leading the way to health care access

community partnerships

future nursing workforce

primary care

health information technology

health care disparities
Our vision is to serve as an academic center of nursing excellence for healthy people and healthy communities.
The College of Nursing is making a difference in the health of our community, our state, our country, and around the world. While the U.S. and Michigan continue to experience health care access challenges, the college remains committed to creating a highly trained, diverse nursing workforce that will meet individual and family health needs, as well as develop new knowledge that is essential to their care. The College of Nursing has identified ways to improve health care access by:

- Investigating the causes and developing solutions for disparate health status among diverse population groups.
- Expanded primary care provided by nurse practitioners.
- Nursing workforce development.
- Advances in health information technology.
- Broadening partnerships among health care educators, clinicians and medically underserved communities.

The nursing profession has a critical opportunity to strengthen the health care system and improve both health care access and quality. This 2010 report discusses some of the college's initiatives that benefit our region and serve as a model for the nursing profession. I welcome your comments.

Barbara K. Redman, PhD, RN, MBE, FAAN
Dean and Professor
College of Nursing
Convenient access to fresh produce and places to exercise are important factors in reducing the incidence of obesity, diabetes and cardiovascular disease.

Wayne State University (top) operates a farmers market during the summer and fall to encourage students and other city residents to buy locally-grown produce.

Detroit’s new RiverWalk (bottom) provides walking and cycling paths along the Detroit River.
The incidence of some chronic health conditions and diseases is significantly higher among some populations than others. These health disparities result from a combination of factors but particularly a lack of access to health services, whether due to a shortage of nearby health care providers or the inability to afford health insurance. In addition, many lack information about the importance of preventive care and healthy lifestyles, as well as the skills necessary for effective self-care for chronic conditions. Nurses have the knowledge base and ongoing close contact with patients to investigate and develop strategies to improve health status despite differences in patients’ education, income, race, and ethnicity.

With its mission to be a center of nursing excellence for healthy people and communities, the College of Nursing believes that everyone should have a fair opportunity to attain good health. As a result, the College focuses its research on the causes and potential solutions to health disparities common among Detroiters. Detroit is part of the southeastern Michigan region, which has a racially and ethnically diverse population, as well as a wide range of income levels. The city has a high rate of unemployment and many impoverished residents. While many Detroit neighborhoods have a shortage of health care professionals, the city is also the headquarters for several large, nationally-known tertiary health care systems. The College has partnerships with these institutions along with many other health organizations to improve health care in Detroit, Michigan, and the country.

Several College of Nursing faculty members have undertaken successful research projects to identify and test ways to help those in our communities both understand and manage their medical conditions. Their research has demonstrated that with appropriate information and coaching, patients can learn to manage their conditions, even if they have a low or moderate literacy level and a racial background that puts them at higher risk for some health conditions.
Several research initiatives have focused on African Americans with hypertension and cardiovascular disease, conditions which are more common among this population. Nancy T. Artinian, PhD, RN, FAAN, professor and associate dean for research, conducted an NIH/NINR-funded trial of a home-based blood pressure telemonitoring system for African American patients, who are more likely to develop high blood pressure at an earlier age and subsequently develop cardiovascular disease.

Patients who participated in the study received blood pressure cuffs and were shown how to monitor their blood pressure at home. These readings were transmitted over a phone line to a data center that provided immediate results to the patients, as well as to clinicians for interpretation and follow-up when necessary. Through this blood pressure telemonitoring trial, Dr. Artinian demonstrated that hypertensive patients can help manage their condition by taking their own blood pressure, thereby reducing trips to a health care provider’s office, and benefitting from immediate, regular results to help them reduce their risk for cardiovascular disease and stroke.

In an NIH/NIEHS-funded study, Dr. Artinian tested an educational and counseling intervention for African American patients enrolled in cardiac rehabilitation. Patients chose support partners (spouses, relatives or friends), who also received information and guidance about heart disease and lifestyle modifications to reduce risk factors. The preliminary findings indicated that patients with stronger social support networks had better health behaviors, such as healthier diets and more physical activity, and increased positive results from cardiac rehabilitation.

Dr. Artinian’s current study, funded by the Wayne State University Cardiovascular Research Institute, targets issues surrounding poor nutrition and excess body weight. Unhealthy eating is a modifiable risk factor for cardiovascular disease. In Detroit, heart disease accounts for 31.3 percent of reported deaths and represents 21,862 years lost to premature death. Dr. Artinian, along with principal investigators Dr. Julie Gleason-Comstock and Dr. Cathy Jen, are examining the feasibility of using a kiosk to deliver a healthful eating intervention in a primary care clinic operated by the Detroit Department of Health and Wellness Promotion (DHWP), which serves mostly uninsured and underinsured adults in the city of Detroit.
Effective Health Materials Lead to Better Outcomes

In order to achieve effective health care, patients must be able to understand the written materials provided to them regarding their condition. Feleta Wilson, PhD, associate professor and Fulbright Scholar, investigated whether educational materials provided to patients at a Detroit hospital-based anticoagulation clinic were appropriate for their literacy level. With support from a DMC Faculty Scholar Research Award, she discovered that the mean reading level of patients was between the seventh and eighth grades, while the written material was three to four grades higher.

In addition, Dr. Wilson found that some older patients had cognitive issues that hampered their understanding of the educational information they received. As a result, many patients did not understand the dietary restrictions required for long-term anticoagulant use and therefore were not complying with them—effectively reducing or blocking the benefit of the medication. She is currently testing two alternative educational approaches for this group of patients—individual counseling by a nurse and an easy-to-read pamphlet about dietary requirements while taking their medication.

Since nurses are often the health care professionals who educate patients about their condition and ongoing care, they are in an ideal position to perceive the individual and systemic barriers to better health outcomes and to develop remedies to overcome them. Nurse researchers have demonstrated that some health disparities can be reduced through appropriate educational materials and supportive programs for patients.

Feleta Wilson believes that health literacy is a critical field for investigation.

“Because patients have poor health outcomes when they lack health literacy skills, their cost of health care is somewhere around $77 billion a year [as they are often readmitted to hospitals] due to lack of understanding. That population, because they are embarrassed by their condition, tends to seek health care later, rather than preventive care.”

– Dr. Wilson
How can nurses help to expand much-needed primary care?

Too many individuals lack accessible primary care due to an insufficient number of health care professionals practicing in urban and rural primary care settings across the country. However, the good news is that the U.S. health care workforce is expanding and Michigan is part of this effort to meet the population’s needs. The education and health sectors are growing and as our economy improves, the demand for health care professionals will continue to expand.

Nurse practitioners already fulfill a major role in health care delivery and positive health outcomes. They provide primary and specialty care for culturally-diverse individuals, families, groups, and communities within a variety of health care settings. Numerous studies have repeatedly demonstrated that nurse practitioners provide care that is equal to or, in some cases, higher quality than that provided by physicians. Nurse practitioners’ advanced education prepares them to address the multifaceted issues that influence their patients’ health.

Wayne State University College of Nursing Initiatives

A recent survey of Advanced Practice Registered Nurses (APRN) (Michigan Center for Nursing, 2010) reported that only 39 percent of the APRNs in Michigan currently practice in primary care settings (family practice, internal medicine, and pediatrics) and only nine percent practice in women’s health. Not only are more APRNs needed in primary care settings, more are needed overall to fulfill the demand of expanding health care needs.

In response to the acute need for additional nurse practitioners, the College of Nursing has been awarded grants from the federal Health Resources and Services Administration (HRSA) that enable students to attend school full-time. Through these grants, students are able to complete their Doctorate of Nursing Practice and Master of Nursing degrees on an accelerated timetable, enabling them to fill leadership roles in the health care sphere sooner.

In addition to providing graduate education for advanced practice nurses, the College of Nursing emphasizes nurse-managed primary care through the Campus Health Center. The Center was established through formation of a nonprofit
Wayne State University student Hadi El Husseini receives a vaccination from Mary White, RN, MSN, APN-BC, a clinical instructor at the College of Nursing and director of the Campus Health Service (above). The health service provides primary care and travel medicine for students. El Husseini will travel to Ghana with other Wayne State students participating in the university’s Forum on Contemporary Issues in Society.

The nurse-managed Campus Health Center is staffed by nurse practitioners who provide a range of primary care services. Karen Faricy, FNP-BC, advises a student on medication (below).

I come here because they’re really knowledgeable and it’s convenient. I’ve had women’s issues, sinus infections and counseling for a chronic illness. I can really talk to the nurse practitioners about women’s issues.

Danielle O’Mara
pharmacy student

39% of nurse practitioners in Michigan work in primary care.
How will health information technology reshape health care?

Using computer technology to create an electronic health record and to facilitate online communication between patients, internet health information sources and health care professionals are just a few of the ways that health information technology (HIT) is changing patient/provider interaction and health care delivery.

Lorraine Buis, PhD, assistant professor at the College of Nursing, is investigating the potential role of communication technologies in health care. Her research centers on the use of the Internet and mobile devices, including cell phones, for chronic disease management. Dr. Buis addresses some of these issues in an interview below:

Q: How is information technology influencing health care?

Dr. Buis: The role of information technology is, and has been, expanding rapidly within the health care arena. On a systems level, HIT is being used within health care to manage and coordinate care through electronic health records, clinical decision support, electronic prescribing, computerized order entry, electronic medication administration records, or some combination of these. On an individual level, people have increasingly turned to information technologies to assist in the day-to-day management of their health and the health of loved ones through web-based behavior change and health promotion interventions, electronic self-monitoring tools for logging diet and physical activity, retrieval of health-related information, personal health records, and online support communities. These technologies can be very empowering to individuals and may help people to take control of the management of their health.

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Q **How exactly can people use HIT to help manage their health?**

**Dr. Buis:** Many of the HIT developments that are commonly used today have been designed to make things more convenient for health care consumers. For example, the use of the Internet for secured communications between patients and providers for issues such as appointment scheduling and reminders, questions, and test results, is more and more common. Also, comprehensive medical information from reputable sources such as the National Institutes of Health and the Mayo Clinic is available online and can be accessed in the convenience of your own home 24 hours a day, 7 days a week.

Q **What is the focus of your research about the future of health information technology?**

**Dr. Buis:** The area that I’m particularly interested in, which happens to be the realm in which I expect to see the biggest changes in HIT for health care consumers, is in the world of mobile devices, which include things like cell phones, iPads, tablet PCs, and laptops. These technologies are contributing to the democratization of health care and helping to bring health information and health promotion tools into the hands of the consumer.

Q **What do you mean by the democratization of health care?**

**Dr. Buis:** The penetration of these technologies is extremely pervasive in this country. While not totally ubiquitous, it is estimated that approximately 82 percent of adult Americans have access to a cell phone of whom 72 percent send and receive text messages. Furthermore, cell phone penetration is very high in low income, low education, and minority groups, which are communities of individuals who traditionally have been plagued by health disparities in this country. Through the development of interventions that are low-cost or free to the consumer, we have the ability to push health information and health promotion tools into the hands of those individuals who wish to use them. This facet of health information technology has great implications for the city of Detroit as we have extreme examples of health disparities in southeast Michigan.

Q **I’ve heard patients complain that their health care providers now interact with a computer rather than with them. Does health information technology risk depersonalizing medical care?**

**Dr. Buis:** As with any new innovation, health information technologies run the risk of being disruptive to the communities in which they are used. Without a doubt, these innovations are here to stay. Not only do they increase access and coordination of care, but they can improve outcomes as well. As such, it is imperative that we train our health care providers to utilize these technologies in a way that complements clinical encounters, not disrupts them. On the other hand, it is also important to recognize that sometimes health care work flow processes need to change when HIT is introduced. These systems aren’t digitizing the old ways of doing business in health care. Rather, they are changing the ways in which health care is conducted.

Dr. Buis currently has funding from the Agency for Healthcare Research and Quality (AHRQ) (HR21 HS019092-01) to conduct a study titled *Text Messaging to Improve Hypertension Medication Adherence in African Americans*. The purpose of this study is to develop and test a text messaging system that will remind Detroit-area African Americans with uncontrolled hypertension to take their blood pressure medication.
The nursing workforce in Michigan and the entire nation needs to expand as our population ages and more individuals acquire health insurance. Additional health care professionals will be needed to care for elderly patients who typically have longer hospital stays and require more outpatient, emergency and home health visits. In Michigan, 65 of 83 counties are designated as medically underserved and the state lacks sufficient nurse practitioners to meet current needs. Advanced degrees are increasingly necessary to keep pace with progress in health care and nursing.

Despite the clear necessity to expand the nursing workforce, nursing programs in Michigan and across the country turn away qualified applicants due to a shortage of faculty and clinical training sites. According to the American Association of Colleges of Nursing (AACN), the faculty shortage results from a limited pool of nurses with doctorates and noncompetitive salaries in relation to practice positions. In addition, many MSN and PhD students preparing to become nursing faculty are delayed in completing their degrees because they attend classes only part-time while they work.

The College of Nursing is actively preparing the nursing workforce required now and in the future, especially in medically underserved areas, through several special programs:

**Distance Learning Programs**

The College began its innovative distance learning programs in 2006 to enable nurses living in medically underserved areas or without nearby universities to pursue advanced practice graduate education in several specialty fields.

“Distance learning allows nurses to continue working and living in their home areas while attending classes at the College of Nursing. Outstate students participate via video conference which enables students at multiple locations to interact with each other and their instructor synchronously,” explains Linda A. Lewandowski, PhD, RN, assistant dean, Family, Community, and Mental Health. The College of Nursing offers the only distance learning programs in Michigan for Pediatric Nurse Practitioner and Neonatal Nurse Practitioner, as well as for Psychiatric-Mental Health Nurse Practitioner.

The distance outreach programs are funded through Advanced Nurse Education Grants from the federal Health Resources and Services Administration. Distance learning...
Accelerating Advanced Degree Completion

The College of Nursing has attained state and federal grants so that master’s degree and doctoral students can accelerate completion of their degrees by attending classes full-time, enabling them to teach or practice in an advanced capacity more quickly than in a traditional program. The College is a leading participant in the Michigan Nursing Corps program to increase nursing faculty for colleges and universities in Michigan. Beginning in 2007, former Michigan Gov. Jennifer Granholm and the Michigan Legislature invested more than $6.5 million in nursing education to ensure essential health services in the future. The Michigan Nursing Corps was created to advance the education of nursing faculty through grants for accelerated master’s and PhD programs for students who commit to teach in a Michigan nursing program after graduation. Wayne State University College of Nursing received more than $2.3 million to expand nursing faculty through the Michigan Nursing Corps. These funds enable students to move more rapidly into teaching positions, increasing the pool of future nurses in the state.

Doctorate of Nursing Practice (DNP)

The College of Nursing established a Doctorate of Nursing Practice (DNP) in 2008 to prepare nurses as leaders and educators who will impact the clinical setting and use clinical research to improve health care. The program prepares clinically-focused advanced practice nurses to address practice issues in a scholarly way, adopt a broad system perspective on health promotion and risk reduction, participate in the evaluation of health care outcomes, and address health disparities in an urban environment.

Nursing Research

The College of Nursing was a pioneer in establishing the Center for Health Research in 1968. The Center provides grant writing resources and statistical support for graduate students and faculty members engaged in research to enhance clinical nursing practice and health care access. Such research serves to develop knowledge to: build the scientific foundation for clinical practice, prevent disease and disability, manage and eliminate symptoms caused by illness, and enhance end-of-life and palliative care. Many of the college’s research projects focus on reducing health disparities and other ways to improve health in urban communities, reflecting the college’s mission.

Area Health Education Center (AHEC)

In 2010 Wayne State University was awarded a two-year, $900,000 grant from the Health Resources and Services Administration to create a state-wide Area Health Education Center that will improve access to and the quality of primary care for Michigan residents, as well as reduce health disparities in underserved areas. The College of Nursing and the Wayne State University School of Medicine are planning and implementing the program which will have five regional centers in Michigan. The Michigan Area Health Education Center will strengthen the recruitment of underrepresented and disadvantaged students to the health professions and address health workforce shortages.

In 2007, 4,000 qualified nursing applicants were unable to enter nursing programs in Michigan due to a lack of space.
How do community partnerships help advance health care access and quality?

Maintaining good health and managing chronic conditions requires accessible health care provided by health care professionals who understand their patients’ health needs and practices, including their racial, ethnic, religious, and economic backgrounds. It is essential that nursing students learn how to care for patients in a range of clinical settings, providing culturally-sensitive care for individuals from diverse backgrounds with a wide range of medical needs. The College of Nursing's clinical affiliations with community agencies provide a broad spectrum of clinical experience for nursing students.

The college is a partner with dozens of public and private agencies, schools and clinics throughout metropolitan Detroit and beyond. One of these is the Super All Year Detroit (S.A.Y.) Clinic in Highland Park, a small city within the borders of Detroit. The clinic was founded in 2008 by author and sports columnist Mitch Albom in conjunction with Detroit Rescue Mission Ministries. Today the S.A.Y. Clinic provides primary and dental care for uninsured women and children, some of whom live in homeless shelters. Patients include African American, Caucasian, Bangladeshi, and Indian women.

Helping Provide Care for the Uninsured

According to Lenae Perry, S.A.Y.'s coordinator for students and volunteers, the clinic strives to help patients “reshape how they see themselves and redefine what is healthy.” Undergraduate students from the College of Nursing assist with health education and screening programs. Perry said that students transformed a weight loss program into a dance class to provide exercise. They also helped conduct a hypertension screening clinic and lectures about nutrition.

Another urban clinical partner is Detroit Community Health Connection, Inc. (DCHC), a nonprofit corporation that provides primary care and dental services for children and adults at four Detroit-area locations. Detroit Community Health Connection is dedicated to accessible, affordable and quality care regardless of the medical, social or economic circumstances of its patients. DCHC conducts many outreach programs to encourage individuals to see a health care professional and take charge of their health. The College of Nursing has placed preceptors at DCHC sites and has helped the organization obtain needed equipment. Feleta Wilson, PhD, associate professor and Fulbright Scholar, is vice chair of DCHC.

College of Nursing students also have the opportunity to work with rural populations, including Native Americans. The college has an ongoing partnership with a clinic managed by the Little Traverse Bands of the Odawa (known in English as the Ottawa Indians) in Petoskey, located in northern Michigan. Students from the College of Nursing's Second Career, Second Degree program can choose the clinic as an alternative clinical setting for three extended weekends. They learn about Native American culture and history from their hosts while engaging in service learning projects to promote diabetic education and improved nutrition, such as developing healthier versions of Native American recipes.
A community resident's blood is checked at a Detroit Community Health Connection health fair (top). Nursing students conduct a health program for patients of the S.A.Y. Clinic (middle) and help spruce up the Clinic (bottom).
WAYNE STATE UNIVERSITY
COLLEGE OF NURSING

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- Bachelor of Science in Nursing

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