

Quality Improvement

Investing in Critical Care Nurses Post-Pandemic Through a Critical Care Certification Pilot Program

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ABSTRACT

Background: In 2022, after two and a half long years of caring for COVID-19 patients on the frontline of patient care, critical care nurses were burnt out and leaving the bedside. To invest in critical care nurses, a large multisystem healthcare organization's Nurse Scholars Academy partnered with Springer Publishing to offer a dynamic self-paced online review course for the critical care certification exam.

Aim: The aim of this paper is to discuss the evaluation of the critical care certification pilot program.

Methods: Recruitment strategies for all regional critical care departments were implemented through education departments at each facility. Springer Publishing would provide participating nurses with access to the self-paced study program on ExamPrepConnect. The Nurse Scholars Academy would provide a prepaid certification exam voucher at no personal expense to the nurse. In exchange, participants would commit to take the certification exam within 3 months of Pilot kick-off.

Results/Findings By month 4, 70 nurses from 21 medical centers took the Adult CCRN® certification exam. Of those 70 who took the exam, 58 passed. The pass rate was 82.8%, 11.3% above the national pass rate of 71.5% (AACN, 2021). Nurses spent more than 1,500 hours studying in ExamPrepConnect and successful ExamPrepConnect users studied for an average of 19 hours.

Conclusions. The pass rate was a successful outcome. The overwhelming response from local critical care nurses who wanted to obtain their CCRN® certification was encouraging. There was an apparent need with available resources. Of note, only 30% of those participants took the certification exam, future implications for this study involve further brainstorming on effective promotion to improve awareness and support frontline staff to take full advantage of this type of program.

Keywords: Certification, critical care, nursing, COVID-19 pandemic, retention

INTRODUCTION

In 2022, after two and a half long years of caring for COVID-19 patients on the frontline of patient care, critical care nurses were burnt out and exhausted. The pandemic caused nurses to leave the bedside, and their morale was low. Healthcare organizational leaders had to think of ways to show nurses that they were valued and invested in their workforce. To help invest in critical care nurses and relight their passion for nursing, a large multisystem healthcare organization's Nurse Scholars Academy partnered with Springer Publishing to offer a dynamic self-paced online review course for the Adult Critical Care Registered Nurse (CCRN®) certification examination. A pre-paid certification examination voucher, also purchased by the organization, enabled critical care nurses to sit for the certification examination without personal expense.

BACKGROUND

The Nurse Scholars Academy's mission is to advance professional nursing, streamline the integration of best practices, and nurture future leaders. As part of this effort, a professional certification campaign was launched in 2020 to remove barriers and offer certification pathways for all nurses. Certification is a key component of the Magnet Certification Journey (Friese, 2014); it validates one's skills and knowledge, empowering and enabling the nurse to perform at a higher level of clinical competency. Certification programs have been shown to improve job satisfaction and retention (High, 2014), patient outcomes in the pediatric critical care population (Hickey, 2018), and select nurse-sensitive outcomes (Coelho, 2020). The Nurse Scholars Academy surveyed 10,000 nurses in the organization in 2021. The response rate was 7,000 out of 10,000 nurses (70%). Forty percent (40%) of those respondents were nationally certified. Of those non-certified registered nurses (RNs), 73% reported a desire to pursue certification. The need was there, but the problem was getting more nurses to participate in this exciting opportunity. One barrier for nurses was finding a suitable and comprehensive study platform to accommodate their busy schedules. The Academy reviewed various sources and platforms and ultimately partnered with Springer Publishing.

Springer Publishing is an award-winning provider of nursing, behavioral sciences, and healthcare digital and print solutions. They offer a range of certification examination prep resources for nurses, including a CCRN® prep course delivered on ExamPrepConnect, their online study platform. The ExamPrepConnect course is self-paced with review content embedded with knowledge checks, practice questions and examinations, a gaming feature, and additional study assistance. There are also public and private discussion boards

available for learners who work in the same organization. The platform offers a personalized study plan to help nurses design a strategy based on their preferences as they prep for the exam date. ExamPrepConnect also offers a mobile app that allows learners to study on the go anytime, anywhere—an attractive feature for busy nurses. With this platform, the Nurse Scholars Academy was able to provide a certification study program for nurses that was innovative and convenient. The aim of this paper is to discuss the evaluation of the critical care certification pilot program.

METHODS

Study design

Post-intervention, descriptive study

Subjects

Volunteer Critical Care nurses working at one of 21 hospitals located in Northern California region, part of a large integrated healthcare system

Intervention

CCRN Preparation examination course (ExamPrepConnect) and pre-paid examination voucher

Study of the intervention

The Critical Care Certification Pilot Program was created with the organization's Nurse Scholars Academy and Springer Publishing's ExamPrepConnect team. A core group of Nursing Professional Development Specialists, Clinical Nurse Specialists, Regional leaders in Education and the Nurse Scholars Academy, and consultants from Springer Publishing met biweekly to discuss recruitment and planning strategies.

Recruitment strategies for regional critical care departments were implemented through education departments at each facility, appointing Nursing Professional Development Specialists and Clinical Nurse Specialists as site leads. Fliers that outlined pilot requirements, details, and deadlines were posted at each site. Springer Publishing staff provided participating nurses with access to the self-paced study program on ExamPrepConnect. The Nurse Scholars Academy provide participants with a prepaid certification examination voucher at no cost, as well as the opportunity to retake the examination and apply for tuition reimbursement if they were not successful on the first attempt. In exchange, participants were asked to commit to take the certification examination within 3 months of the pilot kick-off. A total of 232 critical care nurses across 21 facilities expressed interest in obtaining their certification.

Monthly surveys were sent to participants, requesting feedback about the learning platform and any challenges the nurses were experiencing. Site leads were

asked to check in with their staff and support and encourage them to make it to the finish line as they prepped to sit for the examination. The program was extended by 1 month based on participants' feedback on needing more time.

Evaluation plan

Evaluation using descriptive statistics (percentages) targeted the examination pass rate between self-reported active versus non-active ExamPrepConnect users, and three questions that targeted planned retention, empowerment and competency, and evaluation of program content and usefulness. The later questions were rated on a four and five-point ordinal scales.

Research Ethics and Compliance

This project did not meet the definition of human subject's research and Institutional Review Board approval was not needed.

RESULTS

By month 4, 70 of the 232 critical care nurse participants (30%) took the Adult CCRN® certification examination. Of these, 58 passed, and two additional participants passed on their second attempt. The pass rate was 82.8%, 11.3% above the national pass rate of 71.5% (AACN, 2021). Those who actively used ExamPrepConnect achieved a higher pass rate than non-active users; active users had an 87.0% pass rate vs. 68.7% for non-active users (Table 1). Successful ExamPrepConnect users studied for an average of 19 hours.

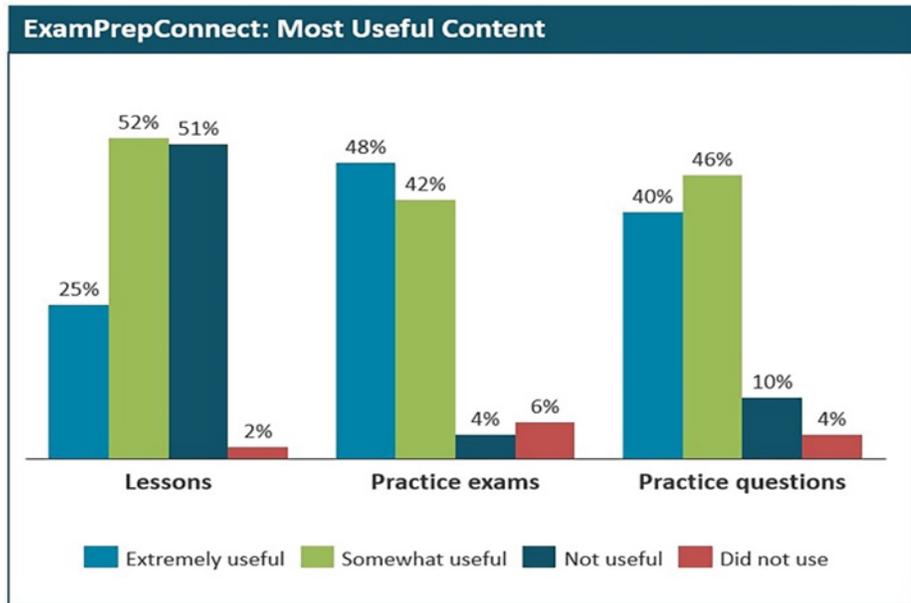
Table 1.
Pilot Participant Pass Rates: Active vs. Non-Active ExamPrepConnect (EPC) Users

	Active EPC Users	Non-Active EPC Users
Total Test-Takers	54	16
Total Passed	47	11
Pass Rate	87.0%	68.7%

Fifty-four nurses (23%) filled out a survey at the end of the pilot, 47 of whom took the certification examination. Survey results showed that 45% of the pilot participants used the platform several times a week, 41% used it several times a month, and 4% used it daily. Of those who used the platform, 42% preferred the mobile app, 33% preferred the desktop website, and 25% had no preference. Respondents valued the practice questions and examinations, strengths and weaknesses dashboard, and personalized study plan (Figure 1 & 2).

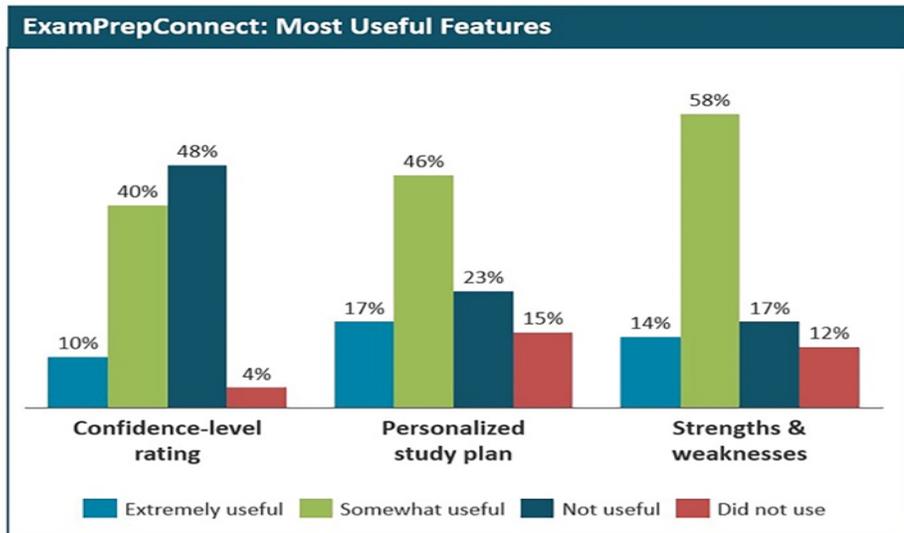
Figure 1.

Most Useful ExamPrepConnect Content and Features



Source: Springer Publishing (2022). Pilot Participant Survey

Figure 2.
Strengths and Weaknesses of the ExamPrepConnect Dashboard



Source: Springer Publishing (2022). Pilot Participant Survey

The pilot succeeded at reinvigorating and motivating nurses, driving interest in certification and usage of vouchers, and improving examination outcomes. After

completing the pilot, 69% of nurses completing the survey felt more empowered and competent in their role (Figure 3), and 76% were likely to stay within the organization (Figure 4). In addition, the pilot forged a strong and fruitful partnership between Springer Publishing and the healthcare organization.

Figure 3.

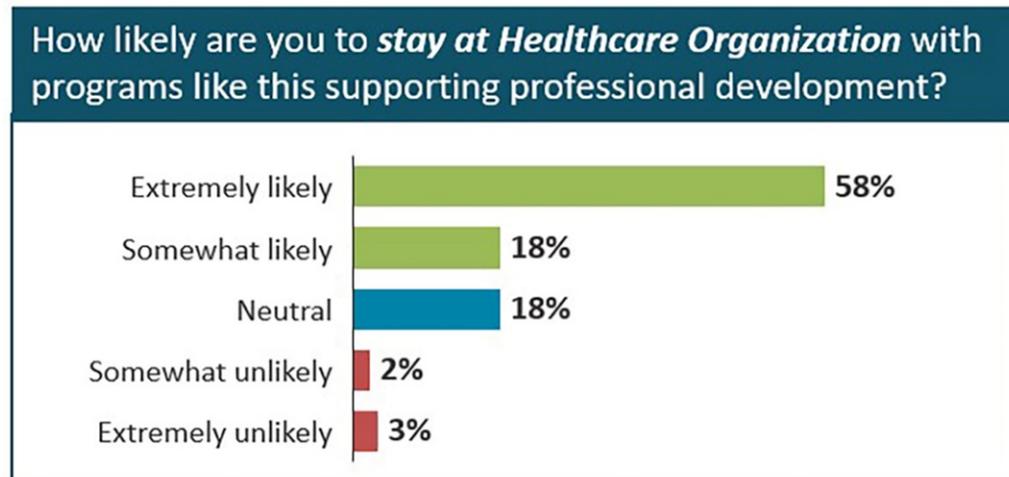
Feelings of Empowerment and Competency in the Nursing Role after Pilot Completion



Source: Springer Publishing. (2022). Pilot Participant Survey.

Figure 4.

Likelihood of Nurses Staying at the Healthcare Organization after Pilot Completion



Source: Springer Publishing. (2022). Pilot Participant Survey.

DISCUSSION



Although the number of pilot participants who took the examination was 30%, the pass rate of 82.8%, compared to the national average of 71.5%, was a successful outcome. Nurses self-reported that the barriers to taking the examination included family illness, not having time to study, fear of failure, and personal health issues. Additionally, the organization was going through labor negotiations, which may have impacted nurses' focus. What was encouraging about the pilot was the positive response from local critical care nurses who wanted to obtain their CCRN® certification. The need was apparent, and through the pilot program, resources available. The question was: What else did the organization need to do to get nurses to their goal? Although an anecdotal observation, the facility with the highest number of new certified nurses and high pass rate (12/13) had the highest nurse-leader engagement compared to the facility with minimal nurse-leader engagement. In the former only one RN signed up to take the examination and failed.

CONCLUSION

As this healthcare organization approaches applying for Magnet designation at each facility, leader engagement is essential to get nurses motivated, engaged, and invested in their professional development. Due to this pilot, the health system changed its existing policy to provide tuition reimbursement for study prep courses and examination recertifications that previously were not reimbursed. Additionally, Springer Publishing was able to offer additional certification programs, discounts, and creative packages to the organization. Future implications for this study involve more specialty certification offerings and further brainstorming on effective promotion to improve awareness and support frontline staff to take full advantage of these unique programs.



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REFERENCES

- American Association of Critical-Care Nurses. Certification Exam Statistics and Cut Scores, 2021. <https://www.aacn.org/certification/preparation-tools-and-handbooks/exam-stats-and-scores>
- Coelho P. Relationship between nurse certification and clinical patient outcomes: systematic literature review. *Journal of Nursing Care Quality* 2020; 35(1):E1-E5. DOI: 10.1097/NCQ.0000000000000397
- Friese CR, Xia R, Ghaferi A, Birkmeyer JD, Banerjee M. Hospitals in 'Magnet' program show better patient outcomes on mortality measures compared to non-'Magnet' hospitals. *Health Affairs* 2015;34(6); 986-992. DOI: [10.1377/hlthaff.2014.0793](https://doi.org/10.1377/hlthaff.2014.0793)
- Hickey PA, Gauvreau K, Porter C, Connor JA. The impact of critical care nursing certification on pediatric patient outcomes. *Pediatric critical care medicine* 2018;19(8);718-724. DOI: [10.1097/PCC.0000000000001609](https://doi.org/10.1097/PCC.0000000000001609)