# Master's-Level Nurse Practitioner Educational Programs

Findings from the 2000-2001 Collaborative Curriculum Survey

Conducted by the
American Association of
Colleges of Nursing
and the
National Organization of
Nurse Practitioner Faculties

MASTER'S-LEVEL NURSE PRACTITIONER EDUCATIONAL PROGRAMS

FINDINGS FROM THE 2000-2001 COLLABORATIVE CURRICULUM SURVEY

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INTRODUCTION

In 1998, the American Association of Colleges of Nursing (AACN) and the National Organization of Nurse Practitioner Faculties (NONPF) embarked on an unprecedented agreement to jointly collect and own data on nurse practitioner (NP) educational programs, enrollment, and graduations. This compact between the two organizations resulted in the creation of the most complete repository of data on NP education in the United States and a single data source to support health workforce planning and policy analysis.

As the roles for primary and specialty care NPs have continued to evolve in response to societal and health care needs, NP educational programs have adapted and expanded. In 2000, NP or combined NP/Clinical Nurse Specialist (CNS) majors accounted for 64.5 percent of all master's graduates (Berlin, Bednash, & Stennett, 2000). AACN and NONPF realized that comprehensive information about the current state of NP curriculum was critical to understanding NP roles. Therefore, the two organizations agreed to expand their collaboration to include a survey of the current status of master's-level NP educational programs relative to earlier assessments conducted by each organization (Berlin, Bednash, Stanley, & Scott, 1995; Harper & Johnson, 1996).

This report reflects the first joint initiative on the latest developments in NP curriculum. Specifically, this report of master's-level NP programs presents (1) types of programs and their characteristics; (2) programs by NP role preparation (single track, dual track, or combined NP/CNS); (3) course content areas included in core master's and clinical (didactic and/or clinical practicum) curriculum content; (4) selected aspects of faculty workload associated with clinical supervision; and (5) Web-based capacity of NP programs.

METHODOLOGY

SURVEY INSTRUMENT
The Joint Data Advisory Committee, comprised of members and staff from both organizations, discussed the foundation for the survey during biannual meetings in fall 1999 and spring 2000. By spring 2000, the leadership of AACN and NONPF approved the plans for a Web-based NP curriculum survey.

The project directors and Joint Data Advisory Committee reviewed earlier NP education program surveys utilized by NONPF and AACN. Building upon these previous surveys, the committee validated a survey blueprint of content areas based on NONPF's *Advanced Nursing Practice: Curriculum Guidelines and Program Standards for Nurse Practitioner Education* (NONPF, 1995) and *Domain and Competencies for Nurse Practitioner Education* (NONPF, 2000); AACN's *The Essentials of Master's Education for Advanced Practice Nursing* (AACN, 1996); and *the Criteria for Evaluation of Nurse Practitioner Programs* developed by the National Task Force on Quality Nurse Practitioner Programs (1997). AACN and NONPF developed a Web-based survey, including built-in validity checks to minimize reporting errors and data inconsistencies prior to data submission, to facilitate online data collection and reporting. An online pre-test was conducted in July 2000 by 10 representative institutions. Based on pre-test findings, the committee made final modifications to improve logistical issues and selected response items. The paper version of the survey instrument is included in Appendix A.

The survey was made available to the 328 institutions identified as having master's-level NP programs through the NONPF and AACN databases. AACN and NONPF activated the survey

Web site on August 4, 2000 and kept it active through December 2000. Schools that were unable to complete the online version due to technical difficulties received paper surveys.

DATA PROCEDURES

To ensure the quality of the data, AACN and NONPF applied rigorous data cleaning procedures prior to analysis. These procedures included contacting institutions in order to resolve inconsistencies and discrepancies. Data were excluded from the analysis if problems could not be resolved to the satisfaction of the project directors.

CATEGORIZATION OF CLINICAL TRACKS

The project directors compared three variables prior to data analysis: (1) role preparation (single, dual, or combined NP/CNS), (2) title of the NP clinical track, and (3) area of primary certification (the national certification examination that the clinical track prepares individuals to take upon graduation for entry into practice). Exploratory data analysis revealed considerable variation in clinical track title and designated area of primary certification (Appendix A, Questions 1 and 2). After considerable discussion, the project directors determined assignment to role preparation group and clinical track solely by area of primary certification.

Examples of the Categorization Process
Example 1
Title of Clinical Track: Women's Health NP/CNS
Listed Primary Certification Examination: WHNP
Categorization: Single track NP; WHNP

Example 2
Title of Clinical Track: Cardiovascular NP
Listed Primary Certification Examination: ANP
Categorization: Single track NP; ANP

Example 3
Title of Clinical Track: Oncology NP
Listed Primary Certification Examination: Adult NP
Categorization: Single track NP; ANP

Example 4
Title of Clinical Track: Primary Care of the Adult and Aged
Listed Certification Examination: GNP
Categorization: Single track NP; GNP

Example 5
Clinical Track Title: Adult Health NP-Chronic
Listed Certification Examinations: ANP and CNS in Medical-Surgical Nursing
Categorization: Combined NP/CNS; ANP and CNS in Medical-Surgical Nursing

There was one exception to the categorization process. The American Nurses Credentialing Center (ANCC) psychiatric and mental health-family NP examination was not available until approximately four months after initiation of the survey; therefore the majority of graduates sat for the psychiatric CNS examination. The project directors decided to categorize the clinical track as a NP program if the title contained 'NP', even if the psychiatric CNS certification examination was listed as the primary certification examination. Likewise, if a dual track NP program was

entitled ANP/Adult Psychiatric NP, it was classified as such rather than a combined NP/CNS program. However, programs that contained 'NP' and 'CNS' in the title (e.g., PNP/child and adolescent psychiatric and mental health CNS) were assigned to the combined NP/CNS role preparation group.

If responses to the certification examination questions were left blank or were inconsistent, the entire record for the clinical track was excluded from the analysis. Tables 1a – 1c summarize clinical track titles for single track NP, dual track NP, and combined NP/CNS track programs and their respective national certification examinations.

ANALYSIS PLAN
The data were grouped in four ways for the analysis: (1) by role preparation (single track NP, dual track NP, and combined NP/CNS clinical track programs, as well as by total clinical tracks; (2) single track NP programs by specific type of clinical track (FNP, ANP, PNP, etc.); (3) single track programs grouped by primary care and specialty care; (4) dual track NP programs stratified by primary care, specialty care, or both primary and specialty care; and (5) combined NP/CNS programs stratified by primary care, specialty care, or both primary and specialty care.

RESPONSE RATE

Two hundred seventy-five of 328 institutions with master's-level NP programs submitted partial or complete data, for an overall response rate of 83.8 percent. The list of respondent institutions is found in Appendix B. The number of clinical tracks (curriculum in a specific practice area such as family, adult, pediatric, etc.) included in the analysis totaled 679.

CHARACTERISTICS OF RESPONDENTS AND NONRESPONDENTS

Table 2 summarizes the institutional characteristics of respondents and nonrespondents. Most respondents were (1) AACN-member institutions (97.5%), (2) located in public institutions (61.8%), (3) classified as universities (86.5%), (4) autonomous schools or colleges of nursing within a university (56.0%), (5) not part of an academic health center (70.9%), and (6) schools without doctoral programs (74.5%). More respondents (29.1%) than nonrespondents (15.1%) were part of an academic health center (p = 0.05). Although the majority of respondents were not located in academic health centers, NP programs in academic health centers accounted for 346 of the 679 (51.0%) clinical tracks in the database. There were no other statistically significant differences between respondents and nonrespondents.

DEFINITION OF TERMS USED IN THIS REPORT

Clinical Track: Clinical track is defined as curriculum in a specific practice area such as family, acute care, pediatric, etc.

Clinical Track Title: The name of the clinical track as assigned by the nursing academic unit.

Clinical Track Courses: The advanced practice nursing and specialty curriculum content included in clinical courses (didactic and/or clinical practicum).

Clinical Practice Hours: The clock hours in which direct clinical care is provided to individuals, families and populations in specific areas of NP practice. Clinical practice hours *exclude* didactic hours.

Combined Nurse Practitioner/Clinical Nurse Specialist: Graduate (master's-level) educational programs in which, by curricular design, the NP and CNS roles are merged in the curriculum. Graduates are eligible to sit for one NP national certification exam and one CNS national certification exam (e.g., gerontological/geriatric nurse practitioner and CNS in gerontological nursing).

Direct Clinical Observation: A faculty site visit to the clinical setting to observe a student interacting face-to-face with a real patient.

Didactic Hours: The clock hours in which content is taught in the educational program, including classroom and skill laboratory hours. Didactic hours *exclude* clinical hours.

Direct Supervision: The type of oversight given when faculty function as on-site clinical preceptors responsible for guiding students' acquisition of clinical skills on a patient-by-patient basis.

Graduate Core Courses: The foundational curriculum content deemed essential for all students who pursue a master's degree in nursing *regardless* of the specialty or functional focus.

Indirect Clinical Observation: Faculty contact with students by methods other than site visits. These methods include student-faculty conferences, telephone calls, and videotaped conferences.

Indirect Supervision: The type of oversight given when faculty share supervisory responsibility with other clinicians serving as clinical preceptors.

Interdisciplinary Education: An educational approach in which students from two or more disciplines collaborate in the learning process with the goal of fostering interprofessional interaction that enhances the practice of each discipline.

Nurse Practitioner Primary Certification Examination (Single Track): The *principal* national examination that the clinical track prepares the majority of graduates to take. For instance, if the clinical track is titled "adult cardiovascular NP," the primary certification examination is adult nurse practitioner because the primary clinical focus of the track is adult nurse practitioner. The cardiovascular component is a subspecialty. The primary certification examination was used to categorize clinical tracks.

Nurse Practitioner Program: A graduate (master's-level) preparation in which a defined curriculum includes theory, research, and clinical preparation for competency-based primary

care or specialty practice in single, dual or combined NP clinical tracks. These programs prepare graduates to be eligible for national NP certification examinations.

Nurse Practitioner Program (Dual Track): Graduate (master's-level) educational programs whose curricular design allows students to major in two NP clinical tracks. Graduates are eligible to sit for two national NP certification examinations (e.g., adult nurse practitioner and gerontological/geriatric nurse practitioner).

Nurse Practitioner Program (Single Track): Graduate (master's-level) educational programs whose curricular design prepare graduates to sit for one national NP certification examination (e.g., adult nurse practitioner).

Primary Care: The provision of integrated, accessible health care services by clinicians who are accountable for addressing a large majority of personal health care needs, developing a sustained partnership with patients, and practicing in the context of family and community (Institute of Medicine, 1996).

Primary Care Tracks: Primary care tracks include the following clinical practice areas: adult nurse practitioner, family nurse practitioner, pediatric nurse practitioner, women's health care nurse practitioner and gerontological/geriatric nurse practitioner.

Psychiatric Nurse Practitioner Program
Psychiatric Nurse Practitioner/Clinical Nurse Specialist Program: Graduate (master's-level) preparation in either the NP or CNS role that expands theoretical, research and clinical preparation for competency-based practice in psychiatric/mental health care. These programs prepare graduates to be eligible to sit for the national certification exam in advanced psychiatric/mental health nursing as either an NP or an CNS. The ANCC psychiatric and mental health-family NP certification examination was not available when this survey was initiated.

Specialty Care: The provision of health care services by clinicians to patient populations that are directed at the diagnosis, treatment, and management of discrete, complex health care problems.

Specialty Care Tracks: Specialty care tracks include the following clinical practice areas: acute care nurse practitioner, neonatal nurse practitioner, adult psychiatric/mental health nurse practitioner, and child and adolescent psychiatric/mental health nurse practitioner.

Subspecialty Component: Subspecialty components include advanced practice preparation in clinical areas such as oncology, emergency care, cardiovascular, and occupational health. The subspecialty component is *in addition* to the clinical area identified as the primary national certification area. For example, if the clinical track is titled "adult cardiovascular NP", the primary certification examination is adult nurse practitioner because the primary clinical focus of the track is adult nurse practitioner. The cardiovascular component is a subspecialty.

Web-Based Programs: Totally Web-based programs refer to NP educational programs that are offered completely through online instruction utilizing Web technology.

Web-Enhanced Programs: Web-enhanced refers to NP educational programs that use Web technology to supplement in-classroom teaching.

ROLE PREPARATION (SINGLE TRACK NP, DUAL TRACK NP, AND COMBINED NP/CNS)

General Program Characteristics and Requirements

➢ The majority of the 275 respondent institutions prepared NP graduates in single track roles (87.5%, or 594 of 679 clinical tracks) (Table 3a). The most frequently reported clinical track was family (39.7%), followed by adult (17.5%), pediatric (15.5%), acute care (6.7%), women's health (6.4%), geriatric (5.4%), neonatal (5.4%), and psychiatric/mental health (3.4%) (Table 3b). Dual track NP programs and combined NP/CNS programs accounted for 5.0 and 7.5 percent of clinical tracks, respectively (Table 3a).

Figure 1. Master's-Level NP Programs by Role Preparation.
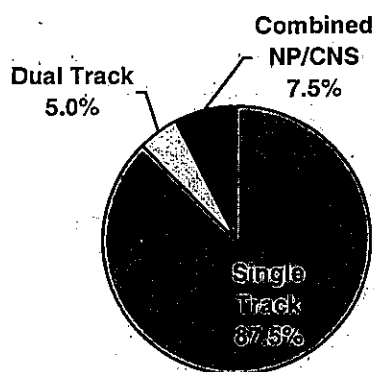
➢ Most respondents (70.9%) were not part of an academic health center (AHC). Although the majority of respondents was not affiliated with an AHC, 51.0% of all NP clinical tracks were offered in institutions that were part of an academic health center (346 of 679 clinical tracks) (Table 2).

➢ Eighty percent of single track (84.3%) and 91.2 percent of dual track programs prepared graduates for primary care practice areas, whereas 56.9 percent of combined NP/CNS program tracks prepared graduates in one primary care area and one specialty care area (Table 3a).

➢ The majority of master's programs operated on a semester basis (88.4%) and allowed part-time study (96.3%). Mean length of the master's program was 21.5 ± 5.0 months. Eighty-seven percent (87.3%) of programs had a time limit for completion; mean completion time was 64.0 ± 13.1 months (Table 4).

➢ The mean number of required semester credit hours was highest for dual track programs (48.1 ± 4.7) followed by combined NP/CNS programs (46.3 ± 6.6). Single track programs had the lowest mean number of semester credit hours (44.9 ± 4.6). On a quarter basis, combined NP/CNS programs had the highest mean number of required credit hours (71.7 ± 17.1), followed by dual track programs (70.5 ± 12.1), and single track programs (64.4 ± 8.5) (Table 5).

➤ The mean for didactic and supervised clinical practice clock hours for all 679 clinical tracks was 485.2 ± 147.7 and 650.6 ± 118.0, respectively (Table 5).

➤ Dual track NP programs had the highest mean number of didactic (541.8 ± 146.5) and supervised clinical practice (708.5 ± 182.1) clock hours (Table 5).

CORE MASTER'S CURRICULUM CONTENT

For each specific content area included in the curriculum, respondents were asked to indicate if the subject matter was (1) not offered, (2) offered as a separate course, or (3) offered and integrated in other courses.

➤ Core master's content areas taught most frequently as separate courses included: research methodology and design (95.1%), theory (77.3%), professional role issues (63.6%), health policy issues (48.5%), and statistics (43.6%) (Table 6).

Figure 4. Content Areas Included in Core Master's Courses Offered in NP Curricula as Separate Courses.
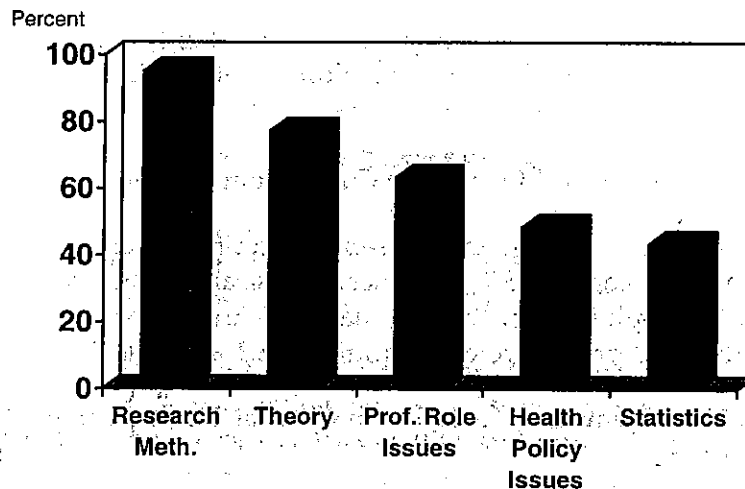
➤ Core master's content areas integrated most frequently in other courses included: managed care (88.6%), sociocultural diversity (86.4%), ethics (72.7%), population-based care (72.5%), organization systems and theory (70.6%), health economics/health care financing (69.6%), computer technology (62.4%), health promotion and disease prevention (62.2%), and health policy issues (49.9%) (Table 6).

Figure 5. Content Areas Most Frequently Included in Core Master's Courses Offered in NP Curricula as Integrated Courses.
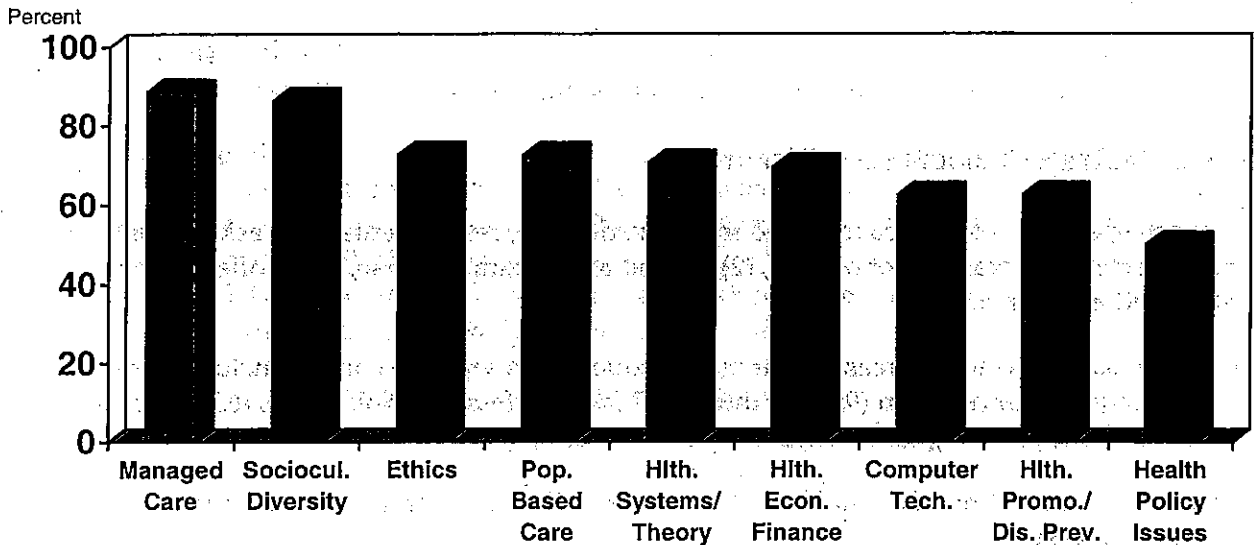
Percent

> Twenty-three percent (22.9%) of clinical track programs reported that computer technology and statistics (22.7%) were not offered in the curriculum (Table 6). Questions about prerequisite courses were not included in this survey.

Clinical Track (Didactic and/or Clinical Practicum) Curriculum Content

> Course content areas offered most frequently as separate courses in clinical track courses included advanced pharmacology (97.8%), advanced physical/health assessment (96.6%), advanced physiology/pathophysiology (93.7%), diagnosis, treatment and management of illness (59.9%), and advanced practice role preparation (58.3%) (Table 7).

Figure 6. Content Areas Most Frequently Included in Clinical Track Courses Offered in NP Curricula as Separate Courses.
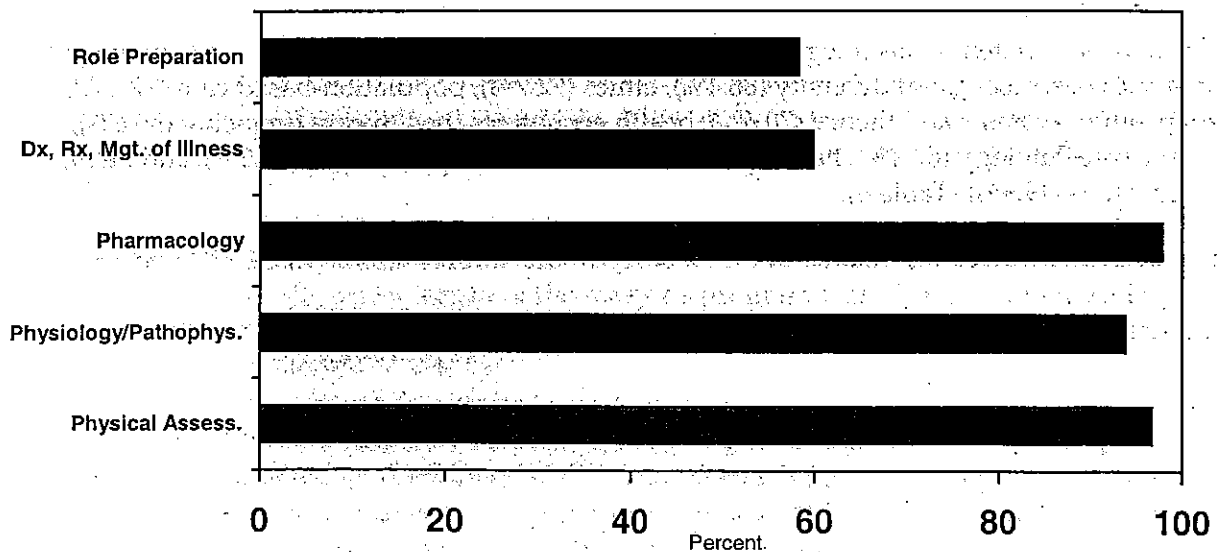
Percent.

➤ Content areas most often integrated in other clinical track courses included (Table 7):

Content Area	Percent
Interdisciplinary Team Concepts	95.4
Evidence-Based Practice	95.0
Best Practices	92.3
Immunology	90.6
Complementary and Alternative Modalities	88.8
ICD Procedural and Diagnostic Coding	87.6
Clinical Laboratory Procedures	87.4
Mental Health	87.0
Human Development	86.5
Continuous Quality Improvement	86.0
Genetics	83.8
End of Life Care	82.6
Office Emergencies	81.5
X-Ray Interpretation	80.5

➤ Content related to minor surgical procedures, suturing, end of life care, and EKG interpretation was not offered in 44.2, 28.8, 16.4, and 15.9 percent of clinical tracks, respectively (Table 7).

SINGLE TRACK PROGRAMS GROUPED BY PRIMARY CARE AND SPECIALTY CARE

General Program Characteristics
➤ The number of primary care clinical tracks (N=501, 84.3%) in master's-level NP single track programs outnumbered specialty care tracks (N=93, 15.7%) by 5 to 1 (Table 3a).

Clinical Track (Didactic and/or Clinical Practicum) Curriculum Content
➤ Advanced practice role preparation (59.9% vs. 50.5%), continuous quality improvement (3.4% vs. 0.0%), end of life care (1.4% vs 0.0%), and community health (13.0% vs. 4.3%) were taught as separate courses in a higher percentage of primary care tracks than in specialty care tracks. Diagnosis, treatment, and management of illness (65.6% vs. 58.7%), mental health (18.3% vs. 6.8%), ICD procedural and diagnostic coding terminology (6.5% vs. 3.6%), suturing (12.0% vs. 8.2%), EKG interpretation (14.0% vs. 6.4%), and minor surgical procedures (11.0% vs. 2.8%) were offered as separate courses more frequently in specialty care tracks than in primary care tracks (Table 11).

➤ More clinical tracks classified as primary care as opposed to specialty care did not offer content in the curriculum related to minor surgical procedures (46.7% vs. 36.3%) and end of life care (19.0% vs. 9.7%). A higher percentage of specialty care tracks did not offer course content related to office emergencies (34.4% vs. 11.8%), community health (21.5% vs. 10.8%), complementary and alternative modalities (11.8% vs. 3.0%), x-ray interpretation (16.1% vs. 9.8%), clinical laboratory procedures (8.6% vs. 3.0%), and mental health (11.8% vs. 2.4%) than did primary care tracks (Table 11).

➢ Single NP clinical tracks had the highest mean number (7.9 ± 5.9) of faculty visits over the entire program, followed by combined NP/CNS (7.7 ± 4.8) and dual tracks (7.0 ± 3.9) (Table 16). Both dual track and combined NP/CNS tracks, however, had higher mean numbers of required didactic and clinical practice clock hours (Table 5).

➢ The mean number of indirect observations per semester or quarter was highest for the combined NP/CNS tracks (13.1 ± 5.8), followed by dual (12.2 ± 5.7) and single (11.8 ± 6.7) clinical tracks (Table 16).

➢ The median and modal student-to-faculty ratios for direct and indirect clinical supervision were 1:1 and 6:1, respectively, regardless of the type of role preparation (single, dual, and combined NP/CNS tracks) (Table 16).

➢ Faculty were responsibility for clinical site development and clinical site coordination in 88.0 and 86.5 percent of all clinical track programs, respectively (Table 16).

COMPARISON OF SELECTED NP PROGRAM CHARACTERISTICS FROM 1995 TO 2000

➢ In general, since 1995 (Harper & Johnson, 1996), the mean number of semester credit hours required for the NP master's degree has remained stable, increasing by only one credit hour. However, didactic and supervised clinical practice clock hours have increased by 72 and 36 clock hours, respectively. This increase is reflected in the expansion of core master's and clinical content areas.

	Mean Hours	
	1995	2000
Semester Credit Hours	44	45
Didactic Clock Hours	413	485
Clinical Practice Clock Hours	615	651

INTERDISCIPLINARY EDUCATION

➢ The majority of the 275 respondent schools did not employ interdisciplinary education in either core master's (72.7%) or clinical track courses (64.3%) (Table 17).

APPLICATION OF WEB TECHNOLOGY

➢ Seventy-four percent (74.1%) of schools with NP programs used Web technology to supplement in-classroom teaching; 2.6 percent of schools offered one or more totally Web-based clinical track programs, meaning that all instruction occurred online utilizing Web technology (Table 18).

➢ Of the seven schools that offer totally Web-based curricula, six schools (one school did not respond) reported that faculty provided direct on-site supervision of students during the clinical practicum (Table 18).

DISCUSSION

This report provides a significant resource on NP education. In addition, the report provides answers to many questions that have been raised over the past several years regarding NP education. However, it also raises several questions or issues that need addressing or which warrant further discussion.

In 1995 and 1996, AACN and NONPF reported the last major NP curriculum assessments, respectively (Berlin, Bednash, Stanley, & Scott, 1995; Harper & Johnson, 1996). In the interval since that time, several national consensus-based documents regarding nurse practitioner education have been published. *Advanced Nursing Practice: Curriculum Guidelines and Program Standards for Nurse Practitioner Education* (NONPF, 1995) and *Domains and Competencies for Nurse Practitioner Education* (NONPF, 2000) provide a framework for specialty curriculum content in NP programs. *The Essentials of Master's Education for Advanced Practice Nursing* (AACN, 1996) provides a framework for master's education programs for all advanced practice nurses, particularly the graduate core content and advanced practice nursing core content. The data reported here document the impact of the aforementioned publications on core and specialty content in NP education and the move by educators to frame NP programs around these nationally recognized standards.

Criteria for Evaluation of Nurse Practitioner Programs, a report of the National Task Force on Quality Nurse Practitioner Education, became available in 1997. This consensus-based document, currently under revision, created a framework for the review of all NP educational programs. The impetus for the National Task Force, which included NP education and certification organizations, was the National Council of State Boards of Nursing's (NCSBN) concern about the variance among educational programs. Variation does exist among NP programs depending upon the clinical track, specialty focus, subspecialty component, and number of tracks. However, the findings reported here (e.g., student-to-faculty ratios and number of clinical hours) strongly mirror the criteria established by the National Task Force on Quality Nurse Practitioner Education.

The data in this report raise several questions and issues related to NP education that may warrant further discussion by the NP education community as a whole.

- Titles of NP clinical tracks vary tremendously and many do not reflect NP role preparation (single, dual, and combined NP/CNS tracks) and certification eligibility. The relationship between titling and certification warrant examination and should adequately reflect role preparation. This developmental issue is important because educational preparation drives certification eligibility and ultimately scope of practice.

- Variation in program titles also may limit the accurate enumeration of practitioners prepared in the primary and specialty care roles. For example, an HIV NP program is a subspecialty and prepares individuals who are eligible to sit for the ANP certification examination. The subspecialty component of the program addresses a critical health care need but does not reflect the actual NP role or certification eligibility.

- A difference in the number of semester credit hours between single track and combined NP/CNS tracks merits further investigation and may offer direction for the future development of master's level APN curricula. The discussion regarding the similarities and differences among NP and CNS roles and educational programs has been ongoing. The

The differences in number of credit hours and the overlap in course requirements to meet both NP and CNS certification criteria may spur this discussion.

- Although some programs did not identify course content areas, (e.g., minor surgical procedures, suturing, and end of life care), anywhere in the curriculum, a majority of programs offered these areas as separate courses or integrated in other courses. This and other findings provide important information for the advanced practice nursing community in establishing future guidelines for NP education. As practice areas and NP roles continue to evolve to meet the needs of the health care system, NP education must reflect these changes.

- Since 1995 the mean number of required semester credit hours for NP programs has not increased. However, the actual number of didactic and clinical practice hours included in the programs has increased dramatically. Educators, due to expanding knowledge and technologies and possibly to national NP education guidelines, have continued to add additional requirements for students to complete the programs without increasing the number of required credit hours. Has the current NP and NP/CNS curriculum reached capacity and what does this finding imply for future curriculum development?

- A majority of NP programs did not include interdisciplinary education experiences in the curriculum. In light of the current emphasis on the need to increase interdisciplinary health professions education, research, and practice (AACN, 1995; Donaldson, Yordy, Lohr, & Vanselow, 1996; O'Neil and the Pew Health Professions Commission, 1998) to improve health care outcomes, the role of and need for incorporating interdisciplinary education into the NP curriculum should be examined.

RECOMMENDATIONS FOR FURTHER INVESTIGATION

This report summarizes the most comprehensive information to date on master's-level NP education. Emerging from these findings are several substantive areas that merit further investigation by NP educators and nursing leaders. Among the recommendations for further study are the following:

> The relationships among program titles, NP workforce data, and the categorization of primary and specialty care roles.

> The development and evolution of new program titles and their relationship to NP role preparation, certification eligibility, and NP workforce supply and demand.

> The development and tracking of new subspecialty areas and the relationships between NP role preparation and subspecialty roles.

> The breadth and depth of core and specialty content in NP role preparation (single, dual, combined NP/CNS) for primary and specialty care tracks.

> The current and future capacity of master's-level NP programs to incorporate new content and/or additional content and the potential for expansion or contraction of program requirements at the master's-level and into the post-masters and/or doctoral levels.

The findings reported here demonstrate that NP curriculum has changed since 1995 and suggest the need to collect such data at regular five-year intervals to monitor progress and change.

In summary, the findings in this report provide a valuable guidepost to NP educators and administrators in designing, evaluating, and revising NP programs and curricula. The report should also serve to further guide accrediting organizations, credentialing bodies, and NP leaders and educators in continually improving the quality of NP programs.

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CLINICAL TRACK TITLES INCLUDED IN CERTIFICATION AREAS AND SELECTED CHARACTERISTICS OF RESPONDENT INSTITUTIONS AND PROGRAMS

Track Title	Family Nurse Practitioner	Adult Nurse Practitioner	Pediatric Nurse Practitioner	Gerontological Nurse Practitioner	Women's Health Nurse Practitioner	Neonatal Nurse Practitioner	School Nurse Practitioner	Acute Care Nurse Practitioner	CNS in Psychiatric Mental Health Nursing-Adult or Child and Adolescent	Psychiatric Mental Health Nurse Practitioner-Family or Adult NP
Acute Care (Adult) Nurse Practitioner								X		
Acute Care (Pediatric) Nurse Practitioner										
Acute Care Nurse Practitioner/Neonatal						X				
Adult Cardiovascular Nurse Practitioner		X								
Adult Nurse Practitioner		X								
Adult Nurse Practitioner w/Focused Study in Mental Health		X								
Adult Nurse Practitioner/Oncology Clinical Nurse Specialist		X								
Adult Nurse Practitioner/Oncology Nurse Practitioner		X								
Adult Occupational and Environmental Health										
Adult Psychiatric and Mental Health Nurse Practitioner									X	(or) X
Adult/HIV/AIDS		X								
Advanced Practice Community Health Nursing		X								
Advanced Practice Home Care Nurse Practitioner										
Advanced Practice in Oncology										
Advanced Practice Neonatal Nursing						X				
Advanced Practice Nursing: Mental Health										
Advanced Practice Nursing: Pediatrics			X							
Advanced Practice Nursing-Adult Primary Care		X								
Advanced Practice Pediatric Nursing			X							
Cardiac Health and Rehabilitation/Adult Nurse Practitioner		X								
Child Health Nurse Practitioner/Clinical Nurse Specialist			X							
Children's Health Advanced Practice Nursing			X							
Community Based Primary Care Nurse Practitioner	X	X								
Community Health Primary Care	X									
Emergency Nurse Practitioner	X									
Family Nurse Practitioner	X									
Family Nurse Practitioner/Clinical Nurse Specialist	X									
Family Nurse Practitioner-Congregational Care	X									
Gerontological Nurse Practitioner				X						
Infant/Neonatal Nurse Practitioner/Clinical Nurse Specialist						X				

Area of Primary Certification

Table 1a. Clinical Track Titles Included in Single Track[1] Nurse Practitioner Programs by Area of Primary Certification[2] (N=594 Clinical Tracks in 265 Schools), cont.

Track Title	Family Nurse Practitioner	Adult Nurse Practitioner	Pediatric Nurse Practitioner	Gerontological Nurse Practitioner	Women's Health Nurse Practitioner	Neonatal Nurse Practitioner	School Nurse Practitioner	Acute Care Nurse Practitioner	CNS in Psychiatric Mental Health Nursing-Adult or Child and Adolescent	Psychiatric Mental Health Nurse Practitioner-Family or Adult NP
Neonatal Critical Care Clinical Nurse Specialist/Nurse Practitioner						X				
Neonatal Nurse Practitioner						X				
Nursing of Children/Pediatric Nurse Practitioner			X							
OB/GYN Nurse Practitioner					X					
Occupational Health Nurse Practitioner		X								
Oncology Nurse Practitioner		X								
Oncology/Immune Deficiency/Adult Nurse Practitioner		X								
Pediatric Acute/Chronic Care Advanced			X							
Pediatric Advanced Nursing Practice			X							
Pediatric Critical Care Nurse Practitioner			X							
Pediatric Nurse Practitioner			X							
Pediatric Nurse Practitioner/Child Specialist			X							
Pediatric Nurse Practitioner/Clinical Nurse Specialist			X							
Pediatric Oncology Advanced Practice			X							
Pediatric/School Nurse Practitioner										
Peri Operative Nurse Practitioner								X		
Perinatal Nurse Practitioner					X					
Primary Care Nurse Practitioner	X									
Psychiatric/Mental Health Advanced Practice									X	
Psychiatric/Mental Health Nurse Practitioner/Clinical Nurse Specialist									X	
Psychiatric/Mental Health Nurse Practitioner-Lifespan									X	
Psychiatric Mental Health Nurse Practitioner (Family)									X	
School Nurse Practitioner							X			
Women's Health Nurse Practitioner					X					
Women's Health Nurse Practitioner/Clinical Nurse Specialist					X					
Women's Health Nursing/Women's Health Nurse Practitioner					X					

[1] Single track refers to those programs where graduates are eligible to sit for one NP certification examination.

[2] Primary certification refers to the main certification examination that a clinical track prepares the majority of graduates to take. For instance, if the clinical track is titled 'Adult Cardiovascular NP', the primary certification examination is ANP (because the main focus of the track is ANP). The cardiovascular component is a subspecialty.

Table 1b. Clinical Track Titles Included in Dual Track* Nurse Practitioner Programs by Areas of Certification (N=34 Clinical Tracks in 30 Schools).

Track Title	Area of NP Certification #1					Area of NP Certification #2						
	Family Nurse Practitioner	Adult Nurse Practitioner	Pediatric Nurse Practitioner	Gerontological Nurse Practitioner	Women's Health Nurse Practitioner	Family Nurse Practitioner	Adult Nurse Practitioner	Gerontological Nurse Practitioner	Women's Health Nurse Practitioner	Neonatal Nurse Practitioner	School Nurse Practitioner	Acute Care Nurse Practitioner
Adult Acute Care Nurse Practitioner		X										X
Adult/Gerontological Nurse Practitioner		X						X				
Adult/Women's Health Nurse Practitioner		X							X			
Family/Adult Nurse Practitioner	X						X					
Family/Gerontological Nurse Practitioner	X							X				
Family/School Nurse Practitioner	X										X	
Pediatric/Neonatal Nurse Practitioner			X							X		
Primary Care of Adult and Aged		X						X				
Primary Care/Adult Nurse Practitioner	X						X					
Women's Health Nurse Practitioner					X							

* Dual track refers to those programs where, by curricular design, students major in two NP clinical tracks. Graduates are eligible to sit for two NP examinations (e.g., ANP and GNP).

Table 1c. Clinical Track Titles Included in Combined Nurse Practitioner/Clinical Nurse Specialist* (NP/CNS) Programs by Areas of Certification (N=51 Clinical Tracks in 38 Schools).

Track Title	Area of NP Certification					Area of CNS Certification					
	Family Nurse Practitioner	Adult Nurse Practitioner	Pediatric Nurse Practitioner	Gerontological Nurse Practitioner	Acute Care Nurse Practitioner	CNS in Psychiatric Mental Health Nursing-Adult	CNS in Psychiatric Mental Health Nursing-Child and Adolescent	CNS in Gerontological Nursing	CNS (CCNS) in Acute and Critical Care-Adult	CNS in Community Health Nursing	CNS in Medical-Surgical Nursing
Acute Care (Adult) Nurse Practitioner					X						X
Acute Care NP/Acute and Critical Care CNS					X				X		X
Adult Acute Care NP/CNS					X						X
Adult Acute Care/Medical-Surgical CNS					X						
Adult Health Nurse Practitioner-Chronic		X									
Adult NP, Primary, Acute and Critical Care		X			X				X		
Adult NP/Acute and Critical Care CNS									X		
Adult NP/Adult Psychiatric/Mental Health CNS-Adult		X				X					
Adult NP/Adult Psychiatric and Mental Health NP		X				X					
Adult NP/Community Health CNS		X								X	X
Adult NP/Medical-Surgical CNS		X									X
Adult Nurse Practitioner		X									X
Adult/Adult Health		X									
Advanced Practice Nursing: Geriatrics				X				X			
Advanced Practice Psychiatric Nurse	X					X					
Cardiopulmonary Nursing/Adult NP		X									X
Family NP/Community Health CNS	X									X	
Family NP/Medical-Surgical CNS	X										
Family NP/Psychiatric/Mental Health CNS-Adult	X					X					
Family Nurse Practitioner	X									X	
Gerontologic Nursing/Gerontological NP				X				X			
Gerontological NP/CNS				X				X			
Home Health Advanced Practice	X									X	
Pediatric NP/Psychiatric/Mental Health CNS-Child/Adolescent			X				X				
Psychiatric-Primary-Care-NP		X				X					

Table 2. Selected Characteristics of Respondent and Nonrespondent Institutions with Master's-Level Nurse Practitioner Programs (N=328 Schools).

CHARACTERISTIC	RESPONDENTS (N=275) Response Rate = 83.8%		NONRESPONDENTS (N=53)		p value[1]
	Number	(%)	Number	(%)	
AACN MEMBER STATUS					ns
Member	268	(97.5)	48	(90.6)	
Nonmember	7	(2.5)	5	(9.4)	
REGION					ns
North Atlantic	84	(30.5)	12	(22.6)	
Midwest	61	(22.2)	14	(26.4)	
South	89	(32.4)	17	(32.1)	
West	41	(14.9)	10	(18.9)	
TYPE OF INSTITUTION					ns
Public	170	(61.8)	28	(52.8)	
Private	105	(38.2)	25	(47.2)	
PARENT INSTITUTION					ns
University	238	(86.5)	40	(75.5)	
College/Other	37	(13.5)	13	(24.5)	
DESCRIPTION OF PROGRAM					ns
Autonomous	154	(56.0)	26	(49.1)	
Department/Division/Other	121	(44.0)	27	(50.9)	
PART OF AN ACADEMIC HEALTH CENTER[2]					0.05
Yes	80	(29.1)	8	(15.1)	
No	195	(70.9)	45	(84.9)	
DOCTORAL PROGRAM OFFERED					ns
Yes	70	(25.5)	7	(13.2)	
No	205	(74.5)	46	(86.8)	

[1] Chi-Square, Yates' Chi-Square, or Fisher's Exact Test.

[2] Although 70.9 percent of respondents were not part of an academic health center, 51 percent of all NP clinical tracks were offered in institutions that were part of an academic health center.

NOTE: Percents may not total to 100.0 due to rounding.

Table 3a. Master's-Level Nurse Practitioner Programs by Role Preparation, Type of Care, and Practice Area (N=679 Clinical Tracks in 275 Schools).

	NUMBER OF SCHOOLS	NUMBER OF CLINICAL TRACKS[1]	PERCENT OF CLINICAL TRACKS
Role Preparation			
Single Track[2]	265	594	87.5
Dual Track[3]	30	34	5.0
Combined NP/CNS[4]	38	51	7.5
Clinical Tracks by Type of Care			
Primary Care[5]	371	545	80.3
Specialty Care[6]	72	102	15.0
Both Primary and Specialty Care[7]	29	32	4.7
Role Preparation by Type of Care			
Single Track			
Primary Care	264	501	84.3
Specialty Care	70	93	15.7
Dual Track			
Primary Care	28	31	91.2
Specialty Care	3	3	8.8
Combined NP/CNS			
Primary Care	13	13	25.5
Specialty Care	9	9	17.6
Both Primary and Specialty Care	26	29	56.9

[1] Clinical track is defined as curriculum in a specific practice area such as family, acute care, pediatric, psychiatric and mental health, etc.

[2] Single track refers to those programs where graduates are eligible to sit for one NP certification examination.

[3] Dual track refers to those programs where, by curricular design, students major in two NP clinical tracks. Graduates are eligible to sit for *two* NP examinations (e.g., ANP and GNP).

[4] Combined NP/CNS refers to those programs where, by curricular design, the NP and CNS roles are merged in the curriculum. Graduates are eligible to sit for *one* NP and *one* CNS certification examination (e.g., GNP and CNS in gerontological nursing).

[5] Tracks defined as Primary Care are: Family, Adult, Geriatric, Pediatric, and Women's Health.

[6] Tracks defined as Specialty Care are: Acute Care, Neonatal, Adult Psych/Mental Health, and Child & Adolescent Psych/Mental Health.

[7] Tracks defined as "both" include one primary care track and one specialty care track.

NOTE: Percents may not total to 100.0 due to rounding.

Table 3b. Specific Practice Areas (Based on Primary Certification Examination[1]) of Master's-Level Nurse Practitioner Single Track[2] Programs (N=594 Clinical Tracks in 265 Schools).

	NUMBER OF CLINICAL TRACKS[1]	PERCENT OF CLINICAL TRACKS
Practice Area		
Family	236	39.7
Adult	104	17.5
Pediatric	92	15.5
Gerontological/Geriatric	32	5.4
Women's Health	38	6.4
Neonatal	32	5.4
Acute Care	40	6.7
Adult Psychiatric/Mental Health	19	3.2
Child and Adolescent Psychiatric/Mental Health	1	0.2

[1] Primary certification refers to the main certification examination that a clinical track prepares the majority of graduates to take. For instance, if the clinical track is titled "Adult Cardiovascular NP", the primary certification examination is ANP (because the main focus of the track is ANP). The cardiovascular component of the clinical track is a subspecialty.

[2] Single track refers to those programs where graduates are eligible to sit for one NP certification examination.

NOTE: Percents may not total to 100.0 due to rounding.

Table 4. Selected Characteristics of Master's-Level Nurse Practitioner Programs Categorized by Single Track Nurse Practitioner[1], Dual Track Nurse Practitioner[2], Combined Nurse Practitioner/Clinical Nurse Specialist[3] and Total Clinical Tracks (N=679 Clinical Tracks in 275 Schools).

CHARACTERISTIC	SINGLE TRACK NP (n=594 Clinical Tracks in 265 Schools)		DUAL TRACK NP (n=34 Clinical Tracks in 30 Schools)		COMBINED NP/CNS (n=51 Clinical Tracks in 38 Schools)		TOTAL CLINICAL TRACKS (N=679 Clinical Tracks in 275 Schools)	
	Number	(%)	Number	(%)	Number	(%)	Number	(%)
BASIS FOR ACADEMIC YEAR								
Semesters	528	88.9	28	82.4	44	86.3	600	88.4
Quarters	66	11.1	6	17.6	7	13.7	79	11.6
LENGTH OF MASTER'S PROGRAM (MONTHS)								
Mean ± SD	21.5 ± 5.1		21.3 ± 3.2		21.5 ± 5.0		21.5 ± 5.0	
Median	21		21		22		21	
Mode	24		24		24		24	
Not Reported	{4}				{1}		{5}	
TIME LIMIT FOR PROGRAM COMPLETION								
Yes	515	86.7	31	91.2	47	92.2	593	87.3
Mean ± SD (months)	64.1 ± 13.2		63.9 ± 12.9		63.6 ± 12.7		64.0 ± 13.1	
Median	60		60		60		60	
Mode	60		60		60		60	
No	79	13.3	3	8.8	4	7.8	86	12.7
PART-TIME STUDY ALLOWED								
Yes	570	96	34	100.0	50	98.0	654	96.3
No	24	4.0	0		1	2.0	25	3.7

[1] Single track refers to those programs where graduates are eligible to sit for one NP certification examination.

[2] Dual track refers to those programs where, by curricular design, student major in two NP clinical tracks. Graduates are eligible to sit for two NP examinations (e.g., ANP and GNP).

[3] Combined NP/CNS refers to those programs where, by curricular design, the NP and CNS roles are merged in the curriculum. Graduates are eligible to sit for one NP and one CNS certification examination (e.g., GNP and CNS in gerontological nursing.

Table 5. Master's-Level Nurse Practitioner Programs Categorized by Single Track Nurse Practitioner[1],
Dual Track Nurse Practitioner[2], Combined Nurse Practitioner/ Clinical Nurse Specialist[3],and Total
Clinical Tracks by Degree Requirements, Allocation of Credit Hours, and Clinical Practice
Hours (N=679 Clinical Tracks in 275 Schools).

CHARACTERISTIC	SINGLE TRACK NP (n=594 Clinical Tracks in 265 Schools)	DUAL TRACK NP (n=34 Clinical Tracks in 30 Schools)	COMBINED NP/CNS (n=51 Clinical Tracks in 38 Schools)	TOTAL CLINICAL TRACKS (N=679 Clinical Tracks in 275 Schools)
DEGREE REQUIREMENTS (TOTAL CREDIT HOURS)				
Semester				
Mean ± SD	44.9 ± 4.6	48.1 ± 4.7	46.3 ± 6.6	45.2 ± 4.8
Median	45	48	45	45
Mode	45	44	42	45
Not Reported			{1}	{1}
Quarter				
Mean ± SD	64.4 ± 8.5	70.5 ± 12.1	71.7 ± 17.1	65.5 ± 10.0
Median	66	69	74	67
Mode	69	58	68	69
Not Reported	{1}			{1}
CREDIT HOURS ALLOCATED TO GRADUATE CORE COURSES[4]				
Semester				
Mean ± SD	15.7 ± 5.4	15.4 ± 6.0	15.5 ± 5.4	15.7 ± 5.4
Median	15	14	15	15
Mode	12	12	12	12
Not Reported	{6}		{1}	{7}
Quarter				
Mean ± SD	15.0 ± 4.6	18.3 ± 5.2	14.7 ± 4.1	15.3 ± 4.6
Median	14	18	13	14
Mode	14	18	11	14
Not Reported	{1}			{1}
DIDACTIC CLOCK HOURS[5]				
Mean ± SD	481.2 ± 145.6	541.8 ± 146.5	494.7 ± 166.9	485.2 ± 147.7
Median	480	532	495	483
Mode	540	510	495	495
Not Reported	{11}	{1}	{1}	{13}
SUPERVISED CLINICAL PRACTICE CLOCK HOURS[6]				
Mean ± SD	644.0 ± 109.0	708.5 ± 182.1	690.4 ± 147.5	650.6 ± 118.0
Median	630	670	674	630
Mode	600	500	720	600
Not Reported			{1}	{1}
FINAL CLINICAL PRACTICE COURSE CLOCK HOURS[7]				
Mean ± SD	263.5 ± 120.3	287.4 ± 137.6	241.4 ± 90.8	263.1 ± 119.4
Median	240	240	225	240
Mode	240	180	225	240
Not Reported	{10}		{1}	{11}

[1] Single track refers to those programs where graduates are eligible to sit for one NP certification examination.

[2] Dual track refers to those programs where, by curricular design, student major in two NP clinical tracks. Graduates are eligible to sit for two NP examinations (e.g., ANP and GNP).

[3] Combined NP/CNS refers to those programs where, by curricular design, the NP and CNS roles are merged in the curriculum. Graduates are eligible to sit for one NP and one CNS certification examination (e.g., GNP and CNS in gerontological nursing).

[4] Graduate core is defined as the foundational curriculum content deemed essential for all students who pursue a master's degree in nursing regardless of specialty or functional focus.

[5] Didactic hours refer to clock hours in which content is taught in the educational program, including classroom and skill laboratory hours. Didactic hours exclude clinical hours.

[6] Clinical practice hours refer to hours in which direct clinical care is provided to individuals, families, and populations in specific areas of NP practice.

[7] Final clinical practice course is also referred to as the capstone, preceptorship, or residency course.

Core Master's and Clinical Course Content Areas by Type of Clinical Track (Single, Dual, or Combined NP/CNS)

Table 6. Course Content Areas Included in the Core Curriculum[1] of Single Track Nurse Practitioner[2], Dual Track Nurse Practitioner[3], Combined Nurse Practitioner/Clinical Nurse Specialist[4], and Total Clinical Tracks[5]: Master's-Level Programs by Course Content Area (N=679 Clinical Tracks in 275 Schools).

COURSE CONTENT AREA	SINGLE TRACK NP (n=594 Clinical Tracks in 265 Schools)				DUAL TRACK NP (n=34 Clinical Tracks in 30 Schools)				COMBINED NP/CNS (n=51 Clinical Tracks in 38 Schools)				TOTAL CLINICAL TRACKS (N=679 Clinical Tracks in 275 Schools)			
	Not Offered N (%)	Offered as a Separate Course N (%)	Offered & Integrated in Other Courses N (%)	Not Reported (N)	Not Offered N (%)	Offered as a Separate Course N (%)	Offered & Integrated in Other Courses N (%)	Not Reported (N)	Not Offered N (%)	Offered as a Separate Course N (%)	Offered & Integrated in Other Courses N (%)	Not Reported (N)	Not Offered N (%)	Offered as a Separate Course N (%)	Offered & Integrated in Other Courses N (%)	Not Reported (N)
Ethics	8 (1.4)	459 (77.4)	126 (21.2)	(1)	1 (2.9)	21 (61.8)	12 (35.3)		0	44 (86.3)	7 (13.7)		9 (1.3)	524 (77.3)	145 (21.4)	(1)
Professional Role Issues	10 (1.7)	156 (26.3)	422 (72.0)	(1)	2 (5.9)	5 (14.7)	27 (79.4)		4 (7.8)	8 (15.7)	39 (76.5)		16 (2.4)	169 (24.9)	493 (72.7)	(1)
Health Policy Issues	10 (1.7)	379 (63.9)	204 (34.4)	(1)	3 (8.8)	21 (61.8)	10 (29.4)		1 (2.0)	31 (60.8)	19 (37.3)		14 (2.1)	431 (63.6)	233 (34.4)	(1)
Organizational & Systems Theory	8 (1.3)	294 (49.6)	291 (49.1)	(1)	2 (5.9)	16 (47.1)	16 (47.1)		1 (2.0)	19 (37.3)	31 (60.8)		11 (1.6)	329 (48.5)	338 (49.9)	(1)
Health Economics/Health Care Financing	39 (6.6)	134 (22.6)	419 (70.8)	(2)	4 (11.8)	9 (26.5)	21 (61.8)		1 (2.0)	12 (23.5)	38 (74.5)		44 (6.5)	155 (22.9)	478 (70.6)	(2)
Managed Care	21 (3.5)	159 (26.9)	412 (69.6)	(2)	2 (5.9)	7 (20.6)	25 (73.5)		1 (2.0)	16 (31.4)	34 (66.7)		24 (3.5)	182 (26.9)	471 (69.6)	(2)
Computer Technology	29 (4.9)	37 (6.3)	525 (88.8)	(3)	5 (14.7)	1 (2.9)	28 (82.4)		3 (5.9)	2 (3.9)	46 (90.2)		37 (5.4)	40 (5.9)	599 (88.6)	(3)
Research Methodology & Design	140 (23.6)	84 (14.2)	369 (62.2)	(1)	7 (20.6)	5 (14.7)	22 (64.7)		8 (15.7)	11 (21.6)	32 (62.7)		155 (22.9)	100 (14.7)	423 (62.4)	(1)
Statistics	5 (0.8)	564 (94.9)	25 (4.2)		0	34 (100.0)	0		0	48 (94.1)	3 (5.9)		5 (0.8)	646 (95.1)	28 (4.1)	
Sociocultural Diversity	140 (23.6)	252 (42.4)	202 (34.0)		10 (29.4)	17 (50.0)	7 (20.6)		4 (7.8)	27 (52.9)	20 (39.2)		154 (22.7)	296 (43.6)	229 (33.7)	
Population-Based Care	18 (3.1)	62 (10.5)	510 (86.4)	(4)	3 (8.8)	3 (8.8)	28 (82.4)		3 (5.9)	3 (5.9)	45 (88.2)		24 (3.5)	68 (10.1)	583 (86.4)	(4)
Health Promotion & Disease Prevention	51 (8.6)	107 (18.1)	433 (72.9)	(3)	6 (17.6)	5 (14.7)	23 (67.6)		7 (13.7)	10 (19.6)	34 (66.7)		64 (9.5)	122 (18.0)	490 (72.5)	(3)
[row label unclear]	29 (4.9)	190 (32.1)	365 (63.0)	(2)	4 (11.8)	12 (35.3)	18 (52.9)		10 (19.6)	11 (21.6)	30 (58.8)		43 (6.3)	213 (31.5)	421 (62.2)	(2)

[1] Graduate core curriculum is defined as the foundational curriculum content deemed essential for all students who pursue a master's degree regardless of the specialty or functional area.

[2] Single track refers to those programs where graduates are eligible to sit for one NP certification examination.

[3] Dual track refers to those programs where, by curricular design, students major in two NP clinical tracks. Graduates are eligible to sit for two NP examinations (e.g., ANP and GNP).

[4] Combined NP/CNS refers to those programs where, by curricular design, the NP and CNS roles are merged in the curriculum. Graduates are eligible to sit for one NP and one CNS certification examination (e.g., GNP and CNS in gerontological nursing).

[5] Clinical track is defined as curriculum in a specific practice area such as family, acute care, pediatric, psychiatric and mental health, etc.

NOTE: Percents may not total to 100.0 due to rounding.

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Table 7. Course Content Areas Included in Clinical Track Courses (Didactic and/or Clinical Practicum)[1] of Single Track Nurse Practitioner[2], Dual Track Nurse Practitioner[3], Combined Nurse Practitioner/Clinical Nurse Specialist[4] and Total Clinical Tracks:[5] Master's-Level Programs by Course Content Area (N=679 Clinical Tracks in 275 Schools).

COURSE CONTENT AREA	SINGLE TRACK NP (n=594 Clinical Tracks in 265 Schools)							DUAL TRACK NP (n=34 Clinical Tracks in 30 Schools)							COMBINED NP/CNS (n=51 Clinical Tracks in 38 Schools)							TOTAL CLINICAL TRACKS (N=679 Clinical Tracks in 275 Schools)						
	Not Offered N	(%)	Offered as a Separate Course N	(%)	Offered & Integrated in Other Courses N	(%)	Not Reported (N)	Not Offered N	(%)	Offered as a Separate Course N	(%)	Offered & Integrated in Other Courses N	(%)	Not Reported (N)	Not Offered N	(%)	Offered as a Separate Course N	(%)	Offered & Integrated in Other Courses N	(%)	Not Reported (N)	Not Offered N	(%)	Offered as a Separate Course N	(%)	Offered & Integrated in Other Courses N	(%)	Not Reported (N)
Advanced Physical/Health Assessment	3	(0.5)	574	(96.6)	17	(2.9)		0		33	(97.1)	1	(2.9)		0		49	(96.1)	2	(3.9)		3	(0.4)	656	(96.6)	20	(2.9)	
Advanced Physiology/Pathophysiology	4	(0.7)	559	(94.1)	31	(5.2)		0		31	(91.2)	3	(8.8)		0		46	(90.2)	5	(9.8)		4	(0.6)	636	(93.7)	39	(5.7)	
Advanced Pharmacology	2	(0.3)	579	(97.5)	13	(2.2)		0		34	(100.0)	0			0		51	(100.0)	0			2	(0.3)	664	(97.8)	13	(1.9)	
Diagnosis, Treatment, & Management of Illness	5	(0.8)	355	(59.8)	234	(39.4)		0		24	(70.6)	10	(29.4)		0		28	(54.9)	23	(45.1)		5	(0.8)	407	(59.9)	267	(39.3)	
Human Development	16	(2.7)	69	(11.6)	509	(85.7)		1	(2.9)	1	(2.9)	32	(94.1)		1	(2.0)	4	(7.8)	46	(90.2)		18	(2.6)	74	(10.9)	587	(86.5)	
Mental Health	23	(3.9)	51	(8.6)	519	(87.5)	(1)	1	(2.9)	3	(8.8)	30	(88.2)		1	(2.0)	9	(17.6)	41	(80.4)		25	(3.7)	63	(9.3)	590	(87.0)	(1)
Advanced Practice Role Preparation	2	(0.3)	347	(58.4)	245	(41.2)		0		21	(61.8)	13	(38.2)		0		28	(54.9)	23	(45.1)		2	(0.3)	396	(58.3)	281	(41.4)	
Genetics	79	(13.3)	19	(3.2)	495	(83.5)	(1)	6	(17.6)	1	(2.9)	27	(79.4)		5	(9.8)	0		46	(90.2)		90	(13.3)	20	(2.9)	568	(83.6)	(1)
Immunology	47	(7.9)	11	(1.9)	536	(90.2)		2	(5.9)	0		32	(94.1)		2	(3.9)	2	(3.9)	47	(92.2)		51	(7.5)	13	(1.9)	615	(90.6)	
Clinical Epidemiology	41	(6.9)	78	(13.1)	475	(80.0)		1	(2.9)	6	(17.6)	27	(76.4)		7	(13.7)	6	(11.8)	38	(74.5)		49	(7.2)	90	(13.3)	540	(79.5)	
Community Health	74	(12.5)	69	(11.6)	450	(75.9)	(1)	2	(5.9)	4	(11.8)	28	(82.4)		11	(21.6)	5	(9.8)	35	(68.6)		87	(12.8)	78	(11.5)	513	(75.7)	(1)
Interdisciplinary Team Concepts	16	(2.7)	12	(2.0)	566	(95.3)		0		2	(5.9)	32	(94.1)		1	(2.0)	0		50	(98.0)		17	(2.5)	14	(2.1)	648	(95.4)	
Continuous/Quality Improvement	68	(11.4)	17	(2.9)	509	(85.7)		6	(18.2)	0		28	(82.4)		2	(3.9)	2	(3.9)	47	(92.2)		76	(11.2)	19	(2.8)	583	(86.0)	
Complementary & Alternative Modalities	26	(4.4)	41	(6.9)	525	(88.7)	(2)	1	(2.9)	5	(14.7)	28	(82.4)		2	(3.9)	1	(2.0)	48	(94.1)		29	(4.3)	47	(6.9)	601	(88.5)	(2)

Table 7, cont. Course Content Areas Included in Clinical Track Courses (Didactic and/or Clinical Practicum)[1] of Single Track Nurse Practitioner[2], Dual Track Nurse Practitioner[3], Combined Nurse Practitioner/Clinical Nurse Specialist[4] and Total Clinical Tracks:[5] Master's-Level Programs by Course Content Area (N=679 Clinical Tracks in 275 Schools).

COURSE CONTENT AREA	SINGLE TRACK NP (n=594 Clinical Tracks in 265 Schools)				DUAL TRACK NP (n=34 Clinical Tracks in 30 Schools)				COMBINED NP/CNS (n=51 Clinical Tracks in 38 Schools)				TOTAL CLINICAL TRACKS (N=679 Clinical Tracks in 275 Schools)			
	Not Offered N (%)	Offered as a Separate Course N (%)	Offered & Integrated in Other Courses N (%)	Not Reported {N}	Not Offered N (%)	Offered as a Separate Course N (%)	Offered & Integrated in Other Courses N (%)	Not Reported {N}	Not Offered N (%)	Offered as a Separate Course N (%)	Offered & Integrated in Other Courses N (%)	Not Reported {N}	Not Offered N (%)	Offered as a Separate Course N (%)	Offered & Integrated in Other Courses N (%)	Not Reported {N}
Business Aspects of Practice	58 (9.8)	71 (12.0)	465 (78.3)		2 (6.1)	3 (9.1)	28 (84.8)	{1}	3 (5.9)	3	45 (88.2)		63 (9.3)	77 (11.4)	538 (79.4)	{1}
End of Life Care	104 (17.5)	7 (1.2)	483 (81.3)	{2}	2 (5.9)	0	32 (94.1)	{1}	5 (9.8)	0	46 (90.2)		111 (16.4)	7 (1.0)	561 (82.6)	{1}
Best Practices	34 (5.7)	11 (1.9)	547 (92.4)	{2}	2 (5.9)	1 (2.9)	31 (91.2)		2 (3.9)	2	47 (92.2)		38 (5.6)	14 (2.1)	625 (92.3)	{2}
Evidence-Based Practice	1 (0.2)	26 (4.4)	565 (95.4)	{2}	0	3 (9.1)	33 (90.9)	{1}	0	4 (7.8)	47 (92.2)		1 (0.1)	33 (4.9)	642 (95.0)	{3}
ICD[6] Procedural & Diagnostic Coding Terminology; Current Procedural Terminology	53 (8.9)	24 (4.0)	517 (87.0)		2 (6.1)	1	31 (93.9)	{1}	4 (7.8)	1 (2.0)	46 (90.2)		59 (8.7)	25 (3.7)	594 (87.6)	{1}
X-Ray Interpretation & Radiological Procedures	64 (10.8)	48 (8.1)	481 (81.1)	{1}	5 (14.7)	2 (5.9)	27 (79.4)		9 (17.6)	4 (7.8)	38 (74.5)		78 (11.5)	54 (8.0)	546 (80.5)	{1}
Clinical Laboratory Procedures	23 (3.9)	51 (8.6)	519 (87.5)	{1}	1 (3.0)	3 (9.1)	29 (87.9)	{1}	2 (3.9)	5 (9.8)	44 (86.3)		26 (3.8)	59 (8.7)	592 (87.4)	{2}
Suturing	174 (28.8)	52 (8.8)	370 (62.4)	{2}	9 (26.5)	1 (2.9)	24 (70.6)		15 (29.4)	6 (11.8)	30 (58.8)		195 (28.8)	59 (8.7)	424 (62.5)	{1}
EKG Interpretation	99 (16.7)	45 (7.6)	449 (75.7)	{1}	3 (8.8)	2 (5.9)	29 (85.3)		6 (11.8)	3 (5.9)	42 (82.4)		108 (15.9)	50 (7.4)	520 (76.7)	{1}
Office Emergencies	91 (15.4)	20 (3.4)	481 (81.3)	{2}	7 (20.6)	0	27 (79.4)		5 (9.8)	2 (3.9)	44 (86.3)		103 (15.2)	22 (3.2)	552 (81.5)	{2}
Minor Surgical Procedures	264 (45.1)	24 (4.1)	298 (50.9)	{8}	14 (42.4)	0	19 (57.6)	{1}	18 (35.3)	2 (3.9)	31 (60.8)		296 (44.2)	26 (3.9)	348 (51.9)	{9}

[1] Clinical track courses are defined as the advanced practice nursing and specialty curriculum content included in clinical courses (didactic and/or clinical practicum).

[2] Single track refers to those programs where graduates are eligible to sit for one NP certification examination.

[3] Dual track refers to those programs where, by curricular design, students major in two NP clinical tracks. Graduates are eligible to sit for two NP examinations (e.g., ANP and GNP).

[4] Combined NP/CNS refers to those programs where, by curricular design, the NP and CNS roles are merged in the curriculum. Graduates are eligible to sit for one NP and one CNS certification examination (e.g., GNP and CNS in gerontological nursing).

[5] Clinical track is defined as curriculum in a specific practice area such as family, acute care, pediatric, psychiatric and mental health, etc.

[6] ICD = International Classification of Diseases

NOTE: Percents may not total to 100.0 due to rounding.

CORE MASTER'S AND CLINICAL COURSE CONTENT AREAS BY AREA OF CERTIFICATION FOR SINGLE TRACK

Table 8. Course Content Areas Included in the Core Curriculum[1] of Single Track[2] Master's-Level Nurse Practitioner Programs by Course Content Area (N=594 Clinical Tracks in 265 Schools).

Content Area Not Offered. — Number and Valid Percent[4]

COURSE CONTENT AREA	FNP (n=236)		ANP (n=104)		PNP (n=91)		GNP (n=32)		WHNP (n=38)		NNP (n=32)		ACUTE CARE (n=40)		PSYCH/ MENTAL HEALTH[3] NP (n=16)	
	ni	(%)	ni	(%)	ni	(%)	ni	(%)	ni	(%)	ni	(%)	ni	(%)	ni	(%)
Theory	4	(1.7)	1	(1.0)	1	(1.1)	0		0		1	(3.1)	1	(2.5)	1	(6.3)
Ethics	6	(2.5)	0		1	(1.1)	0		1	(2.6)	0		1	(2.5)	1	(6.3)
Professional Role Issues	6	(2.5)	0		2	(2.2)	0		0		0		1	(2.5)	1	(6.3)
Health Policy Issues	5	(2.1)	0		1	(1.1)	0		0		1	(3.1)	1	(2.5)	1	(6.3)
Organizational & Systems: Theory	22	(9.4)	3	(2.9)	4	(4.4)	2	(6.3)	3	(7.9)	2	(6.3)	2	(5.0)	1	(6.3)
Health Economics/Health Care Financing	12	(5.1)	3	(2.9)	2	(2.2)	1	(3.1)	1	(2.6)	1	(3.1)	1	(2.5)	0	
Managed Care	9	(3.8)	4	(3.9)	4	(4.4)	1	(3.1)	3	(7.9)	2	(6.3)	5	(12.5)	1	(6.3)
Computer Technology	62	(26.4)	25	(24.0)	21	(23.1)	9	(28.1)	6	(15.8)	7	(21.9)	8	(20.0)	2	(12.5)
Research Methodology & Design	2	(0.8)	0		1	(1.1)	0		1	(2.6)	1	(3.1)	0		0	
Statistics	54	(22.9)	24	(23.1)	18	(19.8)	9	(28.1)	8	(21.1)	6	(18.8)	14	(35.0)	6	(37.5)
Sociocultural Diversity	9	(3.9)	1	(1.0)	3	(3.3)	1	(3.1)	1	(2.6)	2	(6.3)	1	(2.5)	0	
Population-Based Care	21	(9.0)	5	(4.9)	9	(10)	2	(6.3)	4	(10.5)	7	(21.9)	3	(7.5)	0	
Health Promotion & Disease Prevention	10	(4.3)	1	(1.0)	8	(8.8)	1	(3.1)	2	(5.3)	2	(6.3)	4	(10.0)	1	(6.3)

Content Area Offered as a Separate Course — Number and Valid Percent[4]

COURSE CONTENT AREA	FNP		ANP		PNP		GNP		WHNP		NNP		ACUTE CARE		PSYCH/ MENTAL HEALTH NP	
	ni	(%)	ni	(%)	ni	(%)	ni	(%)	ni	(%)	ni	(%)	ni	(%)	ni	(%)
Theory	204	(86.4)	77	(74.8)	64	(70.3)	24	(75.0)	28	(73.7)	25	(78.1)	23	(57.5)	9	(56.3)
Ethics	62	(26.3)	31	(30.1)	27	(29.7)	9	(28.1)	7	(18.4)	5	(15.6)	13	(32.5)	1	(6.3)
Professional Role Issues	155	(65.7)	68	(66.0)	56	(61.5)	21	(65.6)	27	(71.1)	17	(53.1)	20	(50.0)	11	(68.8)
Health Policy Issues	112	(47.5)	49	(47.6)	50	(54.9)	15	(46.9)	18	(47.4)	17	(53.1)	19	(47.5)	11	(68.8)
Organizational & Systems: Theory	51	(21.7)	26	(25.2)	28	(30.8)	3	(9.4)	7	(18.4)	7	(21.9)	8	(20.0)	2	(12.5)
Health Economics/Health Care Financing	55	(23.4)	31	(30.1)	32	(35.2)	5	(15.6)	13	(34.2)	8	(25.0)	10	(25.0)	3	(18.8)

Table 8, cont. Course Content Areas Included in the Core Curriculum[1] of Single Track[2] Master's-Level Nurse Practitioner Programs by Course Content Area (N=594 Clinical Tracks in 265 Schools).

COURSE CONTENT AREA	FNP (n=236) n	(%)	ANP (n=104) n	(%)	PNP (n=91) n	(%)	GNP (n=32) n	(%)	WHNP (n=38) n	(%)	NNP (n=32) n	(%)	ACUTE CARE (n=40) n	(%)	PSYCH/ MENTAL HEALTH[3] NP (n=16) n	(%)
Content Area Offered as a Separate Course																
Number and Valid Percent[4]																
Managed Care	18	(7.7)	3	(2.9)	4	(4.4)	2	(6.3)	3	(7.9)	0		3	(7.5)	2	(12.5)
Computer Technology	32	(13.6)	11	(10.6)	16	(17.6)	4	(12.5)	6	(15.8)	6	(18.8)	6	(15.0)	3	(18.8)
Research Methodology & Design	227	(96.2)	100	(96.2)	88	(96.7)	29	(90.6)	32	(84.2)	30	(93.8)	38	(95.0)	15	(93.8)
Statistics	97	(41.1)	43	(41.3)	44	(48.4)	13	(40.6)	18	(47.4)	15	(46.9)	14	(35.0)	5	(31.3)
Sociocultural Diversity	25	(10.7)	13	(12.5)	7	(7.7)	2	(6.3)	6	(15.8)	4	(12.5)	3	(7.5)	2	(12.5)
Population-Based Care	36	(15.3)	23	(22.3)	19	(21.1)	5	(15.6)	5	(13.2)	8	(25.0)	7	(17.5)	2	(12.5)
Health Promotion & Disease Prevention	73	(31.1)	36	(35.0)	30	(33.0)	10	(31.3)	13	(34.2)	11	(34.4)	12	(30.0)	3	(18.8)
Content Area Offered as an Integrated Course																
Number and Valid Percent[4]																
Theory	28	(11.9)	25	(24.3)	26	(28.6)	8	(25.0)	10	(26.3)	6	(18.8)	17	(42.5)	6	(37.5)
Ethics	168	(71.2)	72	(69.9)	63	(69.2)	23	(71.9)	30	(70.0)	27	(84.4)	26	(65.0)	14	(87.5)
Professional Role Issues	75	(31.8)	35	(34.0)	33	(36.3)	11	(34.4)	11	(28.9)	15	(46.9)	19	(47.5)	4	(25.0)
Health Policy Issues	119	(50.4)	54	(52.4)	40	(44.0)	17	(53.1)	20	(52.6)	15	(46.9)	20	(50.0)	4	(25.0)
Organizational & Systems Theory	162	(68.9)	74	(71.8)	59	(64.8)	27	(84.4)	28	(73.7)	23	(71.9)	30	(75.0)	13	(81.3)
Health Economics/Health Care Financing	168	(71.5)	69	(67.0)	57	(62.6)	26	(81.3)	24	(63.2)	23	(71.9)	29	(72.5)	13	(81.3)
Managed Care	207	(88.5)	96	(93.2)	81	(89.0)	29	(90.6)	32	(84.2)	30	(93.8)	32	(80.0)	13	(81.3)
Computer Technology	141	(60.0)	68	(65.4)	54	(59.3)	19	(59.4)	26	(68.4)	19	(59.4)	26	(65.0)	11	(68.8)
Research Methodology & Design	7	(3.0)	4	(3.8)	2	(2.2)	3	(9.4)	5	(13.2)	1	(3.1)	2	(5.0)	1	(6.3)
Statistics	85	(36.0)	37	(35.6)	29	(31.9)	10	(31.3)	12	(31.6)	11	(34.4)	12	(30.0)	5	(31.3)
Sociocultural Diversity	199	(85.4)	89	(86.4)	81	(89.0)	29	(90.6)	31	(81.6)	26	(81.3)	36	(90.0)	14	(87.5)
Population-Based Care	178	(75.7)	75	(72.8)	62	(68.9)	25	(78.1)	29	(76.3)	17	(53.1)	30	(75.0)	14	(87.5)
Health Promotion & Disease Prevention	152	(64.7)	66	(64.1)	53	(58.2)	21	(65.6)	23	(60.5)	19	(59.4)	24	(60.0)	12	(75.0)

[1] Graduate core is defined as the foundational curriculum content deemed essential for all students who pursue a master's degree regardless of the specialty or functional area.

[2] Single track refers to those programs where graduates are eligible to sit for one NP certification examination.

[3] Includes 16 Adult and one Child/Adolescent Psychiatric and Mental Health tracks.

[4] Missing values for each cell are not included due to space limitation.

NOTE: Percents may not total to 100.0 due to rounding.

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Table 9. Course Content Areas Included in Clinical Courses (Didactic and/or Clinical Practicum)[1] of Single Track[2] Master's-Level Nurse Practitioner Programs by Course Content Area (N=594 Clinical Tracks in 265 Schools).

Content Area Not Offered — Number and Valid Percent[4]

COURSE CONTENT AREA	FNP (n=236) n	(%)	ANP (n=104) n	(%)	PNP (n=91) n	(%)	GNP (n=32) n	(%)	WHNP (n=38) n	(%)	NNP (n=32) n	(%)	ACUTE CARE (n=40) n	(%)	PSYCH/ MENTAL HEALTH[3] NP (n=16) n	(%)
Advanced Physical/Health Assessment	2	(0.8)	0		1	(1.1)	0		0		0		0		0	
Advanced Physiology/Pathophysiology	2	(0.8)	0		1	(1.1)	0		1	(2.6)	0		0		0	
Advanced Pharmacology	1	(0.4)	0		1	(1.1)	0		0		0		0		0	
Diagnosis, Treatment & Management of Illness	2	(0.8)	1	(1.0)	1	(1.1)	0		1	(2.6)	0		0		0	
Human Development	3	(1.3)	5	(4.8)	2	(2.2)	1	(3.1)	1	(2.6)	2	(6.3)	2	(5.0)	0	
Mental Health	5	(2.1)	1	(1.0)	2	(2.2)	1	(3.1)	3	(7.9)	7	(21.9)	4	(10.0)	0	
Advanced Practice Role Preparation	1	(0.4)	0		1	(1.1)	0		0		0		0		0	
Genetics	36	(15.3)	20	(19.2)	2	(2.2)	7	(21.9)	2	(5.3)	0		8	(20.0)	3	(18.8)
Immunology	18	(7.6)	13	(12.5)	5	(5.5)	3	(9.4)	5	(13.2)	0		1	(2.5)	2	(12.5)
Clinical Epidemiology	15	(6.4)	7	(6.7)	5	(5.5)	4	(12.5)	4	(10.5)	3	(9.4)	2	(5.0)	1	(6.3)
Community Health	26	(11.0)	12	(11.5)	8	(8.8)	5	(15.6)	3	(7.9)	9	(28.1)	10	(25.0)	1	(6.3)
Interdisciplinary Team Concepts	9	(3.8)	2	(1.9)	2	(2.2)	0	(0.0)	3	(7.9)	3	(7.9)	0		0	
Continuous Quality Improvement	22	(9.3)	14	(13.5)	9	(9.9)	5	(15.6)	8	(21.1)	3	(9.4)	5	(12.5)	2	(12.5)
Complementary & Alternative Modalities	2	(0.8)	5	(4.8)	3	(3.3)	2	(6.3)	3	(7.9)	6	(18.8)	4	(10.0)	1	(6.3)
Business Aspects of Practice	18	(7.6)	11	(10.6)	7	(7.7)	8	(25.0)	5	(13.2)	4	(12.5)	4	(10.0)	1	(6.3)
End of Life Care	37	(15.7)	18	(17.3)	22	(24.2)	3	(9.4)	15	(39.5)	3	(9.4)	4	(10.0)	2	(12.5)
Best Practices	19	(8.1)	4	(3.8)	4	(4.4)	1	(3.1)	3	(7.9)	1	(3.2)	2	(5.0)	0	
Evidence-Based Practice	1	(0.4)	0		0		0		0		0		0		0	
ICD[5] Procedural & Diagnostic Coding Terminology; Current Procedural Terminology	17	(7.2)	10	(9.6)	7	(7.7)	3	(9.4)	6	(15.8)	5	(15.6)	3	(7.5)	2	(12.5)
X-Ray Interpretation & Radiological Procedures	15	(6.4)	9	(8.7)	14	(15.6)	6	(18.8)	5	(13.2)	1	(3.1)	1	(2.5)	11	(68.8)
Clinical Laboratory Procedures	6	(2.5)	1	(1.0)	5	(5.5)	1	(3.1)	2	(5.3)	1	(3.1)	1	(2.5)	5	(31.3)
Suturing	47	(19.9)	29	(27.9)	36	(39.6)	15	(46.9)	17	(44.7)	5	(15.6)	5	(12.5)	15	(93.8)
EKG Interpretation	20	(8.5)	11	(10.6)	31	(34.1)	6	(18.8)	12	(31.6)	4	(12.5)	0		13	(81.3)
Office Emergencies	21	(8.9)	13	(12.5)	13	(14.3)	6	(19.4)	6	(15.8)	16	(50.0)	11	(27.5)	5	(31.3)
Minor Surgical Procedures	94	(40.3)	47	(45.2)	51	(57.1)	20	(64.5)	18	(50.0)	5	(15.6)	12	(30.0)	14	(87.5)

Table 9, cont. Course Content Areas Included in Clinical Courses (Didactic and/or Clinical Practicum)[1] of Single Track[2] Master's-Level Nurse Practitioner Programs by Course Content Area (N=594 Clinical Tracks in 265 Schools).

Content Area Offered as a Separate Course
Number and Valid Percent[4]

COURSE CONTENT AREA	FNP (n=236) ni	(%)	ANP (n=104) ni	(%)	PNP (n=91) ni	(%)	GNP (n=32) ni	(%)	WHNP (n=38) ni	(%)	NNP (n=32) ni	(%)	ACUTE CARE (n=40) ni	(%)	PSYCH/MENTAL HEALTH[3] NP (n=16) ni	(%)
Advanced Physical/Health Assessment	229	(97.0)	100	(96.2)	88	(96.7)	31	(96.9)	37	(97.4)	31	(96.9)	37	(92.5)	16	(100.0)
Advanced Physiology/Pathophysiology	221	(93.6)	97	(93.3)	87	(95.6)	31	(96.9)	37	(97.4)	30	(93.8)	37	(92.5)	14	(87.5)
Advanced Pharmacology	232	(98.3)	100	(96.2)	90	(98.9)	31	(96.9)	37	(97.4)	32	(100.0)	37	(92.5)	15	(93.8)
Diagnosis, Treatment, & Management of Illness	132	(55.9)	69	(66.3)	61	(67.0)	15	(46.9)	17	(44.7)	24	(75.0)	26	(65.0)	9	(56.3)
Human Development	16	(6.8)	7	(6.7)	27	(29.7)	4	(12.5)	5	(13.2)	5	(15.6)	2	(5.0)	2	(12.5)
Mental Health	13	(5.5)	7	(6.7)	6	(6.6)	7	(21.9)	1	(2.6)	1	(3.1)	3	(7.5)	11	(68.8)
Advanced Practice Role Preparation	151	(64.0)	55	(52.9)	52	(57.1)	18	(56.3)	23	(60.5)	14	(43.8)	20	(50.0)	10	(62.5)
Genetics	3	(1.3)	1	(1.0)	8	(8.8)	0		2	(5.3)	4	(12.5)	0	(2.5)	1	(6.3)
Immunology	3	(1.3)	2	(1.9)	4	(4.4)	0		0		1	(3.1)	1	(2.5)	0	
Clinical Epidemiology	40	(16.9)	16	(15.4)	10	(11.0)	0		2	(5.3)	3	(9.4)	7	(17.5)	0	
Community Health	36	(15.3)	10	(9.6)	11	(12.1)	3	(9.4)	5	(13.2)	1	(3.1)	3	(7.5)	0	
Interdisciplinary Team Concepts	4	(1.7)	2	(1.9)	3	(3.3)	2	(6.3)	0		1	(3.1)	0		0	
Continuous Quality Improvement	5	(2.1)	2	(1.9)	8	(8.8)	1	(3.1)	1	(2.6)	0		0		0	
Complementary & Alternative Modalities	18	(7.7)	8	(7.7)	5	(5.6)	1	(3.1)	2	(5.3)	2	(6.3)	2	(5.0)	3	(18.8)
Business Aspects of Practice	29	(12.3)	14	(13.5)	11	(12.1)	2	(6.3)	5	(13.2)	5	(15.6)	4	(10.0)	1	(6.3)
End of Life Care	2	(0.8)	2	(1.9)	1	(1.1)	1	(3.1)	1	(2.6)	0		0		0	
Best Practices	2	(0.8)	2	(1.9)	2	(2.2)	2	(6.3)	1	(2.6)	0		1	(2.5)	1	(6.3)
Evidence-Based Practice	8	(3.4)	5	(4.8)	6	(6.6)	2	(6.3)	0		1	(3.1)	2	(5.0)	2	(12.5)
ICD[5] Procedural & Diagnostic Coding Terminology; Current Procedural Terminology	8	(3.4)	2	(1.9)	7	(7.7)	1	(3.1)	0		0		5	(12.5)	1	(6.3)
X-Ray Interpretation & Radiological Procedures	21	(8.9)	10	(9.6)	5	(5.6)	2	(6.3)	4	(10.5)	2	(6.3)	5	(12.5)	0	
Clinical Laboratory Procedures	17	(7.2)	9	(8.7)	7	(7.7)	2	(6.3)	6	(15.8)	3	(9.4)	7	(17.5)	0	
Suturing	23	(9.7)	9	(8.7)	4	(4.4)	2	(6.3)	3	(7.9)	3	(9.4)	8	(20.0)	0	
EKG Interpretation	17	(7.2)	6	(5.8)	4	(4.4)	1	(3.1)	4	(10.5)	4	(12.5)	9	(22.5)	0	
Office Emergencies	11	(4.7)	2	(1.9)	2	(2.2)	1	(3.2)	1	(2.6)	2	(6.3)	1	(2.5)	0	
Minor Surgical Procedures	10	(4.2)	2	(1.9)	2	(2.2)	0		0		4	(12.5)	6	(15.0)	0	

Table 9, cont. Course Content Areas Included in Clinical Courses (Didactic and/or Clinical Practicum)[1] of Single Track[2] Master's-Level Nurse Practitioner Programs by Course Content Area (N=594 Clinical Tracks in 265 Schools).

Content Area Offered as an Integrated Course[4]
Number and Valid Percent

COURSE CONTENT AREA	FNP (n=236) n	(%)	ANP (n=104) n	(%)	PNP (n=91) n	(%)	GNP (n=32) n	(%)	WHNP (n=38) n	(%)	NNP (n=32) n	(%)	ACUTE CARE (n=40) n	(%)	PSYCH/MENTAL HEALTH[3] NP (n=16) n	(%)
Advanced Physical/Health Assessment	5	(2.1)	4	(3.8)	2	(2.2)	1	(3.1)	1	(2.6)	1	(3.1)	3	(7.5)	0	
Advanced Physiology/Pathophysiology	13	(5.5)	7	(6.7)	3	(3.3)	1	(3.1)	0		2	(6.3)	3	(7.5)	2	(12.5)
Advanced Pharmacology	3	(1.3)	4	(3.8)	0		1	(3.1)	1	(2.6)	0		3	(7.5)	1	(6.3)
Diagnosis, Treatment & Management of Illness	102	(43.2)	34	(32.7)	29	(31.9)	17	(53.1)	20	(52.6)	8	(25.0)	14	(35.0)	7	(43.8)
Human Development	217	(91.9)	92	(88.5)	62	(68.1)	27	(84.4)	32	(84.2)	25	(78.1)	36	(90.0)	14	(87.5)
Mental Health	217	(92.3)	96	(92.3)	83	(91.2)	24	(75.0)	34	(89.5)	24	(75.0)	33	(82.5)	5	(31.3)
Advanced Practice Role Preparation	84	(35.6)	49	(47.1)	38	(41.8)	14	(43.8)	15	(39.5)	18	(56.3)	20	(50.0)	6	(37.5)
Genetics	196	(83.4)	83	(79.8)	81	(89.0)	25	(78.1)	34	(89.5)	28	(87.5)	32	(80.0)	12	(75.0)
Immunology	215	(91.1)	89	(85.6)	82	(90.1)	29	(90.6)	33	(86.8)	31	(96.9)	38	(95.0)	14	(87.5)
Clinical Epidemiology	181	(76.7)	81	(77.9)	76	(83.5)	28	(87.5)	32	(84.2)	26	(81.3)	31	(77.5)	15	(93.8)
Community Health	174	(73.7)	82	(78.8)	72	(79.1)	24	(75.0)	30	(78.9)	22	(68.8)	27	(37.5)	15	(93.8)
Interdisciplinary Team Concepts	223	(94.5)	100	(96.2)	86	(94.5)	30	(93.8)	35	(92.1)	31	(96.9)	40	(100.0)	16	(100.0)
Continuous Quality Improvement	209	(88.6)	88	(84.6)	74	(81.3)	26	(81.3)	29	(76.3)	29	(90.6)	35	(87.5)	14	(87.5)
Complementary & Alternative Modalities	215	(91.5)	91	(87.5)	82	(91.1)	29	(90.6)	33	(86.8)	24	(75.0)	34	(85.0)	12	(75.0)
Business Aspects of Practice	189	(80.1)	79	(76.0)	73	(80.2)	22	(68.8)	28	(73.7)	23	(71.9)	32	(80.0)	14	(87.5)
End of Life Care	197	(83.5)	84	(80.8)	68	(74.7)	28	(87.5)	22	(57.9)	29	(90.6)	36	(90.0)	14	(87.5)
Best Practices	214	(91.1)	98	(94.2)	85	(93.4)	29	(90.6)	34	(89.5)	30	(96.8)	37	(92.5)	15	(93.8)
Evidence-Based Practice	226	(96.2)	98	(95.1)	85	(93.4)	30	(93.8)	38	(100.0)	31	(96.9)	38	(95.0)	14	(87.5)
ICD[5] Procedural & Diagnostic Coding Terminology; Current Procedural Terminology	211	(89.4)	92	(88.5)	77	(84.6)	28	(87.5)	32	(84.2)	27	(84.4)	32	(80.0)	13	(81.3)
X-Ray Interpretation & Radiological Procedures	200	(84.7)	86	(82.7)	71	(78.9)	24	(75.0)	29	(76.3)	29	(90.6)	34	(85.0)	5	(31.3)
Clinical Laboratory Procedures	213	(90.3)	93	(90.3)	79	(86.8)	29	(90.6)	30	(78.9)	28	(87.5)	32	(80.0)	11	(68.8)
Suturing	166	(70.4)	66	(63.5)	51	(56.0)	15	(46.9)	18	(47.4)	24	(75.0)	27	(67.5)	1	(6.3)
EKG Interpretation	199	(84.3)	87	(83.7)	56	(61.5)	25	(78.1)	22	(57.9)	24	(75.0)	31	(77.5)	3	(18.8)
Office Emergencies	203	(86.4)	89	(85.6)	76	(83.5)	24	(77.4)	31	(81.6)	14	(43.8)	28	(70.0)	11	(68.8)
Minor Surgical Procedures	129	(55.4)	55	(52.9)	37	(40.7)	11	(35.5)	18	(50.0)	23	(71.9)	22	(55.0)	2	(12.5)

[1] Clinical track courses are defined as the advanced practice nursing and specialty curriculum content included in clinical courses (didactic and/or clinical practicum).

[2] Single track refers to those programs where graduates are eligible to sit for one NP certification examination.

[3] Includes Adult and Child/Adolescent Psychiatric and Mental Health tracks.

[4] Missing values for each cell are not included due to space limitation.

[5] ICD = International Classification of Diseases

NOTE: Percents may not total to 100.0 due to rounding.
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CORE MASTER'S AND CLINICAL COURSE CONTENT AREAS BY PRIMARY CARE AND SPECIALTY CARE

Table 10. Course Content Areas Included in the Core Curriculum[1] of Single Track[2] Master's-Level Primary Care[3] and Specialty Care[4] Tracks by Course Content Area (501 Primary Care Tracks in 264 Schools; 93 Specialty Care Tracks in 70 Schools).

COURSE CONTENT AREA	PRIMARY CARE (501 Tracks in 264 Schools)							SPECIALTY CARE (93 Tracks in 70 Schools)						
	Not Offered n	(%)	Offered as a Separate Course n	(%)	Offered & Integrated in Other Courses n	(%)	Not Reported n	Not Offered n	(%)	Offered as a Separate Course n	(%)	Offered & Integrated in Other Courses n	(%)	Not Reported n
Theory	6	(1.1)	398	(79.6)	96	(19.2)	(1)	2	(2.2)	61	(65.6)	30	(32.3)	
Ethics	8	(1.6)	136	(27.2)	356	(71.2)	(1)	2	(2.2)	20	(21.5)	71	(76.3)	
Professional Role Issues	8	(1.6)	328	(65.6)	164	(32.8)	(1)	2	(2.2)	51	(54.8)	40	(43.0)	
Health Policy Issues	6	(1.2)	244	(48.8)	250	(50.0)	(1)	2	(2.2)	50	(53.8)	41	(44.1)	
Organizational & Systems Theory	34	(6.8)	115	(23.0)	350	(70.1)	(2)	5	(5.4)	19	(20.4)	69	(74.2)	
Health Economics/Health Care Financing	19	(3.8)	136	(27.1)	344	(68.7)	(2)	2	(2.2)	23	(24.7)	68	(73.1)	
Managed Care	21	(4.2)	32	(6.4)	445	(89.4)	(3)	8	(8.6)	5	(5.4)	80	(86.0)	
Computer Technology	123	(24.6)	69	(13.8)	308	(61.6)	(1)	17	(18.3)	15	(16.1)	61	(65.6)	
Research Methodology & Design	4	(0.8)	476	(95.0)	21	(4.2)		1	(1.1)	88	(94.6)	4	(4.3)	
Statistics	113	(22.6)	216	(43.1)	172	(34.3)		27	(29.0)	36	(38.7)	30	(32.3)	
Sociocultural Diversity	15	(3.0)	53	(10.7)	429	(86.3)	(4)	3	(3.2)	9	(9.7)	81	(87.1)	
Population Based Care	41	(8.2)	89	(17.9)	368	(73.9)	(3)	10	(10.8)	18	(19.4)	65	(69.9)	
Health Promotion & Disease Prevention	22	(4.4)	163	(32.7)	314	(62.9)	(2)	7	(7.5)	27	(29.0)	59	(63.4)	

[1] Graduate core is defined as the foundational curriculum content deemed essential for all students who pursue a master's degree regardless of the specialty or functional area.

[2] Single track refers to those programs where graduates are eligible to sit for one NP certification examination.

[3] Tracks defined as Primary Care are: Family, Adult, Geriatric, Pediatric, and Women's Health.

[4] Tracks defined as Specialty Care Tracks are: Acute Care, Neonatal, Adult Psych/Mental Health, and Child & Adolescent Psych/Mental Health.

NOTE: Percents may not total to 100.0 due to rounding.

Table 11. Course Content Areas Included in Clinical Track Courses (Didactic and/or Clinical Practicum)[1] of Single Track[2] Primary Care[3] and Specialty Care[4] Master's-Level Nurse Practitioner Programs by Course Content Areas (501 Primary Care Tracks in 264 Schools; 93 Specialty Care Tracks in 70 Schools.

COURSE CONTENT AREA	PRIMARY CARE (501 Tracks in 264 Schools)								SPECIALTY CARE (93 Tracks in 70 Schools)							
	Not Offered n	(%)	Offered as a Separate Course n	(%)	Offered & Integrated in Other Courses n	(%)	Not Reported n		Not Offered n	(%)	Offered as a Separate Course n	(%)	Offered & Integrated in Other Courses n	(%)	Not Reported n	
Advanced Physical/Health Assessment	3	(0.6)	485	(96.8)	13	(2.6)			0		89	(95.7)	4	(4.3)		
Advanced Physiology/Pathophysiology	4	(0.8)	473	(94.4)	24	(4.8)			0		86	(92.5)	7	(7.5)		
Advanced Pharmacology	2	(0.4)	490	(97.8)	9	(1.8)			0		89	(95.7)	4	(4.3)		
Diagnosis, Treatment, & Management of Illness	5	(1.0)	294	(58.7)	202	(40.3)			0		61	(65.6)	32	(34.4)		
Human Development	12	(2.4)	58	(11.6)	431	(86.0)			4	(4.3)	11	(11.8)	78	(83.9)		
Mental Health	12	(2.4)	34	(6.8)	454	(90.8)	{1}		11	(11.8)	17	(18.3)	65	(69.9)		
Advanced Practice Role Preparation	2	(0.4)	300	(59.9)	199	(39.7)			0		47	(50.5)	46	(49.5)		
Genetics	67	(13.4)	14	(2.8)	419	(83.8)	{1}		12	(12.9)	5	(5.4)	76	(81.7)		
Immunology	44	(8.8)	9	(1.8)	448	(89.4)			3	(3.2)	2	(2.2)	88	(94.6)		
Clinical Epidemiology	35	(7.0)	68	(13.6)	398	(79.4)			6	(6.5)	10	(10.8)	77	(82.8)		
Community Health	54	(10.8)	65	(13.0)	381	(76.2)	{1}		20	(21.5)	4	(4.3)	69	(74.2)		
Interdisciplinary Team Concepts	16	(3.2)	11	(2.2)	474	(94.6)			0	(0.0)	1	(1.1)	92	(98.9)		
Continuous Quality Improvement	58	(11.6)	17	(3.4)	426	(85.0)			10	(10.8)	0		83	(89.2)		
Complementary & Alternative Modalities	15	(3.0)	34	(6.8)	450	(90.2)	{2}		11	(11.8)	7	(7.5)	75	(80.6)		
Business Aspects of Practice	49	(9.8)	61	(12.2)	391	(78.0)			9	(9.7)	10	(10.8)	74	(79.6)		
End of Life Care	95	(19.0)	7	(1.4)	399	(79.6)			9	(9.7)	0		84	(90.3)		
Best Practices	31	(6.2)	9	(1.8)	460	(92.0)	{1}		3	(3.2)	2	(2.2)	87	(94.6)	{1}	
Evidence-Based Practice	1	(0.2)	21	(4.2)	477	(95.6)	{2}		0		5	(5.4)	88	(94.6)		
ICD[5] Procedural & Diagnostic Coding Terminology; Current Procedural Terminology	43	(8.6)	18	(3.6)	440	(87.8)			10	(10.8)	6	(6.5)	77	(82.8)		
X-Ray Interpretation & Radiological Procedures	49	(9.8)	41	(8.2)	410	(82.0)	{1}		15	(16.1)	7	(7.5)	71	(76.3)		
Clinical Laboratory Procedures	15	(3.0)	41	(8.2)	444	(88.6)	{1}		8	(8.6)	10	(10.8)	75	(80.6)		
Suturing	144	(28.7)	41	(8.2)	316	(63.1)			27	(29.3)	11	(12.0)	54	(58.7)	{1}	
EKG Interpretation	80	(16.0)	32	(6.4)	388	(77.6)	{1}		19	(20.4)	13	(14.0)	61	(65.6)		
Office Emergencies	59	(11.8)	17	(3.4)	423	(84.8)	{2}		32	(34.4)	3	(3.2)	58	(62.4)		
Minor Surgical Procedures	231	(46.7)	14	(2.8)	250	(50.5)	{6}		33	(36.3)	10	(11.0)	48	(52.7)	{2}	

[1] Clinical track courses are defined as the advanced practice nursing and specialty curriculum content included in clinical courses (didactic and/or clinical practicum).

[2] Single track refers to those programs where graduates are eligible to sit for one NP certification examination.

[3] Tracks defined as Primary Care Tracks are: Family, Adult, Geriatric, Pediatric, and Women's Health.

[4] Tracks defined as Specialty Care Tracks are: Acute Care, Neonatal, Adult Psych/Mental Health, and Child & Adolescent Psych/Mental Health.

[5] ICD = International Classification of Diseases

NOTE: Percents may not total to 100.0 due to rounding.

Table 12. Course Content Areas Included in the Core Curriculum[1] of Combined NP/CNS Tracks[2] Master's-Level Nurse Practitioner Programs Categorized as Primary Care[3], Specialty Care, and Dual Primary/Specialty Care[4] Tracks by Course Content Area (13 Combined NP/CNS Primary Care Tracks in 13 Schools; 9 Specialty Care Tracks in 9 Schools; and 29 Dual Primary/Specialty Tracks in 26 Schools).

COURSE CONTENT AREA	PRIMARY CARE (13 Tracks in 13 Schools)							SPECIALTY CARE (9 Tracks in 9 Schools)							BOTH PRIMARY AND SPECIALTY (29 Tracks in 26 Schools)						
	Not Offered n	(%)	Offered as a Separate Course n	(%)	Offered & Integrated in Other Courses n	(%)	Not Reported n	Not Offered n	(%)	Offered as a Separate Course n	(%)	Offered & Integrated in Other Courses n	(%)	Not Reported n	Not Offered n	(%)	Offered as a Separate Course n	(%)	Offered & Integrated in Other Courses n	(%)	Not Reported n
Theory	0		12	(92.3)	1	(7.7)		0		9	(100.0)	0			0		23	(79.3)	6	(20.7)	
Ethics	1	(7.7)	1	(7.7)	11	(84.6)		1	(11.1)	0		8	(88.9)		2	(6.9)	7	(24.1)	20	(69.0)	
Professional Role Issues	0		9	(69.2)	4	(30.8)		0		6	(66.7)	3	(33.3)		1	(3.4)	16	(55.2)	12	(41.4)	
Health Policy Issues	0		6	(46.2)	7	(53.8)		0		3	(33.3)	6	(66.7)		1	(3.4)	10	(34.5)	18	(62.1)	
Organizational & Systems Theory	0		3	(23.1)	10	(76.9)		0		1	(11.1)	8	(88.9)		1	(3.4)	8	(27.6)	20	(69.0)	
Health Economics/Health Care Financing	0		3	(23.1)	10	(76.9)		0		4	(44.4)	5	(55.6)		1	(3.4)	9	(31.0)	19	(65.5)	
Managed Care	1	(7.7)	0		12	(92.3)		0		0		9	(100.0)		2	(6.9)	2	(6.9)	25	(86.2)	
Computer Technology	2	(15.4)	2	(15.4)	9	(69.2)		0		2	(22.2)	7	(77.8)		6	(20.7)	7	(24.1)	16	(55.2)	
Research Methodology & Design	0		12	(92.3)	1	(7.7)		0		8	(88.9)	1	(11.1)		0		28	(96.6)	1	(3.4)	
Statistics	0		8	(61.5)	5	(38.5)		0		6	(66.7)	3	(33.3)		4	(13.8)	13	(44.8)	12	(41.4)	
Sociocultural Diversity	0		1	(7.7)	12	(92.3)		1	(11.1)	0		8	(88.9)		2	(6.9)	2	(6.9)	25	(86.2)	
Population-Based Care	1	(7.7)	3	(23.0)	9	(69.2)		1	(11.1)	3	(33.3)	5	(55.6)		5	(17.2)	4	(13.8)	20	(69.0)	
Health Promotion & Disease Prevention	3	(23.1)	3	(23.1)	7	(53.8)		2	(22.2)	2	(22.2)	5	(55.6)		5	(17.2)	6	(20.7)	18	(62.1)	

[1] Graduate core is defined as the foundational curriculum content deemed essential for all students who pursue a master's degree regardless of the specialty or functional area.

[2] Combined NP/CNS refers to those programs where, by curricular design, the NP and CNS roles are merged in the curriculum. Graduates are eligible to sit for one NP and one CNS certification examination (e.g., GNP and CNS in gerontological nursing).

[3] Combined NP/CNS programs defined as Primary Care are: Family, Adult, Geriatric, Pediatric, and Women's Health; combined NP/CNS programs defined as Specialty Care are: Acute Care, Neonatal, Adult Psych/Mental Health, and Child & Adolescent Psych/Mental Health.

[4] Combined NP/CNS programs defined as "both" include one primary care track and one specialty care track.

NOTE: Percents may not total to 100.0 due to rounding.

Table 13. Course Content Areas Included in Clinical Track Courses (Didactic and/or Clinical Practicum)[1] of Combined NP/CNS Tracks[2] Master's-Level Nurse Practitioner Programs Categorized as Primary Care[3], Specialty Care, and Dual Primary/Specialty Care[4] Tracks by Course Content Area (13 Combined NP/CNS Primary Care Tracks in 13 Schools; 9 Specialty Care Tracks in 9 Schools; and 29 Dual Primary/Specialty Tracks in 26 Schools).

COURSE CONTENT AREA	PRIMARY CARE (13 Tracks in 13 Schools)							SPECIALTY CARE (9 Tracks in 9 Schools)							BOTH PRIMARY AND SPECIALTY (29 Tracks in 26 Schools)						
	Not Offered n	(%)	Offered as a Separate Course n	(%)	Offered & Integrated in Other Courses n	(%)	Not Reported n	Not Offered n	(%)	Offered as a Separate Course n	(%)	Offered & Integrated in Other Courses n	(%)	Not Reported n	Not Offered n	(%)	Offered as a Separate Course n	(%)	Offered & Integrated in Other Courses n	(%)	Not Reported n
Advanced Physical/Health Assessment	0		13	(100.0)	0			0		9	(100.0)	0			0		27	(93.1)	2	(6.9)	
Advanced Physiology/Pathophysiology	0		12	(92.3)	1	(7.7)		0		8	(88.9)	1	(11.1)		0		26	(89.7)	3	(10.3)	
Advanced Pharmacology	0		13	(100.0)	0			0		9	(100.0)	0			0		29	(100.0)	0		
Diagnosis, Treatment, & Management of Illness	0		5	(38.5)	8	(61.5)		0		1	(11.1)	8	(88.9)		0		22	(75.9)	7	(24.1)	
Human Development	0		2	(15.4)	11	(84.6)		0		1	(11.1)	8	(88.9)		1	(3.4)	1	(3.4)	27	(93.1)	
Mental Health	0		0		13	(100.0)		0		1	(11.1)	8	(88.9)		0		9	(31.0)	20	(69.0)	
Advanced Practice Role Preparation	0		8	(61.5)	5	(38.5)		0		5	(55.6)	4	(44.4)		0		15	(51.7)	14	(48.3)	
Genetics	1	(7.7)	0		12	(92.3)		0		0		9	(100.0)		4	(13.8)	0		25	(86.2)	
Immunology	1	(7.7)	1	(7.7)	11	(84.6)		0		0		9	(100.0)		1	(3.4)	1	(3.4)	27	(93.1)	
Clinical Epidemiology	2	(15.4)	1	(7.7)	10	(76.9)		1	(11.1)	0		8	(88.9)		4	(13.8)	5	(17.2)	20	(69.0)	
Community Health	2	(15.4)	2	(15.4)	9	(69.2)		5	(55.6)	0		4	(44.4)		4	(13.8)	3	(10.3)	22	(75.9)	
Interdisciplinary Team Concepts	1	(7.7)	0		12	(92.3)		0		0		9	(100.0)		0		0		29	(100.0)	
Continuous Quality Improvement	0		0		13	(100.0)		0		1	(11.1)	8	(88.9)		2	(6.9)	1	(3.4)	26	(89.7)	
Complementary & Alternative Modalities	0		0		13	(100.0)		2	(22.2)	0		7	(77.8)		0		1	(3.4)	28	(96.6)	
Business Aspects of Practice	1	(7.7)	0		12	(92.3)		1	(11.1)	1	(11.1)	7	(77.8)		1	(3.4)	2	(6.9)	26	(89.7)	
End of Life Care	3	(23.1)	0		10	(76.9)		0		0		9	(100.0)		2	(6.9)	0		27	(93.1)	
Best Practices	1	(7.7)	0		12	(92.3)		0		1	(11.1)	8	(88.9)		1	(3.4)	1	(3.4)	27	(93.1)	
Evidence Based Practice	0		0		13	(100.0)		0		2	(22.2)	7	(77.8)		0		2	(6.9)	27	(93.1)	
ICD[5] Procedural & Diagnostic Coding Terminology; Current Procedural Terminology	1	(7.7)	0		12	(92.3)		2	(22.2)	1	(11.1)	6	(66.7)		1	(3.4)	0		28	(96.6)	

Table 13. Course Content Areas Included in Clinical Track Courses (Didactic and/or Clinical Practicum)[1] of Combined NP/CNS Tracks[2] Master's-Level Nurse Practitioner Programs Categorized as Primary Care[3], Specialty Care, and Dual Primary/Specialty Care[4] Tracks by Course Content Area (13 Combined NP/CNS Primary Care Tracks in 13 Schools; 9 Specialty Care Tracks in 9 Schools; and 29 Dual Primary/Specialty Tracks in 26 Schools), cont.

COURSE CONTENT AREA	PRIMARY CARE (13 Tracks in 13 Schools)				SPECIALTY CARE (9 Tracks in 9 Schools)				BOTH PRIMARY AND SPECIALTY (29 Tracks in 26 Schools)			
	Not Offered n (%)	Offered as a Separate Course n (%)	Offered & Integrated in Other Courses n (%)	Not Reported n	Not Offered n (%)	Offered as a Separate Course n (%)	Offered & Integrated in Other Courses n (%)	Not Reported n	Not Offered n (%)	Offered as a Separate Course n (%)	Offered & Integrated in Other Courses n (%)	Not Reported n
X-Ray Interpretation & Radiological Procedures	2 (15.4)	1 (7.7)	10 (76.9)		0	0	9 (100.0)		7 (24.1)	3 (10.3)	19 (65.5)	
Clinical Laboratory Procedures	1 (7.7)	1 (7.7)	11 (84.6)		0	0	9 (100.0)		1 (3.4)	4 (13.8)	24 (82.8)	
Suturing	5 (38.5)	1 (7.7)	7 (53.8)		1 (11.1)	1 (11.1)	7 (77.8)		9 (31.0)	4 (13.8)	16 (55.2)	
EKG Interpretation	1 (7.7)	1 (7.7)	11 (84.6)		0	1 (11.1)	8 (88.9)		5 (17.2)	1 (3.4)	23 (79.3)	
Office Emergencies	1 (7.7)	0	12 (92.3)		0	0	9 (100.0)		4 (13.8)	2 (6.9)	23 (79.3)	
Minor Surgical Procedures	7 (53.8)	0	6 (46.2)		2 (22.2)	1 (11.1)	6 (66.7)		9 (31.0)	1 (3.4)	19 (65.5)	

[1] Clinical track courses are defined as the advanced practice nursing and specialty curriculum content included in clinical courses (didactic and/or clinical practicum).

[2] Combined NP/CNS refers to those programs where, by curricular design, the NP and CNS roles are merged in the curriculum. Graduates are eligible to sit for one NP and one CNS certification examination (e.g., GNP and CNS in gerontological nursing).

[3] Combined NP/CNS programs defined as Primary Care are: Family, Adult, Geriatric, Pediatric, and Women's Health; combined NP/CNS programs defined as Specialty Care are: Acute Care, Neonatal, Adult Psych/Mental Health, and Child & Adolescent Psych/Mental Health.

[4] Combined NP/CNS programs defined as "both" include one primary care track and one specialty care track.

[5] ICD = International Classification of Diseases

NOTE: Percents may not total to 100.0 due to rounding.

Table 14. Course Content Areas Included in the Core Curriculum[1] of Dual Track[2] Master's-Level Nurse Practitioner Programs Categorized as Primary Care[3], Specialty Care[4], and Both Primary/Specialty Care[5] Tracks by Course Content Area (31 Dual Primary Care Tracks in 28 Schools; 3 Dual Primary/Specialty Tracks in 3 Schools).

| COURSE CONTENT AREA | PRIMARY CARE (31 Tracks in 28 Schools) | | | | | | | BOTH PRIMARY AND SPECIALTY (3 Tracks in 3 Schools) | | | | | | |
| | Not Offered | | Offered as a Separate Course | | Offered & Integrated in Other Courses | | Not Reported | Not Offered | | Offered as a Separate Course | | Offered & Integrated in Other Courses | | Not Reported |
	n	(%)	n	(%)	n	(%)	n	n	(%)	n	(%)	n	(%)	n
Theory	0		21	(67.7)	10	(32.3)		1	(33.3)	0		2	(66.7)	
Ethics	1	(3.2)	4	(12.9)	26	(83.9)		1	(33.3)	1	(33.3)	1	(33.3)	
Professional Role Issues	2	(6.5)	19	(61.3)	10	(32.3)		1	(33.3)	2	(66.7)	0		
Health Policy Issues	1	(3.2)	14	(45.2)	16	(51.6)		1	(33.3)	2	(66.7)	0		
Organizational & Systems Theory	3	(9.7)	9	(29.0)	19	(61.3)		1	(33.3)	2	(66.7)	0		
Health Economics/Health Care Financing	1	(3.2)	7	(22.6)	23	(74.2)		1	(33.3)	0		2	(66.7)	
Managed Care	4	(12.9)	1	(3.2)	26	(83.9)		1	(33.3)	0		2	(66.7)	
Computer Technology	6	(19.4)	5	(16.1)	20	(64.5)		1	(33.3)	0		2	(66.7)	
Research Methodology & Design	0		31	(100.0)	0			0		3	(100.0)	0		
Statistics	9	(29.0)	15	(48.4)	7	(22.6)		1	(33.3)	2	(66.7)	0		
Sociocultural Diversity	2	(6.5)	3	(9.7)	26	(83.9)		1	(33.3)	0		2	(66.7)	
Population-Based Care	5	(16.1)	5	(16.1)	21	(67.7)		1	(33.3)	0		2	(66.7)	
Health Promotion & Disease Prevention	3	(9.7)	11	(35.5)	17	(54.8)		1	(33.3)	1	(33.3)	1	(33.3)	

[1] Graduate core is defined as the foundational curriculum content deemed essential for all students who pursue a master's degree regardless of the specialty or functional area.

[2] Dual track refers to those programs where graduates are eligible to sit for two NP certification examinations.

[3] Dual track programs defined as Primary Care are: Family, Adult, Geriatric, Pediatric, and Women's Health; dual track programs defined as

[4] Specialty Care are: Acute Care, Neonatal, Adult Psych/Mental Health, and Child & Adolescent Psych/Mental Health. There were no dual tracks categorized as specialty care.

[5] Dual track programs defined as "both" include one primary care track and one specialty care track.

NOTE: Percents may not total to 100.0 due to rounding.

Table 15. Course Content Areas Included in Clinical Track Courses (Didactic and/or Clinical Practicum)[1] of Dual Track[2] Master's-Level Nurse Practitioner Programs Categorized as Primary Care[3], Specialty Care[4], and Dual Primary/Specialty Care[5] Tracks by Course Content Area (31 Dual Primary Care Tracks in 28 Schools; 3 Dual Primary/Specialty Tacks in 3 Schools).

COURSE CONTENT AREA	PRIMARY CARE (31 Tracks in 28 Schools)														BOTH PRIMARY AND SPECIALTY (3 Tracks in 3 Schools)								
	Not Offered n	(%)	Offered as a Separate Course n	(%)	Offered & Integrated in Other Courses n	(%)	Not Reported n	Not Offered n	(%)	Offered as a Separate Course n	(%)	Offered & Integrated in Other Courses n	(%)	Not Reported n
Advanced Physical/Health Assessment	0		30	(96.8)	1	(3.2)		0		3	(100.0)	0		
Advanced Physiology/Pathophysiology	0		28	(90.3)	3	(9.7)		0		3	(100.0)	0		
Advanced Pharmacology	0		31	(100.0)	0			0		3	(100.0)	0		
Diagnosis, Treatment, & Management of Illness	0		22	(71.0)	9	(29.0)		0		2	(66.7)	1	(33.3)	
Human Development	1	(3.2)	0		30	(96.8)		0		1	(33.3)	2	(66.7)	
Mental Health	1	(3.2)	3	(9.7)	27	(87.1)		0		0	(0.0)	3	(100.0)	
Advanced Practice Role Preparation	0		21	(67.7)	10	(32.3)				0		3	(100.0)	
Genetics	6	(19.4)	1	(3.2)	24	(77.4)		0		0		3	(100.0)	
Immunology	2	(6.5)	0		29	(93.5)		0		0		3	(100.0)	
Clinical Epidemiology	1	(3.2)	6	(19.4)	24	(77.4)		0		0		3	(100.0)	
Community Health	1	(3.2)	4	(12.9)	26	(83.9)		1	(33.3)	0		2	(66.7)	
Interdisciplinary Team Concepts	0		2	(6.5)	29	(93.5)		0		0		3	(100.0)	
Continuous Quality Improvement	5	(16.7)	0		25	(83.3)	{1}	1	(33.3)	0		2	(66.7)	
Complementary & Alternative Modalities	1	(3.2)	5	(16.1)	25	(80.6)		0		0		3	(100.0)	
Business Aspects of Practice	2	(6.7)	3	(10.0)	25	(83.3)	{1}	0		0		3	(100.0)	
End of Life Care	2	(6.5)	0		29	(93.5)		0		0		3	(100.0)	
Best Practices	2	(6.5)	0		29	(93.5)		0		1	(33.3)	2	(66.7)	
Evidence-Based Practice	0		2	(6.7)	28	(93.3)	{1}	0		1	(33.3)	2	(66.7)	
ICD[6] Procedural & Diagnostic Coding Terminology; Current Procedural Terminology	2	(6.7)	0		28	(93.3)	{1}	0		0		3	(100.0)	
X-Ray Interpretation & Radiological Procedures	5	(16.1)	1	(3.2)	25	(80.6)	{0}	0		1	(33.3)	2	(66.7)	
Clinical Laboratory Procedures	1	(3.3)	2	(6.7)	27	(90.0)	{1}	0		1	(33.3)	2	(66.7)	
Suturing	9	(29.0)	0	(0.0)	22	(71.0)		0		1	(33.3)	2	(66.7)	
EKG Interpretation	3	(9.7)	1	(3.2)	27	(87.1)		0		1	(33.3)	2	(66.7)	
Office Emergencies	7	(22.6)	0		24	(77.4)	{0}	0		0		3	(100.0)	
Minor Surgical Procedures	13	(43.3)	0		17	(56.7)	{1}	1	(33.3)	0		2	(66.7)	

[1] Clinical track courses are defined as the advanced practice nursing and specialty curriculum content included in clinical courses (didactic and/or clinical practicum).

[2] Dual track refers to those programs where graduates are eligible to sit for two NP certification examinations.

[3] Dual track programs defined as Primary Care are: Family, Adult, Geriatric, Pediatric, and Women's Health; dual track programs defined as

[4] Specialty Care are: Acute Care, Neonatal, Adult Psych/Mental Health, and Child & Adolescent Psych/Mental Health. There were no dual tracks categorized as specialty care.

[5] Dual track programs defined as "both" include one primary care track and one specialty care track.

[6] ICD = International Classification of Diseases.

NOTE: Percents may not total to 100.0 due to rounding.

FACULTY WORKLOAD, INTERDISCIPLINARY EDUCATION, AND WEB-BASED CURRICULUM

Table 16. Selected Components of Faculty Workload in Master's-Level Nurse Practitioner Programs Categorized by Single Track[1] Nurse Practitioner, Dual Track[2] Nurse Practitioner, or Combined Nurse Practitioner/Clinical Nurse Specialist[3] (N=679 Clinical Tracks in 275 Schools).

COMPONENTS	SINGLE TRACK NP (n=594 Clinical Tracks in 265 Schools)	DUAL TRACK NP (n=34 Clinical Tracks in 30 Schools)	COMBINED NP/CNS (n=51 Clinical Tracks in 38 Schools)	TOTAL CLINICAL TRACKS (n=679 Tracks in 275 Schools)
SITE VISITS TO STUDENTS FOR DIRECT CLINICAL OBSERVATION[4] PER SEMESTER OR QUARTER				
Mean ± SD	2.2 ± 2.0	1.8 ± .9	2.2 ± 1.3	2.2 ± 1.9
Median	2	2	2	2
Mode	2	2	2	2
Not Reported	{9}	{1}		{10}
VISITS TO STUDENTS OVER ENTIRE PROGRAM				
Mean ± SD	7.9 ± 5.9	7.0 ± 3.9	7.7 ± 4.8	7.9 ± 5.7
Median	6	6	6	6
Mode	6	6	8	6
Not Reported	{17}	{2}		{19}
INDIRECT OBSERVATION[5] OF STUDENTS PER SEMESTER OR QUARTER				
Mean ± SD	11.8 ± 6.7	12.2 ± 5.7	13.1 ± 5.8	11.9 ± 6.6
Median	12	14	14	14
Mode	15	15	15	15
Not Reported	{3}	{1}		{4}
STUDENT-TO-FACULTY RATIO FOR DIRECT CLINICAL SUPERVISION[6] (STUDENTS PER FACULTY)				
Mean ± SD	1.5 ± 1.5	1.4 ± 1.6	1.3 ± .8	1.1 ± 1.5
Median	1	1	1	1
Mode	1	1	1	1
Not Reported	{8}			{8}
STUDENT-TO-FACULTY RATIO FOR INDIRECT CLINICAL SUPERVISION (STUDENTS PER FACULTY)				
Mean ± SD	6.8 ± 3.0	6.5 ± 3.0	7.5 ± 3.9	6.8 ± 3.0
Median	6	6	6	6
Mode	6	6	6	6
Not Reported	{16}	{1}	{1}	{18}

Table 16, cont. Selected Components of Faculty Workload in Master's-Level Nurse Practitioner Programs Categorized by Single Track[1] Nurse Practitioner, Dual Track[2] Nurse Practitioner, or Combined Nurse Practitioner/Clinical Nurse Specialist[3] (N=679 Clinical Tracks in 275 Schools).

COMPONENTS	SINGLE TRACK NP (n=594 Clinical Tracks in 265 Schools)	DUAL TRACK NP (n=34 Clinical Tracks in 30 Schools)	COMBINED NP/CNS (n=51 Clinical Tracks in 38 Schools)	TOTAL CLINICAL TRACKS (n=679 Tracks in 275 Schools)
FACULTY RESPONSIBLE FOR CLINICAL SITE DEVELOPMENT	Number (Percent)	Number (Percent)	Number (Percent)	Number (Percent)
Yes	517 (87.3)	31 (92.1)	48 (94.1)	596 (88.0)
No	75 (12.7)	3 (8.8)	3 (5.9)	81 (12.0)
Not Reported	{2}			{2}
FACULTY RESPONSIBLE FOR CLINICAL SITE COORDINATION	Number (Percent)	Number (Percent)	Number (Percent)	Number (Percent)
Yes	508 (86.0)	28 (82.4)	49 (96.1)	585 (86.5)
No	83 (14.0)	6 (17.6)	2 (3.9)	91 (13.5)
Not Reported	{3}			{3}

[1] Single track refers to those programs where graduates are eligible to sit for one NP certification examination.

[2] Dual track refers to those programs where, by curricular design, student major in two NP clinical tracks. Graduates are eligible to sit for *two* NP examinations (e.g., ANP and GNP).

[3] Combined NP/CNS refers to those programs where, by curricular design, the NP and CNS roles are merged in the curriculum. Graduates are eligible to sit for *one* NP and *one* CNS certification examination.

NOTE: Percents may not total to 100.0 due to rounding.

Table 17. Interdisciplinary Education[1] in Master's-Level Nurse Practitioner Programs (N= 275 Schools).

	NUMBER	PERCENT
INTERDISCIPLINARY EDUCATION IN ONE OR MORE CORE MASTER'S COURSES[2]		
Yes	75	27.3
No	200	72.7
INTERDISCIPLINARY EDUCATION IN ONE OR MORE NP CLINICAL TRACK COURSES[3]		
Yes	97	35.7
No	175	64.3
Not Reported	{3}	

[1] Interdisciplinary education is defined as an educational approach in which students from two or more disciplines collaborate in the learning process with the goal of fostering interprofessional interaction that enhances the practice of each discipline (e.g., medicine, nursing, pharmacy, etc.).
[2] Graduate core is defined as the foundational curriculum content deemed essential for all students who pursue a master's degree in nursing regardless of specialty or functional focus.
[3] Clinical track courses are defined as the advanced practice nursing and specialty curriculum content included in clinical courses (didactic and/or clinical practicum).
NOTE: Percents may not total to 100.0 due to rounding.

Table 18. Web-Based or Web-Enhanced Curriculum in Master's-Level Nurse Practitioner Programs (N= 275 Schools).

	NUMBER OF SCHOOLS	PERCENT
TOTALLY WEB-BASED[1] CLINICAL TRACKS WITHIN A SCHOOL		
One or More Tracks Web-Based	7	2.6
No Tracks Web-Based	266	97.4
Not Reported	{2}	
DIRECT FACULTY SUPERVISION[2] FOR WEB-BASED CLINICAL TRACKS		
Yes	6	100.0
No	0	
Not Reported	{1}	
WEB-ENHANCED[3] CLINICAL TRACKS WITHIN A SCHOOL (Valid n=270 Schools)		
One or More Tracks Web-Enhanced	200	74.1
No Tracks Web-Enhanced	70	25.9
Not Reported	{5}	

[1] Totally Web-based programs refer to educational programs offered completely through online instruction utilizing web technology

[2] Direct supervision is when faculty function as on-site clinical preceptors responsible for guiding students' acquisition of clinical skills on a patient-by-patient basis.

[3] Web-enhanced refers to educational programs that use Web technology to supplement in-class teaching.

NOTE: Percents may not total to 100.0 due to rounding.

APPENDICES

NONPF

National Organization of
Nurse Practitioner Faculties

American Association
of Colleges of Nursing

2000 Survey Nurse Practitioner Educational Programs
Please complete this survey for EACH NP clinical track

NAME OF INSTITUTION: _____

PROGRAM DIRECTOR (if applicable)

Name and
Credentials: _____

E-mail: _____

Area Code: _____ Phone: _____ FAX: _____

TRACK COORDINATOR (if applicable)

Name and
Credentials: _____

E-mail: _____

Area Code: _____ Phone: _____ FAX: _____

2nd TRACK COORDINATOR (if applicable)

Name and
Credentials: _____

E-mail: _____

Area Code: _____ Phone: _____ FAX: _____

1. **Role Preparation** - Please indicate the role preparation for this clinical track. Clinical track is defined as curriculum in a specific practice area such as family, acute care, pediatric, psychiatric and mental health, etc. You may only **CHOOSE ONE.**

O   Nurse Practitioner (Single Track) - *Nurse practitioner single track refers to those programs where graduates are eligible (upon meeting the practice requirements) to sit for one NP certification examination.*

O   Nurse Practitioner (Dual Track) - *Nurse practitioner dual track refers to those programs where, by curricular design, students major in two NP clinical tracks. Graduates are eligible (upon meeting the practice requirements) to sit for two NP examinations (e.g., ANP & GNP).*

O   Combined Nurse Practitioner/Clinical Nurse Specialist - *Combined nurse practitioner/clinical nurse specialist refers to those programs where, by curricular design, the NP and CNS roles are merged in the curriculum. Graduates are eligible (upon meeting the practice requirements) to sit for one NP and one CNS certification examination (for example, gerontological/geriatric NP and CNS in gerontological nursing).*

2a. **Title** - Indicate the title of the nurse practitioner clinical track. **Select only one.**

Nurse Practitioner
- O Family Nurse Practitioner
- O Adult Nurse Practitioner
- O Pediatric Nurse Practitioner
- O Gerontological/Geriatric Nurse Practitioner
- O Women's Health Nurse Practitioner
- O Neonatal Nurse Practitioner
- O School Nurse Practitioner
- O Occupational Health Nurse Practitioner
- O Acute Care Nurse Practitioner (Adult)
- O Acute Care Nurse Practitioner (Pediatric)
- O Oncology Nurse Practitioner
- O Adult Psych/Mental Health Nurse Practitioner
- O Child & Adolescent Psych/Mental Health NP

- O Other, non-listed title

Dual Tracks
- O FNP/ANP
- O ANP/GNP
- O FNP/GNP
- O ANP/WHNP
- O FNP/WHNP
- O FNP/SNP
- O Adult Psych/Child & Adolescent Psych Mental Health NP

NP/CNS Titles
- O ANP/Adult Psych
- O FNP/ Adult Psych
- O ANP/ Community Health CNS
- O ANP/ Home Health CNS
- O FNP/ Home Health CNS
- O GNP/ Gerontological CNS
- O ANP/ Med-Surg CNS
- O ACNP/ Acute & Critical Care CNS
- O ANP/ Acute & Critical Care CNS

2b. If you answered 'OTHER' to the question above, please specify the exact the title of the clinical track.

2c. **Primary Certification** - If you chose Nurse Practitioner (Single Track) as your answer to Question 1, indicate the <u>primary</u> certification examination that this clinical track prepares the majority of graduates (upon meeting the practice requirements) to take. For instance, if the program is titled 'Adult Cardiovascular NP,' choose ANP (because the primary focus of the track is ANP). The cardiovascular component is a subspecialty. **Select only one.**

- ○ Family Nurse Practitioner
- ○ Adult Nurse Practitioner
- ○ Pediatric Nurse Practitioner
- ○ Gerontological/Geriatric Nurse Practitioner
- ○ Women's Health Nurse Practitioner
- ○ Neonatal Nurse Practitioner
- ○ School Nurse Practitioner
- ○ Acute Care (Adult) Nurse Practitioner
- ○ Clinical Specialist in Adult Psychiatric & Mental Health Nursing
- ○ Clinical Specialist in Child & Adolescent Psychiatric & Mental Health Nursing
- ○ Advanced Oncology Certified Nurse

2d. If you chose Nurse Practitioner (Dual Track) as your answer to Question 1, indicate the **two** NP certifications examinations that this NP dual clinical track program prepares the majority of graduates (upon meeting the practice requirements) to take.

- ○ Family Nurse Practitioner
- ○ Adult Nurse Practitioner
- ○ Pediatric Nurse Practitioner
- ○ Gerontological/Geriatric Nurse Practitioner
- ○ Women's Health Nurse Practitioner
- ○ Neonatal Nurse Practitioner
- ○ School Nurse Practitioner
- ○ Acute Care (Adult) Nurse Practitioner
- ○ Clinical Specialist in Adult Psychiatric & Mental Health Nursing
- ○ Clinical Specialist in Child & Adolescent Psychiatric & Mental Health Nursing
- ○ Advanced Oncology Certified Nurse

2e. If you chose Combined Nurse Practitioner/Clinical Nurse Specialist as your answer in Question 1, indicate the one NP certification examination and the one CNS certification examination that this combined NP/CNS clinical track program prepares the majority of graduates (upon meeting the practice requirements) to take. **Select one from each list.**

<u>Nurse Practitioner</u> (select one)

- ○ Family Nurse Practitioner
- ○ Adult Nurse Practitioner
- ○ Pediatric Nurse Practitioner
- ○ Gerontological/Geriatric Nurse Practitioner Adolescent
- ○ Women's Health Nurse Practitioner
- ○ Neonatal Nurse Practitioner
- ○ School Nurse Practitioner

- ○ Acute Care (Adult) Nurse Practitioner
- ○ Clinical Specialist in Adult Psychiatric & Mental Health Nursing
    - ○ Clinical Specialist in Child &

  Psychiatric & Mental Health Nursing
- ○ Advanced Oncology Certified Nurse

Clinical Nurse Specialist (select one)

- O Clinical Specialist in Gerontological Nursing
- O Acute & Critical Care Clinical Nurse Specialist
- O Clinical Specialist in Adult Psychiatric & Mental Health Nursing
- O Clinical Specialist in Child and Adolescent Psychiatric & Mental Health Nursing
- O Clinical Specialist in Community Health Nursing
- O Clinical Specialist in Home Health Nursing
- O Clinical Specialist in Medical-Surgical Nursing
- O Advanced Oncology Certified Nurse

3. **Academic Year** - What is the basis for your academic year?

      O Semesters   O Quarters

4. **Length of Program** - Indicate the number of _months_ required to complete a master's degree in this clinical track.

_____

5. **Time Limit for Completion** - Is there is a time limit to complete a master's degree in this track?

      O Yes   O No

5a. **If yes**, specify the time in _months_: _____

6. **Part Time** - Is part-time study allowed?   O Yes   O No

7a. **Credit Hours** - The total number of credit hours required to complete this track is:

_____

7b. How many of these credit hours are allocated to graduate core courses? _Graduate core is defined as the foundational curriculum content deemed essential for all students who pursue a master's degree in nursing regardless of specialty or functional focus._

_____

8. **Didactic Hours** - Enter the total number of didactic clock hours for this clinical track. _Didactic refers to clock hours in which content is taught in the educational program, including classroom and skill laboratory hours. Didactic hours exclude clinical hours._

_____

9. **Clinical Hours** - Indicate the total number of supervised clinical practice clock hours for this clinical track. *Clinical practice hours refer to hours in which direct clinical care is provided to individuals, familities, and populations in specific areas of NP practice.*

_____

10. **Indicate if the following content areas are included in your school's core master's courses.** *Graduate core is defined as the foundational curriculum content deemed essential for all students who pursue a master's degree in nursing regardless of specialty or functional focus.* For those areas that are included in the curriculum, indicate if the content area is offered as a separate course or if the content is integrated in other core courses.

ANSWER KEY:

N/O	Not Offered in Core Master's Courses
SEP	Offered as a Separate Core Course
INT	Offered and Integrated in Other Core Courses

Theory	○ N/O *****	○ SEP	○ INT
Ethics	○ N/O *****	○ SEP	○ INT
Professional Role Issues	○ N/O *****	○ SEP	○ INT
Health Policy Issues	○ N/O *****	○ SEP	○ INT
Organizational and Systems Theory	○ N/O *****	○ SEP	○ INT
Health Economics/Health Care Financing	○ N/O *****	○ SEP	○ INT
Managed Care	○ N/O *****	○ SEP	○ INT
Computer Technology	○ N/O *****	○ SEP	○ INT
Research Methodology and Design	○ N/O *****	○ SEP	○ INT
Statistics	○ N/O *****	○ SEP	○ INT
Sociocultural Diversity	○ N/O *****	○ SEP	○ INT
Population-Based Care	○ N/O *****	○ SEP	○ INT
Health Promotion and Disease Prevention	○ N/O *****	○ SEP	○ INT
Other A	○ N/O *****	○ SEP	○ INT
Other B	○ N/O *****	○ SEP	○ INT
Other C	○ N/O *****	○ SEP	○ INT

10a. **Other A Specify -** _____

10b. **Other B Specify -** _____

10c. **Other C Specify -** _____

11. **Interdisciplinary** - Are any core master's courses for this NP track taught interdisciplinarily? *Interdisciplinary education is defined as an educational approach in which students from two or more disciplines collaborate in the learning process with the goal of fostering interprofessional interaction that enhance the practice of each discipline (e.g, medicine, nursing, pharmacy, etc.).*

    O Yes   O No

12. **Indicate if the following content areas are included in courses (didactic and/or clinical practicum) for this NP clinical track.** For those content areas that are included in the curriculum for this NP clinical track, indicate if the content area is offered as a separate course or if the content is integrated in other NP clinical courses.

ANSWER KEY:

N/O	Content Area Not Offered
SEP	Offered as a Separate Course
INT	Offered and Integrated in Other Courses

Advanced Physical/Health Assessment	O N/O	*****	O SEP	O INT
Advanced Physiology & Pathophysiology	O N/O	*****	O SEP	O INT
Advanced Pharmacology	O N/O	*****	O SEP	O INT
Diagnosis, Treatment, & Management of Illness	O N/O	*****	O SEP	O INT
Human Development	O N/O	*****	O SEP	O INT
Mental Health	O N/O	*****	O SEP	O INT
Advanced Practice Role Preparation	O N/O	*****	O SEP	O INT
Genetics	O N/O	*****	O SEP	O INT
Immunology	O N/O	*****	O SEP	O INT
Clinical Epidemiology	O N/O	*****	O SEP	O INT
Community Health	O N/O	*****	O SEP	O INT
Interdisciplinary Team Concepts	O N/O	*****	O SEP	O INT
Continuous Quality Improvement	O N/O	*****	O SEP	O INT
Complementary and Alternative Modalities	O N/O	*****	O SEP	O INT
Business Aspects of Practice	O N/O	*****	O SEP	O INT
End of Life Care	O N/O	***** -	O SEP	O INT
Best Practices	O N/O	*****	O SEP	O INT
Evidence-Based Practice	O N/O	*****	O SEP	O INT
International Classification of Diseases Procedural & Diagnostic Coding; Current Procedural Terminology	O N/O	*****	O SEP	O INT
X-Ray Interpretation & Radiological Procedures	O N/O	*****	O SEP	O INT

Table continued on next page

Clinical Laboratory Procedures	○ N/O	*****	○ SEP	○ INT
Suturing	○ N/O	*****	○ SEP	○ INT
EKG	○ N/O	*****	○ SEP	○ INT
Office Emergencies	○ N/O	*****	○ SEP	○ INT
Minor Surgical Procedures	○ N/O	*****	○ SEP	○ INT
Other A	○ N/O	*****	○ SEP	○ INT
Other B	○ N/O	*****	○ SEP	○ INT
Other C	○ N/O	*****	○ SEP	○ INT

12a. **Other A Specify -** _____

12b. **Other B Specify -** _____

12c. **Other C Specify -** _____

13. **Interdisciplinary** - Are any NP didactic and/or clinical practice courses for this NP track taught interdisciplinarily? *Interdisciplinary education is defined as an educational approach in which students from two or more disciplines collaborate in the learning process with the goal of fostering interprofessional interaction that enhance the practice of each discipline (e.g, medicine, nursing, pharmacy, etc.).*

○ Yes   ○ No

14. **Direct Observation** - For this clinical track, what is the average number of times per semester or quarter that a faculty member makes a site visit to the clinical practice setting for the purpose of direct observation of a student? *Direct clinical observation is defined as a site visit to the clinical setting in order to observe a student interacting face-to-face with a real patient.*

Average Number of Visits: _____

15. **Indirect Observation** - For this clinical track, what is the average number of times per semester or quarter that a faculty member has contact with a student by methods other than site visits. Methods include student-faculty conferences, telephone calls, and videotaped conferences.

_____

16. **Clinical Practice** - For this clinical track, what is the average number of visits made to students over the entire program?

_____

17. **Final Clinical Practice Course** - For this clinical track, how many clock hours are allocated to the final (capstone/preceptorship/residency) clinical practicum course?

_____

18.   **Direct Supervision** - When a faculty member is directly supervising students in a clinical area, what is the average number of students supervised by one faculty member? *Direct supervision is when faculty function as on-site clinical preceptors responsible for guiding students' acquisition of clinical skills on a patient-by-patient basis.*

_____ *students to one faculty*

19.   **Indirect Supervision** - When faculty share supervision with other clinicians serving as clinical preceptors, what is the average number of students supervised by one faculty member? If you have a creative way for establishing your student-faculty ratio, please explain in the comment section at the end of the survey.

_____ *students to one faculty*

20.   **Clinical Site Development and Coordination** - Are NP faculty responsible for clinical site development and/or site coordination?

Site Development:	○ Yes	○ No
Site Coordination:	○ Yes	○ No

21a.   **On-Line** - Is this clinical track offered totally Web-based? *Totally Web-based programs refer to educational programs offered completely through on-line instruction utilizing Web technology.*

○ Yes   ○ No

21b.   If yes, do you provide direct faculty supervision for students?   ○ Yes   ○ No

22.   **Web-Enhanced** - Is this clinical track program Web-enhanced? *Web-enhanced refers to educational programs that use web technology to supplement in-classroom teaching.*

○ Yes   ○ No

23.   **Comments** - If you have any other comments, you may note them on the reverse page.

RETURN TO: NONPF, 1522 K Street, NW, Ste. 702, Washington, DC 20005.

Appendix B. Lists of Institutions that Provided Data for this Report

Alabama
Samford University
Troy State University
University of Alabama at Birmingham
University of Alabama-Huntsville
University of Mobile
University of South Alabama

Arizona
Arizona State University
Northern Arizona University
University of Arizona
University of Phoenix

Arkansas
Arkansas State University
University of Arkansas for Medical Sciences
University of Central Arkansas

Alaska
University of Alaska Anchorage

California
Azusa Pacific University
California State University-Bakersfield
California State University-Dominguez Hills
California State University-Fresno
California State University-Hayward
California State University-Los Angeles
California State University-Northridge
California State University-Sacramento
Loma Linda University
Samuel Merritt-Saint Mary's
San Diego State University
San Francisco State University
San Jose State University
Sonoma State University
University of California-Davis
University of California-Los Angeles
University of California-San Diego
University of California-San Francisco
University of San Diego
University of San Francisco
University of Southern California
Western University of Health Sciences

Colorado
Beth El College of Nursing
Regis University
University of Colorado Health Science Center
University of Northern Colorado

Connecticut
Fairfield University
Quinnipiac College
Sacred Heart University
Southern Connecticut State University
St. Joseph College
University of Connecticut
University of Hartford
Western Connecticut State University
Yale University

Delaware
University of Delaware
Wilmington College

District of Columbia
Catholic University of America
Georgetown University
Howard University

Florida
Barry University
Florida A & M University
Florida Atlantic University
Florida Gulf Coast University
Florida International University
Florida State University
University of Central Florida
University of Florida
University of Miami
University of North Florida
University of South Florida
University of Tampa

Georgia
Albany State College
Armstrong State College
Brenau University
Emory University
Georgia College

Georgia, cont.
Georgia Southern University
Georgia State University
Kennesaw State College
Medical College of Georgia
North Georgia College
Valdosta State College

Hawaii
Hawaii Pacific University
University of Hawaii at Manoa

Idaho
Idaho State University

Illinois
DePaul University
Loyola University of Chicago
Mennonite College of Nursing
Northern Illinois University
Rush University
Southern Illinois University
St. Joseph College of Nursing
St. Xavier University
University of Illinois at Chicago

Indiana
Ball State University
Indiana State University
Indiana University
Indiana University - Purdue University
Indiana Wesleyan University
Purdue University - Calumet Campus
Saint Francis College
The University of Indianapolis
University of Southern Indiana

Iowa
Allen College of Nursing
Clarke College
Drake University
University of Iowa

Kansas
Fort Hays State University
Pittsburg State University
University of Kansas

Kansas, cont.
Wichita State University

Kentucky
Eastern Kentucky University
Murray State University
Northern Kentucky University
Spalding University
University of Kentucky
University of Louisville
Western Kentucky University

Louisiana
Grambling State University
Louisiana State University Medical Center
Loyola University of New Orleans
McNeese State University
Northwestern State University
Southeastern Louisiana University
Southern University and A&M College
The University of Louisiana at Lafayette

Maine
Husson College
University of Maine
University of Southern Maine

Maryland
Bowie State University
Coppin State College
Salisbury State University
The Johns Hopkins University
Uniformed Services University of the Health Sciences
University of Maryland

Massachusetts
Boston College
Massachusetts College of Pharmacy and Allied Health Sciences
MGH Institute of Health Professions
Northeastern University
Regis College
Simmons College
University of Massachusetts-Amherst
University of Massachusetts-Boston
University of Massachusetts-Dartmouth
University of Massachusetts-Lowell

Massachusetts, cont.
  University of Massachusetts-Worcester
Michigan
  Andrews University
  Grand Valley State University
  Madonna University
  Michigan State University
  Northern Michigan University
  Oakland University
  Saginaw Valley State University
  University of Detroit Mercy
  University of Michigan
  University of Michigan-Flint
  Wayne State University
Minnesota
  College of St. Benedict
  Mankato State University
  Metropolitan State University
  The College of St. Catherine
  The College of St. Scholastica
  University of Minnesota
  Winona State University
Mississippi
  Alcorn State University
  Delta State University
  Mississippi University for Women
  University of Mississippi
  University of Southern Mississippi
Missouri
  Central Missouri State University
  Graceland College
  Jewish Hospital College of Nursing and Allied Health
  Maryville University
  Research College of Nursing
  Saint Louis University
  Southeast Missouri State University
  Southwest Missouri State University
  University of Missouri-Columbia
  University of Missouri-Kansas City
  University of Missouri-St. Louis

Montana
  Montana State University
Nebraska
  Clarkson College
  Creighton University
  University of Nebraska Medical Center
Nevada
  University of Nevada-Las Vegas
  University of Nevada-Reno
New Hampshire
  Rivier College
  University of New Hampshire
New Jersey
  Fairleigh Dickinson University
  Felician College
  Monmouth College
  Rutgers, The State University of New Jersey
  Saint Peter's College
  Seton Hall University
  Stockton State College
  Trenton State College
  University of Medicine & Dentistry of New Jersey
  William Paterson College
New Mexico
  University of New Mexico
New York
  Adelphi University
  Binghamton University
  C.W. Post Campus/Long Island University
  College of Mount Saint Vincent
  College of New Rochelle
  Columbia University
  Daemen College
  Dominican College of Blauvelt
  D'Youville College
  Hunter College of CUNY
  Lehman College
  Long Island University
  Mercy College
  Molloy College

New York, cont.
  Mt. Saint Mary College
  Nazareth College of Rochester
  New York University
  Niagara University
  Pace University
  Russell Sage College
  St. John Fisher College
  SUNY College at Brockport
  SUNY Health Sciences Center/Brooklyn
  SUNY Health Sciences Center/Syracuse
  SUNY Institute of Technology at Utica/Rome
  SUNY/Stony Brook
  Syracuse University
  The University at Buffalo
  University of Rochester
  Wagner College
North Carolina
  Duke University
  East Carolina University
  University of North Carolina-Chapel Hill
  University of North Carolina-Charlotte
  University of North Carolina-Greensboro
  University of North Carolina-Wilmington
  Western Carolina University
North Dakota
  University of Mary
  University of North Dakota
Ohio
  Case Western Reserve University
  Kent State University
  Medical College of Ohio
  Ohio State University
  University of Akron
  University of Cincinnati
  Wright State University
Oklahoma
  University of Oklahoma
Oregon
  Oregon Health Sciences University

Oregon, cont.
  University of Portland
Pennsylvania
  Allentown College
  Bloomsburg University
  Carlow College
  Clarion University
  College Misericordia
  Duquesne University
  Edinboro University of Pennsylvania
  Gannon University
  Gwynedd-Mercy College
  Hahnemann University
  La Roche College
  La Salle University
  Millersville University
  Neumann College
  Pennsylvania State University
  Slippery Rock University
  Temple University
  Thomas Jefferson University
  University of Pennsylvania
  University of Pittsburgh
  University of Scranton
  Villanova University
  Widener University
Rhode Island
  University of Rhode Island
South Carolina
  Clemson University
  Medical University of South Carolina
  University of South Carolina
South Dakota
  South Dakota State University
Tennessee
  Belmont University
  Carson-Newman College
  East Tennessee State University
  Southern College of Seventh Day Adventists
  Tennessee State University

Tennessee, cont.
University of Tennessee-Chattanooga
University of Tennessee-Knoxville
University of Tennessee Health Sciences Center
Vanderbilt University

Texas
Abilene Intercollegiate School
Baylor University
Houston Baptist University
Midwestern State University
Prairie View A & M University
Texas A&M University-Corpus Christi
Texas Tech University Health Science Center
Texas Woman's University
University of Texas Health Sciences Center-Houston
University of Texas Health Sciences Center-San Antonio
University of Texas-Arlington
University of Texas-Austin
University of Texas-El Paso
University of Texas Medical Branch
University of Texas-Pan American
West Texas A&M

Utah
Brigham Young University
University of Utah
Westminster College

Vermont
University of Vermont

Virginia
George Mason University
Hampton University
Marymount University
Old Dominion University
Radford University
Shenandoah University
University of Virginia
Virginia Commonwealth University

Washington
Gonzaga University
Intercollegiate Center for Nursing

Washington, cont.
Pacific Lutheran University
Seattle Pacific University
Seattle University
University of Washington

West Virginia
College of West Virginia
Marshall University
West Virginia University
Wheeling Jesuit College

Wisconsin
Concordia University Wisconsin
Marquette University
University of Wisconsin-Eau Claire
University of Wisconsin-Madison
University of Wisconsin-Milwaukee
University of Wisconsin-Oshkosh
Viterbo College

Wyoming
University of Wyoming