

# SFF/RRG COVER SHEET

(This should be the top page)

(Please type)

Application Receipt Deadline: 4:00 p.m. Thursday, September 29, 2016

Type of application:  SFF  RRG  Both

Review Panel:  natural, physical and applied sciences  humanities  social sciences

Collaborative Application:  No  Yes

Descriptive Project Title (Limited to 120 character, including spaces)

Patient Preferences for Engagement in Healthcare

Name: Teresa Jerofke-Owen

Department: Nursing

Phone: 288-3867

Email: teresa.jerofke@marquette.edu

Academic Rank:  Assistant Professor  
 Associate Professor  
 Full Professor

MU Hire Date: 8/2013

This project involves (check all that apply):

Human Subjects  Vertebrate animals  Recombinant DNA  Radioactive Materials

Does this SFF/RRG application request graduate student support?  Yes  No

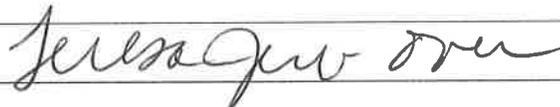
What other internal and external research support are you currently receiving (e.g., external grants, start-up funding, etc.)? Please provide a list of any **pending** applications and **current** awards.

I am not currently receiving any internal or external research support. I did submit a grant to Delta Gamma At-Large (the local chapter of Sigma Theta Tau International) for this same study on 9/16/16.

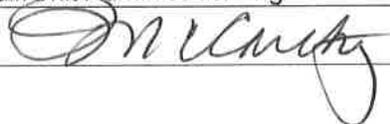
If awarded, describe your plans for submitting an external grant application.

If awarded, the PPET will be a foundational component in planned intervention research to improve patient engagement and outcomes. Possible funding agencies include: AHRQ, NINR, PCORI, or more disease-focused organizations such as The American Heart Association, or American Cancer Society.

Applicant signature and date

 9/28/16

Chair/Unit Administrator signature and date

 9-28-16

## Patient Preferences for Engagement in Healthcare

### Abstract

Patient engagement in healthcare, an important component of healthcare reform, has been associated with improved patient satisfaction and perceived quality of care, increased participation in self-management behaviors, and a 50% reduction in adverse events in hospitalized patients. Failure to assess and tailor engagement efforts to patient preferences for engagement has resulted in patient frustrations and poor patient-centered care. Furthermore, there is not currently a clinical assessment tool that can be used by nurses to assess patient preferences for engagement in their healthcare. This two-phase mixed-methods study, framed by the Interactive Care Model, will develop and test the Patient Preference for Engagement Tool (PPET). A total of 309 inpatients from an academic Magnet hospital in the Midwestern United States will be enrolled (20 for phase 1, 289 for phase 2) using convenience sampling. During phase 1, semi-structured interviews will be conducted with patients to generate items for inclusion in the PPET. During phase 2, validity, reliability, and usability of the PPET will be assessed. Patients will complete the PPET at the time of enrollment. Participating patients and RNs will complete usability surveys once the patient completes the PPET and RNs review it. The significance of the study is the availability of a tool for use in clinical practice to precisely determine patients' individual preferences for engagement in their care, leading to more personalized strategies to actively engage patients in their care. The PPET will be a foundational component in planned intervention research to improve patient engagement and outcomes.

## Project Description

### a) Significance and Broader Impact

Promoting patient engagement or involvement in healthcare has become an important component of healthcare reform efforts (Institute for Healthcare Improvement, 2014; PCORI, 2014) and has been associated with improved patient satisfaction and perceived quality of care, increased participation in self-managing behaviors, and a 50% reduction in adverse events in hospitalized patients (Ekman et al., 2012; Kuntz et al., 2014; Tzeng & Yin, 2014; Weingart et al., 2011). While factors such as gender, age, severity of illness, and education levels have been associated with patient engagement preferences (Aasen, 2015; Florin, Ehrenberg, & Ehnfors, 2008; Sainio & Lauri, 2003), engagement efforts are often not tailored to individual patient situations, leading to patient frustrations and poor patient-centered care (Tobiano, Marshall, Bucknall, & Chaboyer, 2015).

There are many ways healthcare providers can engage patients in their care including information-sharing, encouraging decision making, inviting patients and families to participate in daily rounds and discharge planning, and involving patients in quality improvement efforts (AHRQ, 2013; author blinded for review, 2014; Swartwout, Drenkard, McGuinn, Grant & El-Zein, 2016). Unfortunately, patients report that key components of patient engagement including discharge planning, patient education, attending to emotional and social needs, and being kept informed of care plans were missing from the nursing care provided to them (Kalisch, McLaughlin, & Dabney, 2012). Prior studies have also demonstrated that few acute care nurses asked about patient expectations for participation in their care (Rozenblum et al., 2011) and a third of patients wanted a more active role in their treatment decision-making than offered to them (Florin, Ehrenberg, & Ehnfors, 2006). In a focus group study conducted by this PI (manuscript in preparation), nurses reported that lack of communication between patients and providers and unclear expectations for involvement in care were barriers to patient engagement.

Patient frustrations and reports of missed nursing care highlight the need for a valid and reliable measure of patient preferences for engagement in healthcare (Swartwout et al., 2016). The American Hospital Association (2013) cites that a barrier to healthcare engagement is “the lack of measurement tools to assess where a patient is along the engagement continuum” (p. 12). It must be acknowledged that not all patients may want to participate in their care or may prefer to receive information about their healthcare rather than participate in actual decision-making or treatment planning (Florin et al., 2006). Whether patients choose not to participate in their care due to personal preference, have misconceptions about their role, or incapacity to participate, it is important for nurses to assess how involved patients want to be in their care given the volume of research that demonstrates that patient preferences for engagement are not being taken into consideration. At the very least, the use of the assessment tool could provide the opportunity to educate patients about their rights to be involved in healthcare planning and decision-making (Bovenkamp & Trappenburg, 2009).

This study is significant because it will develop and test a tool that can be used by nurses to assess patient preferences for engagement in their healthcare and provides an opportunity for nurses and patients to have conversations about engaging in care. The PPET will be a foundational component in planned intervention research to improve patient engagement and outcomes such as the actual engagement in care, decreased adverse events, satisfaction with care, healthcare utilization, or quality of life.

*Problem Statement.* While there are published instruments that can be used to measure if patients are engaging in their care (Graffigna, Barello, Bonanomi, & Lozza, 2015; Mavis et al.,

2014), there is not currently a published tool that can be used by nursing staff to assess patients' preferences for how and when they would like to participate in their care. The purpose of this two-phase study is to (1) develop and (2) test the Patient Preference for Engagement Tool (PPET), a clinical assessment tool that can be used to identify patient preferences for engagement in healthcare.

*Theoretical Framework.* This study is framed by elements of the Interactive Care Model (ICM) (Drenkard, Swartwout, Deyo, & O'Neil, 2015). Two major concepts of the ICM will be explored in this study: (1) Assessing a Person's Capacity for Engagement and (2) Exchanging Information and Communicating Choices. In this study, age, health perception, chronic illness load, and years of education (capacity for engagement) will be examined as possible predictors of exchanging information and communicating choices, conceptualized as patient preferences for engagement and operationalized by the PPET. The relationship between the theoretical framework concepts, study variables, and study measures is shown in Table 1 in the appendix.

## **b) Specific Research Objectives**

### **Phase 1: Tool Development**

AIM 1: Develop a clinical assessment tool (PPET) that can be used to identify patients' preferences for engagement in their healthcare.

### **Phase 2: Pilot Testing**

AIM2: Examine preliminary psychometric properties of the PPET.

RQ1: What is the content validity index of the PPET?

RQ2: What is the reliability estimate of the PPET?

RQ3: Will PPET score significantly differ by age, health perception, chronic illness load, and years of education, providing evidence for construct validity?

AIM3: Examine the usability of the PPET for both nurses and patients.

RQ4: What is the factor structure of the PPET?

RQ5: What are the (1) effectiveness, (2) efficiency, and (3) satisfaction of the PPET?

## **c) Work Plan**

*Design.* This study will utilize a mixed-methods design in order to develop (semi-structured interviews) and pilot test the validity, reliability, and usability of the PPET

*Sample/Subjects.* A convenience sample of English-speaking adult patients without cognitive impairment from various medical-surgical inpatient units at a 516 bed academic Magnet<sup>®</sup>-designated hospital in Southeastern Wisconsin will be enrolled into both phases of the study (see letter of support). As recommended by Green & Thorogood (2014), twenty patients will be interviewed about their preferences for engagement in phase one. Six patients will be enrolled at the start of phase two to assess the content validity of the newly constructed PPET. A power analysis indicated that to estimate a multi factorial model with correlations between constructs of  $r = 0.3$  or larger, with a power = 80%, and a  $p$  value of  $<.05$ ; a sample size of  $n = 240$  is sufficient. A total of 283 patients will be enrolled for PPET testing to account for an estimated attrition rate of 15% (seen in the PIs prior studies).

*Instruments.* Patient preferences for engagement in care will be measured at the time of enrollment (as close to admission as possible) using the PPET. The number of items in this tool will be dependent on the dimensions of engagement that emerge from the interviews. It is estimated that the tool will have no more than 25 items to reduce testing burden on patients and nursing staff. Items will be scored on a 10-point Likert scale with greater scores indicating a stronger patient preference for an item.

Using a demographic form (see appendix), patients will be asked to self-report gender,

age, race, marital status, whether they live alone, number of hospitalizations in last year, chronic illness diagnoses, and education level. Health perception will be measured by asking patients “How would you rate your health in general?” 1=poor, 2=fair, 3=good, 4=very good, 5=excellent.

Usability will be assessed using both a RN and patient form (see appendix). Usability surveys are based on the three components of ISO’s 9241-11 (1998) definition of usability: (1) effectiveness, (2) efficiency, and (3) satisfaction were incorporated into the RN and patient usability tools. An open-ended question will be used to assess for any usability issues not captured in the items.

### **Procedure**

Undergraduate or graduate nursing student research assistants (RAs) will be trained in enrolling and consenting patients for a research study. During phase 1, eligible patients will be identified with the help of the nurses on the participating units. The study will be explained, voluntary participation will be requested, and informed consent will be obtained. Patients will be given the option of conducting the interview while they are hospitalized or within four days after discharge over the phone. If a phone interview is preferred they will be asked for their contact information. Conducting individual interviews with patients recognizes that they are the experts concerning their unique health situations and increases the likelihood of honest responses (Green & Thorogood, 2014).

The PI will conduct the interviews and the entirety of the interviews will be voice-recorded. A detailed description of the interview protocol, derived from extensive review of the literature is provided in the appendix. Participants in phase 1 will be given \$25 grocery store gift cards as appreciation for their time.

The PPET will be constructed following completion of analysis of the patient interviews. At the start of phase 2, the content validity (Lynn, 1986) of the PPET will be assessed by six medical-surgical patients. Item revisions will be made if necessary. RAs will be responsible for enrolling and consenting patients for phase 2 (instrument-testing and usability). Patients will complete the demographic form and PPET at the time of enrollment and return them to the RA. Patients will be informed that their nurses will review their responses. Nurses assigned to participating patients will be asked to complete usability surveys following review of the patient’s PPET responses and return them to the central collection boxes. Nurse surveys will not contain nurse or patient identifiers, therefore an information sheet, approved by the IRB, will be attached to the usability form in lieu of consent document. IRB approval will be obtained from the healthcare system and University at the time of grant funding. Patients will be asked to complete their usability surveys on the day of discharge so the effectiveness of the PPET can be captured in their responses.

There are numerous medical-surgical units at the hospital and various primary care clinics that can be utilized if enrollment is slower than anticipated. The PI also has a relationship with another major healthcare organization in the area that could be included in the study if additional patients are needed.

### **Plan for data management/analysis.**

During phase 1, the PI will check the transcriptions against the recordings to assure rigor. Thematic analysis will be used to uncover the themes from the interviews (Boyatzis, 1998). The PI, along with a graduate RA who has completed a qualitative methods course, will code the data independently to assure confirmability of the data and will then meet in person to compare interpretations. Themes from patient data will be used to generate items due to the patient-centeredness of the concept (Pelletier & Stichler, 2014) and the previously identified differences

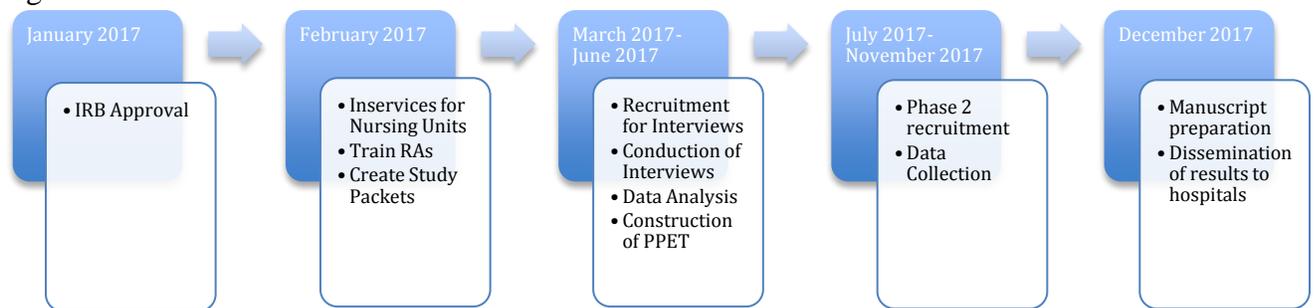
in patient and nurse perceptions of the concept (Eldh et al., 2006; Tobiano et al., 2015).

Phase 2 statistical calculations will be performed using SPSS version 24 (SPSS Inc., 2013). RQ1 will be analyzed by determining the proportion of patients who gave each item a rating of “3” or “4” (content validity index) (Lynn, 1986). RQ2 will be analyzed by calculating the Cronbach’s alpha coefficient for the PPET. The scale will be validated with a factor analysis model, identifying items that measure common constructs of interest in order to analyze RQ3 and RQ4. These common constructs will be tested for convergent validity by relating them to characteristics like age, education and severity of illness. Usability data from both patients and nurses will be summarized.

### Limitations

This study will be conducted at one academic Magnet designated medical institution. Replication at other sites is recommended as patient demographics and preferences may differ. Additionally, this study will only include English-speaking patients, which may lead to underrepresentation of minority races. The clinical assessment tool is a new tool and estimates of validity and reliability cannot be predicted prior to the testing in this proposed study. Lastly, convenience sampling will be used during phase 2. Efforts will be made to enroll all eligible patients on selected enrollment days to minimize the limitation of convenience sampling.

Figure 1. Timeline of Activities



### d) Relationship to Research Goals

Over the last six years I have concentrated my research on patient empowerment as a method to engage patients in their chronic illness care to improve outcomes of care. Given the growing prevalence of chronic illness, the associated cost of care, and decreasing reimbursement for readmissions, research on ways to improve patient engagement in healthcare is imperative. While I have focused on patient reports of receipt of empowering-behaviors and nurse reports of delivery of empowering-behaviors, I have not looked at patient preferences for engagement in care, in other words, HOW patients want to participate in their care. The lack of a published assessment tool that can be used by healthcare teams to determine patient preferences for engagement in care has been cited as a major limitation in patient engagement efforts. This study is significant because it will develop and test a clinically useful tool (The Patient Preferences for Engagement Tool) that nursing staff can utilize to tailor their care to patients’ preferences for when and how they would like to participate in their care. This study supports engagement efforts, which are included in numerous healthcare reform models and provides a mechanism to improve the patient experience, quality of care, and patient safety. The findings of the proposed study and my prior studies will inform the preparation of a federal funding application (AHRQ, NINR, or PCORI) to study the impact of integrating patient preferences for engagement in care into empowerment efforts on patient outcomes such as actual engagement in care, decreased adverse events, satisfaction with care, healthcare utilization, or quality of life.

## Bibliography

- Aasen, E. M. (2015). A comparison of the discursive practices of perception of patient participation in haemodialysis units. *Nursing Ethics*, 22(3), 341-351.
- Agency for Healthcare Research and Quality (AHRQ). (2013). *Guide to patient and family engagement in hospital quality and safety*. Retrieved from <http://www.ahrq.gov/professionals/systems/hospital/engagingfamilies/guide.html>
- American Hospital Association. (2013). *Engaging health care users: A framework for healthy individuals and communities*. Retrieved from <http://www.aha.org/research/cor/engaging/index.shtml>.
- Bovenkamp, H., & Trappenburg, M. (2009). Reconsidering patient participation in guideline development. *Health Care Analysis*, 17 198-216.
- Boyatzis, R. E. (1998). *Transforming qualitative information: Thematic analysis and code development*. Thousand Oaks,CA: Sage Publications.
- Drenkard, K., Swartwout, E., Deyo, P., & O'Neill, M. (2015). Interactive care model: A framework for more fully engaging people in their healthcare. *Journal of Nursing Administration*, 45(10), 503-510.  
doi:10.1002/14651858.CD003267.pub2.
- Ekman, I., Wolf, A., Olsson, L., Taft, C., Dudas, K., Shaufelberger, M., & Swedberg, K. (2012). Effects of person-centred care in patients with chronic heart failure. The PCC\_HF study. *European Heart Journal*, 33(9), 1112-1119.
- Florin, J., Ehrenberg, A., & Ehnfors, M. (2006). Patient participation in clinical decision-making in nursing: A comparative study of nurses' and patients' perceptions. *Journal of Clinical Nursing*, 15, 1498-1508.

- Florin, J., Ehrenberg, A., & Ehnfors, M. (2008). Clinical decision-making: predictors of patient participation in nursing care. *Journal of Clinical Nursing, 17*(21), 2935-2944.
- Graffigna, G., Barello, S., Bonanomi, A., & Lozza, E. (2015). Measuring patient engagement: development and psychometric properties of the Patient Health Engagement (PHE) Scale. *Frontiers in Psychology, 6*, doi: [10.3389/fpsyg.2015.00274](https://doi.org/10.3389/fpsyg.2015.00274).
- Green, J. & Thorogood, N. (2014). *Qualitative methods for health research*. Los Angeles, CA: Sage Publications.
- Institute for Healthcare Improvement (2014) *IHI triple aim*. Retrieved from <http://www.ihl.org/Engage/Initiatives/TripleAim/pages/default.aspx>
- ISO 9241-11. (1998). *Ergonomic requirements for office work with visual display terminals (VDTs) – Part 11: Guidance on usability*. Retrieved from [http://www.iso.org/iso/catalogue\\_detail.htm?csnumber=16883](http://www.iso.org/iso/catalogue_detail.htm?csnumber=16883).
- Kalisch, B. J., McLaughlin, M., & Dabney, B.W. (2012). Patient perceptions of missed nursing care. *The Joint Commission Journal of Quality and Patient Safety, 38*(4), 161-167.
- Kuntz, J. L., Safford, M. M., Singh, J. A., Phansalkar, S., Slight, S. P., Her, Q. L. . . . Hornbrook, M. C. (2014). Patient-centered interventions to improve medication management and adherence: A qualitative review of research findings. *Patient Education and Counseling, 97*, 310-326.
- Lynn, M.R. (1986). Determination and quantification of content validity. *Nursing Research, 35*(6), 382-385.
- Mavis, B., Rovner, M.H., Jorgenson, S., Coffey, J., Anand, N., Bulica, E., Gaulden, C. M., Peacock, J., & Ernst, A. (2014). Patient participation in clinical encounters: A systematic review to identify self-report measures. *Health Expectations, 18*, 1827-1843.

Patient-Centered Outcomes Research Institute (2014) *Advisory panel on patient engagement*.

Retrieved from <http://www.pcori.org/content/advisory-panel-patient-engagement>

Pelletier, L. R., & Stichler, J. F. (2014). Patient-centered care and engagement. *Nurse Leaders' Imperative for Health Reform*, 44(9), 473-480.

Rozenblum, R., Lisby, M., Hockey, P. M., Levtizion-Korach, O., Salzberg, C. A., Lipsitz, S., & Bates, D. W. (2011). Uncovering the blind sport of patient satisfaction: An international survey. *BMJ Quality and Safety*, 20(11), 959-965.

Sainio, C., & Lauri, S. (2003). Cancer patients' decision-making regarding treatment and nursing care. *Journal of Advanced Nursing*, 41(3), 250-260.

Swartwout, E., Drenkard, K., McGuinn, K., Grant, S., & El-Zein, A. (2016). Patient and family engagement summit. *Journal of Nursing Administration*, 46(3S), S11-S18.

Tobiano, G., Marshall, A., Bucknall, T., & Chaboyer, W. (2015). Patient participation in nursing care on medical wards: An integrative review. *International Journal of Nursing Studies*, 52, 1107-1120.

Tzeng, H., & Yin, C. (2014). Engaging as an innovative approach to engage patients in their own fall prevention care. *Patient Preference and Adherence*, 8, 693-700.

Weingart, S. N., Zhu, J., Chiappetta, L., Stuver, S. O, Schneider, E. C., Epstein, A. M., David-Kasdan, J. A., Annas, C. L., Fowler Jr., F. J., Weissman, J. S. (2011). Hospitalized patients' participation and its impact on quality of care and patient safety. *International Journal of Quality Health Care*, 23(3), 269-277.

Blinded for review (2014). Patient perceptions of patient-empowering nurse behaviors, patient activation, and functional health status after surgery. *Journal of Advanced Nursing*, 70(6), 1310-1322.

**SFF/RRG PROJECT BUDGET**

Name(s): Teresa Jerofke-Owen

Department(s): Nursing

Project Title: Patient Preferences for Engagement in Healthcare

**SFF/RRG BUDGET TABLE**

Double click on the table, and then add your budget figures:

| Type of Application (Y/N) | Item  | Funds Requested from the Committee on Research | Funds Requested from Other Sources | Source of Other Funds |
|---------------------------|---|--|------------------------------------|-----------------------|
|                           | SFF (\$0, \$5500, \$11000 (joint app))          | \$5,500.00                                     |                                    |                       |
|                           | <b>RRG</b>                                      |  |                                    |                       |
|                           | <i>Please itemize RRG amount below</i>          |  |                                    |                       |
|                           | Personnel                                       |  |                                    |                       |
|                           | Graduate Research Assistant(s)                  | \$578.00                                       |                                    |                       |
|                           | Undergraduate Research Assistant(s)             | \$4,692.00                                     |                                    |                       |
|                           | Other Personnel, please list.                   |  |                                    |                       |
|                           |   |  |                                    |                       |
|                           | Equipment                                       |  |                                    |                       |
|                           | Supplies  |  |                                    |                       |
|                           | Travel  |  |                                    |                       |
|                           | Consultants/Professional Services, please list. |  |                                    |                       |
|                           |   |  |                                    |                       |
|                           | Other, please list.                             |  |                                    |                       |
|                           | Participant Incentives                          | \$500.00                                       |                                    |                       |
|                           |   |  |                                    |                       |
|                           | TOTAL RRG REQUEST, if applicable                | \$5,770.00                                     | \$0.00                             |                       |
|                           | <b>TOTAL COR REQUEST (SFF + RRG):</b>           | <b>\$11,270.00</b>                             |                                    |                       |

**RRG PROJECT BUDGET JUSTIFICATION**

On a separate sheet under the heading "RRG Project Budget Justification," describe **each item you listed in the RRG portion of the budget table**. The description should enable reviewers to understand a) how the cost of each item was computed, and b) how the budget items relate to your project objectives.

**NOTE:** Awardees will be notified before winter break. RRG funds may be spent in an 11-month period. Awardees must provide spending plans for two fiscal periods:

## RRG Project Budget Justification

**Total RRG Project Costs (\$5,770)**Total Other Personnel Salary (\$5,270)

Research Assistant (\$4,692,) A senior nursing student or graduate nursing student will be hired as an RA. The RA will assist with: preparing data forms, patient enrollment, transcription of voice recordings from interviews, survey collection, data entry of survey data, data cleaning, manuscript preparation, and preparation of return presentations to hospitals.

Estimated 6 hrs per week x 46 weeks x \$17/hr = \$4,692.

Graduate Research Assistant (\$578) A graduate nursing student who has completed a qualitative research methods course will be hired to assist with data analysis of interview data and item generation for PPET.

Estimated 34 hours x \$17/hr = \$578

Incentives (\$500)

Anticipate 20 patients for phase 1

\$25 gift card x 20 patients = \$500

### **Results of Prior SFF/RRG Awards**

With my prior SFF/RRG award from 2014, I was able to develop and test the Patient Perceptions of Patient-Empowering Nurse Behaviors Scale (PPPNBS). The PPPNBS is a measure of the process of patient empowerment from the patient's perspective during an acute hospitalization. Validity and reliability of the PPPNBS was confirmed in a sample of 395 chronically-ill medical and surgical adult patients. Confirmatory factor analysis assisted in the creation of a shorter, more useful form, for measurement in clinical settings. The study resulted in a recent peer-reviewed publication in the *Journal of Advanced Nursing* and a presentation at the *Midwest Nursing Research Society Annual Meeting*.

During in-services with the participating nursing units for the PPPNBS study, nurses expressed an interest in the behaviors I was testing on the PPPNBS. Because of their interest, I created a nurse form of the survey, the Nurse Perceptions of Patient-Empowering Nurse Behaviors Scale (NPPNBS), to examine nurse reports of delivering empowering-behaviors. I submitted a grant to The Southeastern Wisconsin Nurses Research Consortium, which was funded in June 2014. During this mixed methods study, I was able to test the NPPNBS in a diverse sample of 336 RNs from 6 different hospitals in Southeastern Wisconsin. I also conducted focus groups with 34 nurses to examine the nurse experience of empowering patients. Like the patient version, a shortened version of the NPPNBS demonstrated validity and reliability, and should be used in future studies examining associations between NPPNBS scores and patient outcomes. Analysis of focus group data revealed that patients engage in their care at varying levels; however, there is not a clinical assessment tool that nurses can use to determine when or how patients want to engage in their care. Nurses also reported needing to spend a fair amount of time educating patients that they have a right to participate in their care. I therefore determined that my next step in my research trajectory was to develop a clinical assessment tool that can be used by nurses to assess how and when patients want to participate in their care. I submitted a grant to American Nurses Foundation/Midwest Nursing Research Society in May of 2016, but it was not funded.

**Teresa A. Jerofke-Owen, PhD, RN**

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Milwaukee, WI 53201  
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(262) 442-3696

**Research expertise:**

Patient empowerment, patient engagement, acute care, instrument development and testing.

**Education**

**PhD in the Science of Nursing**, College of Nursing, Marquette University,  
Milwaukee, WI, May 2013  
Advisor: Dr. Marianne Weiss

**Masters in the Science of Nursing**, College of Nursing, Marquette University,  
Milwaukee, WI, May 2008  
Concentrations: Acute Care Nurse Practitioner  
Advisor: Dr. Kerry Kosmoski-Goepfert

**Bachelors in the Science of Nursing**, College of Nursing, Marquette University,  
Milwaukee, WI, *Summa Cum Laude* December 2004  
Advisor: Dr. Marilyn Bratt

**Professional Experience**

**Assistant Professor**, August 2013 – present  
Marquette University, Milwaukee, WI

**Acute Care Nurse Practitioner**, June 2011– June 2013  
Froedtert Hospital/Medical College of Wisconsin – Surgical Oncology

**Clinical Instructor**, January 2011– May 2011  
Marquette University, Milwaukee, WI

**Research Assistant**, January 2010 – May 2011

**Acute Care Nurse Practitioner**, February 2009 – January 2011  
Froedtert Hospital/ Medical College of Wisconsin – Cardiothoracic Surgery

**Acute Care Nurse Practitioner**, May 2008 – February 2009  
Milwaukee Neurological Institute

**Pediatric Staff Nurse**, 2005 – 2008

Children's Hospital of Wisconsin – Pediatric Intensive Care Unit

**Research Assistant**, August 2006 – May 2007

Faculty in College of Nursing, Marquette University, Milwaukee, WI

**Research Assistant**, January 2003 – January 2005

Dr. Marianne Weiss at Marquette University, Milwaukee, WI

## Certification and Licensure

Advanced Practice Nurse Prescriber in Wisconsin – Sept 2008 - present

Board Certified Acute Care Nurse Practitioner – Aug 2008 - present

Wisconsin RN – February 2005 - present

BLS certified – 2002 - present

## Publications

### Articles in Print or Press

- X Jerofke, T.A., & Weiss, M.E. (2016). Development and psychometric analysis of the Patient Perceptions of Patient-Empowering Nurse Behaviors Scale (PPPNBS). *Journal of Advanced Nursing*. e-publication ahead of print, DOI: 10.1111/jan.13060
- X Jerofke, T.A., Weiss, M., & Yakusheva, O. (2014). Patient perceptions of patient-empowering nurse behaviors, patient activation, and functional health status after surgery. *Journal of Advanced Nursing*, 70(6), 1310-1322.
- X Jerofke, T.A. (2013). Concept analysis of empowerment from survivor and nurse perspectives within the context of cancer survivorship. *Research and Theory for Nursing Practice*, 27(3), 157-172.
- Bobay, K.L., Jerofke, T.A., Weiss, M.E., & 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., Johnson, N.L., 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.

### Manuscripts in review and preparation

- Jerofke, T.A., & Bull, M.J. (2016). Nurses' experiences empowering hospitalized patients.

Manuscript in preparation

## **Presentations**

### **Regional**

- X Jerofke, T.A., & Bull, M. Perceptions of Patient-Empowering Nurse Behaviors. 18<sup>th</sup> Annual Southeastern Wisconsin Nursing Research Conference Improving Quality and Safety Through Research. Milwaukee, WI 5/2016
- X Jerofke, T.A. & Weiss, M. Psychometric Testing of the Patient Perceptions of Patient Empowering Nurse Behaviors Scale. MNRS 2016 Annual Research Conference. Milwaukee, WI 3/2016
- X Jerofke, T.A., Weiss, M., & Yakusheva, O. Patient Perceptions of Patient-Empowering Nurse Behaviors, Patient Activation, and Functional Health Status After Surgery. MNRS 2014 Annual Research Conference. St. Louis, MO, 3/2014
- X Jerofke, T.A. & Weiss, M. Patient Perceptions of Patient-Empowering Nurse Behaviors, Patient Activation, and Functional Health Status After Surgery [keynote speaker]. Inaugural Celebration of PhD Student Progress. Marquette University, Milwaukee, WI, 5/2013
- X Jerofke, T.A. & Weiss, M. Psychometric Testing of the Patient Perceptions of Patient-Empowering Nurse Behaviors Scale (PPNBS). MNRS 2013 Annual Research Conference Poster Competition. Chicago, IL, 3/2013
- X Jerofke, T.A. Patient Perceptions of Patient-Empowering Nurse Behaviors, Patient Activation, and Functional Health Status After Surgery. Froedtert Hospital Nursing Research Conference: Putting the Puzzle Together. Milwaukee, WI 11/2012

### **National**

- X Jerofke, T.A., Weiss, M., & Yakusheva, O. Patient Perceptions of Patient-Empowering Nurse Behaviors, Patient Activation, and Functional Health Status After Surgery. 2014 State of the Science Congress on Nursing Research. Washington D.C. 9/2014
- X Jerofke, T.A., Weiss, M., & Yakusheva, O. Patient Perceptions of Patient-Empowering Nurse Behaviors, Patient Activation, and Functional Health Status

After Surgery. Mayo 2014 Nursing Research Conference: Improving Health Through Self-Management. Phoenix, Arizona 3/2014

- X Jerofke, T.A. Psychometric Testing of the Patient Perceptions of Patient-Empowering Nurse Behaviors Scale (PPPNBS). Nurses' Contributions to Fostering Successful Patient Engagement- Nursing Alliance for Quality Care (NAQC). Washington DC, 11/2012

## Research Grants

### Funded:

#### Past

- X Title: Perceptions of Patient-Empowering Nurse Behaviors  
 Source: Southeastern Wisconsin Nursing Research Consortium – Building Bridges  
 Role: Principal Investigator  
 Dates: June 1, 2014- May 31, 2016  
 Direct Funds: \$2,500
- X Title: Perceptions of Patient-Empowering Nurse Behaviors  
 Source: Marquette University College of Nursing  
 Role: Principal Investigator  
 Dates: June 1, 2014- May 31, 2015  
 Direct Funds: \$4,500
- X Title: Psychometric Analysis of Patient Perceptions of Patient-Empowering Nurse Behaviors Scale (PPPNBS) in Patients with Chronic Illness  
 Source: Marquette University Committee on Research  
 Role: Principal Investigator  
 Dates: January 20, 2014 – December 31, 2014  
 Direct Funds: \$11,500
- X Title: Patient Perceptions of Patient-Empowering Nurse Behaviors and Patient Activation After Surgery  
 Source: Sigma Theta Tau International Nursing Honor Society  
 Role: Principal Investigator  
 Dates: June 1, 2012 – May 31, 2013  
 Direct Funds: \$5,000

### Submitted but not funded:

- Title: Patient Preferences for Engagement in Care  
 Source: MNRS/ANF  
 Role: Principal Investigator

Dates: Submitted May 2016

Title: Perceptions of Patient-Empowering Nurse Behaviors  
Source: MNRS  
Role: Principal Investigator  
Dates: Submitted November 2013

### **Awards and Honors**

Heeb Foundation Scholarship – Fall 2011- Spring 2012

Agnes A. Reinders Scholarship – Fall 2007

St. Ignatius Scholarship – Spring 2001 - Fall 2004

### **Committees and University Service**

UPCC, College of Nursing – Fall 2015- Spring 2017

Academic Senate – Fall 2016

Academic Integrity Council – Fall 2015

### **Memberships**

Midwest Nursing Research Society

Sigma Theta Tau International – Nursing Honor Society

The Council for the Advancement of Nursing Science

### **Editorships/Editorial Boards/Journal Reviews**

#### **Manuscript Reviewer**

Journal of Advanced Nursing – August 2013- present

Clinical Journal of Oncology Nursing - January 2012-present

Appendix

Table 1

*Linkages Between Interactive Care Model Concepts, Study Variables, and Study Measures*

| Interactive Care Model Concept                             | Assessment of Person’s Capacity for Engagement  | Exchange Information and Communicate Choices  |
|--|---|---|
| Interactive Care Model Definitions (Drenkard et al., 2015) | Assessment of a person’s ability to participate in his/her healthcare. This may include looking at the patient’s medical history, assessment of physical symptoms, cultural values, health literacy, activation/motivation, disease burden, psychosocial support, preventive health strategies, involvement in safety, and technology use for healthcare. | During this phase, providers must listen to patients to assess their values, beliefs, and preferences for participation in their healthcare. Together, the provider and patient determine how a patient wants to participate in his/her care so that treatment plans can be tailored to patient preferences. Also acknowledging that not all patients will want to or be able to participate in their care. |
| Study Variables  | Patient characteristics   | Patient preferences   |
| Study Measures   | <ul style="list-style-type: none"> <li>a. Age</li> <li>b. Perceived health status</li> <li>c. # of chronic illnesses</li> <li>d. Education level</li> </ul>   | Patient Preference for Engagement Tool (PPET) <ul style="list-style-type: none"> <li>a. How he/she would like to participate in his/her care</li> <li>b. When or in which circumstances he/she would like to participate in his/her care</li> </ul>   |

Study ID # \_\_\_\_\_

**Patient Preference for Engagement Study  
Contact Form**

Your Name: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Alternate Telephone Number: \_\_\_\_\_

Best Time To Call: \_\_\_\_\_

### **Semi-Structured Interview Protocol**

Discuss that participation is voluntary and that participants end the interview at any time. Emphasize that they should feel free to share their own experiences and that researchers will maintain confidentiality and anonymity throughout the research process by not using identifying information.

Prompts for general discussion (30-60 minutes):

“Tell me a little about how you participate in your healthcare.”

“What parts of your healthcare would you like to be involved in that maybe you aren’t at this time”

“Tell me how providers can help involve you in your healthcare”

“Has your involvement in healthcare changed over time..if so, how”

“When do you like to be involved in your healthcare”

“What parts of healthcare would you not like to be involved”.

Potential Prompting phrases:

“Please tell me more about”

“Could you explain a bit more about.....”

Conclusion/Debrief (5 minutes):

Ask participants if they have anything additional to add and clarify any questions PI may have. PI will validate themes and subthemes with participants at the conclusion of the interview.

Thank participants for participating and ensure anonymity once again. Hand out incentive gift card and direct them to contact the PI if they should have any questions or concerns .

Study ID # \_\_\_\_\_

**Patient Preference for Engagement Study  
Patient Demographic Form**

Thank you for agreeing to participate in the patient engagement study. Please provide us with some background information about you.

**Your age:** \_\_\_\_\_

**Gender:**

male

female

**Your marital status:**

Married

Single

Separated

Divorced

Widowed

Other, please describe \_\_\_\_\_

**Your race/ ethnicity: (check all that apply)**

Asian

African American

Hispanic

White

Other, please describe

**Do you live alone?**

no

yes

If no, how many other people live with you? \_\_\_\_\_Adults & \_\_\_\_\_Children (less than 18 yrs)

**Your highest completed level of education:**

- Less than 7<sup>th</sup> grade
- Junior high school (9<sup>th</sup> grade)
- Partial high school (10<sup>th</sup> or 11<sup>th</sup> grade)
- High school graduate
- Partial college or specialized training
- College or university graduate
- Graduate degree

**Years of Education**

\_\_\_\_\_

**Have you been hospitalized this year?**

Yes

No

If yes, how many times in last  
year? \_\_\_\_\_

**Which of the following chronic conditions are you being treated for?**

- High blood pressure
- Heart Disease
- High Cholesterol
- Asthma
- COPD
- Diabetes
- Arthritis
- Cancer
- Osteoporosis
- Other \_\_\_\_\_

**How would you rate your health in general?**

- Poor
- Fair
- Good
- Very Good
- Excellent

Study ID # \_\_\_\_\_

**Patient Preference for Engagement Study  
Assessment of Usability – Patient Form**

Please answer the questions listed below. The answers are on a 5-point scale from 1 to 5. An answer of 1 = strongly disagree, 2= disagree, 3=neutral, 4=agree, and 5=strongly agree.

|  |                        |   |              |   |                     |
|--|------------------------|---|--------------|---|---------------------|
| 1. The Patient Preference for Engagement Tool (PPET) provided an opportunity to talk with my nurse about my participation in care. | 1<br>Strongly disagree | 2 | 3<br>Neutral | 4 | 5<br>Strongly agree |
| 2. The PPET provided my nurse with useful information about me.  | 1<br>Strongly disagree | 2 | 3<br>Neutral | 4 | 5<br>Strongly agree |
| 3. The PPET took too long to complete.   | 1<br>Strongly disagree | 2 | 3<br>Neutral | 4 | 5<br>Strongly agree |
| 4. The PPET had too many questions.  | 1<br>Strongly disagree | 2 | 3<br>Neutral | 4 | 5<br>Strongly agree |
| 5. The questions on the PPET were easy to understand.  | 1<br>Strongly disagree | 2 | 3<br>Neutral | 4 | 5<br>Strongly agree |
| 6. The PPET helped me think about ways I can participate in my care.   | 1<br>Strongly disagree | 2 | 3<br>Neutral | 4 | 5<br>Strongly agree |

|  |                                |          |                      |          |                             |
|--|--------------------------------|----------|----------------------|----------|-----------------------------|
| <p>7. Discussing my answers to the questions with the nurses was helpful to my care.</p> | <p>1<br/>Strongly disagree</p> | <p>2</p> | <p>3<br/>Neutral</p> | <p>4</p> | <p>5<br/>Strongly agree</p> |
| <p>8. I believe that my answers to the questions may change over time.</p>               | <p>1<br/>Strongly disagree</p> | <p>2</p> | <p>3<br/>Neutral</p> | <p>4</p> | <p>5<br/>Strongly agree</p> |

We value your feedback. Please provide any additional feedback you may have about the PPET or individual items on the PPET so that we can continue to revise the tool to meet the needs of providers and patients.

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**Patient Preference for Engagement Study  
Assessment of Usability – RN Form**

Please answer the questions listed below. The answers are on a 5-point scale from 1 to 5. An answer of 1 = strongly disagree, 2= disagree, 3=neutral, 4=agree, and 5=strongly agree.

|  |                        |   |              |   |                     |
|--|------------------------|---|--------------|---|---------------------|
| 1. Patient data from the Patient Preference for Engagement Tool (PPET) were helpful in planning my nursing care. | 1<br>Strongly disagree | 2 | 3<br>Neutral | 4 | 5<br>Strongly agree |
| 2. I incorporated patient preferences from the PPET in my nursing care.  | 1<br>Strongly disagree | 2 | 3<br>Neutral | 4 | 5<br>Strongly agree |
| 3. I am satisfied with how long it took me to review my patient’s answers on the PPET.                           | 1<br>Strongly disagree | 2 | 3<br>Neutral | 4 | 5<br>Strongly agree |
| 4. The PPET provided me with useful information about my patient.  | 1<br>Strongly disagree | 2 | 3<br>Neutral | 4 | 5<br>Strongly agree |
| 5. The PPET had too many questions.  | 1<br>Strongly disagree | 2 | 3<br>Neutral | 4 | 5<br>Strongly agree |
| 6. The PPET helped me think about ways I could engage my patient in his/her care.                                | 1<br>Strongly          | 2 | 3<br>Neutral | 4 | 5<br>Strongly       |

|  | disagree          |   |         |   | agree          |
|--|-------------------|---|---------|---|----------------|
| 7. I feel that the use of the PPET will improve the nursing care I deliver to patients.              | 1                 | 2 | 3       | 4 | 5              |
|  | Strongly disagree |   | Neutral |   | Strongly agree |
| 8. The use of the PPET provided an opportunity to talk with patients about engagement in their care. | 1                 | 2 | 3       | 4 | 5              |
|  | Strongly disagree |   | Neutral |   | Strongly agree |

We value your feedback. Please provide any additional feedback you may have about the PPET or individual items on the PPET so that we can continue to revise the tool to meet the needs of providers and patients.

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September 12, 2016

Teresa Jerofke, PhD, RN  
Marquette University, College of Nursing  
P.O. Box 1881  
Milwaukee, WI 53201-1881

Dear Dr. Jerofke,

As the Director Nursing Practice, Research & Innovation of Froedtert Hospital, I am pleased to support your study entitled, "Patient Preferences for Engagement" for consideration for funding. Froedtert Hospital is excited to serve as a site for this study and will provide access to patients for the project once you have IRB approval.

I understand that you have conducted two prior studies with various medical and surgical units at Froedtert Hospital and have made valuable connections with nursing leaders of those respective units. The study will include interviewing patients to develop a clinical assessment tool for examining patient preferences for engagement in healthcare, testing the usability of the tool for nurses and patients, and examining psychometric properties of the tool.

This research offers great potential for understanding and increasing patient engagement in care, consistent with national priority objectives to improve the quality and safety of nursing care.

As a Magnet hospital, we value the conduct of research that investigates nursing practice and nurses' impact on patient outcomes. We look forward to having you in our hospital and clinics to conduct your research and we eagerly await your results. If you have any additional questions, feel free to contact me at anytime.

We eagerly await you sharing the results of the study with the nursing staff at Froedtert Hospital. If you have any additional questions, feel free to contact me at anytime.

Sincerely,

Handwritten signature of Melissa A. Paulson-Conger in cursive script.

Melissa A. Paulson-Conger DNP, RN, CNS-BC  
Director of Nursing Practice, Research & Innovation  
Froedtert Hospital  
9200 W. Wisconsin Ave  
Milwaukee, WI 53226



September 14, 2016

Dear Marquette University Committee on Research,

It is my distinct pleasure to write this letter of unconditional support for the grant application of Dr. Teresa Jerofke-Owen, entitled 'Patient Preferences for Engagement in Care.' Engaging patients in their care has been associated with improved patient satisfaction, increased self-managing behaviors, and fewer adverse events in hospitalized patients. However, not all patients want to be involved in all aspects of their care. More concerning is the fact that patients report key components of patient engagement missing from their care including discharge planning, patient education, listening to concerns, and participation in care planning. Dr. Jerofke-Owen's proposed study will develop and test a tool that nursing staff can utilize to tailor their care to patients' preferences for when and how they would like to participate in their care. This study supports patient engagement, which is included in numerous healthcare reform models; the study findings will provide needed information to improve the patient experience, quality of care, and patient safety.

The proposed study builds on Dr. Jerofke-Owen's prior work demonstrating that surgical patients who felt the nurse engaged them in their care before hospital discharge had better post-discharge outcomes. Dr. Jerofke has the requisite experience in tool development as seen in her recent publications in *Journal of Advanced Nursing*. Another data-based manuscript on nurses' perceptions of their patient engagement behaviors is under review. The research plan for the proposed study is carefully crafted and includes sufficient staff to accomplish the implementation and completion of the study, and the interpretation and dissemination of the findings. Our college and Dr. Jerofke-Owen have excellent working relationships with nursing leadership in the hospitals in the area, and Dr. Jerofke-Owen should have no difficulty accruing the projected sample size for adequate testing of the proposed instrument to measure patient preference for engagement in care.

As the Interim Dean of the College of Nursing, I assure you that Dr. Jerofke-Owen will have sufficient protected time to ensure the timely completion of her proposed study. As the interim Associate Dean for Research in the college, I assure you that Dr. Jerofke-Owen will have full access to any and all support services available through the college Office of Research, including statistical consultation and assistance with grant management. We will ensure she has appropriate computing hardware and software to securely collect and store the human subject's research data. I am most pleased to endorse this funding application, the skills of the PI, and our university and college resources to support the project.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "D McCarthy".

Donna McCarthy, PhD, RN, FAAN  
Professor and Interim Dean