Executive Summary

Like much of the nation, Michigan’s demand for nurses is outpacing the production of nurses at the state’s community colleges and universities. Both college and university nursing programs continue to investigate and develop ways to increase the number of nurses entering the workforce, but there exist many barriers to increasing program capacities at these institutions.

Community colleges in Michigan educate about two-thirds of the state’s licensed nurses, and as such, the Michigan Legislature has requested the Michigan Community College Association to convene a workgroup comprised of representatives from the universities and the healthcare industry and report on how the nursing shortage is being addressed. This report reflects this requested effort.

Section 1 of this report offers a glimpse at what other states have done to address their own shortages of nurses, and discusses organizations in Michigan that have been created to address the same. Additionally, Section 1 includes a brief discussion of the economic impact that the nursing profession has on the state.

Section 2 of this report focuses upon the pipeline issues that nursing programs face in producing more nurses and some of the creative partnerships between colleges, universities and the healthcare industry that are intended to increase nursing numbers.
LEGISLATIVE CHARGE

P.A. 255 of 2008, Sec. 246 requires that a workgroup comprised of representatives from community colleges, state universities, and the health care community address and resolve the nursing shortage in Michigan.

The workgroup is required to submit a report to the house and senate appropriation subcommittees on community colleges, the house and senate fiscal agencies, and the Department of Labor and Economic Growth no later than December 31, 2008.

The workgroup is comprised of:

- Michigan Community College Association
- President’s Council, State Universities of Michigan
- Michigan Health and Hospital Association

INTRODUCTION

The nursing shortage has been widely documented. According to the Michigan Department of Community Health, the state is expected to have a shortage of about 7,000 RN’s by 2010, and about 18,000 by 2015. Nursing programs at community colleges and other institutions continue to turn away qualified applicants because of a lack of classroom and clinical faculty, as well as clinical infrastructure. In fact, in 2007, Michigan nursing education programs turned away more than 4,000 qualified applicants due to the programs’ lack of capacity. Making matters worse, more than half of the faculty at most Michigan nursing schools and colleges are

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1 The Nursing Agenda for Michigan: 2005-2010 – Actions to Avert a Crisis; Coalition of Michigan Organizations of Nursing, 2006
eligible to retire.\(^2\) Moreover, the senior population in Michigan is expected to grow by about 25% by 2015. Thus, healthcare needs are set to increase while the ability to deliver healthcare services is expected to decrease.

Key factors contributing to the nursing shortage include an aging nursing population, a decreasing number of advanced level nurses available to teach in nursing schools, and program costs exceeding revenues. This report provides an overview of these factors and some of the ways that Michigan’s community colleges, universities and health care industry are addressing and resolving the issue.

**STATE INITIATIVES ADDRESSING NURSING SHORTAGES**

The nursing shortage is not unique to Michigan. Nationally, several states have enacted legislation addressing the shortage of both practicing nurses and nursing educators. The initiatives have focused on several fronts, from increasing the capacity of nursing programs to developing long-term nursing workforce plans. The following examples were compiled by the American Association of Colleges of Nursing:

- In April 2006, Maryland awarded $6 million in grants through the Nurse Support Program (NSP). The legislatively-created NSP aims to expand the pool of nurses by increasing the capacity of nursing programs in two phases: first, funding for graduate nursing faculty scholarships, new nursing faculty fellowships, and state nursing scholarship grants. The second phase focuses on increasing the pipeline for nurse faculty

\(^2\) Michigan Department of Community Health
through a competitive institutional grants initiative. The state’s Health Services Cost Review Commission generates funding for this initiative by levying a 0.1 percent increase to the rate structure of all Maryland hospitals. The change generates approximately $8.8 million annually.\textsuperscript{3}

- In July 2006, the Illinois General Assembly enacted the Nurse Educator Assistance Act. This Act provides up to $5,000 in loan repayment and $10,000 in scholarship funds to nursing students enrolled in graduate nursing programs. The legislation was aimed at attracting promising students to the nursing educator role and provides opportunities for those making mid-career decisions to enter the nursing educator profession. Additionally, the law created the Illinois Center for Nursing to address recruitment, retention and nurse utilization.\textsuperscript{4}

- In 2006, the state legislature in Colorado passed two bills focused on their nurse faculty shortage. The legislation targeted both the financial barriers to graduate education and the salary differential for nursing working in academia versus practice. Labeled the Nursing Teacher Loan Forgiveness Program and the Nursing Faculty Fellowship Program, the laws allowed for up to $20,000 in loan forgiveness for student’s pursuing master’s or doctoral degrees in exchange for a 5-year commitment to teach at a Colorado nursing

\textsuperscript{3} State Legislative Initiatives to Address the Nursing Shortage, American Association of Colleges of Nursing, October 2006

\textsuperscript{4} State Legislative Initiatives to Address the Nursing Shortage, American Association of Colleges of Nursing, October 2006
school, and to assist nursing schools in filling faculty vacancies through fellowship payment of up to $10,000 per year.\textsuperscript{5}

Around the country, state level nursing organizations and institutions have worked together, launching joint nursing shortage relief strategies. These collaborations typically involve a number of stakeholders, from nursing schools, nursing centers, hospital associations, businesses and higher education agencies. In Michigan, various coalitions and task forces have taken to the issue.

**Coalition of Michigan Organizations of Nursing (COMON)**

In 2006, a coalition representing Michigan’s nursing community presented the Governor with a strategic plan for assuring a nursing workforce adequate in numbers to meet the health care needs of the state. Called the Coalition of Michigan Organizations of Nursing (COMON), the group produced short-range recommendations, mid-range recommendations, and long-range recommendations for nursing education, healthcare systems, regulatory and licensure changes, and work environment changes. The full report, *The Nursing Agenda for Michigan: 2005-2010; Actions to Avert a Crisis*, can be found online at [www.michigan.gov/mdch/ocne](http://www.michigan.gov/mdch/ocne).

**Task Force on Nursing Education**

To assist in implementing the steps suggested by the Coalition of Michigan Organizations of Nursing with respect to regulation, the Department of Community Health convened the Task Force on Nursing Education (TFNE) in 2007. Composed of representatives of nursing education programs at all levels, professional nursing practice organizations, plus representatives from the

\textsuperscript{5} \textit{Id. at 3}
Michigan State Board of Nursing and others, the TFNE makes recommendations to the Director of the Department of Community Health regarding needed changes in statutes, rules, and policies in order to enhance the education of licensed nurses and expand the capacity of nursing educations system in Michigan.

**Michigan Nursing Corp**

During the 2007 State of the State address, Gov. Jennifer Granholm unveiled the creation of a Michigan Nursing Corps to specifically confront the state’s looming critical shortage of nurses. The governor said that the Corps, will address the key obstacle to educating greater numbers of nurses – a shortage of faculty – by preparing additional nurse educators to train new nurses by the year 2010.

Since then, the initiative has been spearheaded by Michigan Chief Nurse Executive Jeanette Wrona Klemczak, the Nursing Corps supports community colleges and universities with existing, accredited baccalaureate, master’s and doctoral nursing education programs, aimed at increasing nursing faculty, thus adding new nurses into the workforce.

The framework for the Nursing Corps initiative has been outlined through Gov. Granholm’s executive budget recommendation. Appropriation for the initiative has been placed in the Department of Labor and Economic Growth’s (DLEG) budget.

The state will award grants to university and colleges, as well as hospitals that partner with nursing schools, for the purpose of accelerated nursing education programs that increase the capacity of nursing faculty and add new nurses to the workforce.
Since the creation of the MNC, the Legislature allocated $1.5 million for the initial phase of the Corps; with an additional $5 million dollars for fiscal year 2009, which began October 1, 2008.

Supporting funding of the Nursing Corp Initiative is critical to providing additional funding necessary to universities and college nursing programs for the purpose of accelerated nursing education which will increase the capacity of nursing faculty and add new nurses to the workforce.

Below are the current Michigan Nursing Corp Initiative awardees:

<table>
<thead>
<tr>
<th>No.</th>
<th>Applicant</th>
<th>Partnering Institution</th>
<th>Total Recommended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>MNC1</td>
<td>William Beaumont Hospital</td>
<td>Oakland University</td>
<td>$125,000</td>
</tr>
<tr>
<td>MNC2</td>
<td>DMC</td>
<td>Oakland Comm College</td>
<td>$300,500</td>
</tr>
<tr>
<td>MNC3</td>
<td>Northern Michigan University</td>
<td></td>
<td>$360,000</td>
</tr>
<tr>
<td>MNC4</td>
<td>Saginaw Valley State University</td>
<td>Covenant Healthcare</td>
<td>$124,920</td>
</tr>
<tr>
<td>MNC5</td>
<td>University of Detroit Mercy</td>
<td>Trinity Health</td>
<td>$258,280</td>
</tr>
<tr>
<td>MNC6</td>
<td>Wayne State University</td>
<td></td>
<td>$331,300</td>
</tr>
</tbody>
</table>

$1,500,000
NURSING: THE ECONOMIC IMPACT

According the Michigan Department for Community Health, every $1 invested in nursing programs return $162 in economic value to Michigan’s communities. Each RN in Michigan brings $75,000 of economic value annually to the community in which he or she works and resides. Overall, $10.5 billion is contributed to the state and local economies by RN’s.

The aforementioned statistics showing the economic impact of nursing reflect the most current calculations from the MDCH. According to the department, nurse salaries have risen since these calculations due to the increased demand, as have the number of nurses.

PIPELINE ISSUES: FACULTY, CLINICAL SITES AND PROGRAM COSTS

In addition to increasing the number of qualified faculty to teach at Michigan nursing schools, improving clinical site access and increasing program capacity are also vital components to how Michigan will resolve the nursing shortage.

Increasing Capacity and Student Numbers

Nursing education is expensive, both for students and for the institutions that provide the training they need to perform in the workforce. The increasing use of technology in clinical settings has increased the cost of nursing laboratories that colleges must provide to ensure students experience a work-like environment. Further, compensating Masters-trained faculty is an issue. While the aforementioned Nursing Corp initiative can fund the education of Masters degree nurses, community colleges don’t have the funding to hire these nurses to teach.

According to Charlene McPeak, Dean of Health and Human Services at Macomb Community College in Macomb, Michigan, nursing program costs exceed their revenue from
tuition, fees and state aid by about $1 million. Because of costs exceeding revenues at this level, Macomb Community College’s nursing program can admit only 120 out of more than 1,000 applicants each year.

Macomb Community College has looked at expanding its nursing program via capital improvement projects aimed at providing larger classrooms that could accommodate more students, as well as increasing simulation capacity in order to provide students the chance at practicing clinical skills in a state-of-the-art educational facility. To date, Macomb’s nursing program has not found the funding to expand in this manner.

In 2002 when the nursing shortage crisis was becoming apparent, Bay College, located in Escanaba, Michigan, requested and was awarded a temporary increase in the number of seats in the nursing program. The increase added an additional ten seats in the practical nurse portion (from 70 to 80) and ten seats in the A.D.N. completion portion (from 50 to 60). This temporary increase was approved for the 2002 and 2003 academic years. Bay then requested to extend this temporary increase to the 2004 academic year and was approved, with the understanding that additional increases must be permanent increases.

Late in 2004 Bay partnered with MIWorks! to write for and received the Regional Skills Alliance seed grant to permanently increase the number of seats in the nursing program. Concurrently the nursing program was experiencing a bottleneck with students progressing to the A.D.N. portion at a higher rate than ever before. To remedy this situation Bay provided an outreach program with a portion of the RSA seed money, and admitted 20 LPN’s in the 2005/6 academic year to complete their A.D.N. by December of 2006. During this time period Bay de Noc Community College received a land donation in Dickinson County for the sole purpose of building a college. It was at this time a decision was made to bring a full-time permanent
nursing program to Dickinson County. Proposals were generated and approved to add 20 permanent full time seats in the practical nurse portion and 20 in the A.D.N. completion program at the Dickinson campus beginning in 2007.

Table Illustrating Program Increases – Bay College, Escanaba, Michigan

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>PN Seats Added</th>
<th>A.D.N. Completion Seats Added</th>
<th>Total perYear</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002/3</td>
<td>10 temporary</td>
<td>10 temporary</td>
<td>20 temporary</td>
</tr>
<tr>
<td>2003/4</td>
<td>10 temporary</td>
<td>10 temporary</td>
<td>20 temporary</td>
</tr>
<tr>
<td>2004/5</td>
<td>10 temporary</td>
<td>10 temporary</td>
<td>20 temporary</td>
</tr>
<tr>
<td>2005/6</td>
<td>10 temporary</td>
<td>10 temporary</td>
<td>10 temporary</td>
</tr>
<tr>
<td>2006/7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007/8</td>
<td>20 permanent-Dickinson Campus</td>
<td>20 permanent Dickinson Campus</td>
<td>40 permanent Dickinson Campus</td>
</tr>
</tbody>
</table>

During the time of program expansions, Bay de Noc Community College submitted an application for initial accreditation with the National League for Nursing Accreditation, Inc (NLNAC). The site visit for the initial accreditation was in October of 2004, and Bay’s nursing program received full approval for accreditation.

Along with the temporary and permanent increase in program seats, the College made the commitment to add the necessary full time faculty to accommodate the program expansions. The College, Michigan Board of Nursing, NLNAC, and MIWorks! have been very
accommodating in supporting Bay College to fulfill the needs of future shortages of health care
workers in the State of Michigan. Recently, Bay had a request to bring an outreach A.D.N.
completion program to the Newberry area, and are discussing the possibility of doing this. The
biggest drawback to another program expansion is the lack of available clinical facilities for
placement in specialty areas, such as obstetrics and medical/surgical.

Addressing Clinical Education Needs - Human Patient Simulation

The Human Patient Simulator is an excellent learning tool for many health programs,
including training in anesthesia, respiratory, nursing and critical care. Nursing programs as well
as other health care programs have found that the use of human patient simulators has increased
student’s critical thinking abilities. Human Patient simulators offer students a realistic simulated
patient experience not found in static mannequins. Simulated experiences allow students to
practice in a safe and controlled environment in which mistakes can be made and corrected
without any harm to a live person. A variety of simulated health scenarios may be selected by
the course instructor that provides students with experiences that may not be readily available in
clinical agencies. The course instructor can set up a simulation that addresses common health
problems as well as emergency situations. With specific scenarios, the instructor can construct a
set of specific learning objectives that fit the overall course objectives and that test the student’s
knowledge of disease processes and nursing interventions. Simulators are available in adult,
child and infant models and are programmed to address health issues relevant to the age of the
simulated patient.

Practice on human patient simulators has helped students to perform more effectively in
clinical situations. In one case, a student had practiced an emergency code drill in the Human
Patient Simulator Lab. The very next day, the student was assigned to the Emergency Department of a busy urban hospital. The patient for whom she was caring suffered a cardiac arrest. The student immediately began life saving measures and the patient survived. The staff in the Emergency Department commented that they had never seen a Nursing student react so promptly and with such confidence and skill as this student had. The student credited her practice on the Human Patient Simulator as the reason that she was able to respond so effectively.

Clinical simulation can be used in lieu of certain clinical requirements for nursing education, especially if the clinical experiences are not readily available. The financial investment associated with this technology is substantial – a Human Patient Simulator costs about $250,000. At Monroe County Community College in Monroe, the nursing program hopes to acquire a simulator in the near future.

COMMUNITY COLLEGE, UNIVERSITY AND THE HEALTHCARE INDUSTRY-PARTNERSHIPS

Across the state, community colleges, four-year universities and hospitals have forged partnerships to increase the number of nurses in the Michigan workforce. For instance, Lake Superior State University School of Nursing has a direct partnership with Bay de Noc Community College and North Central Michigan Community College, and continues to expand these partnership opportunities to others through increased distance learning initiatives as well. Below are some examples of such partnerships, addressing nursing education pipeline issues such as clinical placement and nursing student attrition.
Oakland Community College / Detroit Medical Center Nursing Partnership

In April, 2008, an agreement was reached between the Detroit Medical Center (DMC) system and Oakland Community College that stipulated that the DMC would provide clinical placements in all areas of Oakland Community College’s nursing program, as well as two full-time clinical faculty. The agreement called for Oakland Community College to admit 50 nursing students. The program possesses the same curriculum as the college’s ADN program, with the same amount of contact and credit hours required.

In May, 2008, a 15-month accelerated track was developed, and 60 students were admitted by Oakland Community College. Students were selected from the same pool as the ADN program, and will graduate in August, 2009. As of November, 2008, the retention rate is at 100 percent – no student has left the program.

The OCC/DMC model provides a consistent, supportive and interactive model that allows the student nurse transition into a professional nurse as he or she progresses through the clinical training and education. This collaboration allows for nursing students to gain clinical experience at one of the largest health systems in Michigan, an experience that will allow them to encounter a diverse group of sometimes medically complex patients.

ACE PASSPORT and ACE PLACEMENT – Southeastern Michigan

ACE PASSPORT and ACE PLACEMENT are unique regional collaborations of diverse organizations that are all interested in enhancing the efficiency and effectiveness of clinical
placements for students studying to become part of Michigan’s healthcare workforce. These systems have been launched initially with nursing students, but are intended to be used for other healthcare professions’ students as well.

ACE PASSPORT, launched June, 2008, is a Web-based learning system which enables healthcare students to acquire knowledge about HIPAA, OSHA and Blood Borne Pathogens, all of which are essential, prior to their entering the clinical environment for rotations and which are required by regulatory agencies. The system also tracks whether the student has completed certain other requirements prior to the start of their rotations, such as inoculations, background checks, etc. Currently, more than 2,500 students are registered in the system with an anticipated year-end target of 3,000 students. Under ACE PASSPORT, the student only needs to have their knowledge of these subjects tested on an annual basis – and this is accepted at all participating providers.

ACE PLACEMENT, launched in July, 2008, is a Web-based clearing house for clinical placements for healthcare students. This system eases the administrative burden between educational institutions and providers of finding, requesting, modifying and accepting clinical placements for students. This reduces faculty and clinical coordinator staff time and has proved to utilize existing clinical placements more fully and create new opportunities for placements. Currently, the system has over 1,400 placements for nursing students in Southeastern Michigan for Fall 08 and Winter 09 semesters. All of this will assist in growing Michigan’s healthcare workforce to meet our state’s needs in the future.
Nurse Preceptor Initiative – East Central Michigan

The Nurse Preceptor Initiative was created to address and reduce nurse vacancy rates and improve the retention rates of newly hired nurses. Funding from a federal grant enabled the East Central Michigan Healthcare Foundation (ECMHF) to establish the program, which trains existing nursing staff to become mentors to new nurses (on staff for 3 years or less). Targeted at reducing nursing turnover rates, the initiative is using the $800,000 award over a three-year period to train the mentors, or “preceptors.”

The program will train nurses from among 14 counties in east central Michigan. Under the grant award terms, 430 nurses will be trained as preceptors after this initial three-year period. An additional 24 public health nurses will be trained as well, and nursing students will be provided the opportunity to “job shadow” with experienced nursing staff. The ECMHF will collect evaluation forms from each participant and the number of those trained – as well as the vacancy and turnover rates in participating hospitals to follow any improvements.

Nursing Programs at the University Level

University of Michigan School Of Nursing is the largest nursing program in the state with over 650 baccalaureate students [generic, RN studies and second career]; and the largest total enrollment [just under 1000 students]; further-UM SON has the largest PhD program in the state preparing future faculty [currently 78 PhD students and several post doctoral fellows].

UM-SON is also being highlighted by Hugh Downs' National Public Television programming on medical issues regarding what they are doing for the nurse shortage and the
faculty shortages. In order to enhance the clinical preparedness and leadership of baccalaureate
grads, they have embarked on an Initiative for Excellence in Clinical Education with the UMHS
that will provide the enhanced training on evidence based practice, practice leadership, and
quality and safety issues so important in meeting current and future needs of health care. As
well, their PhD program also promotes teaching emphasis with our partnership with Rackham
and CRLT so that their PhD graduates have experience and training in higher education teaching
that will support their faculty roles upon graduation. Because of their large research program,
UM-SOIN also are the leader in the state in terms of advancing the knowledge base to support
better practices in health care.

Wayne State University College of Nursing recently added Doctorate of Nursing Practice
(DNP) program, which emphasizes the development of the student’s capacity to impact the
clinical setting as leaders and educators and to utilize clinical research to improve and transform
health care. Along with its long-standing PhD program, WSU CON has long been a leader in
preparing nurse educators and leaders in this state, in order to alleviate the bottleneck and train
more nurse faculty. In an effort to offset state cutbacks and the increasing demand by students
for entry into the Wayne State University College of Nursing, the school began collaborating
with health care partners to support the College of Nursing’s efforts to increase the number of
students in entering classes. This effort has resulted in meaningful partnerships with area
healthcare leaders that understand the importance of educating additional nurses, all of which
have a vested interest in preparing the most highly qualified nursing professionals. These partner
institutions include the Detroit Medical Center, William Beaumont Hospitals, Henry Ford Health
System and St. John’s Health System. These resources offer every health care specialty, providing many opportunities for nursing students to learn and grow in their profession.

CONCLUSION

In March, 2007, the Michigan Community College Association submitted to the Legislature a report concerning the expansion of nursing programs at community colleges throughout the state. A workgroup was formed consisting of statewide nursing, healthcare, education and regulatory organizations to analyze the factors inhibiting the ability of community colleges to expand their nursing programs. Four critical factors were identified:

1) High cost of offering nursing programs
2) Availability of qualified nursing faculty
3) Availability of clinical sites for clinical training
4) Attrition of students who are admitted but fail to graduate from these nursing programs

To address these critical factors, the workgroup recommended various courses of action, including the expansion of Associate Degree nursing programs through mitigating the barriers addressed above. This report showcases a few of the ways that community colleges are doing just that, as well as the efforts by the universities and healthcare industries to increase the number of nurses in Michigan’s workforce. All three groups are essential in the production of nurses necessary to remedy the current shortage crisis.

While the four critical factors remain substantial barriers to the production of qualified nurses, our colleges, universities and health care industry groups continue to try and develop ways to mitigate them. The demand for nurses will only increase, and future discussion and
consideration of all the issues affecting the ability for our nursing colleges and healthcare industry to meet this demand are warranted. The MCCA and its members, in collaboration with the university and healthcare industry partners, appreciate the opportunity to submit this report – and look forward to continuing the effort to resolve this crisis.