

# **Project Name - Vermont Nurse Internship Project Research Plan**

## **Proposal Number - P52001**

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### **Organization type - Non-profit**

**Organization information** Mt. Ascutney Hospital Community Health Foundation - Vermont Nurse Internship Project

**Organization's Scope of work** – The VT Nurse Internship Project exists to assist and support transitions into the workplace for professional nurses and other staff in healthcare. Using a framework that is research and evidence-based will ensure provision of competent practice and quality of care for patients.

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**Project Overview:** The Vermont Nurse Internship Project (VNIP) combined several data collection and analysis activities within one global research plan. VNIP is a successful, statewide, implementation project that develops and evaluates the initial competence of the new graduate, new to specialty nurse and re-entry program nurse. The VNIP Research Plan will undertake broad evaluation of the program’s outcomes for interns, preceptors, nursing leadership, education, and agencies. A combination of demographic data collection, retention tracking, questionnaires, survey tools, focus groups, and weekly assessments will be used to evaluate the model components and overall impact in various clinical settings. With this project, formative and summative evaluation will occur and reports/publications will establish benchmarks for comparison with other programs of this type.

**Rationale:** Further outcomes research is needed to quantify the impact of the overall VNIP implementation project. The current outcomes analysis for the HRSA project tracks the duration of retention and “reasons for leaving” for both new graduate and “new to specialty” nurses. Nursing literature reports turnover rates of 35% to 60% for new graduate nurses within the first year of employment (Halfer & Graf , 2006). Early data analysis of the VNIP model indicates that only 12% of the enrolled interns (472) have left their positions to date. Of the 57 interns that left their positions, 10% failed their licensing boards and 14 % were unable to meet agency expectations and/or competency requirements. The HRSA funding was limited to 3 years, but tracking this retention for additional years will show the longer range impact the model has on retention. Further tracking and analysis of both retention and “reasons for leaving” could provide data for benchmarking ‘best practices’ at individual agencies, as well as indicating the reliability of these initial research outcomes. Further outcomes data collection and analysis would add to the evidence that supports using this or similar frameworks as a practice standard for transition of new graduate and new to specialty nurses in various settings. Continuing the evidence collection on the VNIP model offers a unique opportunity to evaluate a framework that is used statewide and across the continuum of care. Providing funding at this time will ensure that there will be no gap in data collection and analysis, and it will expand the variety and type of evidence available for benchmarking the outcomes of this transition to practice model.

**Research Goal:** The Vermont Nurse Internship Project (VNIP) Research Plan will advance nursing regulation by providing and validating an evidence-based model for developing the competent practice of new graduate and new to specialty nurses. Best practices for supporting nurses in transition to a new practice area will be tested and available for dissemination. The VNIP is an innovative project that has had a measurable impact in providing a ‘transition to practice’ model, which is currently in use throughout the state of Vermont, across the continuum of care. This transition to practice model supports competency development and validation while protecting patient safety. Further data collection will substantiate the framework effectiveness and have implications for nursing education, as we determine both met and unmet expectations in nursing workforce development.

**Background:** The Vermont Nurse Internship Project was undertaken in response to the looming staffing issues identified in 1999 by the Vermont Organization of Nurse Leaders (VONL). VONL partnered with the Vermont Association of Hospitals and Health Systems to study the nursing workforce issues specific to Vermont. The resulting report, the Vermont Nursing Report became the basis for further collaborative work and then strategic planning relating to the pending workforce crisis. Six (6) strategic goals for dealing with the crisis were identified in VONL - Current State of Nursing in Vermont.  
<http://www.vahhs.org/lucie/Vonl/VONL%20Presentation.htm>

These goals included:

- V. Create a formal nursing internship program that provides adequate practical clinical experience for novice nurses to function at a competent level when they enter the work force. This would force a marriage of schools of nursing and fields of practice that could strengthen both institutions, while promoting the preparation of nurses able to handle the currently complex and demanding field of health care.

The initial model development targeted the new graduate RN and transition to practice. It was decided that the internship would be based in a preceptorship delivery model. As a result two programs were developed: one for the interns (new graduates) and another for the development and support of clinical staff preceptors.

**Unique aspects of this project** include the collaborative workgroup comprised of nurse leaders from practice settings, academia, and the Board of Nursing and the focus on a model configuration that can be applied statewide and across the continuum of care. The Internship model used Lenburg's Competency Outcomes Performance Assessment (COPA) model (Lenburg, 1999) to define the core outline for the role of the RN and competency-based skills verification. The specific subskills for each of Lenburg's Eight Core Practice Competencies were identified with input from all practice areas to establish a competency verification form that outlined the core role of the generalist RN in most, if not all, direct care settings. The initial form was used in the first pilot during the summer of 2000. Based on outcomes data and feedback from the educators and preceptors using the model within the pilot, it was modified then underwent a second pilot during 2001. Thus the model and its components were established as a standardized model for delivery in multiple settings. It was found to be a model that provides structure for experiential learning that can address the needs of the new graduate, specialty care internships, and/or the clinical component of a re-entry program.

Another unique aspect of this model is the strong link between internship and preceptor development and support. The VNIP integrated the preceptor development as a core component of the internship delivery model and has standardized research and theory-based preceptor instruction on a statewide basis.

## **Methodology & data analysis - The planned data collection and analysis includes:**

### **1. Job satisfaction and intention to leave comparison**

Method I: comparison of job satisfaction and intention to leave. A mailed questionnaire, included in re-licensure materials, was sent to all Vermont RNs in January 2007 and 2009, exploring job satisfaction, intention to leave and reasons for leaving. This questionnaire includes demographics, education, current position, job satisfaction, intention to leave, and other elements of the minimum data set for nursing workforce analysis recommended by the Colleagues on Caring. Content validity was established by expert panel review and Institutional Review Board (IRB) approval established through the University of Vermont IRB.

See report: Summary of Board of Nursing Relicensure Survey March 2007

[Registered Nurses in Vermont](#)

at <http://www.choosenursingvermont.org/research/2007.php>

Interns complete a consent form for data collection and submit demographic data on entry into VNIP program. Site coordinators submit quarterly reports that identify retention of interns and reported reasons for leaving. These data are collated and analyzed on a semi-annual basis, with intent of identifying any “systems failures” that are impacting retention. This process will produce data that can be compared to prior research related to departure from first nursing position. (35% to 60% of new graduate nurses leave their first job during the first year of hire)

### **2. Determine satisfaction with VNIP delivery**

Method I: Development and pilot testing of evaluation survey for interns, preceptors, other staff, managers, educators.

Method II: Development of focus group procedures to collect qualitative data.

**3. Establish benchmarks for transition** by tracking competency development data as pertains to various backgrounds and new specialty challenges.

Methods: Pilot testing of competence assessment form as a tool used weekly by interns and preceptors to track progression towards safe and effective, independent practice.

**4. Evaluate the model components** in order to determine criteria that are essential to the success of the novice nurse in transition.

Methods: Development and pilot testing of evaluation survey for interns, preceptors, other staff, managers, educators.

- Report back to the academic settings to compare preparation expectations with actual capability within the practice settings
- Modify the model to support the best possible framework and process for transition to practice.

## Research outcomes report

### Section One: Retention and reasons for leaving outcomes

Prepared by:

Susan A. Boyer, RN, MEd, FAHCEP

Since June of 2003, the Vermont Nurse Internship Project (VNIP) has enrolled and tracked the retention of new graduate nurses that start their nursing practice experience within the framework and process of the standardized Vermont nurse internship. During this period, VNIP has enrolled 842 interns. Interns include both RN and LPNs that are new graduates, new to specialty and/or Re-entry program nurses. For this data analysis, the 26 re-entry nurses were eliminated from the sample, as they are not routinely hired by the agencies that enroll them in the internship. There were another 6 interns that were eliminated due to incomplete data, such as missing licensure or start date information.

Eight Hundred and seven (807) interns started their employment in Vermont healthcare agencies since June of 2003 and were tracked for retention reporting purposes. Analysis of the retention and reported 'reasons for leaving' shows that forty-three (43) interns of those enrolled were unable to complete the internship. The most significant number within this group is that nine (9) were unable to continue within the internship due to NCLEX failure, five (5) of which were 2004 graduates. (Most were retained within their agency of hire as nurse aides and were able to pass the NCLEX at a later time, but their internship tracking ended with NCLEX failure.)

Two of the 'unable to complete' interns reported a poor job match and another two interns reported 'mutual agreement' to terminate employment in less than two months. Another group of eleven (11) reported inability to meet competency requirements for mixed reasons that ranged from moving to another state to dissatisfaction with position, role, childcare, or location. The only consistency within this group was the early identification that they were not in the 'right job', thus not able, or willing, to complete the 10 week internship. The start dates and locations were evenly distributed across five (5) years and six (6) different agencies.

Another Twelve (12) terminated secondary to "incomplete internships" although their period of employment was significantly longer than the minimum 10 weeks and ranged as long as 10 months. Comments included "poor job match" for four (4) within this group – with internships that ranged from 4 to 10 months, although all were employed by the same agency, each intern was in a different specialty area.

Of those that completed the Vermont Nurse Internship since June 2003, fifty-five (55) left their initial position of hire in less than 12 months. With 708 interns staying in their original position of hire for 12 months or more, the retention rate of ninety-three percent (93%) of the internship 'completers' compares very favorably with national figures and expectations.

"Nursing literature reports that the inability to handle the intense working environment, advanced medical technology, and high patient acuity results in new grad turnover rates of 35% to 60% within the first year of employment" (Beecraft, Kunzman, & Krozek, 2001)

### **Report on “reasons for leaving” for those that completed the internship:**

Eleven (12) reported career advancement issues as their reason.

Two (2) left to return to school

Nine (9) were looking for a different type of position or hours

A total of Eighteen (18) left for situational issues

Three (3) left for unstated situational issues

Four (4) needed to leave for family reasons

Nine (9) due to relocation needs

Three (3) because of health/illness problems

A total of Thirteen (13) left for job dissatisfaction concerns

Four (4) terminated their employment without identifying the dissatisfier

Six (6) were unhappy with hours or assignment

Two (2) reported salary/benefits as an issue

One (1) intern reported leaving due to job stress.

Twelve (12) interns left due to “Other” reasons

The actual reason was not stated for many of these, but a few comments reflected a desire to be a traveler or work closer to home. Again, these departures were spread over several years and multiple agencies.

## **Conclusions:**

Due to the previously funded HRSA grant project, **GN/RN Internship: Vermont Nurse Internship Project**, the project investigators are able to report retention data that extends back to June of 2003. For this project, interns include new graduate and new to specialty nurses.

When considering retention figures for the first twelve (12) months of employment, the Vermont Internship Project achieves overall retention of 88% of all interns that start the internship and 93% retention of those that complete the internship. Twelve percent (12%) of all interns were either unable to complete the internship or left their initial position of hire in less than 12 months. Only NCLEX failures are identified as a 'systems failure' that impacts the ability of nurses to complete the internship. There also appears to be some indications of 'poor job match' being an issue as relates to retention of interns, but this is spread across several years and locations, thus trending is not apparent.

VNIP site coordinators have committed to continue reporting retention data for at least another year. With further data collection, additional analysis will be completed to break down the retention data for two (2) and three (3) years after hiring. The system trend related to NCLEX failures has already resulted in the VNIP framework recommendation that interns not be hired until they have taken their NCLEX.

**Addendum:** In the fall of 2007, the VNIP Executive Director, Susan Boyer, initiated sharing of the VNIP framework, tools and resources with the Hawaii State Center for Nursing. A statewide site license process was negotiated and consulting services provided. A pilot project was established for Hawaii, along with ongoing partnership with VNIP. As a result of this consulting and networking, the two Hawaii agencies, Tripler Army Medical Center and Queens Medical Center initiated use of the weekly conference form, starting in June of 2008. Soon thereafter, Susan shared with them the challenges and reservations that use of this form created in Vermont, but these agencies chose to go forward with weekly conferencing and use of the tool.

They scheduled follow-up consulting with the VNIP Director during the last two weeks of May 2009 and learnings were shared by all parties. Queens and Tripler have found the tool and process to be very successful in supporting the work of the intern/preceptor teams. Their success is based in strong site coordinator support and clear, recurring directions for form use. Their success with this tool validates the use of the form as a development tool – contrary to the findings of the VNIP research.

**Suggestion:** It might be beneficial to further evaluate the tool and process by using the same focus group and individual interviews that were used for evaluation in Vermont. I would recommend having the same interviewer, to ensure that the queries followed the same format and trending.

**RELIABILITY AND VALIDITY OF SCALES  
and  
SELECTED CONCLUSIONS ABOUT  
THE EFFICACY OF THE VNIP**

**Prepared by:**

Ellen Hagman

Patricia Winstead-Fry

**INTRODUCTION**

The Vermont Internship Project began with five evaluation tools, the Intern Evaluates the Preceptor, the Intern Evaluates the Program, Weekly Evaluation Forms, Preceptor Evaluates the Program, and the Workplace Impact Form. We discontinued the Intern Evaluates the Preceptor form because as a novice, the intern wouldn't have the experience to evaluate a preceptor on being an educator, a role model and one who protects the patient and the novice. This report will focus on the Intern Evaluates the Program, Weekly Evaluation Form, Preceptor Evaluates the Program and the Workplace Impact. We will also offer comments on the support of new nurses in the workplace.

**RESEARCH RESULTS**

**SAMPLE**

The sample for this analysis were nurses from hospitals, home care, and nursing homes who completed the internship during the period funded by the National Council of State Boards of Nursing. The majority of the sample (over 90%) were newly graduated nurses. The other nurses were nurses who were new to a practice site or returning to practice after an absence. The majority of nurses in the study were associate degree graduates, as this is the main source of education in Vermont.

The number of nurses who completed each measure varies. The nurses were given the questionnaires and stamped envelopes in which to return the materials to the VNIP office. Some were more conscientious than others in following through on this. If their organization allows it, the nurses were paid for participating after the sixth week of completing forms. As anticipated the completion of forms dropped off after that week.

The number of nurses completing the Weekly Evaluation Form was 167; the Intern Evaluates the Program was 117; and the Workplace Impact form was 365. The Weekly Evaluation from week six was the one used in the analysis. The Workplace Impact Form was completed by other nurses and employees in the agency where the internship took place.

## MEANS, RANGES AND STANDARD DEVIATIONS OF MEASURES

Measure	Mean	Range	SD
Weekly Evaluation	120.23	35-149	12.39
Intern Evaluates Program	101.58	76-118	13.29
Workplace Impact	89.66	24-120	17.85

## RELIABILITY

Reliability is concerned with how consistently we are measuring what we are trying to measure. For example, if we were measuring how accurately a person threw a ball, it could vary because people are different from day to day, the ball may be different (soft ball versus hard ball), or you may have such a small sample that you can't be sure you are measuring what you think you are. Suppose there is a student who can't grasp the ball very well. In a large sample that would probably not matter too much, but if you had a sample of 10 that means 10% of your sample can't do the task. So reliability deals with consistency.

Reliability can be analyzed in several ways. In this analysis we used Cronbach's alpha which is a measure of how internally consistent the scale is. We used this because the other measures assume a stability to the score, for example test-retest reliability compares tests from two different times. Because we expected the new nurse to increase in capability, to expect comparable scores at two different times was not an option. The scores range from -1 (no consistency) to 1 (high consistency).

With the measures used in the VNIP, the following scores were obtained.

*Weekly Evaluation Form* has a reliability of .975 at week one and .981 at week six.

While the form was filled out weekly for 10 weeks, we paid the participants at week six for their participation. After that, responses dropped dramatically.

*Workplace Impact Form* has a reliability of .962. This form is filled out by managers and nurse educators at varying intervals.

*Intern Evaluates the Program* has a reliability of .961

*Preceptor Evaluates the Program* has a reliability of .954, but we do not have a sufficient sample size to have confidence in this finding. The sample size is 72 and that is not sufficient for five to 10 responses for each item on the scale which is 25 (desired  $n = 125$  to 250).

## **VALIDITY: BACKGROUND**

Validity is more important than reliability as it deals with the extent to which a scale is measuring what it claims to measure. Generally, constructing a scale goes through several phases. Often one begins by reviewing the literature to assess what is already known about the topic. Suppose one wanted to create a scale to measure nurses' job satisfaction. The first decision would be which nurses? All nurses from the vice president for nursing to the staff nurse? One might decide to study only staff nurses because nurses with administrative responsibilities are too diverse a group to include.

So, one decides to develop a scale to measure the job satisfaction of staff nurses. Then one goes through the literature on job satisfaction for that group. After the review of the literature, one finds that there are several factors that most writers think influence job satisfaction. These include: 1) salary and benefits, 2) relationships with supervisors, 3) relationships with colleagues, 4) opportunity for advancement, and 5) the quality of patient care a nurse can deliver.

The next step is to develop several questions that assess each of the factors. This is typically done with a group of people, including staff nurses, and others who have some knowledge of job satisfaction. One wants several questions for each domain because these are complex ideas. So, as an example one might have a statement such as:

My salary is adequate answered on a scale of 1 to 5. One means my salary is inadequate and five means my salary is generous. Ratings of 2, 3 or 4 are somewhere in between.

(This is called a Likert Scale and most of you have probably filled out one at some point.)

To continue the example, let's assume you develop 6 questions for each of the 5 factors listed above. You now have a 30 item scale that contains items that you and your group think are measuring the concept of job satisfaction for staff nurses.

The next step is to give the scale to a group of staff nurses and have them fill it out. If there is another Job Satisfaction Scale that already has validity, you can have them complete that one also for purposes of comparison. Once you have collected sufficient data, you begin the data analysis.

The data analysis can take several forms. If you have two job satisfaction scales, one with known validity and your new one, you can compare them. Do the scales correlate with one another? If they do, you can claim validity for your scale.

If there is no other scale with validity, you have to take another approach. A typical one is factor analysis. Your scale has 5 factors with six items measuring each factor. When you do a factor analysis, you hopefully get five factors with your six items associated with the factor you want. For example "My salary is adequate" is associated with the salary and benefits factor, not with the relationship with peers factor. Usually, things are not perfect and some re-thinking of items is needed or that statements may cluster in a way you never considered, but suggest some revision in your thinking about what makes up job satisfaction. Whatever the outcome of the factor analysis, the researcher has to account for the findings. Sometimes the scale has to be

revised; sometimes it makes no sense and one goes back to the drawing board, or it is an adequate measure of the concept of job satisfaction.

In the VNIP study, the factor analysis approach was used, as there were not other comparable scales to administer. The scales were developed by a group of nurse educators and managers in Vermont who knew the state's nurses and who met to review the national literature and to hone it to the nurses of Vermont. Most nurses in Vermont are Associate Degree graduates. Most are graduates of local programs. So, the planners of the program knew their nurses and their educational preparation.

The Vermont Organization of Nurse Leaders (VONL) worked for four years to refine, test, and redefine their vision of the Preceptors' roles and responsibilities. They determined that the Preceptor had five roles, role model, socializer, educator, evaluator, and protector.

Role model involves such behaviors as leading by example by modeling reflective practice, adhering to standards of practice, listening well, and resolving conflicts. The preceptor also give constructive feedback and models how to access information for evidence based practice.

Socializer and team leader is essentially helping novices become part of the team by adjusting to new roles and the work environment. In this role, she introduces the novice to other staff, ensures colleagues support the novice, and helps the novice integrate into the new work role. She is highly invested in building team support of the novice.

Educator and coach involve instructing, supporting and encouraging the novice. The preceptor assesses the learning needs and learning style of the novice. The preceptor seeks to develop critical thinking in the novice through clinical experiences that develop the competence of the novices by collaboratively planning activities that meet the goals of the agency and the novice. The preceptor evaluates the novice and communicates strengths and weakness that are the basis for future learning.

The Evaluator role focuses on safe and effective practice. The preceptor is concerned with safe practice within the standards of practice of the employing agency. She maintains close communication with the nurse manager about the progress and competence of the novice. She documents issues and competence care delivery.

The VONL leaders describe Protector as the foundation of the precepting role. This means protecting the safety of both the patient and the novice. The novice needs the freedom to practice with the assurance that she will not harm the patient or others. She protects the novice from other staff who might not be supportive of the need to learn or from those who expect expert behavior from a novice. She guides the novice in adhering to standards of practice.

## **SCALE DEVELOPMENT**

In the original thinking of the planners, there was an Intern Evaluates Preceptor scale. That was removed from the study when it became apparent that most of the Interns would be novices and would not have the background to decide if their preceptor was competent. Steps were taken through a preceptor education program to assure preceptors know how to perform the role described above.

## **WEEKLY EVALUATION FORM**

The Weekly Evaluation Form was developed from Lenburg's (1999) eight core practice competencies. The concepts, methods of competency outcomes and performance assessment (COPA) model is an integrated approach of developing competent practitioners. The model was selected because the competencies are universal to nursing practice in most patient oriented areas. The VNIP evolved over time, at first focusing on hospitals, then incorporating home care and nursing homes. This made a model as practical as COPA very helpful.

### **Lenburg's core competencies are:**

- 1) Assessment and Intervention skills: protection, assessment and monitoring of patient status, treatments and procedures.
- 2) Communication Skills: oral, interactive, writing and computing. Oral skills include listening, talking, interviewing, group discussion. Interacting skills involve showing, telling and reporting. Writing skills include developing care plans, charting, completing agency reports developing memos and manuals, and memo writing. Computing skills involve the basic use of computers and information processing.
- 3) Critical Thinking Skills: the ability to identify essential, pertinent data and to weave it into a problem solving base that leads to clinical decisions. It also includes scientific thinking and understanding the research process
- 4) Human Caring and Relationship Skills: a respect for collaborative interpersonal relationships, morality, legality ethics and respect for cultural diversity
- 5) Management Skills: planning, implementing and evaluating a program, supervision of others, using human and material resources in an effective manner, accountability and responsibility, and quality improvement.
- 6) Leadership Skills: professional accountability, assertiveness, risk taking, collaboration, and creativity.
- 7) Teaching Skills: health promotion and health restoration with individuals and groups including clients and co-workers.
- 8) Knowledge Integration Skills: integrating nursing knowledge with that of other disciplines, liberal arts and related disciplines.

Within the VNIP, Assessment and Intervention Skills was labeled Safety/Technical and Clinical. Leadership and Management were condensed into one category from Lenburg's categorizing, labeled Leadership and Management. There was no change in the basic competencies that went into each of the categories.

The Weekly Evaluation Form consisted of 30 questions, designed to measure the seven categories Lenburg outlined. It was scored on a five-point Likert scale with the lowest score (.5) indicating performance concerns to exceeds basic expectations (2.5). There was also a section at the end of the measure wherein the Intern and Preceptor could mutually set goals for the next week. The Form was to be filled out weekly for the ten weeks of the Internship. The Intern was to self-evaluate. When there was a new task or learning involved, she would consult with her preceptor. During the funding period, 179 persons filled out the questionnaire. By the terms of the agreement with the Interns, they were paid for their participation after six weeks, and the completion rate dropped off after that. For purposes of validity testing, the week six scores were used as we reasoned that by that time all the interns had sufficient experience with the scale to complete it accurately.

The Weekly Evaluation Form was submitted to factor analysis. The original Principal Component Factor Analysis with an oblique rotation resulted in three factors. The Weekly Evaluation Form was developed with the idea that there were seven factors. The three factors had items scattered widely. There was no pattern matching the developer's ideas. We then "forced" a seven factor solution which again resulted in loadings that were not interpretable within Lenburg's model. After several statistical manipulations, we had to conclude the scale was not measuring what we hoped, as none of the analysis resulted in factor loadings that were interpretable and the amount of variance accounted for by the factors was not over five, and the eigen values were universally low.

## WORKPLACE IMPACT FORM

The Workplace Impact Form was developed from a review of the literature on work environment, orientation for new employees, and preceptor impact. The literature was filtered through the real-life experience of the nurse leaders of VONL. The scale addresses collaboration with disciplines other than nursing, the culture of the organization as relates to learning and teamwork. Several questions address the orientation process as far as safety for patients and new hires are concerned and the efficacy of preceptors. There was also space to comment upon barriers, assets and suggestions for improving the program.

The resulting 23 item questionnaire was answered by 365 nurses over the course of the grant period. The nurses who answered the questionnaire could be managers, educators, or staff nurses. For purposes of the validity study, no effort was made to sort the data by position, as different organizations have different titles for similar roles.

The Workplace Impact Form was also factor analyzed. It was thought to be a one factor scale because the environment is a summation of many institutional inputs. See Table 1 for the factor loadings.

Table 1

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ITEM	FACTOR 1	FACTOR 2
Disciplines outside of nursing are engaged in collaborative initiatives.	.427	.393
A culture of support and nurture exists.	.691	.504
An environment of safety exists for staff and clients	.605	.475
Teamwork is the “norm” in this workplace.	.655	.525
A “safe learning environment” exists for all staff.	.748	.351
Orientation content/process/delivery protects patients from errors.	.766	.160
Recruitment and retention of new staff	.791	-.100
Low nurse vacancy rates	.741	-.090
Patient satisfaction	.760	-.127

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Teamwork with allied health providers	.797	.034
Communication with physician staff.	.748	.034
New staff competency development is effective and systematic	.805	-.209
New staff function in a capable manner.	.783	-.134
New hires demonstrate confidence in their practice.	.770	-.197
A high level of “caring” is evident within patient care delivery	.696	-.086
Competence development occurs as effectively as possible.	.819	-.126
New staff members feel supported and safe.	.828	-.030
Preceptors are willing to precept.	.733	-.082
Preceptors are well prepared for the precepting role.	.777	-.192
Critical thinking development occurs with the new hires	.798	-.220
Evaluation of competency occurs in a measurable manner	.778	-.225
Planning occurs related to teaching learning goals and activities.	.811	-.169
Communication and conflict management Issues are handled effectively.	.754	-.042

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For the most part, the Workplace Impact Form performed as expected. Most of the items loaded on the first factor that accounted for 55.8 % of the variance. Reviewing Table 1 demonstrates that items 2, 3 and 4 could be removed from the scale, as they load on both factors, suggesting ambiguity.

Over one-half (167) of the persons who responded to the Workplace Impact Form wrote comments about the program. They cited the following barriers:

1. Staffing or lack of resulted in multiple preceptors and patient assignments too large to allow the preceptor time to precept.
2. Poor collaboration with ALL departments many of whom seemed unaware of the internship program.
3. Physicians were not helpful.
4. The inexperience of new graduates was overwhelming.
5. Poor communication was mentioned, but no specifics were offered.

The major asset the nurses stated centered around words like team work, great staff and the value of experienced nurses. These were non-specific.

Suggestions for improvement included:

1. Better communication
2. More staff
3. More education for preceptors
4. More collaboration with other disciplines.
5. Improved systems and processes of orientation.

## INTERN EVALUATES THE PROGRAM

The Intern Evaluates the Program was developed by the nurse leadership to reflect the goals of the internship and the core learnings based on Benner's ideas of novice to expert performance (1984) and Lenburg's competencies. The resulting 24 item scale was completed by 117 nurse interns. It was thought there would be two factors, one focused on the intern's development and the other focused on the program. While two factors did emerge, the scale proved to be uni-factorial. Table 2 presents the factor loadings.

Table 2

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ITEM	FACTOR 1	FACTOR
Learn to work effectively with co-workers	.740	.172
Develop/polish interviewing techniques	.518	.229
Develop clinical problem solving skills	.751	.315
Develop skills in proper discharge management	.616	.364
Develop documentation skills	.703	.257
Perform procedures	.637	.316
Work in a time efficient manner	.752	.151
Learn to use pragmatic judgment in clinical management of care	.794	.200
Gradually assume responsibility for complete patient care	.711	.160
Manage a multi-patient assignment effectively	.802	.064
Expand knowledge of patho-physiology of normal/disease states	.656	.064
Assess my own learning needs with my preceptor	.770	.053
Tailor my experiences to meet my learning needs	.789	-.037
Improve performance based on constructive feedback from preceptor	.782	.003

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Increase comfort level in one-on-one patient encounters	.779	.172
Provided orientation to my job description and/or role	.770	-.237
Included organized/efficient teaching methods	.725	-.287
Provided opportunities for self-directed learning	.630	-.015
Included and ensured support from co-workers/colleagues	.725	-.042
Provided needed clinical experience	.774	-.339
Provided sufficient clinical experience to achieve goals	.775	-.359
Gradually increased my responsibility /capability in patient care	.806	-.313
Supports initial transition from new graduate toward confident, adaptable independent practice.	.794	-.296
I would recommend this program to other new graduates.+	.801	-.318

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While the emergence of two factors was not anticipated by the program developers, it is not seen as a comment on the validity of the scale, as the first factor is statistically the stronger one and the second factor is not interpretable.

## ISSUES OF WORK ENVIRONMENT SUPPORT

In order to assess work environment support for the interns, questions on the Workplace Impact Survey that indicate support were reviewed. The major questions explored were:

1. In my workplace, a culture of support and nurture exists.
2. Teamwork is the “norm” in this workplace.
3. In my opinion, the orientation process supports and improves recruitment and retention of new staff.
4. In my opinion, the orientation process supports and improves teamwork with allied health providers.
5. New staff members feel supported and safe.
6. Preceptors are well prepared for the precepting role.
7. Communication and conflict management issues are handled effectively.

These questions were compared with comments from the focus groups on the themes of “Transition Process”, “Establishing relationships between nurse preceptors and nurse interns”, and “Becoming a member of a core team”. In each of these themes, some problems were identified, but generally comments were process oriented and demonstrated good faith on the part of the intern and preceptor.

In the quantitative data, the frequency of responses at the four and five level to the seven items listed above were reviewed. Four and five were the most positive responses. There were a total of 365 respondents, Two hundred and eight nine rated “In my workplace, a culture of support and nurture exists” as a four or five. “Teamwork is the ‘norm’ in this workplace” was rated as four or five by 289 respondents. Two hundred and thirty two respondents rated “In my opinion, the orientation process supports and improves recruitment and retention of new staff” highly. “New staff members feel supported and safe” was rated at a four or five by 242 respondents. Two hundred and thirty two rated “Preceptors are well prepared for the precepting role” at four or five. “Communication and conflict management issues are handled effectively.” was rated at four or five by respondents.

Over 50% of respondents rated the questions that indicate the support for the intern highly. In the comments on the Workplace Impact Survey, several nurses thought preceptors had too many patients to precept well. Others commented upon having multiple preceptors. From the focus groups, we learned that up to two preceptors was seen as an advantage, but more than that and the intern was too fragmented.

## CONCLUSIONS

The Workplace Impact and the Intern Evaluates the Program forms will remain the same for the present. They performed as expected or in a way that was interpretable. We will continue to monitor them and make changes when we have a larger sample.

The Weekly Evaluation Form will be removed from the VNIP based upon the factor analysis and the nurses' comments to Dr. Watters. The nurses and preceptors did not like the Form and many of them did not fill it out with much thought, if at all. Most of the nurses and preceptors liked setting weekly goals and working toward them. We are recommending instead that nurses and their preceptors set weekly goals and use them as indications of the nurses' success or lack thereof.

The interns, preceptors and their colleagues generally present a picture of a work environment that is supportive of new nurses. While there are problems with too few staff, too many preceptors per intern, most of the interns were satisfied with their experience and found it valuable.

## References

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