

MASSACHUSETTS
ACTION COALITION
Transforming Healthcare Through Nursing



REPORT

Nursing Faculty Workforce Challenges in Massachusetts

December 2014

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Preface

About the Massachusetts Action Coalition:

The Massachusetts Action Coalition (MAAC) is part of the nationwide Campaign for Action, a joint initiative of the Robert Wood Johnson Foundation (RWJF) and the AARP Foundation to implement the recommendations in the Institute of Medicine's 2010 landmark report on the future of nursing. With the Massachusetts Department of Higher Education and the Organization of Nurse Leaders of MA & RI as co-leaders, the MAAC is engaging health care providers, nurse educators, and public sector leaders to effect and support changes in how nurses are educated, trained, and practice in order to better serve the health care needs of the Commonwealth.

The MAAC's goals are to:

- Broadly disseminate the recommendations of the Institute of Medicine report;
- Build a statewide consensus in support of academic progression for all nurses;
- Implement a plan to increase diversity in the nursing workforce;
- Promote statewide adoption of the Nurse of the Future Nursing Core Competencies[®] in academic and practice settings;
- Use demographic data to inform health care workforce plans;
- Remove scope of practice barriers for Advanced Practice RNs; and
- Strengthen inter-professional collaboration within the health care community.

In 2014, Massachusetts became one of nine states to receive a second two-year \$300,000 grant from the RWJF for the second phase of its Academic Progression in Nursing (APIN) program to advance state and regional strategies aimed at creating a more highly educated, diverse nursing workforce.

In awarding the grant, the RWJF noted that the funding will allow Massachusetts and the other states “to continue working with academic institutions and employers to expand their work to help nurses in their states get higher degrees, so they can be essential partners in providing care and promoting health, as well as more easily continue their education and fill faculty and primary care nurse practitioner roles. The Action Coalitions in all these states have been encouraging strong partnerships between community colleges and universities to make it easier for nurses to transition to higher degrees.”

To learn more about the MAAC's progress and join our efforts to improve health care, visit <http://campaignforaction.org/state/massachusetts>.

In its efforts to implement the recommendations of the IOM report on the future of nursing, the MAAC has formed project teams of nursing professionals with specialized knowledge and expertise to explore a variety of topics.

The goal of this report is to add to the knowledge base on Nursing Faculty Workforce Challenges in Massachusetts and to stimulate further dialogue on this topic.

The authors are solely responsible for the content of the report, which does not represent the opinions or recommendations of the MAAC's co-leading organizations.

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The Nursing Faculty Workforce Challenges in Massachusetts

Massachusetts Action Coalition Report

Executive Summary

Registered Nurse Workforce Gap

The Massachusetts Department of Higher Education (DHE), the Organization of Nurse Leaders MA/RI and the Massachusetts Hospital Association have, since 2005, led an initiative to address an array of challenges facing the Registered Nurse workforce. This collaboration led to the formation of the Massachusetts Action Coalition to advance recommendations contained in the 2010 Institute of Medicine (IOM) report, titled “Future of Nursing: Leading Change, Advancing Health.” Two of those recommendations are to increase the number of BSN or higher degrees to 80% by 2020 and to double the number of nurses with doctoral degrees.

In 2012, the DHE issued a *Nursing Workforce Plan* describing strategies to provide for seamless progression of nursing students from associate to baccalaureate and advanced degrees with the goal of raising the percentage of Registered Nurses with a BSN or above from 55% to 66% by 2020 (The IOM target is 80%). A central theme of this plan is that practicing nurses - RN’s holding a diploma or associate degree in nursing (ADN), and LPN’s - must be engaged through programs that enable them to advance their education to the BSN level or greater. Further, seamless progression pathways must be developed for a more diverse population of students entering ADN and LPN programs, including second bachelor degree nursing students, to advance to the BSN level. These so called “RN to BSN programs” complement direct entry BSN programs which have been and are expected to continue to increase enrollments. The DHE plan calls for an increase of 1,000 BSN graduates by 2020, across public and private nursing programs, to achieve the 66% goal and create a trajectory toward the IOM’s 80% target.

Modeling the nursing workforce pipeline is a complex undertaking. A framework to estimate the need for 1,000 additional BSN graduates by 2020 was developed as part of the DHE *Nursing Workforce Plan*, incorporating multiple entry points into nursing education programs including pre-licensure diploma, LPN, ADN and BSN programs as well as post-licensure progression programs (RN to BSN and, LPN to BSN) and finally, MSN and doctoral programs. The framework also included assumptions for retirements as well as enrollments into pre-licensure programs. It is important to note that this call for additional BSN graduates does not necessarily translate into a growth in the nursing workforce. In order to rebalance the nursing workforce to a higher percentage of nurses holding a BSN or greater, many of the 1,000 additional graduates must be currently practicing nurses who return to the classroom to extend their formal education and credentials. Too often, reports point to a lack of capacity in pre-licensure nursing programs,

evidenced by high numbers of qualified applicants being turned away for lack of capacity, as a cause of the RN workforce gap. This is a contributing factor; however, the solution requires a multi-pronged strategy.

While there will be many elements to a strategy that will address this increased demand, including additional classroom space, laboratories, simulation technology, clinical site placements and nurse preceptors, the focus of this paper is on the need for additional nursing faculty.

Sizing the Nurse Educator Shortage

If modeling the nursing workforce gap presents a challenge, sizing the shortfall in faculty needed to meet this additional demand is even more so. The shortage is immediate and the barriers are many. According to a Special Survey on Vacant Faculty Positions by American Association of Colleges of Nursing for Academic Year 2014-2015, the total number of full-time vacancies (nationally) is 1,236 (6.9%). The number of schools with no full-time vacancies, but needing additional nursing faculty, was 124. Cited as the major reasons precluding schools of nursing from hiring additional full-time faculty were insufficient funds, unwillingness of administration to commit to additional full-time positions, inability to recruit qualified faculty, and qualified applicants unavailable in the geographic area.

The survey further reported that the single most critical issue faced by schools of nursing related to faculty recruitment was noncompetitive salaries, followed by limited pool of doctorally-prepared faculty, finding faculty with the right specialty mix, finding faculty willing/able to conduct research, finding faculty willing/able to teach clinical courses, and high faculty workload.

The same survey for academic year 2014-2015 indicates that most open faculty positions either require (57.5%) or prefer (32.1%) doctorally-prepared faculty members.

This problem will become exacerbated as many faculty reach retirement age in the next decade. Nurse educators are, on average, slightly older than the community of practicing nurses. Among nurses who identify as Instructor/Faculty on the 2012 relicensure survey conducted by the MA Board of Registration in Nursing, 38.7% are 50-59 years old and 34.1% are over 60. This compares to AACN's report on 2013-2014 Salaries of Instructional and Administrative Nursing Faculty in Baccalaureate and Graduate Programs in Nursing, where the average age of full time nurse faculty was 52.9. The mean age of a full-time doctoral professor is 61.6, doctoral associate professor, 57.6 and doctoral assistant professor, 51.4. In Massachusetts the average age of nursing faculty in 2013 was 55.

The lack of diversity is a prevalent issue for both practicing nurses and faculty. While retirements present a challenge they may also offer opportunities to diversify the ranks of nurse educators. According to AACN's 2012 annual survey data, only 12.3% of full-time nursing school faculty come from minority backgrounds, and only 5.4% are male (AACN, 2014b).

In attempting to quantify the current faculty workforce, and project future need, we encountered a wide variation in faculty roles such as full time/part time; tenure or non-tenure; workload calculations and contract length, among others. The factors impacting the determination of actual teaching workload is further complicated when faculty teach across multiple program levels or are filling administrative roles within the full time faculty workload. In essence, a faculty member may be full time and “counted” as a full time but not be teaching as a faculty member 100% of the time.

The salary, compensation and workload benefit allocation for nursing faculty is another issue that bridges across a profession manifested by clinical practice and academic roles. The advanced degrees required for clinical practice and academic roles vary somewhat and are often difficult to translate between roles. A Master’s prepared advanced practice nurse in a clinical (private-sector) setting salary will be higher than in an academic setting with same or even higher degree, causing nurses to steer away from academia. The two systems - one based on productivity and patient volumes and the other on educational preparation - are disproportionate from each other. Currently, the American Association of Nurse Practitioners reports the average salary of a nurse practitioner, across settings and specialties, is \$94,050 (as cited in AACN, 2014a). By contrast, AACN reported in March 2013 that the average salary for a master's-prepared Assistant Professor in schools of nursing was \$80,690 (AACN, 2014a). Compounding the issue is the fact that faculty positions require graduate degrees and many potential nurse educators have to step out of the paid workforce for extended periods to get those degrees or take classes on a part- time basis which extends the time it takes to complete the programs.

In addition, there are multiple factors related to the type of program(s) where faculty teach - entry level, i.e., baccalaureate versus masters and those with a doctoral program. The faculty credentials and expectations related to practice and scholarship may vary depending on the programs offered and the overall mission of the school and program. Each college or university may have its own specific policies related to faculty and/or the faculty may be unionized or not, teaching over an academic year or a calendar year.

Faculty workload is calculated differently within and across the various programs and schools. Expectations on an academic health sciences campus that operates on a calendar year may be different than those on a traditional college campus with an academic year appointment. Appointment, promotion and tenure policies are different across schools based on the college or university.

Clearly, these issues and more make it a challenge to model the faculty workforce and project with even a gross degree of precision the impact on the faculty system of increasing by 1,000 the number of BSNs graduating by 2020.

Elasticity of the Nurse Faculty System

To respond to this legitimate challenge, the MA Action Coalition Faculty team is proposing recommendations that will affect overall faculty capacity through targeted initiatives that

can be implemented locally. Some of these recommendations have been explored and developed and are in implementation. Others suggest pilot projects and still others are early stage ideas that will require exploration and investigation.

By proposing a portfolio of projects that can be adapted and implemented in the context of local institutional conditions, the overall system of nursing faculty will be made more elastic and adaptable as the need for capacity becomes evident at the department, campus and system level.

Recommendations

As it relates to the overall mission of the work, which is to address the need for sustainable, competent faculty to educate professional nurses, the goal for this initiative is to increase the faculty pool available to educate nurses from BSN through doctoral degrees. The strategies identified address challenges from both the recruitment and retention lens, as well as the retirement perspective. Multiple strategies were utilized to focus on addressing the issues of delay of retirement or return of retired faculty to teaching.

The following recommendations reveal the need to sustain and stabilize faculty currently in the workforce to avoid exacerbating the current and future faculty shortage in nursing. The major recommendations for recruitment, retention, and development of faculty include:

1. Establish a method to determine the RN workforce supply and demand through datasets that track the current and future capacity (enrollment) for traditional BSN, RN-BSN, LPN-BSN, and second-degree Master's programs in Massachusetts.
2. Recruit, promote, and retain diverse faculty that participate in conducting research, educating future nurse leaders, and shaping practice to improve health outcomes in Massachusetts.
3. Address program needs to accommodate increases in capacity through innovative program initiatives and collaborations.
4. Foster teamwork and expand the number of qualified interprofessional faculty to teach nursing students through collaborative teaching and implementation of Interprofessional Education (IPE) models.
5. Retain current faculty and optimize to their fullest.
6. Expand the number of qualified nursing faculty to teach nursing students through enhanced faculty preparation and professional development.
7. Promote the ongoing utilization of qualified retiring and/or retired faculty.

Introduction

The DHE *Nursing Workforce Plan* calls for an increase of 1,000 more BSN graduates yearly by 2020, across public and private nursing programs, to achieve the 66% goal and create a trajectory toward the IOM's 80% target. The MA Action Coalition Faculty team recognizes that achievement of this goal is dependent on filling the need for additional nursing faculty. To overcome the barriers, the MA Action Coalition Faculty team has developed strategies and has put forth recommendations to minimize the impact of the faculty shortage. These proposed strategies, which can be adapted and implemented to effect change to the nursing faculty shortage, require an understanding of:

- *Current learner pool,*
- *Nursing programs and their respective capacity,*
- *Factors contributing to the shortage of faculty,*
- *Initiatives and recommendations to close the gap.*

Section I: Current Learner Pool

The current learner pool for achieving the BSN includes those who are currently or could enroll in a traditional BSN program, the RNs with a Diploma or an Associate's Degree (RN-BSN), Licensed Practical Nurses (LPN-BSN) and those who are working on a second bachelor's degree to pursue a new career. Since only 55% of Massachusetts RNs hold a BSN or higher, the vital pool of BSN nurses are greatly affected by the large numbers of RNs having diplomas (14%) and associate degrees in nursing (ADN) (30%). In addition, current LPNs are another part of potential group who will move through BSN completion programs.

Historically, it was difficult for nurses from associate, diploma or LPN programs to find flexible programs to complete their BSN. Currently, Massachusetts has created seamless progression pathways for diverse populations of students entering RN to BSN programs, LPN to BSN programs, and second-degree program complement the traditional generic BSN programs which have been and are expected to continue to increase enrollments.

Increased opportunity for achieving a BSN through seamless progression programs and flexibility of online learning and onsite learning at healthcare organizations will aid Massachusetts in reaching its 66% BSN target by 2020 and lead to a more educated nursing workforce. Ultimately, an increase in the proportion of nurses with a BSN would create a workforce poised to achieve higher levels of education required for nurses to assume roles in advanced practice, leadership, education, and research.

Data from pre-licensure and post-licensure nursing programs are essential to determine the learner pool and to help inform projections of the size of the future workforce. Available data from a variety of sources were collected and examined for this paper. Pre-licensure data

collected by Massachusetts Board of Registration in Nursing (BORN); workforce supply and demand data from HRSA's National Center for Health Workforce Analysis; and nursing education program and faculty data from American Association of Colleges of Nursing (AACN) were reviewed.

A gap in data was found for post-licensure RN-BSN programs. A more robust tracking of the number of qualified applicants, number of applicants accepted, the number of admissions, and number of students enrolled in all RN-BSN programs could help to better inform projections of the size of the future workforce in the Commonwealth of Massachusetts.

Recommendation 1. Establish a method to determine the RN workforce supply and demand through datasets that track the current and future capacity (enrollment) for traditional BSN, RN-BSN, LPN-BSN, and second-degree Master's programs in Massachusetts.

Strategies:

1. Continue to refine and utilize preexisting data to determine the current RN workforce supply and demand, workforce distribution, and future pipeline projections.
2. Establish a dataset to determine the number of applications, acceptances, admissions, enrollments and graduations of RN-BSN programs.
3. Determine and project the needed demand of clinical practice placements for the current and future RN- BSN program capacity.

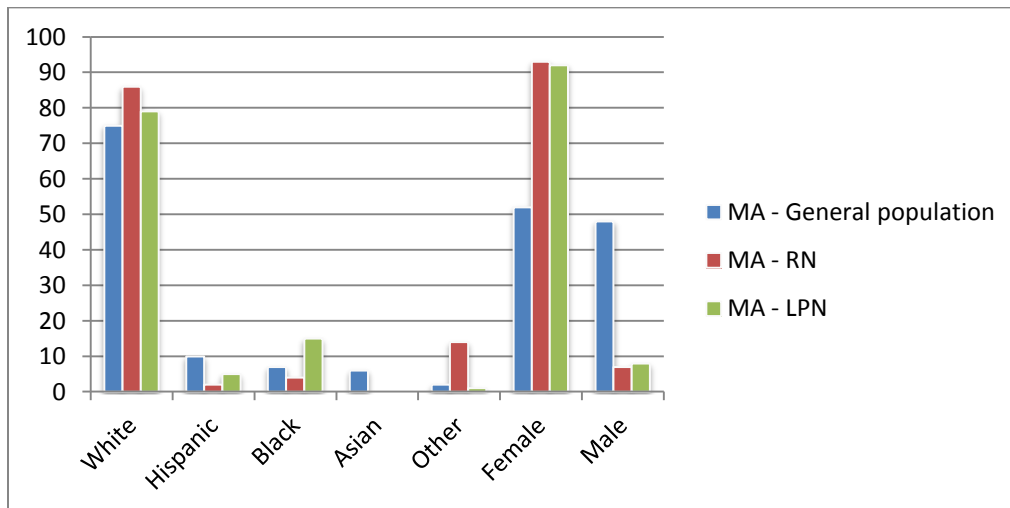
Diversity

There continues to be a lack of diversity in the nursing workforce including faculty, nationally and in the Commonwealth of Massachusetts, which like many other states, remains highly non-diverse in gender, race, and ethnicity to meet current and projected population needs. According to an April 2000 report prepared by the National Advisory Council on Nurse Education and Practice, a culturally diverse nursing workforce is essential to meet the health care needs of the nation's population.

As seen in Figure 1, race/ethnicity and gender of the RN workforce in Massachusetts is less diverse than general population of 75% white, 10% Hispanic, 7% black, 6% Asian, 2% other, which includes Native Hawaiian-Pacific Islander (Filipino) and Native American as well as individuals who identify as multi-ethnic/racial; gender is 52% female and 48% male. The race/ethnicity of the LPN workforce is more diverse than RN workforce nursing workforce but still less diverse than the general population. Not only does nursing need to increase the diversity of its students, it needs to recruit more diverse faculty from the minority RN populations. According to 2012 data from AACN's annual survey, only 12.3% of full-time

nursing school faculty come from minority backgrounds, and only 5.4% are male (AACN, 2014b).

Figure 1 Race/Ethnicity and Gender Diversity:
MA General Population, MA RNs and LPNs



MA BORN (2012). Race/Ethnicity and Gender Diversity among all MA Registered Nurses and ACS, 2006-2010 ACS 5-Year Estimates. Race/Ethnicity and Gender Diversity among MA Employed LPNs

Current Initiatives

To address diversity concerns, there is currently a pilot of a clinical faculty orientation program for new clinical nursing faculty that includes a module on Cultural Competency in Nursing Education. This will increase clinical faculty knowledge on cultural awareness of their students' learning needs while gaining their clinical experience.

Recommendation 2. Recruit, promote, and retain diverse faculty that participate in conducting research, educating future nurse leaders, and shaping practice to improve health outcomes in Massachusetts.

Strategies:

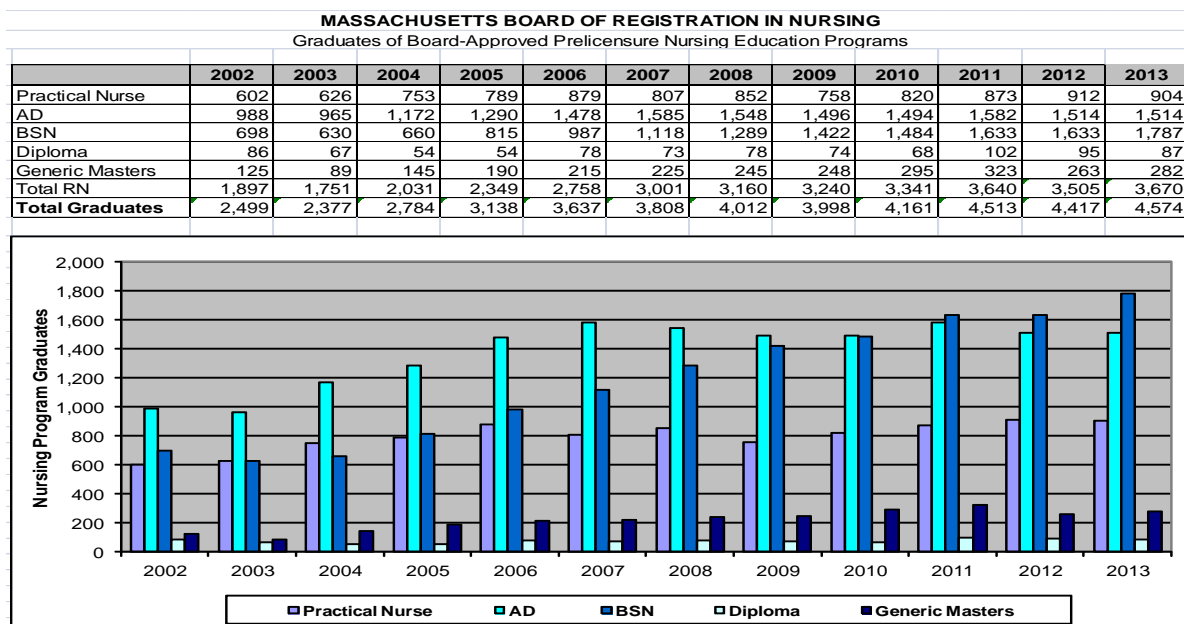
1. Cultivate relationships with those levels of nursing programs with diversity - ADN and LPN programs - and increase seamless academic progression models, such as RN to BSN and LPN-BSN programs.
2. Set nursing education program diversity goals and benchmarks for both faculty and students with identified strategies to achieve an increase number of diverse individuals entering the nursing profession at all levels.
3. Integrate the Massachusetts Nurse of the Future Core competencies in every nursing program and develop a standard evidence-based evaluation tool to assess cultural competencies of nursing students.

4. Increase diversity in the nursing pipeline through innovative programs and partnerships agreements with the local public school system to link the nursing program's faculty, graduates, and students with diverse high school students interested in a nursing career.
5. Support and publish effective and sustainable strategies aimed at recruiting and retaining ethnic and gender diversity of faculty and students in nursing education in a centralized resource location.
6. Provide a standard, evidence-based orientation program for all new clinical nursing faculty that includes strategies for assessment and evaluation of student's progress toward cultural competency.
7. Develop a state-wide, best-practice mentoring program for diverse nursing adjunct clinical faculty and full time nursing faculty moving through the ranks from Assistant Professor to full Professor and achieving tenure.

Section II: Current Programs and their Respective Capacity

Determining actual program capacity is challenging for nursing due to the multiple education program paths: diploma, associate's degree, bachelor's degree, second bachelor's degree and direct entry graduate degree programs. One way to begin understanding capacity is to look at the number of graduates from nursing programs. In Figure 2, we have historical data from the Massachusetts Board of Registration in Nursing showing graduates by program. The programs included are only Board-approved pre-licensure programs. Over the period 2002-2013, the number of BSN graduates increased over 150%. The numbers of Practical Nurse and AD graduates have leveled off over the most recent years after larger increases in the earlier years.

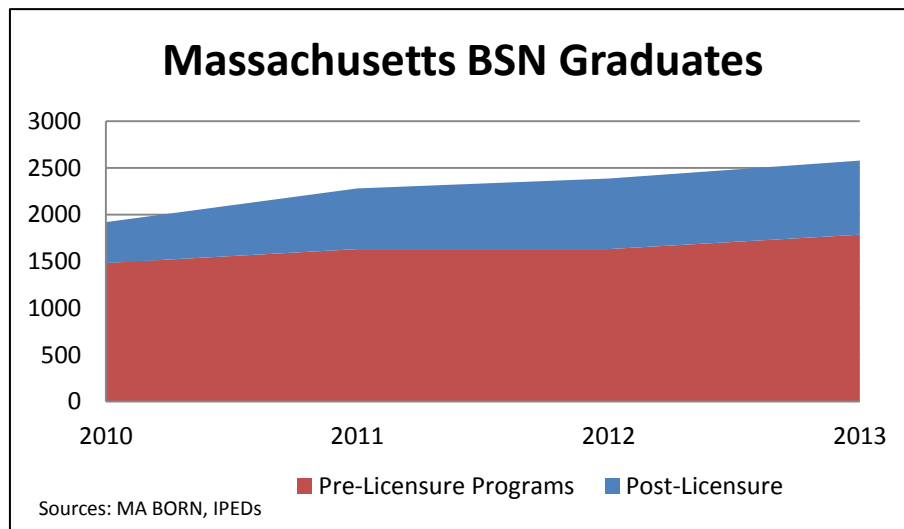
Figure 2



The DHE plan calls for an annual increase of 1,000 BSN graduates by 2020, from a variety of academic progression pathways, to achieve the 66% goal. Figure 2 captures the pipeline from which these students will come and illustrates recent trends. In Figure 3 we focus on BSN completions from 2010 to 2013 and by using both total BSN degrees and pre-licensure degrees we are able to carve out the number of RNs who are returning to school to complete a BSN.

Data for total BSN graduates were obtained from the Integrated Postsecondary Education Data System (IPEDS) and pre-licensure data are from MA BORN. The area in red and the additional post-licensure BSN graduates are represented in the blue area. Together in 2013, there were 2,580 BSN graduates, a 34% change since 2010. Looking at just the post-licensure programs (blue), we note the large increase over the period. The table under the graphs shows a 81% improvement in BSN post-licensure graduate from 2010 to 2013; a positive story confirming that many nurses are returning to school to attain the BSN degree.

Figure 3



Year	2010	2011	2012	2013	% Change 2010-2013
Total BSN Graduates, Source: IPEDs	1,922	2,282	2,388	2,580	34.2%
BSN Graduates, prelicensure programs only; Source: BORN	1,484	1,633	1,633	1,787	20.4%
BSN Graduates, post-licensure (calc)	438	649	755	793	81.1%

Nursing programs in Massachusetts have increased their capacity for new students and have admitted more students over the past five years into entry-level BSN programs. Shown in Figure

4, the General BSN programs admitted a total of 2,018 students in 2009, and 2,375 students in 2013, a 17% increase. Generic Master Degree RN programs increased from 309 admissions in 2009 to 500 students in 2013, a 61% increase.

Figure 4 Pre-licensure Admissions Data

	2009	2013
BSN	2,018	2,375
AD	2,033	1,822
Diploma	124	127
LPN	1,138	1,159
Generic Master	309	500

(BORN, 2013)

The growing shortage of nursing faculty is threatening Massachusetts’ capacity to educate nurses and support the health care needs of the residents in the Commonwealth. In 2013, 4,495 qualified applicants were turned away from MA baccalaureate and graduate degree nursing program primarily due to lack of faculty and lack of clinical training sites (AACN, 2014f).

While many actions to address these issues have been taken, including expanding capacity of nursing programs, development of a Centralized Clinical Placement system (CCP) to manage and request clinical placements, and implementation of clinical simulation, the nursing faculty shortage continues to be the primary barrier.

Leveraging Technology

Technology is changing the teaching and learning strategies for nursing programs. This constantly evolving technology requires a high level of commitment and places added pressure on nursing educators who are already stretching to integrate technology effectively into the curriculum. Augmenting learning in a simulation environment or virtual environment substantially expands the number of nurses who gain new competencies and the depth of their skills. In simulation and virtual environments, students can repeat skills-based lessons as often as they need with no impact on actual patients.

Technology utilized effectively can become the delivery platform needed to transform professional education for nursing programs at all levels. Online education can reach more students. Ongoing professional development for nursing faculty on leveraging technology, and a resource list of effective integration of technology linked to positive outcomes could prove valuable to nursing faculty.

Clinical Site Placements

Experience in a clinical setting is an integral part of nursing academic programs. Students benefit from the knowledge and hands-on learning that is only possible through actually applying theoretical skills in practice. Although clinical experiences are provided in a variety of settings, finding clinical placements for nursing students can be a challenge.

Patient care is shifting out of the acute care health care setting into ambulatory settings, the home and the community. David Houle, a futurist, and Jonathan Fleece, a healthcare attorney, authors of “The New Health Age: The Future of Health Care in America,” predict one-third of all hospitals will close by 2020 because of this shift from inpatient hospital to alternative settings.

The Massachusetts Centralized Clinical Placement System (CCP) is internet-based software developed by the Massachusetts Department of Higher Education, to facilitate the display, scheduling, and management of clinical nursing education placements between health care organizations and nursing education programs. Currently, 69 nursing programs, 63 acute care health care organizations, and 17 post-acute care health care organizations in Massachusetts utilize CCP to manage clinical placements.

Recommendation 3: Address program needs to accommodate increases in capacity through innovative program initiatives and collaborations.

Strategies:

1. Develop a shared resource center of technology integration and Clinical Simulation best practice strategies and scenarios that enhances learning and aligns competencies outcomes to simulation.
2. Develop a Massachusetts simulation interest group of representatives from academia and practice to share simulation use, evaluation, and develop evidence-based simulation competencies that integrate the Nurse of the Future Core Competencies.
4. Nursing education programs need to extend clinical practice to alternate settings, such as home care setting, hospice, telehealth, surgi-centers, wellness centers, medi-spas, nurse managed health centers, retail clinics, and nurse advice lines.
5. Increase the number of post-acute care health care organizations, such as long term care agencies and home care agencies on into the Massachusetts CCP system.
6. Collaborate with practice partners across the continuum to review and develop innovative clinical placement models to maximize clinical opportunities.

Inter-professional Education (IPE)

Traditionally, nursing has objected to utilizing non-nurse faculty and/or sharing resources and courses across disciplines and specialties, even though these non-traditional approaches may provide an important solution to a nursing faculty shortage and enhance student learning. It is time that nursing programs look for new innovative approaches, such as inter-professional education models that meet requirements across several specialty tracks. Interdisciplinary courses such as Introduction to health care, physical assessment, pharmacology, informatics, research, business of healthcare, and gerontology can be developed on topics applicable to students representing a variety of health professions. Selected nursing classes/courses might be taught by non-nurse faculty. Sharing of resources and developing joint initiatives among faculty and across inter-professional programs, can model an interdisciplinary collaboration and communication.

Interest in Inter-professional Education (IPE) in the United States has grown as research has emerged suggesting that greater levels of collaboration between health professionals improves patient outcomes (Barr, 2002; Barnsteiner et al., 2007). IPE is recognized by various international professional societies (e.g. World Health Organization and Institute of Medicine) and accreditation organizations as foundational to achieving safe, high quality, accessible, patient-centered care (NLN, 2013).

Recommendation 4. Foster teamwork and expand the number of qualified interprofessional faculty to teach nursing students through collaborative teaching and implementation of Interprofessional Education (IPE) models.

Strategies:

1. Review current IPE models for best practices that have partnered within their institution's educational and clinical settings and partnerships outside of their institutions that focused on producing very high quality nurses that can work collaboratively with other professionals.
2. Advance inter-professional models of education that provide collaborative and patient-centered care.
3. Initiate use of IPE courses that are team taught or taught from other disciplines as appropriate to meet nursing program requirements.

Section III. Factors Contributing to the Shortage of Faculty

The DHE (2012) examined the root causes associated with our capacity to educate more nurses to the BSN or higher degree levels including the limited numbers of faculty available to teach in nursing programs. As noted, while many actions have been taken, there continues to be a

shortage of nursing faculty compounded by the problem that many are approaching retirement. The determination of sufficient numbers and utilization of qualified faculty available to educate nurses at the RN-BSN, LPN-BSN and traditional BSN levels is essential data to obtain in order to develop effective strategies to address the looming faculty shortage in Massachusetts. However, the complicating factors in determining current faculty numbers and the potential of enduring faculty are numerous. They include, a variation in faculty roles such full time/part time; tenure or non-tenure; workload calculations and contract length, among others. The factors impacting the determination of actual teaching workload is further complicated when faculty teach across multiple program levels or are filling administrative roles within the full time faculty workload. In essence, a faculty member may be full time and “counted” as a full time but not be teaching as a faculty member 100% of the time.

According to the *AACN 2013-2014* report, the average age of full time nurse faculty in the U.S. was 52.9. The mean age of a full-time doctoral professor is 61.6, doctoral associate professor 57.6 and doctoral assistant professor 51.4. Here in Massachusetts, the average age of nursing faculty in 2013 was 55. According to a *Special Survey on Vacant Faculty Positions* by AACN for Academic Year 2014-2015, the total number of full-time U.S. vacancies is 1,236 (6.9%). The number of schools with no full-time vacancies, but needing additional nursing faculty, was 124.

According to the survey, the major reasons precluding schools of nursing from hiring additional full-time faculty for the Academic Year 2014-2015 were:

- (a) Insufficient funds to hire new faculty (61.3%);
- (b) Unwillingness of administration to commit to additional full-time positions (39.5%);
- (c) Inability to recruit qualified faculty because of competition for jobs with other marketplaces (31.5%);
- (d) Qualified applicants for faculty positions are unavailable in their geographic area (25.0%).

The survey further reported that the single most critical issue faced by schools of nursing related to faculty recruitment was:

- (a) Noncompetitive salaries (32.1%);
- (b) Limited pool of doctorally-prepared faculty (28.6%);
- (c) Finding faculty with the right specialty mix (20.6%);
- (d) Finding faculty willing/able to conduct research (5.3%);
- (e) Finding faculty willing/able to teach clinical courses (4.5%);
- (f) High faculty workload (2.9%).

Salary Compensation and Workload

The salary, compensation and workload benefit allocation for nursing faculty is a complex issue that bridges across a profession manifested by clinical practice and academic roles. The advanced degrees required for clinical practice and academic roles vary somewhat and are often difficult to translate between roles. A Master's prepared advanced practice nurse in clinical (private-sector) setting salary will be higher than in an academic setting with same or even higher degree. The two systems - one based on productivity and patient volumes and the other on educational preparation - are disproportionate from each other.

Currently, the American Association of Nurse Practitioners reports the average salary of a nurse practitioner, across settings and specialties, is \$94,050. By contrast, AACN reported in March 2013 that the average salary for a master's-prepared Assistant Professor in schools of nursing was \$80,690 (www.aanp.org/research/aanp-research and www.aacn.nche.edu/IDS).

Compounding the issue is the fact that faculty positions require graduate degrees and many potential nurse educators have to step out of the paid workforce for extended periods to get those degrees or take classes on a part-time basis which extends the time it takes to complete the programs.

In addition, there are multiple factors related to the type of program(s) where faculty teach; entry level, i.e., baccalaureate versus masters and those with a doctoral program. The faculty credentials and expectations related to practice and scholarship may vary depending on the programs offered and the overall mission of the school and program. An example is the expectation that a faculty member be practicing as a professional nurse, advanced practice nurse or be a funded researcher for a faculty position in many organizations. Each college or university may have its own specific policies related to faculty and/or the faculty may be unionized or not, teaching over an academic year or a calendar year. The way additional credit and compensation for work outside the academic year are counted may be influenced more by the college policy and bargaining agreement that includes the non-nursing faculty as well as the nursing faculty. This can be challenging if the only faculty in the college that have a "practice" requirement are the nursing faculty.

Faculty workload is calculated differently within and across the various programs and schools. Expectations on an academic health sciences campus that operates on a calendar year may be different than those on a traditional college campus with an academic year appointment. Appointment, promotion and tenure policies are different across schools based on the college or university meaning that what constitutes promotion and or tenure in one college may be the difference in the university next door so rank may represent something slightly different. Private, public and faith-based schools may each have different policies or requirements that can impact faculty's work. Different regions of the country have different salary ranges. It is difficult to compare across schools and programs, even locally, when any or all of these factors are differentiators. One source of data that includes a large number of nursing programs is the AACN 2013-2014 report. This document provides the range of salaries for faculty by rank,

institution type, academic and calendar year, and by types and combinations of programs provided.

There is no way of identifying at this point the number of faculty that will be needed in the future. That assessment is plagued with many complicating factors which include the inability to predict enrollment (learner pool); inaccurate data regarding the number of faculty currently teaching and the demand for the future; variations of definition of “faculty” as to role (faculty vs administrator) and variations in work load calculations.

Current Initiatives

The focus on recommendations for this area is on increasing faculty capacity despite not knowing the actual needs and establishing strategies for collecting accurate data to develop an evidence-based plan for faculty capacity building in the future. Current initiatives to support that include the establishment of a framework of an online centralized clinical faculty database that maximizes communication between nursing programs and potential clinical faculty and fosters the connection of opportunities for employment.

Recommendation 5. Retain current faculty and optimize to their fullest.

Strategies:

1. Maximize and increase faculty capacity
 - a. Implement the online centralized clinical faculty database that maximizes communication between nursing programs and potential clinical faculty and fosters the connection of opportunities for employment.
 - b. In collaboration with academic leaders, select pilot sites/campuses (high volume BSN schools) to develop a faculty workload model for appropriate size of faculty necessary (faculty/student ratio).
2. Encourage academic nursing leaders to utilize AACN published annual salary report that provides the salary data by various sectors as a benchmark for identifying competitive salaries for faculty.
3. Examination of salaries/compensation and expectations with workload methodologies by school, rank, and program in MA.
4. Review current salary/compensation models as well as expectations with workload methodologies of MA institutions to determine process of establishing common methodologies in workload. Utilize established professional benchmarks for salary/compensation and workload measurements such as AACN and AAUP contemporary sources.

Faculty Preparation and Development

In order to prepare the next generation, faculty need to be supported in orientation and development. According to the National League for Nursing, recruitment and retention of qualified nurse educators advocates the use of mentoring as a primary strategy to establish healthful work environments and facilitate the ongoing career development of nurse faculty.

Retention of qualified nursing faculty is especially important as the nursing shortage continues to grow; yet, there are an insufficient number of nurses advancing their education to transition into the faculty role. Tuition, required fees, and incurring debt for graduate students to return to school all place a burden on nurse educators pursuing an advanced degree. In addition, many potential nurse educators have to step out of the paid workforce to complete those degrees or take classes on a part-time basis which extends the time it takes to finish the programs.

Current Initiatives

The MA Action Coalition Faculty team recognizes the multiple aspects of the clinical faculty role and developed a formal orientation model. The model is currently being piloted and is divided into seven modules focusing on the clinical faculty's role and responsibilities, such as how to stimulate critical thinking, review of the syllabus, how to provide clinical feedback in formative evaluation and summative evaluation, supervising a student while off the unit, and supervising a student in medication administration. Revisions and enhancements will be made to the clinical faculty orientation model after review and analysis of evaluation data and recommendations from the clinical faculty orientation advisory team.

Expanding the number of full-time and part-time faculty is essential and must be achieved through collaboration with practice. The MA Action Coalition Faculty Team has completed a literature search on Nursing Faculty Joint appointments and is currently conducting interviews with nurses sharing roles between academia and practice with the goal to develop characteristics of best-practice shared faculty appointments/positions.

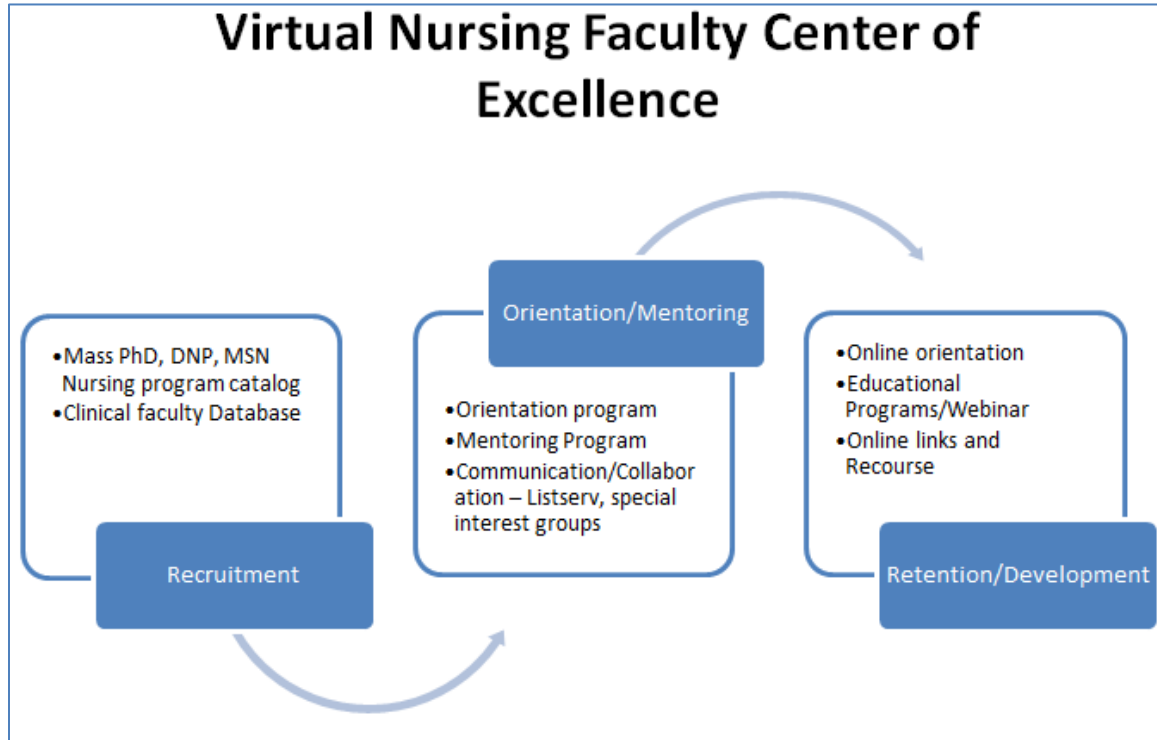
Since nurses with advanced education, prepared at both the master's and doctoral levels, are needed in large numbers in the Commonwealth to serve as faculty and leaders to reach the goal of 66% BSN by 2020, the MA Action Coalition Faculty Team compiled a reference resource list on available PhD, DNP, Nurse Educator Master's and Certificate Programs in Massachusetts. The Reference Resource list consolidated the necessary information on available PhD, DNP, Nurse Educator Master's and Certificate Programs in Massachusetts into a datasheet to streamline the search for nurses looking to advance their education. The Faculty Team is currently working on moving the resource datasheet to a live online datasheet where additions, edits, and revision can be made by nursing programs in Massachusetts.

Recommendation 6. Expand the number of qualified faculty to teach nursing students through enhanced faculty preparation and professional development.

Strategies:

1. Improve communication of nursing graduate school information to potential nursing students to increase the number of incoming nursing students for higher level of degree through the use of an online catalogue of programs in the state.
2. Increase faculty for students who are incumbent LPNs & RNs- there is an opportunity to increase joint appointments and offer masters and doctorally-prepared practicing nurses opportunities to teach off shift/eve or on line.’
3. Establish a best practice standardized clinical faculty orientation and mentoring program for clinical faculty. Develop and implement a standardized evidenced-based practice orientation for clinical faculty to be placed on the CCP for all schools to use. Establish a clinical faculty mentoring program to increase retention.
4. Define the role and expectation of the faculty joint-appointment to assure that all those involved in the collaboration are working together.
5. Plan future research to address nursing faculty workloads and how workloads influence faculty retention.
6. Move reference resource list for potential nursing faculty to advance their degree of consolidating information of available Ph.D., DNP, Nurse Educator Master’s and Certificate Programs in Massachusetts to online.
7. Establish a Virtual State-wide Faculty Center of Excellence (Figure 5 below) to support online orientation, mentoring, communication, professional development, links to job opportunities to meet the current and new faculty needs.

Figure 5

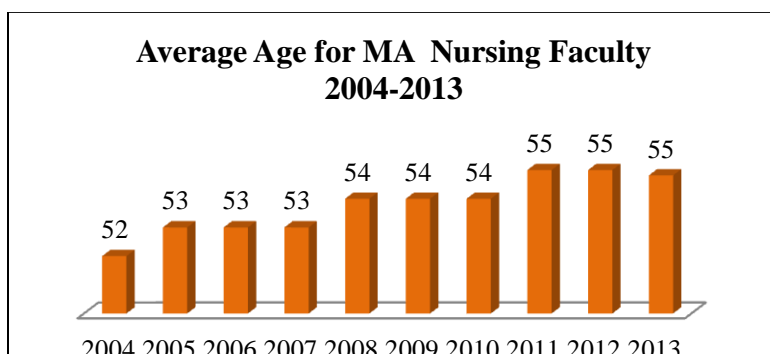


Faculty Retirements

In an effort to accurately address the faculty shortage, it is important to identify to the best of our ability the number of faculty that may be retiring in the near future. Once again, this is complicated data to obtain. However, the average age of nursing faculty has been climbing to the current average of 55 years (Figure 6). Anticipating retirement accurately and providing successful succession planning are the tools that most effectively provide assurances that the incumbent faculty numbers stay at the current level.

Aging Faculty in Massachusetts

Figure 6



Numbers of Retiring Nursing Faculty

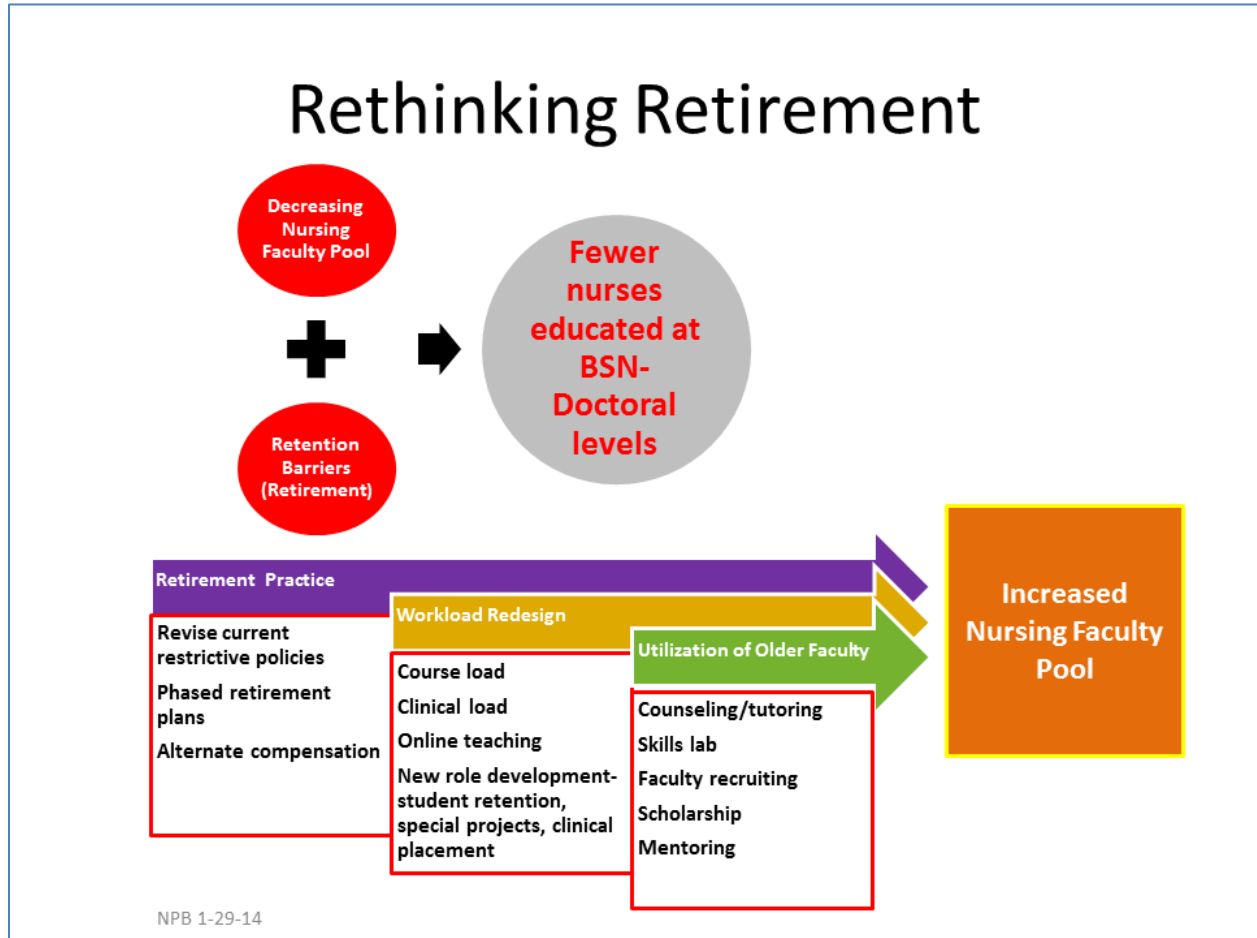
In order to accommodate these educational pathways to a BSN prepared nursing workforce, the appropriate number of qualified nursing faculty will need to also be prepared. The capacity issue is directly related to the availability of qualified faculty and is the focus of the remainder of this paper.

Retirement often has been viewed as an all-or-none phenomenon in the academic nursing community, making an experienced pool of faculty unavailable for continued contributions to the nursing academic unit. Many faculty approaching retirement would like to continue teaching in some capacity, but may be unable to do so because of restrictive university policies and/or retirement plan provisions. Retirement policies have been reconsidered at some institutions to allow retired faculty to return to teaching responsibilities. Nursing may do well to utilize these and similar strategies to encourage retiring and retired faculty to remain active with choices across the full array of nursing education activities (Figure 7).

Current Initiatives

In 2012, a preliminary survey of RN and LPN nursing schools in MA was conducted by a team of PhD prepared nursing faculty regarding their predicted retirement within the next five years and succession planning. Twenty-one (21) school leaders responded of the 62 (number of BORN approved programs at the time) approved programs. There was a mix of LPN, AD and BSN programs. The response to predicted number of faculty expected to retire in five years was zero to 66% with the average being 24.8%. Of those responding, 12 had no succession planning while eight stated they did have succession planning. One program was in the process of developing a succession plan. Eight program leaders responded they had retirement options other than full retirement while 12 program leaders had no retirement options. One program leader indicated they were in the process of developing retirement options for faculty. The results of data collection revealed that there were no identified plans or incentives for phasing out nursing faculty close to retirement. Many of the AD programs (vast majority) are part of the state system, hence unionized. The unionized restrictions limit the ability of the retiree to continue to work. When not prohibited, retired faculty return to adjunct positions/labs but there are no incentives to do so. The majority of adjunct positions are in the clinical placements. This is often physically challenging for retirement aged faculty. There are no incentives offered to retired faculty to return to an academic role.

Figure 7



Faculty Interviews

A qualitative project was designed by a team of experienced faculty (Faculty Opportunities Team) to conduct interviews with recent nursing faculty retirees to determine the issues they identify with their respective institutions and the retirement practices. In total, 38 interviews were conducted. The age range for the retirees was 39-70 years; there were 4 males and 34 females over a geographic area of 12 states nationwide. Years of experience varied from 12 years to greater than 40 years. Of those interviewed, 16 stated they were hired with an orientation. None of the 38 had retired from an institution with an optional retirement plan for faculty. A number of faculty (8) stated they continued working with continuing educational programs.

The participants were asked “What components should be included or considered in retirement faculty positions?” The responses included: benefits, educational support, orientation plan for new role, leadership support, and a positive climate for retired faculty use. Participants were asked what had made them satisfied with their teaching role implying what would keep them teaching. The responses were: organizational commitment in a positive environment, option for leadership/mentoring, personal

satisfaction, and value-added identity with high knowledge backgrounds. They were then asked, “What went into your decision to retire?” Their responses were: lack of value in the role, no flexibility to reduce job responsibilities, student assessment of adjunct/retired role, and lack of cultural /organizational support.

Recommendation 7. Promote the ongoing utilization of qualified retiring and/or retired faculty.

Strategies:

1. Examine college/university retirement policies and identify barriers to continued faculty service and propose alternative models.
2. Propose new phased retirement plans that support the inclusion of productive retired faculty with specific delineations in the areas of: Eligibility, Limitations, Process and Compensation. Recruit through the Deans and Directors of nursing programs to pilot test a multi-faceted model including phased retirement.
3. Propose models for redesign current faculty workload to accommodate part-time retired faculty by addressing modifications: Course load, Clinical requirement, On-line teaching, Implement a Less-Work For Less-Pay program, Use a “cafeteria” approach where phased retiring faculty can select benefits that meet their needs.
4. Pilot programs that formally include and recognize retired nursing faculty as a continuing, productive part of the nursing academic unit.

As it relates to the overall mission of the work which is to address the need for sustainable, competent faculty to educate professional nurses, the goal for this initiative is to increase the faculty pool available to educate nurses from BSN through doctoral degrees. The strategies identified address challenges from both the recruitment and retention lens, as well as the retirement perspective. Multiple strategies were utilized to focus on addressing the issues of delay of retirement or return of retired faculty to teaching. The initial activity included a collection of much needed data (qualitative & quantitative) on retirement issues. Data collected included information on currently reported barriers to successful retirement, as well as current utilization of retired faculty. This resulted in a statement of the current state on retirement which appears to be dismal with regard to planned or phased retirement procedures and succession planning. Results and recommended strategies to address the lack of successful retirement processes include those focused on providing opportunities for retired faculty to return to teaching or phase into retirement rather than the current accepted process of retiring completely from teaching. It is recommended to include faculty as active participants in the decision-making regarding developing new and creative retirement policies and procedures. The goal is to utilize extensive faculty knowledge more creatively by creating a team approach in a culture/organization with positive leadership support.

Conclusion

Realistic expectations to successfully address the workforce gap challenge for nurses and nurse educators requires the simultaneous implementation of multiple strategies to enhance the capacity of practicing nurses with a BSN to meet the goal of 66% BSN or higher by 2020 and 80% by 2025. It is essential that the strategies focus on assessing the current learner pool, establishing the future capacity for learners, determining factors impacting the nursing faculty shortage and developing new models for retention of retirement age faculty. Nurses with advanced education, prepared at both the master's and doctoral levels, are needed in large numbers in the Commonwealth to serve as faculty and leaders to reach the goal. Nursing education programs at all levels of baccalaureate nursing programs will need to increase the number of faculty, maximize the use of available resources, and facilitate models to educate the additional 1,000 new BSNs a year through these various pathways to reach the goal. In addition to educating more nursing faculty, nursing education and practice settings need to facilitate models to retain older nurses beyond retirement age for their skills and experience.

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