ASSESSMENT OF NURSE ENGAGEMENT

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“Assessment of Nurse Engagement”

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ASSESSMENT OF NURSE ENGAGEMENT

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ABSTRACT

Organizations with high employee engagement reap the benefits of higher employee retention and improved customer satisfaction. Studies find that engaged workers are in the minority. Among healthcare workers, nurses are found to be the least engaged. The association of the registered nurse (RN) at the bedside with improved patient outcomes has been documented by many. Today, the goal of providing safe, high quality and efficient patient care and an exceptional patient experience are benchmark measures for patient care delivery. Since nurses are essential to optimal patient outcomes, it is important to understand what motivates them. Career advancement programs (CAPs) are one method of addressing the challenge of creating engagement. The purpose of this scholarly project is to determine if participation in a professional career advancement program for RNs improves nurse engagement and has an impact on patient outcomes. The study will survey RNs in a tertiary care academic center in the southwestern United States who are enrolled in a career advancement program. The results of this project demonstrated that participation in a professional career advancement program for RNs does not improve nurse engagement, and extraneous variables must be considered. The potential exists for employers to identify those variables that impact nurse engagement. This
study did find, however, that there is a positive association between improved patient outcomes and participation in the career advancement program.

*Keywords:* career advancement programs, career ladder, nurse engagement, patient outcomes, work engagement
DEDICATION

I dedicate this to my family and friends who have inspired me and weathered through a lifetime of adventure with me. First, to my Mother and Father who instilled many values in me, including the love of God, family, and life. They taught us the importance of perseverance, hard work and helping others, loving our neighbors, and forgiveness. They have left their mark on our lives as only they could do.

To my husband, Tim, my one and only. “I got lucky, babe, when I found you.” To my most beautiful daughters, Camille, Jessica, Danielle, and Nicole, who have been my reason for living and have taught me how to laugh and have shown me what real courage and strength are all about. To my grandchildren who bring joy in their smiles, screams, and love of the moment. To my brother, Phil, and my sister, Mary, for their never-ending support and encouragement. To my sister, T, who continues to be my angel. I am grateful to Raz, Chet, Joy, and Johanna for being such supportive, inspirational, and high-achieving classmates. I am inspired by and grateful to Sheena Ferguson and Steve McKernan for believing in and promoting the importance of education. I am grateful for all those who kept me in their prayers. In God, anything is possible.
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# LIST OF ACRONYMS

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<tr>
<td>BSN</td>
<td>Bachelor of Science in Nursing</td>
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<tr>
<td>CAP</td>
<td>Career Advancement Program</td>
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<td>CAP V</td>
<td>Career Advancement Program Level V</td>
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<tr>
<td>CMS</td>
<td>Centers for Medicaid and Medicare</td>
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<tr>
<td>IRB</td>
<td>Institutional Review Board</td>
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<tr>
<td>MSN</td>
<td>Master of Science in Nursing</td>
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<td>NWI-R</td>
<td>Revised Nursing Work Index</td>
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<td>REDCap</td>
<td>Research Electronic Data Capture</td>
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<tr>
<td>RN</td>
<td>Registered Nurse</td>
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CHAPTER 1
INTRODUCTION AND BACKGROUND

Nurse engagement is poorly understood (Simpson, 2009). S. E. Wagner (2006) and Fasoli (2010) have determined that engagement in nursing is more than just retention and, rather, involves engaging nurses in their professional practice. Simpson (2009) proposed that understanding nurse engagement and its relationship to nurses’ organizational behavior could begin by building upon the concept of work engagement. This is further complicated by the fact that many researchers differ in their conception of work engagement (Bakker, Albrecht, & Leiter, 2011).

A 2017 Gallup poll reported that 51% of employees in the United States were not engaged (Harter & Atkins, 2017). This same poll reported that 16% of these employees were, in fact, actively disengaged. Actively disengaged is described as being unhappy at work to the point of feeling resentful that needs are not being met and then acting out on the unhappiness (Harter & Atkins, 2017). This same survey listed New Mexico as one of the states with the highest levels of active disengagement with a rate of 19%.

Schaufeli, Salanova, Gonzalez-Roma, and Bakker (2002) defined work engagement as a “positive, fulfilling, work related state of mind” (p. 74). First introduced by Kahn in 1990, the concept as defined by Schaufeli et al. (2002) is composed of three dimensions: (a) vigor, (b) dedication, and (c) absorption. Schaufeli et al. (2002) described vigor as an elevated level of energy, mental resilience, and willingness to invest in one’s work, and persistence. Dedication is characterized as a high level of involvement with an experience of feeling pride in one’s work and excitement about the challenges presented by the work (Schaufeli & Bakker, 2010). Absorption is noted to be full concentration in the work at hand.
when the person loses track of time (Mills, Culbertson, & Fullagar, 2011; Schaufeli et al., 2002). Utilizing Schaufeli et al.’s (2002) definition of work engagement, one group has defined nurse engagement as a state of mind where the nurse feels that their work is meaningful and results in the desire to contribute their energy and dedication to the work (Catheterout, n.d.).

An employee’s level of work engagement reportedly can predict outcomes of quality of service, performance, and customer loyalty (Sarti, 2014). Indeed, hospitals with high employee engagement report satisfaction with job security, respectful treatment by employers, confidence in management of senior leadership, and the belief that their organization provides high-quality care and service (Press Ganey, 2013).

Laschinger, Wilk, Cho and Greco (2009) stated that high-quality patient care is dependent on an empowered nursing workforce. Aiken, Smith, and Lake (1994) concluded that environments that are supportive of professional nursing practice result in positive outcomes for both nurses and patients. Since nurses are at the center of patient activity and drive performance measures, the question that arises is how to improve nurse engagement to improve patient outcomes.

Organizational culture, nurse burnout, patient experience, and high quality patient care are interrelated (Montgomery, Todorova, Baban, & Panagopoulou, 2013). Cox and Leiter (1992) proposed that “the wellbeing of staff was shown to reflect the health of the organization in which they worked” (p. 221). Healthy work environments can have a significant impact on patient outcomes (Press Ganey, 2015). For the 2013 fiscal year, hospitals scoring in the top 10% of employee engagement scores also had higher scores in core measures and total performance (Press Ganey, 2013).
In 2013, the Centers for Medicaid and Medicare (CMS) through its value-based program, began to reward or withhold monetary incentives to acute-care hospitals based on each institution’s patient outcomes. In this program, CMS withholds a percentage of payment to those hospitals that do not meet established benchmarks in core measure performance, hospital acquired conditions, mortality rates, and patient satisfaction survey results as measured by the hospital consumer assessment of healthcare providers and systems survey (HCAHPS); (Raso, 2015).

Career ladder programs support nurses’ career progression (Ko & Yo, 2014). Career advancement programs (CAPs) reward bedside nurses for obtaining advanced levels of clinical expertise and education (Owens & Cleaves, 2012) and have the potential to impact nurse turnover and improve the quality of patient care (Dill, Chuang, & Morgan, 2014). Owens and Cleaves (2012) argued that these programs support nurses’ perception of control over their practices. CAPs may be one method of addressing the challenge of creating engagement.

**Problem Statement**

The pending nursing shortage, attempts to contain the cost of health care, and concerns with patient safety all play a role in the impact of work engagement in nursing (Bargagliotti, 2011). Furthermore, the aging nursing workforce will require a new focus on retention (Laschinger et al., 2009). Costs of nurse replacement are high, not only financially, but also psychologically to the patient care team that is left behind to care for patients with less support (O’Brien-Pallas, Murphy, Shamian, & Hayes, 2010).

The implementation of the Affordable Care Act and associated value-based pricing programs has changed the face of the health care environment with reimbursement tied to the
result of attainment of benchmark metrics (CMS, 2011). Health care organizations are now expected to provide value when caring for patients as opposed to the previous expectations of volume. An engaged workforce is imperative to ensuring that outcomes are met, and that patient safety is maintained. Unfortunately, many studies have found that engaged nurses are in the minority (Rivera, Fitzpatrick, & Boyle, 2011).

**Study Purpose/PICOT**

The purpose of this exploratory study is to determine if registered nurses’ (RNs’) participation in a career advancement program improves nurse engagement and has an impact on patient outcomes.

**Objectives and Goals**

The purposes of this project are:

1. To analyze the relationship between RNs’ participation in the CAP V program and nurse engagement.
2. To determine the association between RNs’ nurse engagement in the CAP V program and patient outcomes.

**Scope of the Study**

All individuals listed by the study site’s Human Resources Department as CAP V RNs in the outpatient and inpatient settings were eligible to participate in the collection of demographic information and initial Utrecht Work Engagement Scale (UWES) scores. The follow-up UWES study was available to those who completed the demographic and first UWES study.
Assumptions

The CAP at the study site is a voluntary program that was initiated in 1990 to promote the Bachelors of Science in Nursing (BSN) degree as the entry-level degree for nursing practice. The program initially consisted of three levels and was point based (P. J. Woods, personal communication, February 27, 2017).

The purpose of the CAP program is as follows:

- to encourage those with expertise in advancing the professional practice model of nursing,
- to assist in the recruitment and retention of nurses in a professional practice model of nursing,
- to improve role satisfaction by enhancing autonomous professional practice through peer review, and
- to provide opportunities for professional growth and excellence through shared governance (UNMH, 2015).

In 2015, the program was expanded to five levels. CAP IV and CAP V levels were added to recognize and reward individual excellence in the organization’s professional-practice model of nursing. The purpose of the CAP V level is to “advance clinical expertise to contribute to the body of nursing knowledge” (UNMH, 2015, p. 1). Attaining the level of CAP V requires “dedication to clinical outcomes, professional excellence, and clinical leadership” (UNMH, 2015, p.1). Participation in the CAP V program requires participation in a pertinent project that improves patient outcomes (S. Ferguson, personal communication, March 17, 2017).
The five CAP levels are as follows:

1. Level I: new employees.
2. Level II: requires a professional practice portfolio.
3. Level III: national certification, or Bachelor’s in Nursing, or in school for BSN
4. Level IV: national certification and Bachelor’s in Nursing, or national certification and in school for BSN.
5. Level V: national certification and Master’s of Science in Nursing (MSN) and one pertinent project annually approved by the area executive director, or national certification and in school for MSN and one pertinent project annually approved by the area executive director. (UNMH, 2015)

**Significance of the Study**

The change in health care practices from fee-for-service to an emphasis on quality calls for a closer look at incentives as avenues for nurse engagement to ensure high-quality patient care. A study by the Advisory Board Company (2014) found that among health care workers surveyed, nurses were the least engaged and the most disengaged. Furthermore, none of the studies in the initial literature review for this study have addressed a link between professional advancement programs and nurse engagement and improved patient outcomes. These findings point to the value of exploring more directly the link between career advancement programs, nurse engagement, and patient outcomes.
CHAPTER 2

REVIEW OF THE LITERATURE

A systematic literature search was conducted using the CINAHL, MEDLINE, PubMed, Web of Knowledge, and Cochrane databases for the time period of 2009 through 2016. Keywords and phrases included: *career advancement for nurses, career ladder, staff engagement*, and *nurse engagement*. The initial search yielded 48 articles on staff engagement and 55 on career advancement for nurses. Articles were selected for review and the references sections were examined for additional relevant sources. Initially, nine articles were selected for inclusion in this study. However, due to the limited amount of research initially available specifically on nurse engagement, the literature review included other employee types.

Findings

This literature review consists of seven cross-sectional studies, four descriptive correlational studies, and two systematic reviews. *Cross-sectional studies* examine the relationship between characteristics of interest where the exposure and outcome are measured at the same time (Center for Evidence-Based Medicine [CEBM], 2014). The studies are used to quantify the presence of a disease or risk factor (CEBM, 2014). Advantages of this method include ease of use and limited ethical risk. Disadvantages, however, include difficulty in interpretation of the associations of the variables and the challenge of determining whether the intervention was the cause of the change (CEBM, 2014).

By contrast, *correlational studies* are used when describing the relationship between two or more variables. In correlational studies, it is not clear which variable was the
precursor of the other (Melnyk & Fineout-Overholt, 2015). Systematic reviews provide a summary of the evidence on a particular subject. Several themes emerged in this literature review including: Quality of Work Life, Empowerment, Influence of Nurse Management, Patient Outcomes, and Compensation.

**Quality of Work Life**

The significance of an employee’s quality of work life is reported in three of the individual studies reviewed. Garcia-Sierra, Fernandez-Castro, and Martinez-Zaragoza (2016a) conducted a descriptive correlational study utilizing the job demands–resource model to determine the relationship between job demands, control, social support, burnout, and engagement in nurses. A stratified random sample of 100 nurses was obtained from two Spanish university general-care hospitals. Demands, control, and support were measured using the Job Content Questionnaire.

Cronbach’s α is a measure of internal consistency reliability (Kellar & Kelvin, 2013). This measurement defines how closely items are related and will increase as the relationship between the items increases. Generally, a reliability coefficient of .70 or higher is required before an instrument is used. In Garcia-Sierra et al.’s (2016a) study, Cronbach’s α ranged from .729 to .821. Work engagement was measured with the 11-item UWES; Cronbach’s α was .767 for vigor and .873 for dedication. Burnout was assessed with the Maslach Burnout Inventory, the Cronbach’s α was .854 for emotional exhaustion and .533 for cynicism.

The Pearson correlation is a parametric test that determines the strength of the linear relationship between two normally distributed measures of an interval or ratio measurement scale (Kellar & Kelvin, 2013). It can range from -1 to +1, with 0 indicating that there is no association. If the value is greater than 0, there is an indication of a positive association.
When one variable increases, so will the other. Pearson’s correlations demonstrated high associations between control and engagement, and between support and engagement ($r = .304; r = .361$). In addition, a high correlation existed between demand and burnout ($r = .446$). The model demonstrated that nurses with greater engagement reported lower levels of burnout when experiencing high levels of demand and suggested a relationship between burnout and engagement. This study consisted of a small sample size and was conducted in Spain where the nurse-to-patient ratios may not be the same as in the United States. Therefore, the results of this study may not be generalizable to the United States.

Jenaro, Flores, Orgaz, and Cruz (2011) conducted a descriptive correlational study over a 7-month period in 2006–2007 in Spain drawn from a convenience sample of 412 nurses. The sample included 256 RNs, eight nurse managers, and 148 certified nursing assistants. The researchers hypothesized that “psychological adjustment, together with job features and job satisfaction will predict engagement” (Jenaro et al., 2011, p. 867). Utilizing the Spanish version of the nine-item UWES, the General Health Questionnaire, and an ad hoc survey, the study results found a close relationship between quality of work life and relationships with peers. A large number of respondents (78.7%) reported that their job was stressful. Stressors included workload, number of patients, responsibilities, work shift, and relationships with patients’ relatives.

Means and standard deviations were assessed for vigor, dedication, and absorption, with reported means of 3.47, 3.89, and 3.48, respectively. Scores were recoded as low, medium and high according to the Spanish norms (Jenaro, et al., 2011). High scores on the three scales is indicative of engagement level. Approximately one third (33%) of the nurses experienced high dedication, 20.4% experienced high vigor, and 36.7% experienced high
absorption. A small portion (13.3%) of the sample scored high on the three components. 

*Regression analyses* are a statistical model used to estimate the relationship between one dependent variable and a series of independent variables (Kellar & Kelvin, 2013). In this study, it was used to examine the relationships between psychological adjustment, job features, and job satisfaction. Results were as follows: (a) dedication, $F(14, 361) = 19.607, p < .0001$; and (b) vigor, $F(14, 361) = 15.189, p < .0001$. The study findings included a high level of psychiatric distress symptoms in nurses. Ultimately, this study found that dedication and vigor can be predicted by the combined effect of higher values in satisfaction with job position, quality of work life, and lower stress associated with care delivery and lower social dysfunction. As this study was limited to one hospital and information was self-reported and did not include patient outcomes, the findings do not lend themselves to generalization.

Ma, Olds, and Dunton (2015) conducted a cross-sectional nationwide study utilizing the 2012 National Database of Nursing Quality Indicators (NDNQI) RN survey in combination with largescale unit-level data from the NDNQI to examine the association of the unit work environment and quality of care. They utilized the Practice Environment Scale of the Nursing Work Index (PES–NWI) to assess the work unit environment. The PES–NWI is a 31-item scale that measures nurse participation in hospital affairs; nursing foundations for quality of care; nurse manager ability, leadership, and support; staffing and resource adequacy; and collegial nurse–physician relations.

The final sample yielded 7,677 units of 14 different types from 577 hospitals in 49 U.S. states. The study involved a one-way analysis of covariance with a Tukey-Kramer post hoc test to determine the differences in quality of care in all possible pairs. A two-level linear regression was conducted to estimate the relationship between work environment and
quality of care. Overall, 58% of the nurses reported excellent quality of care. When examined by unit type, 43% of nurses in adult medical units reported high quality care compared to 73% in specialized units. In addition, the study found a significant correlation between the specific unit type’s work environment and unit quality of care. The study found less difference in nurse-reported improved quality of care than with nurse-reported overall quality of care. Such findings suggest a variance in unit quality of care that may indicate differences in allocation of nursing resources (Ma et al., 2015). Nurses in ambulatory and interventional units reported the highest levels of excellent care. The findings indicate a variation in unit quality of care suggesting opportunities are available to improve patient care. The findings also suggest that quality of care may be improved through the improvement of nurse work environments. The limitations in Ma et al.’s (2015) study include the small sample of hospitals that participated in NDNQI data collection. These hospitals were voluntary participants and may represent hospitals with certain characteristics.

In another study, Mason et al. (2014) reported a lower mean work engagement level (3.8) than previous studies. Their study also found a significant negative correlation between work engagement and burnout ($r = -.49, p < .05$). Additional findings included conflict with management, dealing with death and suffering, coping with violence, family interactions, powerlessness, physical distress, and value conflict between medical staff and nursing. The evidence suggests that it is critical to explore compassion fatigue and satisfaction, levels of moral distress, and work engagement in the surgical intensive care unit (Mason et al., 2014). This non-randomized study was based on one surgical intensive care unit and given its small sample size, it is difficult to draw generalizable conclusions. In addition, a majority of
respondents reported possessing at least a bachelor’s degree, which may also influence favorable patient outcomes.

J. I. J. Wagner and Gregory (2015) studied surgical RNs in an acute care hospital environment and home care RNs working in the patient’s home. The researchers reported on two groups of nurses in two cities. They used the Spirit at Work (SAW) tool as another avenue to assess RN workplace perceptions. The SAW tool provides a holistic view of the workplace that includes assessment of engaging work, sense of community, spiritual connection, and mystical experience (J. I. J. Wagner & Gregory, 2015). The study concluded that SAW plays a significant role in improved job satisfaction and organizational commitment and argued that the work setting had an impact on RNs’ work engagement. They found that the concepts of engaging work, mystical experience, sense of community, and spiritual connection had an additive effect on the outcome of engagement.

Another dimension in quality of work life was shift work. Wonder (2013) found that shift work is significantly related to RN engagement. The study found that nurses working an 8-hour day shift reported the highest level of work engagement, as opposed to the lowest levels reported by nurses working 12-hour night shifts. Wonder’s study involved two Magnet-designated hospitals with the sample recruited at unit meetings. The argument could be made, though, that nurses who attend unit meetings are more engaged, thereby skewing results of the study. Because of the limitations in these studies, the findings do not lend themselves to generalization. Additionally, the study by Rivera et al. (2011) concluded that nurses who worked day shifts had also a noted increase in engagement.
Empowerment

Rivera et al. (2011) conducted a study of 510 RNs from a large urban academic university setting on the East Coast. The site was also a participant in a study on RN engagement conducted by the Nurse Executive Center of the Advisory Board Company. There were 1,592 eligible participants with a resulting 32% response rate. The research questions were: (a) What are the RNs’ levels of engagement at the research site, and (b) what are the relationships between RN engagement and drivers of engagement? Drivers were identified as: (a) autonomy and input, (b) manager action, (c) nurse staff teamwork, (d) non-nurse teamwork, (e) personal growth, (f) recognition, (g) salary and benefits, (h) passion for nursing, and (i) work environment (Rivera et al., 2011). A correlation analysis was utilized and results indicated a significant positive correlation between nurse engagement and nine variables ($p < .001$, two-tailed test). Additional statistics included $t$ tests to examine differences between each of the drivers of engagement and engaged and non-engaged participants. A one-way analysis of variance was used to evaluate the difference between each of the drivers of engagement and the levels of engagement. Bonferroni post hoc tests were used to quantify the relationships, and found each of the nine drivers of engagement were positively correlated to the engagement ratings. The lowest correlation was noted with salary and benefits. Bonferroni post hoc tests were used to analyze the data for any differences. They are used to control the Type I error rate (Field, 2013). Logistic regression revealed that the variable of passion for nursing was the only driver that influenced RNs’ level of engagement. Additionally, chi-square tests were used to examine relationships with demographic variables. Nurses older than 36 years of age were more often engaged, although engagement was not dependent on the length of employment. The study found
significant differences between years of experience in nursing and level of reported nurse engagement. Nurses with greater than 15 years of experience reported higher levels of engagement. RN engagement at this facility was noted to be higher than average. Nearly one third (31%) of the RNs at this hospital fell at the 75th percentile when compared with the benchmark. In addition, there were no significant associations among sex, tenure, or education with the level of engagement. In this study, “employees responded to an institution that provides resources and organizational support by exhibiting higher levels of engagement” (Rivera et al., 2011, p. 269). The study employed voluntary participation of subjects; another noted limitation was the size and complexity of the research site.

Laschinger et al. (2009) conducted two simultaneous studies in Canada in 2005. Utilizing Kanter’s theory of work empowerment (as cited in Laschinger et al., 2009) and Schaufeli and Bakker’s (2004) theory of work engagement, the purpose of these studies was to provide a link between workplace empowerment and work engagement and to compare the differences between new graduates and experienced nurses (Laschinger et al., 2009). Graduate nurses were those with 2 years or fewer years of experience, while experienced nurses had more than 2 years of nursing experience.

The first study focused on the new graduate with a sample of 185. The second study was a sample of nurses in the province with 294 participants. Three questionnaires were used to measure the variables, including the Conditions of Work Effectiveness-II—used to measure structural empowerment—the nine-item UWES, used to measure work engagement—and the Global Empowerment Scale—used to measure perceptions of work effectiveness. Structural equation modeling (SEM) was conducted. SEM is a statistical evaluation that estimates relationships between latent variables that are measured by several
indicators (the measurement model) and among latent variables (the construct model; Laschinger et al., 2009). SEM is a reliable and flexible approach that provides estimates of the goodness of fit between model and data (Hoyle & Smith, as cited in Laschinger et al., 2009).

The SEM concluded that nurses empowered to practice according to professional standards exhibit higher levels of vigor, dedication, and absorption. The study also found that work engagement is a significant mediator in the relationship between empowerment and the perception of effectiveness. Although this relationship was noted to be stronger in experienced nurses, the study suggested that empowerment has a powerful effect regardless of experience level and that positive engagement supports improved quality of patient care.

**Influence of Nurse Management and Compensation**

Van Bogaert, Clarke, Willems, and Mondelaers (2012) studied two psychiatric hospitals in Belgium utilizing a nurse practice environment and outcome causal model. The sample consisted of 357 RNs, licensed practical nurses, and non-registered caregivers. In this study, non-registered caregivers are workers who are not qualified as psychiatrists, psychologists, social workers, nurses, or who have a lower credential than a master’s degree and give direct care to patients.

The purpose of the study was to examine the relationship between the environment, workload, work engagement, job outcomes, and perceptions of quality in psychiatric hospitals. The study utilized an assortment of tools to assess the variables including the Revised Nursing Work Index (NWI-R) to measure the practice environment, and the nine-item UWES to assess work engagement. Absorption was predicted by vigor through dedication. Positive nurse–physician relationships were used to predict vigor, while positive
ratings for management predicted dedication. The findings indicated that a positively rated nurse management at the unit level is strongly related to positive job outcomes, including quality of care; this also had a positive influence on nurse–physician relationships. The study found that nurse practice environments influence outcomes via their influence on work engagement (Van Bogaert et al., 2012). Van Bogaert et al.’s (2012) study was nonetheless limited by the use of a measurement of perceived quality of care as opposed to measurable patient outcomes.

In another study, Rivera et al. (2011) found a positive correlation between nurse engagement and variables that included the nurses’ understanding of hospital goals and direction, value placed on manager efforts, opportunities for career growth and development, and competitive salary and benefits. In this study, manager actions and work engagement were highly correlated, $F(3, 485) = 95.9, p < .001$. Their findings on salary indicate that good pay and benefits do not necessarily motivate employees, but an absence of them may decrease levels of job satisfaction (Rivera et al., 2011).

Weigl, Muller, Hornung, Leidenberger, and Heiden (2014) studied flight attendants using the lifespan model of selection, optimization, and compensation (SOC). This model posited that the use of certain behaviors increases access to resources, helps maintain function in difficult times, and supports the regulation of impending resource losses (Weigl et al., 2014). Findings were consistent with a study on nurses by Muller et al. (as cited in Weigl et al., 2014), which indicated that SOC strategies act as a meaningful mediator between job control and work ability. The study by Weigl et al. is the first study that links SOC with work engagement.
Patient Outcomes

Patient outcomes were reported as outcome variables in three studies. Laschinger et al. (2009) indicated a link between workplace empowerment and work engagement, concluding that nurses empowered to practice according to professional standards exhibit higher levels of vigor, dedication, and absorption. The study revealed that empowerment has a powerful effect without regard to level of experience and positive engagement supports improved quality of patient care.

Van Bogaert, van Heusden, Timmermans, and Franck (2014) conducted a study to explore the relationships of the nurse practice environment with job outcomes and nurses’ perception of quality of care using SEM. The relationships were explored with nurse work characteristics categorized as mediating predictors, while work engagement was considered a mediating outcome variable. A cross-sectional survey of 1,201 acute care hospital registered nurses in eight hospitals across Belgium was conducted. Measurement instruments included the NWI-R, which measures nurse–physician relations (three items), unit nurse management (13 items), and hospital management and organizational support (15 items). Work engagement was measured with the 9-item UWES. Nurse work characteristics were measured by three scales: workload, decision latitude, and social capital. Workload was measured utilizing Richter et al. Intensity of Labor Scale (as cited in Van Bogaert, et al., 2014). A seven-item instrument and a six-item instrument were utilized for decision latitude and social capital, respectively.

Response rates ranged from 44 to 74%, with 244 responses from a general hospital, 440 from a university hospital, and 517 from a hospital group. More than half of respondents (57%) were Dutch speaking and 43% spoke French. The findings supported a model with
work engagement dimensions that impact job outcomes and nurse-assessed quality of care. Nurse management at the unit level had a strong direct positive effect on both dependent outcome variables. Hospital management was found to be directly related to workload, with workload having a negative effect on both dependent outcome variables. Nurse–physician relationships had a direct positive effect on vigor, with vigor in turn positively affecting job outcomes and dedication and negatively impacting absorption. Absorption had a direct positive impact on nurse-assessed quality of care.

The study also found that perceived workload had a strong influence and direct negative effect on both outcome variables. More research is needed to clarify the concept of workload. The study concluded that nurse work characteristics such as workload combined with nurse work engagement influence nurses’ perspective of their work environment, job outcomes, and quality of care. One limitation in this study, however, is that the NWI-R tool has only been confirmed with Belgian study populations.

Models and Themes

Simpson (2009) conducted a review of the literature that resulted in 20 studies about the precursors and consequences of engagement at work. Her systematic review included sources from business, organizational psychology, health sciences, and health administration. The review drew attention to four models that included Kahn’s model of personal engagement (1992), Maslach and Leiter’s 1997 work life model (as cited in Simpson, 2009), the job–demands resource model by Bakker and Demerouti (2007), and finally, the 2003 employee engagement model by Harter et al. (as cited in Simpson, 2009). In the review, Simpson identified four constructs: (a) personal engagement, (b) burnout/engagement, (c) work engagement, and (d) employee engagement.
Seven of the studies focused on nursing, six of these studies focused on the construct of burnout/engagement, and one study examined employee engagement. Arguing that several factors have been found to impact patient outcomes, Simpson (2009) claimed that there are gaps in the body of knowledge and contended that understanding engagement at work will help to address this deficit. The study concluded that organizational factors are a significant factor in engagement at work with an additional theme of performance-based impact. Simpson commented that the studies of work engagement were mostly outside of the United States.

Simpson (2009) recommended that research continue to build on the concept and definition of work engagement as it relates to nursing. She supported Schaufeli’s (2002) definition of work engagement to be used to study the nursing workforce. She also pointed out that her literature review did not yield any studies examining issues of length of work shift, staffing level, and skill mix. Simpson also found that when the work unit was the focus of examination, there were noted differences in employee engagement.

Garcia-Sierra, Fernandez-Castro, & Martinez-Zaragoza (2016b) conducted a literature review to further examine the construct of work engagement in nursing. Utilizing PsycINFO, MEDLINE, and CINAHL for articles published between January 1990 and December 2013, the initial search yielded 244 articles. Inclusion criteria included: (a) a sample containing staff nurses; (b) publication in a scientific journal in either English, French, or Spanish; and (c) an empirical study design. After the criteria were applied, 27 studies remained: 24 quantitative and three qualitative. Overall participation in the studies ranged from 14% to 90%, with only eight studies reporting over 60% participation. The
sample sizes were greater than 100 in 24 of the studies. The quantitative studies yielded Cronbach’s $\alpha$ coefficients ranging from 0.72 to 0.93, indicating high reliability.

The studies were primarily cross-sectional in nature; only two studies were longitudinal. The most commonly used measurement instrument was the UWES, which was utilized in 22 of the 24 studies. The remaining two studies used the Maslach burnout inventory. Among these studies, four themes emerged: (a) organizational precursors of engagement, (b) individual history of engagement, (c) characteristics of nurse managers on engagement, and (d) outcomes of engagement. The study concluded that the personal factors examined can be determined by the characteristics of the job (Garcia-Sierra et al., 2016b). The only personal factors that Garcia-Sierra et al. (2016b) found that influenced nurse engagement were optimism and self-efficacy. Garcia-Sierra et al. concluded that engagement influences performance and impacts patient outcomes. They found that engagement is not related to a personality trait, but instead is the result of interactions between personality characteristics, personal professional learning, and work environments. Because of these findings, they proposed that engagement can be modified.

Garcia-Sierra et al. (2016b) reported that the term “engagement” also has meanings that are unassociated with work and their search was limited to key words in articles. They felt that this limitation may have limited the number of relevant studies that were available. In addition, they noted the lack of longitudinal studies.

**Summary**

Work engagement influences the performance of the nurse and as such, it has the potential to impact patient outcomes. Garcia-Sierra et al. (2016b) explained that it is not a personality trait, but rather a result of an interaction among several factors, including
personal learning and work environment. They proposed that engagement can be modified by a positive work climate, social support from the organization, and nurse managers who foster engagement.

None of the studies, however, directly discussed the use of a career ladder program to increase levels of nurse engagement. Several studies noted the influence of workload. Van Bogaert et al. (2014), for example, noted the need for additional research on workload. In Garcia-Sierra et al.’s (2016b) study in Spain, the nurse–patient ratio that ranged from 10:1 on the day shift, to 30:1 nurse on the night shift, demonstrating a significant variation in workload.

Rivera et al. (2011) recognized the value of older employees and noted that they exhibited high engagement, with those over 36 years of age at the highest level of engagement. They found that an employee’s direct manager is an influential factor in employee engagement. Additionally, they found that passion as a leadership quality stimulated others’ engagement. They suggested that studies focus on leadership and work environment characteristics and their relationship to patient outcomes.

Jenaro et al. (2011) reported the importance of personal and organizational variables on nurses’ work engagement. Nurses with higher satisfaction levels showed higher engagement. One common theme in the studies is the role of the nurse manager and their influence on nurse engagement. Recommendations included training programs for enhanced communication skills to improve relationships and identify ways to reduce dysfunction on the unit. Another concept needing more research is the influence of shift length on nurse engagement.
Laschinger et al. (2009) found that the relationship between engagement and work effectiveness was lower in new graduates. This finding highlights the importance of structural empowerment and having resources to do their job. This study also found that when nurses do have the tools to practice professionally, they experience more vigor, energy, and absorption in patient care.

Limitations in all the reviewed studies include the use of a cross-sectional design with focused samples, self-reported data, and the possibility of omission of significant variables (CEBM, 2014). Furthermore, although the UWES work engagement was the most commonly used measurement tool, none of the identified studies addressed a link between a career advancement program which may provide monetary incentives with nurse engagement and improved patient outcomes. Rivera et al.’s (2011) study came closest with the finding that neither good pay nor benefits necessarily motivates employees, but when these are lacking, there is an increase in levels of job dissatisfaction. Finally, the literature is limited on nurse engagement studies conducted in the United States. This emphasizes the value in exploring the link between career advancement programs, nurse engagement, and patient outcomes more directly.
CHAPTER 3
THEORETICAL MODEL AND METHODOLOGY

The manual for the UWES characterizes *engaged employees* as those who display an energetic and effective connection with their work-associated tasks (Schaufeli, & Bakker, 2003). The theoretical framework for this study integrates Schaufeli and Bakker’s (2003) theory of work engagement, as measured by the UWES, with the conceptual framework based on the writing of William A. Kahn (1990).

**Theoretical Model**

Kahn is a psychologist who formulated his theory on work engagement around the concepts of personal engagement and personal disengagement. In 1990, Kahn published “Psychological Conditions of Personal Engagement and Disengagement at Work.” He based his theory on the premise that people occupy roles at work. He was interested in the psychological presence of the person and believed that people could use different parts of themselves—physical, cognitive, and emotional—in the roles they performed while maintaining the boundaries of their personal self and the role they were in.

Kahn’s (1990) work was based on three conditions: (a) meaningfulness, (b) safety, and (c) availability. He presumed that the more people drew themselves into their work within those boundaries, the better they performed and the more content they were with their role. He proposed that people continuously bring themselves in and out of themselves during their workday to express themselves and defend themselves. Kahn felt that by engaging, people expressed themselves in a physical, mental, and emotional sense, while by disengaging, the person withdrew and defended themselves in these same areas.
Schaufeli and Bakker proposed that engaged employees were connected to their work in a way that helped them cope with the demands of the job and developed the job demands research model (see Figure 1) to demonstrate their theory (Schaufeli & Bakker, 2004).

The model they developed proposed two psychological processes: (a) Jobs with high demands cause exhaustion and decrease motivation, and (b) the presence of resources is linked with organizational outcomes and may lead to personal development (Schaufeli & Bakker, 2004).

The concept of energy depletion can be seen in the top level of this model, while the lower level demonstrates motivation and the fulfillment of personal goals. The diagram illustrates that job resources have the potential to decrease job demands while lacking job resources increases job demands and predisposes burnout. The positive relationship between burnout and turnover intention is thought to be caused by an unfair relationship with the organization. There is a positive relationship between burnout and turnover intention and between health problems and turnover.
In 2007, Bakker and Demerouti further explained the model (see Figure 2). They illustrated that every occupation has unique characteristics that affect job stress; these factors are broken down to two categories: job demands and job resources. Job demands are the specific physical, psychological, or social skills that are sometimes physically or psychologically taxing and cause strain (Bakker & Demerouti, 2007). Job demands do not have to be negative in nature to be a stressor. However, demands turn into stressors when they require excess effort on the part of the employee.

On the other hand, job resources are the aspects of the job that help the employee reduce demands and stimulate growth and development. Resources include pay, career opportunities, job security, and interpersonal and social relations (Bakker & Demerouti, 2007).

The job demands–resource model demonstrates the role of job strain and motivation. In job strain, health impairment processes, poorly designed jobs or high demanding jobs may precipitate health issues. The sympathetic nervous system can become activated as a
protective mechanism from the strenuous work environment and can lead to health issues (Bakker & Demerouti, 2007).

Job resources can be motivational and promote increased work engagement and high quality work. The presence of job resources may support growth and development of the employee and help organizations achieve their goals. The job demands–resource model proposes that the interaction between job demands and job resources is important for the development of job strain and motivation. Job resources may buffer the impact of job demands on job strain, and eventual burnout (Bakker & Demerouti, 2007). Kahn (1990) agreed, arguing that the interaction between any pair of variables in the stress/strain sequence can serve as a buffer.

In 2008, Bakker and Demerouti further refined their model (see Figure 3). In this model, job and personal resources independently or collaboratively predict work engagement. Their impact highly impacts work engagement and is enhanced when job demands are high. In turn, engagement has a positive impact on job performance. An important feature of this model is the feedback loop that illustrates that engaged employees can create their own resources. This feature is known as job crafting and is theorized to promote engagement.

**Methodology**

This is an exploratory study designed to assess nurse engagement in registered nurses enrolled in CAP Level V. In addition, the study assessed the relationship between nurse engagement and CAP V individual participant project results. Participants were recruited via e-mail utilizing Research Electronic Data Capture (REDCap). Initiation of the study began with approval from the chief nursing officer at the study site (see Appendix A). The project
was presented to the Institutional Review Board (IRB) which reviewed and gave approval for the study in June 2016 (see Appendix B). For the recruitment flyer, see Appendix C.

![Model of work engagement](image)

Figure 3. Model of work engagement. Model based on Bakker and Demerouti (2008).

**Ethical Issues**

The study presents minimal risk of breach of privacy and confidentiality for study participants. The participants received and completed the surveys and questionnaires via the secure REDCap survey software. The participants were assigned an identification number by REDCap. The honest broker collated the pre- and post-questionnaires with the individual project metrics and stripped any identifiers prior to release to the researcher. An honest broker is a neutral third party who acts on behalf of the researcher to collect and provide de-
identified information to the researcher (UNMC, 2016). The honest broker provides information in a manner where it would not be reasonably possible to identify individuals either directly or indirectly (UNMC, 2016).

**Setting**

The setting is a Tier 1 academic medical center, trauma center, and public hospital situated in the southwestern United States. There are over 60 clinics associated with this setting. The tertiary hospital has 620 licensed beds and employs approximately 5,800 employees. There are 1,852 RNs at the setting. Each of these RNs is CAP eligible.

**Study Population**

In July 2016, the human resources department reported 64 inpatient and outpatient Registered Nurses enrolled in Level V of the CAP program. With the permission of the chief nursing officer, the human resources department supplied the list of e-mail addresses for those who were enrolled in the CAP Level V program to be solicited for participation. Four e-mail messages were returned as undeliverable. Two out-of-office responses were returned. One e-mail was returned with notification of a faulty e-mail address. This therefore resulted in 57 CAP Level V nurses eligible for the survey.

Forty CAP Level V nurses responded to the e-mail recruitment message, resulting in a 70% response rate. Of these, three of the initial respondents were excluded from the study due to the following reasons: (a) One participant did not complete the first UWES survey, (b) one participant did not complete the second UWES survey, and (c) one participant dropped CAP V status during the project. This resulted in 37 total study participants (see Figure 4).
Figure 4. Population sample.

Research Design

The study surveyed enrolled CAP V RNs at two points approximately 3 months apart. Data collection on nurse engagement was conducted in two phases.
The first phase consisted of two surveys: (a) a demographic survey (see Appendix D) and the (b) UWES (see Appendix E). Informed consent was obtained prior to administering the demographic survey (see Appendix F). Upon completion of the demographic survey, the first UWES survey was immediately deployed to the participant. The second phase of the survey was triggered by completion of the first engagement survey and was sent to enrolled participants 90 days after completion of the first set of surveys. Survey reminders were sent every 3 days for a maximum of five reminders for both phases.

**Sources of Data**

After obtaining all approvals, the demographic and engagement surveys were set up in a secure electronic data base. CAP V projects had been selected by participants with review and approval from their executive directors (EDs). Projects were set to start on January 1st, 2016 and conclude on June 30th, 2016. The projects were specific to the participant’s specific area of interest. Results were self-reported by participants and were accepted by the ED. Qualitative achievement of outcomes was measured as “met” or “not met.”

**Data Collection Process**

Study data were collected by two methods. For the surveys, the first set of surveys was deployed on September 15th, 2016 to RNs enrolled in CAP Level V on July 1st, 2016. Survey and demographic data were managed using electronic data capture tools hosted at the University of New Mexico. Demographic and survey data were captured upon participants’ enrollment. In the original proposal, the second data collection period was set at 6 months. However, due to the delayed start date of the project, 90 days after completion of the first UWES survey, the second survey was distributed.
Participants filled out their demographic data by self-report. The data queried years of practice, prior participation in a nurse residency program, and length of time at the study site. This data were collected during the first phase of the survey along with the first deployment of UWES. Reminders were sent out to each initial participant. These reminders were sent out every 3 days for a total of five reminders for each set of surveys.

The second method of data collection pertained to the individual CAP V participants’ projects. In December 2016, information on CAP V projects was requested by the chief nursing officer and submitted by EDs. EDs had originally approved all CAP V projects for employees in their areas. CAP V project data were collected for all participants enrolled in the CAP V program from January 2016 to July 2016. The information obtained by the EDs from the CAP V participants included data on the scope of the project, the metric utilized, and starting and ending measurements. Each ED provided the available information on the specific projects to the researcher. The researcher entered information into a spreadsheet, and turned over to the honest broker for deidentification of data.

Tools

The UWES was utilized to measure nurse engagement. As previously noted, the UWES is a self-reporting questionnaire that examines the three aspects of work engagement: (a) vigor, (b) dedication, and (c) absorption. The original version contained 24 items, and a second revision reduced the number of items to 17. The third revision resulted in 15 items. A final revision resulted in the nine-item UWES (Schaufeli & Bakker, 2003).

In this study, the RN’s perceived level of work engagement was assessed utilizing the nine-item Utrecht Work Engagement Scale (Schaufeli & Bakker, 2003). Three questions address each of the three aspects of work engagement. Participants responded on a Likert
scale for each of the nine items. Scoring is based on a 7-point scale ranging from 0 (never) to 6 (always). Higher overall scores indicate higher levels of work engagement.

*Vigor* is measured in the items that refer to high levels of energy and resilience, the willingness to invest effort, not being easily fatigued, and persistence in the face of difficulties. Those who score high on vigor usually have much energy, zest, and stamina when working; those who score low, on the other hand, have less energy, zest, and stamina as far as their work is concerned.

Dedication is assessed in the items that refer to deriving a sense of significance from one’s work, feeling enthusiastic and proud about one’s job, and feeling inspired and challenged by it. Those who score high on dedication identify with their work because it is experienced as meaningful, inspiring, and challenging. Those who score low do not identify with their work, as they are not inspired or challenged by the work they are doing. They also are neither enthusiastic about nor proud of their work.

Absorption is measured by items that refer to being completely happy and entirely immersed in one’s work, and having trouble separating from work so that time passes quickly and the person forgets everything around them. Those who score high on absorption are happily engrossed in their work. Those who score low are not engrossed and do not have difficulty detaching from work. They also do not lose track of time due to their work.

The validity and reliability of the UWES-9 was reviewed in a study conducted by Schaufeli, Bakker, Salanova between 1999 and 2003. Cronbach’s α coefficients ranged between .80 and .90 and test-retest reliability was reported as high. The three questions in each category are illustrated in the following Table 1.
Collection of the patient outcome data for the CAP V project began January 1st, 2016 and was completed by June 30th, 2016. These data were collected from the CAP V participants by their unit director. Individual CAP V participants identified the metrics for data collection, and outcomes were reported using these metrics. The data were then reported to and validated by the ED. The ED sent the data to the researcher who collated the data in a spreadsheet.

Table 1

_Utrecht Work Engagement Survey Questions_

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vigor</td>
<td>1. At my work, I feel bursting with energy</td>
</tr>
<tr>
<td></td>
<td>2. At my job, I feel strong and vigorous</td>
</tr>
<tr>
<td></td>
<td>3. When I get up in the morning, I feel like going to work</td>
</tr>
<tr>
<td>Dedication</td>
<td>4. I am enthusiastic about my job</td>
</tr>
<tr>
<td></td>
<td>5. My job inspires me</td>
</tr>
<tr>
<td></td>
<td>6. I am proud of the work that I do</td>
</tr>
<tr>
<td>Absorption</td>
<td>7. I feel happy when I am working intensely</td>
</tr>
<tr>
<td></td>
<td>8. I am immersed in my work</td>
</tr>
<tr>
<td></td>
<td>9. I get carried away when I’m working</td>
</tr>
</tbody>
</table>

The researcher rated the project outcomes as “met” or “not met” as noted by the measurements provided. The completed spreadsheet was then turned over to the honest broker for deidentification.

**Data Protection Plan**

Survey data were collected and managed using REDCap, hosted at the University of New Mexico. REDCap is a secure, web-based application designed to assist research teams with easy to use tools for collection, storage, and dissemination of research data. Key features of the program include an intuitive interface, auditing capabilities, export functions
to common statistical packages, and import functions from external sources (Harris et al., 2009).

An honest broker was utilized to provide anonymity to participants. The honest broker obtained data from REDCap for the two surveys and participant demographics. The honest broker took the information on the CAP V projects from the researcher and associated it with participants in the REDCap database. The honest broker deidentified the data and turned over the information in a spreadsheet to the researcher.

**Timeline**

This was an exploratory study with four phases to the timeline: (a) planning, (b) implementation, (c) analysis, and (d) defense.

1. **Planning Phase**
   a. Develop concept
   b. Seek approval of project
      i. Committee chairs
      ii. Chief nursing officer

2. **Implementation Phase**
   a. Begin research
      i. Literature review
   b. Develop and determine data collection tools
      i. Demographic survey
      ii. UWES survey
   c. Obtain IRB approval
   d. Prepare surveys on REDCap
e. Recruitment of participants (see Appendices G & H).
   i. First survey deployed – September 15th, 2016
   ii. Second survey deployed – 90 days after each participant’s completion of first set of surveys

3. Analysis phase: January–March 30th, 2017
   a. Collect and collate data
   b. Statistical analysis of data with support of committee
   c. Interpretation of data

   a. Preparation of written documents
   b. Submission of written documents
   c. Oral defense–March 30, 2017

   **Statistical Analysis**

   Statistical analyses were completed with the use of IBM SPSS Version 24. Analyses included whether participation in a professional career advancement program influenced nurse engagement and whether RN participation in a career advancement program influenced patient outcomes.

   **Budget**

   There were minimal costs to this study. The tools used were computer, SPSS software, and Microsoft Office software, all purchased by and owned by the researcher. No other costs were identified.
CHAPTER 4

RESULTS AND DISCUSSION

This chapter presents the study results from the recruitment sample including demographics of the sample, descriptive statistics, and analysis of the study’s objectives.

Results

Four participants failed to answer one question in the dedication category. Three failed to answer the question “I am enthusiastic about my job” and one failed to answer the question “My job inspires me.” To address this, their scores were averaged for the questions answered on that section. In addition, one participant failed to answer the question on whether they possessed an MSN, and one failed to answer the question about previous participation in a nurse residency program.

Descriptive Statistics

A quantitative analysis of the information provided by the honest broker was conducted. Descriptive statistics were used to analyze the demographic data (see Table 2). Possession of a MSN degree was reported by 61% of the participants. Participation in a nurse residency program was reported by 16.7% of the participants.

Participants reported their years in health care in a range from 6 to 10 years (24.3%), followed by 16 to 20 years (18.9%), 11 to 15 years (16.2 %), greater than 30 years (13.5%), 21 to 25 years (10.8%), 3 to 5 years (8.1%), 26 to 30 years (5.4%), and 1 to 3 years (2.7%). Demographic percentages included 3 to 5 years in their current role reported by 41.7% of the participants, followed by 1 to 3 years reported by 22.2%, 6 to 10 years reported by 13.9%, and less than 1 year reported by 11.1%. The categories of 11 to 15 years and 26 to 30 years each reported 5.6%.
Table 2

Demographic Data for Registered Nurses

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residency</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>6</td>
<td>16.7</td>
</tr>
<tr>
<td>No</td>
<td>30</td>
<td>83.3</td>
</tr>
<tr>
<td>No answer</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>MSN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>22</td>
<td>61.1</td>
</tr>
<tr>
<td>No</td>
<td>14</td>
<td>38.9</td>
</tr>
<tr>
<td>No answer</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Years in Healthcare</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 – 3 years</td>
<td>1</td>
<td>2.7</td>
</tr>
<tr>
<td>3 – 5 years</td>
<td>3</td>
<td>8.1</td>
</tr>
<tr>
<td>6 – 10 years</td>
<td>9</td>
<td>24.3</td>
</tr>
<tr>
<td>11 – 15 years</td>
<td>6</td>
<td>16.2</td>
</tr>
<tr>
<td>16 – 20 years</td>
<td>7</td>
<td>18.9</td>
</tr>
<tr>
<td>21 – 25 years</td>
<td>4</td>
<td>10.8</td>
</tr>
<tr>
<td>26 – 30 years</td>
<td>2</td>
<td>5.4</td>
</tr>
<tr>
<td>Greater than 30 years</td>
<td>5</td>
<td>13.5</td>
</tr>
<tr>
<td>Years in Current Role</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 1 year</td>
<td>4</td>
<td>11.1</td>
</tr>
<tr>
<td>1 – 3 years</td>
<td>8</td>
<td>22.2</td>
</tr>
<tr>
<td>3 – 5 years</td>
<td>15</td>
<td>41.7</td>
</tr>
<tr>
<td>6 – 10 years</td>
<td>5</td>
<td>13.9</td>
</tr>
<tr>
<td>11 – 15 years</td>
<td>2</td>
<td>5.6</td>
</tr>
<tr>
<td>26 – 30 years</td>
<td>2</td>
<td>5.6</td>
</tr>
<tr>
<td>Years at UNMH</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 1 year</td>
<td>1</td>
<td>2.7</td>
</tr>
<tr>
<td>1 – 3 years</td>
<td>1</td>
<td>2.7</td>
</tr>
<tr>
<td>3 – 5 years</td>
<td>8</td>
<td>21.6</td>
</tr>
<tr>
<td>6 – 10 years</td>
<td>15</td>
<td>40.5</td>
</tr>
<tr>
<td>11 – 15 years</td>
<td>5</td>
<td>13.5</td>
</tr>
<tr>
<td>16 – 20 years</td>
<td>4</td>
<td>10.8</td>
</tr>
<tr>
<td>21 – 25 years</td>
<td>1</td>
<td>2.7</td>
</tr>
<tr>
<td>26 – 30 years</td>
<td>1</td>
<td>2.7</td>
</tr>
<tr>
<td>Greater than 30 years</td>
<td>1</td>
<td>2.7</td>
</tr>
<tr>
<td>Years in CAP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 1 year</td>
<td>2</td>
<td>5.4</td>
</tr>
<tr>
<td>1 – 3 years</td>
<td>3</td>
<td>8.1</td>
</tr>
<tr>
<td>3 – 5 years</td>
<td>8</td>
<td>21.6</td>
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<tr>
<td>6 – 10 years</td>
<td>14</td>
<td>37.8</td>
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<tr>
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<td>13.5</td>
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<tr>
<td>16 – 20 years</td>
<td>3</td>
<td>8.1</td>
</tr>
<tr>
<td>21 – 25 years</td>
<td>1</td>
<td>2.7</td>
</tr>
<tr>
<td>26 – 30 years</td>
<td>1</td>
<td>2.7</td>
</tr>
</tbody>
</table>

Note. N = 37. MSN = Master’s of Science in Nursing; CAP = career advancement program.
Years of service at the study site included 40.5% for the range of 6 to 10 years, 21.6% for 3 to 5 years, 13.5% for 11 to 15 years, and 10.8% for 16 to 20 years.

Years of participation in the CAP program were reported at 37.8% for the range of 6 to 10 years, followed by 21.6% for 3 to 5 years, and 13.5% at 11 to 15 years. The ranges of 1 to 3 and 16 to 20 years each reported 8.1%. Participation in the CAP V program requires participation in a pertinent project that improves patient outcomes (S. Ferguson, personal communication, March 17, 2017). Achievement of Level V in the CAP program requires dedication to patient outcomes, excellence in practice and clinical leadership (UNMH, 2015).

The study found that 92.3% of the CAP V projects had reported data on patient outcomes demonstrating an improvement (see Table 3). Eleven of the projects lacked outcome reporting due to the following reasons: new CAP V participant (4), project not ready for roll-out (1), missing equipment (1), process issue/project stopped (1), participant dropped CAP V (1), or resignation (2). One project had no data reported, even though it had been completed.

Table 3

**CAP V Project Data**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Improvement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>24</td>
<td>92.3</td>
</tr>
<tr>
<td>No</td>
<td>2</td>
<td>7.7</td>
</tr>
<tr>
<td>Other</td>
<td>11</td>
<td></td>
</tr>
</tbody>
</table>

*Note. N = 37.*

The histogram in Figure 5 was used to illustrate the frequencies of the variable. The shape provides information about the distribution of the variable (Pallant, 2013). The distribution of the total UWES scores for both UWES Time 1 and UWES Time 2 is
demonstrated in Figure 5. The histogram demonstrated a negative skew (-.33) with a platykurtic kurtosis (-.33; see Figure 5). The $M = 4.37$ is ($SD = .96$) with a range of 2 and a maximum score of 6 with a 95% range from 4.14 to 4.59.

![Histogram](image)

**Figure 5.** Utrecht Work Engagement Scale Histogram.

**Inferential Statistical Analysis**

Paired-samples $t$ tests are used to measure the same variable at two different times (Kellar & Kelvin, 2013). This statistical test is commonly used before and after an intervention such as used in this study. Assumptions include: (a) a continuous dependent variable, (b) related samples such as the same participants in the before- and after-treatment groups, (c) normality, and (d) no outliers (Kellar & Kelvin, 2013). Two-tailed $t$ tests were used to assess the statistical significance of any difference in the UWES scales from the time
the project was in progress to the time the project was completed. The assumption of normality was assessed for this sample. In review of skewness/kurtosis, histogram, and Q–Q plots for UWES Time 1 and UWES Time 2, the scores were close to normal, assuming homogeneity of variance. The mean difference in the posttest minus the pretest was calculated, and there was a statistically significant difference in the scores for UWES Time 1 \( (M = 4.53, SD = .88) \) and UWES Time 2 \( (M = 4.20, SD = 1.02) \), \( t(36) = 2.724, p < .010 \) (two-tailed). The mean decrease in the UWES scores was .33, with a 95% confidence interval ranging from .085 to .58. The Cohen’s \( d \), or the mean difference between the responses divided by the standard deviation (Cohen, 1988) of these difference scores was calculated as follows: \( .31/.93 = .33 \). This is a medium effect size (Cohen, 1988).

**Findings**

A statistically significant decrease in UWES scores was found for the entire sample of CAP V RNs. The low \( p \) value indicated that the decrease in scores between the first test and the follow-up test did not occur simply by chance, and that participation in the CAP program did not have a positive effect on nurse engagement. The 95% confidence interval demonstrated that the participants might be expected to show decreased engagement by .33 points in the UWES scores.

The second aim of the study was to assess if participation in the CAP program had a positive effect on patient outcomes. This objective proved to be true, with 93% of the participants reporting an improvement in patient outcomes. EDs collected the CAP V project data for all participants in their respective areas. The information obtained by the EDs from the CAP V participants included data on the scope of the project, the metric utilized, and starting and ending measurements of patient outcomes. Projects results were reported as
either “met” or “not met.” Twenty-four of the projects were reported as having improved patient outcomes, while two were reported as not met. As cited above, eleven projects did not report outcomes. In summary, 92.3% of the projects reported improved patient outcomes.

**Interpretation of Findings**

Bakker and Demerouti (2008) have demonstrated the link between job and personal resources and their impact on work engagement. Of interest is the moderate decrease in scores with the extraneous factors influencing the work environment. During this project, there were several organizational changes at the site facility that could have influenced the outcomes. First, the hospital had initiated several practices to address unexpected decreases in funding from the home state of the organization site. These initiatives included a prescriptive use of sitters and institution of hours of care for all units. Although there is limited evidence to support their use, *sitters* are unlicensed personnel used to provide observation of patients (Rausch & Bjorklund, 2010). Hours of care are a staffing metric that calculates the total number of hours of care delivered to each patient per day (Min & Scott, 2016). The numbers are derived by adding together all hours of direct caregivers in a given time period and dividing this sum by the number of patients. The RNs could have interpreted these actions as a loss of job resources and lend to the possibility of a *history threat*, or an event that occurs concurrently with treatment and could cause the observed effect (Shadish, Cook, & Campbell, 2002).

**Discussion**

This project is the first study at this organization to assess the relationship between a CAP program and nurse engagement and patient outcomes at this facility. This study
occurred only in this facility and consisted of a self-selected sample size. Thus, generalization to other populations is limited. Furthermore, with the possibility of a history threat at the time of the second survey, participants in CAP V would seem to preserve their engagement levels for challenging times at work. Although the change in UWES scores was statistically significant, 93% of the CAP V projects demonstrated improvement in patient outcomes. Of the 37 participants in the study, 26 of the projects reported significant results. Improved patient outcomes were reported in 24 projects with EDs concurring with the self-reported scores in their individual projects.

**Implications for Practice**

Nursing is considered one of the most stressful professions (Roberts, Grubb, & Grosch, 2012). The stress is related to the physical, emotional, and interpersonal demands of the job, with other factors contributing. These factors include the increased use of technology, budget cuts, increased workload, and continuous pace of organizational change (Roberts et al., 2012).

Changes in health care delivery have created a change-filled environment with multiple demands. It is important to evaluate the stressors placed on nurses to identify their impact on the nurse and on patient outcomes. It is important to fully understand how the three concepts of vigor, dedication, and absorption can be addressed with nursing staff to improve nurse engagement, and reduce the stress of an inherently stressful occupation.

It is also important to address communication of changes and how the messages flow from administration to the nurse at bedside. Failure to understand the “why” behind the change can impact understanding and buy-in of new processes.
Limitations and Strengths of the Study

There were several limitations in this study. First, the study was conducted using a small population with self-selected participation resulting in a small sample ($N = 37$). Furthermore, a specific group of nurses was solicited for the survey with the potential of a perceived lack of confidentiality, as the study site was limited to one academic medical center in the Southwestern United States. Two unassociated surveys had recently taken place leading to the possibility of survey fatigue and the additional possibility of a low response rate. Additional threats included a failure to address participants’ concerns that have not been addressed by the organization and the influence of organizational projects on participants’ responses. Moreover, during the time the survey was conducted, there were new financial constraints that the organization was addressing that may have affected participants’ responses.

Strengths of this study include the convenient and anonymous access to the survey. This study is the first in this organization to assess the nature of nurse engagement among RNs. An additional strength is the opportunity to analyze the influence on the new CAP V program and identify areas for improvement. The study assessed both inpatient and outpatient nurses and nurses in various roles, adding to the variety of respondents.

Suggestions for Future Research

Further research on nurse engagement is needed in this population. This study should be repeated with inclusion of all CAP levels to compare nurses’ engagement in different levels. In addition, studies of job position and its correlation with nurse engagement could assess engagement levels among various staff roles at this facility, allowing for correlation
with position and level of engagement. It would be important to reveal which of the three categories of the UWES scale has the most impact on engagement in this population.

Bakker, van Emmerick, and Euwema (2006) discussed the importance of engagement level for the team and suggested that engagement may be something that can spread from one employee to another. Another important question for further research is what makes this population sample able to continue in their professional roles despite the challenges that they face with changes in patient care delivery at their organization.

**Conclusion**

The purpose of this project contained two objectives. First, the project was intended to study if RNs’ CAP participation improved nurse engagement. Second, the researcher sought to determine if participation in the CAP had a positive impact on patient outcomes. The study took place at a large academic medical center in an urban public hospital in the Southwestern United States that serves as a safety net for the state and region. While there was a statistically significant decrease in UWES scores for the entire sample of CAP V RNs, 93% of the participants reported improvement in patient outcomes in their projects.

The findings suggest that more research is needed to identify the factors that affect nurse engagement at this site. Finding ways to improve the work environment, decrease the perception of stress, and improve workflow may have a positive impact on nurse engagement. Of interest in this population is the resilience of the nursing staff who were able to demonstrate positive patient outcomes despite a decrease in work engagement.

Results of this study are exploratory. The study supported earlier findings that job resources, as opposed to job demands, are better predictors of engagement (Mauno, Kinnunen, & Ruokolainen, 2007). Bakker, Albrecht, and Leiter (2011) concluded that work
environments with abundant resources promoted work engagement, especially in environments where job demands were high. More research would be beneficial to understanding the role of job resources in nurse populations.

The shift to value-based purchasing by the Centers for Medicare and Medicaid Services (Raso, 2012) has caused a change in the way health care is delivered. Hospitals are challenged with competition for high-quality care and control of resources (Santos, Chambel, & Castanheira, 2016). Research supports the findings that high-quality patient care is dependent on an empowered nursing workforce (Laschinger et al., 2009) and for 15 consecutive years, Americans have rated nurses among the most respected professionals (Norman, 2016). Environments that are supportive of professional nursing practice result in positive outcomes for both nurses and patients. This study has provided an opportunity to assess links in patient outcomes, professional incentives, and nurse engagement, and to assess the impact of programs such as this particular CAP.
REFERENCES


Research Electronic Data Capture (REDCap) – A metadata-driven methodology and workflow process for providing translational research informatics support. *Journal of Biomedical Informatics, 42*(2), 377–381. doi:10.1016/j.jbi.2008.08.010


doi:10.1097/01.NURSE.0000419437.60674.45


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APPENDIX A

ORGANIZATIONAL APPROVAL LETTER

April 7, 2016

From: Sheena M. Ferguson, MSN, RN, CNS, CCRNa

Administrator/Chief Nursing Officer

Dear IRB and DNP Capstone Committee:

This letter indicates my full support of the DNP Capstone project proposed by Manuelita (Mela) Chapman, MSN, RN, NE-BC, entitled "Assessment of Nurse Engagement".

The goal of the project is to determine if there is a relationship between monetary incentives, nurse engagement, and patient outcomes.

Ms. Chapman has permission to conduct this proposed project and associated research with CAP V Registered Nurses at the __________________ and its’ associated clinics.

Please feel free to contact me for any additional information, questions or concerns. I am glad to assist in any way.

Sincerely,

[Signature]

[Name]

[Title]
APPENDIX B

IRB APPROVAL LETTER

Human Research Review Committee
Human Research Protections Office

June 22, 2016

Amy Levi
amylevi@salud.unm.edu

Dear Amy Levi:

On 6/20/2016, the HRRC reviewed the following submission:

Type of Review: Initial Study
Title of Study: Assessment of Nurse Engagement
Investigator: Amy Levi
Study ID: 16-197
Submission ID: 16-197
IND, IDE, or HDE: None

Submission Summary: Nurse Engagement
Documents Approved: Assessment of Nurse Engagement
Study Consent
Recruitment flyer
Email to participants
Letter to Executive Directors
UWES survey tool
Demographic survey

Review Category: Exemption: Categories (4) Data, documents, or specimens and (2) Tests, surveys, interviews, or observation

Determinations/Waivers: Requires a signed consent form
HIPAA Authorization Addendum Not Applicable

Submission Approval
Date: 6/20/2016
Approval End Date: None
Effective Date: 6/20/2016

The HRRC approved the study from 6/20/2016. If modifications were required to secure approval, the effective date will be later than the approval date. The “Effective Date” 6/20/2016 is the date the HRRC approved your modifications and, in all cases, represents the date study activities may begin.

Because it has been granted exemption, this research is not subject to continuing review.
Please use the consent documents that were approved and stamped by the HRRC. The stamped and approved consents are available for your retrieval in the “Documents” tab of the parent study.

This determination applies only to the activities described in this submission and does not apply should you make any changes to these documents. If changes are being considered and there are questions about whether HRRC review is needed, please submit a study modification to the HRRC for a determination. A change in the research may disqualify this research from the current review category. You can create a modification by clicking Create Modification / CR within the study.

In conducting this study, you are required to follow the Investigator Manual dated April 1, 2015 (HRP-103), which can be found by navigating to the IRB Library.

Sincerely,

[Signature]

Thomas F. Byrd, MD
HRRC Chair
Join in an anonymous REDCap Survey to help analyze nurse engagement and patient outcomes at [redacted].

Participation in this survey is voluntary and will aid in research of a DNP Scholarly project.

DATE: THRU SEPT 30

Check your email for survey. Survey available for inpatient and outpatient CAP V RNs enrolled in initial rollout of CAP V program.

This survey has been assigned IRB#16-197

FOR MORE INFORMATION CONTACT: MELA CHAPMAN @ [redacted]
APPENDIX D

DEMOGRAPHIC SURVEY

1. Were you enrolled in the nurse residency program at UNMH?
   □ Yes
   □ No

2. Do you currently have your MSN?
   □ Yes
   □ No

3. How many years have you worked in healthcare?
   □ Less than 1
   □ 1–3 years
   □ 3–5 years
   □ 6–10 years
   □ 11–15 years
   □ 16–20 years
   □ 21–25 years
   □ 26–30 years
   □ Greater than 30 years

4. How many years have you worked in your current role?
   □ Less than 1
   □ 1–3 years
   □ 3–5 years
   □ 6–10 years
   □ 11–15 years
   □ 16–20 years
   □ 21–25 years
   □ 26–30 years
   □ Greater than 30 years

5. How many years have you participated in the CAP program at UNMH?
   □ Less than 1
   □ 1–3 years
   □ 3–5 years
   □ 6–10 years
   □ 11–15 years
   □ 16–20 years
   □ 21–25 years
   □ 26–30 years
   □ Greater than 30 years

6. How many years have you been employed at UNMH?
☐ Less than 1
☐ 1–3 years
☐ 3–5 years
☐ 6–10 years
☐ 11–15 years
☐ 16–20 years
☐ 21–25 years
☐ 26–30 years
☐ Greater than 30 years
APPENDIX E

UTRECHT WORK ENGAGEMENT SURVEY

Work & Well-being Survey (UWES) ©

The following 9 statements are about how you feel at work. Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling, cross the “0” (zero) in the space after the statement. If you have had this feeling, indicate how often you feel it by crossing the number (from 1 to 6) that best describes how frequently you feel that way.

<table>
<thead>
<tr>
<th></th>
<th>Almost never</th>
<th>Rarely</th>
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<th>Often</th>
<th>Very often</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Never</td>
<td>A few times</td>
<td>Once</td>
<td>A few</td>
<td>Once</td>
<td>A few</td>
<td>Every</td>
</tr>
<tr>
<td></td>
<td>a year or</td>
<td>a month</td>
<td>times a</td>
<td>a week</td>
<td>times a</td>
<td>day</td>
</tr>
<tr>
<td></td>
<td>less</td>
<td>or less</td>
<td>week</td>
<td></td>
<td>week</td>
<td></td>
</tr>
</tbody>
</table>

1. _______ At my work, I feel bursting with energy
2. _______ At my job, I feel strong and vigorous
3. _______ I am enthusiastic about my job
4. _______ My job inspires me
5. _______ When I get up in the morning, I feel like going to work
6. _______ I feel happy when I am working intensely
7. _______ I am proud of the work that I do
8. _______ I am immersed in my work
9. _______ I get carried away when I’m working

© Schaufeli & Bakker (2003). The Utrecht Work Engagement Scale is free for use for non-commercial scientific research. Commercial and/or non-scientific use is prohibited, unless previous written permission is granted by the authors
APPENDIX F

CONSENT FOR SURVEY AND WAIVER OF CONSENT

The University of New Mexico
Consent for Survey

Assessment of Nurse Engagement

Manuelita (Mela) Chapman, a Doctor of Nursing Practice student from the UNM College of Nursing is conducting a research study. This research is studying the relationship between nurse engagement and patient outcomes and a career advancement program. You are being asked to participate in this study because you are a Registered Nurse (RN) at the Hospital and are participating in the Career Advancement Program (CAP) at level V.

Your participation will involve completion of the Utrecht Work Engagement Scale (UWES) at two different time periods and a demographic questionnaire that includes questions regarding your education level, years of experience, years of participation in CAP program, prior participation in residency and years employed at. The surveys should take about ten minutes to complete. Your involvement in the study is voluntary, and you may choose not to participate. There are no names or identifying information associated with this survey. The survey includes a total of 9 brief statements that will ask you about your perceptions on work and well-being based on a six-point scale with 0 being never to 6 being always/every day.

You can refuse to answer any of the questions at any time. You may decide not to be included in the study at any time. You will not be penalized in any way if you choose not to answer any questions or not participate in the study. There are no known risks in this study, but some individuals may experience discomfort when answering the questions. All data will be analyzed and reported in aggregate only and your data will be stored on a pass-word protected computer and your surveys will be aggregated by RED CAP software and destroyed at the end of the study.

The findings from this project will provide information regarding the use of career advancement programs in nursing practice and how they may impact patient outcomes and nurses’ perceptions of work. In addition, you may receive some benefit from contribution to research to address nursing working issues. Any dissemination of data will be presented in aggregate only.

If you have any questions about this research project, please feel free to call Manuelita (Mela) Chapman co-researcher at (505) - 980-3049, or Amy Levi, PhD, CNM, RN who is the Principle Investigator of the study at (505-272-0864). If you have questions regarding your legal rights as a research subject, you may call the UNM Human Research Protection Office of the IRB (OIRB) at (505) 272-1129.
By completing and this survey and the demographic questionnaire in the survey provided you will be agreeing to participate in the above described research study.

Thank you for your consideration.

Sincerely,

Manuelita (Mela) Chapman
College of Nursing DNP student
# CHECKLIST: Waiver or Alteration of Consent Process

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>DATE</th>
<th>PAGE</th>
</tr>
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<tbody>
<tr>
<td>HRP-410</td>
<td>2/24/2016</td>
<td>1 of 2</td>
</tr>
</tbody>
</table>

The purpose of this checklist is to provide support for IRB members or the Designated Reviewer following the WORKSHEET: Criteria for Approval (HRP-314) when research involves waiver or alteration of the consent process. This checklist must be used for all reviews (initial, continuing, modification, review by the convened IRB, and review using the expedited procedure).

- For initial review using the expedited procedure and modifications and continuing reviews where the determinations relevant to this checklist made on the previous review have changed, the Designated Reviewer completes this checklist to document determinations required by the regulations along with protocol specific findings justifying those determinations. The Designated Reviewer attaches this checklist to the CHECKLIST: Non-Committee Review (HRP-402). The IRB Office retains this checklist in the protocol file.
- For initial review using the convened IRB and for modifications and continuing reviews where the determinations relevant to this checklist made on the previous review have changed, one of the following two options may be used:
  1. The convened IRB completes the corresponding section of the TEMPLATE MINUTES (HRP-501) to document determinations required by the regulations along with protocol specific findings justifying those determinations, in which case this checklist does not need to be completed or retained.
  2. The convened IRB completes this checklist to document determinations required by the regulations along with protocol specific findings justifying those determinations and the IRB Office retains this checklist in the protocol file.

The research must meet one of the following four sets of criteria

## 1. Waiver or Alteration of Consent Process¹ (Check if "Yes". All must be checked)

- The research is NOT FDA-regulated.
- The research does NOT involve non-viable neonates.
- The research involves no more than Minimal Risk to the subjects. Provide protocol specific findings justifying this determination: There is a slight risk of breach of privacy and confidentiality with any survey research study.
- The waiver or alteration will NOT adversely affect the rights and welfare of the subjects. Provide protocol specific findings justifying this determination: A subject may choose not to participate in the study at any time by choosing not to answer any question on the survey at any time or by choosing not to complete the survey at either survey period without consequencess to their employment status or CAP V status at UNM Hospital.
- The research could NOT practicably be carried out without the waiver or alteration. Provide protocol specific findings justifying this determination: The consent form would be the only record linking the subject to the study survey data and would constitute the primary risk for breach of confidentiality.
- Whenever appropriate, the subjects will be provided with additional pertinent information after participation. Provide protocol specific findings justifying this determination: Study results will be shared in aggregate form via presentations at UNM, Hospital, student researcher's oral defense for Doctor of Nursing practice degree, poster presentations at Transforming Care at the Bedside Conference, public presentations if requested, and publication in professional journals if accepted.

## 2. Waiver or Alteration of Consent Process² (Check if "Yes". All must be checked)

- The research is NOT FDA-regulated.
- The research does NOT involve non-viable neonates.
- The research or demonstration project is to be conducted by or subject to the approval of state or local government officials. Provide protocol specific findings justifying this determination.
- The research or demonstration project is designed to study, evaluate, or otherwise examine one or more of the following (Check all boxes that are true. One must be checked):
  - Public benefit or service programs.
  - Procedures for obtaining benefits or services under those programs.
  - Possible changes in or alternatives to those programs or procedures.
  - Possible changes in methods or levels of payment for benefits or services under those programs. Provide protocol specific findings justifying this determination.
- The research could NOT practicably be carried out without the waiver or alteration. Provide protocol specific findings justifying this determination:

---

¹ 45 CFR §46.116(d)
² 45 CFR §46.116(c)
Subject: Opportunity to participate in RN Survey for DNP Scholarly Project

Fellow RNs,

I am a DNP student at the UNM College of Nursing and have obtained IRB approval (16-197) for my DNP Scholarly Project entitled **Assessment of Nurse Engagement**. I am asking for your participation in this survey that examines nurse engagement and patient outcomes in our organization.

The survey will remain open until DATE TO BE DETERMINED. The results are anonymous and will be reported in aggregate form in mid-spring 2017.

Here is the link to the anonymous survey.

Thank you, in advance, for helping me with my capstone project. Feel free to contact me with any questions or comments.

Sincerely,

Manuelita Chapman MSN, RN
DNP Student
UNM College of Nursing
Subject: Opportunity to participate in RN Survey for DNP Scholarly Project

Colleagues,

Having obtained IRB approval for my DNP Scholarly Project entitled Assessment of Nurse Engagement, I am preparing to begin a survey study examining nurse engagement of CAP V Registered Nurses in our organization. I received an email list of all nurses at [redacted] whose job description lists them as CAP V Registered Nurses. The survey will launch on September 15, 2016 until DATE TO BE DETERMINED. It takes about 10 minutes to complete.

Please share this information with Unit Directors and let them know they will be receiving an email about the survey to share with CAP V Registered Nurses in their units.

Thank you for your consideration,

Manuelita Chapman MSN, RN
DNP Student
UNM College of Nursing