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1/25/12

Responding to the Nursing Shortage: A Report Concerning the Expansion of Nursing Programs at Michigan's Community Colleges

This report is prepared to comply with the requirement included in Public Act 341 of 2006. The report is intended for the House and Senate Appropriations Subcommittees on Community Colleges, the House and Senate Fiscal Agencies, and the State Budget Director and is due March 1, 2007.

Prepared by:

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March 1, 2007

Executive Summary

It is an accepted and well-documented fact that both Michigan and the rest of the nation are experiencing a severe nursing shortage. The number of nurses produced by our colleges and universities is not keeping pace with the increasing demand for new nurses by the healthcare system.

Michigan's community colleges have historically been a major source of nursing education as two-thirds of the state's employed nurses are graduates of community colleges. Consequently, the Michigan Legislature charged the Michigan Community College Association (MCCA) with the task of convening a workgroup comprised of statewide nursing, health care, education, and regulatory organizations to analyze the factors that inhibit the ability of community colleges to expand their nursing programs (P.A. 341 of 2006). The report that follows is the culmination of that effort.

In essence, the workgroup likened the production of nurses to a continuous process that is impacted by a number of factors along that process - any one of which can limit the ability of community colleges to increase the number of nursing graduates. The four most critical factors identified by the workgroup are:

- 1) The high **costs** of offering nursing programs which, due to a number of limitations, can not achieve economies of scale
- 2) The availability of qualified nursing program **faculty**
- 3) The availability of appropriate **clinical sites** for clinical training
- 4) The **attrition** of students who are admitted, but fail to graduate from a nursing program

Section I of this report is the result of the workgroup's analysis of these process barriers with recommendations to mitigate or remove these restrictions in the production of nursing graduates. This section, endorsed by virtually all of the workgroup organizations, offers ways to expand the production of Registered Nurses with an Associate's Degree from community colleges.

Section II of the report focuses on an initiative for expanding the production of Registered Nurses with a Baccalaureate Degree. This section, not endorsed by a majority of the workgroup, would require an amendment to the state's Community College Act to allow two-year institutions to offer the Bachelor of Science in Nursing (BSN) degree. It is the position of the MCCA that Michigan's community colleges are capable and well-positioned to provide the remaining classroom components of this degree and can provide increased access and affordability to students who wish to complete the Baccalaureate Degree in Nursing, but currently are often denied that opportunity because of costs, geography, and program availability.

It is our opinion that the recommendations in this report, if implemented, will increase the number of nurses available for employment in this state.

Introduction

Michigan's community college system has been at the apex of nursing education for many years by providing nearly two-thirds of the state's employed nurses. These colleges, to the extent possible, have shouldered increased fiscal burden in an effort to meet expanding employment demand. However, the community colleges have arrived at a juncture that necessitates external support and assistance if they are to be effective in responding to the nursing shortage. Increasing the enrollment capacity of community college nursing programs along with new partnerships with hospitals and other health-care providers will ultimately increase the number of licensed registered nurses in the state.

Without question, Michigan's community colleges are vital to ensuring that adequate numbers of well-educated health-care professionals are available to meet the state's need. They have a proven history of providing cost-effective and efficient nursing and allied health education to professionals who share licensure pass rates and scope of practice with their counterparts graduated by four-year institutions.

To be sure, this is a complex matter requiring a re-thinking of traditional paradigms of nursing education, new partnerships, new delivery structures, and a propensity of seeking fresh answers to questions about the optimum methods for meeting state nursing demands, while concomitantly ensuring educational quality and the delivery of safe and effective healthcare.

Through the deliberations of the workgroup, it was made clear that in order to increase the number of nursing graduates from community colleges, the barriers that preclude nursing program expansion must be removed, funding for more nursing seats must be provided, and existing nursing program seats must be maximized by reducing student attrition.

Section I of this report describes the principle barriers to expanding Associate Degree Nursing (ADN) programs at Michigan's community colleges, along with recommendations that would most effectively remove these barriers. The majority of this section was endorsed by nearly all workgroup member organizations. Section II of the report describes the expansion of Baccalaureate in Science, Nursing Degree (BSN) programs by recommending that community colleges be given the opportunity to offer the BSN. That portion of the report is the position of the MCCA, but was not endorsed by a majority of the participating organizations.

We appreciate this opportunity, in partnership with many talented individuals from our state's nursing, hospital, and other health care organizations, to present this

report for consideration. A roster of those who provided input and a table summarizing the major findings is included at the end of the report.

Legislative Charge – Section 236 Public Act 341 of 2006

This report was prepared to comply with the requirement included in Public Act 341 of 2006. From Sec. 236: (1) "It is the intent of the Legislature that a workgroup be formed to evaluate, discuss, and make recommendations concerning the expansion of nursing programs at community colleges... (2) The workgroup described in subsection (1) shall submit a report containing its finding and recommendations to the House and Senate Appropriations Subcommittees on Community Colleges, the House and Senate Fiscal Agencies, and the State Budget Director by March 1, 2007. The report of the workgroup shall include recommendations for the future funding of community colleges that would encourage the expansion of nursing programs and facilitate the implementation of the finding of the workgroup. It is the intent of the Legislature that the future state appropriations for community colleges adequately fund the recommendations of the workgroup."

The Michigan Community College Association (MCCA) was given the charge for convening the workgroup and preparing this report. In order to ensure that the recommendations presented in this report best addressed the barriers to expansion of nursing programs at Michigan's community colleges, representatives from a number of state nursing and hospital organizations were invited to participate in the workgroup deliberations and report development. Specific workgroup members and their organizational affiliations are listed at the end of this report. We express our appreciation for their insight, expertise, and contributions.

While considerable work was accomplished through electronic means, the formal nursing workgroup conducted their activities over three meetings, conducted at the Michigan Community College Association offices in Lansing, as indicated below:

- January 19, 2007
- February 9, 2007
- February 23, 2007

I. Associate Degree Nursing Program Expansion

A. Background

The acute and sustained shortage of registered nurses, both nationally and within the state of Michigan, is well documented. A decreasing supply of nurses,

coupled with the simultaneous increase in demand for healthcare services, is a widely researched and accepted reality. Among the most relevant facts regarding the nursing shortage:

- In Michigan, two-thirds of new Registered Nurses are educated in Associate Degree Nursing-Registered Nursing (ADN-RN) programs at community colleges;
- Community college job placement rates average 98% within six months of graduation for RNs graduating with an Associate Degree, which is consistent with other higher education institutions with nursing programs;
- RN job growth in Michigan is projected to be 19%, or approximately 14,870 jobs by 2012 – totaling approximately 31,300 RN openings (including replacement of nurses who retire or leave the field); and
- Associate Degree nursing programs are often a critical entry point to the health professions for a disproportionate number of women, minorities, and economically disadvantaged students.

The national and state wide shortage of registered nurses is a multi-faceted problem which will require a variety of initiatives over a period of years to resolve. As a case in point, expansion of community college nursing programs, if initiated today, would require nearly three years before new nurses would emerge. Still, this workgroup attempted to focus specifically on capacity issues at Michigan's community colleges. Individual colleges have attempted various initiatives to address local needs by redirecting existing resources, and have had some notable successes.

While the results have been positive, the increases in the numbers of nurses have been small relative to the scope of the state's shortage. It seems clear from the work of this group, that in order to achieve a quantum increase in the capacity of community college nursing programs, a corresponding significant new investment, combined with some reworking of current strategies, is essential if we are to be effective in this endeavor. This will require new partnerships with the Legislature, community colleges, health care stakeholders and other four-year and university nursing education providers.

B. The Barriers to Associate Degree Nursing Expansion

When the workgroup met on January 19, 2007, considerable time was dedicated to identifying barriers that preclude the expansion of nursing programs at Michigan's community colleges. It quickly became evident that the majority of the barriers could be included in one of the following four categories:

- The cost of operating nursing programs;
- The shortage of qualified nursing faculty available;
- The lack of clinical training sites; and
- Student attrition from nursing programs.

A more detailed discussion for each of these four major barriers to expanding community college nursing programs, together with recommendations to mitigate those barriers, are presented below:

Barrier #1: Program Cost

All 28 of Michigan's community colleges have nursing programs, and in every case, the nursing program is either the most costly, or nearly the most costly program, and must be subsidized by other instructional programs. There are few economies of scale to operating such programs (i.e., the larger the nursing program, the greater the financial loss to the college).

Program costs are driven in part, by the need for modern, specialized equipment and facilities. The single greatest factor in the high cost of nursing programs, however, is the cost of the faculty, due in part to the staffing ratios required for both the didactic and clinical instruction. The nature of nursing education is labor intensive in order to ensure safety and quality of patient care.

Required credentials for didactic nursing faculty include a Masters of Science in Nursing (MSN) degree. Clinical faculty need a Bachelor of Science in Nursing (BSN), as well as training as a preceptor for nursing students. Unfortunately for colleges, nurses with such credentials are in high demand throughout the health care system, and consequently are aggressively pursued and competitively compensated. In many cases, these qualified nurses are offered hiring bonuses, moving costs, longevity payments, and other incentives that are beyond the financial capacity of most community colleges. Additionally, faculty union contracts can prevent a college's ability to provide higher salary levels or non-contractual incentives.

Furthermore, student-to-faculty ratios are established by state regulation. Due to liability and the increasing acuity levels of patients, clinical ratios are also often fixed by hospitals and other clinical sites at a level lower than that required by the state. Consequently, every expansion in the number of nursing students requires expansion of the nursing faculty.

On average, it costs \$10,000 annually to provide for operational costs associated with the preparation of an Associate's Degree Nurse (ADN-RN) to sit for the Registered Nurse exam. However, tuition accounts for roughly 33% of total program costs. Consequently, providing tuition reimbursements, scholarships, financial aid, and other student support incentives alone does little to alleviate the college's overall expense of providing the programming. In order for colleges to

expand program capacity, new program expansion funding must be provided at \$7,000 for every nursing graduate that the state requires beyond existing productivity levels.

Recommendation:

- Provide funding for community college nursing instructional program expansion of \$7.0 million per year that will result in the creation of 1,000 job-ready ADN-RN graduates by 2010. This amount does not contemplate capital outlay, facilities, or equipment needed for individual institutional program expansion.

Barrier #2: Faculty

Just as a shortage of registered nurses exists in Michigan today, there is also a shortage of nursing faculty at both the Masters and Baccalaureate levels. Indeed, the average age of nursing faculty in the U.S. is 51.1 years, and large numbers of these "baby-boomers" are retiring every year. In Michigan, 81% of full-time nursing faculty, and 59% of adjunct nursing faculty, are age 45 or older. In addition, 36% of full-time faculty and 19% of adjunct faculty are age 55 or older.

Unfortunately, a majority of all Michigan nursing programs report that they have difficulty filling full-time faculty positions. If community college nursing programs are to expand, the availability of credentialed faculty must similarly increase. In addition to strategies that encourage more nurses to seek an MSN degree (such as those outlined in the Governor's FY 2008 budget proposal), options to share masters-prepared nurses between hospitals and colleges were considered by the workgroup. These strategies include "joint appointments," as well as encouraging hospitals to deploy staff nurses as preceptors for the community colleges, thereby allowing the college's faculty to remain on campus working to advance other nursing students in the didactic and skill development portions of their training. Clearly, these and other creative strategies are needed to increase the pool of clinical nursing faculty.

Recommendation:

- Support Michigan Nursing Corps initiatives to:
 - (1) "fast-track" 300 individuals through accredited MSN programs;
 - (2) accelerate training of staff nurses prepared as clinical faculty using a statewide curriculum; and
 - (3) recruit displaced workers with a BS to the accelerated nursing program.

- Develop incentives for hospitals (and other health care providers with masters-prepared nurses on staff) to make joint appointments that release these nurses part-time to serve as college faculty. (Ideally, such joint appointments would allow nurses to maintain their seniority and benefits from their primary employer).
- Encourage colleges to develop, and state bodies to permit, teaching roles for qualified retired clinical practitioners.
- Leverage the existing Michigan Community College Virtual Learning Collaborative (MCCVLC on-line learning) infrastructure for expanding the didactic component of the nursing degree. This suggests the critical need for an extensive upgrade of network capacity for high speed Internet access state wide.

Barrier #3: Clinical Sites

In addition to studies in the classroom and laboratory, according to extensive National Council Licensure Examination (NCLEX) requirements, nursing students must obtain a great deal of direct experience in a hospital or other clinical setting in a wide variety of areas. This clinical experience must be under the guidance of clinical faculty specifically trained to provide this part of the educational experience. While it is certainly in the long-term best interest of hospitals and clinics to make their facilities available to nursing programs, there are challenges for the health care organizations. There are costs to hospitals for redeploying staff, liability issues if student preceptor ratios increase, and insurance reimbursement issues that may be impacted by changes in staff roles.

Another difficulty with clinical training, particularly in the rural hospitals, is that not all hospitals and clinics have the breadth of patient issues that meet NCLEX requirements. Thus, expanding the number and capacity of clinical sites for nurse education is another barrier to training additional nurses.

Recommendation:

- Encourage cooperative agreements that utilize non-traditional practice sites, such as home care agencies and hospice, community health clinics, nurse-managed practices, and school-based health centers;
- Develop incentives for hospitals and other clinical sites to accept more students;

- Provide funding to develop 12-month (summer) programs to utilize clinical sites at off-times;
- Implement a web-based software data system to coordinate state wide sharing of clinical sites;
- Develop student "passport" to access clinical sites to ease site access requirements (e.g., for infection control, immunization history, etc); and
- Provide program support to colleges that utilize state-of-the-art technologies, including the expansion of on-line offerings, computer-driven mannequins for patient simulation resources, and interactive CD-ROM/DVD clinical simulations.

Barrier #4: Student Attrition

In addition to the barriers previously discussed, student attrition from nursing programs and the profession continues to impede progress in the production of educated nurses.

Student interest in nursing programs has been increasing steadily at Michigan's community colleges while the number of available "seats" in the programs has increased only marginally. Sadly, "waiting lists" at most of the state's community colleges, are commonplace. In some cases, community colleges have over 1,000 students in the queue waiting to have access to the college's nursing program.

Given the high costs associated with nursing education, the competition to enter the programs, and the "gap" that is created when a student drops out, or fails in the program, reducing student attrition from nursing programs represents a significant opportunity to increase the number of nursing graduates.

Causes of student attrition from nursing programs, as identified by the workgroup, were of two types: 1) academic issues causing students to withdraw from the program, and 2) changes in life circumstances that require students to drop out, or at least "stop-out." (Note: "Stop-outs" are students who withdraw from a program, but eventually return and complete the program at a later date.)

Currently, students interested in becoming a licensed nurse take their entire general education sequence prior to program admission. This strategy seeks to ensure, though not entirely, the student's ability and persistence. However, focused learner support services and mentoring programs such as the \$2.0 million grant-funded pilot program offered at Mott Community College, have proven successful in reducing attrition rates at community colleges.

Two models for increasing nursing student retention were also discussed. The first is a multi-component intervention strategy that includes education of hospital nurses and recently retired nurses as Clinical Assistants, providing mentoring, tutoring, and role modeling to nursing students at risk of non-completion or delayed completion of their nursing program. This Clinical Assistant approach includes: working with student groups, assignment of a Clinical Assistant working with regular Clinical Faculty to provide clinical education to nursing students, providing individual, small group, or full class tutoring; and mentoring of students related to non-academic needs that influence academic success. This approach has improved graduation rates, NCLEX pass rates, and retention rates. Estimated cost: education for each Clinical Assistant = \$4,000; continuation cost is \$5,000 per semester per 5 or 6 students or \$1,000 per student per semester. The example has been tested by a partnership including Mott Community College, University of Michigan – Flint, hospital and community partners, Genesys Health Foundation, and the Greater Flint Health Coalition.

The second model is the case manager strategy. Many nursing education programs report that family-based needs and issues are the primary cause of nursing student attrition or lack of timely completion of nursing programs. This model proposes the identification of students with these risk-factors, assignment of a nurse case manager to assist with family-based problems, identification of available resources, and support of the student in counseling and coordination roles. This assistance with problem-solving and attention to student needs provides experience and support that keep students in the nursing program in order to graduate with their class. The case management activities may be carried out by part-time graduate students or recently retired nurses. Mid Michigan Community College has piloted a program similar to this with excellent outcomes – attrition was reduced 50% in one year. Estimated cost: \$25 per hour for one FTE position (shared by two or more individuals) supporting about 15-20 students per week. Estimating 40-50 students per semester times 2 semesters per year, per student per year cost is \$700-\$900 (including related supplies and services). This avoids much larger expenditures for students who do not complete their program or who drop-out mid-semester, leading to decreased faculty efficiency.

Both such programs require trained personnel with appropriate credentials in the nursing discipline. Beyond the classroom, life circumstances are often at odds with a student's ability to remain focused on their courses, manage clinical time, study, and advance in their program of study. Typically, these personal challenges are more difficult to deal with systematically. However, intervention programs to assist with child care, transportation, counseling, and other aspects of the student's life have shown some success.

Recommendation:

- Provide financial support for community colleges to establish peer and professional mentoring programs, or ombudsman support for nursing students to help them advance through a program of study that is unique to nursing program participants. This should include support for life issues (family, day care, employment, etc.) that would impede completion (see Mott Community College program above);
- Provide financial support for community colleges to provide counseling support services for students;
- Encourage detailed on-line and print information about the challenging aspects of the nursing program to students; and
- Develop better screening and assessment tools to better screen nursing program applicants.

II. Baccalaureate Degree Nursing Program Expansion

This section of the report is the position of the MCCA, but was not endorsed by all organizations of the work group.

The position of the MCCA is that given the need for more MSN trained faculty, the pool of BSN applicants ready to move on to a higher credential must likewise increase. While this expansion will require existing four-year nursing programs to increase their output of BSN's, it seems clear that the demand for new BSN trained nurses cannot be met by the four-year programs alone. Consequently, the MCCA Board of Directors has taken the position that the current statute (i.e. the Community College Act) which as written limits community colleges to preparing the ADN nurse only, must be amended to allow community colleges to offer the BSN. Since this recommendation was not supported by all members of the work group, it was suggested that another work group be formed to consider the BSN topic with the goal of producing a position on the issue in six months. Consequently the MCCA will continue this discussion in conjunction with four-year programs and present a report back to the legislature within six months.

Most community colleges already invite four-year schools onto their campuses. At present, the ADN-RN is essentially a three-year program of study, including clinical experiences. The addition of the final elements of a BSN program of study at community colleges would be the most cost-effective and most manageable portion of the BSN degree.

Community colleges are clearly capable, and are well positioned to provide the remaining classroom components of the BSN for those students wishing to complete the Bachelor's Degree on the campus of a local community college. Currently, students graduating with an Associates Degree in Nursing from a community college sit for the very same State Board of Nursing exam to become RNs as their BSN counterparts. Statistically, the community college nurses do as well as the four-year graduates. For example, Jackson Community College's May ADN-RN graduating class had a 100% pass rate on the nursing board examinations.

The delivery of BSN programs at community colleges would be new for Michigan but is not new nationally. Over the last several years, at least four other states have enacted legislation to provide community colleges with the authority to deliver baccalaureate programs in high demand areas, to the benefit of the state. This national interest has been documented by the Community College Baccalaureate Association (CCBA) [see <http://www.accbd.org/>].

MCCA Recommendation:

- Consistent with the *Cherry Commission Report* recommendations, amend the Community College Act to permit Michigan's community colleges to award BSN degrees allowing for the seamless progression from Licensed Practical Nurse (LPN) to ADN to BSN.

III. Conclusions

The *NurseWeek* publication has reported extensively on the alarming picture of an acute worldwide nursing shortage that promises to become much worse in the years ahead. In Michigan, the Chief Nursing Executive's Report, "The Nursing Agenda for Michigan 2005 – 2010: Actions to Avert a Crisis" suggests a 30-year shortfall. The most convincing evidence of the nursing shortage is the rapidly rising vacancy rates across the country (see *NurseWeek*).

As further evidence, *NurseWeek* has reported that some hospitals are canceling non-urgent surgeries, closing beds or units and diverting emergency room patients. As a result, some hospitals and nursing homes are unable to admit new patients and some home care agencies are unable to take on new clients.

Combine this shortage of nurses with the fact that community colleges have significant backlogs of students interested in becoming nurses, a state in poor economic condition, and the fact that every day, nearly 3000 health care workers

(the majority of whom are nurses) cross the Canadian border to come to work in Michigan, and you begin to see a system that needs immediate improvement.

Expansion of Associate Degree Nursing programs, as endorsed by the majority of the workgroup, requires leadership at many levels to provide adequate funding for increased nursing program capacity at community colleges, expanded opportunities to increase the number of qualified nursing faculty, increased clinical site availability, and a mitigation of student attrition. Expansion of Baccalaureate Nursing programs at community colleges, as endorsed by the MCCA but not a majority of the workgroup, will require the abandonment of previous notions regarding the function of community colleges and require new ways of thinking that recognizes the benefits of increased access and affordability to students that wish to complete their Bachelor's Degree in Nursing at a community college, which will in turn help meet the shortage of bachelor-trained nurses.

The Legislatively-tasked workgroup, and its resulting nursing workgroup report, has sought to be broad in its consideration of the various aspects of the shortage of nurses in Michigan, the barriers to mitigating that shortage, and ideal solutions to remove the barriers. However, not all of the many issues that may in some way impact the expansion of nursing programs (such as the need for a uniform, standardized curriculum for all ADN and BSN nursing programs), could be included in this report. Consequently, future discussion and consideration of other related issues is warranted.

The Michigan Community College Association and its 28 member institutions, in collaboration with other Michigan nursing and health care organizations, appreciate the opportunity to present the report. We look forward to continuing a dialogue that results in immediate action to solve this crisis.

Nursing Workgroup Participants

MEMBER NAME	ORGANIZATION
Amy Barkholz	Michigan Health & Hospital Association (MHA)
Melanie Brim	Bureau of Health Professions, Michigan Department of Community Health (MDCH/BHS)
Cameron Brunet-Koch	North Central Michigan College
Elaine Foster	Michigan Council of Nursing Education Administrators (MCNEA), Southwestern Michigan College
Martin Gibbs	Michigan Department of Labor & Economic Growth (DLEG)
Jean Goodnow	Delta College
Mike Hansen	Michigan Community College Association (MCCA)
Conway Jeffress	Schoolcraft College
Jeanette Klemczak	Michigan Department of Community Health, Office of the Chief Nurse (MDCH/OCNE)
David Mathews	Southwestern Michigan College
David E. Nixon	Monroe County Community College
Dan Phelan	Jackson Community College
Anne Rosewarne	Michigan Health Council (MHC)
Dick Shaink	Mott Community College
Steve Shotwell	Michigan Center for Rural Health
Mary Spangler	Oakland Community College
Teresa Thompson	Michigan Association of Colleges of Nursing (MACN)
Mary Lou Wesley	Michigan Organization of Nurse Executives (MONE)
Lynn Zuellig	Michigan Home Health Association

Summary of Recommendations

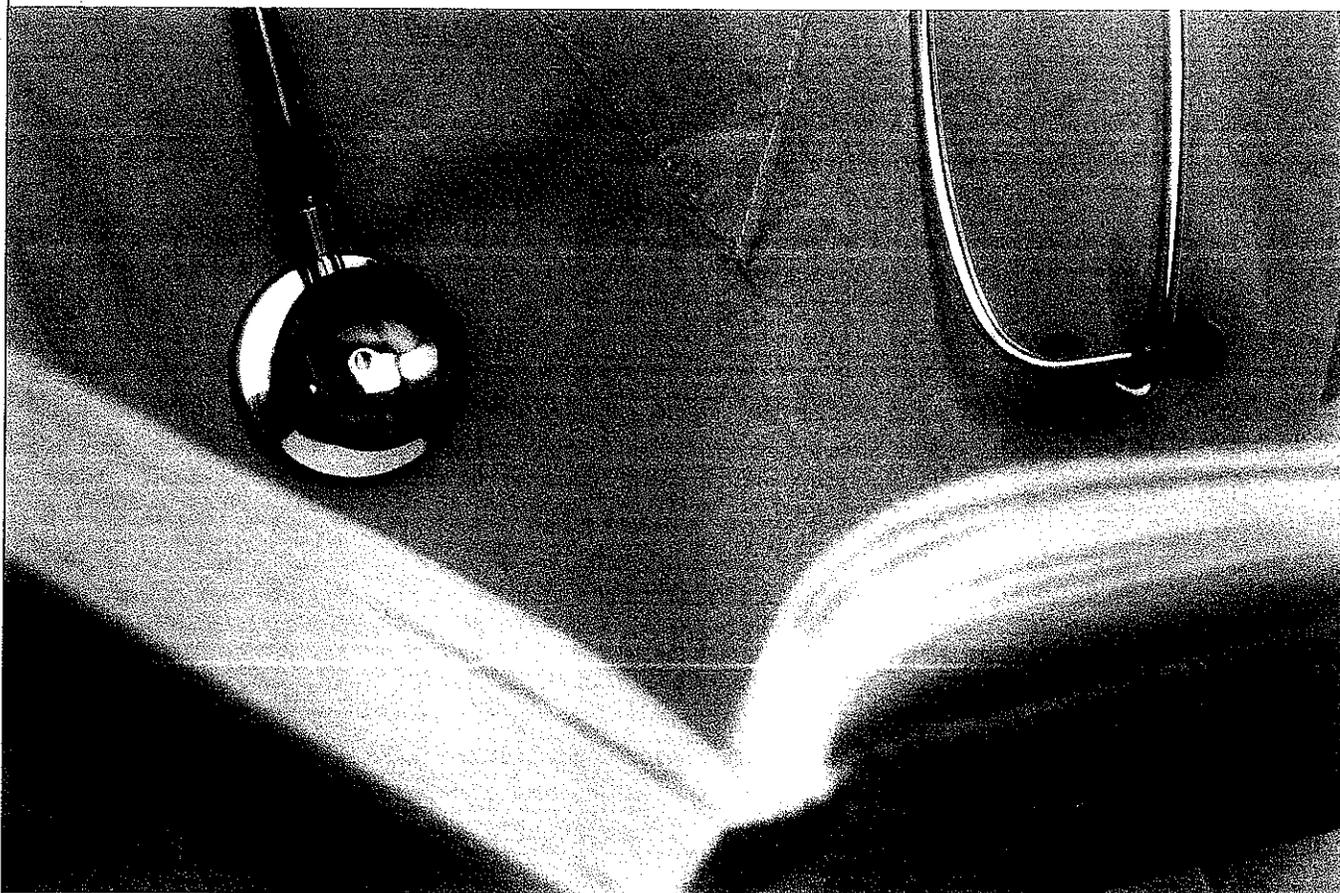
Expanding ADN/RN Nursing Programs

Barrier	Strategy	Recommendation	Notes
Cost of Operating Nursing Programs	<ul style="list-style-type: none"> ▪ Obtain new program expansion funding for colleges to increase capacity 	<ul style="list-style-type: none"> ▪ \$7M instructional program expansion funding resulting in 1,000 new ADN-RN jobs by 2010 	Program costs driven by cost of faculty and the need for modern, specialized equipment and facilities
Shortage of Qualified Nursing Faculty	<ul style="list-style-type: none"> ▪ Create ways to accelerate retention of qualified faculty ▪ Develop incentives for "joint appointments" 	<ul style="list-style-type: none"> ▪ Support Nursing Corps initiative to accelerate training and recruit BS-prepared displaced workers to the program ▪ Encourage hospitals to allow their masters-prepared nurses to serve as part-time faculty ▪ Encourage allowing teaching roles for qualified retired clinical practitioners 	
Clinical Site Availability	<ul style="list-style-type: none"> ▪ Utilize non-traditional practice sites and provide funding to use sites at off-times ▪ Invest and implement in helpful technology 	<ul style="list-style-type: none"> ▪ Encourage partnerships with non-traditional clinical sites ▪ Develop hospital and clinical site incentives for accepting more students ▪ Fund off-time site use and student "passport" for easier access ▪ Implement software for site-sharing ▪ Support use of technology for clinical simulation 	
Student Attrition	<ul style="list-style-type: none"> ▪ Provide adequate student support and promote persistence in course completion 	<ul style="list-style-type: none"> ▪ Provide funding for mentoring, counseling and support services ▪ Encourage detailed information to students about challenges of nursing program 	Personal challenges difficult to systematically deal with, but intervention programs have shown success

Expanding BSN/RN Nursing Programs

Nursing Program waiting lists and the need for BSN-trained faculty	<ul style="list-style-type: none"> ▪ Allow Michigan community colleges to offer BSN degrees 	<ul style="list-style-type: none"> ▪ Amend Community College Act 	Current practice in at least four other States.
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A Survey of Michigan's
Nursing
Education Programs
2009-2010 School Year



**A report by the Michigan
Center for Nursing**
www.michigancenterfornursing.org
operated by the
Michigan Health Council
www.mhc.org



Michigan
Center
for Nursing

Survey of Nursing Education Programs:
2009–2010 School Year

Prepared for
Michigan Center for Nursing
Okemos, Michigan

Prepared by
Public Sector Consultants
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Survey of Nursing Education Programs: *2009–2010 School Year*

EXECUTIVE SUMMARY

In the fall of 2010, the Michigan Center for Nursing conducted a survey of nursing education programs in Michigan to collect information on the types of programs offered, their enrollment capacity, the number of graduates, student and faculty demographics, and current issues affecting program capacity. Survey recipients were asked for data on all nursing education programs offered by their institution during the 2009–2010 school year. Responses were received from all 58 institutions surveyed, but some institutions did not provide complete information.

The survey instrument for 2009–2010 was modified from previous surveys (in 2004 and 2006) to match the national data set recommendations from the National Forum of State Nursing Workforce Centers. Institutions were asked to provide the number of seats for new students, qualified applicants, admitted applicants, newly enrolled students, and total number of students enrolled.

Key findings show:

- There are a greater number and variety of nursing education programs available now than there were in 2005–2006.
- Fewer programs are being developed or expanded now. In 2009–2010, there were four nursing education programs being developed or expanded, compared to 11 programs being developed or expanded in 2005–2006.
- The total number of graduates of nursing education programs has increased significantly, from 5,018 in 2005–2006 to 6,929 in 2009–2010.

While some programs report that they did not have enough qualified applicants in 2009–2010, most report that they had more qualified applicants than the number of seats available for new students. In a few programs, qualified applicants were not admitted even though there were unfilled seats.¹ Programs may have difficulty filling seats for new students if they currently lack faculty, facilities, or clinical placement sites to support the approved admission slots. These seats may also go unfilled if there are too few qualified applicants, or if admitted applicants do not enroll because of financial or personal reasons or acceptance to another education program.

¹ The number of applicants is based on the number of *applications* received by each institution. Many students apply to more than one institution and may become enrolled in one institution, but be counted as not enrolled at another institution. Therefore, these numbers are likely to exaggerate the size of the overall applicant pool for these 58 institutions and the number of applicants not admitted.

- Licensed practical nurse (LPN) programs report that 45 percent (1,348) of qualified applicants were not admitted.
- Associate's degree in nursing (ADN) programs report that 52 percent (3,575) of qualified applicants were not admitted.
- Pre-licensure BSN programs report that 50 percent (2,789) of qualified applicants were not admitted.

Survey results for the 2009–2010 school year show that

- 1,163 graduates received a certificate or diploma through an LPN program,
- 2,959 graduates received an ADN,
- 2,395 graduates received a BSN (1,972 from a pre-licensure program and 423 from a post-licensure program),
- 369 graduates received a master of science in nursing (MSN),
- 18 graduates received a PhD in nursing, and
- 25 graduates received a doctor of nursing practice (DNP).

Not all graduates are new to the practice of nursing. Some ADN program graduates had been working as LPNs before receiving their ADN, and some BSN graduates had been working as LPNs or RNs with an associate's degree before receiving their BSN. For example, survey data show that 18 percent (423) of BSN graduates during 2009–2010 were already licensed as registered nurses (RNs).

The capacity of nursing education programs to accept students is determined by the availability of faculty, facilities, and clinical placement opportunities. Survey findings related to faculty in Michigan nursing programs show that

- the overall vacancy rate for full-time faculty positions in nursing education programs is 7 percent (54 out of 811 positions) and the vacancy rate for part-time faculty positions is 2 percent (29 out of 1,560 positions);
- 62 percent of full-time faculty and 39 percent of part-time faculty hold a master's degree in nursing;
- 21 percent of full-time faculty and 4 percent of part-time faculty hold a PhD in nursing;
- 41 percent of full-time faculty are age 56 or older; and
- 17 percent of full-time faculty are expected to retire in the next five years.

When asked about issues of concern for their program, survey respondents most often identified lack of enough sites for clinical placement and difficulty filling part-time faculty positions, followed by difficulty filling full-time faculty positions and recruiting preceptors. Of the 58 institutions responding to the survey,

- 39 do not have enough **sites** for clinical placements for nursing students,
- 35 have difficulty filling **part-time** faculty positions in particular specialty areas,
- 19 have difficulty filling **full-time** faculty positions in particular specialty areas, and
- 18 have difficulty recruiting **preceptors** for clinical placements.

INTRODUCTION

In the fall of 2010, the Michigan Center for Nursing conducted a survey of all nursing education programs in Michigan to collect information on accreditation, the types of programs offered, their enrollment capacity, the number of graduates, demographic information on students and faculty, and current issues affecting program capacity. The survey results presented in this summary provide information that will be used along with data from past and future surveys to analyze trends in enrollment, graduation, and program capacity that have an impact on the nursing workforce in Michigan.

METHODOLOGY

The Michigan Center for Nursing contracted with Public Sector Consultants Inc. (PSC) for development, implementation, and analysis of the survey of nursing education programs. The survey instrument for 2009–2010 was modified from previous surveys, conducted in 2004 and 2006, to match the national data set recommendations from the National Forum of State Nursing Workforce Centers. The survey instrument was designed in collaboration with the Michigan Center for Nursing Advisory Board, with specific input from a subgroup of board members representing nursing education programs.

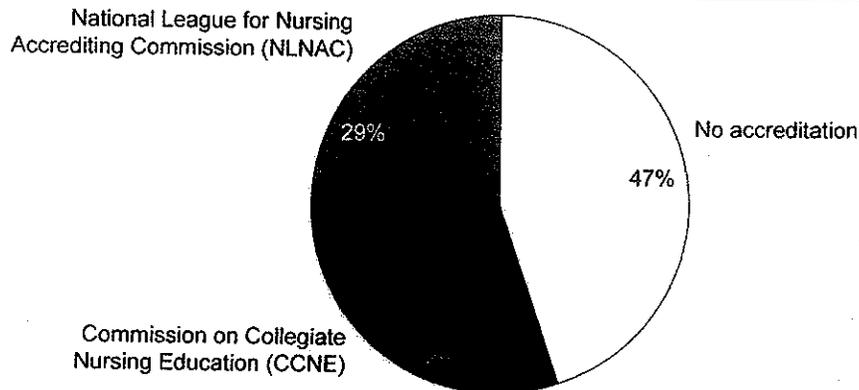
In October 2010, a survey worksheet was mailed to 58 education institutions that offer nursing education programs in Michigan. Respondents were asked to complete the survey online. Follow-up phone calls, letters, and e-mail notices were used to prompt response to the survey. By mid-June 2011, survey responses were received from all institutions offering nursing education programs in the 2009–2010 academic year. Survey recipients were asked to complete the survey with information for all nursing education programs offered by the parent institution during the 2009–2010 school year. Some programs indicated that they do not keep information on the demographic characteristics of their student population and/or faculty. Other institutions that offer ladder programs (i.e., licensed practical nurse [LPN] to associate's degree in nursing [ADN] programs) indicated that they do not track student information separately for LPN students and ADN students. Similarly, some programs with more than one track (i.e., master of science in nursing [MSN] clinical track or MSN non-clinical track) also reported that they do not track student information separately for clinical and non-clinical MSN students. Limitations in availability of data for specific questions are indicated in the data tables.

ACCREDITATION

Survey respondents were asked to identify accreditation held by the nursing education program from either or both of the national nursing accreditation agencies. Respondents were able to note current status in an accreditation process and were asked to check all that apply (see Exhibit 1). Twenty-nine percent (17) of institutions hold an accreditation by the Commission on Collegiate Nursing Education (CCNE), and 29 percent (17) hold an accreditation by the National League for Nursing Accrediting Commission (NLNAC). One institution noted both CCNE and NLNAC accreditation. One institution noted accreditation with CCNE, with preapproval for accreditation for a new doctor of nursing practice [DNP] program. Of the 27 programs without accreditation, two noted that they are in the process of obtaining NLNAC accreditation, and another two indicated that they plan to file in 2011 for NLNAC accreditation.

EXHIBIT 1

Percentage of Nursing Programs with Accreditation, 2009–2010 School Year



SOURCE: Michigan Center for Nursing Survey of Nursing Education Programs 2009–2010.

NOTE: Percentages equal more than 100 percent because respondents were asked to choose "all that apply."

TYPES OF NURSING EDUCATION PROGRAMS

There are a variety of nursing certificate or degree programs in Michigan. In the 2009–2010 survey, respondents were asked to report the types of programs being offered, developed or expanded, or discontinued as of 2009–2010 by the parent institution (see Exhibit 2). The categories of program types were changed from previous surveys to reflect the national data set recommendations. For example, the category for the bachelor of science in nursing (BSN) program was split from one category into three separate categories: (1) pre-licensure BSN, generic; (2) pre-licensure BSN, second degree; and (3) post-licensure BSN. The MSN category was also split to capture the number of institutions that offer a clinical (e.g., advanced practice nurse) and/or non-clinical track (e.g., nurse administration).

An education institution may offer one or more types of degree/certificate programs. For example, an institution may offer an LPN certificate program and a separate program for an ADN. Some institutions offer a combined LPN and ADN program. If an institution offers a ladder program (combined LPN and ADN programs), it was asked to provide data for the LPN and ADN programs separately. Three institutions were not able to separate LPN program, faculty, and student data from their ADN combined data. For this report, these institutions have been counted in the ADN, generic, category. Three institutions offer both generic and accelerated ADN programs. One of these institutions indicated it was not able to separate generic and accelerated program, faculty, and student data; therefore, it is included in the ADN, generic category throughout the report.

Some institutions offer a BSN, an MSN with a clinical and/or non-clinical track, a doctor of nursing practice (DNP) or a doctoral degree in nursing (PhD). One institution was not able to separate MSN-clinical and MSN-non-clinical program, faculty, and student data. This program is counted within the MSN-clinical category throughout this report.

EXHIBIT 2
**Number of Nursing Programs by Type of Degree/Certificate Offered,
 2009–2010 School Year**

	Number of programs offered	Being developed or expanded	Discontinued since 2009–2010
Pre-licensure programs			
Practical nurse certificate (LPN/PN)	30		
Associate's degree in nursing (ADN), generic	35		
Associate's degree in nursing (ADN), accelerated option	3		
Pre-licensure bachelor of science in nursing (BSN), generic	19		
Pre-licensure bachelor of science in nursing (BSN), second degree	8		
Pre-licensure master of science in nursing (MSN)	1		
Post-licensure programs			
Post-licensure bachelor of science in nursing (BSN)	16	1	
Master of science in nursing (MSN) – clinical tracks (e.g., advanced practice nursing specialties)	11		1
Master of science in nursing (MSN) – non- clinical tracks (e.g., nursing education, administration, informatics)	9	1	
Doctorate in nursing (PhD)	3		
Doctor of nursing practice (DNP)	5	2	
Other doctoral program	1		

SOURCE: Michigan Center for Nursing Survey of Nursing Education Programs 2009–2010.

There has been an increase in the number of DNP programs offered (from three in 2005–2006 to five in 2009–2010). However, overall, there are fewer programs being developed or expanded. In 2009–2010, there were 4 nursing education programs being developed or expanded, compared to 11 programs being developed or expanded in 2005–2006. One post-licensure BSN, one MSN, non-clinical track, and two DNP programs were being developed or expanded in 2009–2010. One MSN, clinical track, has been discontinued since the 2009–2010 academic year.

PROGRAM CAPACITY, APPLICATIONS, AND ENROLLMENT

Institutions were asked to provide the number of seats for new students, qualified applicants, admitted applicants, newly enrolled students for the 2009–10 academic year, and the total number of students enrolled. The number of seats for new students was defined as the total number of seats available for newly admitted students during the reporting period (i.e., 2009–2010 academic

year).² (See Attachment A for the survey instrument glossary.) Based on survey responses, there were 1,761 seats available for newly admitted licensed practical nursing students during the 2009–2010 school year, and 3,052 seats available for newly admitted students seeking an ADN (see Exhibit 3). There were 2,454 seats available for pre-licensure BSN students, 462 seats available for MSN students, and 237 seats for doctoral students—including 185 for DNP students.

EXHIBIT 3 Capacity of Nursing Education Programs, 2009–2010 School Year

	Number of seats for new students
Pre-licensure programs	
Practical nurse certificate (LPN/PN) ^a	1,761 ^b
Associate's degree in nursing (ADN), generic	2,970
Associate's degree in nursing (ADN), accelerated option ^c	82
Pre-licensure bachelor of science in nursing (BSN), Generic	1,897
Pre-licensure bachelor of science in nursing (BSN), second degree	557
Pre-licensure master of science in nursing (MSN) ^d	0
Post-licensure programs	
Post-licensure bachelor of science in nursing (BSN)	577 ^e
Master of science in nursing (MSN) – clinical tracks (e.g., advanced practice nursing specialties)	365 ^f
Master of science in nursing (MSN) – non-clinical tracks (e.g., nursing education, administration, informatics)	97 ^g
Doctorate in nursing (PhD)	37
Doctor of nursing practice (DNP)	185
Other doctoral program	15

SOURCE: Michigan Center for Nursing Survey of Nursing Education Programs 2009–2010.

^a Three institutions offering an LPN/ADN ladder program are counted within the ADN, generic, category because they were not able to separate data for the LPN and ADN components.

^b One institution indicated it had unlimited seating for its practical nurse certificate program.

^c One institution offers both generic and accelerated ADN programs. This institution was not able to separate program data so the accelerated program data are included within the ADN, generic, category.

^d One institution offers a pre-licensure master of science in nursing program every three years. At the time of the survey, this institution was not accepting applications for this program.

^e 7 out of 16 institutions reported they have unlimited seating for their post-licensure bachelor of science in nursing program.

^f 5 out of 11 institutions reported they have unlimited seating for their post-licensure master of science in nursing – clinical track program.

^g 4 out of 9 institutions reported they have unlimited seating for their post-licensure master of science in nursing-non-clinical track program.

The number of qualified applicants (i.e., applications submitted on time that meet all of an institution's requirements for formal admission) is based on the number of *applications* received

² In past surveys of nursing education programs, institutions were asked to report the number of approved seats for each of their programs. The Michigan Board of Nursing (BON) approves the maximum number of students that may be enrolled (i.e., seats for new students) in programs that offer a PN diploma or certificate, an ADN, or a BSN for pre-licensure students, i.e., students who are not already licensed as a registered nurse (RN). An individual may apply for licensure as a registered nurse (RN) after receiving either an associate's degree in nursing or a bachelor of science degree in nursing and passing the National Council Licensure Examination (NCLEX[®]). Admission slots for BSN students who already are RNs do *not* require approval by the BON.

by each institution. Many students apply to more than one institution and may become enrolled in one institution, but be counted as not enrolled at another institution. Therefore, these numbers are likely to exaggerate the size of the overall applicant pool for these 58 institutions and the number of applicants not admitted. While some programs report that they did not have enough qualified applicants in 2009–2010, most report that they had more qualified applicants than the number of seats available for new students. In a few programs, qualified applicants were not admitted even though there were unfilled seats.

- Licensed practical nurse (LPN) programs report that 45 percent (1,348) of qualified applicants were not admitted.
- Associate's degree in nursing (ADN) programs report that 52 percent (3,575) of qualified applicants were not admitted.
- Pre-licensure BSN programs report that 50 percent (2,789) of qualified applicants were not admitted.

The number of admitted applicants was defined on the 2009–2010 survey as the number of individuals who received official notice from the institution to begin the nursing program during the reporting period (see Exhibit 4). Some institutions admitted more students than the number of seats available.³ However, the data show that some institutions did not admit enough applicants to fill the number of seats available for new students.

Eight out of 26 (31 percent) LPN programs did not admit enough applicants to fill the total number of seats available for new LPN students (1,761 seats available) in 2009–2010. Seven out of 32 (22 percent) ADN programs did not admit enough applicants to fill the 3,052 seats available for new ADN students in 2009–2010.

In 2009–2010, there were an estimated 1,897 available seats for pre-licensure students seeking a traditional bachelor of science in nursing degree and 557 seats available for students seeking a pre-licensure BSN as a second degree. Out of 18 institutions with complete data, only one reported that it did not admit enough applicants to fill the number of available seats for its pre-licensure BSN, generic, program; and only 1 out of 8 pre-licensure BSN programs offering a second degree reported it did not admit enough applicants to fill the available seats.

Respondents to the survey were not asked why available seats were not filled. Difficulty filling available seats could be related to the immediate capacity of the program (e.g., lack of availability of faculty, facilities, or clinical placement sites to support the approved admission slots), to factors related to the applicants (e.g., too few qualified applicants, affordability of the program for the applicant, enrollment of the applicant in another program), or to a combination of factors. The explanation may also vary among the different education institutions. For example, two LPN programs, five ADN programs, and one pre-licensure BSN, generic, program report fewer qualified applicants than the number of available seats for each prospective program. One ADN program reported more than enough qualified applicants but it still did not admit enough applicants to fill all of its available seats. Nevertheless, the vast majority of nursing programs report more qualified applicants than the number of seats available.

³ Nursing education programs may request and be granted an exception by the BON to fill additional slots above their approved capacity.

EXHIBIT 4
Applications Compared to Admissions and Enrollment for
Nursing Education Programs, 2009–2010 School Year

	Number of qualified applicants	Number of admitted applicants	Total student enrollment
Pre-licensure programs			
Practical nurse certificate (LPN/PN) ^a	2,981	1,633	1,163
Associate's degree in nursing (ADN), generic	6,715	3,208	5,106
Associate's degree in nursing (ADN), accelerated option ^b	150	82	62
Pre-licensure bachelor of science in nursing (BSN), generic	4,371	2,258	5,171
Pre-licensure bachelor of science in nursing (BSN), second degree	1,252	576	554
Pre-licensure master of science in nursing (MSN) ^c	0	0	16
Post-licensure programs			
Post-licensure bachelor of science in nursing (BSN)	1,032	1,022	1,625
Master of science in nursing (MSN) – clinical tracks (e.g., advanced practice nursing specialties)	822	656	1,324
Master of science in nursing (MSN) – non-clinical tracks (e.g., nursing education, administration, informatics)	139	137	210
Doctorate in nursing (PhD)	33	25	123
Doctor of nursing practice (DNP)	206	163	208
Other doctoral program	14	14	10

SOURCE: Michigan Center for Nursing Survey of Nursing Education Programs 2009–2010

^a Three institutions offering an LPN/ADN ladder program are counted within the ADN, generic, category because they were not able to separate data for the LPN and ADN components.

^b One institution offers both generic and accelerated ADN programs. This institution was not able to separate program data so the accelerated program data are included within the ADN, generic, category.

^c One institution offers a pre-licensure master of science in nursing program every three years. At the time of the survey, this institution was not accepting applications for this program.

Institutions were also asked to provide the total number of newly enrolled students during the 2009–2010 academic year, and the total number of students enrolled on the fall term census date. Data for the number of newly enrolled students were incomplete and are not included in the survey analysis. The total number of enrolled students in nursing education programs at the 2009 fall term census date was 15,572.

GRADUATES

Nurses may enter the workforce with a certificate or degree from an LPN program, a combined LPN and ADN program, an ADN program, or a BSN program. Institutions were asked to provide the number of students who successfully completed their nursing program(s) during the reporting period. Based on survey responses, and shown in Exhibit 5, an estimated 6,094 graduates received a certificate or degree from one of the pre-licensure programs in 2009–2010 (i.e., LPN, ADN, or pre-licensure BSN). The total number of graduates of nursing education programs has increased significantly, from 5,018 in 2005–2006 to 6,929 in 2009–2010.

EXHIBIT 5
Graduates of Nursing Education Programs, 2009–2010 School Year

	1997–98	1998–99	1999–2000	2002–03	2005–06	2009–10
LPN graduates	967	934	935	1,094	1,314	1,163
ADN graduates	1,886	1,764	1,708	1,772	2,165	2,959
BSN graduates ^a	1,407	1,346	1,404	1,130	1,277	–
Pre-licensure BSN graduates	–	–	–	–	–	1,972
Post-licensure BSN graduates	–	–	–	–	–	423
MSN graduates	–	–	–	200	242	369
PhD graduates	–	–	–	16	20	18
DNP	–	–	–	–	–	25

SOURCES: Michigan Center for Nursing Survey of Nursing Education Programs 2009–2010; Michigan Center for Nursing Survey of Nursing Education Programs 2005–2006; Michigan Center for Nursing Survey of Nursing Education Programs 2002–2003; and Study of the Current and Future Needs of the Professional Nursing Workforce in Michigan, prepared for the Michigan Department of Consumer and Industry Services by Public Sector Consultants Inc., July 2001.
^a BSN graduates prior to 2009–2010 include pre-licensure BSN students and RNs completing a BSN.

Not all of the graduates shown in Exhibit 5 are new to the practice of nursing. Some of the graduates of ADN programs or BSN programs have been working as licensed practical nurses before receiving their ADN or BSN. Some of the BSN graduates have been working as registered nurses with an ADN before receiving their BSN (i.e., post-licensure BSN students). Institutions submitting complete survey data show that about 18 percent (423) of BSN students graduated from Michigan nursing education programs during 2009–2010 were already licensed as RNs.

Survey respondents reported 412 graduates from advanced degree programs during 2009–2010 (369 MSN graduates, 18 PhD graduates, and 25 DNP graduates). The number of graduates with advanced nursing degrees rose from 262 graduates reported in 2005–2006. These nurses do not add to the number of nurses in the workforce, but they do add to the number of nurses who have the credentials required for nursing program faculty and upper-level positions in health care administration.

STUDENT CHARACTERISTICS

Survey respondents were asked to provide demographic information for students enrolled during the 2009–2010 school year. Race/ethnicity and age groups were modified from previous surveys to reflect the national data set recommendations from the National Forum of State Nursing Workforce Centers. About 74 percent of institutions provided complete information on the gender of their students, 78 percent of the institutions provided complete information on race and ethnicity, and about 69 percent provided complete information on the age of their students.

The breakdown of students by gender, race/ethnicity, and age is shown in Exhibit 6 for each type of pre-licensure nursing education program, based on the data available. The percentage of nursing students who are male has generally increased. In 2005–2006, males made up about 10 percent of the LPN, ADN, and BSN students. In 2009–2010, males comprise between 12 and 20 percent of pre-licensure nursing students. The percentages of students who are male in LPN, ADN, and BSN programs are smaller than the percentages of students who are male in accelerated, second-degree, or MSN pre-licensure programs. The distribution of students by race/ethnicity is similar across all types of pre-licensure programs, except that the percentage of LPN students who are Black/African American is higher. The pre-licensure BSN programs have a higher percentage of students aged 30 or younger than the LPN, ADN, and MSN programs.

EXHIBIT 6
Demographic Characteristics of Pre-Licensure Nursing Students,
2009–2010 School Year

	Percentage of Pre-Licensure Students					
	LPN students ^a	ADN generic students ^b	ADN accelerated students ^c	BSN generic students ^d	BSN second degree students ^e	MSN students ^f
Gender						
Female	88%	86%	80%	85%	80%	81%
Male	12	14	20	15	20	19
Race/Ethnicity						
American Indian/Alaskan Native	1%	<1%	0%	<1%	0%	0%
Asian	3	<1	0	4	6	0
Black/African American	18	8	0	4	6	0
Hispanic/Latino	3	2	3	2	2	0
Native Hawaiian or Other Pacific Islander	1	1	0	0	1	0
White/Caucasian	71	80	97	83	73	75
Unknown	4	8	0	6	13	25
Age						
30 or younger	46%	47%	–	87%	64%	6%
31–40	28	32	–	7	23	25
41–50	14	16	–	3	12	31
51–55	3	3	–	1	1	13
56–60	1	1	–	<1	<1	19
61 and older	<1	<1	–	<1	0	6
Unknown	8	<1	100	2	1	0

SOURCE: Michigan Center for Nursing Survey of Nursing Education Programs 2009–2010.

NOTE: The majority of nursing education programs were not able to provide complete data on student race/ethnicity and age. Many programs indicated they do not currently track demographic data. Most programs attempted to get demographic data from the admissions office of their parent institution, which was also not complete.

^a 21 out of 27 institutions offering LPN programs submitted data for student gender, while only 20 institutions submitted data on race and 18 on age of students.

^b 28 out of 35 institutions offering ADN programs submitted data for student gender, while only 27 institutions submitted data on race, and 24 on age of students.

^c 1 out of 3 institutions offering ADN-accelerated programs submitted data for student gender and race. No institutions submitted data on student age.

^d 18 out of 19 institutions offering BSN-generic programs submitted data for student gender, while 17 institutions provided data for race, and 12 for age of students.

^e 7 out of 8 institutions offering BSN-second degree programs submitted data for student gender, race, and age.

^f The one institution offering a pre-licensure MSN degree program submitted data for gender and race. This institution was not able to submit data for the age of students.

The breakdown of students by gender, race/ethnicity, and age of post-licensure students is shown in Exhibit 7 for each type of post-licensure nursing education program, based on the data available. A smaller percentage of post-licensure degree students are male than shown in the demographic data for pre-licensure programs. The distribution of race/ethnicity is similar across all types of post-licensure programs, except that the percentage of students who are Black/African American is higher in MSN, non-clinical track programs and PhD programs, and the percentage of students who are Asian is higher in PhD programs. The MSN, non-clinical track programs

have the largest percentage of older students, while the MSN, clinical track programs have the largest percentage of younger students.

EXHIBIT 7
Demographic Characteristics of Post-Licensure Nursing Students,
2009–2010 School Year

	Percentage of Post-Licensure Students					
	BSN students ^a	MSN clinical students ^b	MSN non-clinical students ^c	PhD students ^d	DNP students ^e	Other doctoral students ^f
Gender						
Female	90%	92%	95%	94%	95%	90%
Male	10	8	5	6	5	10
Race/Ethnicity						
American Indian/Alaskan Native	<1%	<1%	0%	1%	1%	–
Asian	3	4	<1	14	1	–
Black/African American	8	9	14	17	12	–
Hispanic/Latino	2	2	2	3	2	–
Native Hawaiian or Other Pacific Islander	0	0	0	0	0	–
White/Caucasian	71	77	73	62	75	–
Unknown	16	7	11	3	9	100
Age						
30 or younger	25%	39%	17%	7%	9%	–
31–40	35	30	18	32	22	–
41–50	25	22	33	37	31	–
51–55	11	7	6	9	25	–
56–60	4	3	4	11	9	–
61 and older	1	<1	21	6	2	–
Unknown	1	<1	1	0	2	100%

SOURCE: Michigan Center for Nursing Survey of Nursing Education Programs 2009–2010.

NOTE: The majority of nursing education programs were not able to provide complete data on student race/ethnicity and age. Many programs indicated they do not currently track demographic data. Most programs attempted to get demographic data from the admissions office of their parent institution, which was also not complete.

^a 15 out of 16 institutions offering a post-licensure BSN program submitted data for student gender, while only 13 submitted race and 10 submitted age of students.

^b 11 out of 11 institutions offering MSN-clinical track program submitted data for student gender and race data. Two institutions did not provide data for student age.

^c 8 out of 9 institutions offering MSN-non-clinical track program submitted data for student gender and race. One institution did not provide student age data.

^d 3 out of 3 institutions offering PhD in nursing programs provided data for student gender, race, and age.

^e 5 out of 5 institutions offering DNP programs provided data for student gender, race, and age.

^f The one institution offering an "Other" doctoral program was not able to provide the race and age of students.

FACULTY

Survey respondents were asked to provide the number of full-time faculty positions, the number of full-time positions filled by exception, the number of full-time vacancies, the number of part-time faculty positions, and the number of part-time faculty vacancies. All institutions surveyed provided complete data for full-time faculty, and 55 out of 55 institutions that employ part-time faculty (i.e., three of the 58 institutions do not employ part-time faculty) provided complete data

(see Exhibit 8). Based on the data provided, the overall vacancy rate for full-time faculty positions in nursing education programs is 7 percent; the vacancy rate for part-time faculty positions is 2 percent.

Institutions were also asked to provide the number of full-time faculty member retirements anticipated over the next five years. The 46 education institutions providing this information report that they anticipate about 17 percent (137) of their full-time faculty will retire in the next five years.

EXHIBIT 8
Number of Faculty and Vacancies in Michigan
Nursing Education Programs, 2009–2010 School Year

	Number
All nursing program faculty who were employed full-time by the program(s) represented on this survey as of the fall term census date (including positions filled by exception ^a)	811
Full-time faculty positions filled by exception	15
Full-time faculty vacancies (open positions that your program is actively trying to fill)	54
Total number of full-time faculty member retirements anticipated over the next five years	137
Nursing program faculty who were employed <i>part-time</i> by the program(s) represented on this survey as of the fall term census date (including positions filled by exception)	1,560
<i>Part-time</i> faculty vacancies (open positions that your program is actively trying to fill)	29

SOURCE: *Michigan Center for Nursing Survey of Nursing Education Programs 2009–2010.*

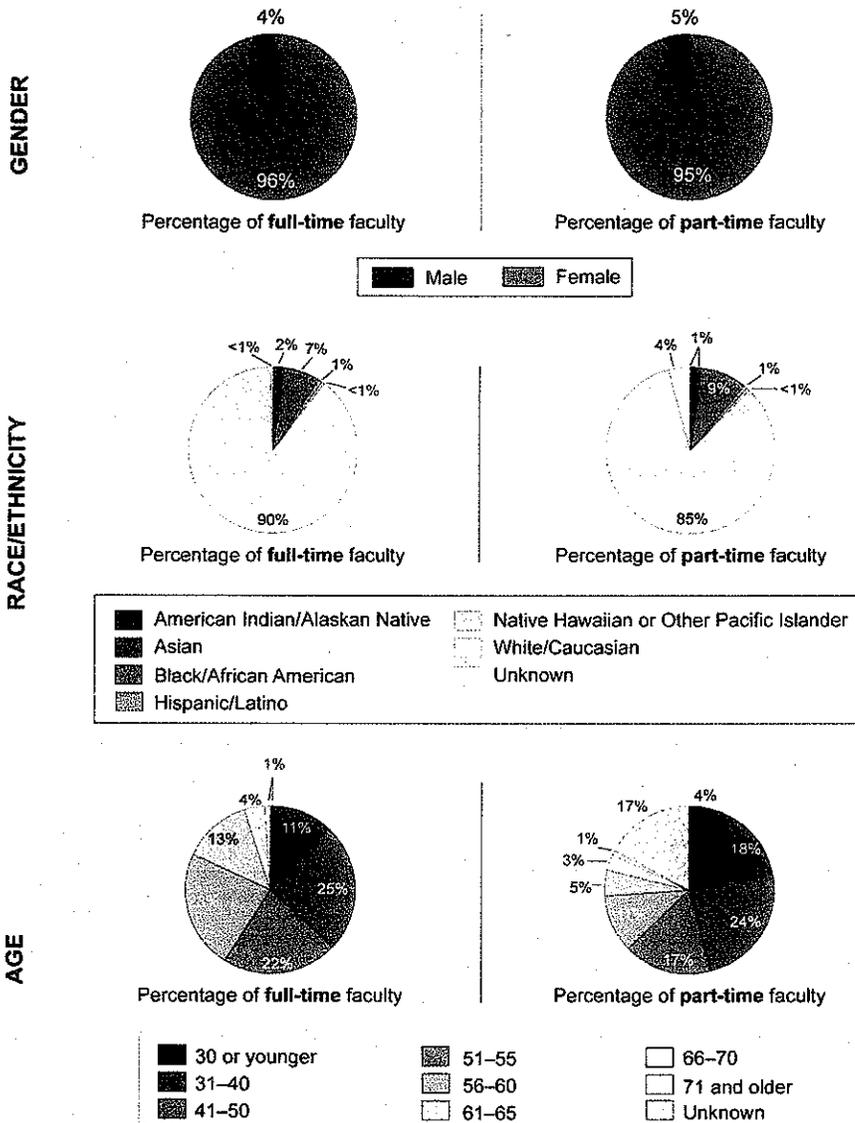
^a Positions filled by exception are filled by a candidate who currently does not meet state faculty credential requirements for the position but is working toward completion of the required degree, and for whom the school has received Michigan Board of Nursing approval pending completion of credential requirements.

Survey respondents were also asked to provide demographic information on their full-time and part-time faculty. Race/ethnicity and age groups were modified from previous surveys per the recommendations of the National Forum of State Nursing Workforce Centers. All of the institutions provided information on the gender, race/ethnicity, and age of their full-time faculty. Of the 55 institutions that employ part-time faculty, all of them provided information on the gender of their part-time faculty, 76 percent (42) provided information on the race/ethnicity of their part-time faculty, and 78 percent (43) provided information on the age of their part-time faculty. As shown in Exhibit 9,

- About 4 percent of full-time faculty and 5 percent of part-time faculty are male,
- 90 percent of full-time faculty and 85 percent of part-time faculty are white,
- 7 percent of full-time faculty and 9 percent of part-time faculty are African American,
- 1 percent of both full-time and part-time faculty are Hispanic/Latino,
- 2 percent of full-time faculty and 1 percent of part-time faculty are Asian,
- Less than 1 percent of both full-time and part-time faculty are Native Hawaiian or Other Pacific Islander,
- 1 percent of part-time faculty are American Indian/Alaskan Native⁴, and
- 41 percent of full-time faculty are age 56 or older.

⁴ None of the institutions reporting demographic information for full-time faculty reported any American Indian/Alaskan Native faculty.

EXHIBIT 9
Demographic Characteristics of Faculty
 (Gender^a, Race/Ethnicity^b, and Age^c), 2009–10 School Year



SOURCE: Michigan Center for Nursing Survey of Nursing Education Programs 2009–2010.

NOTE: Percentages may not equal 100 due to rounding.

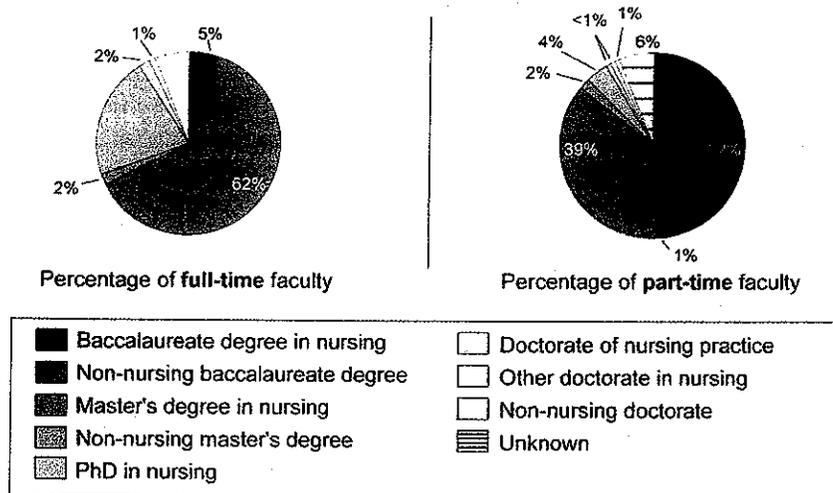
^a All institutions provided complete data for gender of full-time faculty, and all institutions that have part-time staff provided complete data for gender of part-time faculty.

^b All institutions provided complete data for race/ethnicity of full-time faculty, and 42 out of the 55 institutions that employ part-time staff provided complete data for race/ethnicity of part-time faculty.

^c All institutions provided complete data for age of full-time faculty, and 43 out of the 55 institutions that employ part-time staff provided complete data for age of part-time faculty.

For the first time since this survey was implemented, survey respondents were asked to indicate the **highest** academic degree held by faculty members. This question was added to the survey to reflect the national data set recommendations from the National Forum of State Nursing Workforce Centers. All schools were able to provide the highest academic degree held by their full-time faculty members, and 50 of the 55 institutions that employ part-time faculty were able to provide complete information for part-time faculty (see Exhibit 10).

EXHIBIT 10 Highest Academic Degree held by Faculty, 2009–2010 School Year



SOURCE: Michigan Center for Nursing Survey of Nursing Education Programs 2009–2010.

Based on the data reported, full-time faculty have higher academic degrees than do part-time faculty: 62 percent of full-time faculty and 39 percent of part-time faculty hold a master's degree in nursing, while 21 percent of full-time faculty and 4 percent of part-time faculty hold a PhD in nursing.

ISSUES AFFECTING PROGRAM CAPACITY

Survey respondents were asked which, if any, of the following issues are of concern to their program. Respondents most often identified lack of enough sites for clinical placement and difficulty filling part-time faculty positions, followed by difficulty filling full-time faculty positions and recruiting preceptors. Following are the results from the 58 institutions responding to the survey.

- 39 do not have enough **sites** for clinical placements for nursing students. The specialty areas mentioned most often are pediatrics (25), obstetrics (23), psychiatry (17), and medical/surgical (7). Other areas for which respondents indicated difficulty finding clinical placement for nursing students are acute care, family practice/primary care, and leadership.
- 35 institutions have difficulty filling **part-time** faculty positions in particular specialty areas. The specialty areas that respondents mentioned most often as difficult to fill are pediatrics (24), obstetrics (20), mental health (16), and medical/surgical (8). Other areas for which respondents indicated difficulty filling part-time faculty are acute care, administration,

maternal child health, nutrition, and pharmacology. A couple of respondents reported that they are always recruiting for part-time faculty in all specialty areas.

- 19 institutions have difficulty filling **full-time** faculty positions in particular specialty areas. The specialty areas that respondents mentioned most often as difficult to fill are mental health (15), obstetrics (12), pediatrics (12), medical/surgical (8), and nursing fundamentals (2). Other areas for which institutions have difficulty filling full-time faculty positions are community health, gerontology, maternal child (or newborn), and nursing administration and information.
- 18 out of 58 schools surveyed indicated they had difficulty recruiting preceptors for clinical placements.

Attachment A: *Glossary*⁵

Admitted Applicants: A count of the individuals who received official notice from the program that they were invited to begin the nursing program during the reporting period.

ADN/ASN Program, Generic: A program of instruction that requires at least two years of full-time equivalent college academic work, generally within a junior or community college, the completion of which results in an associate's degree with a major in nursing and eligibility to apply for licensure as an RN. This may also be called a "traditional" curriculum sequence.

ADN/ASN Program, Accelerated Option: A pre-licensure RN associate degree program with a curriculum sequence for students having **some** formal training in nursing or a related field. The accelerated option (also called a bridge program) typically accelerates degree completion for students who are licensed as an LPN or paramedic, for example. Completion results in an associate's degree with a major in nursing and eligibility to apply for licensure as an RN.

Diploma Program: A program of instruction that requires two to three years of full-time equivalent coursework, usually within a hospital-based structural unit, the completion of which results in a diploma or certificate of completion and eligibility to apply for licensure as an RN.

DNP Program: A program of instruction that prepares graduates for the highest level of nursing practice beyond the initial preparation in the discipline. The Doctor of Nursing Practice degree is the terminal practice degree.

Faculty Vacancy: A vacant position for a faculty member that is being actively recruited as of the fall term census date.

Full-time Faculty: Those members of the instructional, administrative, or research staff of the nursing academic unit who are employed full-time as defined by the institution, hold academic rank, carry the full scope of faculty responsibility (e.g., teaching, advisement, committee work), and receive the rights and privileges associated with full-time employment. These faculty may be tenured, tenure-track, or non-tenure track (given that there is a tenure system in the institution).

Graduates: A count of the number of students who successfully completed the program requirements and were formally awarded the degree during the reporting period.

LPN Program: A program of instruction that requires at least one year of full-time equivalent coursework generally within a high school, vocational/technical school, or community/junior college setting, the completion of which results in a diploma or certificate of completion and eligibility to apply for licensure as an LPN/VN.

MSN Program, Clinical Track: A post-licensure master's program with emphasis on advanced clinical practice, including Nurse Practitioner, Nurse Anesthetist, Nurse Midwifery, and Clinical Nurse Specialist tracks.

MSN Program, Non-clinical Track: A post-licensure master's program with non-clinical emphasis, such as Nurse Educator and Management/Leadership tracks

⁵ Sources: National Forum of State Nursing Workforce Centers and Interagency Collaborative on Nursing Statistics.

New Enrollees: A count of the admitted applicants who subsequently enrolled for the first time in the nursing program during the reporting period. This count should only include individuals who were still enrolled in a nursing course after the first two weeks of class.

Other doctoral program: Any post-licensure doctoral programs conferring degrees other than the PhD or the DNP.

Part-time faculty: Those members of the instructional, administrative, or research staff of the nursing academic unit who are employed part-time as defined by the institution, may or may not hold academic rank, carry responsibility for a specific area (e.g., teaching a single course), and may carry any number of titles (e.g., adjunct, clinical instructor). Part-time faculty may be permanent or contractual employees. These faculty members are typically not eligible for tenure.

PhD Program: A post-licensure doctoral program that culminates in the Doctorate of Philosophy in Nursing.

Post-licensure BSN Program (RN-BSN Program): A program for students who are already licensed as RNs but whose highest nursing degree is a diploma or associate's degree.

Pre-licensure BSN Program, Generic: A program of instruction to prepare registered nurses that admits students with no previous nursing education, the completion of which results in a baccalaureate degree (e.g., BA, BS, BSN.) with a major in nursing and eligibility to apply for licensure as an RN. The program requires at least four years but not more than five years of full-time equivalent college academic work within a four-year college or university.

Pre-licensure BSN Program, Second Degree: A program of instruction to prepare registered nurses that admits students with baccalaureate degrees in other disciplines and no previous nursing education and, at completion, awards a baccalaureate degree in nursing and eligibility to apply for licensure as an RN. The curriculum is designed to be completed in less time than the generic (entry-level) baccalaureate program, usually through a combination of "bridge"/transition courses.

Pre-licensure MSN Program (Entry MSN): A program of instruction that admits students with baccalaureate degrees in other disciplines and no previous nursing education. The program prepares graduates for entry into the profession, eligibility to apply for licensure as an RN, and upon completion awards a master's degree (e.g., MSN, MS, MA) in nursing. Licensed students are not included in this count.

Qualified Applicants: A count of the individuals who submitted complete applications on time and who met all institutional requirements for formal admission to the nursing program during the reporting period.

Reporting Period: The 12-month reporting period is August 1st through July 31st. Questions about the production cycle of a nursing program, such as the number of qualified applicants or graduates, should use the most recently completed one-year time frame.

Seats for New Students: A count of the total number of seats available for **newly admitted students** during the reporting period. If the program does not have a formal limit on seats for new students, the number of seats is recorded as "Unlimited."

Total student enrollment: A count of the number of students enrolled on the fall term census date. This count should include students at all points of the program's curriculum sequence, including newly enrolled and continuing students, and students in their final semester or year.