



ACADEMIC PROGRESSION IN NURSING WHITEPAPER

August, 2020



AUTHORED BY:

Mary Jean Osborne, DNP, RN, PAPIN Chair and Director Northampton Community College Nursing

Marianne T. Adam, PhD, RN, FNP, CNE, Associate Teaching Professor of Nursing, Campus Coordinator for Nursing, Penn State Schuylkill

Janyce Collier, MSN, MBA, RN, CNE, Director of Franklin County Career & Technology Center Practical Nursing Program

Karen Goldschmidt, PhD, MSN, RN, CNE, Associate Clinical Professor College of Nursing and Health Professions, Drexel University

Cheryl B. Krieg, MSN, BSN, RNC-OB, Nursing Program Director of Clearfield County Career and Technology Center

Andrea Mann, MSN, RN, CNE, Nursing Education Administrator, Nurse Educator

Cynthia Glawe Mailloux PhD, RN, CNE, Professor and Chairperson Department of Nursing King's College

Debbie Rahn, EdD, MSN, RN Director of Reading Hospital School of Health Sciences

Amy H. Ricords, MEd, BSN, RN, NPD-BC, Director Professional Advancement PA-AC

Academic Progression in Nursing Whitepaper

Background

Registered Nurses (RNs) enter the profession from a variety of access points: licensed practical nurse (LPN) progression programs; generic pre-licensure programs in diploma; associate degree programs; baccalaureate programs; accelerated baccalaureate programs for graduates of non-nursing disciplines; and entry-level master's programs. All entry points into the nursing profession contribute to the supply of RNs available to meet the nation's need for nursing care. Multiple studies report enhanced patient outcomes and lower mortality rates in hospitals with larger percentages of baccalaureate-prepared nurses (Aiken, Clarke, Cheung, Sloane, & Silber, 2003; Aiken et al., 2014; Kendall-Gallagher, Aiken, Sloane, & Cimiotti, 2011; Schwarz & Leibold, 2014; Tourangeau et al., 2007). The Institute of Medicine's (IOM) report, *The Future of Nursing: Leading Change, Advancing Health* (2011), recommended that nurses achieve higher levels of education, through an educational system that promotes seamless academic progression to attain an 80% baccalaureate-prepared nursing workforce by 2020.

The Tri-Council for Nursing (2010), including the American Association of Colleges of Nursing (AACN), American Nurses Association (ANA), American Organization of Nurse Executives [(AONE)], along with the National League for Nursing (NLN) issued a policy statement that "all nurses, regardless of entry-point into the profession, to continue their education in programs that grant baccalaureate, master's, and doctoral degrees (para. 9)."

Academic progression to baccalaureate nursing degrees from various entry points continues to be supported by multiple professional nursing organizations (NLN, 2011), the Organization of Associate Degree Nurses [OADN], and the ANA (2015) released a joint position statement supporting academic progression for nursing. Additionally, the accrediting agencies such as the Accreditation Commission for Education in Nursing [ACEN], the Commission on Collegiate Nursing Education [CCNE], and the National League for Nursing Commission for Nursing Education Accreditation [NLN-CNEA] supports a more educated nursing workforce.

History of Pennsylvania Academic Progression in Nursing (PAPiN)

In fall 2007, a team of nurses from Pennsylvania met to discuss strategies to achieve higher numbers of baccalaureate-prepared RNs in Pennsylvania. The initial group of participants expanded to include representation from all levels of nursing education (practical nursing through graduate nursing education) as well as representation from nursing practice, nurse executives in Pennsylvania, the Pennsylvania State Nurses Association (PSNA), and other interested stakeholders. This group self-identified as the Pennsylvania Coalition for the Advancement of Nursing Education (PCANE) and met regularly from its inception through 2015 to discuss issues related to nursing education and the achievement of the IOM recommendations.

In February 2016, the PCANE group transitioned to a new body called Pennsylvania Academic Progression in Nursing (PAPiN, 2017) which was formed as a workgroup of the Pennsylvania Action Coalition (PA-NRC, 2011) to focus on all levels of nursing education. One focus of the group continues to be related to issues affecting academic progression in nursing in Pennsylvania. PAPiN's primary focus is to support the work of the PA-NRC (2011) regarding

nursing education and academic progression. PAPIN is committed to working with education and healthcare communities to create a highly educated workforce through academic partnerships offering seamless academic progression pathways and improved access for underrepresented and economically disadvantaged students.

History of Academic Progression in Nursing (APIN)

Guidance for the recommendations presented in this paper evolved from the work of the Academic Progression in Nursing (APIN) program that was initially funded by the Robert Wood Johnson Foundation from 2012-2017 and lead by the tri-council. In 2017, the National Education Progression in Nursing (NEPIN) Collaborative assumed management of the program, under the leadership of the OADN and the National Forum of State Nursing Workforce Centers.

The APIN National Program Office selected nine states to design and test models of academic progression to support the IOM (2011) recommendation that 80% of RNs be prepared with a Bachelor's of Science in Nursing (BSN) or higher (IOM, 2010). The four potential models identified included: RN- BSN degree conferred by community colleges, accelerated options such as RN to Master of Science in Nursing (MSN, statewide or regional), competency or outcomes-based curriculum, and shared curriculum (Campaign for Action, 2012). Initially, the programs developed by the APIN projects evolved from the shared curriculum model (Campaign for Action, 2012) founded on collaboration between community colleges and universities to provide opportunities for automatic and seamless academic progression. The emergence of partnerships between a community college and a college/university became a common thread in many projects, which led APIN to consider the broader title of the partnership model (APIN, 2017).

The partnership model was identified as the most likely to accelerate progress towards an 80% BSN prepared workforce (National Academies of Sciences, Engineering, and Medicine [NASEM], 2016; APIN, 2015). The model is credited with transforming dialog between academic institutions from one of conflict and competition to one of cooperation (APIN, 2015) and improving access for underrepresented and economically disadvantaged students.

The partnership model traverses a continuum from simple articulation agreements to complete curricular integration. In a *simple articulation agreement*, students are encouraged to progress, but no formal process links the partnering institutions. At the next level, articulation or transfer agreements are standardized across a region or state. Some degree of curricular alignment is required, but participation is voluntary. Students complete the diploma/ADN coursework in conjunction with defined pre-requisites and co-requisites for direct advancement to the BSN. At the next level, *dual admission or co-enrollment partnerships* (also referred to as dual enrollment) include curricular integration with overlapping coursework between the diploma/ADN programs and colleges/universities. Typically, students are identified as a specific cohort with planned advancement to the baccalaureate. Course sequencing and overlap vary. In some models, students vary. Students are eligible for the National Council Licensure Examination for RNs (NCLEX-RN) after completion of the diploma/ADN curriculum. At the same time, other models require completion of the BSN curriculum before taking the licensure examination.

The final partnership level is *complete curricular integration*. Students begin their education at the community college and exit with both an ADN and a college/university-

conferred BSN. Baccalaureate content is woven throughout the curriculum. Ideally, financial aid is distributed across the student's entire course of study.

National Progress

The Campaign for Action monitors the percentage of employed nurses with a BSN (or higher) degree. The report states there have been a slow but steady increase in the number of BSN students from 49% in 2010 to 56% in 2018 (APIN, 2019).

The number of BSN candidates taking the NCLEX-RN for the first time is a secondary indicator of progress. See Table 1 for the national percentage of BSN NCLEX-RN candidates has increased from 39.3% in 2010 to 48.5% in 2018 (National Council State Boards of Nursing [NCSBN], 2019). Data regarding the number of graduates from accredited RN-BSN programs across the country is included as an expanded measure of progress. The number of RNs graduating from BSN completion programs has more than tripled from 19,606 in 2009 to 66,369 in 2018 (AACN, 2009–2019), representing an increase in the percentage of BSN graduates from RN-BSN programs from 29.4% to 48%.

Pennsylvania Progress

Pennsylvania is comprised of sixty-seven (67) counties, forty-eight (48) of which are rural (72%), and home to almost one-third of the state's residents (Center for Rural Pennsylvania, 2020). Several approved programs have established satellite programs in these counties. Twenty nine percent of RN programs and 47% of PN programs are in rural counties.

A variety of nursing educational programs exist in Pennsylvania, resulting in a nursing workforce that includes a large percentage of non-baccalaureate prepared nurses. Current pre-licensure educational programs, approved by the Pennsylvania State Board of Nursing [PA-

SBON, 2019), include fifteen (15) diploma, twenty-five (25) associate, forty-four (44) baccalaureate degree and fifty-five (55) practical nursing programs.

Pennsylvania has a statewide Articulation Agreement, adopted by the Pennsylvania Higher Education Nursing Schools Association, Inc. (PHENSA) in 1994. The statewide agreement allows for each college or university offering a RN to Bachelor of Science in Nursing (BSN) degree to establish its own policies and processes related to admission criteria and credit transfer standards. Multiple RN-BSN articulation models exist within the Commonwealth, which differ in admission and progression requirements.

An accurate depiction of the educational status of the current Pennsylvania RN workforce is difficult to achieve due to the lack of state-wide data collection, analysis, and dissemination. The most recent documented demographics of the nursing workforce was published by the Pennsylvania Department of Health (PA DOH), in a 2012-2013 RN survey, which indicated that at the time of that data collection process, only 39% of respondents listed their highest degree earned as a BSN, with less than an additional 10% of nurses within the Commonwealth holding a graduate degree in nursing. The same report also indicated that 27% of RNs in Pennsylvania were educated at the ADN level, and 24% of nurses were educated with a diploma in nursing as the highest educational level.

While more recent RN workforce data are not currently available, the NCLEX-RN data provides insight regarding the educational preparation of newly licensed RNs in Pennsylvania (NCSBN, 2018). Table 1 (see Appendix) represents data retrieved from NCSBN report number six (6) for the most recent four-year period. In 2018, 59% of individuals who took the NCLEX-RN in PA were graduates who had earned a BSN degree, while the remaining 41% of graduates

where educated at the diploma and ADN level. This data indicates a 9% gain in baccalaureate degree graduates seeking licensure (NCSBN, 2018).

Practical Nursing programs are offered in a variety of academic settings, including community colleges, career and technology centers, for-profit schools, and universities through adult education offerings. These programs offer access to underrepresented and economically disadvantaged students (PAPNA, 2018). “Practical Nursing graduates are the profession's most important pipeline to building a diverse nursing workforce. But historical barriers within nursing education have created gaps in educational mobility that must be addressed if academic progression for graduates from minority backgrounds is fully achieved” (NLN, 2014). Graduates from these programs receive a certificate/diploma, providing eligibility for licensure to become an LPN. Progression models for PN-BSN programs are limited in the Commonwealth with various entry and progression requirements (www.practicalnursing.org). Also, there is a lack of data to show the number of LPNs who continue to BSN programs, regardless of the pathway.

Purpose

The purpose of this document is to highlight growth in cooperative efforts among PA nursing programs engaged in academic progression initiatives that encourage the implementation of best practices identified in the work of the Campaign for Action (2012). The goal is to endorse partnership frameworks to facilitate the achievement of establishing a minimum of 80% of baccalaureate educated nurses in the workforce.

Overcoming Barriers to Academic Progression

Financial barriers

Tuition costs and program length influences program selection and the decision to pursue a BSN degree. Challenges when returning for a BSN include lack of financial support and tuition reimbursement, loss of income and benefits, loan repayment, and modest pay increases for degree attainment (Duffy et al. 2014; Schwarz & Leibold, 2014; Romp et al., 2014). Although BSN degrees may provide more salary over time, this is not always the case, especially in rural areas (Duffy et al. 2014; IOM, 2011; Romp et al., 2014; Schwarz & Leibold.,2014). For this reason, minority and economically disadvantaged students often enter the nursing workforce through community colleges, hospital-based programs, career and technology centers, and proprietary schools (IOM, 2011; NLN, 2014; Pennsylvania Association of Practical Nursing Administrators [PA-PNA], 2017).

Educational Barriers

There is a lack of baccalaureate programs in some areas, especially rural ones (NASEM, 2016; APIN, 2017). Internet connectivity and associated costs may also limit enrollment opportunities. Overall, 6% of Pennsylvania residents do not have broadband access; however, lack of access in rural county areas is noted to be as high as 49% (Federal Communications Commission [FCC], 2016). Where programs are available, lack of seats due to faculty shortages, and lack of clinical sites remains problematic (Schwarz & Leibold, 2014; NASEM, 2016). Barriers for returning to school for higher degrees include inconsistent pre-requisites, admission/progression requirements, curricular requirements, time-limited transfer course credits, and lack of articulation agreements (APIN 2017; IOM, 2011; Giddens & Meyer 2016; Schwarz & Leibold, 2014).

Psychosocial barriers

Current nursing literature identifies multiple psychosocial barriers related to academic progression. Many nurses report difficulty with course scheduling to meet work or family obligations. There is a perceived fear related to time since last in school. New technology is intimidating and will often deter a nurse from pursuing additional education. There is also a lack of support from family, supervisors, and peers (Duffy et al. 2014; Romp et al., 2014; Schwarz & Leibold, 2014).

Best Practice Recommendations

The goal of this document is to highlight growth in cooperative efforts among PA nursing programs engaged in academic progression initiatives that encourage the implementation of best practices identified in the work of the Campaign for Action. The goal is to remove barriers and endorse academic partnership frameworks to facilitate the achievement of establishing a minimum of 80% of baccalaureate educated nurses in the workforce.

RN Progression Recommendations

First, the authors recommend that pre-licensure programs identify institution(s) to create a collaborative academic partnership(s) to allow for educational advancement and progression. The best means to that end is through joint curriculum evaluation to determine fit and prevent the repetition of content. Secondly, it is in the best interest of the student if there is university policy flexibility to eliminate credit expiration. Former recommendations for licensure requirements before beginning the baccalaureate program or promoting completion within predetermined time frames are no longer recommended (PHENSA, 1994).

Third, collaborative meetings should establish the number of credits awarded for licensure and transfer. The institutions should agree upon the awarded credits offered for RN licensure; the recommendation for RNs is that no less than 30 credits be granted to the BSN student. Direct transfer agreements for general education classes are recommended, with little or no time limit on transfer.

There are wide variations in requirements, particularly for ADN and RN-to-BSN students. A national standard of foundational courses for a BSN program was proposed and disseminated, providing a framework for consistency across programs and smooth academic progression. Programs could use these national standards to ensure consistent professional foundations (Appendix, Table 3) while streamlining both ADN-BSN and RN-BSN curricula (APIN, 2014; Gerardi, 2015; NEPIN, 2015).

Lastly, the preadmission requirement for completion of professional practice hours before beginning the BSN program is no longer considered necessary. The current recommendation is to encourage timely admission procedures to foster academic progression.

LPN Progression Recommendations

First, LPN programs can identify partners that can offer foundational BSN courses, including nursing coursework for college credit, thus decreasing the time for RN degree completion and promote seamless progression. Potential partners include colleges/universities, diploma programs, career and technology programs, or high schools that offer college credit. Alignment with a community college could transition LPN coursework to a college credit format and provide the option to bridge to a RN program.

Secondly, the institutions should agree upon the awarded credits offered for LPN licensure. Consider maximizing the award of credits for pre-licensure nursing fundamentals course, fundamental and geriatric clinical, or elective classes. Every consideration should be given to award additional credits through demonstration of competency through portfolio or challenge exams.

Thirdly, the preadmission requirement for completion of professional practice hours before beginning the RN program is no longer considered necessary. The current recommendation is to encourage timely admission procedures to foster academic progression.

Academic Recommendations

Research has found that students lacked the information needed to make informed choices about academic progression pathways (Oregon Consortium for Nursing Education [OCNE], 2012; New Mexico Nursing Education Consortium [NMNEC], 2016). Well trained “transition advisors” or “student success advocates” can inform student progression to ensure decisions are prudent (NMNEC, 2016; OCNE, 2012; RIBN, 2011). A second recommendation is to identify pathways to the BSN during recruitment events with prospective nursing students (PA Action Coalition, 2011), using professional and academic advancement informational materials.

A third recommendation is for nursing program recruiters (RN and LPN) to share pathways to the BSN with high school guidance counselors and LPN program advisors. Developing integrated marketing and recruitment material with BSN programs will provide supportive information to students making the best decision for their entry into

practice. Orientation to the pre-licensure nursing program should include the BSN partner (RN partner if LPN program).

Ideally, programs should have a visible and helpful presence on both campuses. A fourth recommendation is for transparency with admission criteria, advising, and marketing will facilitate a seamless transition. These documents and resources can assist any academic organization in providing accurate information to a potential nursing student. Lastly, joint academic advising, and financial aid counseling are suggested. An additional asset would be that partners develop inter-campus education sessions addressing enrollment, management, advising, and financial aid issues.

Employer Recommendations

Returning to school can be daunting. The first recommendation for an organization is to leverage its technology resources to establish a network of support and access (Gorski et al., 2015). Online and simulation technology provides access to higher education and necessary resources, especially for those in rural areas (Perfetto, 2019). Offering classes at a place(s) of employment/hospitals or establishing satellite campuses will allow nurses greater accessibility to progress toward the BSN.

Implementing an ambassador or mentor to help the nurse employee navigate academia and personal barriers are helpful and a second recommendation. This partnership would help create an environment to support a student's academic enrollment and success. Collaboration with the academic partner to implement assistive bridging programs/workshops on topics such as computerized learning platforms, collaborative projects, conducting online library searches, and use of APA format could facilitate the employees' return to academia (D'Arcy & Czurzynski,

2016). Collaboration between BSN students and employers can result in clinical practice projects that benefit the institution.

A third recommendation is for the encouraged to create collaborative academic partnerships that allow for education, advancement, and mobility. The employer to consider financial and professional rewards for attaining the BSN through offering robust tuition assistance, scholarship opportunities, promoting flexible work schedules to accommodate class schedules and establishing mechanisms to promote educational advancement for both full-time and part-time nursing staff (Gorski et al., 2015).

CONCLUSION

Although Pennsylvania has yet to meet the IOM's (2011) recommendation of an 80% BSN prepared workforce by the year 2020, as Pennsylvania nurses, educators, and employers, we must continue to pursue the goal. Better access to state-wide data is necessary. The authors support the Hospital and Health System Association of Pennsylvania's recommendation to establish an independent entity within the PA state government to collect and analyze workforce and economic data (Hospital Health System Association of Pennsylvania [HAP], 2020). Organizations must explore and support educational opportunities for ongoing academic progression to RN to BSN, Master of Science in Nursing (MSN), and doctoral degrees. Educators from all levels of undergraduate nursing need to embrace the call to advance our profession by offering these strategies as a means of continued collaboration.

References

- Academic Progression in Partnership. [APIN]. (2012). Continuum of Academic Progression Partnerships. Retrieved from https://www.academicprogression.org/findings/continuum_of_academic_progression
- Accreditation Commission for Education in Nursing [ACEN]. (2020). Retrieved from <https://www.acenursing.org/about/>
- Aiken L.H., Clarke S.P., Cheung R.B., Sloane D.M., Silber J.H. (2003). Educational levels of hospital nurses and surgical patient mortality. *JAMA*, 290, 1617–1623. doi: 10.1001/jama.290.12.1617
- Aiken L.H., Sloane D.M., Bruyneel L., Van den Heede K., Griffiths P., Busse R., & Dermeus W. (2014). Nurse staffing and education and hospital mortality in nine European countries: A retrospective observational study. *Lancet*, 38, 1824–1830. doi: 10.1016/S0140-6736(13)62631-
- Campaign for Action. (2012). *Model descriptions*. Retrieved from <https://campaignforaction.org/issue/transforming-nursing-education/>
- Center for Rural Pennsylvania (2020). Retrieved from <https://www.rural.palegislature.us/>
- Commission on Collegiate Nursing Education [CCNE], (2020). Who we are. Retrieved from <https://www.aacnnursing.org/CCNE-Accreditation/Who-We-Are>
- D'Arcy, G. & Czurzynski, S. (2016). Writing skills, *Nursing2019*, 46 (1), 18 – 20.
- Department of Education [DOE], (2017). Retrieved from <https://campaignforaction.org/wp-content/uploads/2019/02/BSN-maps-memo.pdf>
- Duffy, M.T., Friesen, M.A., Speroni, K.G., Swengros, D., Shanks, L.A., Waiter, P.A., & Sheridan, M.J. (2014). BSN completion barriers, challenges, incentives, and strategies. *Journal of Nursing Administration* 44(4), 232-6. doi: 10.1097/NNA.0000000000000054
- Foundation for Nursing Excellence. (2011). Regionally increasing Baccalaureate nurses (RIBN) Project. Retrieved from <http://www.ribn.org/about-us/>
- Federal Communications Commission. [FCC]. (2016). Broad band progress report. Retrieved from <https://www.fcc.gov/reports-research/reports/broadband-progress-reports/2016-broadband-progress-report>
- Gerardi, T. (2015). The academic progression in nursing initiative, *Journal of Nursing Administration*, 45 (11), 531-533. Retrieved from

https://www.nursingcenter.com/pdfjournal?AID=3227641&an=00005110-201511000-00003&Journal_ID=54024&Issue_ID=3227628

Giddens, J.L., & Meyer, D. (2016). Foundational courses for the baccalaureate nursing degree: Enhancing efficiency for academic progression. *Journal of Nursing Education*, 55(7), 373-378.

Gorski, M, Gerardi, T, Giddens, J, Meyer, D, & Peters-Lewis, A. (2015). Nursing Education Transformation Building an infrastructure for the future, *American Journal of Nursing*, 115(4), 47-51. Retrieved from https://nepincollaborative.org/wp-content/uploads/2015/04/Nurs-Edu-Trans_Adv-Health-thru-Nursing.pdf

Hospital Health System Association of Pennsylvania [HAP]. (2020). Addressing Pennsylvania's healthcare workforce challenges; Recommendation report. Retrieved from <https://www.haponline.org/Flipbooks/Workforce/index.html>

Institute of Medicine. (2011). The future of nursing: Leading change, advancing health. Retrieved from <http://www.iom.edu/Reports/2010/The-Future-of-Nursing-Leading-Change-Advancing-Health.aspx>

Kendall-Gallagher, D., Aiken, L.H., Sloane, D.M., & Cimiotti, J.P. (2011). Nurse specialty certification, inpatient mortality, and failure to rescue. *Journal of Nursing Scholarship*, 43, 188-194. doi:10.1111/j.1547-5069.2011.01391.

National Academies of Sciences, Engineering, and Medicine. [NASEM]. (2016). Assessing progress on the Institute of Medicine report the future of nursing. Washington, DC: The National Academies Press. Retrieved from <https://doi.org/10.17226/21838>

National Council of State Boards of Nursing. (2018). 2017 NCLEX® Examination Statistics. Chicago: Author. ISBN# 978-1-7324200-0-7. Retrieved from <https://www.ncsbn.org/1236.htm>

National Council State Boards of Nursing [NCSBN]. (2019). The national percentage of BSN NCLEX candidates

National Education Progression in Nursing. [NEPIN]. (2017). Retrieved from <https://nepincollaborative.org/>

National League for Nursing [NLN]. (2014). A vision for recognition of the role of licensed practical/vocational nurses in advancing the nation's health. [NLN Vision Series]. Retrieved from http://www.nln.org/docs/default-source/about/nln-vision-series-%28position-statements%29/nlnvision_7.pdf

National League for Nursing Commission for Nursing Education Accreditation [NLN-CNEA]. (2020). CNEA Mission and values Retrieved from [http://www.nln.org/accreditation-services/the-nln-commission-for-nursing-education-accreditation-\(cnea\)](http://www.nln.org/accreditation-services/the-nln-commission-for-nursing-education-accreditation-(cnea))

New Mexico Nursing Education Consortium [NMNEC]. (2016). Student. Retrieved from <https://www.nmneec.org/prospective-student.aspx>

Oregon Consortium for Nursing Education [OCNE]. (2012). Redesigning nursing education: : Lessons learned from the Oregon experience. Retrieved from <https://www.issueab.org/resources/13280/13280.pdf>

Organization for Associate Degree Nursing and American Nurses Association. (2015). Joint Position Statement on Academic Progression to Meet the Needs of the Registered Nurse, the Health Care Consumer, and the U.S. Health Care System. Retrieved from [https://www.oادن.org/images/pdf/Position_Statements/15062_OADN_ANA_PositionStatement_Academic%20Progression_2015%20\(2\).pdf](https://www.oادن.org/images/pdf/Position_Statements/15062_OADN_ANA_PositionStatement_Academic%20Progression_2015%20(2).pdf)

PA Action Coalition [PA-NRC]. (2011). About Us. Retrieved from <https://www.paactioncoalition.org/about.html>

Pennsylvania Academic Progression in Nursing [PAPiN]. (2019). Executive Summary. Retrieved from <https://www.paactioncoalition.org/publications/item/499>

Pennsylvania Association of Practical Nursing Administrators [PA-PNA]. (2017). Retrieved from <https://www.pa-pna.org/about-us>

Pennsylvania Higher Education Schools of Nursing, Inc. [PHENSA]. (1994, May). *The Pennsylvania articulation model*. Retrieved from http://phensa.com/wp-content/uploads/2018/09/The-Pennsylvania-Articulation-Model_1994.pdf

Pennsylvania State Board of Nursing [PA-SBON] (2019). Retrieved from <https://www.dos.pa.gov/ProfessionalLicensing/BoardsCommissions/Nursing/Pages/Board-Approved-Nursing-Education-Programs.aspx>

Perfetto, L. (2019). Preparing the nurse of the future: Emergent themes in online RN-BSN education. *Nursing Education Perspectives*, 40(1), 18-24

Robert Wood Hospital Foundation. [RWJ]. (2014) Building the Case for More Highly Educated Nurses. Retrieved from <https://www.rwjf.org/en/library/articles-and-news/2014/04/building-the-case-for-more-highly-educated-nurses.html>

Romp, C.R., Kiehl, E.M., Bickett, A., Bledsoe, S. F., Brown, D. S., Eitel, S. B. & Wall, M. (2014). Motivators and barriers to returning to school: RN to BSN. *Journal for Nurses in Professional Development*. 30 (2), 83-6. doi/10.1097/NND.0000000000000046

Schwarz, L.M. & Leibold, N. (2014). Perceived facilitators and barriers to baccalaureate degree completion among registered nurses with an associate's degree. *The Journal of Continuing Education in Nursing*, 45(4), 171–180. doi.org/10.3928/00220124-20140219-03

Tourangeau, A.E., Doran, D.M., McGillis Hall, L., O'Brien Pallas, L., Pringle, D., Tu, J.V., & Cranley, L.A. (2007). Impact of hospital nursing care on 30-day mortality for acute medical patients. *Journal of Advanced Nursing*, 57(1), 32-44. doi:10.1111/j.1365-2648.2006.04084.x

Tri-Council of Nursing Consensus Statement on the Educational Advancement of Registered Nurses (2010). Retrieved from <http://www.nln.org/newsroom/news-releases/news-release/2010/05/14/tri-council-for-nursing-issues-new-consensus-policy-statement-on-the-educational-advancement-of-registered-nurses>

www.PracticalNursing.org. (2020). Start your journey in practical nursing. Retrieved from www.PracticalNursing.org.

Appendix

Table 1

Percentage of Delivered NCLEX-RN examinations in USA per Program Type

	Baccalaureate	Associate Degree	Diploma
2019	49.2%	49.5%	1.3%
2018	48.5%	50.2%	1.2%
2017	48.2%	50.4%	1.4%
2016	46.2%	52%	1.7%
2015	44.9%	53.4%	1.7%

retrieved from NCSBN at <https://www.ncsbn.org/1236.htm>

Table 2

Percentage of Delivered NCLEX-RN examinations in PA per Program Type

	Baccalaureate	Associate Degree	Diploma
2019	59.2%	29.8%	11%
2018	59%	30.6%	10.4%
2017	55%	33%	12%
2016	49%	35%	16%
2015	50%	36%	14%

Data retrieved from NCSBN at <https://www.ncsbn.org/1236.htm>

Table 3

BSN Foundational Courses (60-64 credits) *

Category	Credits	Subjects
General Education	+/- 24 credits	Communications English Humanities/Fine Arts Statistics/Logic
Basic Sciences	+/- 12 credits	Chemistry Biology Microbiology Physics
Social Sciences	+/- 9 credits	Growth and Development Psychology Sociology
Human Sciences	+/- 16 credits	Anatomy and Physiology Pathophysiology Nutrition Pharmacology

*Courses listed are illustrations of the types of courses that should be included in each category (Gerardi, 2015)