

# **NURSING INFORMATICS**

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## **Background**

The University of Maryland School of Nursing pioneered the specialty of Nursing Informatics (NI) by creating the first NI master's program in the world in 1989. The NI specialty track remains the global market leader in the field as measured by the number of newly enrolled students annually and by national reputation. Nursing informatics is a combination of nursing science, information science/information management, and computer science. A Web-based Post Master's Certificate was first offered in the fall of 2001. Blended programs allow students to earn a Masters in Nursing Informatics and a certificate in Administration, Managed Care, or Health Policy.

## **Students**

The Nursing Informatics specialty track attracts large numbers of students including those new to informatics and those practicing in informatics who are interested in bolstering their practice by a rigorous program of study. Currently there are approximately 100 students enrolled in the Master's program, about a dozen students working on the Post Master's certificate, and approximately six students working on blended tracks. Army, Navy, and Air Force nurses assigned to full time duty under instruction bring students from around the world into the program.

## **Employment**

A small number of enrolled students are currently employed in the field of Nursing Informatics. Most graduates of the specialty track find employment in the field within six months of graduation. Nursing Informatics graduates are employed by hospital organizations, vendors, consulting organizations, and federal and state agencies. Positions informatics nurse specialists take include system administrator for clinical information systems, implementation trainer, research and development, junior member of a consulting team, and policy analyst. The demand for informatics nurse specialists will increase with the advent of HIPAA required security officers.

## **Future Projections**

There are many indicators of steady and increasing demand for the graduates. The demand exists across a very wide range of settings including private corporations, healthcare organizations, and state and federal agencies.

The Nursing Informatics specialty track plans to offer the entire Master's program on-line, which will increase the accessibility of Informatics education for distance students. Students have requested a blend of Nursing Informatics with Education, which is now under development. In the future, an executive level Informatics track may be offered.

# **ADMINISTRATION**

## **ADMINISTRATION**

### **Background**

The graduate program in Administration at the UMB School of Nursing is alive and well, and still going strong after more than 3 decades of consistent and continuous service. The program is ranked among the top five in administration by *US News and World Report*, which means that it is the highest nationally ranked program in the School of Nursing. This program currently has three tracks. One is the traditional focus in administration; another has an emphasis on managed care; and the third option is a dual degree effort (MS/MBA). These tracks were designed and developed to meet both healthcare trends and student needs. In addition, students with an extended time frame may pursue "combo"(combination) programs of study with another focus in the school. The most popular one of these to date is the Administration/Informatics offering.

### **Students**

The majority of students in this specialty come from the Baltimore-Washington area. However, a number of the adult learners also come from surrounding regions such as Pennsylvania, Delaware, and northern Virginia. This program is especially fortunate to have a relatively large number of military officers attend each semester and these individuals come from across the nation. An international flavor has also been evident in recent years as students from Taiwan and South Korea have enrolled.

### **Employment**

Graduates of the program (that is, all 13 tracks) are readily employed. Many assume middle-management positions in a variety of healthcare institutions. Others assume administrative (executive) positions in community hospitals, academic health centers, and government agencies.

A small sampling of interesting and "famous" alumni include:

The first Navy Nurse Corps officer to reach Admiral rank;

The benefactress who gave the school a million \$ endowment;

A nurse entrepreneur who established a highly successful travel health firm;

First nurse to direct a Case Management program in an area hospital; and

A USPHS officer who directs the web site management project for CMS.

### **Future Projections**

The need for this program - both today and tomorrow - is self evident given the turbulent times in society in general, and the healthcare arena particularly. Characteristics that have molded the program include excellent students, dedicated and experienced faculty, and a curriculum that is

realistic, relevant, and creative. The Administration offering is an "out of the box" example of leadership in action. In teaching-learning terminology this program is a stellar model of theory-into-practice. These latter comments are backed up by student evaluations, community agency leaders, and successful graduates.

Future plans include rigorous marketing efforts in coordination with the school's Office of Admissions and Student Affairs. This pursuit is already under way and should yield some interesting numbers.

# **NURSING HEALTH POLICY**

## **NURSING HEALTH POLICY**

### **Background**

The nursing health policy specialty was established in 1980 as the nation's first program in nursing health policy. Dr. Jessie Scott played a key role in its establishment. The specialty prepares nurses to assume leadership roles in policy making and policy analysis in the public and private sectors. In addition to graduate nursing courses which emphasize the development of leadership and research skills, students are grounded in policy and political science and health economics. Students in the specialty take a subset of their courses at the University of Maryland Baltimore County (UMBC) campus in the Policy Science Program and receive an Advanced Certificate in Health Policy from the UMBC Policy Sciences Program in addition to the School of Nursing Certificate in Health Policy that is awarded to students at graduation. During their UMBC course work, students have opportunities to learn and network with a multidisciplinary mix of UMBC masters and doctoral level policy sciences students who have a range of experience from entry to senior level in policy related positions in public and private sector agencies. A real strength for the specialty is the close proximity of the School of Nursing to the state's capital in Annapolis, Maryland, the nation's capital in Washington DC, and the many government agencies and private sector policy shops, associations and lobbying groups key to shaping state and national health care policy with which our students get first hand knowledge via field trips and capstone internships.

### **Students**

Students who enroll in the specialty are nurses who want to move beyond the individual patient care setting and have a broader area of influence, nurses who want to move away from a clinical role, and those who have an attraction to the political scene. Several students developed their interest in health policy when they took the core graduate course NURS 606 Systems in Health Care Delivery and switched from another specialty track into the health policy specialty track.

### **Employment**

To date 115 students have graduated from the specialty. In the last ten years, twelve nurses became Presidential Management Interns, selected through national competition and almost 20 have continued in doctoral studies and moved into research areas.

Graduates have worked in senior policy positions within the U.S. Department of Health and Human Services, many with the Center for Medicare and Medicaid Services (CMS) in quality standards, health promotion and disease prevention, legislative liaison, fraud and abuse and provider credentialing, research and demonstration projects, to mention a few. One graduate was recently detailed to Secretary Thompson's staff. Another has worked in the CDC Washington office on smoking cessation programs and another has worked with the Administration on Aging and another on Women's Health Issues. Some have served in the legislative area within congressional offices and on health subcommittees. One will soon start to work with the health staff in Senator Kennedy's office. One graduate has been health staff for a Maryland State Senator, and another has

headed the office of legislative liaison within the State Department of Health and Mental Hygiene. One has headed a state nurses association and another is a Navy Commander and Deputy Assistant in the Navy's office for Homeland Security. Some have worked with private insurance companies in a technology assessment role and others have become lobbyists for health related special interest groups.

### **Future Projections**

The need for nurses prepared in this specialty will only increase well beyond what we are able to produce. Nurses make a difference in policy outcomes when they are in policy related roles. They are in demand with employers who seek the added value that their in-depth insight and first-hand experience with grappling with the strengths and deficiencies of the health care delivery system brings to their policy expertise.

Since 1989, we have had a dozen nurses become Presidential Management Interns, selected through national competition and almost 20 continue in doctoral studies and move into research areas.



**FAMILY  
NURSE PRACTITIONER**

## **FAMILY NURSE PRACTITIONER**

### **Background and Plan of Study**

The 46 credit FNP specialty track has been offered for the previous five academic years. The specialty is presented over a four semester sequence, taken full-time. Part time entry is possible, with completion time varying from 2 to 4 years, depending on entry point and progression of required coursework. A 36 credit post-master's certificate track is available to those who hold a previous master's degree in nursing. Specialty courses are offered in conjunction with master's core courses, with six sequential courses required. FNP theory and clinical courses are offered once a year and build upon one another, each having a theory and clinical component. Program content is offered in an integrated format, with all aspects of wellness and disease management presented from a lifespan perspective. Adult, pediatric, and women's health components are not separated into separate modules, and are incorporated into the sequential courses as they are encountered from a health promotion, acute disease management, chronic disease management, and integrated care perspective. Students have opportunities for clinical experiences in a variety of health care settings in rural and urban locations, with approximately 805 clinical hours required prior to graduation. Opportunities exist for students to complete specialty coursework at distance learning sites throughout Maryland.

### **Students**

The FNP specialty track attracts nurses from various levels of practice. A well-rounded class is made up of recent graduates to those who have had several years of varied nursing practice. We have consistently graduated approximately 22 students for the previous three academic years.

Graduates of the FNP specialty are eligible for certification by the state of Maryland as well as national certification by the American Nurses Credentialing Center and the American Academy of Nurse Practitioners.

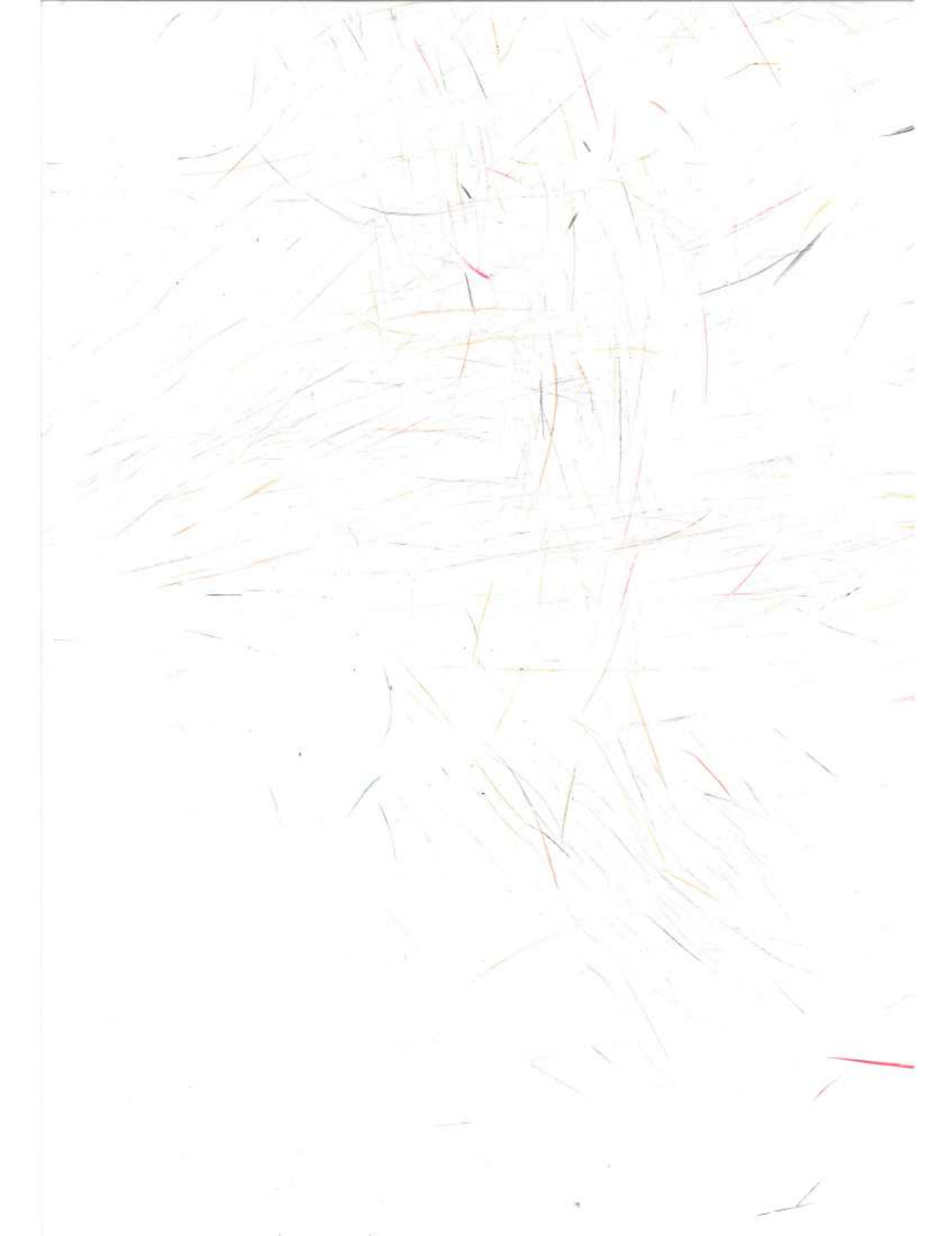
### **Employment**

The program is consistently contacted by Family Practices, Community Clinics, and Specialists regarding recruitment of our recent and past graduates. The previous two graduating classes are well above 90% in terms of employment in the intended area of practice.

FNP specialty graduates are working in Maryland; the contiguous tri-state area; and for various government agencies, both military and non-military throughout the US and worldwide. Practice areas tend to be divided between private practices, HMO's, community clinics, and government health clinics. These data are supported by list-serve and student reported activity related to employment.

### **Future Projections**

The future of the Family Nurse Practitioner specialty is quite good, as the healthcare market is open to the lifespan perspective of the specialty.



**WOMEN'S HEALTH  
NURSE PRACTITIONER**

## **WOMEN'S HEALTH NURSE PRACTITIONER**

### **Background**

The Women's Health Nurse Practitioner (WHNP) was established approximately 15 years ago to prepare nurses to deliver primary care to adults with a focus on women's health throughout the life span. Emphases are on primary care, reproduction, obstetrics gynecology, and disease processes that impact women and their families' lives differently than men and professional issues. This educational program combines an in-depth knowledge of theory, pathophysiology, pharmacotherapeutics, research utilization, critical thinking and clinical decision-making skills along with 600 (minimum) hours of clinical practice experiences in a variety of clinical health care settings. An important feature of the program is to prepare nurses who will provide care reflective of the concepts of health promotion and maintenance, genetics, as well as diagnosis and management of health care problems. The WHNP program curriculum and faculty teaching in the WHNP's program meet the guidelines established by the Association of Women's Health, Obstetrics and Neonatal Nursing, National Association of Nurse Practitioners in Women's Health and the National Certification Corporation.

### **Students**

The students entering the specialty have a wide-range of experiences with the majority having worked in an area of women's health. For many students, recognizing that women's health research is relatively limited in scope and limited in its application to practice have influenced their educational decision to pursue a career with a focus on women's health.

### **Employment**

Graduates of our program should be able to make a significant impact on all aspects of the health care of women. Currently, they are working in about all clinical settings, including hospitals, community clinics, private practices and family planning clinics. The trend is moving toward more in-patient care and an increase in procedures and special testing performed by the WHNP.

### **Future Trends**

The specialty will continue to evolve as more research is dedicated exclusively to women. With a continued increase in the cultural diversity of women, with more women seeking women providers, and with the increasing longevity of women, there will be a continued need for WHNP's.

**ADVANCED PRACTICE  
PEDIATRIC NURSE  
PRACTITIONER**

## **ADVANCED PRACTICE PEDIATRIC NURSE PRACTITIONER SPECIALTY**

### **Background**

Graduate education in maternal child nursing has long been a part of the University of Maryland School of Nursing. The Advanced Practice Pediatric Nurse Practitioner Program (APPNPP) at the University of Maryland School of Nursing, a blended Pediatric CNS/PNP program that leads to the master of science (MS) degree, has been in existence for at least ten years.

There are three emphasis areas in the APPNPP: 1) Primary Care; 2) Acute Care/Tertiary, and 3) School Based. All full and part time students, regardless of emphasis area, must successfully complete all master's core courses; all specialty support courses if applicable to the program of study; and the specialty clinical courses. Once these courses have been completed, the emphasis area selected by the student will determine the final course of study.

### **Students**

Applicants to the Master of Science APPNPP must demonstrate evidence of academic potential and professional nursing skills and commitment to nursing practice, scholarship and leadership. The students' backgrounds vary from pediatric nursing experiences in an acute care or PICU setting to pediatric and adolescent outpatient health care. These students have clearly made the choice to work with children or adolescents and the variety of their backgrounds and clinical experiences provide richness to the curriculum. Most of the students in the APPNPP work part time and as they progress through the program gain new insights into how they want to shape their future.

### **Employment**

Upon graduation, students find employment in primary care or acute care settings. They have had no problems finding jobs, especially in the acute care setting. In primary care, many of the graduates find part time employment that eventually translates into full time work. Follow up interviews with the graduates reveal employment satisfaction as well as increased appreciation for the curriculum. Examples of employment opportunities the students have taken advantage of include outpatient neurology, hematology/oncology and cardiology units at National Children's Medical Center in Washington DC, private practices in Virginia and Maryland, HMO's (Kaiser Permanente) and outpatient settings at Stanford and Duke Universities.

### **Future Projections**

The PEW Health Professions Commission reports have consistently described the direction advanced practice nursing must take to meet the challenges of the next decade. The health care system will continue to shift its focus toward health and to emphasize a population based perspective. There will be limited resources and what resources are available will be used to address coordinated services. Expectations for provider

accountability will continue to increase as will the need for integrated preventive and health promoting interventions.

It is essential that APNs have the skills to manage complex patient situations by providing specialty care across practice settings, thereby facilitating the patient through the health care system. For example, neonatal nurse practitioners are broadening the scope of their specialization. In addition to meeting the needs of hospitalized neonates, these APNs are now following the families into the community setting. This is just one example of expanded styles of practice.

In order to prepare advanced practice nurses (APNs) for the changing situations they may encounter, the Commission stressed that nursing curricula provide APNs with a core set of skills that translate across institutions and settings. The Commission also identified essential or important abilities that the APN must possess to function safely and competently in the health care arena. These abilities include flexibility, critical thinking, interpersonal skills, leadership and an innate sense of self directed learning. **APPNPP** at the University of Maryland School of Nursing must provide students with the necessary tools to function in a variety of settings that range from newborn nursing to palliative care. APNs must possess the skills needed to follow an infant or child from the acute care setting into the community. The faculty believe the clinical nurse specialist role must be expanded to meet the needs of a diverse patient population. Advanced practice nurses must be able to advocate for the child in an increasingly complex political arena. Finally, the curriculum must include content that will allow produce advance practice nurses that embrace the academic environment. The faculty have also discussed the future of the school-based tract and how it might better fit in the program.

### **Faculty**

The Advanced Practice Pediatric Nurse Practitioner Program (**APPNPP**) at the University of Maryland is planned and developed by the Advanced Practice Pediatric Nurse Practitioner faculty at the School of Nursing. All pediatric nurse practitioner faculty are certified by **ANCC** or **NCBPNP/N** and have a minimum of five years clinical experience. The faculty maintain clinical skills by practicing in a primary care setting. The amount of time varies from eight hours a week to thirty-two hours a week.



# **NURSE-MIDWIFERY**

## **NURSE-MIDWIFERY**

### **Background Information**

The University of Maryland School of Nursing's Nurse-Midwifery Specialty:

- is the only nurse-midwifery education program in the state, which is 12<sup>th</sup> from the bottom in infant mortality though 4<sup>th</sup> from the top in per capita income (Maryland's tragic paradox);
- has twice competed for and been awarded federal government (Division of Nursing, HRSA) funding (total of approximately \$1.8 million) and has thus, been continuously federally supported since its inception in 1999 and will be supported through June 2005 on the current grant;
- is using federal funds to support a "cultural audit" of the curriculum to focus it more intensively on educating culturally competent providers to address the state's high infant mortality rate;
- will (in the next two years) be using the federal funds to make much of the curriculum available online to assist students in Maryland who cannot easily come to campus for classes;
- has the support and collaboration of many nurse-midwives around the state who have generously served as clinical preceptors for the program, including the nurse-midwifery services at the Baltimore Birth Center, the Center for Addiction in Pregnancy at Bayview, the University of Maryland Medical System, and Prince George's Hospital Center where 3 faculty have clinical privileges and provide precepting to midwifery students in the spring and fall semesters;
- takes 5 semesters to complete if studying full time;
- has graduated two cohorts of students, May 2001 (4) and 2002 (8), will have 6 more graduates in May 2003;
- has a 92% pass rate (11 of 12 graduates) to date on the national certification examination;
- received the maximum possible number of years of accreditation for a new program (5 years), with no recommendations, from the Division of Accreditation of the American College of Nurse-Midwives; and
- according to All Nursing Schools 2002 data, is the Master's Degree Program specialty most frequently visited on the School's website.

Background data about certified Nurse Midwives (CNMs):

- CNMs have practiced in the US since 1925.
- There are approximately 7,000 CNMs in the US now, and approximately 200 in Maryland; 99% of births attended by CNMs occur in hospitals and the remainder occur in freestanding birth centers or homes.
- The Standards for the Practice of Midwifery (2003) state that "Midwifery practice as conducted by certified nurse-midwives (CNMs) and certified midwives (CMs) is the independent management of women's health care, focusing particularly on pregnancy, childbirth, the post partum period, care of the newborn, and the family planning and gynecologic needs of women. The CNM and CM practice within a

health care system that provides for consultation, collaborative management, or referral, as indicated by the health status of the client.” Nurse-midwives seek to practice in a way that provides women with seamless access to medical care if complications arise, but CNMs are not “supervised” by physicians.

- The number of CNM attended births increased 125% from the year 1989 to 2000.
- The 297,902 births attended by CNMs in 2000 accounted for 7.3 percent of all births and 9.6 percent of spontaneous vaginal births.
- Nurse-midwifery education programs are accredited by the federally recognized Division of Accreditation (DOA) of the American College of Nurse-Midwives (ACNM) and there are 47 programs around the country.
- Graduates of ACNM DOA accredited programs are eligible to take the national certification examination given by the American College of Nurse-Midwives Certification Council (ACC).

### **Employment**

The class of 2001 had 1 military student and 3 Maryland residents. The military graduate is practicing nurse-midwifery in the Army. One of the 3 Maryland residents works in an advanced practice role at Planned Parenthood of Prince George’s County. One is at the Baltimore City Health Department in an advanced practice role. The fourth is working as an agency nurse in Baltimore.

The 8 members of the class of 2002 received the results of their certification examinations approximately 6 ½ months ago, and all but 1 passed. To our knowledge, 4 are in Maryland and of those, 2 are looking for midwifery positions and 2 are pregnant and not looking intensively at this time. Of the 4 who have moved out of state, 1 person is practicing full scope midwifery in a rural clinic in South Carolina and 1 followed her husband to Indiana and is interviewing for midwifery jobs there. Two others have left the state, 1 to take an administrative position in nursing and 1 to work as a traveling nurse in order to “make some money and pay off my loans!”

To sum it up, to date, 2 graduates are working in full scope midwifery positions, 2 are working in an advanced practice clinical role, 1 is working as an administrator (a position we assume required a master’s degree), 3 are working as nurses and seriously job hunting, 4 are working as nurses and not seriously job hunting at this time.

The two graduated cohorts and the two cohorts now enrolled in the clinical sequence total 25 people, all female. Of those, 6, or 24%, are African American, 1 is Caribbean American of African descent, and the remainder are White. The most recent school-wide data shows that African American students were 17% of the student body of the Master’s Degree Program in 2001.

### **Market**

Evidence of demand from potential students for the specialty: In the All Nursing School’s data for last year, the nurse-midwifery part of the SON’s web site was the most frequently visited Master’s Degree Program Specialty – over 9% of all specialty visits were to the midwifery part of the site. In the All Nursing School’s data for the 4 months

from November 2002 through February 2003, the Nurse-Midwifery Specialty received the most site visits, 17%, or 126 of 757. The next closest specialties were neonatal nurse practitioner, 14%, and women's health nurse practitioner, 12%. Inquiry data collected by the Office of Admissions and Student Affairs as of March 7, 2003 shows a similarly high level of interest in midwifery. The Office asks potential students which specialties they are interested in and what semester they might like to start school. A total of 98 people indicated that they were interested in midwifery with a start date in the 2002-2003 school year, and 100 people have inquired about midwifery with a start date in the 2003-2004 school year.

### **Future Trends**

In addition to the 7 students in the cohort that will graduate in the Spring 2004, as of this writing in the end of March 2003, 10 students have told us they intend to be in the midwifery program in the Fall 2003 semester, and at least 7 of those will be in the clinical sequence. If the admissions process follows a trajectory similar to last year's, we will receive and accept several more applications between now and the fall, and some students will decide to go to other schools or to enroll part time at the SON, thus becoming part of a cohort that will graduate later than Spring 2005. In the beginning of the summer last year we expected 12 students to start the clinical courses in the Fall 2002 semester. By the time the semester arrived, however, other programs or the part time option had reduced the cohort to 7.

Nurse-midwifery as a profession believes that all women should have access to midwifery care and that there should be enough nurse-midwives for that to happen, much as it does in Great Britain, Australia, and Scandinavia, where midwifery care is more the norm than the exception in the care of pregnant women. There are in the U.S. now approximately 7,000 CNMs and 5,700 of them are in clinical practice. Approximately 400 new graduates take the national certification examination every year. Given that nurse-midwives conducted only 9.5% of vaginal births in 2000, it is clear that the supply, thus, does not even come close to being sufficient for every pregnant woman to have the option of nurse-midwifery care. According to a federal report of care in 17 states, *Prevalence of Selected Maternal Behaviors and Experiences, Pregnancy Risk Assessment Monitoring System (PRAMS), 1999*, "In 1999, 16.1%--29.9% of women reported receiving late or no entry into prenatal care...In 10 of 15 states where adequate data were available for black populations, late or no entry into prenatal care was significantly higher among black women than among white women (retrieved 3/21/03 from <http://www.cdc.gov/mmwr/preview/mmwrhtml/ss5102a1.htm>)." Given that infant mortality rates in this country far exceed those of other industrialized Western nations and that many women in this country do not receive adequate prenatal care, it is clear that the supply of nurse-midwives does not begin to meet the needs for health care for pregnant women in this country.

There is no good data about how many positions are open for nurse-midwives around the country. In 2002, the jobs available section of the web site of the ACNM received 224 postings. The 6 issues of the ACNM's print newsletter published in the same year had a total of 50 job advertisements. Anecdotal reports suggest that the job markets in metropolitan areas where nurse-midwifery is well established are tight, but that if a

midwife is willing to move for a job, she/he can find a position in full scope practice. Prior to the 1970s, most clinically practicing nurse-midwives worked in large public hospitals. Since the late 1970s, however, nurse-midwives have pioneered in establishing their own practices or in convincing physicians in private practice to expand their businesses to include midwives. Nurse-midwives have also pioneered the concept of the freestanding birth center and one of the largest education programs, the online Community Based Nurse-Midwifery Education Program (CNEP), specializes in educating students who are prepared to open their own businesses – be they birth centers or hospital-based practices. Nurse-midwifery students are encouraged throughout their educations to think not only of finding a job but also of creating jobs for themselves when they graduate.

**NEONATAL NURSE  
PRACTITIONER**

## **NEONATAL NURSE PRACTITIONER**

### **Background**

The Neonatal Nurse Practitioner (NNP) specialty is offered through the Department of Child, Women's and Family Health Nursing. Established in 1993, this specialty prepares nurses to assume advanced practice roles in the care of high-risk infants and families. The program of study incorporates course work, laboratory, and clinical experience. The curriculum emphasizes clinical competence and the developmental and primary care needs of high-risk infants and families. A unique feature of the NNP program is the expansion of the role to include primary care, community, and substance abuse. In addition to an emphasis on advanced clinical practice expertise, three themes are developed within the NNP curriculum: the advanced practice/NNP role, research utilization, and developmental issues. Graduates of the NNP program are eligible for Maryland state certification as well as national certification by the National Certification Corporation.

### **Students**

Students who apply for the NNP program are experienced neonatal intensive care nurses with 2-8 years of clinical experience. This program is designed to offer a post-masters certification and a MS degree to certified neonatal nurse practitioners in the community.

### **Employment and Future Trends**

There are 600-700 job opportunities for neonatal nurse practitioners across the nation. This demand will increase with the changes in clinical hours for interns/residents in the coming year. Our graduates are offered employment 2-6 months prior to graduation. Hospitals and physician groups employ them. The future trends include the NNP working in follow-up and primary care clinics and in the community.

# **BEHAVIORAL NURSING**



## **BEHAVIORAL NURSING SPECIALTY**

### **Background Information**

The clinical specialty track in psychiatric mental health nursing has been offered at the University of Maryland School of Nursing for over 30 years. Over the years, the specialty has responded to included an increased focus on the biological components of behavioral nursing care and emerging trends in advanced practice nursing related to a stronger community focus, and emphasis on best clinical practices in a cost containment, quality conscious health care arena.

The specialty, although small, has evolved into a nationally recognized program of study redefined in 1999 as advanced practice behavioral nursing to reflect an expanded role and broader scope of practice that includes sub-threshold behavioral or psychosocial issues in primary care settings. This broader definition of advanced practice psychiatric mental health nursing provided the initial impetus for the University of Maryland School of Nursing to revise its psychiatric mental health nursing curriculum in 1996. Reflecting SERPN clinical competencies, NONPF guidelines, and ANCC clinical practice guidelines for advanced practice psychiatric mental health nursing, the curriculum revision for the psychiatric component was designed to meet new ANCC requirements for the psychiatric nurse practitioner competencies.

In 1997, the University of Maryland applied for, and received federal funding from a HRSA advanced education training grant to develop and implement a combined adult psychiatric mental health and adult nurse practitioner curriculum. The combined specialty curriculum included course content related to the neurophysiologic mechanisms underlying mental disorders, the pharmacokinetic mechanisms by which selected medications mitigate mental disorders, the side effects of these drugs and relevant drug interactions.

In 2001, the School of Nursing applied for and received federal funding from HRSA for a second training grant that allowed the School to establish a blended clinical nurse specialist/nurse practitioner specialty track in child and adolescent behavioral advanced practice nursing.

In June 2001, the Maryland Board of Nursing approved a measure allowing prescriptive authority for psychiatric nurse practitioners, with national certification granted by the ANCC and graduation from an approved nurse practitioner program. In December 2002, the Maryland Board of Nursing gave formally approval to the graduate behavioral nurse practitioner program at the University of Maryland School of Nursing.

### **Unique Specialty Certification Features**

Until 2000, national certification options were unavailable for advanced practice nurses as psychiatric nurse practitioners. Although advanced practice nurses in psychiatric mental health nursing could practice independently, they did not have prescriptive authority in many States, including Maryland. Recognizing that the use of pharmacologic agents in the treatment of mental disorders is an expected essential standard of psychiatric mental health care, the ANCC moved to develop a credentialing exam that would allow psychiatric mental health nurses prescriptive authority and a broader scope of practice to function in primary care settings.

In 2000, the American Nurses Credentialing Center (ANCC) offered the first national psychiatric nurse practitioner certification exam, with either an adult or a family [child and adolescent] focus. This new nurse practitioner exam credentials advanced practice nurses prepared for that role in either a master's or post-master's program, that includes additional academic preparation in advanced health assessment, pathophysiology or neurophysiology, pharmacology or psychopharmacology, and a clinical practicum which focuses on diagnosis and management of psychiatric illnesses from the nurse practitioner perspective. Additionally the student must have completed a course of study that includes 18 credit hours of psychiatric mental health content at the graduate level with specific theory based content and clinical experience related to two therapeutic treatment modalities and 500 hours of supervised clinical practice specific to the population (adult or child and adolescent/family) served by the program graduate. The ANCC envisioned the implementation of these credentialing exams as the first step in a multi-phased approach toward the one role concept in psychiatric mental health nursing.

Advanced practice nurses, certified in either adult or child and adolescent psychiatric mental health nursing could sit for the new psychiatric nurse practitioner exams, with additional academic preparation as described above taken within an approved nurse practitioner post masters program.

### **Curriculum Overview**

The graduate behavioral nursing specialty at the University of Maryland School of Nursing consists of three inter-related pathways to advanced practice nursing: 1) Advanced Practice Behavioral Nursing Adult focus, 2) Advanced Practice Behavioral Nursing child and adolescent focus, which represent a blended CNS/NP role, and 3) Combined Psychiatric Primary Care Clinical Track. .

The **blended** behavioral clinical nurse specialist (CNS)/nurse practitioner (NP) track prepares advanced practice nurses to provide specialty mental health clinical services that are discipline specific. Course work and clinical practicums provide students with the clinical competencies needed for direct therapeutic work with mentally ill individuals, families and groups, including prescriptive authority for a limited formulary of psychotropic medications.

Students can select either an adult focus or child and adolescent focus as their area of emphasis. The practice-focused curriculum includes advanced concepts in the diagnosis

of psychopathology, neurophysiology of mental disorders and psychopharmacology, and drug abuse. Specialty content and clinical practicums are required in family therapy for all students, and individual and group psychotherapy with adults, or therapeutic interventions with children and adolescents. Students take a specialized clinical internship in an area of interest focused on the advanced practice role, that is considered a capstone role course.

Students completing the blended CNS/NP option, depending on their clinical focus, are academically eligible to sit for the ANCC

- Clinical Specialist Certifying Examination in Adult or child and adolescent psychiatric mental health nursing
- Psychiatric nurse practitioner Certification exam or Family Psychiatric Nurse Practitioner Exam

The blended CNS/NP track prepares advanced practice nurses in psychiatric nursing to:

1. Diagnose and treat individuals with mental disorders and families with dysfunctional behaviors, including medication prescription and management.
2. Provide quality mental health case management of individuals and families with mental disorders
3. Collaborate with interdisciplinary health care professionals in providing comprehensive mental health care management
4. Promote the mental health and well being of mentally ill clients and their families through advocacy and psychoeducation
5. Develop psychiatric nursing initiatives through outcomes research
6. Formulate innovative practice models and treatment programs relevant to the clinical care of mentally ill at individual, family and community levels.

The **combined** adult behavioral and adult primary care nurse practitioner track is designed to prepare multi-skilled behavioral clinicians with expanded community based primary care skills to work in primary care settings with adults. The combined clinical track prepares multi-skilled clinical practitioners with specialty skills in behavioral nursing with cross-training in primary care. The curriculum prepares students to function as a front line provider in community based primary care service arenas. Prior to taking the primary care courses, students complete courses related to specialty knowledge and competencies in advanced psychiatric nursing. The final clinical practicum course (NURS 717) for the student in the combined behavioral and adult track calls for the student to have supervised practice in a primary care setting with dually diagnosed patients. This practicum experience allows students to integrate clinical behavioral care with primary health care delivery.

Program graduates are equipped to provide full service for mentally ill individuals and their families when the primary diagnosis is psychological for common and stable physical problems and brief behavioral interventions in the care of individuals with a primary physical diagnosis and significant psychological concerns.

The Combined Psychiatric/ Primary Care Nurse Practitioner track prepares the advanced practice nurse in psychiatric nursing to:

1. Effectively manage the primary health care needs and complex psychobiologic problems of individuals diagnosed with mental disorders.
2. Provide episodic and continuous care to mentally ill patients with co-morbid physical disorders in a variety of ambulatory clinics and non-traditional care settings such as prisons, emergency departments, medical-psychiatric units, psychiatric home care
3. Render holistic care to ethnically diverse and underserved populations
4. Provide ongoing management of clients with severe and persistent mental illness, including medication management
5. Provide treatment for clients and their families when the primary diagnosis is physical with a secondary psychosocial diagnosis such as anxiety or depression
6. Collaborate with other health professionals to manage complex disorders in which there are both physical and behavioral components
7. Participate in data based client and program evaluation

Students completing the combined psychiatric primary care nurse practitioner curriculum are academically eligible to sit for the ANCC

- Clinical Specialist Certifying Examination in Adult Psychiatric Mental Health Nursing
- Psychiatric Nurse Practitioner Certification exam
- Adult Nurse Practitioner exam

A matrix model wherein there is course sharing between the clinical sub-specialty tracks maximizes faculty resources for the small specialty with multiple requirements for certification depending on the population served. We have found that this approach also enriches the overall experience of all the graduate students in this clinical specialty because the needs of the different age populations are not always conceptually distinct.

A fourteen credit competency module is available for certified clinical specialists in psychiatric mental health nursing. This competency module consists of the additional academic preparation required for the nurse practitioner exams in the clinical specialty: clinical diagnosis course, advanced health assessment, neurophysiology, psychopharmacology, and a clinical practicum which focuses on diagnosis and management of psychiatric illnesses from the nurse practitioner perspective consisting of 120 practice hours. Total practice hours to complete the competency module include 45 hours for the clinical diagnosis course, and 45 hours for the advanced health assessment course. Students do not receive a certificate for post masters study, but are eligible to sit for the NP exam because they have taken their graduate level courses in an approved nurse practitioner program.

## **Market**

The behavioral nursing specialty currently attracts nurses, usually with a significant number of years working in the specialty or in nursing. The applicant pool is relatively small, reflecting the national percentage of nurses choosing to enter the specialty. Most recently we have been attracting post-masters students, and this group has been quite diverse. We have had several adult and family nurse practitioners who want to develop their skills in behavioral health nursing because of the need they see for this skill set. We have pediatric and other clinical specialists seeking the specialty either because of work or interest demands. There has been significant interest in our competency module from clinical specialists certified in psychiatric mental health nursing wanting to be able to sit for the NP certification exams, and to have prescriptive authority. We have relatively few "new" BSN graduates. The armed services (army and navy) have been a recent applicant pool. The community market demand for advanced practice nurses in the specialty significantly exceeds the availability of qualified practitioners, particularly for the advanced practice child and adolescent track, and the psychiatric primary care components of the specialty.

## **Employment**

The graduates of the behavioral health nursing program work in a variety of inpatient, outpatient, and non-traditional clinical settings including juvenile justice settings, private practice, nursing homes, public sector and private psychiatric hospitals, day hospitals, drug abuse treatment centers, school based clinics, rehabilitation centers, clinics for the chronically mentally ill, health departments, etc. Many of our graduates assume leadership positions in health departments, hospitals, and outpatient community based settings.

As our world grows more unsettled, and all health needs including mental health needs are treated in the community, the need for nurses trained as specialists and nurse practitioners in behavioral nursing will become increasingly acute. The preventive focus of Healthy People 2010, the recent highlighting of the importance of mental health issues by the Surgeon General and expanded funding for advanced practice nurses are strong indicators of the viability and need for the clinical specialty.

Employment trends reflect the move to the community for the bulk of mental health care treatment consistent with a managed care management approach.

## **Future Trends**

The ANCC anticipates that the role of the advanced practice psychiatric mental health nurse of the future is likely to be a blended role with a single scope of practice based on ANA specialty standards of practice. The blended role, advanced practice nurse-psychiatric mental health (APRN-PMH), provides a venue in which primary mental health care can be provided within a single scope of practice based on the ANA Statement and Standards.

Although the ANCC defines the psychiatric nurse practitioner as “a registered nurse with a graduate degree in nursing who is prepared for advanced mental health practice in primary care throughout the lifespan in accordance with ANA's scope and standards of psychiatric-mental health nursing. This practice includes independent and interdependent decision-making and direct accountability for clinical judgment. Graduate preparation expands the comprehensiveness of the psychiatric-mental health nurse practitioner role to include participation in and use of research, development and implementation of health policy, leadership, education, case management, and consultation.” (ANCC, 2001), it is likely that the blended role definition will be quite similar.

It is clear that there is a need for continuing education and the development of online courses for the clinical specialty. This addition would allow the School of Nursing to have a significant marketing edge particularly in meeting the need for certification requirements for the NP exam, helping advanced practice nurses fulfill re-certification requirements and geographically expanding the curriculum to meet the needs of students working full time in distant sites.

# **COMMUNITY/PUBLIC HEALTH NURSING**

## **COMMUNITY/PUBLIC HEALTH NURSING**

### **Background and Plan of Study**

The masters program in Community/Public Health Nursing was revised six years ago. The degree is 35 credit hours and focuses on risk assessment and program development. The degree includes: 13 credits of Masters core; 19 credits of Community/Public Health Nursing courses; 3 credits of elective course. There are seven Community/Public Health Nursing courses: Epidemiology (a 3 credit course); Environmental Health Nursing (a 3 credit course); Populations at Risk (a 3 credit course); Program Planning didactic and clinical (3 credit didactic and 3 credit clinical); Leadership (3 credit didactic and 4 credit clinical). A unique feature of our program is the Environmental Health component. Students can add 12 credits of concentration in Environmental Health Nursing to the Community/Public Health Nursing program. Taking the Environmental Health Nursing as a post-masters certificate is also an option for nurses with masters degrees.

### **Students**

Our students come to us from military, public and private employment settings and from other countries, especially Africa (Ghana and Cameroon). Demand for our program is small but steady. We admit students every semester and have about 10 to 12 students in the concentration courses. We meet the demand for nurses who can assess the community and identify community needs and populations at risk; develop programs to meet these identified needs and evaluate the efficacy and effectiveness of the programs. Skills include budget, proposal writing, marketing and policy development. The Environmental Health Nursing courses addresses the need for nurses knowledgeable about Environmental Health.

### **Faculty**

We have a strong core of faculty with research programs in community/occupational health. Students have excellent opportunities to interact with the faculty in course work and through involvement in their research projects.

### **Employment**

Graduates are employed by State and County Health Departments, government and private agencies. Our African graduates plan to return to their countries and work with public health departments.



**COMMUNITY/PUBLIC HEALTH  
NURSING**

**ENVIRONMENTAL FOCUS**

## **COMMUNITY/PUBLIC HEALTH WITH AN ENVIRONMENTAL EMPHASIS**

### **Background**

The University of Maryland established the first master's specialty program in the country for nurses expressly interested in environmental health. The Environmental Health emphasis area was established in 2001 with a grant from HRSA. This new track is responsive to a 1995 report published by the Institute of Medicine entitled: *Nursing Health and the Environment*. The curriculum was developed to reflect the competencies outlined in the IOM report. The environmental health courses are nested within the existing graduate program in Community/Public Health Nursing.

### **Students**

We are in the early phases of implementing a recruitment strategy. Up until this point, recruitment was limited to those students who came to the school interested in community health. The populations from whom we anticipate recruitment are nurses working in community-based and public health settings, military nurses who are responsible for community health, and those nurses who have a particular interest in environmental health. Many of the latter recruits will have attended one of the many workshops and/or presentations that our faculty in occupational and environmental health have offered or have read books and/or articles published by our faculty.

### **Employment**

It is anticipated that our graduates will work for governmental agencies (local, state, and federal health agencies; local state and federal environmental protection agencies; academic settings, and non-profit organizations). Our most recent graduates are working in such settings as project managers and program staff.

### **Future Plans**

We are excited about this new environmental health program and know that it will help to generate additional doctoral students who wish to "dig deeper" into their understanding of environmental health issues. The US Environmental Protection Agency and the National Institutes of Environmental Health Science, as well as NINR will be potential sources of funding for these prospective candidates.

## Appendix D

### Summary of SON Clinical Enterprise

## Summary of SON Clinical Enterprise

COMPONENT	CLINICAL ENTERPRISE SITE	LEARNING EXPERIENCES
Education	Open Gates	Family Nurse Practitioner Students Women's Health Nurse Practitioner Students Community Health Students (BSN and MS) Nursing Administration Students (MS) Doctoral Students
	Governors' Wellmobiles	Family Nurse Practitioner Students Pediatric Nurse Practitioner Students Community Health Students (BSN and MS) Nursing Informatics Students (MS) Nursing Administration Students (MS)
	School-Based Wellness Center Network	Family Nurse Practitioner Students Pediatric Nurse Practitioner Students Advanced Practice Behavioral Health Students (MS) Doctoral Students
	Senior Care Center	Gerontological Nurse Practitioner Students Community Health Students (MS) Informatics Students (MS)
	Southwestern Family Center	Nurse Practitioner Students Community Health Students (MS)
	Pediatric Ambulatory Care Center	Pediatric Nurse Practitioner Students
Practice	Open Gates	Nurse Practitioner Faculty Members Nurse Psychotherapist Faculty Members Nurse Midwives Community Health Nursing Faculty Nursing Administration Faculty
	Governors' Wellmobiles	Nurse Practitioner Faculty Members Community Health Nursing Faculty Nursing Informatics Faculty
	School-Based Wellness Center Network	Nurse Practitioner and Advanced Practice Faculty Members Nurse Psychotherapist Faculty Members
	Senior Care Center	Gerontological Nurse Practitioner Faculty Geriatric Clinical Specialists Community Health Nurse Faculty Informatics Faculty

## Summary of SON Clinical Enterprise

COMPONENT	CLINICAL ENTERPRISE SITE	LEARNING EXPERIENCES
	Southwestern Family Center	Community Health Nursing Faculty
	Pediatric Ambulatory Care Center	Pediatric Nurse Practitioner Faculty
Research and Evaluation	Open Gates	Clinical outcome evaluation of targeted disease areas Patient Satisfaction Demonstration of Nurse-Managed Model Disease Management and CHW Approach Health Disparities Cancer Prevention and Early Detection
	Governors' Wellmobiles	Clinical outcome evaluation of targeted disease areas Patient Satisfaction Demonstration of Nurse-Managed Model Rural versus Urban Access to care Health Disparities Cancer Prevention and Early Detection Immigrant Health Migrant Health Partnerships and Collaboration
	School-Based Wellness Center Network	Clinical Outcome Evaluation of Targeted Disease Areas (e.g. Asthma, ADHD, etc.) Patient Satisfaction Demonstration of Model (School Performance, Achievement) Access to Care Health Disparities Substance Abuse Prevention and Treatment Smoking Prevention and Cessation Mental Health
	Senior Care Center	Clinical Outcomes Geriatric Assessment Model Prevention Other Geriatric Issues
	Southwestern Family Center	Teen Parenting Teen Pregnancy Prevention Family Support Models School Performance
	Pediatric Ambulatory Care Center	Clinical Outcomes Patient Satisfaction Other Pediatric Issues

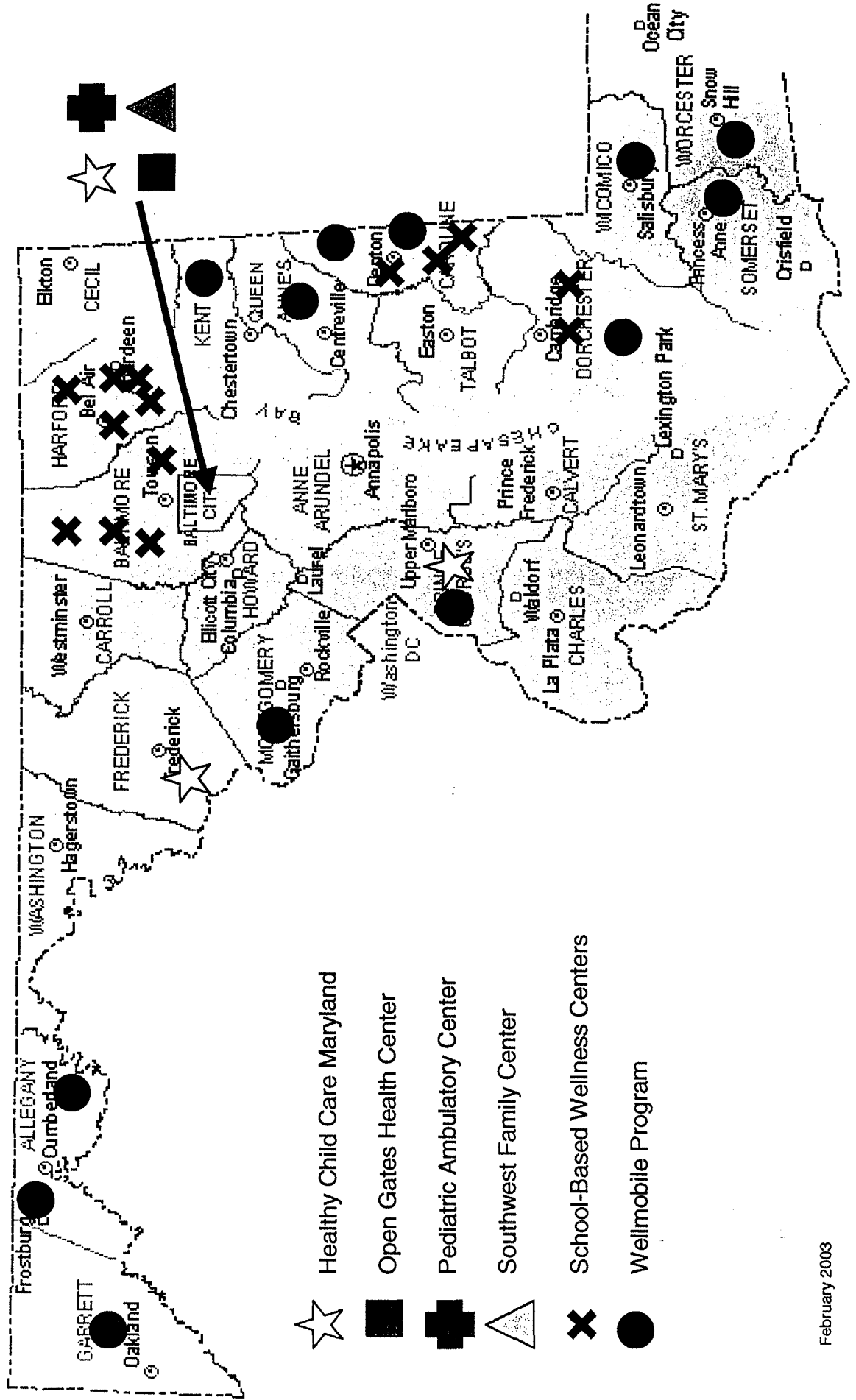
## Summary of SON Clinical Enterprise

COMPONENT	CLINICAL ENTERPRISE SITE	LEARNING EXPERIENCES
Service	Open Gates	Service to Medically Underserved Clients in Southwest Baltimore (e.g. uninsured, underinsured, and Maryland Child Health Insurance Program {MCHIP} patients)
	Governors' Wellmobiles	Service to Medically Underserved Clients Statewide (e.g. uninsured, underinsured, and MCHIP patients) – Central Maryland, Eastern Shore of Maryland, Western Maryland
	School-Based Wellness Center Network	Service at 15 Schools in 5 counties: Acute Care to Children Prevention and Health Education MCHIP Enrollment Immunizations Disease Management of Asthma, ADHD Mental Health Integration with Local School Districts, Health Departments, School Staff, and Community Health Centers
	Senior Care Center	Service to Seniors from East and West Baltimore Sites: Comprehensive Geriatric Assessment Primary Care and Home Care Wellness and Community Sites
	Southwestern Family Center	Service to Teen Parents of Southwestern High School: Child Care Center Parent Education Life Skills Job Skills Academic Enrichment Case Management Family Support
	Pediatric Ambulatory Care Center	Service to 16,000 Baltimore City Children: Primary and Preventive Care Comprehensive Services MCHIP



# University of Maryland School of Nursing

## Clinical Outreach Sites



Appendix E

Statewide Survey



## Preliminary Results Un-weighted

### Frequency Tables

Interested in an Academic Degree

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	729	56.3	57.1	57.1
	No	548	42.3	42.9	100.0
	Total	1277	98.5	100.0	
Missing	3	1	.1		
	9	4	.3		
	System	14	1.1		
	Total	19	1.5		
Total		1296	100.0		

Highest Education Attained

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Diploma	179	13.8	14.1	14.1
	AA Nursing	257	19.8	20.3	34.4
	BSN	424	32.7	33.4	67.8
	B other than Nursing	65	5.0	5.1	72.9
	MS in Nursing	215	16.6	16.9	89.8
	M other than Nursing	118	9.1	9.3	99.1
	PhD Nursing	5	.4	.4	99.5
	PhD Other than Nursing	6	.5	.5	100.0
	Total	1269	97.9	100.0	
Missing	9	7	.5		
	System	20	1.5		
	Total	27	2.1		
Total		1296	100.0		

## Expressed Interest

### RN to MS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	First Choice	129	10.0	41.3	41.3
	Second Choice	76	5.9	24.4	65.7
	Third Choice	107	8.3	34.3	100.0
	Total	312	24.1	100.0	
Missing	System	984	75.9		
Total		1296	100.0		

### BSN to PhD

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	First Choice	51	3.9	26.7	26.7
	Second Choice	64	4.9	33.5	60.2
	Third Choice	76	5.9	39.8	100.0
	Total	191	14.7	100.0	
Missing	System	1105	85.3		
Total		1296	100.0		

### Master of Science

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	First Choice	120	9.3	46.0	46.0
	Second Choice	78	6.0	29.9	75.9
	Third Choice	62	4.8	23.8	99.6
	5	1	.1	.4	100.0
	Total	261	20.1	100.0	
Missing	System	1035	79.9		
Total		1296	100.0		

### MS/MBA

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	First Choice	64	4.9	32.3	32.3
	Second Choice	64	4.9	32.3	64.6
	Third Choice	70	5.4	35.4	100.0
	Total	198	15.3	100.0	
Missing	System	1098	84.7		
Total		1296	100.0		

**Post Master's Certificate**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	First Choice	82	6.3	40.4	40.4
	Second Choice	42	3.2	20.7	61.1
	Third Choice	79	6.1	38.9	100.0
	Total	203	15.7	100.0	
Missing	System	1093	84.3		
Total		1296	100.0		

**Where do you want to take course**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	UMB	169	13.0	24.0	24.0
	Shady grove	73	5.6	10.4	34.4
	Waldorf	26	2.0	3.7	38.1
	Easton	25	1.9	3.6	41.7
	Cumberland	15	1.2	2.1	43.8
	Hagerstown	19	1.5	2.7	46.5
	Web	215	16.6	30.6	77.1
	Balt & Web	74	5.7	10.5	87.6
	shady & Web	24	1.9	3.4	91.0
	Wal & Web	20	1.5	2.8	93.9
	E & Web	25	1.9	3.6	97.4
	Cumb & Web	6	.5	.9	98.3
	Hag & Web	12	.9	1.7	100.0
	Total	703	54.2	100.0	
Missing	System	593	45.8		
Total		1296	100.0		

**Does employer provide tuition remission**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	500	38.6	67.3	67.3
	No	243	18.8	32.7	100.0
	Total	743	57.3	100.0	
Missing	System	553	42.7		
Total		1296	100.0		

## Crosstabs Specialty By Location

Where do you want to take course \* Trauma Critical Care & Emergency Crosstabulation

			Trauma Critical Care & Emergency			Total
			First Choice	Second Choice	Third Choice	
Where do you want to take course	UMB	Count	16	8	11	35
		% within Trauma Critical Care & Emergency	24.6%	20.0%	32.4%	25.2%
	Shady grove	Count	5	4	7	16
		% within Trauma Critical Care & Emergency	7.7%	10.0%	20.6%	11.5%
	Waldorf	Count	3	3	2	8
		% within Trauma Critical Care & Emergency	4.6%	7.5%	5.9%	5.8%
	Easton	Count	3	1		4
		% within Trauma Critical Care & Emergency	4.6%	2.5%		2.9%
	Cumberland	Count	3	1		4
		% within Trauma Critical Care & Emergency	4.6%	2.5%		2.9%
	Hagerstown	Count	2			2
		% within Trauma Critical Care & Emergency	3.1%			1.4%
	Web	Count	15	12	7	34
		% within Trauma Critical Care & Emergency	23.1%	30.0%	20.6%	24.5%
	Balt & Web	Count	10	5	1	16
		% within Trauma Critical Care & Emergency	15.4%	12.5%	2.9%	11.5%
	shady & Web	Count	1		2	3
		% within Trauma Critical Care & Emergency	1.5%		5.9%	2.2%
	Wal & Web	Count	6	3		9
		% within Trauma Critical Care & Emergency	9.2%	7.5%		6.5%
	E & Web	Count		2	2	4
		% within Trauma Critical Care & Emergency		5.0%	5.9%	2.9%
	Cumb & Web	Count			1	1
		% within Trauma Critical Care & Emergency			2.9%	.7%
	Hag & Web	Count	1	1	1	3
		% within Trauma Critical Care & Emergency	1.5%	2.5%	2.9%	2.2%
Total		Count	65	40	34	139
		% within Trauma Critical Care & Emergency	100.0%	100.0%	100.0%	100.0%

**Where do you want to take course \* Community/Public Health Crosstabulation**

			Community/Public Health			Total
			First Choice	Second Choice	Third Choice	
Where do you want to take course	UMB	Count	14	10	10	34
		% within Community/Public Health	23.7%	20.4%	22.2%	22.2%
	Shady grove	Count	6	6	10	22
		% within Community/Public Health	10.2%	12.2%	22.2%	14.4%
	Waldorf	Count	2	2	3	7
		% within Community/Public Health	3.4%	4.1%	6.7%	4.6%
	Easton	Count	2	1	2	5
		% within Community/Public Health	3.4%	2.0%	4.4%	3.3%
	Cumberland	Count	4	2		6
		% within Community/Public Health	6.8%	4.1%		3.9%
	Hagerstown	Count	2	1		3
		% within Community/Public Health	3.4%	2.0%		2.0%
	Web	Count	15	16	11	42
		% within Community/Public Health	25.4%	32.7%	24.4%	27.5%
	Balt & Web	Count	7	4	4	15
		% within Community/Public Health	11.9%	8.2%	8.9%	9.8%
	shady & Web	Count	1	2	3	6
		% within Community/Public Health	1.7%	4.1%	6.7%	3.9%
	Wal & Web	Count	1	2	1	4
		% within Community/Public Health	1.7%	4.1%	2.2%	2.6%
	E & Web	Count	2	3	1	6
		% within Community/Public Health	3.4%	6.1%	2.2%	3.9%
	Cumb & Web	Count	2			2
		% within Community/Public Health	3.4%			1.3%
	Hag & Web	Count	1			1
		% within Community/Public Health	1.7%			.7%
Total		Count	59	49	45	153
		% within Community/Public Health	100.0%	100.0%	100.0%	100.0%

**Where do you want to take course \* Adult Primary Care NP Crosstabulation**

			Adult Primary Care NP			Total
			First Choice	Second Choice	Third Choice	
Where do you want to take course	UMB	Count	13	12	10	35
		% within Adult Primary Care NP	24.1%	29.3%	31.3%	27.6%
	Shady grove	Count	5	5	6	16
		% within Adult Primary Care NP	9.3%	12.2%	18.8%	12.6%
	Waldorf	Count	5	2	1	8
		% within Adult Primary Care NP	9.3%	4.9%	3.1%	6.3%
	Easton	Count	3	1	1	5
		% within Adult Primary Care NP	5.6%	2.4%	3.1%	3.9%
	Cumberland	Count		3		3
		% within Adult Primary Care NP		7.3%		2.4%
	Hagerstown	Count	1			1
		% within Adult Primary Care NP	1.9%			.8%
	Web	Count	15	6	11	32
		% within Adult Primary Care NP	27.8%	14.6%	34.4%	25.2%
	Balt & Web	Count	5	7		12
		% within Adult Primary Care NP	9.3%	17.1%		9.4%
	shady & Web	Count	3		1	4
		% within Adult Primary Care NP	5.6%		3.1%	3.1%
	Wal & Web	Count	2	2		4
		% within Adult Primary Care NP	3.7%	4.9%		3.1%
	E & Web	Count	2	2	2	6
		% within Adult Primary Care NP	3.7%	4.9%	6.3%	4.7%
	Cumb & Web	Count		1		1
		% within Adult Primary Care NP		2.4%		.8%
Total		Count	54	41	32	127
		% within Adult Primary Care NP	100.0%	100.0%	100.0%	100.0%

**Where do you want to take course \* Administration Crosstabulation**

			Administration			Total
			First Choice	Second Choice	Third Choice	
Where do you want to take course	UMB	Count	8	9	8	25
		% within Administration	17.8%	18.8%	19.5%	18.7%
	Shady grove	Count	4	5	6	15
		% within Administration	8.9%	10.4%	14.6%	11.2%
	Waldorf	Count	3	3	1	7
		% within Administration	6.7%	6.3%	2.4%	5.2%
	Easton	Count	2	2	1	5
		% within Administration	4.4%	4.2%	2.4%	3.7%
	Cumberland	Count	1	1	4	6
		% within Administration	2.2%	2.1%	9.8%	4.5%
	Hagerstown	Count			1	1
		% within Administration			2.4%	.7%
	Web	Count	8	17	14	39
		% within Administration	17.8%	35.4%	34.1%	29.1%
	Balt & Web	Count	7	6	1	14
		% within Administration	15.6%	12.5%	2.4%	10.4%
	shady & Web	Count	3	1	2	6
		% within Administration	6.7%	2.1%	4.9%	4.5%
	Wal & Web	Count	6	2	1	9
		% within Administration	13.3%	4.2%	2.4%	6.7%
E & Web	Count	3	1	2	6	
	% within Administration	6.7%	2.1%	4.9%	4.5%	
Cumb & Web	Count		1		1	
	% within Administration		2.1%		.7%	
Total	Count	45	48	41	134	
	% within Administration	100.0%	100.0%	100.0%	100.0%	

**Where do you want to take course \* Family NP Crosstabulation**

			Family NP			Total
			First Choice	Second Choice	Third Choice	
Where do you want to take course	UMB	Count	16	6	10	32
		% within Family NP	35.6%	16.7%	25.6%	26.7%
	Shady grove	Count	3	6	6	15
		% within Family NP	6.7%	16.7%	15.4%	12.5%
	Waldorf	Count	2		4	6
		% within Family NP	4.4%		10.3%	5.0%
	Easton	Count	3	1		4
		% within Family NP	6.7%	2.8%		3.3%
	Cumberland	Count		2		2
		% within Family NP		5.6%		1.7%
	Hagerstown	Count	1	3		4
		% within Family NP	2.2%	8.3%		3.3%
	Web	Count	13	11	11	35
		% within Family NP	28.9%	30.6%	28.2%	29.2%
	Balt & Web	Count	3	2	5	10
		% within Family NP	6.7%	5.6%	12.8%	8.3%
	shady & Web	Count		2	1	3
		% within Family NP		5.6%	2.6%	2.5%
	Wal & Web	Count	1	2		3
		% within Family NP	2.2%	5.6%		2.5%
E & Web	Count	2		2	4	
	% within Family NP	4.4%		5.1%	3.3%	
Cumb & Web	Count	1			1	
	% within Family NP	2.2%			.8%	
Hag & Web	Count		1		1	
	% within Family NP		2.8%		.8%	
Total	Count	45	36	39	120	
	% within Family NP	100.0%	100.0%	100.0%	100.0%	



## Frequency Tables Selected Master's Specialty Programs Programs Ordered By Popularity

### Trauma Critical Care & Emergency

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	First Choice	78	6.0	49.4	49.4
	Second Choice	43	3.3	27.2	76.6
	Third Choice	37	2.9	23.4	100.0
	Total	158	12.2	100.0	
Missing	System	1138	87.8		
Total		1296	100.0		

### Community/Public Health

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	First Choice	69	5.3	38.8	38.8
	Second Choice	57	4.4	32.0	70.8
	Third Choice	52	4.0	29.2	100.0
	Total	178	13.7	100.0	
Missing	System	1118	86.3		
Total		1296	100.0		

### Adult Primary Care NP

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	First Choice	60	4.6	39.7	39.7
	Second Choice	54	4.2	35.8	75.5
	Third Choice	37	2.9	24.5	100.0
	Total	151	11.7	100.0	
Missing	System	1145	88.3		
Total		1296	100.0		

### Administration

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	First Choice	54	4.2	33.3	33.3
	Second Choice	60	4.6	37.0	70.4
	Third Choice	48	3.7	29.6	100.0
	Total	162	12.5	100.0	
Missing	System	1134	87.5		
Total		1296	100.0		

### Family NP

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	First Choice	54	4.2	38.0	38.0
	Second Choice	41	3.2	28.9	66.9
	Third Choice	47	3.6	33.1	100.0
	Total	142	11.0	100.0	
Missing	System	1154	89.0		
Total		1296	100.0		

### Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	First Choice	49	3.8	35.3	35.3
	Second Choice	35	2.7	25.2	60.4
	Third Choice	55	4.2	39.6	100.0
	Total	139	10.7	100.0	
Missing	System	1157	89.3		
Total		1296	100.0		

### Women's Health

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	First Choice	49	3.8	35.8	35.8
	Second Choice	42	3.2	30.7	66.4
	Third Choice	46	3.5	33.6	100.0
	Total	137	10.6	100.0	
Missing	System	1159	89.4		
Total		1296	100.0		

**Where do you want to take course \* Education Crosstabulation**

			Education			Total
			First Choice	Second Choice	Third Choice	
Where do you want to take course	UMB	Count	7	11	11	29
		% within Education	17.5%	36.7%	22.9%	24.6%
	Shady grove	Count	2	3	10	15
		% within Education	5.0%	10.0%	20.8%	12.7%
	Waldorf	Count	1	1	2	4
		% within Education	2.5%	3.3%	4.2%	3.4%
	Easton	Count			2	2
		% within Education			4.2%	1.7%
	Cumberland	Count		1	2	3
		% within Education		3.3%	4.2%	2.5%
	Hagerstown	Count			2	2
		% within Education			4.2%	1.7%
	Web	Count	18	4	9	31
		% within Education	45.0%	13.3%	18.8%	26.3%
	Balt & Web	Count	4	5	4	13
		% within Education	10.0%	16.7%	8.3%	11.0%
	shady & Web	Count	3	1		4
		% within Education	7.5%	3.3%		3.4%
	Wal & Web	Count	2	1	2	5
		% within Education	5.0%	3.3%	4.2%	4.2%
	E & Web	Count	2	2	2	6
		% within Education	5.0%	6.7%	4.2%	5.1%
	Cumb & Web	Count			1	1
		% within Education			2.1%	.8%
	Hag & Web	Count	1	1	1	3
		% within Education	2.5%	3.3%	2.1%	2.5%
Total	Count		40	30	48	118
	% within Education		100.0%	100.0%	100.0%	100.0%

**Where do you want to take course \* Women's Health Crosstabulation**

			Women's Health			Total
			First Choice	Second Choice	Third Choice	
Where do you want to take course	UMB	Count	13	6	13	32
		% within Women's Health	34.2%	15.4%	31.0%	26.9%
	Shady grove	Count	4	5	9	18
		% within Women's Health	10.5%	12.8%	21.4%	15.1%
	Waldorf	Count	2	3	2	7
		% within Women's Health	5.3%	7.7%	4.8%	5.9%
	Easton	Count		4		4
		% within Women's Health		10.3%		3.4%
	Cumberland	Count		1	1	2
		% within Women's Health		2.6%	2.4%	1.7%
	Hagerstown	Count	1	1	1	3
		% within Women's Health	2.6%	2.6%	2.4%	2.5%
	Web	Count	11	8	9	28
		% within Women's Health	28.9%	20.5%	21.4%	23.5%
	Balt & Web	Count	4	1	6	11
		% within Women's Health	10.5%	2.6%	14.3%	9.2%
	shady & Web	Count		5		5
		% within Women's Health		12.8%		4.2%
	Wal & Web	Count	1	4		5
		% within Women's Health	2.6%	10.3%		4.2%
	E & Web	Count		1	1	2
		% within Women's Health		2.6%	2.4%	1.7%
	Cumb & Web	Count	1			1
		% within Women's Health	2.6%			.8%
	Hag & Web	Count	1			1
		% within Women's Health	2.6%			.8%
Total		Count	38	39	42	119
		% within Women's Health	100.0%	100.0%	100.0%	100.0%

## Appendix F

### “All Nursing Schools” Inquiry Report

# All Nursing Schools

## University of Maryland - Baltimore - School of Nursing

Report for Mar 01, 2002 to Feb 01, 2003

### Summary

	Inquiries	Percent
Total inquiries	4673	
Number of days	337	
Average inquiries per Day	13.9	
In-state inquiries	1821	39.0
<hr/>		
Total web site visits *	5621	
Average web site visits per Day	16.7	

<b>Total contacts with school</b>	<b>10294</b>
<b>Average contacts with school per Day</b>	<b>30.5</b>

\* Visitors who went to your web site from AllNursingSchools.com.

### Inquiries by Program

<b>Program</b>	<b>Inquiries</b>	<b>Percent *</b>	<b>% In-State</b>
Bachelor of Science in Nursing (BSN)	1867	40.0	48.0
Accelerated BSN	1689	36.1	37.8
RN-to-BSN	630	13.5	51.1
Online RN-to-BSN	587	12.6	37.0
Master of Science	464	9.9	27.6
Nurse Midwifery (CNM)	392	8.4	30.9
RN-to-MS	349	7.5	43.3
Part-time BSN	319	6.8	67.4
Nurse Practitioner (NP)	310	6.6	31.9
Neonatal Nurse Practitioner	221	4.7	29.4
Family Nurse Practitioner	206	4.4	37.9
Pediatric Clinical Nurse Specialist	193	4.1	44.0
Women's Health Nurse Practitioner	182	3.9	40.1
Nurse Administrator	146	3.1	40.4
Nurse Educator	139	3.0	30.9
Clinical Nurse Specialist	132	2.8	34.1
Doctor of Philosophy (PhD)	125	2.7	25.6
RN-to-MSN	122	2.6	30.3
Acute Care Nurse Practitioner	109	2.3	32.1
Adult Nurse Practitioner	95	2.0	42.1
Psychiatric/Mental Health Nurse Practitioner	89	1.9	32.6
MS/MBA	85	1.8	40.0
Part-time MSN	76	1.6	59.2
Acute Care Clinical Nurse Specialist	73	1.6	41.1
Post-Master	71	1.5	19.7
Community Health Clinical Nurse Specialist	63	1.3	42.9
Joint MSN/MBA	51	1.1	27.5
Gerontological Clinical Nurse Specialist	22	0.5	50.0

\* May total more than 100% because students can inquire about multiple programs.

### Inquiries by Country

Country	Inquiries	Percent
United States	4525	96.8
Canada	26	0.6
Oman	2	0.0
Bahamas	2	0.0
Thailand	8	0.2
Germany	8	0.2
Nigeria	12	0.3
Ghana	4	0.1
Afghanistan	5	0.1
Zimbabwe	3	0.1
Cameroon	3	0.1
United Kingdom	7	0.1
Pakistan	2	0.0
Kenya	7	0.1
Philippines	4	0.1
Jamaica	3	0.1
Iceland	2	0.0
Japan	3	0.1
British Virgin Islands	2	0.0
Saudi Arabia	3	0.1
Brazil	4	0.1
South Korea	5	0.1
Bermuda	2	0.0
Uganda	2	0.0
Italy	2	0.0
Other countries *	27	0.6

\* Countries with only 1 inquiry.

### Inquiries by State/Province (top 10)

State	Inquiries	Percent
MD	1821	39.0
PA	292	6.2
VA	289	6.2
NY	194	4.2
CA	180	3.9
NJ	132	2.8
FL	115	2.5
TX	114	2.4
NC	114	2.4
MA	79	1.7

### Inquiries by Gender

Gender Inquiries Percent



Female	4116	88.1
Male	453	9.7
Unknown	104	2.2

#### Inquiries by Age Group

Age Group	Inquiries	Percent
under 18	595	12.7
18 to 23	1159	24.8
23 to 30	1306	27.9
30 to 40	1337	28.6
over 40	12	0.3

#### Inquiries by Education Level

Education Level	Inquiries	Percent
College - Bachelor's (non-nursing)	1439	30.8
College - Under 2 Years	620	13.3
High School	601	12.9
College - Bachelor's in Nursing	520	11.1
RN - Associate	487	10.4
College - 2 Year Degree (non-nursing)	298	6.4
Other - Describe Below	210	4.5
College - Master's (non-nursing)	176	3.8
College - Master's in Nursing	130	2.8
RN - Diploma	117	2.5
RN - Associate + Bachelor's (non-nursing)	44	0.9
College - Doctorate (non-nursing)	18	0.4
College - Doctorate in Nursing	10	0.2
	3	0.1

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## Appendix G

### Criteria for Initiating, Continuing, and Closing Specialty Majors and Tracks In the Master's Program

**UNIVERSITY OF MARYLAND  
SCHOOL OF NURSING**

**CURRICULUM COMMITTEE**

**Criteria for Initiating, Continuing and Closing of Specialty  
Majors and Tracks in the MS Program**

**Initiating**

The following factors will be considered in making a judgment regarding opening of a program.

1. Documentation of current or anticipated need for program. Consideration is to be given to local, state, regional, and national needs.
2. Documentation of program uniqueness, nationally, due to access to D.C. or other factors.
3. Documentation of the anticipated impact on, and/or relation to, other programs in the state and region.
4. Documentation that program goals and objectives are congruent with aims and priorities of the School of Nursing Philosophy and Strategic Plan.
5. Documentation of the presence of employment opportunities or the future possibility of employment opportunities.
6. Documentation of the availability of sufficient resources to support the program and permit future planned growth.
  - (a) At least two faculty with current and relevant clinical experience and scholarly work; and adequate time in workload to implement and support the program;
  - (b) Presence of a critical mass of students (10 FTE per location) for at least 3 years;
  - (c) Support services, including library, computers, equipment, and any specialized needs;
  - (d) Clinical resources;
  - (e) Expert consultation within the School or University;
  - (f) Impact on University/School of Nursing resources.
  - (g) Plan and resources for meeting any specialty accreditation standards
7. Documentation that the curriculum is:
  - (a) Congruent with Masters Program objectives and specialty programs objectives;
  - (b) Current and adequate in scope;
  - (c) Logically organized:
    - 1) Rationale exists for the leveling and sequencing of content;
    - 2) Relationships exist between the major, core and supporting courses (i.e., no redundant course content with other courses.

### **Continuing**

The following are minimal expectations of ongoing programs.

1. Ongoing enrollment of ten (10) students;
2. Admission of ten (10) new students per year;
3. At least two (2) faculty with current and relevant experience and scholarly work and adequate time for teaching, updating and advising students.
4. Continued documentation of presence of employment opportunities and resources

### **Closing**

Any time a program fails to meet any one of the Continuing criteria two years in a row, an early evaluation of the program will be conducted. The criteria identified for Initiating a program will be used in making a judgment regarding continuing/closing a program.

Approved: 5/22/89

Re-Approved: Fall, 1991, 1992, 1993