

# Factors Related to Successful Transition to Practice for Acute Care Nurse Practitioners

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## ABSTRACT

The transition from student to acute care nurse practitioner (ACNP) has been recognized as a time of stress. The purpose of this descriptive, correlational-comparative design pilot study was to examine: (1) the relationships among personal resources, community resources, successful transition, and job retention; (2) the difference between ACNPs with 0 to 4 years and ACNPs with more than 4 years of prior experience as a registered nurse in an intensive care unit or emergency department; and (3) the skills/procedures that ACNPs found difficult to perform

independently. Thirty-four participants were recruited from a social media site for nurse practitioners. Organizational support, communication, and leadership were the most important elements of successful transition into the ACNP role. This information can help ACNP faculty and hospital orientation/fellowship program educators to help ACNPs transition into their first position after graduation.

**Keywords:** acute care nurse practitioner, transition, practice, graduate nurse practitioner, academic, nurse practitioner fellowship

The demand for acute care nurse practitioners (ACNPs) has increased in the past several years. This demand has been created by an increase in hospitalized and critically ill patients as well as duty-hour restrictions for medical residents implemented by the Accreditation Council for Graduate Medical Education.<sup>1,2</sup> It is vital that ACNPs working in hospital settings be supported as they transition into their new roles.

The Institute of Medicine's report<sup>3</sup> on the future of nursing recommends transition-to-practice residency programs to address health care workforce shortages. The Institute of Medicine suggests that

healthcare organizations take actions to support nurses' completion of a transition-to-practice program (nurse residency) after

they have completed an advanced practice degree program or when they are transitioning into new clinical practice areas.<sup>4(p59)</sup>

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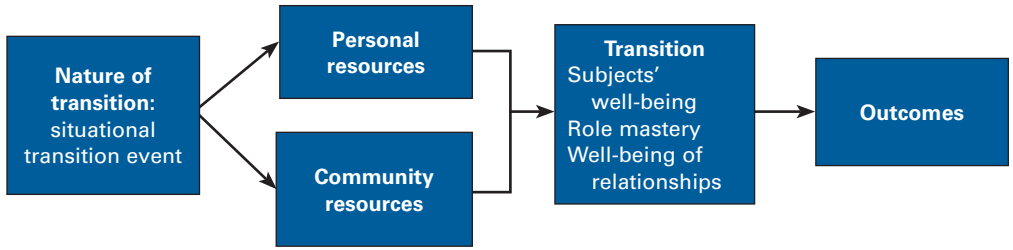
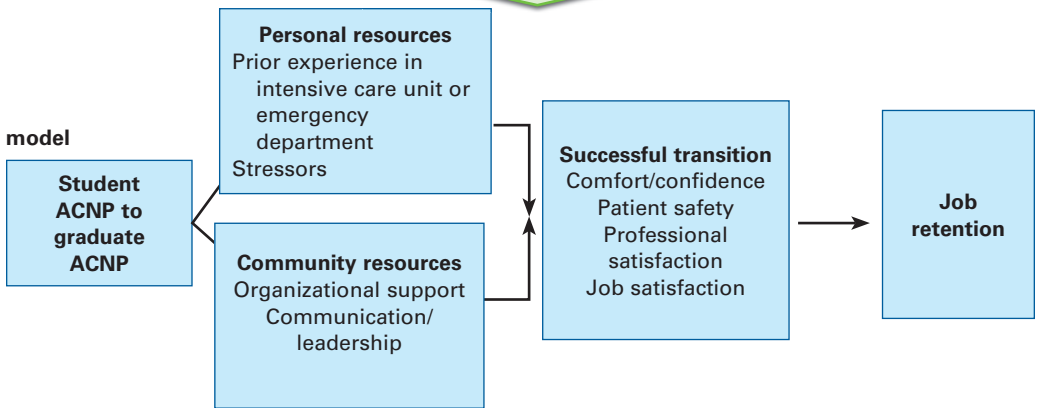
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The authors declare no conflicts of interest.

DOI: <http://dx.doi.org/10.4037/aacnacc2016619>

**Meleis model****Study model**

**Figure:** Meleis model and adapted study model: factors related to successful transition to practice for acute care nurse practitioners (ACNPs).

Hospital orientation or fellowship programs can benefit by targeting interventions to ensure successful transition.

Although factors related to nurse practitioners' transition to clinical practice have been identified, how the factors affect successful transition to practice for ACNPs has not been examined. The complexity of the acute care setting and the specific skills/procedures required by ACNPs make their transition factors unique.

## Background

Schumacher and Meleis<sup>5</sup> defined situational role transition as a change in role function and scope of practice. Shaping the new role involves a balance between role loss as a registered nurse and role expansion as a nurse practitioner.<sup>6</sup> Furthermore, formal education of nurse practitioners is not sufficiently preparing new nurse practitioners to feel ready for practice.<sup>7</sup> According to Hart and Macnee,<sup>7</sup> recent nurse practitioner graduates (>61% were family nurse practitioners) report that better clinical reasoning skills, ability to

interpret electrocardiograms and other diagnostic tests, as well as having clinical faculty who were more experienced would improve their readiness to practice; however, only 1% of the nurse practitioners in this sample (n = 5) were ACNPs.<sup>7</sup>

Role development and successful transition for nurse practitioners have been linked to mastering the 5 elements described in the literature, which include the development of self-confidence,<sup>7-12</sup> patient safety,<sup>7,13-15</sup> organizational support,<sup>9-11</sup> professional satisfaction,<sup>14</sup> and effective communication/leadership.<sup>10,16-23</sup> The Meleis Transition Theory explains the process that is necessary to achieve a successful outcome as well as resources that influence the transition process<sup>24</sup> (see Figure).

In the Meleis model, situational transition, which is experienced by the newly graduated nurse practitioner, is defined as a transition event. The nature of this transition event can include changes in identity, roles, relationships, abilities, and patterns of behavior.<sup>19</sup> Personal and community resources affect successful transition.

Meleis<sup>24</sup> defined 3 global indicators for all successful transitions: (1) subjects' well-being, (2) role mastery, and (3) well-being of relationships. The model for this particular study (adapted from the Meleis model) examined factors related to successful ACNP transition to practice. The study model corresponds to these indicators by identifying successful transition variables as (1) comfort/confidence, (2) patient safety, and (3) professional and job satisfaction (see Figure).

### Description of the Problem

Few reports of graduate nurse practitioners' perception of the transition experience have been published; thus little is known about the factors related to successful transition for any nurse practitioner, including the ACNP.<sup>18,25</sup> Barnes<sup>20</sup> explored the relationship between experience as a registered nurse and the transition to the nurse practitioner role and found that prior nursing experience did not affect successful transition into practice. In an unpublished dissertation, Duke<sup>18</sup> used hermeneutic phenomenology to examine the lived experience of new graduate nurse practitioners to hospital-based practitioners in a group of 12 nurse practitioners (adult, family, and acute care) with at least 1 year of hospital-based experience. She identified a transition period that ranged from 6 to 18 months and was most intense during the first 9 months of practice. Challenges encountered during this time frame included

navigating and negotiating a new health care provider role, becoming integrated into a hospital system in what was a new role for the practitioner and often a new role for the system, learning how to function effectively as a NP [nurse practitioner] while working to re-establish themselves as proficient clinicians with a newly expanded practice scope, building key relationships, and educating physicians, hospital leaders, clinical staff, patients and families about the NP role.<sup>18(abstract)</sup>

### Registered Nurse Transition to Practice

The Casey-Fink Graduate Nurse Experience Survey has been used extensively to examine various factors that affected the transition

from the student role to the registered nurse role.<sup>21</sup> Consistent with Casey and colleagues, Newhouse et al<sup>22</sup> also identified the new graduate experience as stressful with high turnover unless it was partnered with an internship. The importance of a preceptorship in developing a greater degree of perceived competence in development of clinical skills was examined by Kim.<sup>23</sup> Casey et al<sup>21</sup> reported that newly graduated nurses require consistent support and professional development during the first year of practice. The Casey-Fink Graduate Nurse Experience Survey was developed from themes identified from the literature that influenced the graduate nurse experience and included consistency of role socialization support,<sup>21,26</sup> the quality of the clinical orientation,<sup>27,28</sup> and the level of support from nursing leaders.<sup>27-30</sup>

### Purpose of the Study

The purpose of this descriptive, correlational-comparative design study was to identify (1) the relationships among personal resources (prior experience in intensive care unit [ICU]/emergency department [ED] and stressors) and community resources (organizational support and communication/leadership), a successful transition (comfort/confidence, patient safety, and professional and job satisfaction), and job retention experienced by ACNPs within their first 6 months of employment; (2) the differences in personal and community resources, successful transition, and job retention between ACNPs with 0 to 4 years and ACNPs with more than 4 years of prior nursing experience in the ICU/ED; and (3) skills and procedures that new ACNPs found difficult to perform.

### Tool Validation

No instrument is available in the literature to evaluate the factors related to successful ACNP transition, so the Casey-Fink Graduate Nurse Experience Survey was modified, with permission, to apply to the ACNP experience. The Casey-Fink Graduate NP Experience Survey was developed to evaluate the ACNP role transition experience. Specifically, the original instrument was modified to collect data on personal resources (prior nursing experience in the ICU/ED and stressors), community resources (organizational support and communication/leadership), and successful transition factors (comfort/confidence in performing both clinical and relational skills/

procedures, patient safety, professional and job satisfaction, and job retention).<sup>21</sup> The skills or procedures in the modified instrument were adopted from those published by Kleinpell et al<sup>31</sup> after a national survey.

After the modified survey was developed, 2 expert clinical faculty members and 5 ACNPs evaluated the instrument for content validity. A revised survey was pilot tested on 3 ACNPs for applicability.

## Methods

### Design

A descriptive, correlational-comparative design was used for this pilot study. Approval was obtained from the institutional review board at Case Western Reserve University and from the group administrator of the social media site used to recruit participants ([www.linkedin.com/groups](http://www.linkedin.com/groups)).

### Sample Characteristics

The study included a convenience sample of 34 ACNPs who were members of an Acute Care Nurse Practitioner Network social media site. Respondents were eligible to participate if they met the following inclusion criteria:

1. Board-certified ACNP or adult-gerontology ACNP (AG-ACNP) with more than 6 months and less than 3 years of active practice in an ACNP or AG-ACNP role.
2. Member of the social media ACNP Network.

### Data Collection and Procedures

Participants were recruited through an introductory cover letter on the ACNP Network's social media site. They were informed of the purpose of the web survey, what participation entailed (completion of the Qualtrics survey), and the survey length (20 minutes). Respondents were asked to recall their first 6 months of employment as an ACNP when answering the survey questions. Voluntary consent was implied by the participant's completion of the survey. Participants were assured that the data would be confidential and that no identifiers were linked to e-mail addresses or participants' data.

### Instrument

The Casey-Fink Graduate NP Experience Survey was used for data collection and to identify factors related to successful ACNP

transition to practice. The survey consisted of 5 sections: (1) demographic information; (2) skills/procedure performance (drop-down list of 30 items); (3) subscales related to successful transition (comfort/confidence, patient safety, professional satisfaction, job retention); (4) subscales related to community resources (organizational support and communication/leadership); and (5) subscales related to personal resources (stressors and prior work experience as a nurse in the ICU/ED). All responses on subscales were added to calculate total scores for each subscale. Table 1 describes the concepts, gives example of items, and specifies the reliability and validity of the study variables.

### Statistical Analysis

Statistical analyses were performed by using IBM Statistical Package for Social Sciences version 22 (IBM SPSS Inc). Survey items and demographics were summarized by using descriptive statistics. Bivariate correlations and nonparametric tests were used to examine the research questions.

## Results

A description of the demographic variables is displayed in Table 2. The sample was predominantly white women between 41 and 50 years old. Fifteen states and Puerto Rico were represented. Most participants had a master of science degree in nursing. Eighty-two percent had more than 5 years of nursing experience, and 75% had more than 5 years of nursing experience in an ICU or ED. Most had an orientation that lasted 8 weeks or less. Twenty-nine percent of the respondents reported no orientation. Fifty-two percent of the respondents remained in their first position after graduation for less than 2 years. Forty-six percent of the respondents reported experiencing stress, with job performance and personal finances reported as the top 2 stressors.

The relationships among personal and community resources and successful transition and job retention are listed in Table 3. Statistically significant positive correlations were found among organizational support and comfort/confidence ( $r=0.49$ ;  $P<.01$ ), patient safety ( $r=0.38$ ;  $P<.05$ ), professional satisfaction ( $r=0.72$ ;  $P<.05$ ), and job satisfaction ( $r=0.53$ ;  $P<.01$ ). The relationship between communication/leadership was also

**Table 1: Reliability and Validity of Study Variables**

Variable	Definition	Sample Items	No. of Items	Cronbach $\alpha$
<b>Successful transition</b>				
Comfort/ confidence	Perception of efficacy/ability to perform basic skills required of ACNP	I was able to identify goals and outcomes for patients I was confident in prescribing diagnostic interventions I was comfortable in prescribing pharmacologic interventions I was able to develop a plan of care using evidence-based guidelines	7	0.79
Professional satisfaction	Perception of fulfillment with professional role	I felt my work was exciting and challenging I felt satisfied with my chosen nursing profession I felt that the nurse practitioner/physician provided encouragement about my work	3	0.79
Job retention	Intent to leave job in first 6 months of ACNP employment	I was prepared to complete my job responsibilities I felt supported by my nurse practitioner or physician preceptor	2	0.89
Job satisfaction	Perception of fulfillment in aspects of job	How satisfied were you with the following aspect of your job: salary, vacation, benefits, hours worked, weekends off per month, amount of responsibility, opportunities for career advancement, encouragement and feedback, on-call time, reimbursement for on-call time, and flexibility of hours	11	0.81
Patient safety	Perception of the ability to perform job in a timely, safe, and knowledgeable way	I was able to complete a history and physical in a timely manner (<45 minutes) I felt overwhelmed by my patient care responsibilities and workload I felt I might harm a patient because of my lack of knowledge and experience I was comfortable formulating a differential diagnosis I had difficulty prioritizing differential diagnoses	5	0.79
<b>Personal and community resources</b>				
Prior experience in intensive care unit or emergency department	Employed as a registered nurse in an intensive care unit/emergency department	How many years of experience as a registered nurse have you had before entering the ACNP program How many years of experience did you have in the intensive care unit or emergency department before entering the ACNP program	1	NA
Stressors	Perception of stress in one's life	I was experiencing stress in my personal life	1	NA
Communication/leadership	Perception of adequate communication with patient, physician, and families and feeling prepared to complete responsibilities	I felt comfortable communicating with physicians and their families I felt comfortable communicating with patients and their families I felt comfortable making suggestions for changes in the medical plan of care	4	0.79

*Continued*

**Table 1: Reliability and Validity of Study Variables (Continued)**

Variable	Definition	Sample Items	No. of Items	Cronbach $\alpha$
<b>Personal and community resources</b>				
Organizational support	Perception of support from the nurse practitioner/physician mentor and family/friends	I felt supported by my nurse practitioner/physician preceptor I had opportunities to practice skills more than once in simulation I had opportunities to practice skills more than once in real life My preceptor helped me to develop confidence in my diagnostic skills I felt that the nurse practitioner/physician provided feedback about my work	10	0.87

Abbreviations: ACNP, acute care nurse practitioner; NA, not applicable.

significant with comfort/confidence ( $r=0.68$ ;  $P<.01$ ), patient safety ( $r=0.62$ ;  $P<.01$ ), professional satisfaction ( $r=0.44$ ;  $P<.05$ ), and job satisfaction ( $r=0.57$ ;  $P<.01$ ). There was a significant negative correlation between communication/leadership and job retention ( $r=-0.35$ ;  $P<.05$ ; Table 3).

No significant differences were found between nurses with 0 to 4 years and nurses with more than 4 years of ICU/ED experience in the measures of personal and community resources, successful transition, and retention (Table 4). Of the 30 identified skills/procedures adopted from the survey results of Kleinpell et al,<sup>31</sup> only 15 were selected by the respondents. The top 3 skills that were deemed most difficult to perform were cricothyrotomies, dictation or electronic medical record documentation of a history and physical, and billing and coding. Table 5 identifies the top 7 skills/procedures the participants found difficult to perform.

## Discussion

The majority of the sample was more than 40 years old and had more than 4 years of nursing experience in the ICU/ED before becoming an ACNP. We found no differences between nurses with 0 to 4 years and nurses with more than 4 years of ICU/ED experience in relation to successful transition and retention. Contrary to the results of our study, Hart and Macnee<sup>7</sup> identified that nurse practitioners with more prior experience as a nurse (mean, 11 years) felt more prepared in practice than those with little nursing experience. Consistent with our study, Barnes<sup>20</sup> reported no

relationship between prior nursing experience (mean, 13.8 years) and the transition to the nurse practitioner role. Previous nursing experience is important, considering that most ACNP programs require between 1 and 2 years of ICU/ED experience before acceptance, and this requirement may be related to our finding that only 8 ACNPs had less than 4 years of ICU/ED nursing experience. The low number of ACNPs with less than 4 years of ICU/ED nursing experience may have been responsible for the lack of a relationship between these variables.

The findings in our study are consistent with the Meleis model. Overall, the community resources of organizational support and communication/leadership were related to successful transition (comfort/confidence, patient safety, and professional and job satisfaction) for ACNPs during their first 6 months of practice. Support from the nurse practitioner/physician mentor and their availability for new situations and procedures was deemed important by the new ACNPs. Feedback about their work was important and helped the ACNPs to develop confidence in their assessment and diagnostic skills. Support from families and friends during this time frame was also important, consistent with findings identified by Heitz et al<sup>15</sup> in their study of nurses' transition into practice. New ACNPs felt supported in their position by their mentors, in contrast to new nurses, who voiced concerns about peer and preceptor relations and communication with physicians.<sup>21</sup> This difference in relationships may be related to the ACNP being perceived on more of a peer level as well as the

**Table 2: Description of Demographic and Study Variables (N = 34)**

Characteristic	No. (%) <sup>a</sup>
<b>Sex</b>	
Female	26 (79)
Male	7 (21)
<b>Ethnicity</b>	
White	31 (91)
Black	1 (3)
Hispanic	1 (3)
Asian	1 (3)
<b>Area of working specialty</b>	
Intensive care unit/emergency department	13 (39)
Not in intensive care unit	20 (61)
<b>Highest level of education</b>	
Master of science in nursing	32 (94)
Doctorate in nursing practice	0 (0)
<b>Nurse practitioner certification</b>	
American Nurses Credentialing Center	29 (88)
American Academy of Nurse Practitioners	4 (12)
American Association of Critical-Care Nurses	0
<b>Retention</b>	
Time worked in first position after graduation as a nurse practitioner	
Still ongoing	14 (41)
0-6 months	5 (15)
7-12 months	2 (6)
13-18 months	6 (18)
19-24 months	7 (21)
Feelings of leaving your job within the first 6 months of employment	
Never	15 (45)
<Once per month	6 (18)
Once per month	12 (36)
<b>Age, years</b>	
20-30	5 (15)
31-40	11 (32)
41-50	14 (41)
51-60	3 (9)
≥61	1 (3)
<b>Length of orientation</b>	
Still ongoing	1 (3)
0 or <8 weeks	15 (44)
9-12 weeks	5 (15)
13-16 weeks	2 (6)
>24 weeks	1 (6)
Did not have one	10 (29)
<b>Prior experience in intensive care unit/emergency department, years</b>	
0-4	8 (24)
5-9	13 (38)
10-14	7 (21)
15-20	6 (18)

<sup>a</sup> Percentages may not total 100 because of rounding.

difference between a preceptor and a mentor. Consistent with the Casey-Fink Graduate Nurse Experience Survey, nurse practitioners also identified the importance of organizational support.<sup>21</sup>

No relationships were found between personal resources and successful transition. This may be representative of the high percentage of prior nursing experience in the ICU/ED in this sample. Although stressors (eg, job performance and finance) were identified, they did not seem to affect successful transition and job retention. This finding was consistent with the findings of Barnes<sup>20</sup> that organizational factors were more important than personal factors in the successful transition of nurse practitioners.

Responses to the skills/procedures items revealed a lack of comfort in performing cricothyrotomies, dictation or electronic medical record documentation of a history and physical, and billing and coding. Cricothyrotomy is not a commonly performed procedure, which would correlate with a lack of comfort in performing. The ACNP skills survey<sup>31</sup> lists cricothyrotomy as a required skill, so including cricothyrotomy in a simulation portion of an ACNP program would improve comfort for a new ACNP. Although the new ACNPs felt comfortable collecting a medical history and physical examination and doing so in a timely manner (<45 minutes), they were less comfortable in their ability to translate or organize this information into the required documentation. Continued exposure to the skill of organizing history and findings on physical examination and dictating/documenting in electronic medical records during the student ACNPs' clinical practicums would improve this skill. Billing and coding were also identified as difficult skills. This information is similar to that found by Hart and Macnee<sup>7</sup> in their study of predominantly family nurse practitioners. The inclusion of billing and coding skills in ACNP programs is unknown; however, including billing and coding in the classroom training as well as incorporating it into the clinical practicum would most likely increase new ACNPs' comfort with billing and coding.

Other findings of interest were that the mean duration of orientation was 8 weeks or less and that 29% of the respondents reported not having any orientation. It is not surprising that limited orientation would impact the transition process. This finding is

**Table 3: Pearson Correlation of Personal and Community Resources and Successful Transition and Retention**

Resources	Successful Transition and Retention					
	Comfort/ Confidence	Patient Safety	Professional Satisfaction	Job Satisfaction	Retention	Felt Like Leaving
Personal						
Stressors	-0.09	-0.23	0.09	-0.32	-0.08	0.07
Years of experience in intensive care unit	-0.01	-0.26	-0.25	-0.06	0.04	0.01
Community						
Organizational support	0.49 <sup>a</sup>	0.38 <sup>b</sup>	0.72 <sup>b</sup>	0.53 <sup>a</sup>	-0.15	-0.34
Communication/leadership	0.68 <sup>a</sup>	0.62 <sup>a</sup>	0.44 <sup>b</sup>	0.57 <sup>a</sup>	-0.35 <sup>b</sup>	-0.31

<sup>a</sup> Correlation is significant at the .01 level (2-tailed).<sup>b</sup> Correlation is significant at the .05 level (2-tailed).**Table 4: Differences in Personal Resources, Community Resources, and Successful Transition and Retention<sup>a</sup>**

Variable	Nurses' Experience in Intensive Care Unit/ Emergency Department		t
	≤4 Years	>4 Years	
Personal resources			
Stressors	3.13 (0.84)	2.31 (0.75)	2.323
Community resources			
Organizational support	29.62 (5.80)	29.84 (5.99)	-0.083
Communication/leadership	11.50 (1.92)	12.00 (2.04)	-0.556
Successful transition			
Comfort/confidence	19.57 (4.23)	19.46 (3.33)	0.064
Patient safety	13.70 (1.80)	14.30 (1.88)	-0.503
Professional satisfaction	10.25 (1.66)	9.76 (1.36)	0.721
Job satisfaction	37.00 (8.24)	41.33 (7.41)	-1.225
Retention			
Length of time in first position	2.50 (1.41)	2.62 (1.89)	-0.148
How often . . . feelings of leaving	2.00 (1.06)	1.54 (.877)	1.079

<sup>a</sup> Values in second and third column are expressed as mean (SD).**Table 5: Skills or Procedures Found Difficult to Perform in First 6 Months of Practice**

Skill or Procedure	No. (%) of Respondents
Cricothyrotomies	5 (15)
Documentation of history and physical by dictation or in electronic medical record	4 (12)
Billing and coding	4 (12)
Interpreting diagnostic test results (laboratory tests, radiographs)	2 (6)
Interpreting electrocardiograms	2 (6)
Code/emergency response	2 (6)

inconsistent with the literature recommendations for increased orientation/residency programs for ACNPs or all nurse practitioners.<sup>3</sup> Of concern was that 52% of the respondents remained in their first position after graduation for less than 2 years. The reason for leaving their first position was not identified in the study.

### Limitations

A study limitation was the small sample size; a larger number of participants may affect the study results. In addition, the participants were asked to recall the first 6 months of practice, and memory may have played a factor in their responses.



## Future Research

Expanding the data collection method to include more settings may provide a more representative and larger sample of ACNPs as they transition to practice. Performing a comparative design study evaluating ACNPs at 6 and 12 months of practice would enable evaluation of changes over time in the studied variables. Future research to evaluate strategies to enhance successful transition and retention is important as the demand for ACNPs in hospital settings increases. Facilitating the transition of the new ACNPs into competent health care providers by providing them with support and assistance in their practice environment is an important component of these strategies.

## Conclusion

Successful role transition is determined by the extent to which individuals demonstrate mastery of the skills and behaviors needed to manage their new situations or environment.<sup>5</sup> A successful transition of an ACNP into practice depends on an understanding of the community resources that are important for ACNP transition. The importance of organizational support, communication, and leadership during the transition was supported by the Modified Casey-Fink Graduate NP Experience Survey.

Hospitals that perform poorly in retention spend a mean of \$3.6 million more than those with higher retention rates.<sup>32</sup> Highly trained and specialized health care professionals are difficult and expensive to replace in any health care setting.<sup>4,33</sup> Nurse practitioners' turnover is costly and disruptive to continuity of patient care.<sup>33</sup>

It is vital that ACNPs working in acute care settings be supported as they transition into their new roles. Recommendations have been made to facilitate the transition of new ACNPs into competent health care providers by providing them with support and assistance in their practice environment.<sup>7</sup> Bush stated that nurse executives have the opportunity to champion postgraduate NP training programs. Designing programs for recent NP graduates can help ensure adequate retention and job satisfaction of a rapidly growing and important segment of the clinical workforce.<sup>34(p626)</sup>

Postgraduate and fellowship training programs provide community resources such as

organizational support, communication, and leadership, which the results of this study indicate are related to successful transition.

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