

EDITOR'S PICK

Factors That Influence the Retention of Graduate Nurses at a Safety Net Teaching Hospital

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New nurse retention in hospitals is a national problem with significant patient safety and financial implications. This project was designed to determine retention and program completion rates of nurses who participated in a residency program. Factors influencing retention of nurses were explored using the Casey–Fink Nurse Retention Survey. Results revealed nurses' value supportive work environments, recognition, and seek mentorship for professional development. Designing nurse retention strategies is critical for organizations to prevent unnecessary turnover.

ewly licensed nurses are a large source of registered nurses (RNs) available for recruitment, and yet they are more likely to resign than experienced RNs within the first 2 years of practice (Tyndall et al., 2019). These new graduate registered nurses (NGRNs) are challenged with adapting to the continual evolution and growing complexity of health care. Schools of nursing have a curriculum framework that prepares students as generalists; thus, NGRNs often require additional support to achieve confidence and competence in complicated clinical settings (Kavanagh & Szweda, 2017; Van Camp & Chappy, 2017). Transitioning from the role of nursing student to professional nurse is widely recognized as a period of stress, role adjustment, and reality shock and can lead to turnover (Casey et al., 2004, 2021; Halpin et al., 2017). The Institute of Medicine's (2010) report, The Future of Nursing: Leading Change, Advancing Health, recommended healthcare organizations implement nurse residency programs (NRPs) to help facilitate transition to practice and reduce turnover. Exploring factors that influence NGRN retention is a relevant

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The authors have disclosed that they have no significant relationship with, or financial interest in, any commercial companies pertaining to this article.

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DOI: 10.1097/NND.00000000000000804

concern for professional development practitioners as they are closely involved in coordinating graduate NRP and in designing strategies for retaining RNs.

BACKGROUND

One of the outcomes of implementing NRPs is the retention of NGRNs within their first year (Asber, 2019). Focusing on factors that retain NGRNs is essential to create an organizational culture of retention (Buffington et al., 2012). The process for collecting retention and turnover data can vary by institution. "Nurse turnover" has no universal definition, making it difficult to compare turnover rates in healthcare facilities and geographic regions (Kovner et al., 2014). Another term used in the literature is "retention," which is the positive inverse of turnover. Nursing leaders use national retention data as a benchmark to measure outcomes, to make informed decisions, and to improve factors in the work environment that influence retention.

This institution lacked an accurate database to track NGRN retention rates and program completion rates. In addition, understanding what factors are important to former graduate nurses' retention were not known. Therefore, this project was initiated to conduct a formal retention analysis and explore factors that influenced the retention of RNs, who were former participants in the NRP.

LITERATURE REVIEW

A standard definition of retention is not consistently defined in the literature (Hayes et al., 2012). This inconsistency could be related to the difficulty in accurately tracking employee movement through an institution after their initial hire (Blegen et al., 2017). Kovner et al. (2014) reported that the most frequently used definition of turnover was the number of RNs leaving or transferring within the institution divided by the total number of RNs hired in a time period. A more recent turnover definition included involuntary or voluntary terminations but did not include transfers within the institution (Wolford et al., 2019). In contrast, the definition of retention is the number of RNs remaining at an institution, whether on their initial hiring unit divided by the total number of RNs at the end of a period (Blegen et al., 2017; Rush et al., 2013). Regardless, institutions should indicate inclusion criteria such as involuntary or voluntary terminations and state if the definition includes transfers within the institution (Kovner et al., 2014).

Because institutions use a variety of definitions to report retention and turnover, it is difficult to benchmark retention rates. According to Cline et al. (2017), retention of NGRNs is the most frequently used outcome to measure the success of NRPs. Most of the research reviewed included retention data only up to the 2-year mark, suggesting that NRPs are a short-term retention improvement strategy. Many institutionally developed NRPs reported 73%-100% 1-year retention rate (Cline et al., 2017; Edwards et al., 2015; Kovner et al., 2014; Rosenfeld & Glassman, 2016; Van Camp & Chappy, 2017), whereas proprietary NRPs reported a 90.2%-92.9% 1-year retention rate (Ulrich et al., 2010; Vizient, 2020). Twoyear retention rates ranged from 66.5% to 80.4% (Kovner et al., 2014; NSI Nursing Solutions, 2020; Ulrich et al., 2010). Retention rates at 3 years were 71.4%-74.9%, retention rates at 4 years were 65.8%-74.9%, and retention rates at 5 years were 60.2%-74.9% (NSI Nursing Solutions, 2020; Ulrich et al., 2010). When determining which rate to use as a national retention benchmark to compare this organization's retention rate, the NSI Nursing Solutions report was used in multiple studies.

Understanding specific factors that impact and influence retention is paramount to create and sustain a retention culture. Salt et al. (2008) reported that positive professional relationships and supportive workplace characteristics were scored higher in programs that used a preceptor model for clinical orientation. In contrast, Buffington et al. (2012) found that job satisfaction, extrinsic rewards, scheduling, praise, recognition, professional opportunities, work environment, interactions and supportive workplace characteristics, and a sense of belonging affect RN retention. In addition to these factors, Bugajski et al. (2017) specified that RNs value coworker competence, positive professional relationships, and autonomy. Institutions with high workplace violence incidents and incivility cause RNs to leave their work, suggesting that RNs value a healthy work environment (Reinhardt et al., 2020).

PURPOSE

The purpose of this project was to develop a standard method for collecting NGRN retention data for participants in the NRP at an urban, safety net, teaching institution. The specific aims were to (a) determine retention rates and program completion rates of NGRNs who participated in the NRP, (b) examine demographic characteristics of NGRN who were enrolled in the NRP, and (c) identify perceptions of the work environment, support, encouragement, and rewards/recognition factors that influence retention of NGRNs with more than 1 year of experience.

METHODS

Sample and Setting

The 12-month NRP started in fall 2011 and admits three cohorts of NGRNs per year. NGRNs are selected and hired to

individual units on a rolling basis by the unit manager. Eligibility for the NRP includes graduation from an accredited nursing program, passing the National Council Licensure Examination, holding a valid RN license, and having less than 6 months of RN experience. NGRNs are primarily hired into inpatient medical-surgical, behavioral health, float pool, and women and children's departments. Participation in the NRP is mandatory for all NGRNs. Once hired, they join the NRP cohort closest to their RN hire date.

The setting was a 555-bed urban, Level 1 trauma, safety net, teaching institution. This institution has one dedicated NRP coordinator who has a dual role as a professional development specialist. This project was reviewed by the Quality Improvement Committee, which is authorized by the Colorado Multiple Institutional Review Board and was determined not to be human subjects research. As such, this project did not require institutional review board review. This project had the executive support of the Chief Nursing Officer and Director of Nursing Education and Research.

Data Collection

Phase 1 data collection

This project was implemented in two sequential phases. In Phase 1, which began in September 2017 and ended in October 2018, all hired NGRNs (N= 429) were entered into a master Excel database. The institution's human resource department, unit managers, and NRP coordinator were able to identify and validate all NGRNs, who had enrolled in the NRP, in the database. Demographic variables included in the database were identified from the literature and nursing department strategic initiatives and goals. Variables included employee number, name, highest RN degree, school of nursing, date of birth, gender identity, race/ethnicity, marital status, hire status, date of hire as RN, full-time equivalent status on date of hire as RN, transfer status, unit of transfer, termination date, termination reason, program completion, and years retained (1–5 years).

Phase 2 data collection

In Phase 2, which began in November 2018 and ended in December 2018, an e-mail was sent to all former NGRNs (N = 220), with greater than 1 year of experience, and who were still employed at the institution, inviting them to complete the Casey–Fink Nurse Retention (CFNR) Survey. The CFNR Survey was used for this project, after receiving permission for its use from the authors. Participant exclusion criteria included RNs who did not complete the NRP, RNs who were no longer employed at the institution, and current NGRNs participating in the NRP. All hospital RNs had access to e-mail. Survey completion implied consent. Responses were kept anonymous and confidential.

Instrumentation

The CFNR Survey was originally developed in 2008 based on a comprehensive review of the literature related to nurse retention and job satisfaction. The survey was revised in 2009 after being pilot tested with oncology/bone marrow transplant RNs and to further establish content validity (Buffington et al., 2012). The CFNR Survey consists of five sections with 70 questions that provide qualitative and quantitative data used to understand factors influencing nurse retention. Section I includes 32 items that are scored using a 4-point Likert scale asking respondents to indicate their level of agreement from the following four choices: 1 = strongly disagree, 2 = disagree, 3 = agree, and 4 = stronglyagree. Items in this section are analyzed into four subscales titled (a) recognition/rewards, (b) professional nursing role, (c) mentorship, and (d) scheduling flexibility. The overall scale's Cronbach's alpha was .922, and reliability values for the four subscales ranged from .767 to .939 (Buffington et al., 2012). Each subscale contains more than one question. Permission from the authors was obtained to change the wording on Question 17 to read, "I often think about leaving this institution and finding another job." Section II consists of 13 questions designed to measure satisfaction with various aspects of the job. Response options are on a 5-point Likert scale, indicating 1 = very dissatisfied, 2 = moderately dissatisfied, 3 = neither satisfied nor dissatisfied, 4 = moderately satisfied, and 5 = very satisfied. Two open-ended questions ask about (a) how respondents have received praise or recognition for a job well done and (b) how they would like to receive recognition. Section III consists of three questions on professional development; one is open-ended, one is a yes/no, and one is "select all that apply." Section IV includes participant demographic information, and one question focuses on the rationale for working in their current role from a list of possible reasons.

ANALYSIS

Phase 1 data were analyzed using Intellectus Statistics (2019). Frequencies and percentages were calculated for variables in the Excel database. NRP completion rates were calculated based on successful graduation using the start and end dates of the NRP. Retention rates were calculated for the first 5 years of employment based on date of hire as an RN. Involuntary and voluntary terminations were included in the calculations, and transfers within the institution were excluded. The retention formula used was the number of RNs employed at the end of a period, divided by the total number of eligible RNs, multiplied by 100.

Phase 2 survey response data collected were analyzed using IBM SPSS Statistics (Version 25). Prior to analysis, all items in Section I were labeled CF1 to CF32. The negatively worded items (CF 13, CF16, CF17) were reverse scored prior to data analysis. The mean of each item was computed.

Section II job satisfaction item scores were not computed for this project. A qualitative thematic analysis was conducted by the project team for responses to the three open-ended questions in Sections II and III of the CFNR Survey.

RESULTS

The results were calculated in January 2019. The project included data collected on 21 cohorts (N = 429) of NGRNs hired starting October 2011 to November 2018. A summary of RN demographic characteristics is provided in Table 1. NGRNs who were enrolled in the NRP were predominantly female (78%), single (60%), and Caucasian (77%) and earned a bachelor of science in nursing (BSN) degree (86%). The mean age was 35 years (range 22-51 years). The largest percentage of NGRNs were hired into the institutional float pool department (15%), followed by medical-oncology (12%), and 60% were hired into full-time positions. RN demographics for NGRNs enrolled in the NRP were similar to demographics of RNs retained at 1 and 5 years (see Table 1). Program completion and retention rates by cohort are shown in Table 2. The average NRP completion rate was calculated as 95% beginning from 2011 to 2018. The average retention rate was calculated as 93% at 1 year, 82% at 2 years, 74% at 3 years, 66% at 4 years, and 59% at 5 years. Institutional results were benchmarked using NSI Nursing Solutions 2020 data (see Figure 1).

There were 220 of the 429 NGRNs enrolled in the NRP who were still employed at the time of the survey administration. These 220 RNs who were still employed were invited to complete the survey. Eighty respondents completed the survey for a response rate of 36%. The survey respondents were predominately female (86%) with a BSN degree (85%). The mean age was 34 years (range 24-51 years). The largest percentage of respondents worked in the float pool department (14%), followed by medicaloncology (12%), and 96% were full time. Each of the 32 items in Section I of the CFNR Survey, was measured using a 4-point Likert response scale. It was important to keep all questions in each subscale together to measure the concept and to interpret the meaning of the score. Subscale mean scores for each of the four factors (recognition/rewards, professional nursing role, mentoring, scheduling flexibility) were computed, and results are presented in Table 3.

When asked, "What are your professional goals for the next 1–5 years?" (see Table 4), 1-year goals included becoming a charge nurse or preceptor, completing their BSN degree, obtaining specialty certification, and clinical ladder participation. Five-year goals included pursuing an advanced degree, becoming a nurse practitioner, becoming an educator, or cross-training to other units. When asked if mentoring assistance was available to achieve these goals, 64% (n = 51) responded they did not have a mentor available. When asked to "Describe ways in which you have received praise or recognition for a job

	NGRNs Enrolled in the NRP (N = 429)		1-Year Retention (<i>N</i> = 378)		5-Year Retention (<i>N</i> = 121)	
Characteristic	n	%	n	%	n	%
Age in years, M (SD)	31	(6.57)	28.5	(6.57)	29.5 (6.44)
Gender						
Female	335	78	284	75	99	82
Male	94	22	94	25	22	18
Marital status						
Single	257	60	242	64	79	65
Married/partnered	129	30	110	29	34	28
Divorced	26	6	15	4	6	5
Significant other	17	4	11	3	2	2
Race/ethnicity						
White/Caucasian	330	77	291	77	90	74
Hispanic	43	10	38	10	12	10
Black/African American	30	7	26	7	11	9
Asian/Pacific Islander	22	5	19	5	7	6
Multiple	4	1	4	1	1	1
Nursing degree						
BSN	369	86	348	92	111	92
ADN	60	14	30	8	10	8
School of nursing ^a						
For-profit university	120	28	75	27	31	26
Private nonprofit religious university	82	19	50	18	22	18
Out-of-state schools	73	17	51	18	22	18
Public nonprofit research university	56	13	38	13	16	13
Public state university	26	6	21	7	10	8
Unit of employment ^b						
Float pool	64	15	34	9	16	13
Medical oncology	51	12	23	6	12	10
Mother–baby	34	8	34	9	9	7
Surgical trauma	30	7	49	13	7	6
Medical	26	6	34	9	9	7
Surgical orthopedics	26	6	34	9	5	4

(continues)

TABLE 1 RN Demographic Cl	haracteristic	s, Continue	d			
		rolled in the / = 429)		etention 378)	5-Year Re (<i>N</i> = 1	
Characteristic	n	%	n	%	n	%
FTE						
Full time (0.9/1.0 FTE)	258	60	287	76	94	78
Intermittent/PRN (0.001 FTE)	150	35	68	18	18	15
Part time (0.75/0.8 FTE)	21	5	23	6	9	7

Note. All hired NGRNs (N = 429) were entered into a master Excel database. Demographic variables included in the database were identified from the literature and nursing department strategic initiatives and goals. Descriptive statistics were used to calculate frequencies and percentages. NGRN demographics were also compared to RNs retained at 1 and 5 years. RN = registered nurse; NGRN = new graduate registered nurse; NRP = nurse residency program; BSN = bachelor of science in nursing; ADN = associate degree in nursing; FTE = full-time equivalent; PRN = as needed.

well done," responses were organized into themes (see Table 4). Examples included written notes of recognition, "Twinkles" (cafeteria gift cards), Daisy awards, verbal thank you, increase in pay, and "management listens to my concerns" were cited.

DISCUSSION

The first two aims of this project sought to determine retention rate and program completion rates of NGRNs who participated in the NRP and examine demographic characteristics of NGRNs who were enrolled in the NRP. The NGRN demographics in this project were similar to other reports, but three variables are worth reporting. First, this institution hires more NGRNs from a private for-profit university. This university is the largest nursing school in the community; thus, more candidates apply for NGRN positions from this nursing school. The results of hiring more candidates from this university are likely due to candidates' availability rather than mission alignment. Second, the most frequently hired unit is the float pool. This institution has a large float pool with more than 200 patient-facing clinical staff. Although most institutions do not hire NGRNs into the float pool, our institution hires the most NGNRNs into the float pool. The float pool has a rigorous 1-year orientation program for NGRNs in addition to the NRP. Last, NGRN initial full-time equivalents were tracked because of an institutional goal to hire more NGRNs into a fulltime position.

The NRP had a 95% program completion rate average over a 7-year period, which is comparable to similar institutions. The average 1-year retention rates reported for this NRP are higher than the national benchmark (77.8%) and higher than proprietary NRPs (90.2%–92.9%; NSI Nursing Solutions, 2020; Ulrich et al., 2010; Vizient, 2020). Two-year retention rates may be higher than the national benchmark (77.8%) because of a 2-year commitment agreement

that requires the NGRN to remain on the hiring unit for a 2-year period (NSI Nursing Solutions, 2020). After the 2-year commitment, the NGRN can terminate or transfer without any financial obligations. There is a clause in the agreement that allows the NGRN to transfer to another unit without financial obligation if the current unit manager gives written permission.

Three-year retention rates fell below the national benchmark (74.9%) but were similar to reported institutional retention rates (71.4%–74.9%). Although 4- and 5-year retention rates were lower than the national benchmark (74.9%) and peer institutions (60.2%–74.9%), this could be related to RNs pursuing their professional goals or advanced degrees. Because this institution does not have a mentor program, it is unclear if RNs are leaving because they are seeking other professional development activities; however, current literature states that a professional mentor program would help retain RNs through their professional development journey.

The third aim of this project was to identify perceptions of the work environment, support, encouragement, and rewards/recognition factors that influence retention of NGRN with greater than 1 year of experience at the institution. Respondents agreed that recognition and rewards offered in the work environment were a positive influence on their retention. Survey respondents felt they were a respected member of the healthcare team, they were supported by their charge RNs, their educator and manager were approachable, and they would encourage other nurses to work at this institution. Findings from this project are consistent with others that support the importance of creating a positive work environment as this effects nurse retention (Buffington et al., 2012; Hayes et al., 2012; Kramer et al., 2012).

Perceptions of mentorship was positively rated in agreement as an influence on retention, yet respondents also reported they do not have a mentor to assist them to achieve

^aReflects the top five schools with the highest percentages on hire.

^bReflects the top six units with the highest percentages on hire.

TABLE 2	NRP Program Completion ar	am Com	pletion	and Reten	nd Retention Rates 2011–2018	s 2011–2	2018							
	,	# Started	Program (Program Completion ^a	1-Year Retention ^b	ear tion ^b	2-Year Re	2-Year Retention ^b	3-Year Retention ^b	etention ^b	4-Year Retention ^b	tention ^b	5-Year Retention ^b	etention ^b
Cohort	Program Start Date		и	%	и	%	и	%	u	%	и	%	и	%
_	Oct 2011	16	16	100	16	100	15	94	13	81	13	81	12	75
2	Feb 2012	21	19	06	15	62	11	58	10	53	10	53	7	37
3	Jul 2012	14	14	100	13	93	13	93	12	98	11	62	10	71
4	Nov 2012	18	18	100	18	100	16	89	13	72	8	44	7	39
2	Mar 2013	18	18	100	17	94	17	94	17	94	16	89	12	29
9	Nov 2013	16	15	94	12	80	10	29	10	29	10	29	10	29
7	Mar 2014	19	19	100	19	100	18	95	13	89	1	58	11	58
8	Jul 2014	19	18	95	17	94	8	44	7	39	7	39	7	39
6	Nov 2014	20	20	100	18	06	13	65	10	50	10	50	10	50
10	Mar 2015	21	21	100	18	98	13	62	10	48	10	48	10	48
11	Jul 2015	10	10	100	6	06	8	80	8	80	8	80	8	80
12	Nov 2015	25	23	92	20	87	17	74	17	74	17	74	17	74
13	Mar 2016	21	17	81	15	88	11	65	11	65	-	65		1
14	Jul 2016	18	15	83	13	87	12	80	12	80	12	80	1	1
15	Nov 2016	25	21	84	18	98	18	98	18	98	18	98	1	1
16	Mar 2017	33	33	100	32	26	32	26	32	26	1	1		-
17	Aug 2017	31	30	26	30	100	29	65	29	26		1		
18	Nov 2017	17	15	88	15	100	15	100	15	100		1		
19	Mar 2018	22	21	95	21	100	21	100		I	1	1	1	1
20	Aug 2018	29	28	26	28	100	26	93	1	1	1	1	1	1
21	Nov 2018	16	15	94	14	93	14	93	_	-	-		1	_
Ave	Average ^c	429	406	%56	378	93%	337	82%	257	74%	172	%99	121	29%
Note. Program	Note. Program completion and retention rates are reported by cohort. The number of NGRNs who started in each cohort serves as the denominator. Descriptive statistics were used to calculate frequencies and necessary of the number of the program completion and retention rates (1.5 years) and necessary and necessary and necessary of the number of the program completion and retention rates (1.5 years) and necessary of the number of the number of the program of the number of the program of the number of th	etention rates	are reported l	Note. Program completion and retention rates are reported by cohort. The number of NGRNs who started in each cohort serves as the denominator. Descriptive statistics were used to calculate frequencies and necessary and retention rates (1.5 years) and necessary and nec	umber of NGR	Ns who started	Jin each coh	ort serves as tl	he denomina	tor. Descriptiv	ve statistics w	ere used to ca	alculate frequ	nencies and

percentages. The numerator for program completion and retention rates (1–5 years) and percentages are also listed by cohort. NRP completion was calculated using the following formula: (# of RNs who completed the NRP/# started) multiplied by 100. NRP retention was calculated using the following formula: (# of RNs who completed the NRP/# started) multiplied by 100. The 7-year average of the program completion and retention rates was calculated since the start of the NRP. NRP = nurse residency program; NGRNs = new graduate registered nurses; RNs = registered nurses.

and PRP/# started) multiplied by 100.

 $^{\rm b}$ NRP retention calculation = (# of RNs who completed the NRP/# started) multiplied by 100. $^{\rm c}$ The 7-year average of the program completion and retention rates since the start of the NRP.

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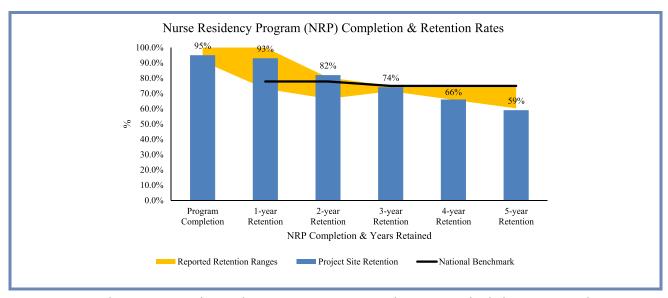


FIGURE 1. Nurse residency program completion and retention rates. Retention ranges that were reported in the literature were used as program completion and retention rate comparisons and appear as the yellow-shaded area. This project site's program completion and retention rates appear as blue bar graphs. NRP completion rates were calculated based on successful graduation using the start and end dates of the NRP. Retention rates were calculated for the first 5 years of employment based on date of hire as an RN. The retention formula used was the number of RNs employed at the end of a period divided by the total number of eligible RNs, multiplied by 100. NSI Nursing Solutions (2020) was used as the national benchmark and appears as the black line. This figure is available in color online (www.jnpdonline.com).

their professional development goals. Mentoring can play a role in nurse longevity at an organization and improve career outcomes such as job satisfaction and the perception of promotion or career advancement for mentees (Jakubik et al., 2017). These findings further highlight the need to develop a formal mentorship program at this institution.

Respondents strongly agreed that aspects of professional nursing role have a critical influence on nurse retention. Nurses felt they were making a difference in patient care and that they were connected to their community. This was evident by RNs agreeing they wish to work at this institution in the next 5 years and did not think about leaving. This rating may also be due to nurses' strong desire to work in a safety net institution where the mission is to care for all people regardless of their ability to pay. Levett-Jones et al. (2009) has suggested that affiliation and a sense of belonging contribute to effective nursing practice and retention of nurses in the profession. These nurses' perceptions are valuable in identifying specific areas for nurses in professional development to focus on in the workplace settings to encourage nurses to stay at their institution.

The scheduling and flexibility factor were rated the lowest as an influence on nurse retention. Respondents indicated they did not want options for shorter shifts. The low scores may be due to the wording of the two items on the survey, and options for working shorter shift hours are not offered at this institution. In contrast, these findings were not congruent with other factors reported in previous studies, such as coworker competence, scheduling, and autonomy (Buffington et al., 2012; Bugajski et al., 2017).

With the complexity of today's healthcare work environments and institutional goals to provide quality patient care, staffing and scheduling issues may need to be further explored in this institution as they seem to negatively influence retention.

CLINICAL IMPLICATIONS

This project demonstrates the process of accurate data collection for calculating NGRN retention rates, NRP completion rates, and identified factors that influence nurse retention, which have clear implications for professional development practitioners as they report program outcomes. Use of CFNR survey data can provide evidence to identify nurse perceptions of work environment concerns that influence retention and prevent unnecessary turnover. The importance of accurate data entry is also beneficial for program retention tracking and benchmarking comparisons. Healthcare institutions that have NRP need to continuously evaluate their outcomes and publish retention and turnover data (Asber, 2019). Developing a master database of NGRNs with variables from the literature and institutional initiatives may help promote the institution's mission, vision, and values. It is clear that the NRP at this institution influenced retention for the first 2 years of employment. When developing strategies to assist in the retention of nursing staff beyond 2 years of employment, nursing leaders should incorporate components of a healthy work environment, supportive workplace characteristics, and a sense of belonging. According to these data, RNs want a mentor to help them achieve professional goals. Nursing leaders and

Items		М	SD
	n/rewards (13 items)		
CF25	My manager places a high value on the work I do.	3.00	0.79
CF21	I feel that my manager is approachable.	3.21	0.82
CF10	My manager provides encouragement and feedback about my work.	3.08	0.78
CF24	My manager is helping me to develop confidence in my practice.	2.90	0.86
CF22	I feel that my manager follows through with my concerns.	3.03	0.85
CF2	I feel that my talents are appreciated.	3.00	0.76
CF6	I feel supported by my charge nurses on my unit.	3.33	0.80
CF18	I feel that my contributions to this organization are acknowledged.	2.60	0.76
CF8	My charge nurse provides encouragement and feedback about my work.	3.13	0.82
CF4	I feel that I am a respected member of the healthcare team.	3.13	0.68
CF5	I feel supported by my team on my unit.	3.28	0.80
CF19	I feel that my charge nurse is approachable.	3.30	0.78
CF29	I would encourage other nurses to work at this institution. ^a	3.23	0.73
Professiona	al nursing role (9 items)		
CF14	I feel the expectations of me in this job are realistic.	2.83	0.67
CF13	I feel overwhelmed by my patient care responsibilities and workload. ^b	2.73	0.89
CF31	I would like to be working here 5 years from now.	3.00	0.82
CF17	I often think about leaving this institution and finding another job. a,b	2.80	0.96
CF28	I am satisfied with my chosen nursing specialty.	3.15	0.82
CF16	I have been in my position about as long as I want to be. ^b	2.56	0.87
CF3	I feel that I make a difference with patient care.	3.35	0.62
CF15	I feel supported by the physicians I work with.	2.99	0.65
CF12	I feel comfortable communicating with patients and families.	3.50	0.50
Mentorship	o (8 items)		
CF20	I feel that my educator is approachable.	3.33	0.73
CF9	My educator provides encouragement and feedback about my work.	2.99	0.73
CF26	My preceptor(s) provided me with a sound foundation to begin my practice.	3.25	0.52
CF1	My work challenges me.	3.29	0.73
CF7	Other nurses are available to assist me during new situations and procedures.	3.27	0.66
CF27	I have a mentor I look to for continued guidance and mentoring.	2.86	0.83
CF23	There are positive role models for me to observe on my unit.	3.32	0.74
CF11	I enjoy socializing with other team members outside of working hours.	3.01	0.63

(continues)

TABLE 3 Item Means for Section I: Work Environment/Support/Encouragement ($n = 80$), Continued					
Items		М	SD		
Scheduling fle	xibility (2 items)				
CF32	I would consider staying here if offered the option for shorter shifts.	2.30	0.82		
CF33	I would like the option of working some shorter shifts (4, 6, 8, 10 hours).	2.48	0.98		
Factor subscal	e mean score				
	Recognition/rewards	3.09	0.79		
	Professional nursing role	3.31	0.76		
	Mentorship	3.16	0.70		
	Scheduling flexibility	2.39	0.90		

Note. Items in Section I were labeled CF1 to CF35. Items CF30 and CF34 were not included in the data analysis as it used a multiple-choice option. The negatively worded item (CF13, CF 16, CF 17), were reverse scored prior to data analysis. The mean of each item was computed. Eighty respondents completed the Casey–Fink Nurse Retention (CFNR) Survey for a response rate of 36%. Each of the items in Section I of the CFNR Survey, except item CF34, was measured using a 4-point Likert response scale. Means and standard deviation for items in the four subscale factors (recognition/rewards, professional nursing role, mentoring, and scheduling flexibility) were computed.

TABLE 4 Themes From Open-Ended Questions in the Casey–Fink Nurse Retention Survey

the Casey	-Fink Nurse Retention Survey
Open-Ended Question	Themes
Please describe ways in which you have received praise or recognition for a job well done.	"Shout-outs" of recognition Written notes Twinkles (cafeteria gift card) Daisy award
How would you like to receive recognition for a job well done?	Increase in pay Verbal thank you Management listens to my concerns
What are your professional goals for the next 1 year?	Become a charge nurse Finish BSN Clinical ladder participation Obtain specialty certification Become a preceptor Transfer to critical care unit
What are your professional goals for the next 5 years?	Pursue advanced degree Become a nurse practitioner Become a clinical nurse educator Cross-train to other areas of the hospital

Note. A qualitative thematic analysis was conducted for responses to the three open-ended questions in Sections II and III of the Casey–Fink Nurse Retention Survey. When asked how they would like to receive recognition and praise, responses were organized into themes. Examples included written notes of recognition, "Twinkles" (cafeteria gift cards), Daisy awards, verbal thank you, increase in pay, and "management listens to my concerns" was cited. When asked about their 1-year and 5-year goals, career advancement (e.g., becoming a charge nurse or preceptor) and professional growth (e.g., completing their BSN), clinical ladder participation, and specialty certification were identified. Pursuing an advanced degree, such as becoming a nurse practitioner or clinical nurse educator, was also listed as 5-year goal. Survey responses were compiled into themes based on individual responses.

educators may consider implementing a mentorship program for RNs that facilitates professional development after NRP completion.

CONCLUSION

This project provided direction for professional development practitioners concerned with the retention of their NGRNs. These results focus on perceptions of NGRN retention and what supported their desire to stay at the institution. NRPs must include continuous and rigorous evaluation methods to measure successful outcomes. Institutions that focus on efforts such as components of a healthy work environment, supportive workplace characteristics including a mentorship program, and building a sense of belonging in the workplace may see a critical improvement in RN retention.

ACKNOWLEDGMENTS

The authors would like to thank Kale Humphrey, MS, and Chia-Lin Tsai, PhD, for their data analysis assistance and Regina Fink, PhD, APRN, AOCN, CHPN, FAAN, for her editing support.

References

Asber, S. R. (2019). Retention outcomes of new graduate nurse residency programs: An integrative review. *The Journal of Nursing Administration*, 49(9), 430–435. 10.1097/NNA.000000000000780

Blegen, M. A., Spector, N., Lynn, M. R., Barnsteiner, J., & Ulrich, B. T. (2017). Newly licensed RN retention: Hospital and nurse characteristics. *The Journal of Nursing Administration*, 47(10), 508–514. 10. 1097/NNA.00000000000000523

Buffington, A., Zwink, J., Fink, R., Devine, D., & Sanders, C. (2012). Factors affecting nurse retention at an academic Magnet® hospital. *The Journal of Nursing Administration*, 42(5), 273–281. 10.1097/NNA.0b013e3182433812

^aWording change to reflect this institution's name.

^bNegatively worded item.

- Bugajski, A., Lengerich, A., Marchese, M., Hall, B., Yackzan, S., Davies, C., & Brockopp, D. (2017). The importance of factors related to nurse retention: Using the Baptist Health Nurse Retention Questionnaire, Part 2. *The Journal of Nursing Administration*, 47(6), 308–312. 10.1097/NNA.0000000000000486
- Casey, K., Fink, R., Krugman, M., & Propst, J. (2004). The graduate nurse experience. *The Journal of Nursing Administration*, 34(6), 303–311. 10.1097/00005110-200406000-00010
- Casey, K., Tsai, C. L., & Fink, R. M. (2021). A psychometric evaluation of the Casey–Fink Graduate Nurse Experience Survey. *The Journal of Nursing Administration*, *51*(5), 242–248. 10. 1097/NNA.0000000000001008
- Cline, D., La Frentz, K., Fellman, B., Summers, B., & Brassil, K. (2017). Longitudinal outcomes of an institutionally developed nurse residency program. *The Journal of Nursing Administration*, 47(7–8), 384–390. 10.1097/NNA.0000000000000500
- Edwards, D., Hawker, C., Carrier, J., & Rees, C. (2015). A systematic review of the effectiveness of strategies and interventions to improve the transition from student to newly qualified nurse. *International Journal of Nursing Studies*, 52(7), 1254–1268. 10.1016/ j.ijnurstu.2015.03.007
- Halpin, Y., Terry, L. M., & Curzio, J. (2017). A longitudinal, mixed methods investigation of newly qualified nurses' workplace stressors and stress experiences during transition. *Journal of Advanced Nursing*, 73(11), 2577–2586. 10.1111/jan.13344
- Hayes, L. J., O'Brien-Pallas, L., Duffield, C., Shamian, J., Buchan, J., Hughes, F., Laschinger, H. K., & North, N. (2012). Nurse turnover: A literature review—An update. *International Journal of Nursing Studies*, 49(7), 887–905. 10.1016/j.ijnurstu.2011.10.001
- Institute of Medicine. (2010). The future of nursing: Leading change, advancing health. The National Academy Press.
- Intellectus Statistics. (2019). *Intellectus Statistics* [Online computer software]. http://analyze.intellectusstatistics.com/
- Jakubik, L. D., Weese, M. M., Eliades, A. B., & Huth, J. J. (2017). Mentoring in the career continuum of a nurse: Clarifying purpose and timing. *Pediatric Nursing*, 43(3), 149–152.
- Kavanagh, J., & Szweda, C. (2017). A crisis in competency: The strategic and ethical imperative to assessing new graduate nurses' clinical reasoning. *Nursing Education Perspectives*, 38(2), 57–62. 10. 1097/01.NEP.0000000000000112
- Kovner, C. T., Brewer, C. S., Fatehi, F., & Jun, J. (2014). What does nurse turnover rate mean and what is the rate? *Policy, Politics & Nursing Practice*, 15(3–4), 64–71. 10.1177/1527154414547953
- Kramer, M., Halfer, D., Maguire, R., & Schmalenberg, C. (2012). Impact of healthy work environments and multistage nurse residency programs

- on retention of newly licensed RNs. *The Journal of Nursing Administration*, 42(3), 148–159. 10.1097/NNA.0b013e31824808e3
- Levett-Jones, T., Lathlean, J., Higgins, I., & McMillan, M. (2009). Staff-student relationships and their impact on nursing students' belongingness and learning. *Journal of Advanced Nursing*, 65(2), 316–324. 10.1111/j.1365-2648.2008.04865.x
- NSI Nursing Solutions. (2020). 2020 NSI national health care retention & RN staffing report. https://www.nsinursingsolutions.com/Documents/Library/NSI_National_Health_Care_Retention_Report.pdf
- Reinhardt, A., Leon, T., & Amatya, A. (2020). Why nurses stay: Analysis of the registered nurse workforce and the relationship to work environments. *Applied Nursing Research*, 55, 151316. 10.1016/j. apnr.2020.151316
- Rosenfeld, P., & Glassman, K. (2016). The long-term effect of a nurse residency program, 2005–2012: Analysis of former nurse residents. *The Journal of Nursing Administration*, 46(6), 336–344. 10.1097/NNA.0000000000000354
- Rush, K. L., Adamack, M., Gordon, J., Lilly, M., & Janke, R. (2013). Best practices of formal new graduate nurse transition programs: An integrative review. *International Journal of Nursing Studies*, 50(3), 345–356. 10.1016/j.ijnurstu.2012.06.009
- Salt, J., Cummings, G., & Profetto-McGrath, J. (2008). Increasing retention of new graduate nurses: A systematic review of interventions by healthcare organizations. *The Journal of Nursing Administration*, *38*(6), 287–296. 10.1097/01NNA.0000312788.88093.2e
- Tyndall, D. E., Scott, E. S., Jones, L. R., & Cook, K. J. (2019). Changing new graduate nurse profiles and retention recommendations for nurse leaders. *The Journal of Nursing Administration*, 49(2), 93–98. 10.1097/NNA.000000000000016
- Ulrich, B., Krozek, C., Early, S., Ashlock, C. H., Africa, L. M., & Carman, M. L. (2010). Improving retention, confidence, and competence of new graduate nurses: Results from a 10-year longitudinal database. *Nursing Economics*, 28(6), 363–375.
- Van Camp, J., & Chappy, S. (2017). The effectiveness of nurse residency programs on retention: A systematic review. AORN Journal, 106(2), 128–144. 10.1016/j.aorn.2017.06.003
- Vizient. (2020). Vizient/AACN nurse residency program. Retrieved December 14, 2020, from https://www.vizientinc.com/oursolutions/clinical-solutions/vizient-aacn-nurse-residency-program
- Wolford, J., Hampton, D., Tharp-Barrie, K., & Goss, C. (2019). Establishing a nurse residency program to boost new graduate nurse retention. *Nursing Management*, 50(3), 44–49. 10.1097/01. NUMA.0000553497.40156.4e