A Comparison of Changes in the Professional Practice of Nurse Practitioners, Physician Assistants, and Certified Nurse Midwives: 1992 and 2000

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Preface

The numbers of nurse practitioners (NPs), physician assistants (PAs), and certified nurse midwives (CNMs) increased dramatically in the 1990s. As of 2000 there were an estimated 95,000 NPs[1], 40,000 PAs[2], and 8,000 CNMs[3] practicing in the U.S., an increase of about 160 percent from 1992. Over this period the three professions were also becoming more widely accepted by physicians, patients, and the general public as key members of the health care delivery team.

To document the extent to which the three professions experienced increased responsibilities over this period, and were helping to meet the health care needs of underserved populations, the Health Resources and Services Administration (HRSA) commissioned this study of the professional practice of NPs, PAs, and CNMs in the 50 States by the Center for Health Workforce Studies at the School of Public Health at the University at Albany. The study involved the compilation of a variety of data to explore these issues, including statutes and regulations from the 50 States, estimated numbers of practitioners, numbers of education programs and graduates, etc. These data were supplemented by field work and interviews conducted in seven States. This report represents a synthesis of all the components of the study.

The Center for Health Workforce Studies is a not-for-profit research center operating under the auspices of the University at Albany of the State University of New York and Health Research, Incorporated (HRI). The views expressed in this report are those of the authors and do not necessarily represent the views or positions of the State University of New York, the School of Public Health, HRI, HRSA, or the subcontractors.

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[1] Data collected from State Boards of Nursing and/or State Regulatory Agencies by the Health Policy Institute, Medical College of Wisconsin, 2000.
[2] American Academy of Physician Assistants, 2002 AAPA Physician Assistant Census Report, http://www.aapa.org/research/02census-intro.html.
[3] Health Policy Institute, 2000.

Executive Summary

This chapter presents an overview of the study and this report. It includes the following sections:

- Introduction
- Key Findings
- Discussion

Introduction

Physician assistants (PAs), nurse practitioners (NPs), and certified nurse midwives (CNMs) play increasingly important roles in the health care system in the U.S. The three professions now combine to form a group of practitioners that is rapidly approaching 20 percent of the size of the physician workforce.

Since many of the NPs, PAs, and CNMs are recent graduates of their respective education programs and few are near retirement age, barring a major unexpected reduction in the respective education programs, the supply of new practitioners is almost certain to continue to grow substantially relative to both population and the supply of physicians for the foreseeable future.

A 1994 article on State practice environments of NPs, PAs, and CNMs by Sekscenski et al, concluded that the professional practice of NPs, PAs, and CNMs varies widely across the 50 States, and that favorable practice environments for the three professions are strongly associated with larger supplies of practitioners [1]. This report revisits this situation and

- documents changes in professional practice of the three professions between 1992 and 2000;
- creates new statistical professional practice indices for each of the three professions that more accurately reflect the respective practice environments across the 50 States in 2000;

- examines the nature of the relationship between the three professions, the professional environment in which they operate, and their physician counterparts;
- identifies salient factors that are related to changes in the three professions and their physician counterparts; and
- assesses the extent to which the three professions improved access to care for underserved populations in the 1990s.

The professional practice indices described in this report were designed to quantify the professional practice options, structural identity, and market recognition of the three professions in each of the 50 States. Higher scores on a professional practice index are generally associated with broader sets of tasks, more autonomous practice environments (i.e., less direct oversight by physicians), and greater opportunities to prescribe controlled substances.

No effort was made to develop an index that could be used to compare the professional practice across the three professions. Although there are similarities among the three professions, each has developed independently with different sets of legal, organizational, and clinical parameters, and it would be inappropriate to compare any single index across the three professions.

The study included: a review of the relevant literature, a systematic review of professional practice statutes and regulations in the 50 States, analysis of data on the three professions and related practice and environmental characteristics, field work in seven States (California, Illinois, New York, North Carolina, Ohio, Oregon, and Texas), and interviews and discussions with a wide range of informants and stakeholders.

Key Findings

- The numbers of NPs, PAs, and CNMs increased significantly in virtually every State between 1992 and 2000. The overall increase was 160 percent over this 8 year period.
- The professional practice for all three professions expanded significantly between 1992 and 2000, that is, practitioners in each of the three professions were permitted to perform more procedures and were permitted to work with less direct supervision from physicians in 2000 than they were in 1992.
- None of the 50 States achieved an index score of 100 on the new professional practice indices for any of the three professions in 2000, indicating that even States with the most expansive practice environments have not yet achieved all practice options viewed as 'optimal' by the respective professions.
- While there remain differences in the scope index scores among the 50 States, the variation of the index scores has declined since 1992, suggesting that the 1990s was a period of 'standardization' or 'convergence' of professional practice across the 50 States for all three of the professions.
- The professional practice indices were significantly positively correlated with the numbers of practitioners per capita for the respective professions in 2000. This suggests that a more positive legal environment for the professions encourages both improved practice options and greater number of practitioners in a State.

- The professional practice indices were significantly positively correlated with managed care penetration in the States in 2000. This suggests that managed care strategies do impact the regulatory environment of NPs, PAs, and CNMs. This is consistent with the significant increases in the numbers of graduates from professional education programs for NPs, PAs, and CNMs in the decade of the 90s, and the continuing success of new graduates in finding employment.
- No other exogenous factor (e.g., aggregate health care expenditures, health insurance rates) was significantly correlated with the new professional practice indices for the three professions in the States. It may be that a study of individual practitioners would reveal additional relationships, but the State-level analysis in this study did not.
- Despite anecdotes about tensions between physicians and the three professions, significant positive correlations between practitioner per capita ratios for NPs, PAs, CNMs, and physicians indicate that States with more physicians per capita also have more NPs, PAs, and CNMs per capita. This is an indication that the three professions supplement or support physicians rather than substitute for or supplant them.
- A critical factor for the three professions related to access to care is the distribution of practitioners. Although the three professions do provide services in areas in which physicians cannot set up viable practices, the penetration of NPs, PAs, and CNMs into shortage areas is often limited by the practice locations of their collaborating physicians.
- Although a majority of new NPs and PAs trained in US entering practice in the 1990s were trained in primary care specialties, many of them entered non-primary care specialties. Many NPs and PAs in specialty practices are assigned tasks generally considered to be 'primary care', e.g., histories and physicals.
- Study informants reported that the attraction of NPs, PAs, and CNMs in different clinical settings and organizations is driven by two key factors: the salary difference between physicians and the three professions, and the ability of the three professions to handle effectively a wide range of clinical tasks. If salaries of the three professions continue to increase relative to those of physicians, the demand for the three professions may fall off. This may be the case for primary care practices as the salaries of primary care physicians in many parts of the U.S. are only slightly higher than those of NPs, PAs, and CNMs.
- Whereas in the early 1990s the major professional practice concerns of NPs were prescriptive authority and legal relations with physicians, the key issue for NPs in recent years has been empanelment by managed care organizations and insurance carriers, that is, the ability to contract with and obtain their own provider numbers for reimbursement from third party payers. This issue is related to both access and visibility. Empanelment provides a major impetus for NPs to seek out patients in traditionally underserved communities and neighborhoods. Empanelment also permits appropriate counting of the services provided by NPs, which now are often reported as being provided by supervising physicians.
- Although the observed increases in both numbers of practitioners and professional practice indices are the basis for prima facie arguments that access to services increased, reliable estimates of the numbers of NPs, PAs, and CNMs practicing in shortage areas are not available in most States. Thus, definitive statistical evidence of improved access for underserved populations is not available. However, qualitative research conducted as part of

the field work in this study strongly supported the claim that the three professions do improve access to care for underserved populations.

- The processes by which legal scopes of practice change in the 50 States are far from uniform, but the field work indicates that the following steps are present in most States: practice teams of physicians and one or more of the three professions work out 'locally acceptable practice arrangements', often based on local demonstration programs that permit innovative practices; then the practitioners seek changes in professional practice to permit these procedures and arrangements for all practitioners. If access to services is limited, public constituent groups and coalitions (e.g., Primary Care Agencies, advocacy groups) often lobby for changes in professional practice to improve access to needed services. The professional associations for the NPs, PAs, and CNMs also lobby actively for changes in professional practice.
- Reimbursement, i.e., compensation or remuneration for different professional activities and procedures, is critical to the acceptance of different practice and supervision arrangements. There will always be some practitioners who provide pro bono services to underserved populations, but provision of services to broad segments of the population that are underserved will happen only if appropriate compensation is available.

Discussion

The analyses, interviews, and meetings conducted as part of this study identify potential follow-up activities that could be pursued at some point.

1. Many informants suggested revisiting the professions every 4 or 5 years to track changes in professional practice of NPs, PAs, and CNMs, the growth in the numbers of practitioners, their demographic characteristics, their legal scopes of practice, their practice patterns, and their contributions to care, especially for underserved populations.
2. A pilot study in one or two States to count/estimate the numbers of NPs, PAs, and CNMs who work in Health Professional Shortage Areas and Medically Underserved Areas, and assess their roles in providing care to underserved populations in rural communities, urban neighborhoods, community health centers, and institutions serving special populations would permit a careful assessment of the contributions of the three professions to care for the underserved.
3. Improved financial incentives for NPs, PAs, and CNMs to practice in HPSAs and other shortage areas could significantly improve access to care for underserved populations. Options for these incentives include increased Medicare incentive payments (as with physicians) and educational loan forgiveness/repayment programs.
4. Increased Medicare reimbursement levels for CNMs from 65 percent of physician rate to 85 percent (as is the case for NPs and PAs) would and help to increase access to CNM services for populations with mental and physical disabilities who are insured by Medicare .
5. Evaluation of State programs that permit practice with remote supervision in more non-traditional settings, including schools, nursing homes, home health agencies, and prisons could ultimately improve access to care for the people in these settings, many of whom are underserved.

6. Practitioner data bases for NPs and CNMs comparable to those maintained by PAs and physicians would significantly enhance the possibilities of assessing the practice patterns of the professions and their contributions to access for underserved populations.
7. If managed care organizations were encouraged to empanel properly qualified NPs, PAs, and CNMs, so that they can provide services to their patients with greater professional autonomy, the result would be improved access to services and reduced costs of care. Empanelment would also provide a basis for more accurately counting the services of the three professions, whose services are often now significantly underestimated because they are recorded as being provided by their collaborating physicians.

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Chapter 1. Study Overview

This chapter presents an overview of the study and this report. It includes the following sections:

- Introduction
- Study objectives
- Study components
- Remainder of report

Introduction

Over the last decade, the numbers of Nurse Practitioners (NPs), Physician Assistants (PAs), and Certified Nurse Midwives (CNMs) in the U.S. have increased substantially. So have the numbers of education programs, new graduates, professional practice options, location of practice, visibility to patient consumers, and professional standing. Many factors have contributed to these increases in numbers and status, some environmental and some related to the professions.

The net result of these factors has been a decade of standardization, socialization, and professionalization of NPs, PAs, and CNMs. Although these processes were not the major focus of this study, their influences on the professions and on the environments in which they practice demand consideration and attention. When considering the reasons for the changes in professional practice experienced by the three professions, it is important to understand the underlying driving forces, which included:

- Pervasive concerns about the rising cost of health care and a growing recognition that the three professions that are subjects of this study, in particular, provide cost-effective, high quality care;

- Cost containment measures that have increased pressure for new economies in practice;
- Consumers who are better educated about health care diagnosis and treatment through a combination of print media, the Internet, television, and advertising, and who as a result demand more of the providers and health systems from whom they seek care, including more time and information;
- Increasing acceptance of the three professions by health care consumers and subsequently, wider use of them in mainstream health care settings.
- The greater roles of consumers in the purchase of health services, the utilization of services, and choice of care providers;
- The growing number of consumers willing to go beyond the traditional allopathic health care system to seek out homeopathic and holistic treatments to address health care problems;
- Growing numbers of uninsured and underinsured people in need of medical care and increased demand for the three professions to work in underserved areas;
- Increased interest and enhanced funding for women's health care initiatives creating new opportunities for CNMs and NPs; and
- Increasing use of the three professions instead of medical residents (i.e., physicians in training), particularly in primary care, in some settings that has created expanded practice opportunities for NPs, PAs, and CNMs.

The regulation of health professions across the United States occurs both externally and internally and is intended to provide safeguards for the public, for the consumer, and for the professions themselves. Externally, State and Federal legislators and regulatory boards determine the legal parameters for professional practice and establish the rules for implementing those conditions. Internally, national professional organizations establish standards and core competencies which are to be met by the professionals within their purview and by the educational institutions which educate and train them. Such guidelines are intended to establish and maintain criteria for appropriate and competent practice.

Regulation of NPs, PAs, and CNMs has evolved considerably over the last decade. National professional organizations have been refining certification and education program requirements and establishing standards for proficient practice. During this period, many national associations have become effective at lobbying for legislation that accommodates the needs of the public and their members on both the State and national levels. Professional associations advocate for regulations that contribute to the professional standing of the group. Standards elevate a profession to a level of skill and competence which creates uniformity and engenders respect by both consumers and other professions.

State and Federal regulators have been actively engaged in altering and adjusting the legal environments in which these professions work to enable practice while maintaining standards to protect public safety. Achieving a balance in various legislative initiatives between the interests of the several professions is a dynamic process. Sustaining this delicate balance requires continual refinement and revision as health care practice, public preferences, and medical technologies evolve. Appropriate regulation can contribute to both efficient practice for the professions and effective care for patients.

In 1994 Edward Sekscenski and colleagues reported on a study that documented the practice environments for NPs, PAs, and CNMs in each of the 50 States for the year 1992 [Sekscenski et al, 1994]. They created three statistical indices that reflected the practice environments for the respective professions, based on the legal status of the professions, the possibilities for direct reimbursement of professionals for their services, and their authority to write prescriptions. The three indices were applied for each State to provide a basis for comparing the practice environments for the three professions across the 50 States and the District of Columbia.

Since that study, the numbers of NPs, PAs, and CNMs have increased dramatically, and their respective scopes of practice have expanded as well. For a variety of reasons many States began to look to non-physician clinicians (especially NPs, PAs, and CNMs) to address service gaps and shortage areas. To promote the use of non-physician clinicians in shortage areas, many State legislatures enacted expansions of their professional practice laws over the past decade with the objective of increasing the supply of medical services to the public, especially for those in officially designated physician shortage areas.

Study Goals and Objectives

The numbers of NPs, PAs, and CNMs increased dramatically in the 1990s, but questions remain: To what extent have the scopes of practice of the three professions increased in this period? Were the improvements in professional practice related to observed increases in numbers of practitioners? Have the overall increases in the numbers of practitioners also occurred in officially designated shortage areas? Has access to care increased in these areas?

The overarching goal of this study was to answer these questions, and to assess the impact of changing professional practice laws for NPs, PAs, and CNMs on access to health care for the underserved in the U.S. This goal was supported by five specific objectives:

1. Document changes in professional practice laws for NPs, PAs, and CNMs in the 50 States between 1992 and 2000, and assess the extent to which these scopes of practice are uniform across the States;
2. Replicate and update the scoring system for the professional practice indices for the three professions developed by Sekscenski, et al;
3. Compile data on the trends of the numbers of individuals licensed as NPs, PAs, and CNMs in each State between 1992 and 2000;
4. Compare the changes in the numbers of NPs, PAs, and CNMs for States with and without a significant change in professional practice for each of these professions, and assess whether there is a relationship between change in professional practice and change in the numbers licensed and practicing in each State; and
5. Assess the impact of changes in professional practice laws and regulations governing NPs, PAs, and CNMs on access to health care in underserved areas.

Study Components

The Center for Health Workforce Studies at the University at Albany (SUNY) in collaboration with the four other Centers for Health Workforce Distribution Studies (at UC San Francisco, the

University of Washington, the University of Texas San Antonio, and the University of Illinois at Chicago), the North Carolina Center for Nursing, the National Conference of State Legislatures, and the Health Policy Institute at the Medical College of Wisconsin examined the impact of changing professional practice laws for three professions on access to health care for the underserved. The specific tasks undertaken included:

1. Obtain and review previous and current professional practice statutes and regulations governing NPs, PAs, and CNMs in the fifty States (plus the District of Columbia) and document how the professional practice requirements changed between 1992 and 2000;
2. Replicate and update the scoring system for professional practice for these practitioners developed by Sekscenski, et al for the year 2000 and assess the extent of the changes that took place between 1992 and 2000;
3. Because the original index was shown to be insufficiently discriminating among the States for the year 2000, develop a new professional practice index for the three professions that reflected a larger number of criteria and used more detailed scoring criteria;
4. Compile data on the trends of the numbers of individuals licensed as NPs, PAs, and CNMs in each State over the past decade to provide a statistical perspective on the changing numbers of practitioners in the three professions;
5. Compare the changes in the number of NPs, PAs, and CNMs for States with and without a significant change in professional practice for each of these professions and assess whether there is a relationship between professional practice and the numbers licensed in each State;
6. Conduct field work in seven States to gather qualitative information about the professional practice of the three professions and access to services in underserved areas to supplement the data on the professional practice indices and numbers of practitioners gathered in other components of the study;
7. Prepare report(s) for HRSA and articles for peer-reviewed journals to disseminate the findings and conclusions of the study.

Remainder of the Report

- This report is presented in eight chapters, including this Study Overview. The remaining chapters address the following topics:

Chapter 2: Background and Context

Chapter 3: Professional Practice Indices

Chapter 4: Nurse Practitioners

Chapter 5: Physician Assistants

Chapter 6: Certified Nurse Midwives

Chapter 7: Factors Related to Professional Practice Indices

Chapter 8: Field Work in Seven States

Chapter 9: Access to Care

- Providing additional detail for interested readers are eight appendices, each providing information about some aspect of the study, the index calculations, or the field work.

Appendix A: Project Advisory Committee

Appendix B: Professional Organizations Related to the Three Professions

Appendix C: Details of the Calculations of the Original Practice Environment Indices

Appendix D: Details of the Calculation of the New PA Professional Practice Index

Appendix E: Details of the Calculation of the New NP Professional Practice Index

Appendix F: Details of the Calculation of the New CNM Professional Practice Index

Appendix G: Details About the Field Work in Seven States

Appendix H: References

Chapter 2. Background and Context

This chapter provides a context for the subsequent discussion of professional practice indices for NPs, PAs, and CNMs. It includes the following subsections:

- Historical Context for the Three Professions
- Factors Related to Professional Practice Indices
- Professionalization
- Conclusions

Historical Context for the Three Professions

The concepts of non-physician providers and physician "assistants" are not new, with medical tradition indicating the presence of these providers across cultures for hundreds of years. These practitioners often worked in locations where physicians were unavailable. However, their presence and acceptance in the United States has increased significantly in recent years.

Although the development of the three professions is rooted in the need for access to primary medical care for underserved populations, each of the three professions has an individual history and orientation that colors its present status. And although each has historical roots that reach into the past, in the United States, the professions have experienced their most rapid development in about the last 40 years, with considerable evolution over the last decade. Brief histories for the three professions are provided below.

A Brief History of Nurse Practitioners in the US

In the 1960s, Dr. Henry Silver and Loretta Ford, PhD (a nurse educator) at the University of Colorado, created a program to educate nurses to respond to the need for primary care providers in rural areas. Dr. Silver and Dr. Ford established a pediatric practitioner program based on the

nursing model.[4] This was the first of the nurse practitioner programs that educated nurses to make medical diagnoses while providing care in a nursing model. The idea was revolutionary and initially not well accepted by the academic nursing profession.[5] The first graduates began to practice in the late 1960s.[6] The program was at the master's level requiring a nursing license and experience in patient care for admission. In subsequent years, several programs moved away from the master's degree model to certificate programs but, more recently, the trend has again shifted to master's education.[7]

The nursing profession initially expressed skepticism with the educational process and the new identity of the nurse practitioner. Education that incorporated a medical model to create a physician "extender" was threatening to nursing's roots and to its exclusive orientation to care. It was only as the NP profession evolved and the academic and training programs were clarified that the profession embraced the new roles for nurses.[8]

Nurse practitioners function in a variety of roles in almost every conceivable health care setting. The care they provide is grounded in a nursing model which emphasizes treatment of illness in the context of a patient's total well-being and encourages patient education. Nurse Practitioners provide well care, diagnose and treat acute illness, and monitor chronic conditions. NPs are permitted to order, perform, and interpret certain laboratory tests and to prescribe medications.

In 2000, Nurse Practitioners were legally enabled to practice in every State and the District of Columbia. Practice varied considerably across States with different statutory and regulatory limitations on prescriptive authority, direct reimbursement, and the required legal relationship with physicians. Nurse practitioners were generally regulated by State Boards of Nursing, but in some States, Boards of Medicine were directly involved in regulation of the profession. In some States, agencies other than the Department of Health were involved in professional oversight activities for Nurse Practitioners. In 2000, NPs were not title protected in every State. In 49 States and the District of Columbia, NPs were provided with some form of prescriptive authority which varied from the ability to prescribe only legend drugs to full prescriptive authority including controlled substances. The educational requirements to obtain prescriptive authority varied widely across States.

Many States required a master's degree in order to be licensed in the State. All but five States required national certification from a certifying body in order to qualify for licensure or registration as an NP. Examinations qualifying NPs for national certification were provided by the American Academy of Nurse Practitioners Certification Program (AANPCP), the American Nurse Credentialing Center (ANCC), the American Board for Pediatric Nurse Practitioners (PNCB), and the National Certification Corporation for the Obstetrical, Gynecologic, and Neonatal Nursing Specialties (NCC).

Nurse practitioners seek some professional autonomy in practice with formal collaboration being the general mode of cooperation with physicians. However, in some States supervision by physicians is a common form of practice.

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[4] Hooker et al., p. 2.
[5] Robert Wood Johnson Foundation Anthology, Chapter 11, p.2.
[6] Buppert C, Nurse Practitioner's Business Practice & Legal Guide, Maryland 1999, p. 7.
[7] Third Age, Nurse Practitioner Profession, http://thirdage.adam.com/ency/article/001934.htm, p. 1.
[8] Robert Wood Johnson Foundation Anthology, Chapter 11, p. 2.

In 2000, there were 321 institutions offering either master's level NP and/or post-master's NP programs.[9] NP education programs were accredited by the Commission on Collegiate Nursing Education, the National League for Nursing Accrediting Commission, and the National Association of Nurse Practitioners in Women's Health which accredits NP programs in women's health.[10] Seventy-two percent of the graduates of the master's programs in 2000 were family, adult, or pediatric nurse practitioners[11] suggesting that primary care continues to be the focus of the majority of NPs.

In 2000 there were approximately 95,000 NPs[12] practicing in the U.S., up from about 28,000 in 1992. This represents an increase of more than 240 percent over the 8 year period.

A Brief History of Physician Assistants

The physician assistant profession is generally understood to have its roots in the military medic or corpsman model. Medics provided medical services teamed with physicians and nurses in wartime settings. In many cases these adjunct providers were highly trained members of the medical team who became experienced in providing care in very challenging and demanding circumstances. In the late 1960s during the Vietnam War, this group of trained providers became the focus of attention for some foresighted physicians in the United States.

There was growing concern about a potential shortage of generalist physicians due to the increasing numbers of medical students who were choosing specialty training. This fact, coupled with increased attention to populations that were poor and/or medically underserved in the United States, created concern that the supply of physicians was insufficient to meet the needs of the public.

As early as 1960, Dr. Charles Hudson, President of the National Board of Medical Examiners, spoke to a gathering of the AMA about the possibility of training these medical corpsmen to work with physicians in civilian medical settings.[13] Several physicians, including Dr. Richard Smith, a Federal bureau director, and Dr. Hudson and Dr. Eugene Stead, a faculty member at Duke University, reiterated this suggestion in subsequent years[14]. Dr. Stead, Dr. Harvey Estes, and Dr. D. Robert Howard, all of Duke University in North Carolina, introduced the idea of educating a health professional who would assist physicians in the provision of primary care services with special emphasis on educating new providers to enhance access to care in rural North Carolina. In the mid-1960s, they instituted a program at Duke that provided formal education and training for these professionals.

This extension of the military model into practice environments in the United States was conceived as a way to link underserved populations to the health care system. After the Vietnam

[9] American Association of Colleges of Nursing, 2000-2001 Enrollment and Graduations in Baccalaureate and Graduate Programs in Nursing.
[10] White Paper of the Consortium for Quality Nurse Practitioner Education, http://www.aanp.org/NR/rdonlyres/e5t66jqu7scgkf3pvrlkfgrw5hiv2i7kfmhssyisrvdcetob7sz4xtkay6xrncsqcrwtk2vkznylgn/White%252bPaper.pdf
[11] American Association of Colleges of Nursing. Table 21a.
[12] Data collected from State Boards of Nursing and/or Other Regulatory Agencies by Health Policy Institute of the Medical College of Wisconsin , 2000.
[13] Hooker et al., p. 24.
[14] Hooker et al., p. 2 and p. 17.

War, the recognition of the potential to use highly trained and competent medics to meet the needs in rural areas gained popularity. Thus the physician assistant profession was born.

PAs traditionally practice under the supervision of physicians and this strong relationship with physicians has remained relatively unchanged as the profession has evolved. As the name suggests, Physician Assistants are closely associated with a medical model of care, one grounded in the diagnosis and treatment of illness. There were only 237 PAs practicing in the U.S. in 1970. By 2000 that number had increased to about 40,000,[15] a 90 percent increase since 1992.

As of 2000, all States and the District of Columbia had statutes or regulations governing the qualification of practice for PAs. All jurisdictions required PAs to pass the Physician Assistants National Certifying Examination, administered by the National Commission on Certification of Physician Assistants (NCCPA) and open only to graduates of PA educational programs accredited by the Accreditation Review Commission on Education for the Physician Assistant (ARC-PA), which is sponsored by the AMA, the American Academy of Family Physicians, the American College of Surgeons, the American Academy of Pediatrics, the American College of Physicians, the Association of Physician Assistant Programs, and the American Academy of Physician Assistants. Only those successfully completing the examination may use the credential "Physician Assistant-Certified (PA-C)."

PAs are educated in accredited programs located in academic medical centers, teaching hospitals, universities, and colleges. The PA curriculum, like medical school, provides a generalist education that promotes the development of skills in clinical problem solving and medical decision-making. Their medical education makes it possible for PAs to choose any medical or surgical specialty after graduation, something that is facilitated by the scope of their licenses.

In order to remain certified, PAs must complete 100 hours of continuing education every 2 years. Every 6 years they must pass a recertifying exam or complete an alternate program combining learning experiences and a take-home exam. [AAPA, 2001]

A Brief History of Certified Nurse Midwives

Nurse Midwives have a lengthy history when considered in an international context. The presence of the profession in the United States, particularly among immigrant populations, spans many generations. In fact, there is documentation suggesting that a nurse midwife delivered three babies on the voyage of the Mayflower.[16] However, the formal education of nurse midwives in the United States began when Mary Breckenridge founded the Frontier Nursing Service in East Kentucky in 1925.[17] This highly regarded program educates midwives to provide nursing services in remote areas with a focus on women and families. Nurse midwives who continue to be trained in this program are credited with significantly reducing infant mortality rates in the areas that they serve.[18] This program eventually began to educate nurse practitioners as well and continues today to serve its mission of educating providers to work with underserved populations. The Frontier School of Midwifery and Family Nursing offers a distance-learning

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[15] Robert Wood Johnson Foundation, Institute for the Future, Health and Health Care 2010, Chapter 6, http://www.rwjf.org/app/rw_publications_and_links/publicationsPdfs/iftf/chapter_6/ch6. p. 1.
[16] Parkland School of Nurse Midwifery, p. 1.
[17] Robert Wood Johnson Foundation Anthology, Chapter 11, p. 4.
[18] Robert Wood Johnson Foundation Anthology, Chapter 11, p. 4

program that enables many students to be in their own communities working with local providers while being educated as midwives.[19]

In 1931, a collaboration of the Lobenstine Clinic and the Maternity Center Association began educating nurse midwives in New York City to serve immigrant and indigent populations in the city. That program continues today as the SUNY Downstate Nurse Midwifery Program.[20] By the 1950's there were seven education programs for nurse midwives in the US. In 1955, Hattie Hemschemeyer, a public health nurse educator who had begun the Maternity Center education program in New York City, incorporated the American College of Nurse Midwifery in New Mexico. In 2000 there were over 8,000[21] nurse midwives in the U.S., educated in 40 master's degree programs and 5 post baccalaureate certificate programs.[22] Educational programs for the profession were accredited by the American College of Nurse Midwives Division of Accreditation.

Midwives advocate a more homeopathic, natural approach to childbirth with less emphasis on the use of technological innovation.[23] This approach to obstetrical care has been integrated into extended scopes of practice that enable nurse midwives to provide women's well-care and other gynecological services to non-obstetrical patients in many States.

Nurse midwives in the United States are generally educated in a nursing model of care. In many States nurse midwives are regulated in legislation as advanced practice nurses. Several States permit practice by non-nurse midwives who are separately licensed and regulated by the individual States. Many States require that non-nurse midwives pass a competency examination. The American College of Nurse Midwives presently offers this exam to these "direct-entry" or "lay" midwives.

Nurse Midwives are governed variously in the 50 States and the District of Columbia. Statutes and regulations addressing practice by nurse midwives is not uniform. Nurse midwives are mainly governed by State Boards of Nursing. In Utah, the profession is governed by a Certified Nurse Midwifery Board and in New York by a Board of Midwifery that regulates both nurse midwives and direct entry midwives. The profession is jointly regulated by the Board of Nursing and the Board of Medicine in 5 States and solely by the Board of Medicine in 2 States. Illinois has established an Advanced Practice Nursing Board that regulates advanced practice nurses (APNs) including nurse midwives. The Board of Health oversees practice of nurse midwives in 3 States.

In 2000, certified nurse midwives had some form of prescriptive authority in 49 States and the District of Columbia. National certification through examination is required in 44 States and the District of Columbia. Since 1971, the American College of Nurse Midwives (ACNM) and subsequently, since 1991, the ACNM Certifcation Council (ACC) have provided competency

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[19] History of Midwifery in the United States, Parkland School of Nurse Midwifery,
[20] History of Midwifery in the United States, Parkland School of Nurse Midwifery,
[21] Health Policy Institute, 2000.
[22] American College of Nurse Midwives, Education Programs, http://www.midwife.org/edu/postbacc.cfm.
[23] Vann MK, CNM, MSN, Professional Autonomy for Midwives, An Essential Component of Collaborative Practice, Journal of Nurse-Midwifery, Vol. 43, No. 1, January/February 1998, p. 41.

testing for nurse midwives. In 1998, the ACC began providing certification for non-nurse midwives trained in accredited education programs.[24]

Nurse midwives operate under various practice relationships with physicians. State regulation requires a range of supervisory, consultative, or collaborative arrangements with physicians. In 11 States in 2000, there was no specific language addressing a required relationship between nurse midwives and physicians in statute or regulation.[25]

There are over 8,000 nurse midwives in the United States providing care in many settings to a wide variety of women. Midwives provide a significant amount of care to women whose access is marginal. As many as 70 percent of the women receiving care from midwives are considered "vulnerable" in some aspect either by their demographic characteristics, their geographic location, or their socioeconomic status.[26]

Factors Related to Professional Practice Indices

A great many factors have influenced the evolution and acceptance of the three professions in the U.S. Figure 2-1 presents a highly simplified schematic that suggests some of the relationships that have contributed to the increased status and professional practice for the three professions over the past several decades. The figure emphasizes factors related to the contributions to patient care and outcomes that can be traced back to the three professions and to their collaborating physicians. The discussion that follows identifies several key factors related to the professional practice of the three professions to suggest the richness that exists in the framework that defines professional practice options.

Barbara Safriet [2002] presents a much different perspective on professional practice of professionals like NPs, PAs, and CNMs. She argues that current professional practice statutes and regulations have generally resulted in significant gaps between "the abilities of non-physician providers and the activities government regulation allows them to perform. Dominant provider groups extensively lobby State legislators in order to obtain scope-of practice monopolies, which confer exclusive control over their areas of interest and exclude other equally-capable groups from performing such services. As a result, the excluded providers' skills are under-used, creating a systemic inefficiency"[p. 301].

NPs, PAs, and CNMs have fared reasonably well in this sometimes hostile political environment. The net result of these and other factors has been increased acceptance of the three professions across the U.S. The response of the system has been dramatic with numbers of practitioners increasing, and the roles, responsibilities, and scopes of practice expanding.

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[24] About ACC, American College of Nurse Midwifery Certification Council, http://www.accmidwife.org/misc_aboutacc.php.
[25] American College of Nurse Midwives, Nurse Midwifery Today, A Handbook of State Laws and Regulations 2000, Washington, DC, 2000, p. xv.
[26] ACNM, Basic Facts

Professionalization

NPs, PAs, and CNMs have undergone a process of "professionalization" over the past 30 years, and especially in the 1990s. Professionalization has been described by Hodson and Sullivan as the "effort by an occupational group to raise its collective standing by taking on the characteristics of a profession."[27] The professionalism process is characterized by several steps including:

- Formation of a professional organization and lobbying the government and the public for increased professional standing,
- Standardization of the body of knowledge through more uniform curriculum requirements and training, publication of journals, engagement in research, and creation of examination requirements for the profession, and
- convincing the public by creating certification requirements that the occupation possesses appropriate professional knowledge and by licensure through public agencies.[28]

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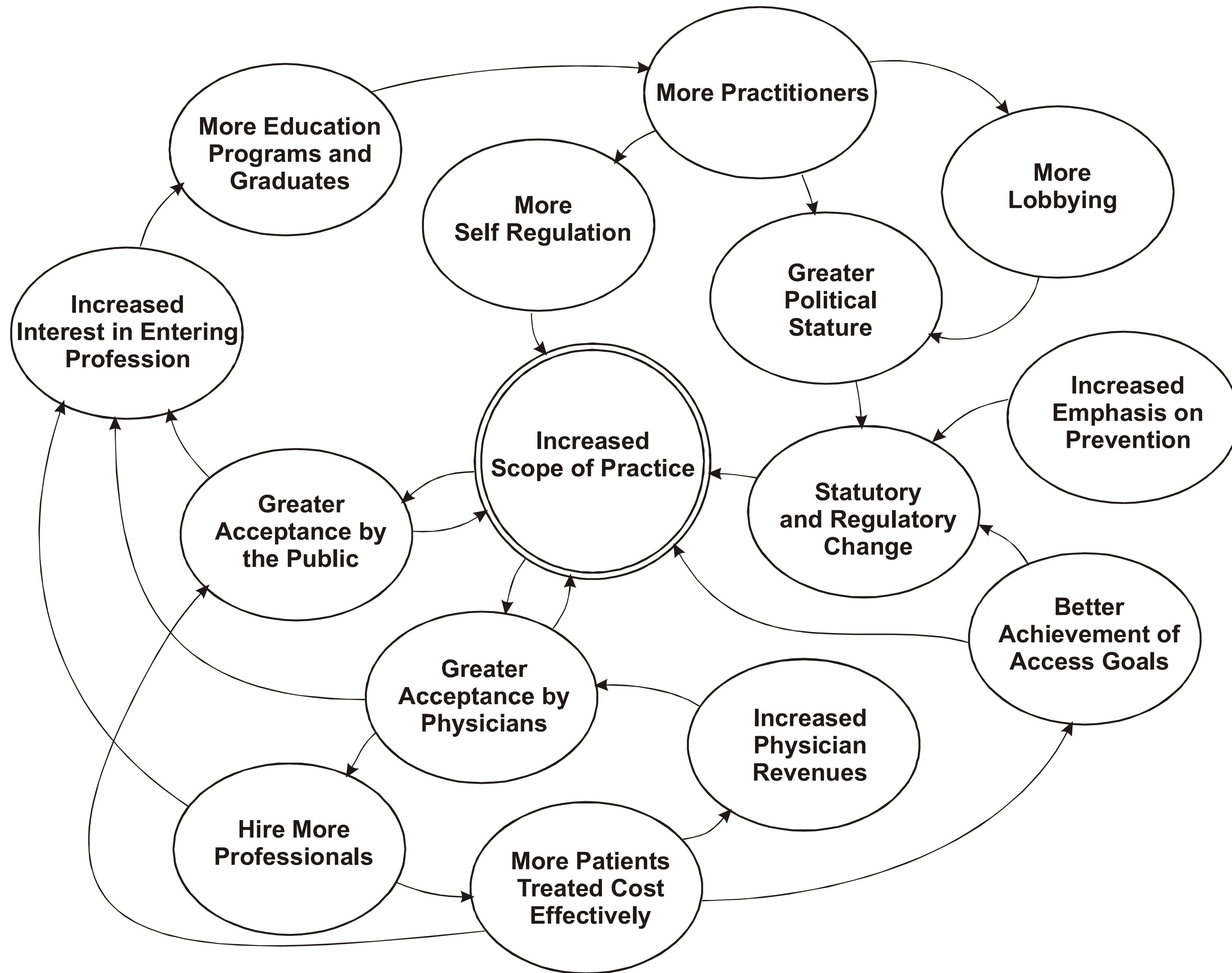
[27] Hodson R and Sullivan TA, The Social Organization of Work, Belmont, California, 2002, p. 295.
[28] Hodson, p. 295

Figure 2-1. Factors Related to Scope of Practice of PAs, NPs, and CNMs



Several activities occur within a profession during this process such as creation of a code of ethics and encouragement of volunteer activities which expose the profession to the public, but also reinforce an altruistic perception of the occupation which further bolsters professional recognition.[29] The NP, PA, and CNM professions actively engaged in these processes in the 1990s. An interesting concomitant process that has occurred over this last decade is a general deprofessionalization of all medical professionals, including physicians. Hodson and Sullivan indicate that this process is characterized by several different processes including: the "demystification" of the professional body of knowledge, increased regulation of the profession, and increased managerial control over the professionals.[30]

Several influences have contributed to this process including a public that has had increased access to medical information on the internet, through television and news reports, through advertisements, and a host of readily available resources to inform them about personal health, healthcare delivery and innovation, and health research. This "consumer empowerment"[31] has increased the scrutiny of the health professions by the public, created a sharing of the body of knowledge that was once mainly the purview of the physician, and has subtly created a situation in which physicians are now being somewhat deprofessionalized.

Regulation in healthcare has increased significantly with Federal and State governments increasingly establishing rules, creating oversight and audit functions, mandating reporting requirements, and creating payment rates and methodologies. Managerial control of the physician profession has also increased with managed care organizations and professional managers and accountants introducing their rules and restrictions on the medical profession thus reducing the autonomy of physicians.

At the same time, the 1990s may rightly be called a decade of professionalization for NPs, PAs, and CNMs. These groups began the decade as acknowledged but loosely regulated professions. The growing demand for primary care providers created a climate conducive to their growth. Competition with physicians was not an issue in an environment with many patients unable to access physicians. The medical profession and professional health care managers were forced to employ alternate strategies in order to meet the demands on their practices. Once again, economics served the non-physician providers. They were less expensive than new physicians, and in the climate of cost containment, they were ideal alternatives. They could provide basic care, leaving the more difficult patients and problems to the physicians.

Conclusions

Many factors help to determine the acceptance of NPs, PAs, and CNMs and ultimately their professional practice options. Perhaps the primary determinants are the positive experiences of physicians working with three professions as reflected in relationships like those shown in Figure 2-1. There are a host of other important factors that determine the professional practice of the three professions, several of which have been discussed in this chapter. The primary conclusion is that NPs, PAs, and CNMs were extraordinarily successful in finding, creating, and filling their respective positions in the healthcare system in the last decade.

[29] Hodson, p. 296
[30] Hodson, p. 298
[31] Hodson, p. 297

Chapter 3. Professional Practice Indices

This chapter summarizes the key concepts and scoring criteria used in the creation the professional practice indices for the three professions. It includes the following sections:

- Introduction
- The Original Practice Environment Indices
- The New Professional Practice Indices

The numerical index scores for NPs, PAs, and CNMs are summarized in State-by-State listings in Chapters 4, 5, and 6, respectively. The detailed professional practice criteria and scores for the original indices for each of the 50 States are provided in Appendix C. The criteria and scores for the new professional practice indices for NPs, PAs, and CNMs are detailed in Appendices D, E, and F, respectively.

Introduction

This chapter describes the effort in this study to replicate these three indices for the year 2000 as part of a larger study of the professional practice of the three professions. Comparisons of the indices for 1992 and 2000 reveal the extent to which the practice environment has changed for the three professions in each of the 50 States over the 8 year period.

In addition to replicating the 1992 index, the current project has also developed a new index with different criteria and weighting schemes that better reflect the current status and roles of the three professions in the health workforce. The overall purpose of the new indices remains the same as that of the original indices, i.e., to define the professional practice options, structural identity, and market recognition of the three professions in each of the 50 States.

The detailed calculations for all the indices presented in Appendices C, D, E, and F include an "optimal score" for each criterion. This optimal score represents the highest score that can be awarded to a State for that criterion, which occurred only when the legal environment for the profession is "optimal" for that criterion. Decisions about what is optimal for each profession are based primarily on statements, observations, and recommendations by the respective professions through their professional associations, and by other interested stakeholders. Input has been received from hundreds of stakeholders as part of this definition process.

The three original indices assigned scores for each State ranging from 0 for "no practice environment" to 100 for "optimal practice environment". The new index also uses a 0 to 100 scoring system. The summary tables for the three professions presented in Chapters 4, 5, and 6 also present a five-category "grading system", which may be easier for policy makers to understand as they consider the possible need for changes in professional practice statutes or regulations in the future.

The Original Practice Environment Indices

In their 1994 article, Edward Sekscenski and colleagues presented three statistical indices representing the practice environments for NPs, PAs, and CNMs in the 50 States and the District of Columbia. They also examined the relationships between and among their indices for the three professions (NPs, PAs, and CNMs) and numbers of practitioners per capita and access to care for underserved populations for the 50 States. They theorized that increases in numbers of providers would enhance accessibility. They hypothesized that the number of practicing professionals in a location would be positively correlated with the legal climate within the State in which practice occurred. One of the hypotheses of this study is that States with more hospitable environments (as measured by the professional practice indices) would exhibit greater growth in the numbers of NPs, PAs, and CNMs.

The statistical indices, based on the specific legal status, reimbursement, and prescriptive authority for the three professions in the fifty States, resulted in the assignment of values from 0 to 100 for each State, based on practice environments in 1992. Although there was commonality among the three professions in their basic focus on primary care, the professions were distinct in professional practice, health orientation, and skills required in the different States. It was determined that accurate evaluation required examination of each profession on the basis of specific criteria relevant to that profession.

The current study includes a replication of the scoring criteria used by Sekscenski et al to assess the legal practice environments in individual States in the year 2000 using the same criteria and weights as in the original study. This replication suffers from several limitations:

- The original documentation was unavailable as a resource for the replication.
- The absence of fundamental documentation from the primary study made it very difficult to score the more discrete criteria accurately for the year 2000.
- Practice environments have evolved rapidly and significantly in the intervening 8 years. The elements of the scale which were relevant to practice in the early 1990s have shifted in value and importance as the legal and health care environments have advanced. In addition, several influential factors affect practice differently in 2000 than in 1992.

- The categories are broad and do not capture important differences and nuances of current professional practice legislation.

In order to complete the scoring, a number of assumptions were made about the allocation of the scores in 1992 in order to score for the year 2000. The final index scores for NPs, PAs, and CNMs are summarized in Chapters 4, 5, and 6, respectively, and the details of the scoring are presented in Appendix C.

The New Professional Practice Indices

After replication and review of the original indices, it was decided that more detailed indices of current practice regulations were needed to better reflect the healthcare environments of the three professions in the year 2000. The purpose of these new indices was to more accurately represent the variations across the States based on more comprehensive and detailed sets of criteria than were used in the original indices. In creating the new indices, some of the basic assumptions of the original scales were retained in order to allow some comparison between the two scales. The new scale incorporates the following features:

- Since the broad categories of legal authority, reimbursement, and prescriptive authority remained valid, they were retained from the original indices.
- The weights for each category were shifted to a more equitable division on the 100 point scale from the original scoring distribution used by Sekscenski et al (i.e., legal status = 20 points; reimbursement = 40 points; and prescriptive authority = 40 points).
- The weighting of each category in the new indices depended on the profession being scored. NPs and CNMs (legal status = 35 points, reimbursement = 35 points, and prescriptive authority = 30 points) were scored differently than PAs (legal status = 35 points, reimbursement = 25 points, and prescriptive authority = 40 points). This was done because reimbursement impacts practice differently for CNMs or NPs practicing in a more independent model of practice. Since PAs are educated to practice under the supervision of physicians, direct reimbursement is not as important for them. Prescriptive authority, which is presently almost universally available to CNMs and NPs, is a major focus of the PAs who are more restricted in prescriptive privileges than the other two professions.
- Legal status is assumed to be a driver of the other categories, although it is not considered a more important category. If the legal description of professional practice was permissive in language or privilege, it was expected that reimbursement rules and prescriptive privileges would be commensurately liberal. Conversely, if the language was restrictive, it was suspected that reimbursement and prescriptive authority would be limited. A total of 35 points is possible for this category for all three professions.
- Reimbursement for services is a complex issue affected by State and Federal regulations, by State and Federal reimbursement and insurance law, by individual insurance company practice, and by employer choices. Fieldwork discussions in several States indicated that reimbursement was an important issue in many States for the three professions. It is the "new frontier" for professional practice changes for the professions in a number of States. Reimbursement is often predicated on limitations that dictate how, where, by whom, and

under what conditions health services are provided. The scoring of this category was extremely challenging.

- As presented, the reimbursement score is intended to capture the broader legislative and regulatory environment. The authors recognize that legislation merely enables the process, and may not fully reflect actual reimbursement practices. Implementation of statutes and regulations is interpretative and individual payers are guided by business principles and practices, legal exemptions, and employer prerogatives in their reimbursement policy. A detailed account of actual reimbursement practices in each State would require an exhaustive study of third party payers, which was not possible within the scope of this study. This category was allocated 35 points in the indices for NPs and CNMs, and 25 points for PAs.
- Prescriptive Authority has changed in most States since the original index was scored, and many State practice environments have evolved considerably with respect to prescriptive privileges. A total of 30 points were allotted to this category for NPs and CNMs, while 40 points were allotted in the PA index. As previously indicated, prescriptive authority is a particularly important issue for the PAs since they have limited or no authority in several States.

The Autonomy of the Three Professions

The criteria chosen for the new scoring system were synthesized from several sources. Ideal legislation composed and proposed by various professional organizations which represent NPs, PAs, and CNMs were major resources when determining items to be scored.

The new indices attempt to identify receptive practice environments that are conducive to professional autonomy. Language that adequately expresses the benchmarks for practice was difficult to identify. Capturing factors that contribute to an ideal practice environment within the confines of a scoring instrument was problematic since what is considered ideal varies by profession. The use of the words 'independent' and 'autonomous' generated considerable discussion among researchers, advisors, experts, and informants consulted by project staff. Autonomy is perhaps best described as "the extent to which a..[professional]…can determine independently the range of tasks… (s/he)… will perform." [Chumbler, et. al. p. 2]

Autonomy should not be confused with practice that is independent of other health care providers. NPs, PAs, and CNMs provide care in an interdependent healthcare delivery system that demands the varying expertise and competencies of a wide range of providers. The use of the words 'independent' or 'autonomous' in this report is not intended to suggest that these providers need not communicate with and seek advice or approval from other professionals when making clinical decisions. Rather this terminology is intended to convey the ability of the professional to make decisions *within the limits of the particular education, skill, and professional competency of the provider* which results in efficient use of resources unimpeded by restrictive regulations, rules, and oversight.

Health care delivery requires an interconnected network of professionals that supply care within a spectrum of services. Effective practice and rational use of health resources is most encouraged by and best achieved in a system that recognizes the complementarity of various medical professions and encourages efficient use of providers.

The three professions practice in complex environments in a medically sophisticated society in which there are both competing and complementary interests. There are both similarities and differences among and between the three professions whose roles are highly technical, very specialized, and narrowly focused. The proliferation of new technologies and changing organizational and operational structures has effected each of these professions. While there is sometimes overlap in functions, each possesses a discrete identity and a distinct place in the system. To acknowledge this diversity and to recognize their individual professional natures, a unique scale was developed for each profession. The characteristics of a receptive environment do vary depending on the profession.

The Scoring Methodology

Structuring and scoring the new professional practice indices required the establishment of certain rules:

- Only legislative changes passed by December 31, 2000 were to be scored. This meant that legislation enacted in early 2001 was not considered. The need to establish a deadline dictated this decision.
- Scores were determined by rules found in legislation and regulation only. Variations in actual practice environments were not considered. If the category was not addressed in statute or regulation, no score was awarded.
- NPs were scored as a single profession. Although there are many specialties within the NP profession, legislation is generally focused on the broad category of NP rather than on the sub-specialties.
- Scoring was generally explicit, with scores based on specific provisions found in a statute, regulation, or rule that were relevant to the category. There were a few cases where the score was implicit. If the professional practice was sufficiently broad (such as in Oregon where no direct physician involvement is written into the statute enabling NP practice), certain assumptions were made. Practice as a self-employed nurse practitioner implied the ability to refer or to order diagnostic tests, even if those functions were not explicitly enumerated in statute or regulation. These functions were implicit to providing a continuum of care for the patient.
- NPs and CNMs vary greatly from PAs in their basic orientation to physicians. PAs "practice medicine with supervision by licensed physicians" [PAs, 8th edition p iii], and are inextricably linked to physician direction in a medical model of care. NPs and CNMs are educated in a nursing model which emphasizes patient education and management. These professionals tend to view their expanded roles "as nurses with a broadened professional practice and do not define themselves as physician-supervised professionals." [Buppert, p. 11]. These orientations create differences in the desired mode of practice of the three professions.

The new scoring system was designed to reveal smaller, more subtle differences and distinctions in professional practice across the States than was possible with the original indices developed by Sekscenski et al. The broad criteria used for each profession are presented in chapters 4, 5, or 6. The detailed point allocations for each of the criteria can be found in Appendices D, E, and F.

Chapter 4. Nurse Practitioners

This chapter summarizes the original practice environment index for NPs developed by Sekscenski et al, the 2000 update of this index, and the new professional practice index developed in this study for NPs for the fifty States plus the District of Columbia. It includes the following subsections:

- Introduction
- The Original Practice Environment Index for NPs
- The New Professional Practice Index for NPs
- Discussion

Detailed criteria and scoring sheets for the three professional practice indices for NPs for the 50 States and the District of Columbia can be found in Appendices C and E.

Introduction

Nurse practitioners (NPs) are registered nurses (RNs) with advanced academic and clinical experience which enables them to diagnose and manage acute, episodic and chronic illness, either independently or as part of a health care team. NPs provide some care once offered only by physicians, and in most States they have the ability independently to prescribe medications.

As of 2000, all States and the District of Columbia had statutes or regulations governing the qualification and professional practice for NPs. Most jurisdictions required NPs to pass one of a number different general or specialty-specific certifying exams. [NCSBN, 1998] Laws in most States allow NPs to provide patient services independently in collaboration with a physician.

Their clinical knowledge and experience as RNs, coupled with their advanced clinical training, enables NPs to work with patients on a wide range of clinical tasks. NP practice blurs the

discipline boundaries between nursing and medicine so their services can both substitute for and complement the care of physicians. This ability to work across the spectrum of care delivery sites and manage patients in both hospital and ambulatory care settings has found acceptance in a growing number of settings and specialties. On the other hand, because the number of NPs is much smaller than the number of physicians, they are currently used in only a fraction of the sites where physicians work.

An important long-term question is whether NPs will continue their penetration of the health care system. If they do, they could play a dramatically larger role in the health care system of the future. The roles of NPs are continuing to evolve in the health care system, however, and the future is not entirely clear. Recommendations by the recent AHA-sponsored Commission on Workforce for Hospitals and Health Systems [2002] suggests that NPs could play greater roles in the staffing of hospital care teams. If penetration of NPs continues in different medical and surgical specialties, there will clearly be a significant growth of the NP profession. The current attention to patient safety and health care quality suggests that NPs will be integral to future health care delivery across the U.S.

The Original Practice Environment Index for NPs

The original NP practice environment index developed by Sekscenski et al for 1992 was based on three broad criteria and point allocations reflecting the then present practice environment for the profession. The broad criteria and point allocations used in creating the index were **Legal Status** (Maximum Score = 20); **Reimbursement** (Maximum Score = 40); and **Prescriptive Authority** (Maximum Score = 40). The detailed point allocations for the original index for NPs in 2000 are presented in Table C-1 in Appendix C.

The original professional practice index scores for NPs for the 50 States based on the criteria in Appendix C are summarized in Table 4-1. The scores show a definite trend toward broader professional practice across the fifty States and the District of Columbia between 1992 and 2000. The increases in the index scores indicate greater professionalization, socialization, and standardization of professional practice for NPs over the last decade.

The New Professional Practice Index for NPs

To better reflect the subtle differences that often exist in professional practice across the 50 States, a new index was developed as part of this study that incorporates more criteria and more variability in the scores assigned. The new professional practice index more accurately reflects the practice environments of NPs across the U.S. Most States scored lower on the new index than on the original index for 2000, indicating that the expectations/possibilities about professional practice for NPs had increased since 1992.

The broad scoring criteria for the new NP Professional Practice Index are the same as for the original index, but the point allocations are different. The three criteria are: **Legal Status** (Maximum Score = 35); **Reimbursement** (Maximum Score = 35); and **Prescriptive Authority** (Maximum Score = 30). The detailed point allocations for the new index for NPs for each of the 50 States are presented in Appendix E.

The new professional practice index scores for NPs for the fifty States and the District of Columbia resulting from the application of these criteria are presented in Table 4-1. A qualitative overlay to the new professional practice index scores has been provided to identify States that provide Excellent, Favorable, Acceptable, Limiting, or Restrictive practice environments for NPs. These terms and categories are not hard-and-fast. They are provided only to help readers to characterize the general practice environments in different States. The terms and ratings generally conform to characterizations of the practice environments in States by knowledgeable NPs.

Discussion

The scores on the original NP practice environment index reveal a trend toward greater practice opportunities for NPs across the fifty States and the District of Columbia between 1992 and 2000. The scores indicate the trend towards greater professionalization, socialization, and standardization of the NP profession over the last decade. Additional analyses of the index scores are described and summarized in Chapter 7.

Table 4-1 shows that most States scored lower on the new index than on the original 2000 index. This is an indication of the impact of the changing health care delivery system which places greater demands and requirements on health professionals in both clinical practice and practice management. The lower scores also reflect the greater efficiency of the new index in capturing nuances in practice options. For example, the prescriptive authority component of the original index had only a three-point scale for prescriptive authority, with 40 points for "full authority", 0 points for no authority, and an incompletely defined 1 to 39 points for "partial authority". The prescriptive authority component of the new index on the other hand has seven parts, the largest of which is a graduated scale for type of authority that assigns 1 point for legend drugs only, 3 points for Schedule V drugs, 6 points for Schedule IV and V drugs, 9 points for Schedule III to V drugs, and 12 points for Schedule II to V drugs. Thus, the new index provides a better basis for identifying differences in professional practice options for NPs in different States in 2000 than does the original index.

As is true with many such indices, the true differences that underlie small differences in the scores are generally very small. Thus, states that are close on any of the indices are not significantly different in their professional practice.

Comparisons of individual NP professional practice scores on a State-by-State basis should be made with caution. The scores reflect general, not particular, conditions in the State regulatory environments. Comparing one State with another on the original practice environment index may not fully reflect similarities or differences in actual practice patterns. The index is a good basis for assessing trends toward broader practice environments, but it does not capture or reveal detailed variations in State environments.

Table 4.1
Professional Practice Indices for NPs in the Fifty States and District of Columbia

State	Sekscenski Index			New Index	Rating
	1992	2000	Change		
New Mexico	62	99	37	94	*Excellent Environment*
Arizona	86	96	10	92	
Iowa	73	98	25	92	
Oregon	100	100	0	92	
Montana	98	98.5	0.5	91.5	
Maine	42	90	48	91	
Washington	90	100	10	91	
Idaho	46	98.5	52.5	89.5	*Favorable Environment*
Alaska	93	93	0	88	
Colorado	59	100	41	86	
Connecticut	58	100	42	86	
Delaware	60	100	40	86	
Minnesota	68	99	31	86	
New Hampshire	95	95	0	86	
New York	93	93	0	86	
North Carolina	53	88	25	86	
Kansas	52	90	38	84	
California	30	70	40	84	
Utah	91	100	9	84	
Rhode Island	50	98	48	83	
New Jersey	65	79.5	14.5	82.5	
Wyoming	94	90	-4	82	
Maryland	93	93	0	78	*Acceptable Environment*
South Dakota	65	92	27	78	
Massachusetts	68	86	18	77	
Kentucky	78	67.5	-10.5	76.5	
District of Columbia	53	73	20	75	
North Dakota	98	98	0	74.5	
Ohio	14	90	76	73	
Pennsylvania	66	86	20	73	
Michigan	45	63	18	72	
Nebraska	46	78	32	72	
Indiana	34	98.5	58.5	71.5	
Wisconsin	67	80	13	69	*Limiting Environment*
Arkansas	48	78	30	67	
Oklahoma	40	62	22	67	
West Virginia	89	89	0	66	
Texas	42	67	15	65.5	
Tennessee	27	87	60	64	
Florida	68	68	0	62	
Louisiana	20	62	42	62	
Hawaii	27	60.5	33.5	61.5	
Vermont	68	80	12	61	
Illinois	14	87	73	60	
Missouri	63	70	7	60	
Mississippi	72	69	-3	59	
Nevada	73	68	-5	58.5	
Alabama	33	43	20	48	*Restrictive Environment*
Virginia	38	38	0	47	
Georgia	32	52	20	45	
South Carolina	41	51	10	43	

Chapter 5. Physician Assistants

This chapter summarizes the original practice environment index developed by Sekscenski et al, the 2000 update of this index and the new professional practice index developed in this study for Physician Assistants for the fifty States plus the District of Columbia. It includes the following subsections:

- Introduction
- The Original Practice Environment Index for PAs
- The New Professional Practice Index for PAs
- Discussion

Detailed criteria and scoring sheets for the three professional practice indices for PAs for the 50 States and the District of Columbia can be found in Appendices C and D.

Introduction

From the beginning, PAs have provided primary care services to patients in a wide range of settings including physician offices, hospitals, health clinics, correctional facilities, emergency centers, outpatient clinics, and a variety of military settings. PAs are recognized as providers of quality health services who are closely tied to physicians in medical practice. PAs work under varying degrees of supervision ranging from direct or personal supervision to indirect or remote supervision depending on the State in which practice occurs, on the setting in which care is offered and on the particular services which are being provided.

In 2000 there were about 40,000 PAs in active practice[32] working in both primary and specialty care. PAs are increasingly finding work in specialty practices including emergency medicine,

[32] AAPA, Facts At A Glance.

allergy, orthopedics, cardiology, and neurosurgery. In recent years, the supply of PAs has expanded considerably with a variety of opportunities emerging for the profession. The practice environments of PAs vary significantly across States.

The Original Practice Environment Index for PAs

The original PA practice environment index developed by Sekscenski et al for 1992 was based on three broad criteria and point allocations reflecting the then present practice environment for the profession. The specific criteria and point allocations used in creating the index were **Legal Status** (Maximum Score = 20); **Reimbursement** (Maximum Score = 40); and **Prescriptive Authority** (Maximum Score = 40). The detailed point allocations for the original index for PAs in 2000 are presented in Table C-2 in Appendix C.

The original practice environment index scores for PAs for the 50 States resulting from the criteria in Appendix C are summarized in Table 5-1. The scores show a definite trend toward greater professional practice opportunities across the fifty States and the District of Columbia between 1992 and 2000. The increases in the index scores indicate greater professionalization, socialization, and standardization of professional practice for PAs over the last decade.

The New Professional Practice Index for PAs

To better reflect the subtle differences that often exist in professional practice across the 50 States, a new index was developed as part of this study that incorporates more criteria and more variability in the scores assigned. The new professional practice index more accurately reflects the practice environments of PAs across the U.S. Most States scored lower on the new index than on the original index for 2000, which reflects the greater ability of the new index to distinguish subtle differences in professional practice that the original index.

The broad scoring criteria for the new PA Professional Practice Index are the same as for the original index, but the point allocations are different. The new PA index incorporates more detailed criteria than those used in the original index to more accurately reflect the practice environments of PAs across the U.S. The three criteria are: **Legal Status** (Maximum Score = 35); **Reimbursement** (Maximum Score = 25); and **Prescriptive Authority** (Maximum Score = 40). The detailed point allocations for each of the criteria in the new index for PAs for each of the 50 States are presented in Appendix D.

The resulting professional practice index scores for PAs are presented for the 50 States in Table 5-1. A qualitative overlay has been applied to the new index scores to identify States that provide Excellent, Favorable, Acceptable, Limiting, and Restrictive practice environments for PAs. These are not hard-and-fast terms or categories, and they are provided only to help readers to characterize the practice environments in the different States. The ratings do generally conform to characterizations of the practice environments in States by knowledgeable PAs.

Discussion

The scores on the original PA practice environment index reveal a trend toward greater professional practice options for PAs across the fifty States and the District of Columbia between

1992 and 2000. The scores indicate the trend towards greater professionalization, socialization, and standardization of the PA profession over the last decade. Additional analyses of the index scores are described and summarized in Chapter 7.

As is true with many such indices, the true differences that underlie small differences in the scores are generally very small. Thus, States that are close on any of the indices are not significantly different in their professional practice. The authors have applied a qualitative overlay to the new index scores to identify States they believe provide Excellent, Favorable, Acceptable, Limiting, and Restrictive environments for PAs. These are not hard-and-fast terms or categories, and they are provided only to help readers to characterize the practice environments in the different States in a more qualitative way. The terms do generally conform to characterizations of the practice environments in States by knowledgeable PAs.

Comparisons of individual PA professional practice scores on a State-by-State basis should be made with caution. The scores reflect general, not particular, conditions in the State regulatory environments. Comparing one State with another on the original index may not fully indicate the similarities or differences in actual practice patterns. The index is a good indicator of the trend toward broader practice environments, but it does not effectively capture the detailed variations in State requirements.

Table 5-1
Professional Practice Indices for PAs in the Fifty States and District of Columbia

State	Sekscenski Index			New Index	Rating Based on
	1992	2000	Change	for 2000	New Index
North Carolina	92	94	2	94	Excellent Environment
Oregon	99	99	0	92	
Montana	98	99.5	1.5	91	
Michigan	89	97	8	89	Favorable Environment
New Hampshire	95	97	2	89	
Rhode Island	93	97	4	88	
Iowa	99	99	0	87	
Illinois	59	59	0	86	
Tennessee	42	99	57	86	
Utah	93	98	5	85	
New Mexico	94	98	4	84	
New York	98	99	1	84	
West Virginia	96	99	3	84	
California	58	97	39	83	
Connecticut	87	97	10	83	
Maine	94	94	0	83	
Wisconsin	95	95	0	83	
Arizona	99	99	0	82	
Delaware	55	68	13	82	
Massachusetts	83	92	9	82	
Vermont	86	95	9	82	
Washington	100	100	0	82	
Alaska	90	96.5	6.5	81.5	
South Dakota	94	97	3	81.5	
Minnesota	83	88	5	81	
Wyoming	97	97	0	81	
Nebraska	93	94	1	79	Acceptable Environment
Hawaii	38	99	61	78	
Oklahoma	46	96	50	77.5	
Georgia	59	96	37	77	
Maryland	49	90	41	76	
Kansas	87	96.5	9.5	75.5	
Colorado	80	95	15	75	
Pennsylvania	86	86	0	73	
Idaho	89	87.5	-1.5	72.5	
North Dakota	87	88	1	69.5	Limiting Environment
Arkansas	54	98	44	69	
Texas	77	93	16	67	
Nevada	98	95.5	-2.5	64.5	
Alabama	39	89	50	61	
Florida	48	93	45	61	
Missouri	39	97	58	61	
Kentucky	42	75	33	54	
Louisiana	37	60	23	54	
South Carolina	37	80	43	52	
Indiana	37	77	40	50	
Mississippi	0	88	88	49	Restrictive Environment
New Jersey	37	42	5	48	
Virginia	42	67	25	47	
District of Columbia	92	59	-33	45	
Ohio	51	55	4	36.5	

Chapter 6. Certified Nurse Midwives

This chapter summarizes the original and new professional practice indices for CNMs for the fifty States. It includes the following subsections:

- Introduction
- The Original Practice Environment Index for CNMs
- The New Professional Practice Index for CNMs
- Conclusions

Detailed scoring sheets for CNMs for each of the 50 States can be found in Appendices C and F.

Introduction

The profession of midwifery has a history spanning both centuries and geography and is arguably the most publicly known of the professions that are subjects of this research. CNMs are healthcare providers who combine the skills of nursing with the competencies of midwifery. Midwives have a special focus on childbirth guided by an orientation that birth is a normal physiological process not an illness.

Presently, nurse midwives provide birthing services but their practice is also augmented by skills obtained in advanced education to include well women health care and educational services as well as family planning services. Nurse midwives attend just under 10 percent of all vaginal births in the United States.[33] Contrary to public perception, 99 percent of these births occur in a hospital or birthing center with less than 1 percent occurring in homes.[34]

[33] American College of Nurse-Midwives (ACNM), "Basic Facts About Certified Nurse-Midwives", http://www.midwife.org/prof/display.cfm?id=6.

[34] ACNM, Basic Facts.

Nurse Midwives are currently licensed in every State. Some States regulate nurse midwifery as a separate profession while others regulate the profession as a special class of nurse in advance practice nurse legislation. In most States, the Board of Nursing governs the profession. Nurse Midwives are separately regulated by a Board of Midwifery in only two States, Utah and New York. The legal status and scope of practice of midwives varies significantly across the 50 States and the District of Columbia.

The Original Practice Environment Index for CNMs

The original CNM practice environment index developed by Sekscenski et al for 1992 was based on three broad criteria and point allocations reflecting the then present practice environment for the profession. The specific criteria and point allocations used in creating the index were **Legal Status** (Maximum Score = 20); **Reimbursement** (Maximum Score = 40); and **Prescriptive Authority** (Maximum Score = 40). The detailed point allocations for the original index for CNMs are presented in Table C-3 in Appendix C.

The original professional practice index scores for CNMs for the 50 States resulting from the criteria in Table C-3 in Appendix C are summarized in Table 6-1. The scores show a definite trend toward greater professional practice options across the fifty States and the District of Columbia between 1992 and 2000. The increases in the index scores indicate greater professionalization, socialization, and standardization of professional practice for CNMs over the last decade.

The New Professional Practice Index for CNMs

To better reflect the subtle differences that often exist in professional practice across the 50 States, a new index was developed as part of this study that incorporates more criteria and more variability in the scores assigned. The new professional practice index more accurately reflects the practice environments of CNMs across the U.S. in 2000.

Table 6-1 shows that most States scored lower on the new 2000 index than on the original 2000 index. This is an indication of the impact of the changing health care delivery system which places greater demands and requirements on health professionals in both clinical practice and practice management. For example, statutes defining Managed Care Organizations added new reimbursement options for CNMs between 1992 and 2000 in many States.

Discussion

The scores on the original CNM practice environment index reveal a trend toward more practice options for CNMs across the fifty States and the District of Columbia between 1992 and 2000. The scores indicate the trend towards greater professionalization, socialization, and standardization of the CNM profession over the last decade. Additional analyses of the index scores are described and summarized in Chapter 7.

As is true with many such indices, the true differences that underlie small differences in the scores are generally very small. Thus, States that are close on any the indices are not significantly different in their professional practice. The authors have applied a qualitative

overlay to the new index scores to identify States they believe provide Excellent, Favorable, Acceptable, Limiting, and Restrictive environments for CNMs. These are not hard-and-fast terms or categories, and they are provided only to help readers to characterize the practice environments in the different states in a more qualitative way. The terms do generally conform to characterizations of the practice environments in States by knowledgeable CNMs.

Comparisons of individual CNM professional practice scores on a State-by-State basis should be made with caution. The scores reflect general, not particular, conditions in the State regulatory environments. Comparing one State with another on the Sekscenski index may not fully indicate the similarities or differences in actual practice patterns. The index is a good indicator of the trend toward broader practice environments, but it does not effectively capture the detailed variations in State requirements.

Table 6-1
Professional Practice Indices for CNMs in the 50 States and District of Columbia

State	Original Index			New Index	Rating Based on
	1992	2000	Change	for 2000	New Index
Washington	62	100	38	92	
New York	67	90	23	92	*Excellent Environment*
Maine	90	90	0	91	
Utah	73	88	15	89	
Rhode Island	84	90	6	88	
New Mexico	78	90	12	88	
Alaska	84	90	6	88	
Connecticut	93	90	-3	86	
Oregon	80	90	10	85	
Minnesota	100	100	0	84	*Favorable Environment*
Iowa	55	97	42	84	
Delaware	60	100	40	83	
Colorado	50	100	50	82	
New Hampshire	70	95	25	82	
Montana	98	98	0	82	
Idaho	54	100	46	81	
Maryland	69	90	21	80	
Arizona	76	96	20	79	
South Dakota	70	89	19	78	
Wyoming	60	90	30	77	
Kansas	68	83	15	76.5	
Massachusetts	57	90	33	74	
Indiana	25	98	73	73.5	
West Virginia	80	90	10	73	
North Carolina	90	90	0	73	
District of Columbia	60	80	20	72	*Acceptable Environment*
Ohio	60	90	30	71	
North Dakota	55	97	42	70.5	
Michigan	70	70	0	69	
Kentucky	68	68	0	68.5	
Vermont	57	80	23	64	
Arkansas	35	78	43	64	
Texas	54	67	13	62	
California	80	70	-10	60	
Oklahoma	54	60	6	60	
Virginia	47	67	20	59	
Tennessee	56	59	3	59	
Missouri	27	60	33	59	
Florida	98	58	-40	58	
Hawaii	42	67	25	57.5	
Wisconsin	62	78	16	57	*Limiting Environment*
Louisiana	37	70	33	56	
New Jersey	54	47	-7	55	
Mississippi	59	59	0	54	
Nevada	30	58.5	28.5	52.5	
Pennsylvania	34	50	16	52	
Nebraska	50	50	0	44	
Illinois	31	71	40	43	
Georgia	70	59	-11	43	*Restrictive Environment*
South Carolina	59	59	0	39	
Alabama	32	50	18	38	

Chapter 7. Factors Related to Professional Practice Indices

- This chapter summarizes a series of statistical analyses performed to estimate the extent to which different factors and variables are related to the professional practice indices developed in this study. It includes the following subsections:
- Introduction
- Factors Related to Professional Practice Indices
- Other Patterns and Relationships
- Conclusions

Introduction

The professional practice indices presented in the preceding chapters have some limited intrinsic value for policy makers interested in the three professions, but much of the interest by health policy makers in these statistics comes from understanding how the indices are related to the numbers of practitioners in the three professions and, ultimately, to access to patient care, especially for underserved populations.

This chapter examines several hypotheses related to the professional practice indices for NPs, PAs, and CNMs, the numbers of professionals per capita for the three professions in the 50 States, and several measures related to access to and the delivery of care. Given the changes that have taken place in health care and the health workforce in the 1990s, three general patterns were hypothesized with respect to each of the three professions.

- The legal scopes of practice (as measured by the indices described above) increased significantly between 1992 and 2000 across the 50 States, indicating increasing acceptance of the professions by physicians, the public, and government regulators.
- Variations in the professional practice declined between 1992 and 2000, indicating a general convergence or standardization of professional practice environments across the States.
- Positive relationships (i.e., correlations) exist between the professional practice indices and the relative supply of practitioners for the three professions (as measured by practitioner per capita ratios).

In addition to these three key hypotheses, the authors performed supplementary analyses of the relationships between the three professions and physicians (i.e., PAs with all physicians, NPs with all physicians, and CNMs with ob-gyns). Of particular interest is whether or not the three professions and physicians have a complimentary relationship or a substitutive relationship with one another.

Analyses were also performed to assess the extent of relationships between the professional practice indices and other measures of the health care system and the health status of the population. These include HMO penetration in the States and the percentages of States' populations living in Health Professions Shortage Areas (HPSAs).

Data and Methods

The data set compiled for this study includes a number of variables summarized in Table 7-1. The original index for 2000 was developed by identifying specific criteria and weighting schemes that would permit replication of the 1992 indices, and then applying these criteria and weights to conditions in 2000. Because some of the historical files related to the earlier study were not available, it was not possible to identify criteria that permitted replication all of the1992 scores. Several of the criteria used by Sekscenski required application of judgment about points assigned for certain conditions, and the authors were unable to devise a single weighting scheme that would successfully replicate the earlier indices for all the States. Also, the authors did not have complete copies of all statutes and regulations in force in the 50 States in 1992, which complicated the task of assigning scores for specific elements of the indices. Despite these limitations, it was possible to replicate the 1992 scores for 45 of the 50 States.

The data presented in Table 7-2 summarize the original index scores as reported in their NEJM article, along with the results of applying the authors' best choice of criteria uniformly for all 50 States for 2000. Thus, State scores for 1992 are based on internally consistent criteria and definitions, as are the State scores for 2000. While there is some question about the validity of comparisons of 1992 and 2000 indices, the fact that the authors were able to replicate 90 percent of the State scores of 1992—and that in the cases where replication was not possible the differences were negative—provides a basis for confidence in the comparisons.

The practitioner counts for 1992 were estimated from the article by Sekscenski et al. Counts for later years were obtained from other sources that appear to be the most reliable as indicated in Table 7-1. The data for PAs is believed to be generally accurate and comparable over time. The data for NPs and CNMs, while improving in recent years, have gaps in the early 1990s that will require attention before reliable year-to-year comparisons can be made for this time period.

Table 7-1
Variables Used to Test Study Hypotheses

Variable	Definition	Source
PA ’00 and ‘96	Number of PAs for 2000 and 1996	AAPA Census Report
NP ‘00 and ‘96	Number of NPs for 2000 and 1996	National Council of State Boards of Nursing, Inc.
CNM ‘00 and ‘96	Number of CNMs for 2000 and 1996	National Council of State Boards of Nursing, Inc.
Population ‘00	Civilian Pop in U.S., ‘00	US Bureau of the Census
Physicians ‘00	Non-Federal physicians, ‘00	AMA, Physician Characteristics & Distribution
PA / Pop ‘00	# of PAs per 100K Pop, 2000	Computed
NP / Pop ‘00	# of NPs per 100K Pop, 2000	Computed
CNM / Pop ‘00	# of CNMs per 100K Pop, 2000	Computed
PA / Pop ‘92	# of PAs per 100K Pop, 1992	Sekscenski et al [1994]
NP / Pop ‘92	# of NPs per 100K Pop, 1992	Sekscenski et al [1994]
CNM / Pop ‘92	# of CNMs per 100K Pop, 1992	Sekscenski et al [1994]
PA/Phys ratio ‘00	The ratio of physician assistants to physicians in 2000	Computed
NP/Phys ratio ‘00	The ratio of nurse practitioners to physicians in 2000	Computed
CNM/Ob-Gyn ‘00	The ratio of certified nurse midwives to Ob-Gyns in 2000	Computed
‘92 Original Index:	The practice environment index created by Sekscenski et al (1994)	Sekscenski et al [1994]
‘00 Original Index	A practice environment index for 2000 based on Sekscenski scoring system	Developed by this study
‘00 New Index	A new professional practice index for 2000 using more detailed criteria	Developed by this study
% of Pop in HPSAs ‘00	% of State population living in Federally designated HPSAs in 2000	BCHDNET, HRSA, Division of Shortage Designation, 2000
HMO Penetration ‘00	% of State population enrolled in an HMO in 2000	NCHS, Table 146, Health, United States, 2002.

The primary analysis tool used in this study was Spearman's rank order correlation. This permits comparisons with Sekscenski et al [1994] which also used this technique. The paired t-test was used to compare average values of the Sekscenski indices for 1992 and 2000. In addition, the F-test was used to compare the variances of the Sekscenski indices in 1992 and 2000. In all cases, an alpha level of 0.05 was used to test statistical significance. All tests were performed using SPSS for Windows version 11.0.

Results

Trends in Professional Practice Indices from 1992 to 2000

Table 7-2 summarizes the information in Tables 4-1, 5-1, and 6-1. It shows clearly that on average the 50 States experienced statistically significant increases in the original practice environment indices for all three professions. This is a clear indication that the professional practice options for all three professions expanded between 1992 and 2000.

Table 7-2 also shows that the standard deviation of the original scores across the States was smaller in 2000 than in 1992 for all three professions, and that the difference was statistically significant for NPs and PAs. This is an indication that there has been a general convergence of the professional practice across the 50 States between 1992 and 2000, especially for NPs and PAs.

Table 7-2
Original and New Professional Practice Indices for NPs, PAs, and CNMs, 1992 to 2000
Comparisons of Means and Standard Deviations

	Original Index							New Index
	Mean				Standard Deviation			Mean
	1992	2000	Difference	p-value	1992	2000	p-value	2000
NP	60.4	82.6	22.2	<0.0005	24.0	16.5	0.009	74.7
PA	72.8	89.1	16.3	<0.0005	25.5	13.8	<0.0005	74.1
CNM	62.2	79.3	17.1	<0.0005	19.2	16.4	0.734	69.6

Table 7-3 presents the three major components (legal status, reimbursement, and prescriptive authority) of the new professional practice indices for NPs, PAs, and CNMs for all 50 States and the District of Columbia for the year 2000. This reveals insights about why one State may have a larger or smaller index for a profession than another State. The table shows that the average overall new index scores for NPs, PAs, and CNMs for 2000 were 74.7, 74.1, and 69.6, respectively, out of a possible total of 100. These scores are significantly lower than the respective original index scores, reflecting the fact that additional options and criteria have been included in the new indices. Readers interested in more detail about the new scope calculations for NPs, PAs, or CNMs may refer to Appendix E, D, or F, respectively.

Comparisons of scores across the three professions, either on average or for individual States are not appropriate. The three indices are based on different criteria and weighting schemes and are not designed to serve as a standard for comparing the professions.

Table 7-3
Components of the Professional Practice Indices for NPs, PAs, and CNMs, 2000

	NP				PA				CNM			
	Legal	Reimb	Rx	Total	Legal	Reimb	Rx	Total	Legal	Reimb	Rx	Total
2000 Professional Practice Index												
Optimal	35	35	30	**100**	35	25	40	**100**	35	35	30	**100**
Average	25.2	28.1	21.4	**74.7**	25.2	19.8	29.1	**74.1**	22.7	27.4	19.4	**69.6**
Std Dev	5.6	7.1	6.1	**13.6**	4.6	3.7	11.5	**14.3**	4.7	7.2	8.6	**15.0**
Original Index for 2000												
Optimal	20	40	40	**100**	20	40	40	**100**	20	40	40	**100**
Average	16.9	35.4	30.3	**82.6**	19.1	36.7	33.3	**89.1**	14.9	36.0	29.0	**79.9**
Std Dev	4.8	7.0	12.4	**16.5**	1.8	8.9	12.8	**13.9**	5.8	6.7	14.1	**16.4**

The gaps between the "optimal" scores and the average scores reveal that opportunities for States to increase the index scores for the three professions are generally greatest for prescriptive authority and legal status, and least for reimbursement. The lower a component score for a State below the "optimal", the greater the opportunity to increase the index through appropriate adjustment in the corresponding criteria.

The standard deviations of the component scores for the new indices show greater variability in scores across the States for prescriptive authority than for legal status and reimbursement. Comparisons of the standard deviations for the components of the three original indices were not made because of difficulties in replicating the 1992 indices for five States.

Numbers of Practitioners

Table 7-4 shows the increases in the numbers of NPs, PAs, and CNMs per 100,000 population that occurred between 1992 and 2000. Despite some data limitations for the earlier years, the estimates show that the growth has been dramatic, with NPs per capita growing by 190 percent, PAs per capita growing by 70 percent, and CNMs per capita growing by 65 percent over the 8 year period.

Table 7-4
Numbers of NPs, PAs, and CNMs per 100,000 Population in the US, 1992, 1996, and 2000

	Numbers of Practitioners per 100K Pop			'92-'00 % Change
Profession and Year	**Min**	**Max**	**Mean**	**Mean**
NP 1992	2.7	37.2	10.9	
NP 1996	7.7	57.1	21.8	+210%
NP 2000	11.9	137.9	33.8	
PA 1992	0.2	24.6	7.4	
PA 1996	1.2	32.2	9.6	+73%
PA 2000	1.3	40.3	12.8	
CNM 1992	0.1	6.4	1.7	
CNM 1996	0.4	6.1	2.0	+71%
CNM 2000	0.3	20.6	2.9	

Relationships Between the Professional Practice Indices and Numbers of Practitioners

An analysis of the relationship between the three components of each index for the three professions (legal status, prescriptive authority, and reimbursement) across the professions showed positive correlations among the components professional practice indices across States in 2000 (Table 7-5). States with favorable prescriptive authority for PAs also had favorable prescriptive authority for NPs and CNMs. For legal status and reimbursement, NP scores were significantly correlated with CNM scores, while PA scores were not significantly correlated with either NP scores or CNM scores.

Table 7-5
Correlations of Components of the Professional Practice Indices
Across the Three Professions
(Coefficients are Spearman rank-order correlations across the 50 states.)

	PA Legal Status	NP Legal Status	CNM Legal Status
PA Legal	1.00	-	-
NP Legal	+0.10	1.00	-
CNM Legal	+0.08	+0.61**	1.00
	PA Reimburse	**NP Reimburse**	**PA Reimburse**
PA Reimburse	1.00	-	-
NP Reimburse	+0.26	1.00	-
CNM Reimburse	+0.11	+0.73**	1.00
	PA Prescriptive	**NP Prescriptive**	**CNM Prescriptive**
PA Prescriptive	1.00	-	-
NP Prescriptive	+0.57**	1.00	-
CNM Prescriptive	+0.50**	+0.84**	1.00

* = significant at the 0.05 level
** = significant at the 0.01 level

Sekscenski et al found that favorable practice environments, as measured by their practice environment indices, were strongly positively correlated with numbers of the corresponding professionals. This study confirmed this relation for both 1992 and 2000 for all three professions. Table 7-6 shows the Spearman rank order correlations between the 1992 scope indices and 1992 practitioners per 100,000 population, and between the 2000 scope indices and 2000 practitioners per 100,000 population. These correlations confirm that higher professional practice indices are associated with greater numbers of practitioners per capita for all three professions.

Table 7-6 also shows that the professional practice indices are not significantly correlated with the numbers of physicians per 100,000 population for the corresponding years. This is an indication that states with relatively large (or small) numbers of physicians per capita do not have unusually high (or low) professional practice indices.

Table 7-6
Correlations Between Original Professional Practice Indices and Professionals per Capita, 1992 and 2000
(Coefficients are Spearman rank-order correlations across states.)

1992

	NP '92 Index+	PA '92 Index+	CNM '92 Index+
NP '92 / Pop	+0.41**	-	-
PA '92 / Pop	-	+0.63**	-
CNM '92 / Pop	-	-	+0.50**
Phys '92 / Pop	0.00	-0.02	+0.16

2000

	NP '00 Index	PA '00 Index	CNM '00 Index
NP '00 / Pop	+0.38**	-	-
PA '00 / Pop	-	+0.39**	-
CNM '00 / Pop	-	-	+0.50**
Phys '00 / Pop	+0.06	-0.03	-
ObGyn '00 / Pop	-	-	+0.14

+ = Sekscenski index from the original study
* = significant at the .05 level
** = significant at the .01 level

Relationships Between the Three Professions and Physicians

The nature of the relationship between the three professions and their physician counterparts typically involves some level of dependency on the part of the three professions. PAs work under the supervision of physicians, and most NPs and CNMs work under some formal collaborative or supervisory agreement with physicians. These supervisory and collaborative working relationships suggest a positive correlation between the numbers of physicians and the numbers of the three professions.

There are a variety of factors that influence these relationships, including organizational arrangements, reimbursement policies, historical trends, etc. When the changes in the professions are as dramatic as they have been for NPs, PAs, and CNMs, some of the usual patterns and relationships may be altered. Nevertheless, this preliminary analysis appears to support the presence of a supportive relationship between the three profession and physicians.

If a substitutive relationship existed, one would expect a negative correlation between the physicians per capita and practitioners per capita for that profession, i.e., that States with relatively fewer physicians per capita had relatively more NPs, PAs, or CNMs per capita. Table 7-7 shows no evidence of such a substitution effect. In fact, the data show a statistically significant positive correlation between NPs per capita and physicians per capita, and between CNMs per capita and Ob-Gyns per capita in 2000.

Table 7-7
Correlations Between NPs, PAs, and CNMs per Capita and Their Counterpart Physicians per Capita, 2000
(Coefficients are Spearman Rank-Order Correlations)

	NP / Pop ‘00	PA / Pop ‘00	CNM / Pop ‘00
Phys / Pop ‘00	+0.45**+	0.11	-
Ob-Gyn / Pop ‘00	-	-	+0.53**

* = significant at the .05 level
** = significant at the .01 level

Other Patterns and Relationships

Relationship of Professional Practice Indices to Access to Care

Since one of the stated goals of the programs that originally launched both the PA and NP professions was to increase access to care, it is of interest to assess the extent to which these goals have been achieved. Unfortunately, current national data systems are not able to assign members of the three professions to services provided to underserved populations or to geographic regions identified as shortage areas. The best that can be done at present for all 50 States is to compute correlations between the percentages of population residing in Health Professions Shortage Areas (HPSAs) and the scope indices and the numbers of practitioners per capita for the respective States.

The results of these calculations are presented in Table 7-8, which shows no significant correlation between the scope indices and the percent of population in HPSAs. Since the three professions are not currently incorporated in the definitions of HPSAs, this is not surprising.

The strongest correlation with percent of population in HPSAs is physicians per capita. This high negative correlation is expected since a region is designated a HPSA if it has especially low numbers of physicians. It is interesting that CNMs per capita, and not PAs per capita or NPs per capita, is significantly negatively correlated with the percent of population in HPSAs.

It is also interesting that HMO penetration is significantly negatively correlated with percent of population in HPSAs. This suggests that HMOs have a positive impact on access to care, although other interpretations are possible.

Relationship to HMO Penetration

Table 7-9 presents correlations of HMO penetration to the chosen set of variables. Here too the correlations with the scope indices are not statistically significant. The correlations with physicians per capita, NPs per capita, and CNMs per capita are all highly significant, which indicates that HMO penetration is higher in states with larger numbers of these three professions.

Table 7-8
Correlations of Percentages of Population in HPSAs with Other Variables of Interest
Spearman Rank Order Correlations

	% of Pop in HPSAs '00	
New PA Scope Index '00	-0.143	
New NP Scope Index '00	-0.055	
New CNM Scope Index '00	0.021	
Original NP Index Dif '92 '00	-0.171	
Original PA Index Dif '92 '00	0.028	
Original CNM Index Dif '92 '	-0.043	
MD/100K Pop '00	-0.465	**
PA/100K Pop '00	0.077	
NP/100K Pop '00	-0.180	
CNM/100K Pop '00	-0.299	*
HMO Penetration '00	-0.384	**

* Correlation is significant at the .05 level (2-tailed).
** Correlation is significant at the .01 level (2-tailed).

Table 7-9
Correlations of HMO Penetration with Other Variables of Interest
Spearman Rank Order Correlations

	HMO Penetration '00	
New PA Scope Index '00	0.179	
New NP Scope Index '00	0.218	
New CNM Scope Index '00	0.186	
Original NP Index Dif '92 '00	0.124	
Original PA Index Dif '92 '00	0.038	
Original CNM Index Dif '92 '	-0.111	
MD/100K Pop '00	0.611	**
NP/100K Pop '00	0.368	**
PA/100K Pop '00	-0.114	
CNM/100K Pop '00	0.461	**
% of Pop in HPSAs '00	-0.384	**

** Correlation is significant at the .01 level (2-tailed).

General Acceptance of Non-Physician Clinicians.

To get a sense of the extent to which different States have accepted the professions which work closely with physicians, a composite index (equal to the sum of the three new index numbers for 2000) was created. This new index, which is based on all three professions, is not meant to relate to professional practice. It is meant solely to reflect the general acceptance of the professions by government regulators. Oregon had the highest score on this composite index, and South Carolina had the lowest.

This composite index was then translated into a five point scale that rated the general acceptance levels of these non-physician clinicians in the 50 States and the District of Columbia from high acceptance to low acceptance. The results of the translation into the five point scale are displayed in the map in Figure 7-1. The States with the highest general acceptance for the three professions were scattered around the country with higher representation in the Northeast and Northwest, while the lowest general acceptance of the three professions was focused in the Southeast.

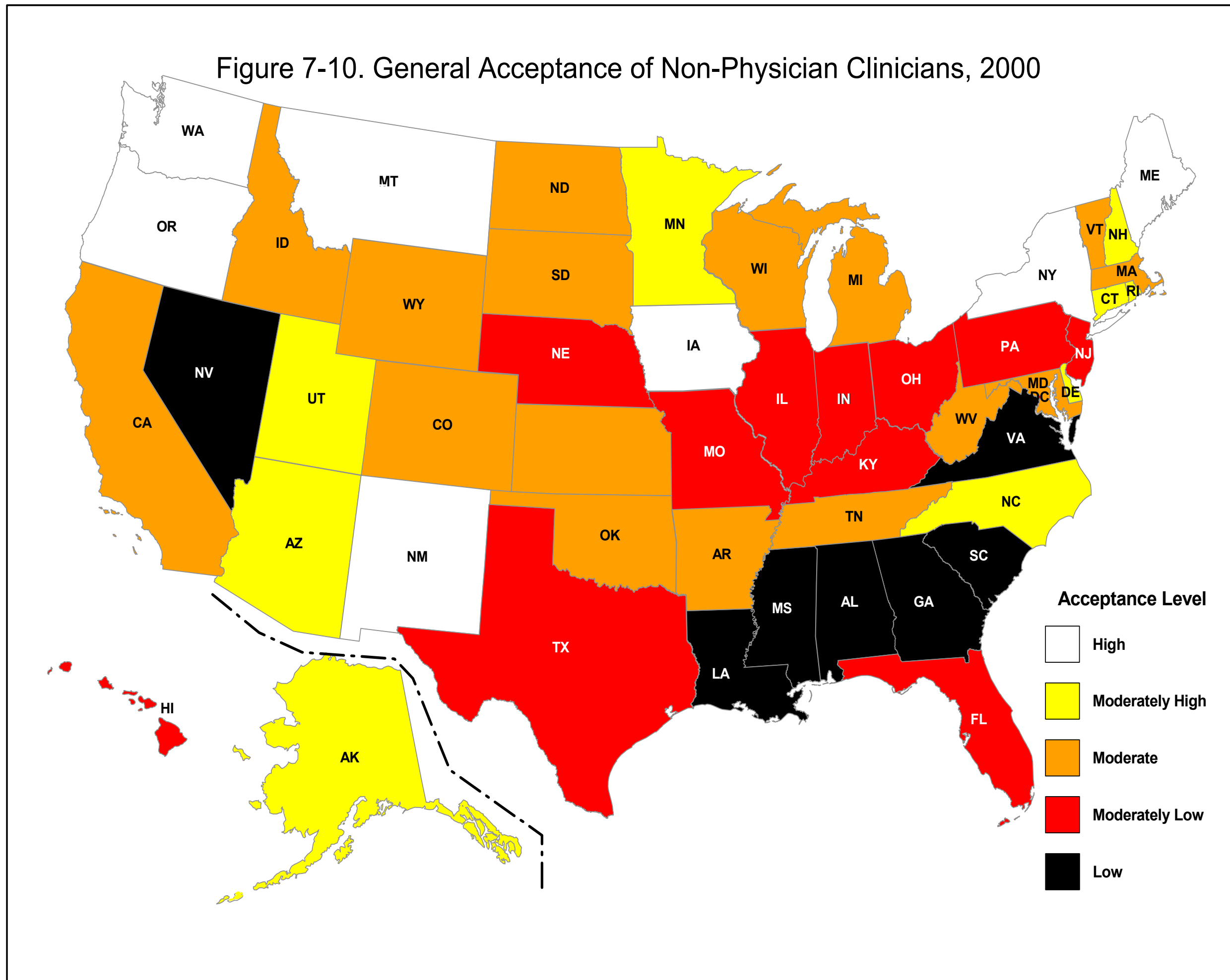


Figure 7-10. General Acceptance of Non-Physician Clinicians, 2000

Professional Practice Component Scores

Table 7-10 presents the scores for the three broad components of the new professional practice indices for the three professions in each of the fifty States and the District of Columbia. Interested readers can use these data to better understand the nature of the practice environments for the three professions in specific States.

Table 7-10
Components of the New Professional Practice Indices for NPs, PAs, and CNMs for the 50 States and DC, 2000

	NP				PA				CNM			
	Legal	Reimb	Rx	Total	Legal	Reimb	Rx	Total	Legal	Reimb	Rx	Total
Optimal	**35**	**35**	**30**	**100**	**35**	**25**	**40**	**100**	**35**	**35**	**30**	**100**
Average	**25.2**	**28.1**	**21.4**	**74.7**	**25.2**	**19.8**	**29.1**	**74.1**	**22.7**	**27.4**	**19.4**	**69.6**
Gap	**9.8**	**6.9**	**8.6**	**25.3**	**9.8**	**5.2**	**10.9**	**25.9**	**12.3**	**7.6**	**10.6**	**30.4**
Range	***20.0***	***23.0***	***21.0***	***51.0***	***25.0***	***15.0***	***40.0***	***57.5***	***19.0***	***23.0***	***30.0***	***54.0***
Std Dev	***5.6***	***7.1***	***6.1***	***13.6***	***4.6***	***3.7***	***11.5***	***14.3***	***4.7***	***7.2***	***8.6***	***15.0***
Alabama	20	20	8	**48**	25	25	11	**61**	19	13	6	**38**
Alaska	32	28	28	**88**	25	18.5	38	**81.5**	25	35	28	**88**
Arizona	33	31	28	**92**	25	20	37	**82**	25	26	28	**79**
Arkansas	30	13	24	**67**	18	20	31	**69**	28	13	23	**64**
California	26	35	23	**84**	25	20	38	**83**	23	30	7	**60**
Colorado	29	30	27	**86**	15	20	40	**75**	26	30	26	**82**
Connecticut	27	35	24	**86**	29	25	29	**83**	24	34	28	**86**
Delaware	29	30	27	**86**	24	20	38	**82**	26	30	27	**83**
District of Columbia	29	20	26	**75**	23	10	12	**45**	32	15	25	**72**
Florida	22	28	12	**62**	27	23	11	**61**	21	28	9	**58**
Georgia	20	14	11	**45**	25	19	33	**77**	20	15	8	**43**
Hawaii	25	27.5	9	**61.5**	23	20	35	**78**	23	27.5	7	**57.5**
Idaho	29	33.5	27	**89.5**	20	18.5	34	**72.5**	27	30	24	**81**
Illinois	31	12	17	**60**	29	25	32	**86**	20	12	11	**43**
Indiana	19	28.5	24	**71.5**	20	20	10	**50**	20	27.5	26	**73.5**
Iowa	30	33	29	**92**	27	25	35	**87**	26	28	30	**84**
Kansas	29	28	27	**84**	24	17.5	34	**75.5**	22	27.5	27	**76.5**
Kentucky	29	32.5	15	**76.5**	22	20	12	**54**	27	27.5	14	**68.5**
Louisiana	21	28	13	**62**	28	25	1	**54**	17	30	9	**56**
Maine	28	35	28	**91**	29	20	34	**83**	28	35	28	**91**
Maryland	20	35	23	**78**	18	20	38	**76**	19	35	26	**80**
Massachusetts	18	35	24	**77**	25	20	37	**82**	20	30	24	**74**
Michigan	25	30	17	**72**	31	25	33	**89**	25	30	14	**69**
Minnesota	30	29	27	**86**	25	19	37	**81**	26	30	28	**84**
Mississippi	20	29	10	**59**	27	10	12	**49**	16	29	9	**54**
Missouri	19	30	11	**60**	26	20	15	**61**	19	30	10	**59**
Montana	31	33.5	27	**91.5**	28	24	39	**91**	27	28	27	**82**
Nebraska	31	15	26	**72**	24	20	35	**79**	20	15	9	**44**
Nevada	19	28.5	11	**58.5**	30	18.5	16	**64.5**	17	28.5	7	**52.5**
New Hampshire	32	30	24	**86**	34	20	35	**89**	26	30	26	**82**
New Jersey	27	34.5	21	**82.5**	25	10	13	**48**	16	32	7	**55**
New Mexico	33	34	27	**94**	25	20	39	**84**	28	35	25	**88**
New York	26	35	25	**86**	29	20	35	**84**	30	35	27	**92**
North Carolina	29	30	27	**86**	29	25	40	**94**	15	30	28	**73**
North Dakota	21	27.5	26	**74.5**	21	17.5	31	**69.5**	17	27.5	26	**70.5**
Ohio	23	30	20	**73**	18	18.5	0	**36.5**	20	30	21	**71**
Oklahoma	27	20	20	**67**	25	17.5	35	**77.5**	26	15	19	**60**
Oregon	33	35	24	**92**	33	25	34	**92**	29	35	21	**85**
Pennsylvania	16	35	22	**73**	20	20	33	**73**	22	30	0	**52**
Rhode Island	27	33	23	**83**	32	18	38	**88**	30	33	25	**88**
South Carolina	15	13	15	**43**	9	20	23	**52**	13	13	13	**39**
South Dakota	24	29	25	**78**	26	17.5	38	**81.5**	24	29	25	**78**
Tennessee	14	35	15	**64**	28	20	38	**86**	19	29	11	**59**
Texas	20	33.5	12	**65.5**	30	25	12	**67**	20	34	8	**62**
Utah	27	30	27	**84**	30	20	35	**85**	29	33	27	**89**
Vermont	20	15	26	**61**	25	19	38	**82**	21	15	28	**64**
Virginia	13	15	19	**47**	24	10	13	**47**	16	30	13	**59**
Washington	31	35	25	**91**	24	20	38	**82**	30	35	27	**92**
West Virginia	16	30	20	**66**	29	20	35	**84**	18	35	20	**73**
Wisconsin	31	15	23	**69**	26	19	38	**83**	19	13	25	**57**
Wyoming	29	30	23	**82**	27	20	34	**81**	24	30	23	**77**

Conclusions

Analyses of the 1992 indices provided by Sekscenski et al and the updated indices created by the authors for 2000 indicates that all three professions increased their respective scopes of practice between 1992 and 2000. The increases observed in the professional practice indices for all three professions are generally associated with broader sets of tasks, more autonomous practice environments (i.e., less direct oversight by physicians), and greater opportunities to prescribe controlled substances.

While differences remain in the professional practice index scores across the 50 States, the variation of the index scores declined significantly between 1992 and 2000, suggesting that the 1990s was a period of convergence of professional practice across the 50 States for all three professions. A breakdown of the three components of the 2000 professional practice index demonstrate a convergence in both legal status and prescriptive authority for NPs, PAs, and CNMs across the 50 States. The reimbursement patterns for NPs, PAs, and CNMs converged less across the States than did the other two components of the indices.

Relations With Physicians

In field work conducted in seven States (California, Illinois, New York, North Carolina, Ohio, Oregon, and Texas) in 2001 as part of this study, more than 220 informants (representing the three professions, educators, provider organizations in urban and rural areas, and State and local planners and policy makers) were asked questions about the three professions, including some concerning relations between the medical profession and NPs, PAs, and CNMs. It was interesting that the closer that informants were to actual practice settings in hospitals, clinics, and physician offices, the stronger was the sense that the three professions provide valuable support to physicians as they serve their patients and the public. The idea is that physicians wouldn't work with NPs, PAs, or CNMs in hospitals, offices, and other settings if they did not believe it was beneficial to their practices and their patients.

Relationship of the Three Professions to Access to Care

One hypothesis of the study, that greater numbers of practitioners in the three professions improved access to health care, especially primary care, could not be tested statistically. Reliable estimates of the numbers of practitioners in the three professions in the 50 States have only recently become available, and reliable estimates of the numbers practicing in shortage areas (i.e., Health Professions Shortage Areas [HPSAs] or Medically Underserved Areas [MUAs], both of which are based on census tracts) or serving underserved population groups are not yet available. Without such information, it is not possible to quantify the extent to which the three professions serve people with low incomes, without health insurance, or with other characteristics associated with lack of adequate health care.

Although it was not possible with the data and other evidence compiled in this study to confirm *statistically* that a higher professional practice index is related to greater access to health care by undeserved populations, many believe that NPs, PAs, and CNMs "are providing services (especially primary care) to populations that otherwise would be managed by a physician or would not receive services" [Hooker and Berlin, 2002]. Additional information on this provided in Chapter 9.

Further research is warranted on the extent to which greater numbers of practitioners in the three professions improve access to health care, particularly primary care, for underserved populations. Moreover, investigating the relationship between the three professions and HPSAs and MUAs is an important avenue for future research.

Chapter 8. Field Work in Seven States

This chapter summarizes the field work conducted as part of this study. It includes the following subsections:

- The Field Work Process
- Observations from the Fieldwork
- Conclusions

Additional details about the conduct of the fieldwork and more details from the various interviews and meetings are provided in Appendix G.

The Field Work Process

As a part of this study, fieldwork was conducted in seven States chosen for their geographic diversity and for the variety of legal and regulatory climates they have for the professions. The States chosen were California, Illinois, New York, North Carolina, Ohio, Oregon and Texas. These States represent variation in demographics, geography, and composition of health care delivery programs. Of particular interest was the impact of the three professions on delivery of care to underserved populations.

The visits to California, Ohio, and New York were conducted by Albany Center. The visits in Oregon were conducted by the WWAMI Center for Health Workforce Studies. The visits in Illinois were conducted by the Illinois Center for Health Workforce Studies. The visits in Texas were conducted by the Center for Health Economics and Policy at the University of Texas Health Science Center at San Antonio. The visits in North Carolina were conducted by the North Carolina Center for Nursing.

The field work was conducted in a variety of formats. Focus groups were convened in State capitals, large urban settings, and in rural locations across the fieldwork States to discuss legal and professional practice issues for the three professions. In some cases, one-on-one face-to-face or telephone interviews were conducted, and in others, written communication was involved.

The fieldwork was structured by a list of questions generated by the cooperating research centers and by the Project Advisory Committee that was convened to monitor and direct the study process. A list of those questions is provided in Appendix H. Individual State fieldwork reports relied on a variety of published data for background information on the supply of the professions within States, the educational programs available to the professions, the numbers of recent graduates from those educational programs, and the demographics of the States involved. The findings of the fieldwork relied heavily on the observations of those who provided insights to the discussions about the professional experience of NPs, CNMs, and PAs in the various States.

Those interviewed in the fieldwork included State legislators and government regulators, State and local policymakers, educators of the three professions, representatives of primary care coordinating councils and area health education centers, representatives of the physician, nurse practitioner, certified nurse midwife, and physician assistant professions, and the directors and staff of community health clinics, mobile clinics, hospital systems, long term care facilities, and rural health projects. Participants were identified through a variety of means including identification by the Project Advisory Committee, professional associations, and educational programs, as well as through Internet resources and literature searches, and personal referrals. Although the general experience of the field work staff was that the medical profession was underrepresented in the fieldwork process, physicians were invited to participate in all venues in all seven States. Participants in the focus groups and interviews represented a wide range of constituents and provided broad perspectives on the professions and their contributions to health care delivery.

In most cases, fieldwork was conducted at defined locations through formal invitations by project staff. Discussions were structured to last over a morning or afternoon session and generally involved mixed groups of participants. However, the composition of the groups varied. For instance, in New York City, individual professional focus groups were hosted that included only nurse practitioners in one session, physician assistants in another, and certified nurse midwives in a third. In other locations, participants included representatives from a range of professional, regulatory, and organizational groups. One center found that individual physician interviews were the most convenient way to obtain the insights from that constituent group.

Observations from the Fieldwork

The following bullets summarize interesting themes that emerged in the fieldwork discussions across States. These ideas are discussed in detail in the ensuing pages.

- Change in professional practice is often motivated by the practical experiences of the three professions and the physicians with whom they work. When a particular legal requirement becomes untenable in the practice environment, there is motivation by professional associations to advocate for change in the legislative arena. When advocates for patient groups feel that a situation is not acceptable, legislative initiatives are also

forthcoming. Change appears to occur incrementally and often occurs through limited legislative mandates that sunset or expand at legislative review.

- The three professions are seeking recognition for their professional competencies and for the quality of care that they provide in an environment that is striving to use resources effectively and efficiently.
- The three professions resist the image of the professions as "cost-effective" providers, preferring instead to focus on their competencies and their contributions to healthcare for a variety of populations.
- The professional status of NPs, PAs, and CNMs has been enhanced by the increase in their numbers throughout the United States, by their employment in a wide range of healthcare settings that has increased their exposure to the public, and by increased scopes of practice including increased prescriptive authority which has allowed them to practice more "autonomously".
- The professional scopes of practice of the three professions converged across the 50 States in the 1990s, consistent with statistical evidence presented earlier in this report.
- The most important professional practice issue for NPs and CNMs is reimbursement.
- Expanded prescriptive authority is the most important professional practice issue for physician assistants, and it is a concern of CNMs and NPs in certain States.
- There is a strong desire within the professions for increased visibility and acceptance by other providers, peers, patients, and payers.
- It is difficult to evaluate the contributions of the three professions to access to care because of the business practices and organizational strategies that currently exist.
- Although competition among the three professions was cited by some field work participants, there is commonality for the three professions in their positioning in the delivery system. Several examples of collaboration in advocacy efforts between professional groups in States were discussed in the fieldwork.
- At the professional association level, the three professions struggle with the medical profession associations to gain desired recognition, responsibility, and autonomy within their individual scopes of practice. This struggle seems greatest for the advanced nursing professions, although physician assistants encounter many of the same roadblocks. Some of these differences may be attributed to the educational models in which the professions are trained, i.e., nursing models vs. medical models; and some may be attributed to the variation in how legal relationships with physicians are defined, i.e., supervisory, collaborative, consultative, or "independent".
- The struggles for professional recognition generally address more detailed aspects of practice, suggesting that these professions are maturing. One informant from New York called this period "a time for rationalization". Whereas statutory and regulatory permission for any prescriptive authority was a prominent issue in the 1990's, refinement of that privilege is now the focus. The same can be said for legal status and reimbursement.

- This same maturation is occurring in educational programs where standardization of programs across the U.S. continues to be a goal. Growth has slowed in recent years both in the numbers of programs and in the numbers of graduates.
- Another indication of the maturity of the professions is the present concern among all stakeholders about the supply of and demand for these providers presently and in the future. There are even emerging concerns about a possible oversupply of the professions in some States.
- The fieldwork suggested that the three professions contributed significantly to access to care, but it also confirmed that it is not possible to verify statistically the contributions to access made by the three professions because data about their supply, places of practice, and the patients that they treat are inadequate. In fact, the three professions feel that the increased visibility gained through HMO empanelment and direct reimbursement will help to demonstrate their contributions to care for a variety of populations. Use of appropriate provider numbers in all billing for services would distinguish data about who is providing care to underserved populations, clarify the level and kinds of services being provided, and identify the settings in which services are obtained.
- The need for new and continuing incentives to encourage the three professions to practice in health professional shortage areas or with underserved populations was considered important. Among the strategies suggested by the fieldwork participants to increase access to care were: educational loans with payback incentives; the opportunity for increased numbers of clinical rotations in areas where underserved populations are treated; Medicare incentives similar to those provided to physicians practicing in underserved areas; programs for recruitment of new professionals directly from underserved populations; and educational opportunities that are accessible in or near underserved communities

Conclusions

There was a broad consensus across the fieldwork states that professional practice options expanded in the 1990s for all three professions, and that practice is now more uniform across the States. Although more improvements are possible, many strides have been made for all three professions.

The contributions by the three professions to access to care continue to be significant. The primary care orientation of NPs, PAs, and CNMs guides the professions in the provision of both primary and specialty services. There is significant potential for these professions to provide services in places where there are gaps in health care. Direct reimbursement from all payers would be important to achieving greater access for underserved populations. Financial incentives for all of the health professions should be encouraged. Physicians and the three professions work cooperatively and interdependently in a variety of health settings. This should be encouraged since the quality, quantity, and substance of services provided are enhanced by the competencies and skills of each of the professions working interdependently.

Attention should be paid to a variety of factors that influence the supply and distribution of the professions across settings. Clinical rotations, scholarship and loan programs, and pay or tax

incentives to work in health settings that provide care to medically underserved populations are important inducements to encourage these professionals to work in those settings.

The three professions are important to provision of quality and cost-effective care to a range of consumers. The skills and competencies of the professions allow them to practice in all health care settings in collaboration with other medical professionals. There is still untapped potential within the professions that could help to resolve some of the significant access issues that exist across States. The paths to achieving this goal are both regulatory and financial.

Chapter 9. Access to Care

This chapter summarizes the findings of the study relating the impact of increasing numbers of NPs, PAs, and CNMs and increasing professional practice options of the three professions on access to health care in the U.S. It includes the following subsections:

- Concepts and Definitions
- Limitations on Quantitative Assessments
- Professional Practice Index and Access to Care
- Anecdotal Evidence from Fieldwork
- Conclusions

Concepts and Definitions

Access to health care is generally related to the ability of individuals in a population group to obtain appropriate services to diagnose and treat health problems and symptoms. A variety of factors influence access to health care for an individual or family, including: availability of health insurance or means of paying for needed services, sufficient numbers of appropriate health professionals to serve all those needing services, and availability of appropriate health care organizations within reasonable travel times.

Access to health care in the U.S. is far from universal, despite programs like Medicaid which help those with limited resources obtain needed services. Many people with resources greater than the limits of public assistance programs like Medicaid do not have health insurance from their employers, and are therefore unable to obtain care. In addition, there are places in this country which do not have sufficient numbers of practitioners to care for all those that need services.

An assessment of the impact of the three professions on access to care was a fundamental objective of this study. Although the increased numbers of practitioners and visits per capita are indicators of improved access, these statistics do not identify the recipients of the services. The initial charge to the study team called for an assessment of the impact of changes in professional practice and numbers of practitioners per capita on access to care for those traditionally underserved by the health care system, e.g., those without insurance, those who are unemployed, etc.

In the discussion that follows the concern is primarily with access to care for underserved population groups. These groups are referred to as "underserved populations". The term "underserved area" is also used in some circumstances to refer to a geographic subdivision in which a "large share" of the population is underserved. Because it is not possible to address the issue of access to care in a systematic, quantitative way, no effort has been made in this study to use precise definitions of these terms.

Limitations on Quantitative Assessments

Superficially, it is easy to conclude that the dramatic increases in the numbers of NPs, PAs, and CNMs in the 1990s resulted in more services to the public, and increases in professional practice indices resulted in additional services provided. Unfortunately, definitive measurement of the influence of NP, PA, and CNM professional practice on access to healthcare services for *underserved* populations remains elusive for several reasons:

- **Adequate data for NPs and CNMs are not available.** Efforts to collect counts for these professions are confounded by the myriad licensing configurations that exist across States. Some State Boards of Nursing count only those licensed as nurses. In some States, the use of an NP or CNM credential is permitted if a nurse has obtained a national certification, with no additional required State certification. Recent passage of legislation in States addressing NP practice as a separate professional category should alleviate this problem. However, in many States, the census of CNMs is still embedded in NP data since nurse midwives are often licensed as a category of advanced practice nurse.
- **The identification of practice location of the three professions is another confounding issue**, since no national database accurately tracks the specific locations in which NPs, PAs, and CNMs work. For example, in order to determine whether a practitioner works in a Health Professional Shortage Area (HPSA) or Medically Underserved Area (MUA), it is necessary to locate the practice locations of these professionals at the census tract or zip code level. In most States only a mailing address is available for identifying the geographic location of practitioners, and most mailing addresses are not the same as practice addresses. Files are even less likely to identify the location of second or third practice sites, which are more likely to be underserved areas than primary practice sites.
- **It is currently impossible to identify with certainty the providers of services to underserved populations** in many settings because many NPs, PAs, and CNMs provide services that are tagged with the identifiers of their supervising or collaborating physicians in insurance claims data. Although Medicaid and Medicare carriers in many States are requiring that each NP, PA, and CNM providing services to eligible

populations have a separate identifier, many third party payers have different claim requirements. In addition, many HMOs/MCOs have been unwilling to empanel NPs, PAs, and CNMs, requiring the three professions to bill for services through the participating physician(s) with whom they work. These administrative practices make NP, PA, and CNM services effectively 'invisible' to those assessing the quantity and quality of care.

The new National Provider Identifier (NPI) required by the Health Insurance Portability and Accountability Act presents an opportunity to implement more effective tracking of the type of health providers, levels of care provided, and locations where services are offered. This will only occur if the NPIs are required by all payer organizations on billing documents. Such an initiative would still only identify services provided by the three professions to insured populations. Tracking of care provided to people without health insurance presents an even greater challenge.

Professional Practice Indices and Access to Care

One of the broad conclusions of this study drawn from the background research and fieldwork conducted as part of this study is that the professional practice indices for NPs, PAs, and CNMs are directly related to access to care. Legal requirements for practice affect both the care that is legally possible and the circumstances under which care is provided. There are several environmental and regulatory factors that inhibit or promote access by underserved populations to health services provided by NPs, PAs, and CNMs.

- **Supervisory arrangements** for NPs, PAs, and CNMs required in law can dramatically affect the provision of services. Impediments to care are created when statutes or regulations in a State require that a physician be physically present within an office or facility when services are provided by a NP, PA, or CNM, or that a physician must be within a certain distance of the site where services are provided. Provision of care is then limited to locations where physicians choose to practice or to locations that are proximate. This study has confirmed that NPs, PAs, and CNMs, like physicians are concentrated in urban and suburban settings. This preference places rural populations at higher risk for limited access, especially in States that require the three professions to practice in close proximity to their collaborating/supervising physicians.
- **The specific services** that may be provided may also be limited in law. Statutes and regulations that proscribe the tasks and services that may be provided by the three professions build barriers that directly affect the characteristics of practice and subsequently, the way in which access may be achieved. If there is a requirement that a new patient must see a physician prior to an encounter with a NP, PA, or CNM, access by the patient is limited by the availability of the physician. Similarly, requiring all medical orders written by a PA to be cosigned by a physician before execution limits access to care. Assuming that the PA is competent to provide the service without direct supervision, these legal limitations may unnecessarily impede the provision of care. The fact that such restrictions exist in some States and not in others, raises questions about the need for the restrictions.

- **Prescriptive authority** is an important feature of professional practice that requires legal permission and enhances care, particularly for rural populations. This privilege is legally enabled in States at various levels by allowing NPs, PAs, or CNMs to prescribe a range of scheduled drugs. If permitted by the State in which practice occurs, the Federal government assigns the professional a DEA registration to prescribe controlled substances. The ability to supply a prescription to a patient without the signature of a physician creates important possibilities for increased access to services in locations physically distant from a collaborating physician.
- **Health insurance** - or lack of it - is the most frequently discussed environmental impediment to access to health services. Those without health insurance have few options when seeking care and often do so only under the most serious medical circumstances. And when there is insurance, the reimbursement policies in States affect the ability of the three professions to be paid directly for services. The lack of insurance and the lack of available direct reimbursement for NPs, PAs, and CNMs were identified by study informants as significant barriers to access. The three professions are often limited to caring for those patients who have insurance from payer organizations with which the supervising/ collaborating physician has contracts to provide care. The refusal of many third party payers to empanel NPs, PAs, and CNMs limits access to patients. Physicians often act as the intermediaries between payers and NPs, CNMs, and PAs and also between patients and these professionals. Another dimension to the discussion about health insurance is that even being insured—although technically providing access—is not always a predictor of utilization. Other barriers such as transportation, provider office hours, and cultural differences can significantly affect patient utilization.

Anecdotal Evidence from Fieldwork

Despite the inability to assess quantitatively the impact of increased professional practice for NPs, PAs, and CNMs on access to care, fieldwork informants overwhelmingly supported the hypothesis that increases in professional practice in the 1990s improved access to care for underserved populations. The fieldwork in this study provides evidence of the manner in which these services are made available. In fact, the fieldwork suggests that demonstration projects in different States often provide pathways to broader scopes of practice for the three professions. The discussion that follows is based primarily on the fieldwork conducted as part of this study as summarized in Appendix G of this report and in the seven separate field study reports.[35]

[35] Langelier MH. "Scope of Practice of NPs, PAs, and CNMs in Ohio, Fieldwork Summary Report". Rensselaer, NY: Center for Health Workforce Studies. 2001.

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North Carolina Center for Nursing. "Examination of the Impact of Expanded Scope of Practice Laws on Improving Access to Health Care for the Underserved". Chapel Hill, NC: North Carolina Center for Nursing. 2001.

Langelier MH. "Scope of Practice of NPs, PAs, and CNMs in New York, Fieldwork Summary Report". Rensselaer, NY: Center for Health Workforce Studies. 2002.

General Findings

- Statutes enabling practice by the professions across States often have preambles that indicate that these professions were established specifically to help meet the healthcare needs of underserved populations including the poor, the elderly, and the disabled. In fact, all three professions are rooted in the principle of serving the needy, and this principle continues to be central to the current values of the three professions. The practical application of this principle is evident in the educational curricula and clinical experiences provided in training programs for each of the three professions.
- The fieldwork supports the contention that NPs, PAs, and CNMs originally practiced largely in areas where there was a lack of physician presence providing primary care. Currently, however, the health care system is drawing the three professions from their original focus on primary care to medical and surgical specialty practices. Since specialty physicians are less likely than generalist physicians to practice in underserved areas, this trend tends to counteract the initial positive impact on access of increasing the supply of NPs, PAs, and CNMs serving traditionally underserved populations.
- In some States professional practice for the three professions is expanded under special circumstances to permit a broader set of services to underserved populations. In this study this legal condition is referred to as "dual scope of practice". NPs, PAs, and CNMs practicing in "traditional" locations with physicians are governed by one set of rules, while NPs, PAs, and CNMs practicing in jurisdictions and settings where underserved populations seek health care are permitted expanded privileges for those patients. The experience of the three professions with needy populations in these dual scope States has sometimes led to legislative initiatives that broadens scope in traditional environments. A successful pilot project in Ohio that provided NPs with prescriptive authority to increase access is an example of an initiative that was initially authorized only in limited settings, but was eventually expanded to all settings.

Specific Anecdotes

The fieldwork conducted as part of this study provided many illustrations of the contributions of the three professions to access to care. The following examples, drawn from observations of fieldwork informants in the seven States (California, Illinois, New York, North Carolina, Ohio, Oregon, and Texas), confirm that NPs, PAs, and CNMs contribute to health care for many population groups.

- In all seven States, informants reported that access to care is enhanced by the use of the three professions in many settings. All three professions were originally conceived because of national policy concerns about meeting the health care needs of underserved populations. In fact, informants suggested that for many years NPs, PAs, and CNMs worked in underserved settings in proportionately greater numbers than physicians. For instance, in North Carolina, NPs and PAs originally practiced only in health clinics and public health settings. They have subsequently moved into more mainstream practice environments as the professions have become more recognized.

Langelier MH. "Scope of Practice of NPs, PAs, and CNMs in California, Fieldwork Summary Report". Rensselaer, NY: Center for Health Workforce Studies. 2001.

- Initially, Federal reimbursement policies encouraged practice in underserved settings by permitting public reimbursement for services provided in special public health, institutional, and clinic settings that serve the underserved. The 1997 Balanced Budget Act (BBA) equalized reimbursement across all settings providing less of an incentive to remain in locations designated as underserved. The BBA extended a 10 percent bonus for physicians practicing in identified underserved locations but did not extend that same benefit to NPs, PAs, and CNMs practicing in the same settings. Informants suggested that this was counterproductive to Federal policy, which was to encourage NPs, PAs, and CNMs to work with populations with limited access to health services.
- The current increase in specialization by PAs and NPs was cited by some informants as a reason for concern. As these professions move into specialty and sub-specialty care, their opportunities for practice with underserved populations are reduced. Since specialist physicians are not found in great numbers in HPSAs and MUAs, the NPs, PAs, and CNMs with whom specialist physicians collaborate are also less likely to be found in those settings.
- Determining if care is being provided to the underserved by NPs, PAs, and CNMs is a complex task, which often has less than satisfying results. Informants suggested that underserved populations can be found in almost any medical setting. For example, PAs in New York discussed institutionally-based care in a non-HPSA certified facility. This is not identified as care to the underserved even though there is a significant provision of care to underserved individuals in such settings. There are many "needy" patients who would be classified as underserved who receive treatment in community hospitals, major medical centers, and even private physician offices. Care to patients who are uninsured or publicly insured is provided by medical professionals who work in settings not traditionally identified as serving underserved populations. However, the care provided is often considerable and should be identified as contributing to access. Assessing to whom, by whom, where, and how such care is provided is difficult and may require tracking patients on public assistance rather than providers. In any case, when considering the issue of how to increase access, traditional care settings should not be ignored.
- Many informants reiterated that reimbursement of providers has a major impact on access to care. Uninsured and publicly insured populations do not always have the same access as privately insured patients. One informant described the Balanced Budget Act of 1997 as "a house of cards". Rural health was greatly affected by its implementation since clinics with greater than 50 beds were no longer supported. Without support, many larger clinics closed causing some professionals in underserved areas to leave their positions.
- In Texas, informants indicated that reimbursement is an especially difficult issue in rural areas. Lack of funding for services to needy populations is a disincentive to practice in locations where those populations are located. Reimbursement policies impact both utilization by patients and recruitment of professionals since payment for services is a fundamental issue for all medical professionals.
- Some informants suggested that many newer graduates are not interested in working with underserved populations. They are more interested in practicing where the money is. Students were viewed as being savvier and more aggressive than they had been in the

past. This change in orientation affects the pool of providers who traditionally might have sought work with the underserved.

- According to informants, public initiatives that encourage professionals to work in health professions shortage areas encountered difficulty because decisions about where to practice are often driven by personal preferences. Individuals make decisions about where they will practice based on personal background, individual goals, family obligations, and practice opportunities. Economics is an important factor for new graduates who have loans to repay. Educational indebtedness may cause new graduates to take positions based on remuneration rather than professional satisfaction. These are exogenous factors over which policymakers have little control.
- Informants also noted several policy initiatives that encourage professionals to practice in underserved areas, including: expanded loan repayment programs, more clinical rotations for student professionals in underserved settings, and targeted efforts to recruit new professionals into underserved areas. These were considered important strategies for increasing the numbers of NPs, CNMs, and PAs available to provide primary care to underserved populations.
- An example of a successful collaborative effort to increase the numbers of NPs, PAs, and CNMs in underserved settings is an educational initiative called Partnerships in Training, funded by the Robert Wood Johnson Foundation. The objectives of this program are "the development and implementation of a regional educational system for nurse practitioners, physician assistants, and certified nurse midwives involving a culturally competent interdisciplinary curriculum, distance learning modalities, and shared resources among the education partners."[36] The program presently operates in eight States: Arkansas, California, Colorado, Michigan, Minnesota, New Mexico, North Carolina, and Wisconsin.[37] In California, the partnership consortium is operated in collaboration with several area health education centers as well as several college and university programs. Potential NPs, PAs, and CNMs are recruited from underserved communities and then educated in or near those same communities. The program encourages students to remain in their home communities after training. A survey in 2000 by the California Center for Health Workforce Studies, found that 39 percent of NPs, 39 percent of PAs, and 47 percent of CNMs surveyed in the State presently practice in underserved settings.[38] Informants credit the program with encouraging new providers to locate in underserved areas which has increased access to care.
- Informants were concerned about the move by various States and the Federal government to increase educational requirements for the professions and the concomitant impact on the professional workforce. New York informants suggested that a requirement for graduate education for the professions would change the complexion of the professional programs and place these professions out of the reach of some qualified candidates. Concern was expressed that the cost of the elevated educational requirements would

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[36] Partnerships for Training, San Joaquin Valley Health Consortium, http://www.sjvhc.org/programs/pft/index.htm.
[37] Partnerships for Training Projects, http://www.uchsc.edu/ahec/mapp/about/pft.htm.
[38] Office of Statewide Health Planning and Development and the Center for California Health Workforce Studies at the University of California, San Francisco, "*Nurse Practitioners, Physician Assistants, & Certified Nurse Midwives in California",* San Francisco, California, Spring 2000.

adversely affect the diversity of graduates from programs and further impede the creation of a culturally competent workforce. Liberal loan repayment programs or scholarship support for diverse students were suggested as partial remedies for this problem.

- The environment in which the professional is educated and trained affects employment opportunities and prospects. Changes in educational models may also affect choice of work after graduation. PAs in New York indicated that current educational models affect practice patterns. PA education in New York was initially provided mostly in community college programs with clinical rotations provided in community settings. This encouraged graduating PAs to work in community settings by acquainting them with those workplaces. Many PA programs in the State have now turned to the medical training model in which clinical training occurs in hospitals and large medical centers. Graduates from these programs are not as likely to have connections to a community health provider and may be less inclined to return to community healthcare settings when seeking employment.
- At Duke University in North Carolina, which housed the first PA training program in the country, the PA program uses Title VII funding to support clinical rotations in medically underserved areas. Several informants suggested that providing clinical rotations in a variety of environments was critical to the process of placing the professions in settings where they are exposed to needy populations. Students sometimes discover that they particularly enjoy working in those environments and will choose to work in them after graduation because of their exposure to the opportunity during training.
- Legislation affects access to care in very direct ways. For instance, individual State requirements for the professions to have supervisory relationships with physicians affects practice in rural locations. In Ohio, a PA or NP with prescriptive authority must work within 60 minutes travel time of his/her supervising physician. This requirement significantly limits practice opportunities for PAs and NPs in the far reaches of Appalachia where supervising physicians are largely unavailable. PAs and NPs might contribute more to care for those populations if the distance limitations did not exist.
- Special circumstances tend to influence CNMs and the locations where they choose to practice. CNMs are especially constrained in rural areas because of their need for backup physicians in case of obstetrical emergencies. In many areas of rural North Carolina there are no physicians to provide on-call services, so CNMs are prevented from working in such places. Although the relationship with physicians constrains the NPs and PAs, most patients of NPs and PAs are able to travel to a physician to whom they have been referred for more complex care, even if distance is great. However, obstetrical patients are limited by their emergent medical situations from traveling long distances to any provider. Collaborating physicians must be available to come to the obstetrical patient for delivery rather than having the patient come to them. CNMs, therefore, encounter very particular professional difficulties.
- In Oregon, informants suggested that CNMs are rarely available in rural practice even though Medicaid guarantees coverage for services provided for the poor in underserved areas in the State. CNMs in Oregon suggested that opportunities to work in rural areas are scarce largely due to opposition from rural physicians who face an oversupply of obstetricians in the State. Some CNMs in Oregon have even chosen not to provide

obstetrical services and instead provide only well-woman gynecological services in their practices.

- Informants viewed provision of health care in rural environments as a special issue since the physical aspects of the rural environment affect practice. The example of prescriptive authority was provided to illustrate how location can influence practice. Expanded prescriptive authority for nurse practitioners is of no use in a location where there is no pharmacy available to fill the prescription, unless the NP also has the ability to dispense samples or to dispense medications. These conditions require rural providers to be creative and collaborative. A rural provider must establish extensive networks and negotiate a variety of cooperative agreements with other providers including pharmacies in order to operate effectively and provide all needed services. Dispensing authority for nurse practitioners in such locations is one possible solution. Clinics could then stock many needed medications to meet the needs of the served population.
- The unique circumstances of rural communities require and inspire unique responses to limiting situations. In upstate New York, for instance, emergency rooms in very small, qualifying hospitals (under 15,000 visits per year) are staffed solely by PAs. This is effective in providing rural populations with access to care in emergency situations.
- Another example of creative collaboration in rural New York State is a health care cooperative which involves the participation of a variety of stakeholders. A family physician conceived and implemented a creative model for delivery of care to small rural communities in the Adirondack Mountains. Town governments in a variety of locations participate in cooperative arrangements with a medical network, the Hudson Headwaters Health Network (HHHN), by providing buildings and other support services for the medical practices. HHHN staffs the facilities with providers on an ongoing basis. The resulting health consortium provides a range of physician, NP, PA, and CNM services in each practice location. This strategy has resulted in an effective delivery system that manages a broad network of providers working cooperatively in an extensive geographic area. Several locations are staffed strictly by one or another of the three professions with physicians traveling to a clinic only on particular day(s) of the week to see complicated cases and to review caseloads with the staff providers. A network of specialist physicians and local hospitals has been developed to provide referral mechanisms for more complicated care for patients living in these remote areas. The consortium covers a wide geographic area and serves a large number of patients.
- The characteristics of rural practice dictate different responses to provider resources. In Oregon, informants suggested that rural practices have more difficulty predicting the need for providers and for assuring that they can afford them since patient caseload and insurance is unpredictable and the pool of potential patients is smaller.
- In Ohio, which has particularly strict rules about the supervision of PAs, physicians in a rural area suggested that employing other providers creates special challenges. A physician must review a PA's medical orders for patients on an ongoing basis. One rural physician suggested that, although hiring a PA had increased opportunities for his patients to see a medical provider, his caseload had effectively doubled because of record review requirements. He was not only required to document the records of *his* patients on a daily basis, but he was also required to review *his PA's notations* on her patients. The

severity of his patient caseload also increased since his PA was assigned many of the patients with routine illnesses. The physician's schedule now includes a higher proportion of patients with complex, chronic problems. Although it is helpful that he is more available to these patients, the time required from him for their medical management has also increased. As a result, the physician was finding his practice more burdensome even though he had more help. When considering whether to hire another provider for his practice in the future, the informant felt he would give serious consideration to hiring a physician who would be more independent in practice and not require ongoing supervision.

- Rural populations are also seen as having different characteristics. In Texas, informants indicated there are illegal aliens in the State afraid to seek care for fear of deportation. Farm and migrant workers are also unable to take time off from work to see a health care provider. In fact, many border workers travel to Mexico for care since medical services are available in that country at more convenient hours for the working poor. Getting to medical appointments is also an issue for people without private transportation. In Texas, mobile health care clinics or clinicians who can travel to the *colonias* in the evening to provide care and medications enable access.
- Cultural competency among providers is also an issue. There are not enough providers and there are even fewer who are culturally diverse or culturally competent. Texas informants cited the shortage of physician providers in underserved areas as a reason for the absence of NPs, PAs, and CNMs who must be supervised in practice. If doctors are not available for supervised practice, then NPs, PAs, and CNMs are not able to practice.
- Some States have implemented special statutory and regulatory provisions that create exceptions for professionals who wish to practice in underserved areas. For purposes of this study, we have identified these States as "dual scope of practice environments". The legal requirements for supervision or collaboration by a physician and the parameters for prescriptive authority and reimbursement are expanded in defined locations to encourage practice with medically underserved populations or in health professional shortage areas. Texas and Oregon are States where such dual scope provisions exist.
- In Oregon, PAs are permitted to apply for remote supervision by a physician, which is intended to extend provision of care to medically disadvantaged areas. PAs must apply for this privilege and must have the ability to directly communicate with a supervising physician in case of need. Additionally, the ratio of physician-to-physician assistants is expanded in the State to allow every physician in an underserved area or facility to supervise up to four PAs, rather than the two PAs allowed in traditional practice settings.
- In Texas, physician assistants can practice with underserved populations under special circumstances that permit the PA and supervising physician more latitude. The physician must visit the clinic site every 10 days, perform a review of at least 10 percent of the medical records on a timely basis, and be available by telecommunication on a continuing basis.
- Government programs dedicated to improved access are important. In rural upstate New York, a prenatal program which initially provided care only in the early stages of pregnancy was successful and has now expanded to include a full range of obstetrical

services. CNMs and NPs provide much of the care to pregnant and parenting women in this program, which reaches some of the more remote communities of the State.

- Increasing provider incentives to work in rural areas is also important. Oregon provides a $5,000 yearly income tax credit to rural providers, including NPs, PAs, and CNMs. Financial incentives might create an inducement to practice in underserved areas.

Conclusions

Many informants to this study indicated that care for underserved populations is enhanced by the three professions. NPs, PAs, and CNMs contribute significantly to increased access to healthcare in the urban and rural settings where healthcare services are provided.

Opportunities exist to increase those contributions through increased scopes of practice which provide more professional autonomy, more direct access to reimbursement from a variety of payers, increased Federal incentives for those working with the underserved, scholarship grants to encourage new professionals and other initiatives to recruit a diverse workforce or train existing workforce to understand diversity and provide care in culturally competent practice. These initiatives are geared to the professions who provide care. There are also environmental initiatives that would permit greater access including monetary support for care to the uninsured and financial incentives to establish or maintain facilities that provide health services to populations with marginal access.

It was clear from the fieldwork that future initiatives to increase access should not be one-dimensional. All constituents—providers, payers, regulators, and patients—will be required to help find and create solutions to make progress towards a goal of universal access to healthcare.

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Appendix B. Professional Organizations

This appendix lists the professional organizations related to NPs, PAs, and CNMs contacted as part of this study.

Professional Organizations

The professional organizations that credential and represent Nurse Practitioners, Certified Nurse Midwives and Physician Assistants are:

Nurse Practitioners

- American Academy of Nurse Practitioners
- American College of Nurse Practitioners
- National Association of Pediatric Nurses Practitioners
- National Organization of Nurse Practitioner Faculties
- Association of Women's Health Obstetric and Neonatal Nurses
- National Association of NPs in Women's Health
- National Conference of Gerontological Nurse Practitioners
- National Council of State Boards of Nursing, Inc.
- American Nurses Credentialing Center
- National Certification Corporation for the Obstetric, Gynecologic, and Neonatal Nursing Services
- American Academy of Nurse Practitioners Certification Program

- National Certification Board of Pediatric Nurse Practitioners

Nurse Midwives

- American College of Nurse Midwives
- American College of Nurse Midwives (ACNM) Certification Council Inc. (ACC)
- ACNM Division of Accreditation for CNMs and CMs
- North American Registry of Midwives (NARM) for CPMs
- American College of Nurse-Midwives Certification Council

Physician Assistants

- American Academy of Physician Assistants

Appendix C. Original Index Calculations

This appendix contains a table that documents the detailed calculations used to compute the practice environment indices for the three professions for each of the 50 States plus the District of Columbia. It includes the following subsections:

- NPs
- PAs
- CNMs

NPs

The original practice environment index developed by Sekscenski et al for 1992 was based on a number of specific criteria and point allocations reflecting the then current practice environment for the profession. The specific criteria and point allocations used in creating the index are presented below.

Legal Status (Maximum = 20)

License or Title Recognition = 6.

Practice Defined by the Board of Nursing = 7.

No Supervision by Physician = 7.

Reimbursement (Maximum = 40)

Mandated Payment = 20. [This was understood to mean any required payment to Nurse Practitioners by Medicare, Medicaid, Workers Compensation, or private payer.]

Services Covered = 0 – 10. [Particularly favorable environments were awarded 10 points, while somewhat favorable environments were awarded 5 points]

Medicaid % Pay = 0 – 10. [This was computed by multiplying the percent of physician reimbursement rate x 10. Thus NP reimbursement at 80 percent of physician rate received a score of 8.]

Prescriptive Authority (Maximum = 40)

Full Authority = 40. [This was defined as prescriptive authority for Schedule II-V controlled substances and legend drugs.]

Partial Authority = 10 – 30. [Schedule III-V and legend drugs was valued at 30 points. Schedule IV-V and legend drugs was valued at 20 points. Legend drugs only was awarded 10 points.]

No Authority = 0.

The details of the point allocations for each of the fifty States and the District of Columbia can be found below.

Table C-1
Professional Practice Index Scoring Criteria
Original Scoring System for NPs for 2000

Scoring Category	Score	Optimal Score	AL	AK	AZ	AR	CA	CO	CT	DE	DC	FL	GA	HI	ID	IL	IN
Legal Status																	
License or Title Recognition	**6**	**6**	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Practice Defined by Board of Nursing	**7**	**7**		7	7	7	7	7	7	7		7	7		7	7	7
No Supervision by Physician	**7**	**7**	7	7	7	7	7	7	7	7	7	7		7	7	7	7
Subtotals Legal		**20**	**13**	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**13**	**20**	**13**	**13**	**20**	**20**	**20**
Reimbursement																	
Mandate Payment	**20**	**20**		20	20	20	20	20	20	20		20	20	20	20	20	20
Services Covered	**0-10**	**10**	10	5	10			10	10	10	10	10		10	10	7	10
Medicaid % Pay x 10	**10**	**10**	10	8	6	8		10	10	10	10	8	9	7.5	8.5	10	8.5
Subtotals Reimbursement		**40**	**20**	**33**	**36**	**28**	**20**	**40**	**40**	**40**	**20**	**38**	**29**	**38**	**38.5**	**37**	**38.5**
Prescriptive Authority																	
Full Authority	**40**	**40**		40	40			40	40	40	40				40		40
Partial Authority	**1-39**		10			30	30					10	10	10		30	
No Authority	**0**																
Subtotals Prescriptive Authority		**40**	**10**	**40**	**40**	**30**	**30**	**40**	**40**	**40**	**40**	**10**	**10**	**10**	**40**	**30**	**40**
TOTAL		**100**	**43**	**93**	**96**	**78**	**70**	**100**	**100**	**100**	**73**	**68**	**52**	**61**	**98.5**	**87**	**98.5**

continued

Table C-1, continued
Professional Practice Index Scoring Criteria
Original Scoring System for NPs for 2000

Scoring Category	Score	Optimal Score	IA	KS	KY	LA	ME	MD	MA	MI	MN	MS	MO	MT	NE	NV	NH
Legal Status																	
License or Title Recognition	**6**	**6**	6	6	6		6	6	6	6	6	6	6	6	6	6	6
Practice Defined by Board of Nursing	**7**	**7**	7	7	7	7	7			7	7	7	7	7	7	7	7
No Supervision by Physician	**7**	**7**	7	7	7	7	7	7			7	7	7	7		7	7
Subtotals Legal		**20**	**20**	**20**	**20**	**14**	**20**	**13**	**6**	**13**	**20**	**20**	**20**	**20**	**13**	**20**	**20**
Reimbursement																	
Mandate Payment	**20**	**20**	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Services Covered	**0-10**	**10**	10	7	10	10	10	10	10	10	10	10	10	10	0	10	10
Medicaid % Pay x 10	**10**	**10**	8	8	7.5	8	10	10	10	10	9	9	10	8.5	10	8	10
Subtotals Reimbursement		**40**	**38**	**35**	**37.5**	**38**	**40**	**40**	**40**	**40**	**39**	**39**	**40**	**38.5**	**30**	**38**	**40**
Prescriptive Authority																	
Full Authority	**40**	**40**	40					40	40		40			40			
Partial Authority	**1-39**			35	10	10	30			10		10	10		35	10	35
No Authority	**0**																
Subtotals Prescriptive Authority		**40**	**40**	**35**	**10**	**10**	**30**	**40**	**40**	**10**	**40**	**10**	**10**	**40**	**35**	**10**	**35**
TOTAL		**100**	**98**	**90**	**67.5**	**62**	**90**	**93**	**86**	**63**	**99**	**69**	**70**	**98.5**	**78**	**68**	**95**

continued

Table C-1, continued
Professional Practice Index Scoring Criteria
Original Scoring System for NPs for 2000

Scoring Category	Score	Optimal Score	NJ	NM	NY	NC	ND	OH	OK	OR	PA	RI	SC	SD	TN	TX	UT
Legal Status																	
License or Title Recognition	**6**	**6**	6	6	6	6	6	6	6	6	6	6	6	6		6	6
Practice defined by Board of Nursing	**7**	**7**	7	7			7	7	7	7		7	7		7	7	7
No Supervision by Physician	**7**	**7**	7	7	7	7	7	7		7		7		7		7	7
Subtotals Legal		**20**	**20**	**20**	**13**	**13**	**20**	**20**	**13**	**20**	**6**	**20**	**13**	**13**	**7**	**20**	**20**
Reimbursement																	
Mandate Payment	**20**	**20**	20	20	20	20	20	20		20	20	20	20	20	20	20	20
Services Covered	**0-10**	**10**	10	10	10	10	10	10	10	10	10	10		10	10	10	10
Medicaid % Pay x 10	**10**	**10**	9.5	9	10	10	8	10	9	10	10	8	8	9	10	7	10
Subtotals Reimbursement		**40**	**39.5**	**39**	**40**	**40**	**38**	**40**	**19**	**40**	**40**	**38**	**28**	**39**	**40**	**37**	**40**
Prescriptive Authority																	
Full Authority	**40**	**40**		40	40		40			40	40	40		40	40		40
Partial Authority	**1-39**		20			35		30	30				10			10	
No Authority	**0**																
Subtotals Prescriptive Authority		**40**	**20**	**40**	**40**	**35**	**40**	**30**	**30**	**40**	**40**	**40**	**10**	**40**	**40**	**10**	**40**
TOTAL		**100**	**79.5**	**99**	**93**	**88**	**98**	**90**	**62**	**100**	**86**	**98**	**51**	**92**	**87**	**67**	**100**

continued

Table C-1, continued
Professional Practice Index Scoring Criteria
Original Scoring System for NPs for 2000

Scoring Category	Score	Optimal Score	VT	VA	WA	WV	WI	WY
Legal Status								
License or Title Recognition	**6**	**6**	6		6		6	6
Practice Defined by Board of Nursing	**7**	**7**	7		7	7	7	7
No Supervision by Physician	**7**	**7**	7		7	7	7	7
Subtotals Legal		**20**	**20**		**20**	**14**	**20**	**20**
Reimbursement								
Mandate Payment	**20**	**20**			20	20		20
Services Covered	**0-10**	**10**	10	10	10	10	10	10
Medicaid % Pay x 10	**10**	**10**	10	10	10	10	10	10
Subtotals Reimbursement		**40**	**20**	**20**	**40**	**40**	**20**	**40**
Prescriptive Authority								
Full Authority	**40**	**40**	40		40		40	
Partial Authority	**1-39**			18		35		30
No Authority	**0**							
Subtotals Prescriptive Authority		**40**	**40**	**18**	**40**	**35**	**40**	**30**
TOTAL		**100**	**80**	**38**	**100**	**89**	**80**	**90**

PAs

The original practice environment index developed by Sekscenski et al for 1992 was based on a number of specific criteria and point allocations reflecting the then present practice environment for the profession. The criteria and point allocations used in creating the index are presented below. The detailed point allocations for the 50 States can be found below.

Legal Status (Maximum = 20)

License or Title Recognition = 5.

Professional Practice Regulations = 5.

Practice Under Indirect Physician Supervision = 0 – 10. [On-site supervision = 0; Distance limitations in the regulations = 5; and Indirect supervision with electronic communication = 10.]

Reimbursement (Maximum = 40)

Mandated Payment = 30. [This was assumed to mean any required payment by Medicare, Workers Compensations, Medicaid or third party payer.]

Payment for Services Under Indirect Supervision = 10. [This was determined to be the Medicaid percent times ten.]

Prescriptive Authority (Maximum = 40)

Any authority to Write Prescriptions = 20.

Limited Authority to Order Medications in Inpatient Settings = 0 – 10. This was a subjective category scored according to the variation across the states in the privilege to write scripts in hospitals. If orders for medication must be signed by a physician before execution, for instance, fewer point were awarded. If PAs could write orders for immediate implementation with post review of records, 10 points were awarded.]

Absence of Specific Restrictions = 0 – 10. [This was scored by a review of all restrictions on prescriptive authority. A point was discounted from the full value of 10 for each restriction found.]

Table C-2
Professional Practice Index Scoring Criteria
Original Scoring System for PAs for 2000

Scoring Category	Score	Optimal Score	AL	AK	AZ	AR	CA	CO	CT	DE	DC	FL	GA	HI	ID	IL	IN
Legal Status																	
License or Title Recognition	**5**	**5**	5	5	5	5	5	0	5	5	5	5	5	5	5	5	5
Scope of Practice Regulations	**5**	**5**	**5**	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Practice Under Physicians Indirect Supervision	**0-10**	**10**	10	10	10	10	10	10	9	10	10	8	8	10	10	10	7
Subtotals Legal		**20**	**20**	**20**	**20**	**20**	**20**	**15**	**19**	**20**	**20**	**18**	**18**	**20**	**20**	**20**	**17**
Reimbursement																	
Mandate Payment	**30**	**30**	30	30	30	30	30	30	30	0	0	30	30	30	30	30	30
Payment for Services Under Indirect Supervision (if less than physician then %x10)	**10**	**10**	10	8.5	10	10	10	10	10	10	0	8	9	10	9		10
Subtotals Reimbursement		**40**	**40**	**38.5**	**40**	**40**	**40**	**40**	**40**	**10**	**0**	**38**	**39**	**40**	**38.5**	**30**	**40**
Prescriptive Authority																	
Any Authority to Write Prescriptions	**20**	**20**	20	20	20	20	20	20	20	20	20	20	20	20	20	0	20
Limited Authority to Order Medications in Inpatient settings	**0-10**	**10**	7	10	10	10	10	10	10	10	10	10	10	10			
Absence of Specific Restrictions	**0-10**	**10**	2	8	9	8	7	10	8	8	9	7	9	9	9	9	
Subtotals Prescriptive Authority		**40**	**29**	**38**	**39**	**38**	**37**	**40**	**38**	**38**	**39**	**37**	**39**	**39**	**29**	**9**	**20**
TOTAL		**100**	**89**	**96.5**	**99**	**98**	**97**	**95**	**97**	**68**	**59**	**93**	**96**	**99**	**87.5**	**59**	**77**

continued

Table C-2, continued
Professional Practice Index Scoring Criteria
Original Scoring System for PAs for 2000

Scoring Category	Score	Optimal Score	IA	KS	KY	LA	ME	MD	MA	MI	MN	MS	MO	MT	NE	NV	NH
Legal Status																	
License or Title Recognition	**5**	**5**	5	5		5	5	5	5	5	5	5	5	5	5	5	5
Scope of Practice Regulations	**5**	**5**	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Practice Under Physicians Indirect Supervision	**0-10**	**10**	10	10	10	10	10	10	10	10	10	10	9	10	5	9	8
Subtotals Legal		**20**	**20**	**20**	**15**	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**19**	**20**	**15**	**19**	**18**
Reimbursement																	
Mandate Payment	**30**	**30**	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Payment for Services Under Indirect Supervision (if less than physician then %x10)	**10**	**10**	10	7.5	10	10	10	10	10	10	9		10	9.5	10	8.5	10
Subtotals Reimbursement		**40**	**40**	**37.5**	**40**	**40**	**40**	**40**	**40**	**40**	**39**	**30**	**40**	**39.5**	**40**	**38.5**	**40**
Prescriptive Authority																	
Any Authority to Write Prescriptions	**20**	**20**	20	20	20		20	20	20	20	20	20	20	20	20	20	20
Limited Authority to Order Medications in Inpatient settings	**0-10**	**10**	10	10		0	10	10	10	10		10	10	10	10	10	10
Absence of Specific Restrictions	**0-10**	**10**	9	9			4		2	7	9	8	8	10	9	8	9
Subtotals Prescriptive Authority		**40**	**39**	**39**	**20**	**0**	**34**	**30**	**32**	**37**	**29**	**38**	**38**	**40**	**39**	**38**	**39**
TOTAL		**100**	**99**	**96.5**	**75**	**60**	**94**	**90**	**92**	**97**	**88**	**88**	**97**	**99.5**	**94**	**95.5**	**97**

continued

Table C-2, continued
Professional Practice Index Scoring Criteria
Original Scoring System for PAs for 2000

Scoring Category	Score	Optimal Score	NJ	NM	NY	NC	ND	OH	OK	OR	PA	RI	SC	SD	TN	TX	UT
Legal Status																	
License or Title Recognition	5	5	5	5	5	5	5	5	5	5	5	5		5	5	5	5
Scope of Practice Regulations	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Practice Under Physicians Indirect Supervision	0-10	10	7	10	10	10	10	10	10	10	10	10	10	9	10	10	10
Subtotals Legal		**20**	**17**	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**15**	**19**	**20**	**20**	**20**
Reimbursement																	
Mandate Payment	30	30		30	30	30	30	30	30	30	30	30	30	30	30	30	30
Payment for Services Under Indirect Supervision (if less than physician then %x10)	10	10		10	10	10	8		8	10	10	10	10	8	10	10	10
Subtotals Reimbursement		**40**	**0**	**40**	**40**	**40**	**38**	**30**	**38**	**40**	**40**	**40**	**40**	**38**	**40**	**40**	**40**
Prescriptive Authority																	
Any Authority to Write Prescriptions	20	20	20	20	20	20	20		20	20	20	20	20	20	20	20	20
Limited Authority to Order Medications in Inpatient settings	0-10	10	5	10	10	10	0	5	10	10	0	10	0	10	10	10	10
Absence of Specific Restrictions	0-10	10		8	9	4	10		8	9	6	7	5	10	9	3	8
Subtotals Prescriptive Authority		**40**	**25**	**38**	**39**	**34**	**30**	**5**	**38**	**39**	**26**	**37**	**25**	**40**	**39**	**33**	**38**
TOTAL		**100**	**42**	**98**	**99**	**94**	**88**	**55**	**96**	**99**	**86**	**97**	**80**	**97**	**99**	**93**	**98**

continued

Table C-2, continued
Professional Practice Index Scoring Criteria
Original Scoring System for PAs for 2000

Scoring Category	Score	Optimal Score	VT	VA	WA	WV	WI	WY
Legal Status								
License or Title Recognition	**5**	**5**	5	5	5	5	5	5
Scope of Practice Regulations	**5**	**5**	5	5	5	5	5	5
Practice Under Physicians Indirect Supervision	**0-10**	**10**	10	2	10	10	10	10
Subtotals Legal		**20**	**20**	**12**	**20**	**20**	**20**	**20**
Reimbursement								
Mandate Payment	**30**	**30**	30	30	30	30	30	30
Payment for Services Under Indirect Supervision (if less than physician then %x10)	**10**	**10**	9		10	10	10	10
Subtotals Reimbursement		**40**	**39**	**30**	**40**	**40**	**40**	**40**
Prescriptive Authority								
Any Authority to Write Prescriptions	**20**	**20**	20	20	20	20	20	20
Limited Authority to Order Medications in Inpatient settings	**0-10**	**10**	10	5	10	10	10	10
Absence of Specific Restrictions	**0-10**	**10**	6		10	9	5	7
Subtotals Prescriptive Authority		**40**	**36**	**25**	**40**	**39**	**35**	**37**
TOTAL		**100**	**95**	**67**	**100**	**99**	**95**	**97**

CNMs

The scores on the Sekscenski CNM professional practice index indicate a trend toward greater autonomy in State practice environments for CNMs across the fifty States and the District of Columbia between 1992 and 2000. The scores indicate the trend towards greater professionalization, socialization, and standardization of the CNM profession over the last decade. These trends are discussed more fully at the end of this chapter.

Legal Status (Maximum = 20)

License or Tile Recognition = 10.

Regulation by Board of Nursing Alone = 10. [These points were allocated only if the Board of Nursing had sole regulatory authority. If another agency or board had any influence on some aspect of professional practice, such as prescriptive privilege, no points were awarded.]

Reimbursement (Maximum = 40)

Mandated Payment = 20. [This was interpreted to mean that reimbursement is required by Medicare, Medicaid, Workers Compensation, or third party payers.]

Services Covered = 0 – 20. [This was a subjective award with 20 points given to very favorable payment environments, 10 points awarded for somewhat favorable environments, and fewer points given as determined by the reimbursement environment in a particular State. Incorporated in this category was Medicaid percentage payment times ten (as found in the CNM scale).]

Prescriptive Authority (Maximum = 40)

Full Authority = 40. [This was defined as prescriptive authority for Schedule II-V controlled substances and legend drugs. Schedule III-V and legend drugs was valued at 30 points. Schedule IV-V and legend drugs was valued at 20 points, while legend drugs only was awarded 10 points.]

The detailed point allocations for CNMs for the 50 States are presented below.

Table C-3
Professional Practice Index Scoring Criteria
Original Scoring System for CNMs for 2000

Scoring Category	Score	Optimal Score	AL	AK	AZ	AR	CA	CO	CT	DE	DC	FL	GA	HI	ID	IL	IN
Legal Status																	
License or Title Recognition	**10**	**10**	10		10	10	10	10	10	10	10	10	10	10	10	10	10
Regulation by Board of Nursing Alone	**10**	**10**		10	10	10	10	10		10	10		10	10	10	10	10
Subtotals Legal		**20**	**10**	**10**	**20**	**20**	**20**	**20**	**10**	**20**	**20**	**10**	**20**	**20**	**20**	**20**	**20**
Reimbursement																	
Mandate Payment	**20**	**20**		20	20	20	20	20	20	20		20	20	20	20	20	20
Services Covered	**0-20**	**20**	20	20	16	8	20	20	20	20	20	18	9	17	20	1	18
Subtotals Reimbursement		**40**	**20**	**40**	**36**	**28**	**40**	**40**	**40**	**40**	**20**	**38**	**29**	**37**	**40**	**21**	**38**
Prescriptive Authority																	
Full Authority	**40**	**40**		40	40			40	40	40	40				40		40
						30										30	
Limited or Restricted Authority	**20**																
							10					10	10	10			
No Authority	**0**		10														
Subtotals Prescriptive Authority		**40**	**10**	**40**	**40**	**30**	**10**	**40**	**40**	**40**	**40**	**10**	**10**	**10**	**40**	**30**	**40**
TOTAL		**100**	**40**	**90**	**96**	**78**	**70**	**100**	**90**	**100**	**80**	**58**	**59**	**67**	**100**	**71**	**98**

continued

Table C-3, continued
Professional Practice Index Scoring Criteria
Original Scoring System for CNMs for 2000

Scoring Category	Score	Optimal Score	IA	KS	KY	LA	ME	MD	MA	MI	MN	MS	MO	MT	NE	NV	NH
Legal Status																	
License or Title Recognition	**10**	**10**	10		10	10	10	10	10	10	10	10	10	10	10	10	10
Regulation by Board of Nursing Alone	**10**	**10**	10	10	10	10				10	10			10			10
Subtotals Legal		**20**	**20**	**10**	**20**	**20**	**10**	**10**	**10**	**20**	**20**	**10**	**10**	**20**	**10**	**10**	**20**
Reimbursement																	
Mandate Payment	**20**	**20**	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Services Covered	**0-20**	**20**	17	18	18	20	20	20	20	20	20	19	20	18	10	19	20
Subtotals Reimbursement		**40**	**37**	**38**	**38**	**40**	**40**	**40**	**40**	**40**	**40**	**39**	**40**	**38**	**30**	**39**	**40**
Prescriptive Authority																	
Full Authority	**40**	**40**	40				40	40	40		40			40			
				35													35
Limited or Restricted Authority	**20**																
					10	10				10		10	10		10	10	
No Authority	**0**																
Subtotals Prescriptive Authority		**40**	**40**	**35**	**10**	**10**	**40**	**40**	**40**	**10**	**40**	**10**	**10**	**40**	**10**	**10**	**35**
TOTAL		**100**	**97**	**83**	**68**	**70**	**90**	**90**	**90**	**70**	**100**	**59**	**60**	**98**	**50**	**59**	**95**

continued

Table C-3, continued
Professional Practice Index Scoring Criteria
Original Scoring System for CNMs for 2000

Scoring Category	Score	Optimal Score	NJ	NM	NY	NC	ND	OH	OK	OR	PA	RI	SC	SD	TN	TX	UT
Legal Status																	
License or Title Recognition	**10**	**10**		10	10	10	10	10	10	10	10	10	10	10		10	10
Regulation by Board of Nursing Alone	**10**	**10**			0	0	10	10		10						10	
Subtotals Legal		**20**		**10**	**10**	**10**	**20**	**20**	**10**	**20**	**10**	**10**	**10**	**10**		**20**	**10**
Reimbursement																	
Mandate Payment	**20**	**20**	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Services Covered	**0-20**	**20**	17	20	20	20	17	20		20	20	20	9	19	19	17	18
Subtotals Reimbursement		**20**	**37**	**40**	**40**	**40**	**37**	**40**	**20**	**40**	**40**	**40**	**29**	**39**	**39**	**37**	**38**
Prescriptive Authority																	
Full Authority	**40**	**40**		40	40	40	40					40		40			40
								30	30	30							
Limited or Restricted Authority	**20**												20		20		
			10													10	
No Authority	**0**										0						
Subtotals Prescriptive Authority		**40**	**10**	**40**	**40**	**40**	**40**	**30**	**30**	**30**	**0**	**40**	**20**	**40**	**20**	**10**	**40**
TOTAL		**100**	**47**	**90**	**90**	**90**	**97**	**90**	**60**	**90**	**50**	**90**	**59**	**89**	**59**	**67**	**88**

continued

Table C-3, continued
Professional Practice Index Scoring Criteria
Original Scoring System for CNMs for 2000

Scoring Category	Score	Optimal Score	VT	VA	WA	WV	WI	WY
Legal Status								
License or Title Recognition	**10**	**10**	10	10	10	10	10	10
Regulation by Board of Nursing Alone	**10**	**10**	10		10	10	10	10
Subtotals Legal		**20**	**20**	**10**	**20**	**20**	**20**	**20**
Reimbursement								
Mandate Payment	**20**	**20**	20	20	20	20		20
Services Covered	**0-20**	**20**		17	20	20	18	20
Subtotals Reimbursement		**40**	**20**	**37**	**40**	**40**	**18**	**40**
Prescriptive Authority								
Full Authority	**40**	**40**	40		40		40	
						30		30
Limited or Restricted Authority	**20**			20				
No Authority	**0**							
Subtotals Prescriptive Authority		**40**	**40**	**20**	**40**	**30**	**40**	**30**
TOTAL		**100**	**80**	**67**	**100**	**90**	**78**	**90**

Appendix D. Professional Practice Index Calculations for PAs

This appendix contains a table that documents the detailed calculations used to compute the new professional practice index for PAs for each of the 50 States plus the District of Columbia. The criteria used in the new index include:

Legal Authority (Maximum = 35)

> **Title protection** prevents those not qualified or certified by the State from practicing as a professional. Title protection provides safeguards to the public and to the professional.
>
> **Licensure** implies approval of credentials and granting of professional status. Licensing of PAs occurs in many States, but certification and registration is used in other States. States vary on the qualifications for licensure which may include the passing of a national certification examination and in some States, an employment agreement with a physician.
>
> Although having a supervising physician is fundamental to PA practice, the professional association for PAs suggests that **employment agreements** should be independent of licensure. PAs should not be required to have an employment contract to remain licensed [PAs 8th edition, p. v].
>
> **Professional Practice** should be "dependent on what the supervising Physician wishes to delegate" [PAs 8th edition, p. xi] and not be finely detailed in law.
>
> **Supervision** should be the least restrictive mode that permits appropriately supervised practice. "Continuous" [PAs, 8th edition, p. xvi] supervision which may be indirect, but which permits contact with the supervising physician as needed is most desirable.

Regulation by a PA Committee of the Board of Medicine is the optimal regulatory mechanism. Input by PAs is important to the profession.

Fees for supervisory agreements can create disincentives for association with a professional. High costs may limit the number of agreements between a physician and PAs.

The conditions and timing of **review of records**, although an implicit part of practice between a physician and a PA, is best determined by the agreement between the two professionals rather than by specific delineation in legislation.

Limiting the number of PAs with whom a physician may associate through **legislated ratios** may be unduly restrictive. Leaving that number to the discretion of the physician and PAs suggests confidence in the abilities of both professions to adequately provide care within the skill and competencies of each and "according to the tenets of good patient care, adequate supervision, and legal responsibility." [PAs, 8th edition, p. vi]

Locum Tenens means "the temporary provision of services by a substitute provider." [PAs, 8th edition, p xx]. Allowance for substitution in law provides legal means for a physician or a PA to continue to practice in the temporary absence or inaccessibility of the other.

Temporary License permits a PA to practice prior to taking the certification examination.

Supervising Physician Liability in law reinforces the legal relationship that exists between a physician and PA.

The ability to **act independently in a declared emergency** allows a PA to respond appropriately to emergency needs in a disaster. It provides legal protection for services provided by the PA in those circumstances.

Reimbursement (Maximum = 25)

Any **mandated payment** reflects the evolution of payment over the decade. Payment to PAs was changed after passage of the Balanced Budget Act in 1997 which extended payment for services rendered by PAs to all locations where they are employed.

Medicaid payment percentage varies by State and this category reflects that fluctuation.

Any language that permits reimbursement to "any qualified provider" is intended to describe the legal obligation to pay for services supplied by a PA. PAs are generally in employment situations in which the physician or the facility is billing for and receiving reimbursement for health services. Legislation that protects the right to payment is enabling to care.

Prescriptive Authority (Maximum = 40)

Prescriptive authority as delegated to PAs "can improve patient access to comprehensive care and provide for increased efficiency and cost effectiveness." [PAs, 8th edition, p. vii]. It may be **defined in law or by the supervisory agreement**. The more extensive privilege allows the PA more latitude in patient care. DEA numbers are

required when prescribing scheduled drugs. Points are allotted for a DEA number to emphasize the importance of the prescriptive privilege.

Accepting and distributing samples, having the **PA name on the prescription pad** and **signing prescriptions** are indicative of latitude in practice provided to the PA in law.

The actual point allocations for PAs for the 50 States are presented below.

Table D-1
Professional Practice Index Scoring Criteria For Physician Assistants in 2000
New Index for AL, AK, AZ, AR, CA, and CO

Scoring Category	Points	Optimal Score	fn	State											
				AL		AK		AZ		AR		CA		CO	
Legal authority															
Title protection	3	3	*a*	3		3		3		3		3			
How Licensed			*b*												
Licensure language only	5	5				5	*b*	5				5			
Licensure w/Registration (i.e. reg. w/employment papers)	3			3						3					
Certification or Registration language only	1													1	
Agreement			*c*												
No notification required, agreement exists btw phys & PA	3	3													
Notification only of employment/agreement btw phys & PA	2														
Written agreement available	2														
File practice agreement w/board	1													1	
File for approval of board	0			0		0	*c*	0		0		0			
Definition of Scope			*d*												
Scope defined by supervising physician & PA	5	5				5								5	
Scope loosely defined in law (may include but not limited to…)	3			3				3		3		3			
Scope clearly delineated in law (list of permissible tasks)	1														
National certification required for initial licensing	1	1	*e*	1		1		1				1		1	
Supervision:			*f*												
Indirect-physical presence not required	5	5		5		5		5		5		5		5	*f*
Limited Indirect (limit on distance, time, travel, etc)	3														
Direct-physical presence required (on site)	0														
Regulated by:			*g*												
PA Board or committee appt by ext agency resp to med bd	5	5						5				5			
Medical Board with PA representation	5														
PA Committee appt by medical board	5			5											
Medical Board with no PA representation	0					0				0	*g*			0	
No fees for supervisory agreements	1	1	*h*											1	
Review of Records by Physician:			*i*												
≥ 7 days/not described/determined by phys-PA team	1	1		1	*i*	1		1	*i*	1					
< 7 days	0												*i*	0	*i*
Ratios > 2 in outpatient settings, or not legislated	2	2	*j*	2		2					*j*				*j*
Locum Tenens			*k*												
Legislated	1	1				1									
When no practice agreement, locum tenens inherent	1														
Temporary License	1	1	*l*	1		1				1		1			
Supervising physician liability	1	1	*m*	1		1		1		1		1		1	
Disaster relief legislation	1	1	*n*					1		1		1			
Subtotals Legal		**35**		**25**		**25**		**25**		**18**		**25**		**15**	

Scoring Category	Points	Optimal Score	fn	AL		AK		AZ		AR		CA		CO	
Reimbursement			*o*												
Any mandated payment- Medicare, Champus, et al.	10	10		10		10		10		10		10		10	
Medicaid % x 10	10	10		10		8.5		10		10		10		10	
Any legislated mandate for coverage of PA services	5	5		5		0		0		0		0		0	
Subtotals Reimbursement		**25**		**25**		**18.5**		**20**		**20**		**20**		**20**	

continued

Table D-1, continued
Scope of Practice Index Scoring Criteria For Physician Assistants in 2000
New Index for AL, AK, AZ, AR, CA, and CO, continued

Scoring Category	Points	Optimal Score	fn	State AL		AK		AZ		AR		CA		CO	
Prescriptive Authority															
How defined			p												
Defined by Supervisory Agreement	30	30				30	p	30				30	p	30	
Defined in Law--allows controlled substances--II-V	30														
III-V	25									25	p				
IV-V	20														
V only	15														
no controlled	10			10											
Defined in Law--formulary, no controlled substances	0														
No Rx Authority	0														
Sign for samples	1	1	q									1		1	
Dispense/distribute samples--implies prepackaged w/ inst	1	1	r					1				1		1	
PA's name on pad	1	1	s	1		1		1		1		1		1	
PA's signature only	2	2	t			2					t			2	
Own DEA number	5	5	u			5		5		5		5		5	
Subtotals Rx Authority		**40**		**11**		**38**		**37**		**31**		**38**		**40**	
TOTAL		**100**		**61**		**81.5**		**82**		**69**		**83**		**75**	

FOOT NOTES

Alabama h) Physician must review PA prescribing practices weekly by a review of 10% of patient charts

Alaska b) Lose authority to practice if lose collaborative agreement
c) Board approves "method for periodic assessment" and plan for delegation of prescriptive authority
p) Schedule II allowed with approval of physician

Arizona l) PA must meet with physician once a week but review of records is not defined

Arkansas g) Board "may" appoint an Advisory Committee
j) No more than 2 PA's at onetime
p) Statute says pharmacists authorized to fill scripts from PA's but rules say physician must sign all scripts . 1999 statutory change not yet reflected in rules

California l) Countersignature and dating of 10% of medical records within 30 days but review of records of patients receiving prescription within 7 days
p) Practice specific formulary and protocols that list specific criteria for prescribing. Controlled substance prescriptive authority is patient specific

Colorado l) In statute, review of records every 2 days in HPSA. In regulations, chart notes of PA's reviewed and signed by physician within 7 days
j) No more than 2 "specific individual" PA's
f) PA practices "under personal and responsible direction and supervision of licensed physician"

REFERENCES
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Alabama State of Alabama Medicaid, http://www.medicaid.state.al.us
Alabama Society of Physician Assistants, http://www.alabamapasociety.org
Alaska Alaska Academy of Physician Assistants, http://www.akapa.org
Arizona The Arizona State Association of Physician Assistants, http://www.asapa.org
Arkansas Arkansas General Assembly, http://www.arkleg.state.ar.us
Arkansas Academy of Physician Assistants, http://www.aapa.org/states/arapa
California Physician Assistant Committee, Medical Board of California, http://www.physicianassistant.ca.gov
Colorado Colorado State Board of Medical Examiners, http://www.dora.state.co.us
Colorado Academy of Physician Assistants, http://www.corloradopas.org

Table D-1, continued
Professional Practice Index Scoring Criteria For Physician Assistants in 2000
New Index for CT, DE, DC, FL, GA, and HI

Scoring Category	Points	Optimal Score	fn	State: CT		DE		DC		FL		GA		HI	
Legal authority															
Title protection	3	3	*a*	3				3		3		3			
How Licensed			*b*												
Licensure language only	5	5		5		5		5		5		5			
Licensure w/Registration (i.e. reg. w/employment papers)	3													3	
Certification or Registration language only	1														
Agreement			*c*												
No notification required, agreement exists btw phys & PA	3	3				3								3	
Notification only of employment/agreement btw phys & PA	2									2					
Written agreement available	2														
File practice agreement w/board	1							1							
File for approval of board	0			0								0			
Definition of Scope			*d*												
Scope defined by supervising physician & PA	5	5		5								5	d		
Scope loosely defined in law (may include but not limited to…)	3					3		3		3				3	
Scope clearly delineated in law (list of permissible tasks)	1														
National certification required for initial licensing	1	1	*e*	1		1		1		1				1	
Supervision:			*f*												
Indirect-physical presence not required	5	5		5										5	
Limited Indirect (limit on distance, time, travel, etc)	3					3	f	3	f	3	f	3	f		
Direct-physical presence required (on site)	0														
Regulated by:			*g*												
PA Board or committee appt by ext agency resp to med bd	5	5						5							
Medical Board with PA representation	5			5											
PA Committee appt by medical board	5					5				5		5		5	
Medical Board with no PA representation	0														
No fees for supervisory agreements	1	1	*h*			1		1		1		1		1	h
Review of Records by Physician:			*l*												
≥ 7 days/not described/determined by phys-PA team	1	1		1	l	1	l								
< 7 days	0							0	l	0	l	0	l	0	l
Ratios > 2 in outpatient settings, or not legislated	2	2	*j*	2						2	j		j		j
Locum Tenens			*k*				k		k						
Legislated	1	1													
When no practice agreement, locum tenens inherent	1														
Temporary License	1	1	*l*	1		1				1		1		1	
Supervising physician liability	1	1	*m*	1		1		1		1		1		1	
Disaster relief legislation	1	1	*n*									1			
Subtotals Legal		**35**		**29**		**24**		**23**		**27**		**25**		**23**	
Reimbursement			*o*												
Any mandated payment- Medicare, Champus, et al.	10	10		10		10		10		10		10		10	
Medicaid % x 10	10	10		10		10		0		8		9		10	
Any legislated mandate for coverage of PA services	5	5		5		0		0		5	o	0		0	
Subtotals Reimbursement		**25**		**25**		**20**		**10**		**23**		**19**		**20**	

continued

Table D-1, continued
Professional Practice Index Scoring Criteria For Physician Assistants in 2000
New Index for CT, DE, DC, FL, GA, and HI, continued

Scoring Category	Points	Optimal Score	fn	State CT		DE		DC		FL		GA		HI	
Prescriptive Authority															
How defined			*p*												
Defined by Supervisory Agreement	30	30				30									
Defined in Law--allows controlled substances--II-V	30														
III-V	25											25	p	25	p
IV-V	20			20	p										
V only	15														
no controlled	10							10		10					
Defined in Law--formulary, no controlled substances	0														
No Rx Authority	0														
Sign for samples	1	1	*q*											1	q
Dispense/distribute samples--implies prepackaged w/ inst	1	1	*r*	1				1		1		1		1	r
PA's name on pad	1	1	*s*	1		1		1						1	
PA's signature only	2	2	*t*	2		2						2		2	
Own DEA number	5	5	*u*	5		5						5		5	
Subtotals Rx Authority		**40**		**29**		**38**		**12**		**11**		**33**		**35**	
TOTAL		**75**		**83**		**82**		**45**		**61**		**77**		**78**	

FOOT NOTES

Connecticut l) Regular review of records
p)Schedule II, III inpatients only, co-signature by physician within 24 hours
Delaware f) Not more than 30 minutes distant
l) In regulation every 3 months (not merely up to physician and physician assistant team)
k) Maximum number of PA's is 2
DC f) Present within a 15 mile radius of District
l) Countersign all medical orders and progress notes within 48 hours
k) No more than 2 PA's at one time
Florida f) Reasonable physical proximity
l) Review and sign records within 7 days
j) No more than 4 at anyone time
o) Insurance must provide payment for PA first assist if coverage would have been provided to physician first assist
Georgia d) But board must approve scope job description
f) Physician readily available for personal supervision
l) Physician to sign medical record entry for script within 7 days, review patient records daily in remote site
j) No more than 2 PA's at any onetime
p) Schedule II in emergency only
Hawaii h) No agreement
l) Review of charts within 7 days
j) No more than 2 at one time
p) Administer, Prescribe, Dispense Schedule II inpatient only
q,r) May request, receive or sign for professional samples, not controlled substances

REFERENCES
Main Resources

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Washburn Law School, www.washlaw.edu
Connecticut Connecticut Academy of Physician Assistants, http://www.connapa.org
Delaware Delaware Academy of Physician Assistants, http://www.delawarepas.org
DC District of Columbia Code, dccode.westgroup.com
Office of Documents and Administrative Issuances, os.doc.gov/info

continued

Table D-1, continued
Professional Practice Index Scoring Criteria For Physician Assistants in 2000
New Index for CT, DE, DC, FL, GA, and HI, continued

Florida	Nova Southeastern University, http://www.nova.edu/pa
	Florida Academy of Physician Assistants, http://www.fapaonline.org
Georgia	Georgia Association of Physician Assistants, http://www.gapaonline.org
Hawaii	State of Hawaii, Office of the Auditor, http://www.state.hi.us/auditor
	Hawaii Academy of Physician Assistants, http://www.aapa.org/states/hapa.htm.

Table D-1, continued
Professional Practice Index Scoring Criteria For Physician Assistants in 2000
New Index for ID, IL, IN, IA, KS, and KY

Scoring Category	Points	Optimal Score	fn	State											
				ID		IL		IN		IA		KS		KY	
Legal authority															
Title protection	3	3	*a*			3		3		3		3			*a*
How Licensed			*b*												
Licensure language only	5	5		5		5									
Licensure w/Registration (i.e. reg. w/employment papers)	3									3	*b*				
Certification or Registration language only	1							1	*b*			1	*b*	1	*b*
Agreement			*c*												
No notification required, agreement exists btw phys & PA	3	3								3					
Notification only of employment/agreement btw phys & PA	2													2	*c*
Written agreement available	2			2											
File practice agreement w/board	1					1	*c*					1			
File for approval of board	0							0							
Definition of Scope			*d*												
Scope defined by supervising physician & PA	5	5				5		5				5		5	
Scope loosely defined in law (may include but not limited to…)	3			3						3					
Scope clearly delineated in law (list of permissible tasks)	1														
National certification required for initial licensing	1	1	*e*	1	*e*	1		1		1		1		1	
Supervision:			*f*												
Indirect-physical presence not required	5	5		5		5	*f*			5	*f*	5	*f*	5	*f*
Limited Indirect (limit on distance, time, travel, etc)	3							3	*f*						
Direct-physical presence required (on site)	0														
Regulated by:			*g*												
PA Board or committee appt by ext agency resp to med bd	5	5				5	*g*	5	*g*	5	*g*	5	*g*		
Medical Board with PA representation	5														
PA Committee appt by medical board	5													5	*g*
Medical Board with no PA representation	0			0											
No fees for supervisory agreements	1	1	*h*	1	*h*	1	*h*		*h*	1		1			*h*
Review of Records by Physician:			*l*												
≥ 7 days/not described/determined by phys-PA team	1	1		1	*i*	1	*l*					0	*l*	1	*l*
< 7 days	0							0	*l*	0	*l*				
Ratios > 2 in outpatient settings, or not legislated	2	2	*j*		*j*		*j*		*j*		*j*		*j*		*j*
Locum Tenens			*k*												
Legislated	1	1								1					
When no practice agreement, locum tenens inherent	1														
Temporary License	1	1	*l*	1		1		1						1	
Supervising physician liability	1	1	*m*	1		1		1		1		1		1	
Disaster relief legislation	1	1	*n*							1		1			
Subtotals Legal		**35**		**20**		**29**		**20**		**27**		**24**		**22**	

Scoring Category	Points	Optimal Score	fn	ID		IL		IN		IA		KS		KY	
Reimbursement			*o*												
Any mandated payment- Medicare, Champus, et al.	10	10		10		10		10		10		10		10	
Medicaid % x 10	10	10		8.5		10		10		10		7.5		10	
Any legislated mandate for coverage of PA services	5	5				5	*o*			5	*o*				*o*
Subtotals Reimbursement		**25**		**18.5**		**25**		**20**		**25**		**17.5**		**20**	

continued

Table D-1, continued
Professional Practice Index Scoring Criteria For Physician Assistants in 2000
New Index for ID, IL, IN, IA, KS, and KY, continued

Scoring Category	Points	Optimal Score	fn	State											
				ID		IL		IN		IA		KS		KY	
Prescriptive Authority															
How defined															
Defined by Supervisory Agreement	30	30													
Defined in Law--allows controlled substances--II-V	30														
III-V	25			25	*p*	25	*p*			25	*p*	25	*p*		
IV-V	20														
V only	15														
no controlled	10							10	*p*					10	
Defined in Law--formulary, no controlled substances	0		*q*												
No Rx Authority	0		*r*												
Sign for samples	1	1	*s*							1		1	*q*	1	*q*
Dispense/distribute samples--implies prepackaged w/ inst	1	1	*t*	1						1		1		1	
PA's name on pad	1	1	*u*	1						1					
PA's signature only	2	2		2		2				2		2			
Own DEA number	5	5		5		5				5		5			
Subtotals Rx Authority		**40**		**34**		**32**		**10**		**35**		**34**		**12**	
TOTAL		**100**		**72.5**		**86**		**50**		**87**		**75.5**		**54**	

FOOT NOTES

Idaho
e) National certification and baccalaureate degree required
h) Agreement not filed with the board
I) Periodic review of representative sample
j) No more than 2
p) Prescribe only

Illinois
c) Required to file notice of delegation of prescriptive authority and notice of supervisory control
f) Physician within reasonable distance
g) PA Advisory Committee - 7 members
h) No agreement filed
I) Review on a timely basis
j) No more than 2
o) PA not allowed to bill patients for services but employer can bill. Payment must be made if services rendered would have been paid if rendered by a physician
p) Prescribe, Dispense and Administer if delegated by supervising physician

Indiana
b) Certificate
f) Physically present or immediately available
g) 5 member PA committee appointed by governor
h) $ 20 fee for changing physician
I) Within 24 hours
j) No more than 2 in statute, 1 in regulations
p) Use or dispense drugsif approved by supervising physician

Iowa
b) Licensure and registration
f) PA may function in remote medical clinic if approved by board
g) 7 member PA committee appointed by governor
I) Charts signed at least once per week in remote clinic
j) No more than 2 at one time
o) 3rd party payer to pay for PA care if same care provided by MD would be paid
p) Schedule II depressants and stimulants excluded

Kansas
b) Registered
f) PA may work at a different practice location under certain conditions
g) PA council, 5 members appointed by governor
I) Review and sign patient records biweekly
j) No more than 2
p) Schedule II in emergency situation only
q) Request, receive, sign for and distribute samples

continued

Table D-1, continued
Professional Practice Index Scoring Criteria For Physician Assistants in 2000
New Index for ID, IL, IN, IA, KS, and KY, continued

Kentucky a) No protection
b) Certification
c) Physician applies for approval to supervise PA
f) May practice in separate clinic or office with board approval
g) member of PA Advisory Committee
h) $ 100 fee
I) Sign all records in timely manner
j) No more than 2 at any time
o) Prohibited from directly billing any patient or payer
q) Request, receive, sign for, and distribute samples

REFERENCES

Main Resources

American Academy of Physician Assistants, *Physician Assistants, State Laws and Regulations, Sixth Edition,* Alexandria, Virginia 1992.
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Iowa Iowa Physician Assistant Society, http://showcase.netins.net/web/ipas
Kansas Kansas Academy of Physician Assistants, http://www.kansaspa.com
Kentucky Kentucky Academy of Physician Assistants, http://www.kyapa.org

Table D-1, continued
Professional Practice Index Scoring Criteria For Physician Assistants in 2000
New Index for LA, ME, MD, MA, MI, and MN

Scoring Category	Points	Optimal Score	fn	State											
				LA		ME		MD		MA		MI		MN	
Legal authority															
Title protection	3	3	*a*	3		3		3		3		3		3	
How Licensed			*b*												
Licensure language only	5	5		5								5			
Licensure w/Registration (i.e. reg. w/employment papers)	3					3	b								
Certification or Registration language only	1							1		1	b			1	b
Agreement			*c*												
No notification required, agreement exists btw phys & PA	3	3								3	c				
Notification only of employment/agreement btw phys & PA	2			2		2	c								
Written agreement available	2											2	c	2	c
File practice agreement w/board	1														
File for approval of board	0							0	c						
Definition of Scope			*d*												
Scope defined by supervising physician & PA	5	5				5						5	d		
Scope loosely defined in law (may include but not limited to…)	3			3	d					3				3	
Scope clearly delineated in law (list of permissible tasks)	1							1							
National certification required for initial licensing	1	1	*e*	1		1		1		1		1		1	
Supervision:			*f*												
Indirect-physical presence not required	5	5		5		5		5		5		5		5	f
Limited Indirect (limit on distance, time, travel, etc)	3														
Direct-physical presence required (on site)	0														
Regulated by:			*g*												
PA Board or committee appt by ext agency resp to med bd	5	5		5				5		5		5	g		
Medical Board with PA representation	5														
PA Committee appt by medical board	5					5								5	g
Medical Board with no PA representation	0														
No fees for supervisory agreements	1	1	*h*		h		h		h	1		1		1	
Review of Records by Physician:			*l*												
≥ 7 days/not described/determined by phys-PA team	1	1				1						1	l		
< 7 days	0			0	l			0	l	0	l			0	l
Ratios > 2 in outpatient settings, or not legislated	2	2	*j*		j	2	j		j		j		j		j
Locum Tenens			*k*												
Legislated	1	1		1	k				k					1	
When no practice agreement, locum tenens inherent	1														
Temporary License	1	1	*l*	1		1		1		1		1		1	
Supervising physician liability	1	1	*m*	1		1		1		1		1		1	
Disaster relief legislation	1	1	*n*	1	n					1		1		1	n
Subtotals Legal		**35**		**28**		**29**		**18**		**25**		**31**		**25**	

Scoring Category	Points	Optimal Score	fn	LA		ME		MD		MA		MI		MN	
Reimbursement			*o*												
Any mandated payment- Medicare, Champus, et al.	10	10		10		10		10		10		10		10	
Medicaid % x 10	10	10		10		10		10		10		10		9	
Any legislated mandate for coverage of PA services	5	5		5	o						o	5	o		
Subtotals Reimbursement		**25**		**25**		**20**		**20**		**20**		**25**		**19**	

continued

Table D-1, continued
Professional Practice Index Scoring Criteria For Physician Assistants in 2000
New Index for LA, ME, MD, MA, MI, and MN, continued

Scoring Category	Points	Optimal Score	fn	State											
				LA		ME		MD		MA		MI		MN	
Prescriptive Authority															
How defined			p												
Defined by Supervisory Agreement	30	30						30	p	30				30	
Defined in Law--allows controlled substances--II-V	30														
III-V	25					25						25	p		
IV-V	20														
V only	15														
no controlled	10														
Defined in Law--formulary, no controlled substances	0														
No Rx Authority	0			0	p										
Sign for samples	1	1	*q*												
Dispense/distribute samples--implies prepackaged w/ inst	1	1	*r*	1		1									
PA's name on pad	1	1	*s*			1		1				1			
PA's signature only	2	2	*t*			2		2		2		2		2	
Own DEA number	5	5	*u*			5		5		5		5		5	
Subtotals Rx Authority		**40**		**1**		**34**		**38**		**37**		**33**		**37**	
TOTAL		**100**		**54**		**83**		**76**		**82**		**89**		**81**	

FOOT NOTES

Louisiana
d) Legislation states list is "intended to be illustrative not limiting"
h) $ 75 fee
I) Inpatient records 24 hours, Nursing Home 48 hrs, all others 72 hrs
j) Not more than 2
k) Physician may supervise up to 4 PA's on a locum tenens basis
n) Under supervision of physician who is present (not supervising physician)
o) "Nothing shall prohibit" charges from being submitted to any government or private payer for services rendered by PA
p) May orally transmit physician prescription, may administer, may transmit physician order into medical record

Maine
b) Certificate of registration and license
c) Physician notifies board
h) $ 100 Fee
j) No limitation

Maryland
b) Delegation agreement
h) $ 200 Fee
I) Certificate of registration and license
j) No more than 2 in a hospital setting
p) PA may not dispense

Massachuset
b) Registration
c) Written guidelines
i) Prescriptive orders for Schedule II must be reviewed within 96 hours. Physician reviews diagnosis and treatment information in a timely manner
j) No more than 2
o) PA's may not bill separately for services rendered -services are considered those of supervising physician

Michigan
c) Written authorization for prescriptive authority maintained in each practice location
d) Separate statute and rules for osteopathic PA's
g) Joint Task Force for PA's and Osteopathic PA's - 9 members, PA member of Medical Board as well
I) Regular review of records
j) No more than 2 at one practice site
o) 3rd party payer may not deny payment for services by PA, under special conditions of practice
p) Schedule II only in facility where PA and supervising physician practice and only for patient being discharged

continued

Table D-1, continued
Professional Practice Index Scoring Criteria For Physician Assistants in 2000
New Index for LA, ME, MD, MA, MI, and MN, continued

Minnesota b) Registered
c) Physician PA agreement details practice arrangement and delegated prescriptive authority
f) PA may provide services in geographically remote location
g) PA Advisory Council (7 members) to Board
I) Daily reviews of prescriptions
j) Not more than 2 simultaneously
n) May provide care during an emergency under direction of Emergency Medical Director

REFERENCES

Main Resources

American Academy of Physician Assistants, *Physician Assistants, State Laws and Regulations, Sixth Edition,* Alexandria, Virginia 1992.
American Academy of Physician Assistants, *Physician Assistants, State Laws and Regulations, Seventh Edition,* Alexandria, Virginia 1998.
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Washburn Law School, www.washlaw.edu

Louisiana Louisiana Board of Medical Examiners, http://www.lsbme.org
Louisiana State Legislature, http://www.legis.state.la.us

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Massachuset Massachusetts Association of Physician Assistants, http://www.mass-pa.com

Michigan The Michigan Academy of Physician Assistants, http://www.michiganpa.org

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Table D-1, continued
Professional Practice Index Scoring Criteria For Physician Assistants in 2000
New Index for MS, MO, MT, NE, NV, and NH

Scoring Category	Points	Optimal Score	fn	State MS		MO		MT		NE		NV		NH	
Legal authority															
Title protection	3	3	*a*	3		3		3		3		3		3	
How Licensed			*b*												
Licensure language only	5	5		5				5				5	*b*	5	
Licensure w/Registration (i.e. reg. w/employment papers)	3					3				3	*b*				
Certification or Registration language only	1														
Agreement			*c*												
No notification required, agreement exists btw phys & PA	3	3													
Notification only of employment/agreement btw phys & PA	2														
Written agreement available	2					2								2	
File practice agreement w/board	1														
File for approval of board	0			0	*c*			0		0		0			
Definition of Scope			*d*												
Scope defined by supervising physician & PA	5	5		5				5	*d*	5		5	*d*	5	*d*
Scope loosely defined in law (may include but not limited to…)	3					3									
Scope clearly delineated in law (list of permissible tasks)	1														
National certification required for initial licensing	1	1	*e*	1	*e*	1		1		1		1		1	
Supervision:			*f*												
Indirect-physical presence not required	5	5						5		5	*f*	5		5	
Limited Indirect (limit on distance, time, travel, etc)	3			3	*f*	3	*f*								
Direct-physical presence required (on site)	0														
Regulated by:			*g*												
PA Board or committee appt by ext agency rasp to med bd	5	5				5				5				5	
Medical Board with PA representation	5			5				5	*g*						
PA Committee appt by medical board	5											5		5	
Medical Board with no PA representation	0														
No fees for supervisory agreements	1	1	*h*	1	*h*	1			*h*			1			
Review of Records by Physician:			*i*												
≥ 7 days/not described/determined by phys-PA team	1	1		1	*i*	1	*i*	1	*i*			1	*i*	1	*i*
< 7 days	0									0					
Ratios > 2 in outpatient settings, or not legislated	2	2	*j*		*j*	2			*j*		*j*	2	*j*		*j*
Locum Tenens			*k*												
Legislated	1	1						1							
When no practice agreement, locum tenens inherent	1														
Temporary License	1	1	*l*	1		1		1		1		1		1	
Supervising physician liability	1	1	*m*	1		1		1		1		1		1	
Disaster relief legislation	1	1	*n*	1											
Subtotals Legal		**35**		**27**		**26**		**28**		**24**		**30**		**34**	

Scoring Category	Points	Optimal Score	fn	MS		MO		MT		NE		NV		NH	
Reimbursement			*o*												
Any mandated payment- Medicare, Champus, et al.	10	10		10		10		10		10		10		10	
Medicaid % x 10	10	10				10		9		10		8.5	*o*	10	
Any legislated mandate for coverage of PA services	5	5				0		5	*o*	0		0		0	
Subtotals Reimbursement		**25**		**10**		**20**		**24**		**20**		**18.5**		**20**	

continued

Table D-1, continued
Professional Practice Index Scoring Criteria For Physician Assistants in 2000
New Index for MS, MO, MT, NE, NV, and NH, continued

Scoring Category	Points	Optimal Score	fn	State MS		MO		MT		NE		NV		NH	
Prescriptive Authority															
How defined			*p*												
Defined by Supervisory Agreement	30	30						30	*p*	30	*p*			30	*p*
Defined in Law--allows controlled substances--II-V	30														
III-V	25														
IV-V	20														
V only	15														
no controlled	10			10	*p*	10						10	*p*		
Defined in Law--formulary, no controlled substances	0														
No Rx Authority	0														
Sign for samples	1	1	*q*	1		1									
Dispense/distribute samples--implies prepackaged w/ inst	1	1	*r*	1		1	*r*	1				1	*r*		
PA's name on pad	1	1	*s*			1		1	*s*						
PA's signature only	2	2	*t*			2		2							
Own DEA number	25	5	*u*					5		5		5	*u*	5	
Subtotals Rx Authority		**40**		**12**		**15**		**39**		**35**		**16**		**35**	
TOTAL		**100**		**49**		**61**		**91**		**79**		**64.5**		**89**	

FOOT NOTES

Mississippi c) Board approved protocol
e) A bachelor's degree is also required until 12/31/04 at which time a master's is required
f) Continuous but not requiring on-site presence - practice confined to same community as physician
h) Not defined
I) On at least a monthly basis, 10% of charts
j) No more than 2 at any one time, if supervising 2 NPs, no supervision of PA allowed
p) Administering, ordering, prescribing, dispensing as delegated(no controlled substances)

Missouri f) Limit on distance (no more than 30 miles by road, 50 miles in HPSA) also, doctor must be on-site 20% of time
I) Must jointly review records at least once every two weeks
r) 72 hr dose only on sample

Montana d) PA may not maintain or manage an office separate from supervising physician but can practice in remote site with physician visits every 30 days
g) PA is a non-voting liaison member of board, governor also appoints 1 PA to Medical Board
h) $ 50 fee for new plan
I) Not described
j) No more than one PA but board can make exceptions
o) 3rd party payers to consider services of PA's to be Medical Assistance
p) Prescribe, dispense, administer. Schedule II limited to 34 day supply
s) And on medical container

Nebraska b) Statute indicates licensed, regulations indicate certification
f) Must be together 20% of time
j) No more than 2 PA's
p) Schedule II limited to 72 hour supply

Nevada b) License valid only as long as a physician employs the PA
d) But board authorizes the supervision and the scope
I) Regular "review of records"
j) May not supervise more than 3 PA's
o) Reimbursement based on PA assigned relative value unit
p) May prescribe and dispense legend drugs, only dispense controlled substances
r,u) DEA # for dispensing only

New Hampsh d) Supervising physician develops a "specific written job description"
I) Records review determined by physician andPA
j) May not supervise more than 2 PA's
P) May prescribe, dispense and administer "to the extent delegated by physician"

continued

Table D-1, continued
Professional Practice Index Scoring Criteria For Physician Assistants in 2000
New Index for MS, MO, MT, NE, NV, and NH, continued

REFERENCES

Main Resources

American Academy of Physician Assistants, *Physician Assistants, State Laws and Regulations, Sixth Edition,* Alexandria, Virginia 1992.

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Nevada Administrative Code, www.leg.state.nv.us

New Hampshire

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Table D-1, continued
Professional Practice Index Scoring Criteria For Physician Assistants in 2000
New Index for NJ, NM, NY, NC, ND, and OH

Scoring Category	Points	Optimal Score	fn	State NJ		NM		NY		NC		ND		OH	
Legal authority															
Title protection	3	3	*a*	3		3		3		3		3		3	
How Licensed			*b*												
Licensure language only	5	5		5		5									
Licensure w/Registration (i.e. reg. w/employment papers)	3							3	b	3	b	3	b	3	b
Certification or Registration language only	1														
Agreement			*c*												
No notification required, agreement exists btw phys & PA	3	3						3							
Notification only of employment/agreement btw phys & PA	2			2						2					
Written agreement available	2					2	c								
File practice agreement w/board	1											1	c		
File for approval of board	0													0	c
Definition of Scope			*d*												
Scope defined by supervising physician & PA	5	5						5	d	5		5			
Scope loosely defined in law (may include but not limited to…)	3					3									
Scope clearly delineated in law (list of permissible tasks)	1			1											
National certification required for initial licensing	1	1	*e*	1		1				1		1		1	
Supervision:			*f*												
Indirect-physical presence not required	5	5		5	f			5		5		5			
Limited Indirect (limit on distance, time, travel, etc)	3					3								3	f
Direct-physical presence required (on site)	0														
Regulated by:			*g*												
PA Board or committee appt by ext agency resp to med bd	5	5		5											
Medical Board with PA representation	5							5							
PA Committee appt by medical board	5					5				5				5	
Medical Board with no PA representation	0											0			
No fees for supervisory agreements	1	1	*h*	1				1		1		1			
Review of Records by Physician:			*l*												l
≥ 7 days/not described/determined by phys-PA team	1	1				1	l	1				1	l	1	
< 7 days	0			0	l						l				
Ratios > 2 in outpatient settings, or not legislated	2	2	*j*		j		j		j	2	j		j		j
Locum Tenens			*k*												
Legislated	1	1													
When no practice agreement, locum tenens inherent	1							1							
Temporary License	1	1	*l*	1		1		1		1				1	
Supervising physician liability	1	1	*m*	1		1		1		1		1		1	
Disaster relief legislation	1	1	*n*												
Subtotals Legal		**35**		**25**		**25**		**29**		**29**		**21**		**18**	

Scoring Category	Points	Optimal Score	fn	NJ		NM		NY		NC		ND		OH	
Reimbursement			*o*												
Any mandated payment- Medicare, Champus, et al.	10	10		10		10		10		10		10		10	
Medicaid % x 10	10	10		0		10		10		10		7.5		8.5	
Any legislated mandate for coverage of PA services	5	5		0		0				5	o	0		0	
Subtotals Reimbursement		**25**		**10**		**20**		**20**		**25**		**17.5**		**18.5**	

continued

Table D-1, continued
Professional Practice Index Scoring Criteria For Physician Assistants in 2000
New Index for NJ, NM, NY, NC, ND, and OH, continued

Scoring Category	Points	Optimal Score	fn	State											
				NJ		NM		NY		NC		ND		OH	
Prescriptive Authority															
How defined			*p*												
Defined by Supervisory Agreement	30	30								30	p				
Defined in Law--allows controlled substances--II-V	30					30	p								
III-V	25							25	p			25	p		
IV-V	20														
V only	15														
no controlled	10			10	p										
Defined in Law--formulary, no controlled substances	0													0	p
No Rx Authority	0														
Sign for samples	1	1	*q*					1		1					
Dispense/distribute samples--implies prepackaged w/ inst	1	1	*r*			1		1		1		1	r		
PA's name on pad	1	1	*s*	1		1		1		1					
PA's signature only	2	2	*t*	2		2		2		2					
Own DEA number	5	5	*u*			5		5		5		5			
Subtotals Rx Authority		**40**		**13**		**39**		**35**		**40**		**31**		**0**	
TOTAL		**100**		**48**		**84**		**84**		**94**		**69.5**		**36.5**	

FOOT NOTES

NEW JERSEY

f) Physician continuously or intermittently present on-site with constant availability through electronic communication in inpatient setting
I) Personal review by physician of all charts and records within 7 days in outpatient setting
j) No more than 2 PA's
p) only when "delegated to do so by physician", may not prescribe controlled substances

NEW MEXICO

c) Written utilization plan
I) When practicing in remote areas, 20% must be reviewed every two weeks
j) May not supervise more than 2 PA's
p) Board approved formulary

NEW YORK

b) "Registered" as PA but issued a license
d) Duties assigned by physician
j) No more than 2 PA's in private practice
p) May not write scripts for Schedule II

NORTH CAROLINA

b) "Licensed by" and "registered with"
I) "Physician countersigns outpatient charts within 7 days"
j) Not legislated
o) Payment for service within PA scope of practice shall not be denied when performed by PA
p) PA may, under certain conditions, compound and dispense drugs. Schedule II and III for 30 days supply only

NORTH DAKOTA

b) Certificate of qualification
c) Contract between physician and PA must be filed for approval
I) "It is the responsibility of the supervising physician to review records"
j) No more than 2 PA's
r) Dispensing pre-packaged medicines limited to schedules IV and V and legend drugs
p) Prescriptive authority delegated by supervising physician

OHIO

b) Certificate of registration (license)
c) Standard utilization plan must be approved as well as supplemental utilization plan for any services beyond those included in standard plan
f) Not more than 60 minutes travel time away
i) $ 75 for approval of utilization plan
j) No more than 2 PA's
p) PA may not prescribe, dispense or order medication but may carry out physician order for medication

continued

Table D-1, continued
Professional Practice Index Scoring Criteria For Physician Assistants in 2000
New Index for NJ, NM, NY, NC, ND, and OH, continued

REFERENCES
Main Resources

American Academy of Physician Assistants, *Physician Assistants, State Laws and Regulations, Sixth Edition,* Alexandria, Virginia 1992.
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New York New York State Society of Physician Assistants, http://www.nysspanet.org
North Carolin North Carolina Academy of Physician Assistants, http://www.ncapa.org
North Dakota North Dakota State Board Of Medical Examiners, http://www.ndbomex.com/Default.htm
Ohio Ohio Association of Physician Assistants,http://www.ohiopa.com

Table D-1, continued
Professional Practice Index Scoring Criteria For Physician Assistants in 2000
New Index for OK, OR, PA, RI, SC, and SD

Scoring Category	Points	Optimal Score	fn	State: OK		OR		PA		RI		SC		SD	
Legal authority															
Title protection	3	3	*a*	3		3	a	3		3				3	
How Licensed			*b*												
Licensure language only	5	5		5		5				5	b				
Licensure w/Registration (i.e. reg. w/employment papers)	3													3	b
Certification or Registration language only	1							1	b			1	b		
Agreement			*c*												
No notification required, agreement exists btw phys & PA	3	3													
Notification only of employment/agreement btw phys & PA	2									2					
Written agreement available	2														
File practice agreement w/board	1														
File for approval of board	0			0		0	c	0	c			0		0	
Definition of Scope			*d*												
Scope defined by supervising physician & PA	5	5				5				5					
Scope loosely defined in law (may include but not limited to…)	3			3				3				3		3	
Scope clearly delineated in law (list of permissible tasks)	1														
National certification required for initial licensing	1	1	*e*			1		1						1	
Supervision:			*f*												
Indirect-physical presence not required	5	5		5	f	5		5						5	
Limited Indirect (limit on distance, time, travel, etc)	3									3		3	f		
Direct-physical presence required (on site)	0														
Regulated by:			*g*												
PA Board or committee appt by ext agency resp to med bd	5	5				5				5					
Medical Board with PA representation	5							5	g	5	g				
PA Committee appt by medical board	5			5		5								5	
Medical Board with no PA representation	0											0			
No fees for supervisory agreements	1	1	*h*												
Review of Records by Physician:			*i*												
≥ 7 days/not described/determined by phys-PA team	1	1		1	j	1	j		j	1				1	j
< 7 days	0							0				0	j		
Ratios > 2 in outpatient settings, or not legislated	2	2	*j*		k		k		k		k		k	2	k
Locum Tenens			*k*												
Legislated	1	1		1	l	1								1	
When no practice agreement, locum tenens inherent	1														
Temporary License	1	1	*l*	1		1		1		1		1		1	
Supervising physician liability	1	1	*m*	1		1		1		1		1		1	
Disaster relief legislation	1	1	*n*							1					
Subtotals Legal		**35**		**25**		**33**		**20**		**32**		**9**		**26**	

Scoring Category	Points	Optimal Score	fn	OK		OR		PA		RI		SC		SD	
Reimbursement			*o*												
Any mandated payment- Medicare, Champus, et al.	10	10		10		10		10		10		10		10	
Medicaid % x 10	10	10		7.5		10		10		8		10		7.5	
Any legislated mandate for coverage of PA services	5	5				5								0	
Subtotals Reimbursement		**25**		**17.5**		**25**		**20**		**18**		**20**		**17.5**	

continued

Table D-1, continued
Professional Practice Index Scoring Criteria For Physician Assistants in 2000
New Index for OK, OR, PA, RI, SC, and SD, continued

Scoring Category	Points	Optimal Score	fn	State											
				OK		OR		PA		RI		SC		SD	
Prescriptive Authority															
How defined			*p*												
Defined by Supervisory Agreement	30	30												30	p
Defined in Law--allows controlled substances--II-V	30									30	p				
III-V	25			25	p	25		25	p						
IV-V	20														
V only	15											15	p		
no controlled	10														
Defined in Law--formulary, no controlled substances	0														
No Rx Authority	0														
Sign for samples	1	1	*q*	1	q										
Dispense/distribute samples--implies prepackaged w/ inst	1	1	*r*	1	r	1	r								
PA's name on pad	1	1	*s*	1		1		1		1		1		1	
PA's signature only	2	2	*t*	2		2		2		2		2		2	
Own DEA number	5	5	*u*	5		5		5		5		5		5	
Subtotals Rx Authority		**40**		**35**		**34**		**33**		**38**		**23**		**38**	
TOTAL		**100**		**77.5**		**92**		**73**		**88**		**52**		**81.5**	

FOOT NOTES

OKLAHOMA

f) Physician must be on-site half day per week
j) "Regularly review health care services" of PA
k) No more than 2 PA's at any time
l) In locum tenens, all charts must be signed within 24 hours
p) Board formulary but authority delegated by physician, restrictions on supply of controlled substances
q,r) May request, receive sign and distribute professional samples

OREGON

a) Must register as a PA if employed as a PA
c) Tasks to be delegated approved by Board
h) "Physician may have 2 PA's, PA may have 4 supervising physicians"
j) Medical services of PA reviewed by MD on regularly scheduled basis
r) May "dispense" pre packaged medications

PENNSYLVANIA

b) Certified
c) PA may not practice without written agreement with a physician
g) Once in every 8 years PA sits on board (4 year terms alternate with NPs/CNMs)
j) Personal and at least weekly review of patient records
k) May not have responsibility for more than 2 PA's
p) Board of approved formulary

RHODE ISLAND

b) Licensed
g) 2 PA's on board
k) Not more than 2 PA's at any time
o) Rate not available but reimbursement allowed, 80% chosen as reasonable score
p) Statutory change 1999, rules not yet written

SOUTH CAROLINA

b) On front
f) 45 miles or 60 minutes
j) Physician must review charts within 72 hours
k) No more than 2 PA's
p) Schedule V if in the "approved written protocol"

SOUTH DAKOTA

b) License in statute, certificate in regulations
j) Responsibility of the physician to review work
k) Up to 4 PA's
p) Schedule II for not more than 48 hours

continued

Table D-1, continued
Professional Practice Index Scoring Criteria For Physician Assistants in 2000
New Index for OK, OR, PA, RI, SC, and SD, continued

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Oregon Oregon Health Division, http://www.ohd.hr.state.or.us

Oregon State Legislature, http://www.leg.state.or.us

Oregon Board of Medical Examiners, http://www.bme.state.or.us

Pennsylvania Pennsylvania Society of Physicians Assistants, http://www.pspa.net.

Pennsylvania Code, http://www.pacode.com

Rhode Island Rhode Island Department of Health, http://www.health.state.ri.us

South Caroli South Carolina Academy of Physician Assistants, http://www.scapapartners.org

South Dakota South Dakota Department of Health, http://www.state.sd.us/doh

South Dakota Academy of Physician Assistants, http://www.sdapa.net

Table D-1, continued
Professional Practice Index Scoring Criteria For Physician Assistants in 2000
New Index for TN, TX, UT, VT, VA, and WA

Scoring Category	Points	Optimal Score	fn	TN		TX		UT		VT		VA		WA	
Legal authority															
Title protection	3	3	*a*	3		3		3		3		3		3	
How Licensed			*b*												
Licensure language only	5	5				5		5				5			
Licensure w/Registration (i.e. reg. w/employment papers)	3			3										3	b
Certification or Registration language only	1									1	b				
Agreement			*c*												
No notification required, agreement exists btw phys & PA	3	3													
Notification only of employment/agreement btw phys & PA	2			2		2	c								
Written agreement available	2							2							
File practice agreement w/board	1														
File for approval of board	0									0	c	0		0	
Definition of Scope			*d*												
Scope defined by supervising physician & PA	5	5		5	d			5		5					
Scope loosely defined in law (may include but not limited to…)	3					3						3		3	d
Scope clearly delineated in law (list of permissible tasks)	1														
National certification required for initial licensing	1	1	*e*	1		1		1		1		1		1	
Supervision:			*f*												
Indirect-physical presence not required	5	5		5		5		5	f	5				5	
Limited Indirect (limit on distance, time, travel, etc)	3											3	f		
Direct-physical presence required (on site)	0														
Regulated by:			*g*												
PA Board or committee appt by ext agency resp to med bd	5	5		5		5	g	5	g			5			
Medical Board with PA representation	5									5				5	
PA Committee appt by medical board	5														
Medical Board with no PA representation	0														
No fees for supervisory agreements	1	1	*h*	1				1				1		1	
Review of Records by Physician:			*l*												
≥ 7 days/not described/determined by phys-PA team	1	1				1				1					
< 7 days	0							0	l			0	l	0	l
Ratios > 2 in outpatient settings, or not legislated	2	2	*j*		j	2	j		j	2			j	2	j
Locum Tenens			*k*												
Legislated	1	1				1		1				1			
When no practice agreement, locum tenens inherent	1														
Temporary License	1	1	*l*	1		1		1		1		1			
Supervising physician liability	1	1	*m*	1		1		1		1		1		1	
Disaster relief legislation	1	1	*n*	1											
Subtotals Legal		**35**		**28**		**30**		**30**		**25**		**24**		**24**	

Scoring Category	Points	Optimal Score	fn	TN		TX		UT		VT		VA		WA	
Reimbursement			*o*												
Any mandated payment- Medicare, Champus, et al.	10	10		10		10		10		10		10		10	
Medicaid % x 10	10	10		10		10		10		9		0		10	
Any legislated mandate for coverage of PA services	5	5		0		5						0		0	
Subtotals Reimbursement		**25**		**20**		**25**		**20**		**19**		**10**		**20**	

continued

Table D-1, continued
Professional Practice Index Scoring Criteria For Physician Assistants in 2000
New Index for TN, TX, UT, VT, VA, and WA, continued

Scoring Category	Points	Optimal Score	fn	State											
				TN		TX		UT		VT		VA		WA	
Prescriptive Authority															
How defined			p												
Defined by Supervisory Agreement	30	30						30	p	30	p				
Defined in Law--allows controlled substances--II-V	30			30	p									30	p
III-V	25														
IV-V	20														
V only	15														
no controlled	10					10	p					10	p		
Defined in Law--formulary, no controlled substances	0														
No Rx Authority	0														
Sign for samples	1	1	*q*									1			
Dispense/distribute samples--implies prepackaged w/ inst	1	1	*r*	1		1	r			1		1		1	
PA's name on pad	1	1	*s*			1						1			
PA's signature only	2	2	*t*	2						2	t			2	
Own DEA number	5	5	*u*	5				5		5				5	
Subtotals Rx Authority		**40**		**38**		**12**		**35**		**38**		**13**		**38**	
TOTAL		**100**		**86**		**67**		**85**		**82**		**47**		**82**	

FOOT NOTES

TENNESSEE

d) Protocol jointly determined by physician and PA
j) No more than 2 PA's
p) Regulations regarding prescriptive authority in statutory change from1999 not yet written

TEXAS

c) Notification includes name, address, licenses and phone numbers of PA and physicians
g) Texas State Board of PA Examiners
j) 3 PA's or their FTE equivalent
p) Authorization through standing medical orders, delegation orders etc. At site in a MUA or primary practice site
r) In public health clinics may supply one or more doses in properly labeled containers

UTAH

f) Must provide direct supervision at least 50% of the time, prior approval for "off-site practice" is required
g) PA Licensing Board
I,p) Doctor must co-sign all charts where Schedule II or III drugs are prescribed, PA may prescribe and administer
j) No more than 2 PA's but an exception may be granted

VERMONT

b) Certification
c) "Written scope of practice submitted to board for approval"
p) Prescribe, dispense and administer drugs and devices
t) Script signed by PA but must indicate the name of physician who has delegated privilege

VIRGINIA

b) Virginia allows volunteer PA license with no remuneration in clinical settings
f) Must obtain board approval if services are to be rendered away from supervising physician, PA not to establish separate office
I) Review and sign records within 72 hours
j) No more than 2 "assistants" at any one time
p) PA may administer but not dispense

continued

Table D-1, continued
Professional Practice Index Scoring Criteria For Physician Assistants in 2000
New Index for TN, TX, UT, VT, VA, and WA, continued

WASHINGTON

b) License in statute, certified in regulations
d) PA functions outlined in "standardized procedures" established by commission
I) "Every written entry reviewed within 2 working days"
j) No more than 3
p) May dispense medication from office supplies, must have specific approval from commission for prescriptive authority

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Texas Texas State Board of Medical Examiners, http://www.tsbme.state.tx.us/rules

Texas Legislature, http://www.capitol.state.tx.us

Texas Academy of Physician Assistants, http://www.tapa.org

Utah Utah Academy of Physician Assistants, http://www.utahapa.org

Vermont Vermont Board of Medical Practice, www.dacboard.org/vt/pa.

Virginia Virginia Department of Health Professions, http://www.dhp.state.va.us

Virginia Academy of Physician Assistants, http://www.vapa.org

Washington Washington State Department of Health, Washington Medical Quality Assurance Commission, http://www.doh.wa.gov/Medical/rcws.htm

Washington Academy of Physician Assistants, http://www.wapa.com

Table D-1, continued
Professional Practice Index Scoring Criteria For Physician Assistants in 2000
New Index for WV, WI, and WY

Scoring Category	Points	Optimal Score	fn	State					
				WV		WI		WY	
Legal authority									
Title protection	3	3	*a*	3		3		3	
How Licensed			*b*			5			
Licensure language only	5	5		5	*b*				
Licensure w/Registration (i.e. reg. w/employment papers)	3							3	
Certification or Registration language only	1								
Agreement			*c*						
No notification required, agreement exists btw phys & PA	3	3							
Notification only of employment/agreement btw phys & PA	2								
Written agreement available	2					2			
File practice agreement w/board	1							1	
File for approval of board	0			0	*c*				
Definition of Scope			*d*						
Scope defined by supervising physician & PA	5	5						5	*d*
Scope loosely defined in law (may include but not limited to…)	3			3					
Scope clearly delineated in law (list of permissible tasks)	1					1			
National certification required for initial licensing	1	1	*e*	1	*e*	1		1	
Supervision:			*f*						
Indirect-physical presence not required	5	5		5	*f*	5	*f*	5	
Limited Indirect (limit on distance, time, travel, etc)	3								
Direct-physical presence required (on site)	0								
Regulated by:			*g*						
PA Board or committee appt by ext agency resp to med bd	5	5				5	*g*		
Medical Board with PA representation	5			5					
PA Committee appt by medical board	5							5	
Medical Board with no PA representation	0								
No fees for supervisory agreements	1	1	*h*	1		1		1	
Review of Records by Physician:			*I*						
≥ 7 days/not described/determined by phys-PA team	1	1		1	*I*		*I*	1	*I*
< 7 days	0								
Ratios > 2 in outpatient settings, or not legislated	2	2	*j*	2	*j*		*j*		*j*
Locum Tenens			*k*						
Legislated	1	1		1				1	
When no practice agreement, locum tenens inherent	1					1			
Temporary License	1	1	*l*	1		1		1	
Supervising physician liability	1	1	*m*	1		1			
Disaster relief legislation	1	1	*n*						
Subtotals Legal		**35**		**29**		**26**		**27**	

Scoring Category	Points	Optimal Score	fn	WV		WI		WY	
Reimbursement			*o*						
Any mandated payment- Medicare, Champus, et al.	10	10		10		10		10	
Medicaid % x 10	10	10		10		9		10	
Any legislated mandate for coverage of PA services	5	5							
Subtotals Reimbursement		**25**		**20**		**19**		**20**	

continued

Table D-1, continued
Professional Practice Index Scoring Criteria For Physician Assistants in 2000
New Index for WV, WI, and WY, continued

Scoring Category	Points	Optimal Score	fn	State WV		WI		WY	
Prescriptive Authority									
How defined			*p*						
Defined by Supervisory Agreement	30	30				30	*p*		
Defined in Law--allows controlled substances--II-V	30								
III-V	25			25	*p*			25	
IV-V	20								
V only	15								
no controlled	10								
Defined in Law--formulary, no controlled substances	0								
No Rx Authority	0								
Sign for samples	1	1	*q*	1	*q*				
Dispense/distribute samples--implies prepackaged w/ inst	1	1	*r*	1	*r*			1	*r*
PA's name on pad	1	1	*s*	1		1		1	
PA's signature only	2	2	*t*	2		2		2	
Own DEA number	5	5	*u*	5		5		5	
Subtotals Rx Authority		**40**		**35**		**38**		**34**	
TOTAL		**100**		**84**		**83**		**81**	

FOOT NOTES

WEST VIRGINIA

a) Statute recognizes PA midwives
c) Physician applies to board for approval to supervise PA, must include description of services to be performed
e) Requires bachelor's or master's degree (7/1/94)
f) Special provisions for rural areas
I) Supervising physician responsible for records of each PA
j) No more than 3 PA's at any one time
p) Exclusion of schedule II anti-coagulants, anti-neoplastics, etc Schedule III limited to 72 hour supply
q,r) May accept and distribute professional samples

WISCONSIN

f) Electronic communication within 15 minutes
g) Council on PA's
I) If PA prescribing, script or patient record must be reviewed and countersigned within one day
j) No more than 2 PA's but requests for more are possible
p) Physician must countersign script or patient record within one day

WYOMING

d) "PA may perform those duties and responsibilities are provided under the supervision of a board-approved physician"
I) Not legislated
j) Physician may supervise 2 PA's and be back up for 2 PA's but may not supervise more than 2 at any one time
r) Dispensing of pre-packaged medications permitted in rural clinics only

continued

Table D-1, continued
Professional Practice Index Scoring Criteria For Physician Assistants in 2000
New Index for WV, WI, and WY, continued

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Main Resources

American Academy of Physician Assistants, *Physician Assistants, State Laws and Regulations, Sixth Edition,* Alexandria, Virginia 1992.

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West Virginia Legislature, http://www.leg.is.state.wv.us

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Wisconsin Wisconsin Academy of Physician Assistants, http://www.wapa.org

Wyoming Wyoming Association of Physician Assistants, http://www.wapa.net

Appendix E. Professional Practice Index Calculations for NPs

This appendix contains a table that documents the detailed calculations used to compute the new professional practice index for NPs for each of the 50 States plus the District of Columbia. The criteria used in the new index include:

Legal Status (Maximum = 35)

Title Protection suggests acceptance and acknowledgement of the skills required to practice as a professional. Legal protection provides a safeguard for both the public and the professional.]

Licensure as NP indicates full recognition as a professional. Licensure as an RN and certification or registration as NP is the second best situation. RN license only is the minimum. Requirements for recognition to practice in an advanced nursing role vary by State and may include the passing of a **national certification** examination, the obtaining of an **advanced degree** (at the master or doctoral level), as well as various levels of pharmacology education for prescriptive authority. Licensure to practice may occur independently of certification to prescribe. In some States, the renewals of licensure and prescriptive authority occur in tandem. In others, licensure and prescriptive authority require separate applications and separate criteria.

Autonomous practice possible provides the most expansive practice options.

Legal relationship with physicians indicates the degree of autonomy in practice for the advanced practice nurse. Statutes vary considerably in their requirements for physician involvement in NP practice. In some laws, physician relationship is not mentioned; in some, collaboration with other health professionals is a requirement; in others, laws demand supervision by a physician for the NP. More independent

environments are considered the ideal practice situation for NPs to exercise their professional practice. However, NPs function well in all of these configurations.

Regulation by the State Board of Nursing is the most appropriate design for NP management. Control of various aspects of practice by Boards of Medicine, Boards of Pharmacy, Boards of Consumer Affairs, etc. occurs across the States with regularity, but these insert the interests of other professions into the practice arena. Self-regulation is the goal of most professions.

The requirement to have **practice agreements approved** or legislated **review of records** at particular intervals removes the autonomy of the nurse and/or physician with whom s/he practices to exercise discretion over practice conditions. Professionals recognize and seek appropriate safeguards to the suitable and safe delivery of care to patients. The ideal would be to have that standard determined on an individual basis by the nurse and collaborating health professional at the practice level.

Hospital privileges, referrals, and the ability to **order testing** suggest recognition of the skills of the NP. In order to practice as a true primary care provider, these things are necessary to care adequately for the patient.

Reimbursement (Maximum = 35)

In 1997, the Balanced Budget Act, expanded the locations at which Nurse Practitioners could be reimbursed for services. Since this represented a progression in reimbursement from 1992, a score was awarded to every State for **direct Medicare payment**.

State reimbursement policy for payment of services rendered to **Medicaid**-eligible patients varies considerably by State and by profession.

The legal right to be included on the **provider panels of health maintenance organizations** allows NPs to fully provide patient care within their professional practice. Since NPs are trained with a primary care orientation, this is a desirable privilege.

The legal right to be reimbursed for services provided is critical to the autonomy of the NP. Although services might potentially be provided totally by the NP, the inability to bill third parties for payment as an identified provider could preclude that from happening. This could be a barrier to the provision of care.

Prescriptive Authority (Maximum = 30)

When **prescriptive authority** is granted as part of the licensure process for advanced practice, it implies recognition of NP skill and education. Separate application suggests special requirements for the privilege that are not fundamental to the educational and clinical preparation of the NP.

Although **DEA numbers** are a requirement for prescribing controlled substances, a separate score was allotted to emphasize the importance of the privilege of prescribing scheduled drugs.

Definition of the **prescriptive privilege in law** rather than by individual physicians suggests full recognition of the abilities of the professional. Dependence on physician delegation for prescriptive authority limits the nurse practitioner and creates barriers to efficient practice. Review by another health professional of patient needs and the ordering of appropriate medications is certainly a necessary part of practice as a NP; however, the circumstances under which that consultation occurs may best be determined by the advanced practice professional and collaborator and need not be detailed in law.

The ability to **receive and distribute sample medications**, to **independently sign a prescription** and to **prescribe medical devices** indicate recognition of the competencies of NPs.

Continuing education requirements are important for maintaining the skills and updating the competencies of the NP.

The actual point allocations for NPs for the 50 States are presented below.

Table E-1
Professional Practice Index Scoring Criteria for Nurse Practitioners in 2000
New Index for AL, AK, AZ, AR, CA, and CO

Scoring Category	Points	Optimal Score	fn	State											
				AL		AK		AZ		AR		CA		CO	
Legal Authority															
Title protection	3	3	*a*	3		3		3		3		3		3	
How Licensed			*b*												
Lic as Nurse Practitioner	3	3								3					
Lic as Nurse & Cert, Reg or Approved as NP	2			2	*b*	2	*b*	2	*b*			2	*b*	2	*b*
RN license only	1														
Autonomous practice possible	7	7	*c*			7		7		7		7	*c*	7	
Relationship with Physicians:			*d*												
No mention of physician in legislation	5	5				5									
Collaborative language	4			4				4		4	*d*			4	*d*
Supervisory Language	2											2			
Electronic communication permitted/Indirect sup.	1											1			
Regulated by:			*e*												
State Board of Nursing Alone/or Board of APN	3	3				3		3		3				3	
Regulation by State BON with another entity	2			2	*e*							2	*e*		
Regulation by Board of Medicine or other	1														
National certification required	1	1	*f*	1		1		1		1				1	
Master's degree required for licensure	1	1	*g*	1				1						1	*g*
Practice Agreements:			*h*												
No written practice agreement required	3	3				3		3				3	*h*		
Written practice agreement avail on site	2													2	*h*
Written practice agreement filed with reg agency	1			1						1					
Ratios > 2 in outpatient settings, or not legislated	1	1	*i*			1		1		1	*i*	1	*i*	1	
Review of Records by Physician:			*j*												
No legislated time requirement for review	3	3				3	*j*	3		3	*j*	3	*j*	3	*j*
Periodic/Regular Reviews	2			2											
Strict/Daily	1														
Hospital Privileges protected in legislation	1	1	*k*					1							
Can refer directly for health/medical services	2	2	*l*	2		2		2		2	*l*	2		2	
Can order or perform diagnostic or lab tests	2	2	*m*	2		2		2		2					
Subtotals Legal		**35**		**20**		**32**		**33**		**30**		**26**		**29**	
Reimbursement															
Medicare	5	5	*n*	5		5		5		5		5		5	
Legal right to be listed on panels as PCP	5	5	*o*	5				5				5	*o*		
Medicaid % x 10	10	10	*p*	10		8		6	*p*	8		10	*p*	10	
Language permits reimb by 3rd party or HMO	15	15	*q*			15		15			*q*	15		15	
Subtotals Reimbursement		**35**		**20**		**28**		**31**		**13**		**35**		**30**	

continued

Table E-1, continued
Professional Practice Index Scoring Criteria for Nurse Practitioners in 2000
New Index for AL, AK, AZ, AR, CA, and CO, continued

Scoring Category	Points	Optimal Score	fn	AL		AK		AZ		AR		CA		CO	
				State											
Prescriptive Authority															
How Received:															
Automatic	4	4	*r*												
Application or Approval Required	2			2		2		2		2		2		2	
Uses Own DEA number	3	3	*s*			3		3		3		3		3	
How defined			*t*												
Defined by Legislation/Phys.agmt.doesn't determine	5	5				5	*t*	5	*t*	5				5	
Collaborative agreement defines	4														
Supervisory agreement defines	3											3			
Defined Formulary (inclusive or exclusive)	1			1											
Type of Authority			*u*												
Full authority within Scope (II-V and Legend)	12	12				12		12	*u*					12	
Extensive authority (III-V and Legend)	9									9	*u*	9	*u*		
Limited authority (IV-V and Legend)	6														
Restricted (V and Legend)	3														
Legends only	1			1	*u*										
Durable medical equipment	1	1				1		1		1		1			
Sign for samples	1	1	*w*			1		1		1		1		1	
Distribute samples	1	1	*x*	1	*x*	1		1				1		1	
NP signs prescription	2	2	*y*	2		2		2		2		2	*y*	2	
Continuing Ed requirements	1	1	*z*	1		1		1		1		1		1	
Subtotals Prescriptive Authority		**30**		**8**		**28**		**28**		**24**		**23**		**27**	
TOTAL		**100**		**48**		**88**		**92**		**67**		**84**		**86**	

FOOTNOTES

ALABAMA

b) Certificate of Qualification
e) BOM
x) NP allowed to provide(dispense) drugs within formulary

ALASKA

b) Authorized
j) Not required
t) No involvement
u) NPs can dispense drugs

ARIZONA

b) Certificate to practice
p) NPs may contract with Health Cost Containment System as PCPs
t) Not defined
u) NPs can dispense drugs

ARKANSAS

d) Collaborative agreement for prescriptive privilege
I) For prescriptive authority
j) Not defined
l) Determined by hospital
q) Any Willing Disallowed Provider Law disallowed 1997
u)1000, hours of practice as APN required, 300 hrs Preceptorship training for privilege

continued

Table E-1, continued
Professional Practice Index Scoring Criteria for Nurse Practitioners in 2000
New Index for AL, AK, AZ, AR, CA, and CO, continued

CALIFORNIA

b) Scope is RN scope
c) May not order drugs in solo practice
e) Board of Nursing is a part of State and Consumer Service Agency
Standardized procedures developed with BOM
h) Standardized procedures guide practice
I) Four
j) Not defined
o) Medi-CAL-cal lists as PCPs
p) Medicaid reimbursement limited to FNP and PNP
u) Dispensing Authority
y) Drs name must appear on drug container label, Effective 2001, NP name as well

COLORADO

b) Registered
d) RN viewed as independent practitioner
g) Master's degree required for prescriptive authority and after 7/1/08, for everyone
h) Collaborative agreement for prescriptive authority must notify BON the name of physician
j) Not defined

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ALABAMA

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ALASKA

http://www.legis.state.ak.us
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ARIZONA

Arizona Health Care Cost Containment System, http://www.ahccs.state.az.us
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ARKANSAS

Arkansas State Board of Nursing , http://www.accessarkansas.org/nurse

CALIFORNIA

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National Council of State Boards of Nursing, http://www.ncsbn.org
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COLORADO

Colorado Department of Regulatory Agencies, http://www.dora.state.co.us/Nursing

Table E-1, continued
Professional Practice Index Scoring Criteria for Nurse Practitioners in 2000
New Index for CT, DE, DC, FL, GA, and HI

Scoring Category	Points	Optimal Score	fn	State											
				CT		DE		DC		FL		GA		HI	
Legal Authority															
Title protection	3	3	*a*	3	*a*	3		3		3			*a*	3	
How Licensed			*b*												
Lic as Nurse Practitioner	3	3				3									
Lic as Nurse & Cert, Reg or Approved as NP	2			2				2	*b*	2		2	*b*	2	*b*
RN license only	1														
Autonomous practice possible	7	7	*c*	7	*c*	7		7						7	
Relationship with Physicians:			*d*												
No mention of physician in legislation	5	5													
Collaborative language	4			4		4		4				4	*d*	4	*d*
Supervisory Language	2									2					
Electronic communication permitted/Indirect sup.	1									1					
Regulated by:			*e*												
State Board of Nursing Alone/or Board of APN	3	3										3			
Regulation by State BON with another entity	2			2	*e*	2	*e*	2	*e*	2	*e*				
Regulation by Board of Medicine or other	1													1	*e*
National certification required	1	1	*f*	1		1	*f*	1		1	*f*	1		1	
Master's degree required for licensure	1	1	*g*	1						1		1		1	*g*
Practice Agreements:			*h*												
No written practice agreement required	3	3						3	*h*						
Written practice agreement avail on site	2			2								2			
Written practice agreement filed with reg agency	1					1	*h*			1	*h*			1	*h*
Ratios > 2 in outpatient settings, or not legislated	1	1	*i*	1		1		1		1		1		1	
Review of Records by Physician:			*j*												
No legislated time requirement for review	3	3				3	*j*	3	*j*	3		3	*j*		
Periodic/Regular Reviews	2			2										2	*j*
Strict/Daily	1														
Hospital Privileges protected in legislation	1	1	*k*					1		1		1			
Can refer directly for health/medical services	2	2	*l*			2		2		2					
Can order or perform diagnostic or lab tests	2	2	*m*	2		2				2		2		2	
Subtotals Legal		**35**		**27**		**29**		**29**		**22**		**20**		**25**	
Reimbursement															
Medicare	5	5	*n*	5		5		5		5		5		5	
Legal right to be listed on panels as PCP	5	5	*o*	5				5	*o*						
Medicaid % x 10	10	10	*p*	10		10		10	*p*	8		9		7.5	
Language permits reimb by 3rd party or HMO	15	15	*q*	15		15				15	*q*			15	
Subtotals Reimbursement		**35**		**35**		**30**		**20**		**28**		**14**		**27.5**	

continued

Table E-1, continued
Professional Practice Index Scoring Criteria for Nurse Practitioners in 2000
New Index for CT, DE, DC, FL, GA, and HI, continued

Scoring Category	Points	Optimal Score	fn	State											
				CT		DE		DC		FL		GA		HI	
Prescriptive Authority															
How Received:															
Automatic	4	4	*r*					4		4		4	*r*		
Application or Approval Required	2			2		2								2	
Uses Own DEA number	3	3	*s*	3		3		3							
How defined			*t*												
Defined by Legislation/Phys.agmt.doesn't determine	5	5						5							
Collaborative agreement defines	4			4		4									
Supervisory agreement defines	3									3		3			
Defined Formulary (inclusive or exclusive)	1													1	
Type of Authority			*u*												
Full authority within Scope (II-V and Legend)	12	12		12		12		12	*u*						
Extensive authority (III-V and Legend)	9														
Limited authority (IV-V and Legend)	6														
Restricted (V and Legend)	3														
Legends only	1									1				1	*u*
Durable medical equipment/devices	1	1				1								1	
Sign for samples	1	1	*w*			1									
Distribute samples	1	1	*x*	1		1				1		1	*x*	1	
NP signs prescription	2	2	*y*	2		2		2		2		2	*y*	2	
Continuing Ed requirements	1	1	*z*			1				1		1		1	
Subtotals Prescriptive Authority		**30**		**24**		**27**		**26**		**12**		**11**		**9**	
TOTAL		**100**		**86**		**86**		**75**		**62**		**45**		**61.5**	

FOOTNOTES

CONNECTICUT
a) APRN for Prescriptive privilege only
c) Prescribe "under direction" of physician in statute
e) BON is located in the Department of Public Health

DELAWARE
e) If NP practices under guidelines or protocols governed by BON, if NP practices and prescribes independently governed by Joint Practice Committee (BON and BOM)
f) Master's required if no national certifying exam is available
h) Submit collaborative agreement for prescriptive authority
j) Not defined

DISTRICT OF COLUMBIA
b) Certificate to practice
e) BON and Department of Consumer and Regulatory Affairs
h) Not required
j) Not defined
o) Redesignated PCPs
p) Medicaid managed care, NPs excluded
u) Non refillable prescriptions for controlled substances

FLORIDA
e) BON and BOM joint committee approves protocols
f) National certification for initial certificate only
h) Filed for prescriptive privilege
q) Any Willing Provider Law

GEORGIA
a) RN only
b) Authorization to practice
d) Scope of practice is collaborative, prescriptive authority is supervisory and delegatory
j) Not defined
x,y) Written protocols define privilege on delegated medical authority of physician in restricted locations
r) May administer, order or dispense but may not prescribe

continued

Table E-1, continued
Professional Practice Index Scoring Criteria for Nurse Practitioners in 2000
New Index for CT, DE, DC, FL, GA, and HI, continued

HAWAII

b) Recognition
d) For prescriptive authority
e) BON , BOME and Department of Commerce and Consumer Affairs define prescriptive authority
g) Master's required for prescriptive authority only
h) For prescriptive authority
j) Joint and periodic evaluation of services
u) APRNs can prescribe legend drugs independently and controlled substances under physician direction only

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CONNECTICUT

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DELAWARE

State of Delaware, Delaware Administrative Code, http://www.state.de.us

DISTRICT OF COLUMBIA

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FLORIDA

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GEORGIA

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HAWAII

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Table E-1, continued
Professional Practice Index Scoring Criteria for Nurse Practitioners in 2000
New Index for ID, IL, IN, IA, KS, and KY

Scoring Category	Points	Optimal Score	fn	State: ID		IL		IN		IA		KS		KY	
Legal Authority															
Title protection	3	3	*a*	3		3		3		3		3		3	
How Licensed			*b*												
Lic as Nurse Practitioner	3	3		3	*b*	3									
Lic as Nurse & Cert, Reg or Approved as NP	2							2	*b*	2	*b*	2	*b*	2	*b*
RN license only	1														
Autonomous practice possible	7	7	*c*	7	*c*	7	*c*		*c*	7		7		7	
Relationship with Physicians:			*d*												
No mention of physician in legislation	5	5													
Collaborative language	4					4		4		4		4	*d*	4	
Supervisory Language	2			2	*d*										
Electronic. communication permitted/Indirect sup.	1														
Regulated by:			*e*												
State Board of Nursing Alone/or Board of APN	3	3		3		3	*e*	3		3		3		3	*e*
Regulation by State BON with another entity	2														
Regulation by Board of Medicine or other	1														
National certification required	1	1	*f*	1		1		1		1				1	
Master's degree required for licensure	1	1	*g*			1	*g*		*g*		*g*	1	*g*		
Practice Agreements:			*h*												
No written practice agreement required	3	3		3		2				3					
Written practice agreement avail on site	2											2	*h*		
Written practice agreement filed with reg agency	1							1	*h*					1	*h*
Ratios > 2 in outpatient settings, or not legislated	1	1	*l*	1		1	*l*	1		1		1		1	*l*
Review of Records by Physician:			*j*												
No legislated time requirement for review	3	3								3				3	*j*
Periodic/Regular Reviews	2			2	*j*	2	*j*	2	*j*			2	*j*		
Strict/Daily	1														
Hospital Privileges protected in legislation	1	1	*k*							1	*k*				
Can refer directly for health/medical services	2	2	*l*	2		2		2		2		2		2	
Can order or perform diagnostic or lab tests	2	2	*m*	2		2						2		2	
Subtotals Legal		**35**		**29**		**31**		**19**		**30**		**29**		**29**	
Reimbursement															
Medicare	5	5	*n*	5		5		5		5		5		5	
Legal right to be listed on panels as PCP	5	5	*o*	5	*o*					5				5	
Medicaid % x 10	10	10	*p*	8.5		7		8.5		8		8		7.5	
Language permits reimb by 3rd party or HMO	15	15	*q*	15	*q*			15	*q*	15		15		15	*q*
Subtotals Reimbursement		**35**		**33.5**		**12**		**28.5**		**33**		**28**		**32.5**	

continued

Table E-1, continued
Professional Practice Index Scoring Criteria for Nurse Practitioners in 2000
New Index for ID, IL, IN, IA, KS, and KY, continued

Scoring Category	Points	Optimal Score	fn	State											
				ID		IL		IN		IA		KS		KY	
Prescriptive Authority															
How Received:															
Automatic	4	4	*r*							4		4		4	
Application or Approval Required	2			2		2		2							
Uses Own DEA number	3	3	*s*	3		3		3		3		3			
How defined			*t*												
Defined by Legislation/Phys. agmt. doesn't determine	5	5		5						5					
Collaborative agreement defines	4					4		4						4	
Supervisory agreement defines	3											3	*t*		
Defined Formulary (inclusive or exclusive)	1														
Type of Authority			*u*												
Full authority within Scope (II-V and Legend)	12	12		12				12		12		12			
Extensive authority (III-V and Legend)	9														
Limited authority (IV-V and Legend)	6														
Restricted (V and Legend)	3					3	*u*								
Legends only	1													1	
Durable medical equipment/devices	1	1		1						1				1	
Sign for samples	1	1	*w*			1						1		1	*w*
Distribute samples	1	1	*x*	1		1				1		1		1	*x*
NP signs prescription	2	2	*y*	2		2		2		2		2		2	
Continuing Ed requirements	1	1	*z*	1		1		1		1		1		1	
Subtotals Prescriptive Authority		**30**		**27**		**17**		**24**		**29**		**27**		**15**	
TOTAL		**100**		**89.5**		**60**		**71.5**		**92**		**84**		**76.5**	

FOOTNOTES

IDAHO

b) Licensed as an NP, authorized as an NP prescriber
c) "May perform …direct management of acute and chronic illness
d) Supervisory, collaborative and consultative language. Supervision "means designation of a course of action or provision of guidance"
j) BOM rules for physicians require periodic review of a sample of records
o) Blue Cross has NPs on preferred provider list
q) Any Willing Provider Law(CNM confirms)

ILLINOIS

c) Not practice without direction from physician but no employment relationship is required
e) Advanced Practice Nursing Board
g) Legislated in 1998, effective from 2001
I) No specific number but not "excessive" number
j) Periodic
u) Schedule III-V but delegated authority only-- may prescribe, dispense and administer

INDIANA

b) APN recognition, only necessary for prescriptive authority(CNMs different)
c) Collaboration with licensed practioner required, other APNs do not qualify as collaborators
g) Complete a "graduate program or a certificate program"
h) Only if applying for prescriptive authority
j) Review of a sample of charts when prescriptions are written must occur within 7 days
q) Any Willing Provider Law

continued

Table E-1, continued
Professional Practice Index Scoring Criteria for Nurse Practitioners in 2000
New Index for ID, IL, IN, IA, KS, and KY, continued

IOWA

b) Registration for prescriptive authority only
g) Masters not required, may be one of qualifications fulfilled
k) Hospital Fairness Act, 1999-2000
l) Not legislated
p) Amendment to medical program, telemedicine pilot project pays for ARNP services

KANSAS

b) Certificate of Qualification issued
d) Collegial
g) Law passed in 2000, effective from 2002
h) Written protocol defines prescriptive authority
j) Periodic
t) Written protocol between physicians and NP defines classes of drugs Dispensing, except for samples is prohibited

KENTUCKY

b) Registration and designation
e) Advanced Registered Nurse Practice Council and BON
h) Effective from 1997 for prescriptive authority
l) Not legislated
j) Not defined
q) Any Willing Provider Law
w,x) Non scheduled legend drugs

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INDIANA

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IOWA

Iowa Board of Nursing, http://www.state.ia.us/nursing

KANSAS

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KENTUCKY

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Table E-1, continued
Professional Practice Index Scoring Criteria for Nurse Practitioners in 2000
New Index for LA, ME, MD, MA, MI, and MN

Scoring Category	Points	Optimal Score	fn	State											
				LA		ME		MD		MA		MI		MN	
Legal Authority															
Title protection	3	3	*a*	3	*a*	3		3		3		3		3	
How Licensed			*b*												
Lic as Nurse Practitioner	3	3		3	*b*										
Lic as Nurse & Cert, Reg or Approved as NP	2					2	*b*	2	*b*	2	*b*	2	*b*	2	*b*
RN license only	1														
Autonomous practice possible	7	7	*c*			7	*c*					7		7	
Relationship with Physicians:			*d*												
No mention of physician in legislation	5	5				5								4	
Collaborative language	4			4				4							
Supervisory Language	2									2	*d*	2	*d*		
Electronic communication permitted/Indirect sup.	1														
Regulated by:			*e*												
State Board of Nursing Alone/or Board of APN	3	3										3	*e*	3	
Regulation by State BON with another entity	2			2	*e*	2	*e*	2	*e*	2	*e*				
Regulation by Board of Medicine or other	1														
National certification required	1	1	*f*	1		1		1		1		1		1	
Master's degree required for licensure	1	1	*g*	1		1	*g*								
Practice Agreements:			*h*												
No written practice agreement required	3	3										3	*h*		
Written practice agreement avail on site	2									2				2	
Written practice agreement filed with reg agency	1			1				1							
Ratios > 2 in outpatient settings, or not legislated	1	1	*i*		*i*			1	*i*			1	*i*	1	*i*
Review of Records by Physician:			*j*												
No legislated time requirement for review	3	3				3	*j*					3	*j*	3	*j*
Periodic/Regular Reviews	2			2	*j*			2		2	*j*				
Strict/Daily	1														
Hospital Privileges protected in legislation	1	1	*k*												
Can refer directly for health/medical services	2	2	*l*	2		2		2	*l*	2				2	
Can order or perform diagnostic or lab tests	2	2	*m*	2		2		2	*m*	2				2	
Subtotals Legal		**35**		**21**		**28**		**20**		**18**		**25**		**30**	

Scoring Category	Points	Optimal Score	fn	LA		ME		MD		MA		MI		MN	
Reimbursement															
Medicare	5	5	*n*	5		5		5		5		5		5	
Legal right to be listed on panels as PCP	5	5	*o*			5		5		5	*o*				
Medicaid % x 10	10	10	*p*	8		10		10		10		10		9	
Language permits reimb by 3rd party or HMO	15	15	*q*	15		15	*q*	15		15		15	*q*	15	
Subtotals Reimbursement		**35**		**28**		**35**		**35**		**35**		**30**		**29**	

continued

Table E-1, continued
Professional Practice Index Scoring Criteria for Nurse Practitioners in 2000
New Index for LA, ME, MD, MA, MI, and MN, continued

Scoring Category	Points	Optimal Score	fn	State LA	fn	ME	fn	MD	fn	MA	fn	MI	fn	MN	fn
Prescriptive Authority															
How Received:															
Automatic	4	4	*r*					4				4			
Application or Approval Required	2			2		2				2				2	*r*
Uses Own DEA number	3	3	*s*			3		3		3		3		3	
How defined			*t*												
Defined by Legislation/Phys.agmt.doesn't determine	5	5				5				5					
Collaborative agreement defines	4			4										4	
Supervisory agreement defines	3											3			
Defined Formulary (inclusive or exclusive)	1							1							
Type of Authority			*u*												
Full authority within Scope (II-V and Legend)	12	12				12		12		12				12	
Extensive authority (III-V and Legend)	9														
Limited authority (IV-V and Legend)	6														
Restricted (V and Legend)	3											3	*u*		
Legends only	1			1											
Durable medical equipment/devices	1	1		1		1								1	
Sign for samples	1	1	*w*	1		1						1		1	
Distribute samples	1	1	*x*	1		1		1				1		1	
NP signs prescription	2	2	*y*	2		2		2		2		2		2	
Continuing Ed requirements	1	1	*z*	1		1								1	
Subtotals Prescriptive Authority		**30**		**13**		**28**		**23**		**24**		**17**		**27**	
TOTAL		**100**		**62**		**91**		**78**		**77**		**72**		**86**	

FOOTNOTES

LOUISIANA

a) Under violations in law
b) Licensed as an Advanced Practice Registered Nurse
e) BON with BOME for prescriptive authority
I) No more than two
j) Frequency determined by APRN and collaborating physician
q) Any Willing Provider Law

MAINE

b) Licensed as RN, approved APRN
c) At initial certification must practice for 24 months under supervising physician then allowed independence and prescriptive authority
e) APRN Committee and BON
g) Passed in 2000, effective from 2006
j) Not defined

MARYLAND

b) Certified
e) Joint Committee appointed by BON and BOM
I) Not defined
I,m) Determined by collaborative agreement

MASSACHUSETTS

b) Licensed RN, Authorized in Expanded role
d) Direction, Supervision, Collaboration and Consultation
e) Prescriptive authority regulated by BON with Board of Regulations in Medicine and Board of Regulations in Pharmacy, also Advisory Committee of APNs
j) Every three months, if schedule II drugs are prescribed, record must be reviewed in 96 hours
o) Mass. Medicaid PCP

continued

Table E-1, continued
Professional Practice Index Scoring Criteria for Nurse Practitioners in 2000
New Index for LA, ME, MD, MA, MI, and MN, continued

MICHIGAN

b) Speciality certification
d) No requirement for physician supervision or collaboration but a physician may delegate at their discretion(Beauport)
e) Department of Commerce licenses
h) Not required
I) Not legislated
j) Not defined
q) Attorney General's opinion
u) Schedule Ill-V and legend but "delegated medical task"

MINNESOTA

b) Certification
I) Not legislated
j) Not defined
r) 1999 law requires fee and proof that criteria for prescriptive authority are met

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Table E-1, continued
Professional Practice Index Scoring Criteria for Nurse Practitioners in 2000
New Index for MS, MO, MT, NE, NV, and NH

Scoring Category	Points	Optimal Score	fn	State											
				MS		MO		MT		NE		NV		NH	
Legal Authority															
Title protection	3	3	*a*	3		3		3		3		3	*a*	3	*a*
How Licensed			*b*												
Lic as Nurse Practitioner	3	3								3				3	
Lic as Nurse & Cert, Reg or Approved as NP	2			2	*b*	2	*b*	2	*b*			2	*b*		
RN license only	1														
Autonomous practice possible	7	7	*c*					7		7	*c*			7	
Relationship with Physicians:			*d*												
No mention of physician in legislation	5	5						5						5	
Collaborative language	4			4	*d*	4	*d*			4		4	*d*		
Supervisory Language	2														
Electronic communication permitted/Indirect sup.	1														
Regulated by:			*e*												
State Board of Nursing Alone/or Board of APN	3	3								3	*e*				
Regulation by State BON with another entity	2			2	*e*	2	*e*	2	*e*			2	*e*	2	*e*
Regulation by Board of Medicine or other	1														
National certification required	1	1	*f*	1		1		1		1		1		1	
Master's degree required for licensure	1	1	*g*	1	*g*	1	*g*	1		1	*g*	1	*g*		
Practice Agreements:			*h*												
No written practice agreement required	3	3						3						3	
Written practice agreement avail on site	2					2									
Written practice agreement filed with reg agency	1			1						1	*h*	1			
Ratios > 2 in outpatient settings, or not legislated	1	1	*i*	1	*i*	1	*i*	1		1		1	*i*	1	
Review of Records by Physician:			*j*												
No legislated time requirement for review	3	3		3	*j*					3	*j*			3	
Periodic/Regular Reviews	2							2	*j*			2	*j*		
Strict/Daily	1					1	*j*								
Hospital Privileges protected in legislation	1	1	*k*												
Can refer directly for health/medical services	2	2	*l*	2		2		2		2		2		2	
Can order or perform diagnostic or lab tests	2	2	*m*					2		2				2	
Subtotals Legal		**35**		**20**		**19**		**31**		**31**		**19**		**32**	
Reimbursement															
Medicare	5	5	*n*	5		5		5		5		5		5	
Legal right to be listed on panels as PCP	5	5	*o*					5	*o*						
Medicaid % x 10	10	10	*p*	9		10		8.5		10		8.5		10	
Language permits reimb by 3rd party or HMO	15	15	*q*	15		15	*q*	15				15		15	
Subtotals Reimbursement		**35**		**29**		**30**		**33.5**		**15**		**28.5**		**30**	

continued

Table E-1, continued
Professional Practice Index Scoring Criteria for Nurse Practitioners in 2000
New Index for MS, MO, MT, NE, NV, and NH, continued

Scoring Category	Points	Optimal Score	fn	State: MS		MO		MT		NE		NV		NH	
Prescriptive Authority															
How Received:															
Automatic	4	4	*r*	4		4								4	
Application or Approval Required	2							2		2		2			
Uses Own DEA number	3	3	*s*					3		3			*s*	3	
How defined			*t*												
Defined by Legislation/Phys.agmt.doesn't determine	5	5						5		5					
Collaborative agreement defines	4					4	*t*								
Supervisory agreement defines	3			3	*t*							3	*t*		
Defined Formulary (inclusive or exclusive)	1													1	
Type of Authority			*u*												
Full authority within Scope (II-V and Legend)	12	12						12	*u*	12	*u*			12	*u*
Extensive authority (III-V and Legend)	9														
Limited authority (IV-V and Legend)	6														
Restricted (V and Legend)	3														
Legends only	1			1		1						1	*u*		
Durable medical equipment/devices	1	1										1			
Sign for samples	1	1	*w*					1							
Distribute samples	1	1	*x*	1	*x*	1	*x*	1		1		1		1	
NP signs prescription	2	2	*y*					2		2		2		2	
Continuing Ed requirements	1	1	*z*	1		1		1		1		1		1	
Subtotals Prescriptive Authority		**30**		**10**		**11**		**27**		**26**		**11**		**24**	
TOTAL		**100**		**59**		**60**		**91.5**		**72**		**58.5**		**86**	

FOOTNOTES

MISSISSIPPI

b) Certified / registered
d) Collaboration, consultative language but "supervising" physician in reimbursement statute
e) Rules jointly promulgated by BON and BOM
g) Effective from 1998 " a graduate program"
I) Not legislated
j) Not defined
t) Protocol defines
x) "Dispense" in regulations

MISSOURI

b) Document of Recognition
d) Can not be geographically distant (30 miles by road or 50 miles in HPSA)
e) Regulations by BON and Board of Healing Arts and Board of Pharmacy
g) 1998
I) No more than three
j) Review every two weeks
q) BC/BS statutory non discriminatory policy
t) Protocol
x) Limited to 72hr supply

MONTANA

b) Certificate
e) Department of Commerce administers licenses, prescriptive authority administered by BON, BOME and BOP
j) Quarterly by peers or physicians
o) 1997 Bill 519 workers COMP, PCP
u) Quality assurance process for prescriptive authority

continued

Table E-1, continued
Professional Practice Index Scoring Criteria for Nurse Practitioners in 2000
New Index for MS, MO, MT, NE, NV, and NH, continued

NEBRASKA

b,h) Integrated practice agreement may be waived if nurse will practice in a Geographic Health Shortage Area
d) Board of Advanced Practice
g) For prescriptive authority
j) Not defined
u) Schedule ll, 72 hour prescription only

NEVADA

a) APN
b) Certificate of Recognition
d) Nursing regulations, collaborative language
e) BON, BOM, BOP
g) Required after 6/1/05
l) No more than 3
j) Periodic/ monthly(BOM) review
s) DEA for dispensing and administering only, if privilege approved
t) Pharmacy regulations supervisory in language
u) APNs may dispense controlled substances under certain circumstances when a pharmacy exam has been passed

NEW HAMPSHIRE

a) ARNP
e) APRN committee on BON, Joint Committee of BON, BOM and BOP for prescriptive authority, formulary
u) Plenary authority from a formulary established by Joint Health Council of BON

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NEVADA

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NEW HAMPSHIRE

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Table E-1, continued
Professional Practice Index Scoring Criteria for Nurse Practitioners in 2000
New Index for NJ, NM, NY, NC, ND, and OH

Scoring Category	Points	Optimal Score	fn	State NJ		NM		NY		NC		ND		OH	
Legal Authority															
Title protection	3	3	*a*	3		3		3		3		3		3	
How Licensed			*b*												
Lic as Nurse Practitioner	3	3				3						3			
Lic as Nurse & Cert, Reg or Approved as NP	2			2	*b*			2	*b*	2				2	*b*
RN license only	1														
Autonomous practice possible	7	7	*c*	7		7		7	*c*	7	*c*				
Relationship with Physicians:			*d*												
No mention of physician in legislation	5	5				5									
Collaborative language	4			4	*d*			4		4	*d*	4		4	
Supervisory Language	2														
Electronic communication permitted/Indirect sup.	1														
Regulated by:			*e*												
State Board of Nursing Alone/or Board of APN	3	3				3						3	*e*	3	
Regulation by State BON with another entity	2			2	*e*					2	*e*				
Regulation by Board of Medicine or other	1							1	*e*						
National certification required	1	1	*f*	1	*f*	1			*f*	1	*f*	1		1	
Master's degree required for licensure	1	1	*g*	1		1				1	*g*	1	*g*	1	
Practice Agreements:			*h*												
No written practice agreement required	3	3				3									
Written practice agreement avail on site	2			2	*h*					2				2	*h*
Written practice agreement filed with reg agency	1							1				1	*h*		
Ratios > 2 in outpatient settings, or not legislated	1	1	*i*	1				1		1		1	*i*	1	
Review of Records by Physician:			*j*												
No legislated time requirement for review	3	3				3									
Periodic/Regular Reviews	2			2				2	*j*	2	*j*	2		2	*j*
Strict/Daily	1														
Hospital Privileges protected in legislation	1	1	*k*					1							
Can refer directly for health/medical services	2	2	*l*			2	*l*	2		2		2		2	
Can order or perform diagnostic or lab tests	2	2	*m*	2		2	*m*	2		2				2	
Subtotals Legal		**35**		**27**		**33**		**26**		**29**		**21**		**23**	
Reimbursement															
Medicare	5	5	*n*	5		5		5		5		5		5	
Legal right to be listed on panels as PCP	5	5	*o*	5		5	*o*	5	*o*						
Medicaid % x 10	10	10	*p*	9.5		9		10		10		7.5		10	
Language permits reimb by 3rd party or HMO	15	15	*q*	15		15		15		15		15		15	
Subtotals Reimbursement		**35**		**34.5**		**34**		**35**		**30**		**27.5**		**30**	

continued

Table E-1, continued
Professional Practice Index Scoring Criteria for Nurse Practitioners in 2000
New Index for NJ, NM, NY, NC, ND, and OH, continued

Scoring Category	Points	Optimal Score	fn	State											
				NJ		NM		NY		NC		ND		OH	
Prescriptive Authority															
How Received:															
Automatic	4	4	*r*							4	*r*				
Application or Approval Required	2			2		2		2	*r*			2		2	
Uses Own DEA number	3	3	*s*	3	*s*	3		3		3		3		3	
How defined			*t*												
Defined by Legislation/Phys.agmt.doesn't determine	5	5				5		5							
Collaborative agreement defines	4			4								4			
Supervisory agreement defines	3									3					
Defined Formulary (inclusive or exclusive)	1													1	
Type of Authority			*u*												
Full authority within Scope (II-V and Legend)	12	12				12	*u*	12		12	*u*	12			
Extensive authority (III-V and Legend)	9													9	
Limited authority (IV-V and Legend)	6			6	*u*										
Restricted (V and Legend)	3														
Legends only	1														
Durable medical equipment/devices	1	1		1				1		1		1		1	
Sign for samples	1	1	*w*	1		1	*w*			1				1	
Distribute samples	1	1	*x*	1		1				1		1		1	
NP signs prescription	2	2	*y*	2		2		2		2		2		2	
Continuing Ed requirements	1	1	*z*	1		1						1			
Subtotals Prescriptive Authority		**30**		**21**		**27**		**25**		**27**		**26**		**20**	
TOTAL		**100**		**82.5**		**94**		**86**		**86**		**74.5**		**73**	

FOOT NOTES

NEW JERSEY

b) Certification
d,h) Collaborative agreement (joint protocol) required only for prescriptive privilege
e) Division of Consumer Affairs of Department of Law and Public Safety approves standards for joint protocols developed by BON with BOME
f) Highest level exam in specialty approved by board
s) Only if prescribing controlled substances in limited circumstances
u) Allowed to prescribe Schedules II-IV, in an inpatient or outpatient setting as a continuation or "reissuing of an order for a controlled substance" previously issued by a physician or at end of life (Pearson)

NEW MEXICO

l,m) Implied by independent practice
o) Defined as PCP in rules and regulations
u) CNP must maintain a self-determined formulary relevant to specialty with BON
w) Implied by independent practice

NEW YORK

b) Certification
c) NPs considered independent practitioners
e) Department of Education and BON
f) National certification is an option
j) Not less than every three months
o) NPs qualified as primary gatekeepers under Medicaid Managed Care Law
r) Required to obtain a certificate after completing a program with a pharmacology component

continued

Table E-1, continued
Professional Practice Index Scoring Criteria for Nurse Practitioners in 2000
New Index for NJ, NM, NY, NC, ND, and OH, continued

NORTH CAROLINA

b) Approval
c) Effective in 2000, independent practice allowed as long as there is a contract with and MD (Pearson)
d) Collaborative language but supervising physician
e) Joint Committee of BON and MB
f,g) 2000
j) Periodic and joint review
r) Given with NP approval
u) Schedule ll-lll for 30 days only, NP may procure, prescribe, order. Compound and dispense

NORTH DAKOTA

h) Collaborative agreement for prescriptive authority only (1999)
e) Rules for prescriptive authority promulgated by BON and BOME
g) 2001
l) Not legislated

OHIO

b) Authorization
h) On-site standard care arrangement
j) Regular review of care outcomes

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Table E-1, continued
Professional Practice Index Scoring Criteria for Nurse Practitioners in 2000
New Index for OK, OR, PA, RI, SC, and SD

Scoring Category	Points	Optimal Score	fn	State											
				OK		OR		PA		RI		SC		SD	
Legal Authority															
Title protection	3	3	a	3		3		3		3			a	3	
How Licensed			b												
Lic as Nurse Practitioner	3	3								3	b			3	
Lic as Nurse & Cert, Reg or Approved as NP	2			2	b	2	b	2	b			2	b		
RN license only	1														
Autonomous practice possible	7	7	c	7	c	7	c			7	c			7	c
Relationship with Physicians:			d												
No mention of physician in legislation	5	5				5									
Collaborative language	4									4				4	
Supervisory Language	2			2	d			2	d			2			
Electronic communication permitted/Indirect sup.	1			1				1				1			
Regulated by:			e												
State Board of Nursing Alone/or Board of APN	3	3				3									
Regulation by State BON with another entity	2			2	e			2	e	2	e	2	e	2	e
Regulation by Board of Medicine or other	1														
National certification required	1	1	f	1						1		1		1	f
Master's degree required for licensure	1	1	g	1	g	1						1			
Practice Agreements:			h												
No written practice agreement required	3	3		3	h	3	h			3					
Written practice agreement avail on site	2											2	h		
Written practice agreement filed with reg agency	1							1	h					1	h
Ratios > 2 in outpatient settings, or not legislated	1	1	I		I	1		1	I	1		1	I		
Review of Records by Physician:			j												
No legislated time requirement for review	3	3		3	j	3	j			3	j	3	j	3	j
Periodic/Regular Reviews	2							2							
Strict/Daily	1														
Hospital Privileges protected in legislation	1	1	k		k	1	k								
Can refer directly for health/medical services	2	2	l	2		2		2							
Can order or perform diagnostic or lab tests	2	2	m			2									
Subtotals Legal		**35**		**27**		**33**		**16**		**27**		**15**		**24**	
Reimbursement															
Medicare	5	5	n	5		5		5		5		5		5	
Legal right to be listed on panels as PCP	5	5	o	5	o	5		5	o	5	o				
Medicaid % x 10	10	10	p	10		10		10		8	p	8		9	
Language permits reimb by 3rd party or HMO	15	15	q			15		15		15				15	
Subtotals Reimbursement		**35**		**20**		**35**		**35**		**33**		**13**		**29**	

continued

Table E-1, continued
Professional Practice Index Scoring Criteria for Nurse Practitioners in 2000
New Index for OK, OR, PA, RI, SC, and SD, continued

Scoring Category	Points	Optimal Score	fn	State: OK		OR		PA		RI		SC		SD	
Prescriptive Authority															
How Received:															
Automatic	4	4	*r*												
Application or Approval Required	2			2		2		2		2		2		2	*r*
Uses Own DEA number	3	3	*s*	3		3		3		3		3	*s*	3	
How defined			*t*												
Defined by Legislation/Phys.agmt.doesn't determine	5	5													
Collaborative agreement defines	4													4	
Supervisory agreement defines	3														
Defined Formulary (inclusive or exclusive)	1			1		1		1	*t*	1	*t*	1	*t*		
Type of Authority			*u*												
Full authority within Scope (II-V and Legend)	12	12				12	*u*	12	*u*	12				12	*u*
Extensive authority (III-V and Legend)	9			9	*u*										
Limited authority (IV-V and Legend)	6														
Restricted (V and Legend)	3											3	*u*		
Legends only	1														
Durable medical equipment/devices	1	1				1		1				1			
Sign for samples	1	1	*w*	1		1				1	*w*	1	*w*	1	
Distribute samples	1	1	*x*	1		1				1		1	*x*	1	
NP signs prescription	2	2	*y*	2		2		2		2		2		2	
Continuing Ed requirements	1	1	*z*	1		1		1		1		1			
Subtotals Prescriptive Authority		**30**		**20**		**24**		**22**		**23**		**15**		**25**	
TOTAL		**100**		**67**		**92**		**73**		**83**		**43**		**78**	

FOOTNOTES

OKLAHOMA

b) Certificate of recognition
c) Practice independently except for prescriptive authority
d) Prescriptive authority, rules use supervisory language
e) A formulary Advisory council of Oklahoma State Medical Association, Oklahoma Pharmacy Association and Oklahoma Board of Nursing determine exclusionary formulary
g) Master's required for prescriptive authority after 7/1/2002
h) Written " documentation" of relationship with physician for prescriptive authority only
I) No more than 2 with prescriptive authority or 4 total
j) Not detailed
k) State law prohibits APNs from admitting patients
o) In rural areas only
u) Optional prescriptive authority with physician supervision required only for prescribing

OREGON

b) Certificate of special competency
c) Independently accountable
h) Not required
j) Not necessary
k) Law prohibits discrimination in hospital privileges, SOP lists admission to hospitals and management of patients
u) Write and dispense, dispensing limited to geographically remote areas

continued

Table E-1, continued
Professional Practice Index Scoring Criteria for Nurse Practitioners in 2000
New Index for OK, OR, PA, RI, SC, and SD, continued

PENNSYLVANIA

b) Certified
d) Supervising physician/collaborating physician
e) BON with BOM
h) Bureau of Professional and Occupational Affairs
I) No more than 4 CRNPs with prescriptive authority at any one time
o) Department of Health regulations allow HMOs to file waivers to list NPs as PCPs
t) Formulary of American Hospital Formulary Service, collaborative agreement documents drugs allowed
u) Schedule ll for 72 hrs, schedule lll - V for 30 days

RHODE ISLAND

b) License to practice as ARNP
c) Collaboration required for prescriptive authority only
e) Department of Health and Division of Professional Regulation, Board of Nursing Registration and Nursing Education and Board of Nursing
j) Not defined
o) Medicaid program allows NPs as PCPs
p) Unable to determine rate, rate unavailable - 8 chosen as reasonable
t) Prescribe from formulary as agreed with physician in written collaboration agreement
w) May procure and dispense samples

SOUTH CAROLINA

a) Use specialty designation of certification but no limits on use
b) BON officially "recognizes NPs", keeps a list of qualified NPs
e) BON with BOME
h) Protocol onsite available for audit by BON
I) Not greater than 3 on site unless exempted, if NPs further than 45 miles from physician it must be reviewed
j) Not defined
s) Schedule V allowed, requires DEA
t) Formulary from listing approved by BON, BOME, BOP
u) Determined by physician in protocol
w,x) 2000 Law

SOUTH DAKOTA

c) 1996 Nurses allowed to form professional service corporations
e) BON with BOME and BOOE
f) Effective from 11/99
h) May be permitted more than one, with board approval up to 4
j) Not defined
r) Application to Department of Health
u) Schedule ll for 48 hrs only

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Washburn University School of Law, http://www.washlaw.edu

continued

Table E-1, continued
Professional Practice Index Scoring Criteria for Nurse Practitioners in 2000
New Index for OK, OR, PA, RI, SC, and SD, continued

OKLAHOMA
Oklahoma Public Legal Research System, http://oklegal.onenet.net/oklegal

OREGON
National Council of State Boards of Nursing, www.ncsbn.org/search/documents/actsand regs/or/
Oregon State Archives, http://arcweb.sos.state.or.us/rules
Oregon State Board of Nursing, http://www.osbn.state.or.us

PENNSYLVANIA
The Pennsylvania Code Online, http://www.pacode.com/secure/data
Pennsylvania Department of State – Professional Licensure, http://www.dos.state.pa.us/bpoa/nurbd

RHODE ISLAND
Rhode Island Department of Human Services, http://www.dhs.state.ri.us/dhs
The State of Rhode Island General Assembly, http://www.rilin.state.ri.us/Statutes/TITLES
The State of Rhode Island General Assembly, http://www.rilin.state.ri.us/gen-assembly/genmenu.html

SOUTH CAROLINA
South Carolina Board of Nursing, http://www.llr.state.sc.us/POL/Nursing
South Carolina State House Network, http://www.lpitr.state.sc.us/code

SOUTH DAKOTA
South Dakota Legislature, http://legis.state.sd.us/rules
South Dakota Legislature, http://legis.state.sd.us/statutes

Table E-1, continued
Professional Practice Index Scoring Criteria for Nurse Practitioners in 2000
New Index for TN, TX, UT, VT, VA, and WA

Scoring Category	Points	Optimal Score	fn	State											
				TN		TX		UT		VT		VA		WA	
Legal Authority															
Title protection	3	3	*a*		*a*	3		3	*a*	3			*a*	3	
How Licensed			*b*												
Lic as Nurse Practitioner	3	3						3	*b*			3		3	
Lic as Nurse & Cert, Reg or Approved as NP	2			2	*b*	2	*b*			2	*b*				
RN license only	1														
Autonomous practice possible	7	7	*c*					7					*c*	7	
Relationship with Physicians:			*d*												
No mention of physician in legislation	5	5													
Collaborative language	4					4	*d*	4	*d*	4	*d*			4	*d*
Supervisory Language	2			2	*d*							2	*d*		
Electronic communication permitted/Indirect sup.	1											1			
Regulated by:			*e*												
State Board of Nursing Alone/or Board of APN	3	3								3	*e*			3	*e*
Regulation by State BON with another entity	2			2	*e*	2	*e*	2	*e*			2	*e*		
Regulation by Board of Medicine or other	1													1	
National certification required	1	1	*f*	1		1		1		1		1		1	*f*
Master's degree required for licensure	1	1	*g*	1	*g*	1	*g*	1				1	*g*		
Practice Agreements:			*h*												
No written practice agreement required	3	3													
Written practice agreement avail on site	2			2		2	*h*								
Written practice agreement filed with reg agency	1							1	*h*	1		1	*h*	1	
Ratios > 2 in outpatient settings, or not legislated	1	1	*i*	1	*i*	1	*i*			1			*i*		
Review of Records by Physician:			*j*												
No legislated time requirement for review	3	3		3	*j*	3	*j*	3	*j*	3	*j*			3	*j*
Periodic/Regular Reviews	2											2	*j*		
Strict/Daily	1														
Hospital Privileges protected in legislation	1	1	*k*			1	*k*							1	*k*
Can refer directly for health/medical services	2	2	*l*					2		2				2	
Can order or perform diagnostic or lab tests	2	2	*m*											2	
Subtotals Legal		**35**		**14**		**20**		**27**		**20**		**13**		**31**	
Reimbursement															
Medicare	5	5	*n*	5		5		5		5		5		5	
Legal right to be listed on panels as PCP	5	5	*o*	5	*o*	5	*o*							5	
Medicaid % x 10	10	10	*p*	10		8.5		10		10		10		10	
Language permits reimb by 3rd party or HMO	15	15	*q*	15		15	*q*	15						15	
Subtotals Reimbursement		**35**		**35**		**33.5**		**30**		**15**		**15**		**35**	

continued

Table E-1, continued
Professional Practice Index Scoring Criteria for Nurse Practitioners in 2000
New Index for TN, TX, UT, VT, VA, and WA, continued

Scoring Category	Points	Optimal Score	fn	State: TN		TX		UT		VT		VA		WA	
Prescriptive Authority															
How Received:															
Automatic	4	4	*r*					4		4					
Application or Approval Required	2			2		2						2		2	
Uses Own DEA number	3	3	*s*	3				3		3		3		3	
How defined			*t*												
Defined by Legislation/Phys.agmt.doesn't determine	5	5													
Collaborative agreement defines	4							4	*t*	4	*t*			4	*t*
Supervisory agreement defines	3			3		3	*t*					3			
Defined Formulary (inclusive or exclusive)	1														
Type of Authority			*u*												
Full authority within Scope (II-V and Legend)	12	12						12		12	*u*			12	*u*
Extensive authority (III-V and Legend)	9														
Limited authority (IV-V and Legend)	6											6	*u*		
Restricted (V and Legend)	3			3	*u*										
Legends only	1					1									
Durable medical equipment/devices	1	1				1						1		1	
Sign for samples	1	1	*w*	1		1		1				1	*w*		
Distribute samples	1	1	*x*	1		1		1		1		1			
NP signs prescription	2	2	*y*	2		2		2		2		2		2	
Continuing Ed requirements	1	1	*z*			1			*Z*					1	
Subtotals Prescriptive Authority		**30**		**15**		**12**		**27**		**26**		**19**		**25**	
TOTAL		**100**		**64**		**65.5**		**84**		**61**		**47**		**91**	

FOOTNOTES

TENNESSEE

a) RN title protected
b) Certification of fitness to prescribe
d) For prescriptive authority
e) With BOME for prescriptive authority
g) For prescriptive authority
I) Not legislated
j) Not defined
o) Registered Professional Nurses are classified as PCPs in Tenn Care Contracts by state law
u) Although NPs may prescribe Schedule ll-V, BOME regulation make the physician professionally responsible and view all scripts to be MDs. Also limitations exist about sites where prescriptive authority may be exercised

TEXAS

b) Authorized to practice, approval
d) Supervisory and collaborative (acts independently) language depending on setting and prescriptive authority
e) BOME influences prescriptive authority
g) Master's degree required, effective from 2003--2007 (waiver possible)
h) On-site
I) No more than 3
j) Not defined
k) Clinical privileging conditions in law
o,q) HB 2846-1997
t) Agreement with physician defines, delegatory language, prescriptive authority is site specific - MUA, physician's primary practice site, facility based site, HPSA - and is limited to legend drugs

continued

Table E-1, continued
Professional Practice Index Scoring Criteria for Nurse Practitioners in 2000
New Index for TN, TX, UT, VT, VA, and WA, continued

UTAH

a) Only 1 licensure, APRN license supersedes RN license
b) With or without prescriptive privilege
d) Consultative language
e) Department of Commerce, Division of Occupation and Professional Licensing and BON
h) For prescriptive authority only
j) No more than 2 NPs with prescriptive authority without the permission of BON
j) Not defined
t) Consultation plan required for Schedule ll and lll prescriptive authority
z) Only if licensed prior to 1992

VERMONT

b) Registration and endorsement
d) Protocol
e) BON with APRN Committee
j) Not defined
t) Privilege described in practice guidelines
u) Dispensing authority

VIRGINIA

a) RN title protected
c) Separate practice setting not allowed when NP has prescriptive authority
d) Collaborative, supervisory, delegatory (mostly supervisory)
e) BON with BOM under Medical Practice Act
g) Regulations delineate approved programs which grant master's degree
h) Protocol, practice agreement approved before issuance of prescriptive authority
I) In 2000, limit reduced from 4 to 2 nurses with prescriptive authority
j) Monthly review of random sample of records
u) May dispense if supervising physician permits, New statute Schedule lll-V phased in from 2000-2003 rules with rules effective from 2002
w) Effective in 2000 legend drugs only

WASHINGTON

d) No physician involvement except for prescriptive authority
e) Called Nursing Care Quality Assurance Commission
f) "Graduate education"
j) Not defined
k) Admit patients, part of SOP
o) Eligible as participating providers under Washington States Health Care Reform Program
t) To exercise prescriptive authority, Joint Practice Agreement with physician required
u) Passed 7/1/2000, rules effective from 8/1/2001, can dispense 72 hr supply of controlled substances

continued

Table E-1, continued
Professional Practice Index Scoring Criteria for Nurse Practitioners in 2000
New Index for TN, TX, UT, VT, VA, and WA, continued

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Main Resources

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Washburn University School of Law, http://www.washlaw.edu

TENNESSEE

Tennessee Nurses Association, http://www.tnaonline.org/ap

Lexis Nexis, http://198.187.128.12/tennessee/

TennesseeAnytime: The Official Site Of the State Of Tennessee, http://www.state.tn.us/sos/rules

TEXAS

Coalition for Nurses in Advanced Practice, http://www.cnaptexas.org/legislation/sessions

National Council of State Boards of Nursing, http://www.ncsbn.org/files/npa/wholenpas/txrnnpa.asp

Board of Nurse Examiners, http://www.bne.state.tx.us

UTAH

Utah Administrative Rules Online, http://www.rules.state.ut.us/publicat/code

Utah Department of Commerce, http://www.commerce.state.ut.us

Utah State Legislature, http://www.le.state.ut.us

VERMONT

Vermont Statutes Online, http://www.leg.state.vt.us/statutes

Secretary of State, Office of Professional Regulation, http://www.sec.state.vt.us/opr/rules/nursing

VIRGINIA

Virginia Board of Nursing, http://dhp.state.va.us/nursing

Legislative Information System, http://leg1.state.va.us

WASHINGTON

Washington State Department of Health, Nursing Care Quality Assurance Commission, http://www.doh.wa.gov/nursing/scopeofp.htm

Washington State Department of Health, Nursing Care Quality Assurance Commission, http://www.doh.wa.gov/unursing/rules.htm

Washington State Legislature, http://search.leg.wa.gov/wslwac

Revised Code of Washington, http://search.leg.wa.gov/wslrcw

Table E-1, continued
Professional Practice Index Scoring Criteria for Nurse Practitioners in 2000
New Index for WV, WI, and WY

Scoring Category	Points	Optimal Score	*fn*	State WV		State WI		State WY	
Legal Authority									
Title protection	3	3	*a*		*a*	3	*a*	3	*a*
How Licensed			*b*						
Lic as Nurse Practitioner	3	3						3	*b*
Lic as Nurse & Cert, Reg or Approved as NP	2			2	*b*	2	*b*		
RN license only	1								
Autonomous practice possible	7	7	*c*			7		7	
Relationship with Physicians:			*d*						
No mention of physician in legislation	5	5							
Collaborative language	4			4	*d*	4	*d*	4	
Supervisory Language	2								
Electronic communication permitted/Indirect sup.	1								
Regulated by:			*e*						
State Board of Nursing Alone/or Board of APN	3	3		3		3		3	
Regulation by State BON with another entity	2								
Regulation by Board of Medicine or other	1								
National certification required	1	1	*f*	1		1		1	
Master's degree required for licensure	1	1	*g*	1		1		1	
Practice Agreements:			*h*						
No written practice agreement required	3	3							
Written practice agreement avail on site	2					2	*h*		
Written practice agreement filed with reg agency	1			1	*h*			1	
Ratios > 2 in outpatient settings, or not legislated	1	1	*l*	1	*l*	1		1	*l*
Review of Records by Physician:			*j*						
No legislated time requirement for review	3	3		3	*j*	3	*j*	3	*j*
Periodic/Regular Reviews	2								
Strict/Daily	1								
Hospital Privileges protected in legislation	1	1	*k*						
Can refer directly for health/medical services	2	2	*l*			2		2	
Can order or perform diagnostic or lab tests	2	2	*m*			2			
Subtotals Legal		**35**		**16**		**31**		**29**	
Reimbursement									
Medicare	5	5	*n*	5		5		5	
Legal right to be listed on panels as PCP	5	5	*o*		*o*				
Medicaid % x 10	10	10	*p*	10		10	*p*	10	
Language permits reimb by 3rd party or HMO	15	15	*q*	15				15	*q*
Subtotals Reimbursement		**35**		**30**		**15**		**30**	

continued

Table E-1, continued
Professional Practice Index Scoring Criteria for Nurse Practitioners in 2000
New Index for WV, WI, and WY, continued

Scoring Category	Points	Optimal Score	fn	State WV	fn	WI	fn	WY	fn
Prescriptive Authority									
How Received:									
Automatic	4	4	*r*						
Application or Approval Required	2			2		2		2	
Uses Own DEA number	3	3	*s*	3		3		3	
How defined			*t*						
Defined by Legislation/Phys.agmt.doesn't determine	5	5						5	*t*
Collaborative agreement defines	4								
Supervisory agreement defines	3								
Defined Formulary (inclusive or exclusive)	1			1		1	*t*		
Type of Authority			*u*						
Full authority within Scope (II-V and Legend)	12	12				12	*u*		
Extensive authority (III-V and Legend)	9			9	*u*			9	*u*
Limited authority (IV-V and Legend)	6								
Restricted (V and Legend)	3								
Legends only	1								
Durable medical equipment/devices	1	1				1			
Sign for samples	1	1	*w*	1					
Distribute samples	1	1	*x*	1		1		1	
NP signs prescription	2	2	*y*	2		2		2	
Continuing Ed requirements	1	1	*z*	1		1		1	
Subtotals Prescriptive Authority		**30**		**20**		**23**		**23**	
TOTAL		**100**		**66**		**69**		**82**	

FOOTNOTES

WEST VIRGINIA

a) RN title protected
b) Recognition "for announcement of Advance Practice"
d) For prescriptive privilege
h) Verification of a collaborative agreement for prescriptive authority is required
I) Not legislated
j) Not defined
o) Excluded in HMO legislation
u) Schedule III -72 hr supply only, IV-V for 6 months

WISCONSIN

a) Under rules for prescriptive authority
b) Certificate to prescribe
d) Collaboration required for prescriptive authority
h) Relationship must be documented
j) Not defined
p) Medicaid bonuses for NPs working in certain areas
t) Collaborative relationship required
u) Dispensing limited to samples or to facility 30 miles from nearest pharmacy

WYOMING

a) Title determined by national certification, limits on use in violation
b) Recognition and licensure
I) Not legislated
j) Not defined
q) Any Willing Provider Law
t) No physician involvement
u) Dispense in accordance with state and federal laws, limited to samples or to facilities 30 miles from nearest pharmacy

continued

Table E-1, continued
Professional Practice Index Scoring Criteria for Nurse Practitioners in 2000
New Index for WV, WI, and WY, continued

REFERENCES
Main Resources

American College of Nurse Midwives, Nurse Midwifery Today, A Handbook of State Laws and Regulations 2000, Washington, DC, 2000.

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West Virginia Board of Examiners for Registered Professional Nurses, http://www.state.wv.us/nurses

Code of State Regulations, http://www.state.wv.us/csr

WISCONSIN

Wisconsin State Legislature, http://www.legis.state.wi.us/rsb/code

Wisconsin Nurses Association, http://www.wisconsinnurses.com

WYOMING

Wyoming State Board of Nursing, http://nursing.state.wy.us/rules

Wyoming State Board of Nursing, http://nursing.state.wy.us/NPA

Appendix F. New CNM Scope Index Calculations

This appendix contains a table that documents the detailed calculations used to compute the new professional practice index for CNMs for each of the 50 States plus the District of Columbia.

Legal Status (Maximum = 35)

Title protection indicates acceptance and acknowledgement of the skills required to practice as a professional. Legal protection provides a safeguard for both the public and the practicing professional.

CNMs are licensed, certified, or approved in all fifty States and the District of Columbia. **Licensure** as a nurse midwife provides recognition of the status of the profession. CNMs are frequently regulated as a category of Advanced Practice Nurse (APN). They are sometimes addressed as a separate category within the statutes and regulations which speak to professional practice, licensure requirements, and prescriptive authority. In some States, Midwives or CNMs are considered independently from other nurses and are regulated as a separate profession from APNs.

Regulation by the Board of Nursing is the most common structure when CNMs are considered to be APNs. **Separate regulation by a Board of Midwifery** is considered ideal since a separate board can best represent the interests and the orientation of midwives. When midwives are regulated by a separate entity, non-nurse midwives may be included in the rules.

Gynecological care in statute or regulation suggests that midwives are viewed as practicing in an expanded role. Limiting midwives to care in pregnancy and at birth does not fully use their professional competencies.

The nature of midwifery practice demands a **relationship with a physician**. Complicated pregnancies and deliveries require the availability of specialty physicians with the skills to provide needed patient care. Practice as a self-employed (autonomous) midwife is an

option in several States, but the need for a collaborating physician is universal. **Practice agreements** and **review of records** that are left to the discretion of the midwife and the physician acknowledge the competency and skill of each profession and the ability of both to safely meet patient need.

Temporary permits allow nurse midwives awaiting the results of the certification examination to practice.

Inactive or retired status allows non-practicing CNMs to use their title.

The profession of Midwifery philosophically supports non-nurse midwives who are properly trained and regulated. The roots of midwifery practice are in the care of women during pregnancy and childbirth in communities where other medical resources are limited. Requiring a masters degree, although elevating to a profession, limits the ability of non-nurse midwives (also referred to as direct entry or lay midwives) to provide care. Rather, professional midwifery associations support adequate skill and competency in midwifery and have opened their certification examinations to these midwives.

Hospital privileges permit a nurse midwife to admit a patient without a supervising physician and provide autonomy to the professional. **Signing birth certificates** and the ability to **directly refer** indicate recognition of the professional ability of the midwife.

Reimbursement (Maximum = 35)

In 1997, the Balanced Budget Act, expanded the locations at which CNM could be reimbursed for services. Since this was a progression in reimbursement from 1992, a score was awarded to every State for **direct Medicare payment**.

State reimbursement policy for payment of services rendered to **Medicaid-**eligible patients varies considerably by State and by profession.

The **legal right to be reimbursed for services provided** is critical to the autonomy of CNMs. Although services may be provided totally by the CNM, the inability to bill third parties for payment as an identified provider can be a barrier to the provision of care.

Direct access legislation allows women to choose well care services from a nurse midwife. Legislation enabling that independent choice acknowledges the skill of the CNM and suggests the roles that CNMs can play in healthcare delivery.

Prescriptive Authority (Maximum = 30)

When **prescriptive authority is granted as part of the licensure process** for nurse midwives, it is recognition of confidence in the education and skill of the CNM. The necessity of a separate application for prescriptive privilege suggests special requirements for the authority not fundamental to the didactic and clinical preparation of the midwife.

Although **DEA numbers** are a requirement for prescribing controlled substances, a separate score was allotted to emphasize the importance of the privilege of writing scripts for scheduled drugs.

Definition of the **prescriptive privilege in law** rather than by individual physicians suggests full recognition of the capability of the professional. Dependence for prescriptive authority on physician delegation limits the nurse midwife by creating barriers to efficient practice. Review with another health professional of patient needs

and ordering of appropriate medications is a necessary part of practice. However, the circumstances under which that consultation occurs may best be determined by the midwife and may not need to be detailed in law or in a cooperative agreement.

The ability to **receive and distribute sample medications**, to **independently sign a prescription** and to **prescribe medical devices** are suggestive of recognition of the expertise of nurse midwives.

Continuing education requirements maintain the skill of the professional and update competencies.

The actual point allocations for the 50 States are presented below.

Table F-1
Professional Practice Index Scoring Criteria for Certified Nurse Midwives in 2000
New Index for AL, AK, AZ, AR, CA, and CO

Scoring Category	Points	Optimal Score	fn	State AL		AK		AZ		AR		CA		CO	
Legal Status															
Title protected	3	3	*a*	3			*a*		*a*	3	*a*	3	*a*	3	
Type of recognition:			*b*		*b*										
Licensed	3	3								3					
Certified, Registered, or Approved	2			2		2	*b*	2	*b*			2	*b*	2	*b*
Regulated How:			*c*												
Separate Statute/Separate Rules	2	2										2			
Regulated as APN	1			1		1		1	*c*	1				1	
Regulated By:			*d*												
Board of Midwifery	3	3													
BON w/ Midwifery Committee or Midwife on Board	2											2	*d*		
BON w/APN rep (when reg as APN) or sep APN Bd	1									1				1	
BON with no specific midwifery representation	1					1		1							
Board of Medicine involved/other	0			0	*d*										
Scope Defined:			*e*												
Scope defined in broad terms	3	3		3		3				3				3	
Scope more specifically defined	2							2				2			
Scope restricted (list of excluded/included tasks)	1														
No scope defined at all	0														
Gynecological care in SOP defined	1	1	*f*	1		1		1		1		1			
Masters degree required	0		*g*	0				0	*g*					0	*g*
National Certification	1	1	*h*	1		1		1		1		1		1	
Autonomous practice possible	5	5	*i*			5	*i*	5		5				5	*i*
Relationships with Physicians:			*j*												
Independent language	3	3				3	*j*								
Colllaborative, referral language	2			2				2	*j*	2		2		2	*j*
Supervisory language	1														
Temporary Permit, or not necessary	1	1	*k*	1		1			*k*	1		1	*k*	1	
Inactive or Retired Status Available	1	1	*l*			1		1		1					
Practice Agreements:			*m*												
No written agreement	3	3						3							
Agreement btw phys and midwife on on site/available	2											2	*m*	2	
Agreement btw phys and midwife with regulatory body	1			1		1	*m*			1	*m*				
Practice permissible for lay or direct entry midwives	1	1	*n*	1	*n*	1	*n*	1	*n*	1	*n*	1	*n*	1	*n*
Review of Records by Physician:			*o*												
Not defined in statutes or laws	2	2				2		2		2		2		2	
Periodic/Defined Intervals	1			1	*o*										
Strict/Daily	0														
Hospital Privileges in legislation	1	1	*p*					1	*p*			1	*p*		
CNMs can sign birth certificates	1	1	*q*	1		1		1		1	*q*	1		1	
Can refer directly for other health services	1	1	*r*	1	*r*	1	*r*	1		1	*r*			1	*r*
Subtotals Legal		**35**		**19**		**25**	*0*	**25**		**28**		**23**		**26**	

Scoring Category	Points	Optimal Score	fn	AL		AK		AZ		AR		CA		CO	
Reimbursement															
Medicare	5	5	*s*	5		5		5	*s*	5		5		5	
Medicaid % x 10	0-10	10	*t*	8		10		6		8		10		10	
Language that permits reimb by 3rd party/HMO	15	15	*u*			15	*u*	15				15		15	
Any "direct access" legislation for women	5	5	*v*			5	*v*								
Subtotals Reimbursement		**35**		**13**		**35**		**26**		**13**		**30**		**30**	

continued

Table F-1, continued
Professional Practice Index Scoring Criteria for Certified Nurse Midwives in 2000
New Index for AL, AK, AZ, AR, CA, and CO, continued

Scoring Category	Points	Optimal Score	fn	State AL		AK		AZ		AR		CA		CO	
Prescriptive Authority				**AL**		**AK**		**AZ**		**AR**		**CA**		**CO**	
How received:			w												
Automatic/No additional application required	4	4													
Application required	2			2		2		2		2	w	2		2	
Own DEA number	3	3	x			3		3		3				3	
CNM name on Rx pad	1	1	y	1		1		1		1				1	
Extent of Authority:			z												
Full auth within scope of pract (Schedule II-V & legend)	16	16				16	z	16	z					16	z
Extensive auth w/in scope (Schedule III-V and legend)	12									12					
Limited auth within scope (Schedule IV-V and legend)	8														
Restricted auth within scope (Schedule V and legend)	4														
Legends only	1			1								1	z		
Authority through:			^												
In legislation/collaborative agrmnt not required	4	4				4		4	^						
Collab agrmnt defines privilege OR no phys involvemen	3									3				3	^
Supervisory agreement defines privilege	2											2			
Defined Formulary (inclusive or exclusive)	1			1											
No Authority at all	0														
Durable medical equipment or devices	1	1	#			1		1		1		1			
Continuing Ed requirements	1	1	$	1		1		1		1		1		1	
Subtotals Prescriptive Authority		**30**		**6**		**28**	0	**28**		**23**		**7**		**26**	
TOTAL POINTS		**100**		**38**		**88**		**79**		**64**		**60**		**82**	

FOOT NOTES
ALABAMA:
b) Certification of Qualification
d) One midwife on Joint Practice Committee
n) Lay midwives with permit may practice but DOH has no present method for issuing permits; the statute is inactive (ACNM)
o) Plan for review of records required in regulations
r) Referral in definition of practice
ALASKA:
a) ANP title only,includes CNM
I,j,m) Procedures for consultation referral must be filed with BON but no direct relationship required
n) Certified Direct Entry (CDEMs) Midwives regulated by Board Of Certified Direct Entry Midwives (ACNM)
r) Referral to other health care professionals
u) Any Willing Provider Law
v) No managed care in Alaska, direct access implied by independent nature of practice
z) Dispensing authority as of 1994
ARIZONA:
a) RNP title protected includes CNMS
b) Certified to practice
c) Category of RNP
g) After 2001
j) All acts performed must be in collaboration with a physician
k) RN temporary license
n) Midwifery regulated by DOH Nurse Midwives by BON
p) Scope of practice in statute includes admitting patients to hospitals
s) Arizona has an innovative managed care plan called Arizona Health Cost Containment System that covers medicaid eligibles, pregnant women etc. RNPs can contract with the plan
z) Prescribe and dispense -limits on refills
^) No physician collaboration required on Application for Authority

continued

Exhibit F-1, continued
Professional Practice Index Scoring Criteria for Certified Nurse Midwives in 2000
New Index for AL, AK, AZ, AR, CA, and CO, continued

ARKANSAS:

a) CNM
m) For intrapartum care and prescriptive authority only
n) Lay midwives regulated by state DOH (ACNM)
q) Licensed midwifery statute provides this privilege
r) Referrals in definition of practice
w) Granted a certificate of prescriptive authority

CALIFORNIA:

a) Holding oneself out as CNM without certification is grounds for discipline
b) Certificate to practice
d) BON with Midwifery Committee
k) Not necessary because of various avenues available for certificates to practice
m) Standardized procedures which are protocols for medical acts including prescribing provide guidelines for practice
n) Licensed midwives are regulated by Division of Licensing of Medical Board since 1993 (ACNM)
p) RNs may be granted expanded role privilege in hospitals
z) Medically delegated

COLORADO:

b) Registration
g) For prescriptive authority and beginning 7/1/2008 required
I) Direct entry midwives are licensed and regulated under Colorado Medical Practice Act
J) 2000 legislation changed language to collaboration
n) Supervisory language for medical functions, collaborative language for prescriptive authority
r) In definition of collaborative agreement
z) Dispensing limited to prepackaged samples, prescriptive authority limited to acute self limiting condition, chronic condition, terminal comfort care
^) Name of at least one collaborating physician required

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US Department of Justice, Drug Enforcement Administration, Diversion Control Program, http://www.deadiversion.usdoj.gov/drugreg/practioners/index.html.
Washburn University School of Law, http://www.washlaw.edu

ALABAMA

Alabama Board of Nursing, http://www.abn.state.al.us

ALASKA

Alaska Legislature Online, http://www.legis.state.ak.us
Alaska Division of Occupational Licensing: Board of Nursing, http://www.dced.state.ak.us/occ

ARIZONA

Arizona Health Care Cost Containment System, http://www.ahccs.state.az.us
Arizona State Board of Nursing, http://www.azboard of nursing.org

ARKANSAS

Arkansas State Board of Nursing , http://www.accessarkansas.org/nurse

continued

Exhibit F-1, continued
Professional Practice Index Scoring Criteria for Certified Nurse Midwives in 2000
New Index for AL, AK, AZ, AR, CA, and CO, continued

CALIFORNIA

State of California-State and Consumer Services Agency, Board of Registered Nursing, http://www.rn.ca.gov
National Council of State Boards of Nursing, http://www.ncsbn.org
American College of Nurse Midwives, http://www.acnm.org

COLORADO

Colorado Department of Regulatory Agencies, http://www.dora.state.co.us/Nursing

Table F-1, continued
Professional Practice Index Scoring Criteria for Certified Nurse Midwives in 2000
New Index for CT, DE, DC, FL, GA, and HI

Scoring Category	Points	Optimal Score	fn	State											
				CT		DE		DC		FL		GA		HI	
Legal Status															
Title protected	3	3	*a*	3			*a*	3			*a*	3			*a*
Type of recognition:			*b*												
Licensed	3	3		3		3		3							
Certified, Registered, or Approved	2									2	*b*	2	*b*	2	*b*
Regulated How:			*c*												
Separate Statute/Separate Rules	2	2		2	*c*										
Regulated as APN	1					1		1		1		1		1	
Regulated By:			*d*												
Board of Midwifery	3	3													
BON w/ Midwifery Committee or Midwife on Board	2														
BON w/APN rep (when reg as APN) or sep APN Bd	1														
BON with no specific midwifery representation	1					1		1				1			
Board of Medicine involved/other	0			0	*d*					0	*d*			0	*d*
Scope Defined:			*e*												
Scope defined in broad terms	3	3		3		3		3				3		3	
Scope more specifically defined	2														
Scope restricted (list of excluded/included tasks)	1									1					
No scope defined at all	0														
Gynecological care in SOP definition	1	1	*f*	1		1		1		1		1		1	
Masters degree required	0		*g*	0	*g*	0				0	*g*	0	*g*	0	*g*
National Certification	1	1	*h*	1		1		1		1	*h*	1		1	*h*
Autonomous practice possible	5	5	*i*	5	*i*	5		5		5	*i*			5	*i*
Relationships with Physicians:			*j*												
Independent Language	3	3						3							
Collab, Consult, Referral	2			2	*j*	2								2	*j*
Supervisory Language	1									1	*j*	1	*j*		
Temporary Permit, or not necessary	1	1	*k*			1		1		1		1		1	*k*
Inactive or Retired Status Available	1	1	*l*					1		1				1	
Practice Agreements:			*m*												
No written agreement	3	3				3	*m*	3							
Agreement btw phys and midwife on site/available	2											2		2	*m*
Agreement btw phys and midwife with regulatory body	1			1	*m*					1					
Practice permissible for lay or direct entry midwives	1	1	*n*	1	*n*	1	*n*	1	*n*	1	*n*			1	*n*
Review of Records by Physician:			*o*												
Not defined in statutes or laws	2	2				2		2		2		2			
Periodic/Defined Intervals	1			1										1	*o*
Strict/Daily	0														
Hospital Privileges in legislation	1	1	*p*					1		1		1	*p*		
CNMs can sign birth certificates	1	1	*q*	1		1		1		1		1		1	
Can refer directly for other health services	1	1	*r*			1	*r*	1		1				1	
Subtotals Legal		**35**		**24**		**26**		**32**		**21**		**20**		**23**	
Reimbursement															
Medicare	5	5	*s*	5		5		5		5		5		5	
Medicaid % x 10	0-10	10	*t*	9		10		10	*t*	8		10		7.5	
Language that permits reimb by 3rd party/HMO	15	15	*u*	15		15				15	*u*		*u*	15	
Any "direct access" legislation for women	5	5	*v*	5											
Subtotals Reimbursement		**35**		**34**		**30**		**15**		**28**		**15**		**27.5**	

continued

Table F-1, continued

Professional Practice Index Scoring Criteria for Certified Nurse Midwives in 2000

New Index for CT, DE, DC, FL, GA, and HI, continued

Scoring Category	Points	Optimal Score	fn	State CT		DE		DC		FL		GA		HI	
Prescriptive Authority															
How received:			w												
Automatic/No additional application required	4	4		4						4		4			
Application required	2					2								2	
Own DEA number	3	3	x	3		3		3							
CNM name on Rx pad	1	1	y	1		1		1		1				1	
Extent of Authority:			z												
Full auth within scope of pract (Schedule II-V & legend)	16	16		16	z	16	z	16	z						
Extensive auth w/in scope (Schedule III-V and legend)	12														
Limited auth within scope (Schedule IV-V and legend)	8														
Restricted auth within scope (Schedule V and legend)	4														
Legends only	1									1	z	1	z	1	
Authority through:			^												
In legislation/collaborative agrmnt not required	4	4						4							
Collab agrmnt defines privilege OR no phys involvemen	3			3		3	^								
Supervisory agreement defines privilege	2									2		2	^		
Defined Formulary (inclusive or exclusive)	1													1	^
No Authority at all	0														
Durable medical equipment or devices	1	1	#	1		1								1	
Continuing Ed requirements	1	1	$			1		1		1	$	1		1	$
Subtotals Prescriptive Authority		**30**		**28**		**27**		**25**		**9**		**8**		**7**	
TOTAL POINTS		**100**		**86**		**83**		**72**		**58**		**43**		**57.5**	

FOOT NOTES

CONNECTICUT:

c) Midwifery Practice Act

d) Department of Public Health and Addiction Services, a committee of 3 CNMs serves as advisory panel

I) Clinical practice relationship with OB/GYN required

j) Services "directed" by a qualified OB/GYN however, statute indicates this is not to be construed as supervision

m) Protocols for prescriptive authority filed with DOH

n) Unlicensed midwives who practice independently of physicians are allowed to practice (ACNM)

z) May prescribe, dispense, administer

DELAWARE:

a) APN title protection only

m) Name of collaborating physician on application for licensure

n) Traditional midwives practice under a special waiver of the regulation (ACNM)

r) Initiating referrals in definition of scope

z) Prescribing medications and treatments independently - can dispense

^) A copy of the collaborative agreement must be submitted to the Joint Practice Committee

DISTRICT OF COLUMBIA:

n) Persons previously licensed under now deleted provisions may continue to practice, other "midwives unregulated but legal" (ACNM)

t) Managed care system

z) No refills on controlled substances

continued

Table F-1, continued
Professional Practice Index Scoring Criteria for Certified Nurse Midwives in 2000
New Index for CT, DE, DC, FL, GA, and HI, continued

FLORIDA:

a) ARNP title only
b) Certified
d) Joint Practice Committee BON with BOM with two APN members
g) Included in list of options in rules for certification
h) For initial certification only
I) Limited practice in licensed midwifery
j) Supervision with protocols, collaborative language
n) Council of Licensed Midwifery regulates practice of other midwives since 1992 (ACNM)
u) Any Willing Provider law
z) Dispensing allowed but special application for privilege is required
$) RN requirement

GEORGIA:

b) Authorization to practice
g) Effective 1/1/99
j) SOP collaborative, prescriptive authority is supervisory and delegatory
p) Hospitals must provide due process rights to licensed medical professionals
u) Georgia has an Any Willing Provider law but APRNs do not seem to qualify under the definitions
z) Controlled substances and legend drugs may be prescribed and dispensed if included in protocol but location of practice, where this is allowed, is restricted to clinic and government settings
^) Written protocols define privilege, on delegated medical authority of physicians

HAWAII:

a) APRN title only
b) Recognized
d) BON but BOME involved with prescriptive authority, Department of Commerce and Consumer Affairs approves prescriptive authority
g) For prescriptive authority
h) Certification or masters
j) No particular relationship specified except for prescriptive authority
k) Not necessary if a nurse has a masters degree
m) For prescriptive authority the name of physician must be submitted
n) Midwifery practice appears to be legal (ACNM)
o) Joint and periodic evaluation
^) Prescribing, administering, dispensing and distribution of drugs
$) For prescriptive authority

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Main Resources

American College of Nurse Midwives, Nurse Midwifery Today, A Handbook of State Laws and Regulations 2000, Washington, DC, 2000.
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continued

Table F-1, continued
Professional Practice Index Scoring Criteria for Certified Nurse Midwives in 2000
New Index for CT, DE, DC, FL, GA, and HI, continued

CONNECTICUT
Connecticut Department of Public Health, http://www.state.ct.us/dph
DELAWARE
State of Delaware, Delaware Administrative Code, http://www.state.de.us
DISTRICT OF COLUMBIA
Lexis Nexis, http://198.187.128.12/dc
FLORIDA
Online Sunshine, State of Florida, http://www.leg.state.fl.us
GEORGIA
State Government of Georgia, http://www.ganet.org
HAWAII
Hawaii State Legislature, http://www.capitol.hawaii.gov
Hawaii State Government, Department of Commerce and Consumer Affairs, http://www.state.hi.us

Table F-1, continued
Professional Practice Index Scoring Criteria for Certified Nurse Midwives in 2000
New Index for ID, IL, IN, IA, KS, and KY

Scoring Category	Points	Optimal Score	fn	State											
				ID		IL		IN		IA		KS		KY	
Legal Status															
Title protected	3	3	*a*	3		3		3		3			*a*	3	*a*
Type of recognition:			*b*												
Licensed	3	3		3	*b*	3		3	*b*						
Certified, Registered, or Approved	2									2	*b*	2	*b*	2	*b*
Regulated How:			*c*												
Separate Statute/Separate Rules	2	2													
Regulated as APN	1			1		1		1	*c*	1		1		1	*c*
Regulated By:			*d*												
Board of Midwifery	3	3													
BON w/ Midwifery Committee or Midwife on Board	2														
BON w/APN rep (when reg as APN) or sep APN Bd	1			1	*d*	1	*d*							1	*d*
BON with no specific midwifery representation	1							1		1		1			
Board of Medicine involved	0														
Scope Defined:			*e*												
Scope defined in broad terms	3	3		3				3		3		3		3	
Scope more specifically defined	2					2									
Scope restricted (list of excluded/included tasks)	1														
No scope defined at all	0														
Gynecological care in SOP	1	1	*f*	1		1		1		1		1		1	
Masters degree required	0		*g*			0	*g*			0	*g*	0	*g*		
National Certification	1	1	*h*	1		1		1		1			*h*	1	
Autonomous practice possible	5	5	*i*	5					*i*	5	*i*	5	*i*	5	*i*
Relationships with Physicians:			*j*												
Independent Language	3	3				3									
Collab, Consult, Referral	2							2	*j*	2	*j*	2	*j*	2	*j*
Supervisory Language	1			1	*j*										
Temporary Permit, or not necessary	1	1	*k*	1					*k*		*k*	1		1	
Inactive or Retired Status Available	1	1	*l*											1	
Practice Agreements:			*m*												
No written agreement	3	3		3											
Agreement btw phys and midwife on site/available	2					2				2	*m*	2			
Agreement btw phys and midwife with regulatory body	1							1	*m*					1	*m*
Practice permissible for lay or direct entry midwives	1	1	*n*	1	*n*			1	*n*		*n*	1	*n*	1	*n*
Review of Records by Physician:			*o*												
Not defined in statutes or laws	2	2								2				2	*o*
Periodic/Defined Intervals	1			1	*o*	1	*o*	1	*o*			1	*o*		
Strict/Daily	0														
Hospital Privileges in legislation	1	1	*p*							1	*p*				
CNMs can sign birth certificates	1	1	*q*	1		1		1		1	*q*	1		1	
Can refer directly for other health services	1	1	*r*	1		1		1	*r*	1		1		1	
Subtotals Legal		**35**		**27**		**20**		**20**		**26**		**22**		**27**	
Reimbursement															
Medicare	5	5	*s*	5		5		5		5		5		5	
Medicaid % x 10	0-10	10	*t*	10		7		7.5		8		7.5		7.5	
Language that permits reimb by 3rd party/HMO	15	15	*u*	15	*u*			15	*u*	15		15		15	*u*
Any "direct access" legislation for women	5	5	*v*												
Subtotals Reimbursement		**35**		**30**		**12**		**27.5**		**28**		**27.5**		**27.5**	

continued

Table F-1, continued
Professional Practice Index Scoring Criteria for Certified Nurse Midwives in 2000
New Index for ID, IL, IN, IA, KS, and KY, continued

Scoring Category	Points	Optimal Score	fn	State											
				ID		IL		IN		IA		KS		KY	
Prescriptive Authority															
How received:			w												
Automatic/No additional application required	4	4								4		4		4	w
Application required	2			2	w	2		2							
Own DEA number	3	3	x	3				3		3		3		3	
CNM name on Rx pad	1	4	y	2		2		2		4		4		4	
Extent of Authority:			z												
Full auth within scope of pract (Schedule II-V & legend)	16	16		16	z			16		16	z	16			
Extensive auth w/in scope (Schedule III-V and legend)	12														
Limited auth within scope (Schedule IV-V and legend)	8														
Restricted auth within scope (Schedule V and legend)	4					4	z								
Legends only	1													1	z
Authority through:			^												
In legislation/collaborative agrmnt not required	4	4								4					
Collab agrmnt defines privilege OR no phys involvemen	3					3		3						3	
Supervisory agreement defines privilege	2											2	^		
Defined Formulary (inclusive or exclusive)	1														
No Authority at all	0														
Durable medical equipment or devices	1	1	#	1		1				1				1	
Continuing Ed requirements	1	1	$	1				1		1		1	$	1	
Subtotals Prescriptive Authority		**30**		**24**		**11**		**26**		**30**		**27**		**14**	
TOTAL POINTS		**100**		**81**		**43**		**73.5**		**84**		**76.5**		**68.5**	

FOOT NOTES

IDAHO:

b) Licensed as a CNM, authorized as a prescriber
d) BON with Advisory Committee on APNs
j) " Shall consult and collaborate with other members of health care team"
"autonomy… of the practice category " but "practice with supervision"
n) A direct entry midwife could practice legally in the state under certain restrictions (ACNM)
o) BOM regulations for supervising physician require periodic review of a representative sample
u) Any Willing Provider law includes CNMs
w) " May be part of initial licensure by separate application"
z) " Prescribe, deliver, distribute and dispense" -- limits on controlled substances

ILLINOIS:

d) APN Board
g) 2001
o) Periodic
z) Schedule III -V but delegated only

INDIANA:

b) "Limited license"
c) Addressed separately in rules for SOP but jointly with NPs for prescriptive authority
i) Performs as an independent and interdependent member of the health care team
j) In collaboration with a "licensed practitioner", specific exclusion for collaboration with other APNs
k) No temporary permit under any circumstance
m) For prescriptive authority only
n) Not regulated but appears to be legal (ACNM)
o) Periodic and joint evaluation chart reviews within 7 days with prescriptive authority
r) Refer clients to other health care providers as appropriate
u) Discrimination prohibited in law

continued

Table F-1, continued
Professional Practice Index Scoring Criteria for Certified Nurse Midwives in 2000
New Index for ID, IL, IN, IA, KS, and KY, continued

IOWA:

b) Registered
g) Optional
I) Referred to as "solo practitioners", practice occurs within an interdisciplinary health care team which provides for consultation, collaboration, referral
j) Collaborative agreement reflects both independent and cooperative decision making
m) Required with respect to " delegated medical function"
n) A Bill for the establishment of a Midwifery Advisory Council in the Department of Public Health which would issue certificate to qualified midwives was introduced but not passed (ACNM)
p) Hospital Fairness Act 1999
q) By designation of institution or out of hospital
z) Prescribe, deliver, distribute or dispense

KANSAS:

a) APRN title only
b) Certificate of qualification
g) After 2002
h) Optional
I,j) Physician's involvement with prescriptive practice only, ARNPs function independently, "collegial relationship with physicians and other health professionals", "interdependent member of physicians directed team with mutually adopted protocols"
n) Lay midwife must have an arrangement with a licensed physician to handle complications (ACNM)
o) Periodic and joint evaluation of services rendered
^) Protocol for prescribing, administering or supplying (no dispensing except samples)
$) Requirement for RN licensure

KENTUCKY:

a) "Use of ARNP or any other words, letters..to indicate"
b) Registration and designation
c) Nurse midwives who held a permit to practice from the State Cabinet of Human Resources prior to 1986 have option to practice as nurse midwife (not ARNP)
d) Advanced Registered Nurse Practice Council including nurse midwives
I) May practice independently but "established protocol required"
j) Protocol defined as similar to national standard of practice, consultation and referral language
m) For prescriptive authority
n) Lay midwifery regulated and legal (ACNM)
o) Not defined
u) Any Willing Provider law
w) No application process
z) " Issue prescriptions for and dispense" (samples only)

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continued

Table F-1, continued
Professional Practice Index Scoring Criteria for Certified Nurse Midwives in 2000
New Index for ID, IL, IN, IA, KS, and KY, continued

Pearson LJ. Annual Legislative Update: How Each State Stands on Legislative Issues Affecting Advanced Nursing Practice, The Nurse Practitioner 26(1):7-57.
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Washburn University School of Law, http://www.washlaw.edu

IDAHO
Idaho State Board of Nursing, http://www2.state.id.us/adm

ILLINOIS
Illinois General Assembly, http://www.legis.state.il.us
Illinois Bar Journal, http://www.illinoisbar.org
National Council of State Boards of Nursing, http://www.ncsbn.or/files/npa/wholenpas/ilnpa.asp

INDIANA
Indiana Health Professions Bureau, http://www.IN.gov/hpb/boards
Indiana State Board of Nursing, http://www.state.in.us/hpb/boards

IOWA
Iowa Board of Nursing, http://www.state.ia.us/nursing

KANSAS
Kansas Legislative Services, http://www.accesskansas.org/legislative

KENTUCKY
Kentucky Legislature, http://www.lrc.state.ky.us/kar
Kentucky Board of Nursing, http://www.kbn.state.ky.us

Table F-1, continued
Professional Practice Index Scoring Criteria for Certified Nurse Midwives in 2000
New Index for LA, ME, MD, MA, MI, and MN

Scoring Category	Points	Optimal Score	fn	State											
				LA		ME		MD		MA		MI		MN	
Legal Status															
Title protected	3	3	*a*		*a*	3	*a*	3		3	*a*	3		3	
Type of recognition:			*b*												
Licensed	3	3		3											
Certified, Registered, or Approved	2					2	*b*	2	*b*	2	*b*	2	*b*	2	*b*
Regulated How:			*c*												
Separate Statute/Separate Rules	2	2						2							
Regulated as APN	1			1		1	*c*			1	*c*	1		1	
Regulated By:			*d*												
Board of Midwifery	3	3													
BON w/ Midwifery Committee or Midwife on Board	2											2		2	
BON w/APN rep (when reg as APN) or sep APN Bd	1														
BON with no specific midwifery representation	1														
Board of Medicine involved	0			0	*d*	0	*d*	0	*d*	0	*d*				
Scope Defined:			*e*												
Scope defined in broad terms	3	3		3		3		3		3				3	*e*
Scope more specifically defined	2														
Scope restricted (list of excluded/included tasks)	1														
No scope defined at all	0											0	*e*		
Gynecological care in SOP definition	1	1	*f*	1		1		1		1				1	
Masters degree required	0		*g*	0	*g*	0	*g*								
National Certification	1	1	*h*	1		1		1		1		1		1	
Autonomous practice possible	5	5	*i*			5						5	*i*	5	
Relationships with Physicians:			*j*												
Independent Language/Collaboration not indicated	3	3				3						3			
Collab, Consult, Referral	2			2				2		2	*j*			2	
Supervisory Language	1														
Temporary Permit, or not necessary	1	1	*k*	1		1		1		1				1	
Inactive or Retired Status Available	1	1	*l*			1			*l*						
Practice Agreements:			*m*												
No written agreement	3	3				3						3			
Agreement btw phys and midwife on site/available	2									2					
Agreement btw phys and midwife with regulatory body	1			1	*m*			1							
Practice permissible for lay or direct entry midwives	1	1	*n*	1	*n*		*n*			1	*n*	1	*n*	1	*n*
Review of Records by Physician:			*o*								*o*				
Not defined in statutes or laws	2	2				2	*o*					2	*o*	2	*o*
Periodic/Defined Intervals	1			1	*o*			1		1	*o*				
Strict/Daily	0														
Hospital Privileges in legislation	1	1	*p*												
CNMs can sign birth certificates	1	1	*q*	1		1		1		1		1		1	
Can refer directly for other health services	1	1	*r*	1		1		1		1		1		1	
Subtotals Legal		**35**		**17**		**28**		**19**		**20**		**25**		**26**	
Reimbursement			*s*												
Medicare	5	5	*t*	5		5		5		5		5		5	
Medicaid % x 10	0-10	10	*u*	10		10		10		10		10		10	
Language that permits reimb by 3rd party/HMO	15	15	*v*	15	*u*	15		15		15		15	*u*	15	*u*
Any "direct access" legislation for women	5	5				5		5	*v*						
Subtotals Reimbursement		**35**		**30**		**35**		**35**		**30**		**30**		**30**	

continued

Table F-1, continued
Professional Practice Index Scoring Criteria for Certified Nurse Midwives in 2000
New Index for LA, ME, MD, MA, MI, and MN, continued

Scoring Category	Points	Optimal Score	fn	State											
				LA		ME		MD		MA		MI		MN	
Prescriptive Authority															
How received:			w												
Automatic/No additional application required	4	4						4				4			
Application required	2			2		2				2	w			2	w
Own DEA number	3	3	x			3		3		3		3		3	
CNM name on Rx pad	1	1	y	1		1		1						1	
Extent of Authority:			z												
Full auth within scope of pract (Schedule II-V & legend)	16	16				16	z	16	z	16				16	z
Extensive auth w/in scope (Schedule III-V and legend)	12														
Limited auth within scope (Schedule IV-V and legend)	8														
Restricted auth within scope (Schedule V and legend)	4											4	z		
Legends only	1			1	z										
Authority through:			^												
In legislation/collaborative agrmnt not required	4	4				4	^							4	
Collab agrmnt defines privilege OR no phys involvemen	3			3											
Supervisory agreement defines privilege	2									2		2			
Defined Formulary (inclusive or exclusive)	1							1							
No Authority at all	0														
Durable medical equipment or devices	1	1	#	1		1								1	
Continuing Ed requirements	1	1	$	1		1		1		1	$	1		1	
Subtotals Prescriptive Authority		**30**		**9**		**28**		**26**		**24**		**14**		**28**	
TOTAL POINTS		**100**		**56**		**91**		**80**		**74**		**69**		**84**	

FOOT NOTES

LOUISIANA:

a) APRN protection only under" violation" section in statute
d) Joint Administrative Committee on Prescriptive Authority; BON with BOM governs prescribing by APRNs
g) 1996
l) For prescriptive authority
n) Licensed midwives regulated by BOME with Advisory Committee on Midwifery within Department of Health and Hospitals (ACNM)
o) Frequency determined by APRN and collaborating physician
u) Any Willing Provider Law
z) The Board may make exceptions and broaden authority on an individual review of APRN qualifications

MAINE:

a) "Or the title designated by national certifying body" , also CNM
b) Approval
c) Statutes classify as APRN, separate rules
d) Joint Practice Council on APRN composed of BON, BOME and BOO makes recommendations on prescriptive authority and other matters
g) 2006
n) Unclear (ACNM)
o) Not defined
z) Prescription and dispensing (prescribe, administer, dispense or distribute)
^) Formulary, referred to in rules, is a very broad guideline

MARYLAND:

b) Certified
d) Joint Committee of BON and BOPQA (Board Of Physicians Quality Assurance) approves applications
l) Illegal - also has Midwife Peer Review Advisory Committee
v) Bill in 2000-- provides for direct access to nurse midwives
z) Dispensing, limited to practice in non profit, government and public facilities

continued

Table F-1, continued
Professional Practice Index Scoring Criteria for Certified Nurse Midwives in 2000
New Index for LA, ME, MD, MA, MI, and MN, continued

MASSACHUSETTS:

a) No person may use any letters, words suggesting expanded role
b) Authorization, endorsement
c) Addressed separately in rules
d) An Advisory Committee to BON for each class of nurse practitioners in "expanded role", Board of Registration and Discipline in Medicine approves BON regulations and Department of Public Health approves prescriptive authority
j) Collaborative language in SOP, supervisory language in prescriptive authority and in SOP
n) Not prohibited (ACNM)
o) At least every three months
w) Registration with Massachusetts Department of Public Health
$) RN Requirement

MICHIGAN:

b) Certification
e) Scope of Practice not defined
l) No relationship with health professionals is described except for prescriptive authority which is delegated
n) Midwifery practice not regulated but not prohibited (ACNM)
o) Not defined
u) Attorney General Opinion
z) Schedule II - V may be prescribed but only as a delegated medical act

MINNESOTA:

b) Certification
e) "Functioning as direct care providers"
n) Licensed traditional midwives regulated by Board of Medical Practice (ACNM)
o) Not defined
u) Mandated but only if NP(CNM) is working under supervision of physician
w) 1999 law requires fee and proof that criteria for prescribing are met
z) Prescribe and dispense(authority more liberal for CNMs than NPs)
$) RN requirement

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American College of Nurse Midwives, Nurse Midwifery Today, A Handbook of State Laws and Regulations 2000, Washington, DC, 2000.
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LOUISIANA

Louisiana State Board of Nursing, http://www.lsbn.state.la.us

MAINE

Maine Legislature, http://janus.state.me.us/legis

MARYLAND

Maryland General Assembly, http://mlis.state.md.us
Maryland Board of Nursing, http://dhmh.state.md.us

continued

Table F-1, continued
Professional Practice Index Scoring Criteria for Certified Nurse Midwives in 2000
New Index for LA, ME, MD, MA, MI, and MN, continued

MASSACHUSETTS
Commonwealth of Massachusetts, http://www.state.ma.us/legis

MICHIGAN
National Council of State Boards of Nursing, http://www.michiganlegislature.org/law
Michigan Legislature, http://www.michiganlegislature.org/law

MINNESOTA
State of Minnesota Board of Nursing , http://www.nursingboard.state.mn.us
Minnesota Office of the Revisor of Statutes, http://www.revisor.leg.state.mn.us

Table F-1, continued
Professional Practice Index Scoring Criteria for Certified Nurse Midwives in 2000
New Index for MS, MO, MT, NE, NV, and NH

Scoring Category	Points	Optimal Score	fn	State: MS		MO		MT		NE		NV		NH	
Legal Status															
Title protected	3	3	*a*	3		3		3		3		3	*a*		*a*
Type of recognition:			*b*												
Licensed	3	3												3	
Certified, Registered, or Approved	2			2	*b*	2	*b*	2	*b*	2	*b*	2	*b*		
Regulated How:			*c*												
Separate Statute/Separate Rules	2	2								2					
Regulated as APN	1			1		1		1				1		1	
Regulated By:			*d*												
Board of Midwifery	3	3													
BON w/ Midwifery Committee or Midwife on Board	2														
BON w/APN rep (when reg as APN) or sep APN Bd	1														
BON with no specific midwifery representation	1					1	*d*								
Board of Medicine involved	0			0	*d*			0	*d*	0	*d*	0	*d*	0	*d*
Scope Defined:			*e*												
Scope defined in broad terms	3	3				3		3		3					
Scope more specifically defined	2											2	*e*	2	*e*
Scope restricted (list of excluded/included tasks)	1														
No scope defined at all	0			0	*e*										
Gynecological care in SOP	1	1	*f*					1		1				1	
Masters degree required	0		*g*	0		0	*g*	0	*g*			0	*g*		
National Certification	1	1	*h*	1		1		1		1		1		1	
Autonomous practice possible	5	5	*i*					5						5	
Relationships with Physicians:			*j*												
Independent Language/Collaboration not indicated	3	3						3	*j*					3	*j*
Collab, Consult, Referral	2			2	*j*	2	*j*			2	*j*	2			
Supervisory Language	1														
Temporary Permit, or not necessary	1	1	*k*	1		1		1		1		1	*k*	1	
Inactive or Retired Status Available	1	1	*l*									1		1	
Practice Agreements:			*m*												
No written agreement	3	3						3	*m*					3	
Agreement btw phys and midwife on site/available	2					2									
Agreement btw phys and midwife with regulatory body	1			1						1	*m*	1			
Practice permissible for lay or direct entry midwives	1	1	*n*	1	*n*	1	*n*	1	*n*					1	*n*
Review of Records by Physician:			*o*												
Not defined in statutes or laws	2	2		2	*o*					2	*o*			2	*o*
Periodic/Defined Intervals	1							1	*o*			1	*o*		
Strict/Daily	0					0	*o*								
Hospital Privileges in legislation	1	1	*p*												
CNMs can sign birth certificates	1	1	*q*	1		1		1		1	*q*	1		1	
Can refer directly for other health services	1	1	*r*	1		1		1		1		1		1	
Subtotals Legal		**35**		**16**		**19**		**27**		**20**		**17**		**26**	

Scoring Category	Points	Optimal Score	fn	MS		MO		MT		NE		NV		NH	
Reimbursement			*s*												
Medicare	5	5	*t*	5		5		5		5		5		5	
Medicaid % x 10	0-10	10	*u*	9		10		8		10		8.5	*t*	10	
Language that permits reimb by 3rd party/HMO	15	15	*v*	15	*u*	15	*u*	15	*u*			15		15	
Any "direct access" legislation for women	5	5													
Subtotals Reimbursement		**35**		**29**		**30**		**28**		**15**		**28.5**		**30**	

continued

Table F-1, continued
Professional Practice Index Scoring Criteria for Certified Nurse Midwives in 2000
New Index for MS, MO, MT, NE, NV, and NH, continued

Scoring Category	Points	Optimal Score	fn	State MS		MO		MT		NE		NV		NH	
Prescriptive Authority															
How received:			w												
Automatic/No additional application required	4	4		4		4	w							4	
Application required	2							2		2	w	2	w		
Own DEA number	3	3	x					3					x	3	
CNM name on Rx pad	1	1	y			1		1						1	
Extent of Authority:			z												
Full auth within scope of pract (Schedule II-V & legend)	16	16						16	z					16	z
Extensive auth w/in scope (Schedule III-V and legend)	12														
Limited auth within scope (Schedule IV-V and legend)	8														
Restricted auth within scope (Schedule V and legend)	4									4					
Legends only	1			1	z	1	z					1	z		
Authority through:			^												
In legislation/collaborative agrmnt not required	4	4						4							
Collab agrmnt defines privilege OR no phys involvemen	3					3	^								
Supervisory agreement defines privilege	2			2	^					2	^	2			
Defined Formulary (inclusive or exclusive)	1													1	
No Authority at all	0														
Durable medical equipment or devices	1	1	#	1								1			
Continuing Ed requirements	1	1	$	1		1		1		1		1		1	
Subtotals Prescriptive Authority		**30**		**9**		**10**		**27**		**9**		**7**		**26**	
TOTAL POINTS		**100**		**54**		**59**		**82**		**44**		**52.5**		**82**	

FOOT NOTES
MISSISSIPPI:

b) Certification
d) Rules jointly promulgate by BON and State Board of Medical Licensure with Advisory Committee
e) 1998
j) Must practice in collaborative relationship, protocols required to outline diagnostic, therapeutic and prescriptive activities
n) Legal but unregulated (ACNM)
o) Not defined
u) Mandated but only if NP(CNM) is working under supervision of physician
z) Controlled substances may be ordered by CNMs in a health care facility if set forth in protocol which details what can be "ordered, administered, dispensed and or prescribed"
^) Protocols define

MISSOURI:

b) Document of Recognition
d) Board of Nursing in Department of Economic Development
g) 1998
j) "Physician should be available for immediate consultation", 30 mile distance (non-HPSA), 50 mile distance in a HPSA
n) Lay midwives licensed by Healing Arts Board if practicing before 1959- no new license since that year (ACNM)
o) Every two weeks
u) RSMO 376.407 1998
w, ^) Collaborative agreement defines "delegated" authority and must be in place before prescribing occurs
z) "Administer, dispense or prescribe," legend drugs, controlled substances only as "delegated" for individual patients

continued

Table F-1, continued
Professional Practice Index Scoring Criteria for Certified Nurse Midwives in 2000
New Index for MS, MO, MT, NE, NV, and NH, continued

MONTANA:
b) Certificate of Nurse Midwifery, endorsement of RN license
d) Department of Commerce licenses RNs, BON, BOM, BOP act jointly on rules for Prescriptive Authority in advisory capacity
g) 1995
j) Independent language
m) Quality assurance process for Prescriptive Authority
n) Direct entry midwives exempted from medical practice act, no physician supervision required, licensed and regulated by "alternate health care board" (ACNM)
o) Sample reviewed quarterly by peers or physicians
u) Freedom of choice statute
z) Prescribe, dispense, administer with some limitations on quantities prescribed

NEBRASKA:
b) Certificate to practice
d) Joint regulation BON and Board of Examiners in Medicine and Surgery under Department of Health and Human Advisory Committee Council of Certified Nurse Midwives
j) Statute specifically states that nothing in it may be interpreted to permit independent practice, collaboration within SOP, supervision for medical functions
m) Must be reviewed by both BON and BOM
q) Act says that CNMs may practice in a facility
w) CNM must notify board of collaborating physician and practice address before prescribing
^) Prescriptive Authority limited to what is permitted in the protocol, Schedule III - V permitted under physician supervision-- no DEA

NEVADA:
a) "Use title APN or any similar title"
b) Certificate of Recognition
d) Protocol and written agreement must be approved
e) A list of tasks including "other" if certified to perform
g) 2005
k) For practice only, no prescriptive authority
o) Monthly in person review, periodic chart review
t) Rate unclear, NP rate 85%
w) In addition to certificate from BON, CNM must apply to pharmacy board for " certificate of registration" to prescribe
x) DEA for administering and dispensing not prescribing
z) APN may dispense controlled substances if passes exam and has approval from BOP

NEW HAMPSHIRE:
a) ARNP title only
d) BON with ARNP member and ARNP Committee, Joint Health Council for Prescriptive authority BON, BOM, BOP appointees
e) Lists of included acts
j) "Shall be competent to practice independently"
n) State Midwifery Council issues certification to other midwives (ACNM)
o) Not defined
z) Possess, compound, prescribe, administer, dispense or distribute

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Main Resources
American College of Nurse Midwives, Nurse Midwifery Today, A Handbook of State Laws and Regulations 2000, Washington, DC, 2000.
Buppert C, Nurse Practitioner's Business Practice & Legal Guide, Aspen Publications, Gaithersburg, Maryland, 1999.
Cooper RA, Multidisciplinary Healthcare Workforce Data Consortium, Meeting, April 2001, Washington, DC.

continued

Table F-1, continued
Professional Practice Index Scoring Criteria for Certified Nurse Midwives in 2000
New Index for MS, MO, MT, NE, NV, and NH, continued

Henderson T, Chovan T , Removing Practice Barriers of NonPhysician Providers, Intergovernmental Health Policy Project, The George Washington University, February 1994.
Henderson T, Fox-Grage W, Lewis S, Scope of Practice & Reimbursement for Advanced Practice Registered Nurses, Primary Care Resource Center, Intergovernmental Health Policy Project, The George Washington University, December 1995.
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MISSISSIPPI
Lexis Nexis, http://198.187.128.12/mississippi
Mississippi State Board of Nursing, http://www.msbn.state.ms.us/laws

MISSOURI
Missouri General Assembly, http://www.moga.state.mo.us/statutes
Missouri Department of Economic Development, Board of Nursing, http://www.ecodev.state.mo.us/pr/nurising

MONTANA
Montana Department of Commerce, Board of Nursing, http://www.com.state.mt.us/License
Montana State Documents Online, http://statedocs.msl.state.mt.us

NEBRASKA
National Council of State Boards of Nursing, http://www.ncsbn.org/serach/documents

NEVADA
Nevada Legislature, http://www.leg.state.nv. us/NRS
Nevada Legislature,http:// www.leg.state.nv.us/nac
National Council of State Boards of Nursing, http://www.ncsbn.org/search/documents/actsand regs/nv

NEW HAMPSHIRE
New Hampshire Board of Nursing, http://www.state.nh.us/nursing
National Council of State Boards of Nursing, http://www.ncsbn.org/search/documents/actsand regs/nh

Table F-1, continued
Professional Practice Index Scoring Criteria for Certified Nurse Midwives in 2000
New Index for NJ, NM, NY, NC, ND, and OH

Scoring Category	Points	Optimal Score	fn	State											
				NJ		NM		NY		NC		ND		OH	
Legal Status															
Title protected	3	3	*a*		*a*			3		3	*a*	3	*a*	3	
Type of recognition:			*b*												
Licensed	3	3		3	*b*	3		3				3			
Certified, Registered, or Approved	2									2	*b*			2	*b*
Regulated How:			*c*												
Separate Statute/Separate Rules	2	2		2		2		2		2					
Regulated as APN	1											1		1	
Regulated By:			*d*												
Board of Midwifery	3	3						3							
BON w/ Midwifery Committee or Midwife on Board	2					2	*d*								
BON w/APN rep (when reg as APN) or sep APN Bd	1														
BON with no specific midwifery representation	1											1		1	
Board of Medicine involved	0			0	*d*					0	*d*				
Scope Defined:			*e*												
Scope defined in broad terms	3	3				3		3							
Scope more specifically defined	2													2	
Scope restricted (list of excluded/included tasks)	1									1					
No scope defined at all	0			0	*e*							0	*e*		
Gynecological care in SOP definition	1	1	*f*	1		1		1		1				1	
Masters degree required	0		*g*									0	*g*	0	
National Certification	1	1	*h*	1		1			*h*	1		1		1	
Autonomous practice possible	5	5	*i*			5		5							
Relationships with Physicians:			*j*												
Independent Language/Collaboration not indicated	3	3				3	*j*								
Collab, Consult, Referral	2			2	*j*			2				2		2	
Supervisory Language	1									1	*j*				
Temporary Permit, or not necessary	1	1	*k*	1				1		1		1		1	
Inactive or Retired Status Available	1	1	*l*												
Practice Agreements:			*m*												
No written agreement	3	3				3	*m*								
Agreement btw phys and midwife on site/available	2			2	*m*			2						2	*m*
Agreement btw phys and midwife with regulatory body	1									1	*m*	1	*m*		
Practice permissible for lay or direct entry midwives	1	1	*n*	1	*n*	1	*n*	1	*n*		*n*	1	*n*		
Review of Records by Physician:			*o*												
Not defined in statutes or laws	2	2				2	*o*	2							
Periodic/Defined Intervals	1			1	*o*					1	*o*	1	*o*	1	*o*
Strict/Daily	0														
Hospital Privileges in legislation	1	1	*p*								*p*			1	*p*
CNMs can sign birth certificates	1	1	*q*	1		1		1		1		1		1	
Can refer directly for other health services	1	1		1		1		1				1		1	
Subtotals Legal		**35**		**16**		**28**		**30**		**15**		**17**		**20**	
Reimbursement															
Medicare	5	5	*s*	5		5		5		5		5		5	
Medicaid % x 10	0-10	10	*t*	7		10		10		10		7.5		10	
Language that permits reimb by 3rd party/HMO	15	15	*u*	15		15		15		15		15		15	
Any "direct access" legislation for women	5	5	*v*	5	*v*	5	*v*	5	*v*		*v*				
Subtotals Reimbursement		**35**		**32**		**35**		**35**		**30**		**27.5**		**30**	

continued

Table F-1, continued
Professional Practice Index Scoring Criteria for Certified Nurse Midwives in 2000
New Index for NJ, NM, NY, NC, ND, and OH, continued

Scoring Category	Points	Optimal Score	fn	State											
				NJ		NM		NY		NC		ND		OH	
Prescriptive Authority															
How received:			*w*												
Automatic/No additional application required	4	4								4	*w*				
Application required	2			2		2	*w*	2	*w*			2		2	
Own DEA number	3	3	*x*			3		3		3		3		3	
CNM name on Rx pad	1	1	*y*	1		1		1		1				1	
Extent of Authority:			*z*												
Full auth within scope of pract (Schedule II-V & legend)	16	16				16	*z*	16		16		16	*z*		
Extensive auth w/in scope (Schedule III-V and legend)	12													12	*z*
Limited auth within scope (Schedule IV-V and legend)	8														
Restricted auth within scope (Schedule V and legend)	4														
Legends only	1			1	*z*										
Authority through:			^												
In legislation/collaborative agrmnt not required	4	4						4							
Collab agrmnt defines privilege OR no phys involvemen	3											3			
Supervisory agreement defines privilege	2									2					
Defined Formulary (inclusive or exclusive)	1			1	^	1								1	
No Authority at all	0														
Durable medical equipment or devices	1	1	#	1		1		1		1		1		1	
Continuing Ed requirements	1	1	$	1	$	1	$			1		1		1	
Subtotals Prescriptive Authority		**30**		**7**		**25**		**27**		**28**		**26**		**21**	
TOTAL POINTS		**100**		**55**		**88**		**92**		**73**		**70.5**		**71**	

FOOT NOTES

NEW JERSEY:

a) None
b) Must pass an examination given by the state
d) BOME regulates CNM liaison committee advises
e) Very descriptive rules
j) "Shall not work …in an … independent practice but shall function within…
a system that provides collaborative management"
m) Name of collaborating physician supplied to board with application
n) Statute applies to all midwives but non-nurses cannot have prescriptive authority (ACNM)
o) Periodic
v) CNMs qualify as PCPs under state law
z) Controlled substances in licensed hospitals only
^) Protocol with "collaborating physician required, formulary determined by BOME
$) For prescriptive authority

NEW MEXICO:

d) Department of Health/Public Health Division with CNM Advisory Board
j,) Independent management of women's health care within a system that provides, etc
m) No physician agreement required, SOP includes "written clinical practice guidelines"
n) Licensed midwives under separate rules, may administer drugs but no
prescribing allowed (ACNM)
o) Peer review required of all CNMs
v) Pharmacy law defines CNMs as having the ability to "serve as a primary care provider"
w) Permit to prescribe
z) Prescribing, administering and distributing of drugs (pre packaged by pharmacist
or manufacturer)
$) CE and participation in peer review required for licensure

continued

Table F-1, continued
Professional Practice Index Scoring Criteria for Certified Nurse Midwives in 2000
New Index for NJ, NM, NY, NC, ND, and OH, continued

NEW YORK:
h) Passing an examination in midwifery satisfactory to Department of Education
n) Direct entry midwives licensed under same practice act (ACNM)
o) Not defined
v) Public Health Law requires direct access
w) Certificate to prescribe

NORTH CAROLINA:
a) Holding oneself out to practice midwifery unless approved is a violation of law
b) Approval
d) Joint Committee of BON and MB with CNM advisors
j) Collaborative language but practice "under supervision of physician"
m) Protocols and written guidelines
n) Those licensed prior to 1983 are grandmothered (ACNM)
o) Periodic and joint review by physician and nurse midwife
p) All persons admitted to hospitals must be under care of a physician
v) Required only if APRN is not employee of physician or hospital
w) With CNM approval application

NORTH DAKOTA:
a) "Use the applicable category designation", "no person may use an APN title without authority
e) "The APRN retains the responsibility and accountability for SOP"
g) 2001
m) Scope of practice statement submitted to board at initial application and renewal which includes physician collaboration arrangement for prescriptive authority
n) Midwifery practice "not legally defined but not prohibited" (ACNM)
o) No less than once every two months
z) May dispense samples

OHIO:
b) Authorization
m) Standard care arrangement
o) Regular review of care outcomes
p) Law prohibits discrimination against NMs if hospital provides maternity services
z) Recent legislation

REFERENCES
Main Resources

American College of Nurse Midwives, Nurse Midwifery Today, A Handbook of State Laws and Regulations 2000, Washington, DC, 2000.
Buppert C, Nurse Practitioner's Business Practice & Legal Guide, Aspen Publications, Gaithersburg, Maryland, 1999.
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Henderson T, Fox-Grage W, Lewis S, Scope of Practice & Reimbursement for Advanced Practice Registered Nurses, Primary Care Resource Center, Intergovernmental Health Policy Project, The George Washington University, December 1995.
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Pearson LJ. Annual Legislative Update: How Each State Stands on Legislative Issues Affecting Advanced Nursing Practice, The Nurse Practitioner 26(1):7-57.
US Department of Justice, Drug Enforcement Administration, Diversion Control Program, http://www.deadiversion.usdoj.gov/drugreg/practioners/index.html.
Washburn University School of Law, http://www.washlaw.edu

continued

Table F-1, continued
Professional Practice Index Scoring Criteria for Certified Nurse Midwives in 2000
New Index for NJ, NM, NY, NC, ND, and OH, continued

NEW JERSEY
- New Jersey State Legislature, http://www.njleg.state.nj.us
- New Jersey.the online state, http:// www.state.nj.us
- New Jersey State Nurses Association, http://www.nurse.org/nj/njsna

NEW MEXICO
- Lexis Nexis, http://198.187.128.12/newmexico
- i Bienvenidos a Nuevo Mexico! – Welcome to New Mexico!, http://www.state.nm.us/clients/nursing

NEW YORK
- New York State Coalition of Nurse Practitioners,http:// www.nysconp.org/gvtaffairs
- New York State Assembly-Consolidated Laws – Education, http://assembly.state.ny.us
- New York State Education Department, Office of the Professions, http://www.op.nysed.gov/rap.htm

NORTH CAROLINA
- North Carolina Board of Nursing, http://www.ncbon.com
- National Council of State Boards of Nursing, http://ncsbn.org/files/npa/wholenpas/ncnpa.asp
- North Carolina General Assembly, http:www.ncga.state.nc.us

NORTH DAKOTA
- North Dakota Board of Nursing, http://www.ndbon.org

OHIO
- National Council of State Boards of Nursing, http://www.ncsbn.org/files/npa/wholenpas/ohnpa.asp
- State of Ohio Government Info and Services, http:// www.state.oh.us/nur
- Anderson's Online Documentation, http://onlinedocs.andersonpublishi
- Session Law from the 124th General Assembly of the State of Ohio, http://ohioacts.avv.com

Table F-1, continued
Professional Practice Index Scoring Criteria for Certified Nurse Midwives in 2000
New Index for OK, OR, PA, RI, SC, and SD

Scoring Category	Points	Optimal Score	fn	State											
				OK		OR		PA		RI		SC		SD	
Legal Status															
Title protected	3	3	*a*	3	*a*	3	*a*	3	*a*	3			*a*	3	
Type of recognition:			*b*												
Licensed	3	3						3		3				3	
Certified, Registered, or Approved	2			2	*b*	2	*b*					2	*b*		
Regulated How:			*c*												
Separate Statute/Separate Rules	2	2						2		2					
Regulated as APN	1			1	*c*	1						1		1	*c*
Regulated By:			*d*												
Board of Midwifery	3	3													
BON w/ Midwifery Committee or Midwife on Board	2									2	*d*				
BON w/APN rep (when reg as APN) or sep APN Bd	1														
BON with no specific midwifery representation	1					1									
Board of Medicine involved	0			0	*d*			0	*d*			0	*d*	0	*d*
Scope Defined:			*e*												
Scope defined in broad terms	3	3		3		3		3		3				3	
Scope more specifically defined	2											2	*e*		
Scope restricted (list of excluded/included tasks)	1														
No scope defined at all	0														
Gynecological care in SOP definition	1	1	*f*	1		1		1		1				1	
Masters degree required	0		*g*	0	*g*							0			
National Certification	1	1	*h*	1					*h*	1	*h*	1		1	*h*
Autonomous practice possible	5	5	*i*	5		5	*i*			5				5	*i*
Relationships with Physicians:			*j*												
Independent Language/Collaboration not indicated	3	3				3				3	*j*				
Collab, Consult, Referral	2			2	*j*			2						2	*j*
Supervisory Language	1											1			
Temporary Permit, or not necessary	1	1	*k*	1		1	*k*			1				1	
Inactive or Retired Status Available	1	1	*l*					1							
Practice Agreements:			*m*												
No written agreement	3	3		3	*m*	3									
Agreement btw phys and midwife on site/available	2							2	*m*	2	*m*	2	*m*		
Agreement btw phys and midwife with regulatory body	1														
Practice permissible for lay or direct entry midwives	1	1	*n*			1	*n*	1	*n*	1	*n*	1	*n*	1	
Review of Records by Physician:			*o*												
Not defined in statutes or laws	2	2		2	*o*	2		2	*o*	2	*o*	2	*o*	2	
Periodic/Defined Intervals	1														
Strict/Daily	0														
Hospital Privileges in legislation	1	1	*p*			1	*p*								
CNMs can sign birth certificates	1	1	*q*	1		1		1		1		1		1	
Can refer directly for other health services	1	1		1		1		1							
Subtotals Legal		**35**		**26**		**29**		**22**		**30**		**13**		**24**	
Reimbursement															
Medicare	5	5	*s*	5		5		5		5		5		5	
Medicaid % x 10	0-10	10	*t*	10		10		10		8	*t*	8		9	
Language that permits reimb by 3rd party/HMO	15	15	*u*			15		15	*u*	15	*u*			15	
Any "direct access" legislation for women	5	5	*v*			5				5	*v*				
Subtotals Reimbursement		**35**		**15**		**35**		**30**		**33**		**13**		**29**	

continued

Table F-1, continued
Professional Practice Index Scoring Criteria for Certified Nurse Midwives in 2000
New Index for OK, OR, PA, RI, SC, and SD, continued

Scoring Category	Points	Optimal Score	fn	State: OK		OR		PA		RI		SC		SD	
Prescriptive Authority															
How received:			*w*												
Automatic/No additional application required	4	4													
Application required	2			2		2				2		2		2	*w*
Own DEA number	3	3	*x*	3		3				3		3	*x*	3	
CNM name on Rx pad	1	1	*y*			1						1		1	
Extent of Authority:			*z*												
Full auth within scope of pract (Schedule II-V & legend)	16	16								16	*z*			16	*z*
Extensive auth w/in scope (Schedule III-V and legend)	12			12	*z*	12	*z*								
Limited auth within scope (Schedule IV-V and legend)	8														
Restricted auth within scope (Schedule V and legend)	4											4	*z*		
Legends only	1								*z*						
Authority through:			^												
In legislation/collaborative agrmnt not required	4	4													
Collab agrmnt defines privilege OR no phys involvemen	3									3	^			3	
Supervisory agreement defines privilege	2														
Defined Formulary (inclusive or exclusive)	1			1	^	1						1			
No Authority at all	0														
Durable medical equipment or devices	1	1	#			1						1			
Continuing Ed requirements	1	1	$	1		1				1		1			
Subtotals Prescriptive Authority		**30**		**19**		**21**		**0**		**25**		**13**		**25**	
TOTAL POINTS		**100**		**60**		**85**		**52**		**88**		**39**		**78**	

FOOT NOTES
OKLAHOMA:
a) Use of any "title, abbreviation, sign or device to indicate that ….. One is an ANP unless duly licensed"
b) Certificate of Recognition
c) Addressed separately in the rules
d) BON and Formulary Advisory Council (State Medical Association involved) and State Pharmacy Association
g) Effective from 2002 for prescriptive authority
j) "Within a …… system which provides for medical consultation, medical management or referral" but supervisory language for prescriptive authority
m) A requirement to file a written statement as part of the initial and renewal application for prescriptive authority detailing physician supervision
o) Not defined
z) May prescribe and administer
^) Supervisory language attached to prescriptive authority-written agreement required "subject to medical direction by a supervising physician"

OREGON:
a) Title NP protected, called Nurse Midwife, Nurse Practitioner in state
b) Certificate of Special Competency
I) Independently responsible and accountable
k) No national certification required, so not necessary
n) 1993 statue governing direct entry midwifery (ACNM)
p) Law prohibits discrimination
z) Write and dispense-dispensing limited to geographically remote areas

continued

Table F-1, continued
Professional Practice Index Scoring Criteria for Certified Nurse Midwives in 2000
New Index for OK, OR, PA, RI, SC, and SD, continued

PENNSYLVANIA:

a) Statute entitles midwife to use title but does not restrict or prohibit use by unlicensed or inactive midwives
d) Board of medicine has exclusive jurisdiction
h) An option for licensing
m) Both a midwife protocol which details the procedures and routines of care and a collaborative agreement are required
n) Statute ambiguous, would appear to permit a lay midwife to practice (ACNM)
o) Not defined
u) Insurance Payment to Registered Nurse Law 1986
z) "May relay to other health providers medical regimens prescribed by the physician including drug orders", no delegation of prescriptive auth. allowed

RHODE ISLAND:

d) Department of Health with Advisory Council on Nurse Midwifery
h) Requirement found in " Discipline of Licensees" (effective 2000)
j) Independent management of cases with evidence of prearranged provision for collaboration
m) Guidelines describing prescriptive authority between physician and CNM
n) Statute and regulations allow non nurses to be licensed (ACNM)
o) Not defined
t) Unclear, 80% used as average
v) Insurance law protects eligibility to participate as network provider, RITE CARE allows CNMs to be PCPs
z) CNMs only, other midwives may not prescribe
^) Guidelines describe provision for prescriptive authority

SOUTH CAROLINA:

a) A specialty area…shall be declared and the specialty title to be used but no limitation on use is described
b) Official recognition
d) BON within Department of Labor with protocols for prescriptive authority jointly authored by BON, BOME, BOP and BON, BOME agreeing on additional acts to be performed
e) SOP defined in general terms as encompassing additional acts, delegated acts, extended role, expanded role all of which are described in detail
m) Protocols that establish physician delegation
n) Licensed midwives regulated by State Board of Health and Environmental Control (ACNM)
o) Not defined
x) For Schedule V only
z) Formulary restricted to schedule V and legends- designated by physician in protocol

SOUTH DAKOTA:

c) Regulated under same statute but separate classification
d) Joint regulation of BON, BMOE (Board of Medicine and Osteopathic Examiners)
h) Effective from 1/1/99
I) 1996 Nurses allowed to form professional services corporation
j) MD must be onsite one half day a week
w) Application to Department of Health
z) Limited to 48 hours on schedule ll (schedule II to IV in regulation but in South Dakota Schedule IV includes Federal Schedule V

continued

Table F-1, continued
Professional Practice Index Scoring Criteria for Certified Nurse Midwives in 2000
New Index for OK, OR, PA, RI, SC, and SD, continued

REFERENCES
Main Resources

American College of Nurse Midwives, Nurse Midwifery Today, A Handbook of State Laws and Regulations 2000, Washington, DC, 2000.

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US Department of Justice, Drug Enforcement Administration, Diversion Control Program, http://www.deadiversion.usdoj.gov/drugreg/practioners/index.html.

Washburn University School of Law, http://www.washlaw.edu

OKLAHOMA

Oklahoma Public Legal Research System, http://oklegal.onenet.net/oklegal

OREGON

National Council of State Boards of Nursing, www.ncsbn.org/search/documents/actsand regs/or/

Oregon State Archives, http://arcweb.sos.state.or.us/rules

Oregon State Board of Nursing, http://www.osbn.state.or.us

PENNSYLVANIA

The Pennsylvania Code Online, http://www.pacode.com/secure/data

Pennsylvania Department of State – Professional Licensure, http://www.dos.state.pa.us/bpoa/nurbd

RHODE ISLAND

Rhode Island Department of Human Services, http://www.dhs.state.ri.us/dhs

The State of Rhode Island General Assembly, http://www.rilin.state.ri.us/Statutes/TITLES

The State of Rhode Island General Assembly, http://www.rilin.state.ri.us/gen-assembly/genmenu.html

SOUTH CAROLINA

South Carolina Board of Nursing, http://www.llr.state.sc.us/POL/Nursing

South Carolina State House Network, http://www.lpitr.state.sc.us/code

SOUTH DAKOTA

South Dakota Legislature, http://legis.state.sd.us/rules

South Dakota Legislature, http://legis.state.sd.us/statutes

Table F-1, continued
Professional Practice Index Scoring Criteria for Certified Nurse Midwives in 2000
New Index for TN, TX, UT, VT, VA, and WA

Scoring Category	Points	Optimal Score	fn	State TN		TX		UT		VT		VA		WA	
Legal Status															
Title protected	3	3	*a*		*a*	3	*a*	3	*a*	3				3	
Type of recognition:			*b*												
Licensed	3	3						3	*b*			3		3	
Certified, Registered, or Approved	2			2	*b*	2	*b*			2	*b*				
Regulated How:			*c*												
Separate Statute/Separate Rules	2	2						2							
Regulated as APN	1			1	*c*	1	*c*			1	*c*	1		1	
Regulated By:			*d*												
Board of Midwifery	3	3						3	*d*						
BON w/ Midwifery Committee or Midwife on Board	2									2	*d*			2	*d*
BON w/APN rep (when reg as APN) or sep APN Bd	1														
BON with no specific midwifery representation	1														
Board of Medicine involved	0			0	*d*	0	*d*					0	*d*		
Scope Defined:			*e*												
Scope defined in broad terms	3	3				3				3		3			
Scope more specifically defined	2							2						2	
Scope restricted (list of excluded/included tasks)	1														
No scope defined at all	0			0	*e*										
Gynecological care in SOP definition	1	1	*f*			1		1		1		1		1	
Masters degree required	0		*g*	0	*g*	0	*g*					0	*g*	0	*g*
National Certification	1	1	*h*	1	*h*	1		1	*h*	1		1		1	
Autonomous practice possible	5	5	*i*	5	*i*		*i*	5	*i*				*i*	5	
Relationships with Physicians:			*j*												
Independent Language/Collaboration not indicated	3	3												3	*j*
Collab, Consult, Referral	2							2	*j*	2	*j*				
Supervisory Language	1			1	*j*	1	*j*					1	*j*		
Temporary Permit, or not necessary	1	1	*k*	1	*k*	1		1		1		1		1	
Inactive or Retired Status Available	1	1	*l*	1				1	*k*					1	
Practice Agreements:			*m*												
No written agreement	3	3													
Agreement btw phys and midwife on site/available	2			2	*m*	2	*m*	2	*m*						
Agreement btw phys and midwife with regulatory body	1									1		1		1	*m*
Practice permissible for lay or direct entry midwives	1	1	*n*	1	*n*	**1**	*n*		*n*			1	*n*	1	*n*
Review of Records by Physician:			*o*												
Not defined in statutes or laws	2	2		2	*o*	2	*o*			2	*o*			2	*o*
Periodic/Defined Intervals	1							1	*o*			1	*o*		
Strict/Daily	0														
Hospital Privileges in legislation	1	1	*p*	1	*p*	1	*p*					1	*p*	1	*p*
CNMs can sign birth certificates	1	1	*q*	1		1		1		1		1		1	
Can refer directly for other health services	1	1	*r*					1		1				1	
Subtotals Legal		**35**		**19**		**20**		**29**		**21**		**16**		**30**	

Scoring Category	Points	Optimal Score	fn	TN		TX		UT		VT		VA		WA	
Reimbursement															
Medicare	5	5	*s*	5		5		5		5		5		5	
Medicaid % x 10	0-10	10	*t*	9		9		8	*t*	10		10		10	
Language that permits reimb by 3rd party/HMO	15	15	*u*	15		15		15	*u*			15	*u*	15	
Any "direct access" legislation for women	5	5	*v*			5	*v*	5	*v*					5	
Subtotals Reimbursement		**35**		**29**		**34**		**33**		**15**		**30**		**35**	

continued

Table F-1, continued

Professional Practice Index Scoring Criteria for Certified Nurse Midwives in 2000

New Index for TN, TX, UT, VT, VA, and WA, continued

Scoring Category	Points	Optimal Score	fn	State											
				TN		TX		UT		VT		VA		WA	
Prescriptive Authority															
How received:			*w*												
Automatic/No additional application required	4	4						4	*w*	4					
Application required	2			2		2						2		2	
Own DEA number	3	3	*x*	3				3		3		3		3	
CNM name on Rx pad	1	4	*y*	2		2		4		4		2		2	
Extent of Authority:			*z*												
Full auth within scope of pract (Schedule II-V & legend)	16	16						16	*z*	16	*z*			16	*z*
Extensive auth w/in scope (Schedule III-V and legend)	12														
Limited auth within scope (Schedule IV-V and legend)	8														
Restricted auth within scope (Schedule V and legend)	4			4	*z*							4	*z*		
Legends only	1					1	*z*								
Authority through:			^												
In legislation/collaborative agrmnt not required	4	4													
Collab agrmnt defines privilege OR no phys involvemen	3							3	^	3	^			3	^
Supervisory agreement defines privilege	2			2	^	2	^					2	^		
Defined Formulary (inclusive or exclusive)	1														
No Authority at all	0														
Durable medical equipment or devices	1	1	#			1						1		1	
Continuing Ed requirements	1	1	$			1				1				1	
Subtotals Prescriptive Authority		**30**		**11**		**8**		**27**		**28**		**13**		**27**	
TOTAL POINTS		**100**		**59**		**62**		**89**		**64**		**59**		**92**	

FOOT NOTES

TENNESSEE:

a) RN title protection only
b) Certification for prescriptive authority only--certificate of fitness, otherwise regulated as RNs
C) For prescriptive authority
d) BON, with rules jointly adopted with BOME and prescriptive authority regulated by
   Primary Care Advisory Board within Tennessee's Licensing Board of the Healing Arts
e) Only prescriptive authority defined
g) Masters required for prescriptive authority
h,J,K) For prescriptive authority
I) CNM could technically practice independently without prescriptive authority
m) Acts that would be regulated outside state definition of midwifery require protocol
n) Midwifery practice is legal but unregulated (ACNM)
p) Regulations permit but do not require CNMs to be granted privileges
o) Not defined
z) Prescribes or issues (dispense and administer) schedule II to V and legends
   but medical acts make MD responsible, requires physician supervision and treats
   scripts as MDs
^) Name of supervising physician and formulary of drugs must be submitted to
   BON and Division of Health Related Boards

TEXAS:

a) Use title specified on authorization--APN not to be used as title
b) Approval in statute, authorization to practice in regulations
c) NMs addressed separately in rules for provision of controlled substances
d) BON with BOME involved when prescriptive authority is approved
g) 2003
I) Acts independently and/or in collaboration with other health professionals
j) The regulations speak of independence or collaboration for nursing aspects of care
  but require that APNs must utilize mechanisms(I.e. protocols or written
  authorization) which provide authority for medical aspects of care
m) Protocols or written authorization need not to be detailed
n) Midwifery Act 1993 provides regulation for other midwives by Texas Board of
   Midwifery (ACNM)

continued

Table F-1, continued
Professional Practice Index Scoring Criteria for Certified Nurse Midwives in 2000
New Index for TN, TX, UT, VT, VA, and WA, continued

o) Not defined
p) Due process privileges when hospitals extends privileges to APNs(1999)
v) State Medicaid identifies CNMs as eligible primary care providers
z) NM may provide one or more doses of controlled substances during intrapartum or postpartum care if delegated by a physician, prescriptive authority limited to eligible sites which include MUAs and HPSAs, primary care locations and health care facilities
^) Although language suggests independence of APN, protocols and written authorization are required for prescriptive authority along with availability of physicians for immediate consultation

UTAH:

a) Representing oneself as a CNM when not licensed subject to fine (including using any title)
b) Licensed as Certified Nurse Midwife, BON has no jurisdiction
d) Certified Nurse Midwife Board advises Department of Commerce
h) Additional state exam on Utah laws and rules
I) Consulting physician required
j) Consulting physician
m) Written plan required for prescriptive privilege of Schedule II and III and for management of intrapartum care
n) Utah has a law protecting right of parents to deliver baby when, where, how and by whom they choose regardless of licensure
o) Participation in a quality review program is a condition of renewal of license
t) CNMs have own fee schedule, 80% chosen as representative of prior physician reimbursement
u) Any Willing Provider Law
v) Medicaid rules define NMs as primary care providers
w) Automatic when all conditions are met on license application--- if the conditions are not met a license as CNM without prescriptive authority is issued
z) Administer(includes administration of anesthesia) and prescribe, Schedule II to III authority requires "consulting" physician with written guidelines

VERMONT:

b) Endorsement
d) BON with APRN Advisory Committee
j) Independent dealing with nursing needs and under practice guidelines for medical functions
o) Not defined
^) May write and sign prescriptions as described in practice guidelines

VIRGINIA:

d) Joint Board of BOM and BON with Advisory Committee of APNs
g) Graduate of a program which grants a masters in nursing -in definition 18VAC 90-30-10
I) Midwives may establish separate offices but a physician must visit monthly
j) Supervision and direction by a physician in accord with written protocols for all medical acts
n) Prior to 1977 lay midwives were issued permits by the Board of Health, these midwives are "grandmothered" but no new permits are being issued (ACNM)
o) Monthly review
p) Statute prohibits discrimination of CNMs on a class basis
u) CNM only
z) Prescriptive authority changed in 2000 (V AND VI), effective 2002 schedule IV will be allowed and in 2003, schedule III. Rules are still being promulgated
^) Prescribe from an approved formulary in accordance with practice agreement. Effective 2000, may dispense if authorized to do so in agreement

continued

Table F-1, continued
Professional Practice Index Scoring Criteria for Certified Nurse Midwives in 2000
New Index for TN, TX, UT, VT, VA, and WA, continued

WASHINGTON:

d) BON called Nursing Care Quality Assurance Commission, one direct entry midwife, two NPs on board (may be CNM)
g) 1995
j) Practice is grounded in nursing and incorporates the use of independent judgement as well as collaborative interaction with other health care professionals
m) New requirement in 2000(rules are being written) which mandates an agreement between NP and physician for prescriptive authority for Schedule ll to IV
n) Direct entry midwives regulated by Midwifery Advisory Committee of Department of Health (ACNM)
p) Admit patients to health care facilities in regulations WAC 246-840-300, not in statutes
z) Prescribe and dispense(schedule ll to IV may only be dispensed for a 72 hour supply)
^) New law now requires collaborative agreement for prescriptive authority schedule ll to IV

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TEXAS

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UTAH

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VERMONT

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VIRGINIA

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Table F-1, continued
Professional Practice Index Scoring Criteria for Certified Nurse Midwives in 2000
New Index for WV, WI, and WY

Scoring Category	Points	Optimal Score	fn	State WV		WI		WY	
Legal Status									
Title protected	3	3	*a*	3	*a*	3		3	*a*
Type of recognition:			*b*						
Licensed	3	3		3	*b*	3		3	*b*
Certified, Registered, or Approved	2								
Regulated How:			*c*						
Separate Statute/Separate Rules	2	2		2		2	*c*		
Regulated as APN	1							1	
Regulated By:			*d*						
Board of Midwifery	3	3							
BON w/ Midwifery Committee or Midwife on Board	2								
BON w/APN rep (when reg as APN) or sep APN Bd	1								
BON with no specific midwifery representation	1			1		1		1	
Board of Medicine involved	0								
Scope Defined:			*e*						
Scope defined in broad terms	3	3							
Scope more specifically defined	2								
Scope restricted (list of excluded/included tasks)	1								
No scope defined at all	0			0		0	*e*	0	
Gynecological care in SOP definition	1	1	*f*	1		1		1	
Masters degree required	0		*g*			0	*g*	0	
National Certification	1	1	*h*	1		1		1	
Autonomous practice possible	5	5	*i*					5	*i*
Relationships with Physicians:			*j*						
Independent Language/Collaboration not indicated	3	3							
Collab, Consult, Referral	2			2				2	
Supervisory Language	1					1			
Temporary Permit, or not necessary	1	1	*k*			1		1	*k*
Inactive or Retired Status Available	1	1	*l*						
Practice Agreements:			*m*						
No written agreement	3	3							
Agreement btw phys and midwife on site/available	2			2	*m*	2			
Agreement btw phys and midwife with regulatory body	1							1	*m*
Practice permissible for lay or direct entry midwives	1	1	*n*		*n*			1	*n*
Review of Records by Physician:			*o*						
Not defined in statutes or laws	2	2		2	*o*	2		2	
Periodic/Defined Intervals	1								
Strict/Daily	0								
Hospital Privileges in legislation	1	1	*p*						
CNMs can sign birth certificates	1	1	*q*	1		1		1	
Can refer directly for other health services	1	1	*r*			1		1	
Subtotals Legal		**35**		**18**		**19**		**24**	

Scoring Category	Points	Optimal Score	fn	WV		WI		WY	
Reimbursement									
Medicare	5	5	*s*	5		5		5	
Medicaid % x 10	0-10	10	*t*	10		8	*t*	10	
Language that permits reimb by 3rd party/HMO	15	15	*u*	15				15	*u*
Any "direct access" legislation for women	5	5	*v*	5	*v*				
Subtotals Reimbursement		**35**		**35**		**13**		**30**	

continued

Table F-1, continued
Professional Practice Index Scoring Criteria for Certified Nurse Midwives in 2000
New Index for WV, WI, and WY, continued

Scoring Category	Points	Optimal Score	fn	State WV		WI		WY	
Prescriptive Authority									
How received:			w						
Automatic/No additional application required	4	4							
Application required	2			2		2	w	2	
Own DEA number	3	3	x	3		3		3	
CNM name on Rx pad	1	1	y	1		1		1	
Extent of Authority:			z						
Full auth within scope of pract (Schedule II-V & legend)	16	16				16	z		
Extensive auth w/in scope (Schedule III-V and legend)	12			12	z			12	z
Limited auth within scope (Schedule IV-V and legend)	8								
Restricted auth within scope (Schedule V and legend)	4								
Legends only	1								
Authority through:			^						
In legislation/collaborative agrmnt not required	4	4						4	
Collab agrmnt defines privilege OR no phys involvemen	3								
Supervisory agreement defines privilege	2								
Defined Formulary (inclusive or exclusive)	1			1		1			
No Authority at all	0								
Durable medical equipment or devices	1	1	#			1			
Continuing Ed requirements	1	1	$	1		1		1	
Subtotals Prescriptive Authority		30		20		25		23	
TOTAL POINTS		100		73		57		77	

FOOT NOTES
WEST VIRGINIA:
a) No person shall hold themselves out as practicing nurse midwifery without a license
b) Also annual certificate of registration
m) Name and address of physician in collaboration must be submitted to Board of Examiners of Registered Professional Nurses
n) Lay midwives licensed prior to 1973 were grandmothered under legislation but no subsequent licenses are issued to lay midwives (ACNM)
o) Not defined
v) Women's access to health care bill 1998
z) Schedule III limited to 72 hour supply

WISCONSIN:
c) Considered APNs for prescriptive authority only, governed as CNMs by different section of Nurse Practice Act
e) CNM practice limited to approved facilities
g) For prescriptive authority (effective 7/1/1998)
t) Higher if qualifies as an NP or has a masters
w) Prescriptive authority as APN. Certificate to Issue Prescription Orders issued to "prescribe, order or dispense", dispensing limited to samples or to facilities at least 30 miles from nearest pharmacy
z) Significant limitations on Schedule II

continued

Table F-1, continued
Professional Practice Index Scoring Criteria for Certified Nurse Midwives in 2000
New Index for WV, WI, and WY, continued

WYOMING:

a) "A specialty area of nurse practice shall be declared and the specialty title to be utilized shall be the title which is granted by …", violation to use any words, titles, etc unless person is duly licensed
b) Recognition and licensure
l) BON is prohibited from limiting nurses from entering into practice with other health care professionals
k) National Certification or masters required for licensure. No temporary certification but if masters prepared not necessary to be certified so could apply for license
m) Written plan which outlines SOP and guidelines for collaboration
n) No regulation prohibits lay midwifery practice, if limits to medical practice act are adhered to (midwifery exempted in medical practices as long as certain conditions are met) (ACNM)
u) Any Willing Provider law covering all HMOs and PPOs
z) Prescribe, provide, dispense

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WEST VIRGINIA

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WISCONSIN

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WYOMING

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Wisconsin Nurses Association, http://www.wisconsinnurses.com

Appendix G. Field Work Details

This appendix contains a discussion of some of the details of the field work conducted in seven States as part of this study. It includes the following subsections:

- Introduction
- The Field Work
- Detailed Discussion of the Fieldwork
- Summary of the Statutes and Regulations
- Separate reports describing the fieldwork in each of the seven States in more detail are available by request.

Introduction

To understand the growth of NPs, PAs, and CNMs and their impact on the health of the American public, the Health Resources and Services Administration commissioned the Center for Health Workforce Studies at the State University of New York at Albany to perform research and report on the changes in the three professions across the decade. As pert of this study, the Albany Center contracted with the Regional Center for Health Workforce Studies in Illinois, the North Carolina Center for Nursing, the WWAMI Center for Health Workforce Studies, and the Center for Health Economics and Policy at the University of Texas Health Science Center at San Antonio to conduct field work to help understand how the three professions had changed between 1992 and 2000. The fieldwork was conducted in seven States (California, Illinois, New York, North Carolina, Ohio, Oregon and Texas) chosen for their geographic diversity and for the variety of legal and regulatory climates for the three professions. Of significant interest was the impact of the three professions on delivery of care to underserved populations. The fieldwork was also intended to inform and confirm the findings of the work on the research.

The Fieldwork

Fieldwork was conducted by the centers in a variety of formats. Focus groups were convened in State capitals, large urban settings, and in rural locations across the fieldwork states to discuss legal and professional practice issues for the three professions. In some cases, individual telephone interviews occurred and in others, written communication was involved.

Those interviewed in the fieldwork included State legislators and government regulators, State and local policymakers, educators of the three professions, representatives of primary care coordinating councils and area health education centers, representatives of the physician, nurse practitioner, certified nurse midwife and physician assistant provider communities, directors of community health clinics, mobile clinics, hospital systems, long term care facilities, and rural health projects. Participants were identified through a variety of means including identification by the Project Advisory Committee, by professional associations, by educational programs, through Internet resources and literature searches, and through other identified peers. Although the general experience of the research centers was that the physician profession was underrepresented in the fieldwork process, that professional group was invited to participate in all States and in all venues. Participants in the focus groups and interview process represented a wide range of constituents and provided broad based perspectives on the professions and their contributions to health care delivery.

The fieldwork was structured by a list of questions generated by the cooperating research centers and by the Project Advisory Committee that was convened to monitor and direct the study process. A list of the questions can be found at the end of this appendix.

In most cases, the fieldwork was conducted at defined locations through invitation by the project research staff. Discussions were structured to last over a morning or afternoon session and generally involved mixed groups of participants. However, the composition of the groups varied. For instance, in New York City, individual professional focus groups were hosted that included only nurse practitioners in one session, physician assistants in another, and certified nurse midwives in a third. In other locations, participants included representatives from a range of professional, regulatory, and organizational groups. One center found that individual physician interviews were the most convenient way to obtain the insights from that constituent group.

Individual State fieldwork reports relied on a variety of published data for background information on the supply of the professions in the States, the educational programs available to the professions, the numbers of recent graduates from those educational programs, and the demographics of the States involved. The findings of the fieldwork are based heavily on the observations of those who provided insights to the discussions about the professional experiences of NPs, PAs, and CNMs in the various States.

The Objectives of The Fieldwork

Fieldwork was guided by the following broad objectives:

- *To assess the kinds of legislative and regulatory change that has occurred in individual States and to understand the effects of legislative change on actual practice environment;*

- *To evaluate the process of change and to discover how regulatory change occurs within States;*
- *To examine and assess the data available about the three professions both locally and nationally;*
- *To understand how the environment in which the professions practice impacts the supply of the professions in a State;*
- *To understand the relationships of these professionals to their peers and to other professions within the complex health care delivery systems in which services are provided;*
- *To understand the influence of the three professions on delivery of health care;*
- *To investigate how practice by the three professions affects care to underserved populations;*
- *To understand what enables and conversely, what impedes provision of care by the professions within the individual State legal scopes of practice.*

Topics Covered in the Fieldwork

A number of topics were covered in the interviews, discussions, and communications conducted as part of the field work. The primary topics were:

The Elements of the Scoring System

- *Changes in Professional Practice*
- *Economic Positioning and Reimbursement*
- *Prescriptive Authority*

Relationships

- *Relationships with Physicians*
- *Relationships Between the Professions*

The Professions

- *Effects on access to Care*
- *Education of the Professions*
- *Supply of the Profession*

Important themes and concepts covered in the seven states are summarized below. This summary is not meant to be exhaustive, but rather to introduce what the field work staff and the project staff seem to be the most important themes that inform the goals of the study.

Changes in Professional Practice

Informants underscored the importance that patient safety issues can have in motivating changes in professional practice for the three professions. Political and economic constituents who have a variety of interests to protect also heavily influence change. Both external and internal stakeholders can effectively move the legislative process with persistence and support.

Achieving a workable balance among all constituents affected by change is often difficult with the process requiring compromise by many stakeholders. The resulting legislation may not be as comprehensive as interested parties might have initially advocated. Therefore, change often occurs incrementally.

What is actually allowed in legislation may differ markedly from what actually happens when the new features are implemented in medical practice. Although legislation may enable practice, the conditions under which these professions actually work may be more confined than what is permitted in law.

When statutes are permissive in nature, actual practice possibilities may not be fully used. Informants in Oregon cited certified nurse midwives who are, by law, permitted to practice autonomously in the State. However, in actual practice, autonomous practice rarely happens. Standards of patient care dictate that CNMs work collaboratively with a physician to provide back-up care in emergency situations so CNMs practice collaboratively. This is a State where actual practice is not generally as expansive as legislation allows. The needs of the patient and the provider moderate practice configurations within the legal parameters.

On the other hand, established legal parameters may create restrictive boundaries. Fieldwork participants indicated that legislated professional practice impacts practice quite directly and definitively. The extent to which professional practice is defined in law is an example.

In some practice acts, professional practice is broadly defined or expansively defined, as in Oregon. In others, it is so highly detailed in law that the performance of daily tasks is restricted. Statutes or rules which list, by task, the services that can be performed by a professional in practice provide no latitude for that practitioner or for his/her supervising or collaborating physician to make determinations about additional competencies that might be used within a practice to enhance provision of care for patients. In the State of Ohio, physician assistants are restricted by a very defined professional practice in statute and regulations. Physicians in the State were previously able to delegate tasks to untrained medical assistants that they were not permitted to delegate to physician assistants because of the restrictive language in law describing PA professional work. The State addressed this rather confusing situation with a recent opinion by the Attorney General that addresses medical delegation to licensed and unlicensed personnel. However, the situation provides an illuminating example of how detailed legislation can complicate actual practice.

In some States, the PA, NP, or CNM and the cooperating, employing, or supervising physician define professional practice. These States require written or verbal agreements that detail the conditions and standards of practice for these professionals. In Ohio, in addition to the statutory and regulatory description of professional practice, physician assistants must work under protocols that are called “standard utilization plans” or under expanded “supplemental utilization plans” that further define and proscribe their practice. In California, NPs, PAs, and CNMs work under directives called “standardized procedures”.

Actual provision of care to patients informs efforts to expand professional practice legislation in many States. Prescriptive authority for nurse practitioners in Ohio provides an example of how practice and legislation interface. NPs had no prescriptive authority in the State until quite recently. This prevented the State of Ohio from accessing Federal money available for targeted initiatives to increase access to care for underserved populations. In order to take advantage of these existing funding streams, the Ohio legislature enacted remedial enabling legislation in 1993

to create a "pilot" program for NPs. Administered by three schools of nursing in the State and supervised through standard care arrangements, this program permitted qualified nurse practitioners to have prescriptive privileges in certain underserved settings in the State. This enabled practice in extended locations with broader populations. When NPs sought expanded prescriptive privilege in all practice venues several years later, the path to legislative approval was informed by the positive experiences from the pilot project. The demonstration project experience enabled change in legislation so that in 2002, NPs who meet certain requirements are granted prescriptive privileges for controlled substances in Schedule III to V within the parameters of a formulary and when supervised by a physician in all settings in the State. The pilot program also eased the expansion of Medicaid reimbursement for NPs in the State so that Medicaid now reimburses non-pilot program NPs for services to Medicaid eligible patients. Now that these privileges have been extended to all qualified NPs in the State, the pilot program will sunset.

Practice acts are in need of refinement on a continuing basis as practice changes. New York informants indicate that enabling legislation for the three professions in the State was enacted about 30 years ago with the main purpose of enhancing primary care services for underserved populations. Informants suggest that now that the professions have moved to provision of specialty care in addition to primary health services, statutes and regulations should be revised to reflect the different conditions of more specialized practice. Since the existing laws and regulations mainly address the provision of primary care, they are not always applicable to practice in specialty areas.

Professional practice legislation in a State can provide a competitive edge for one profession over another. In New York State, PAs must have all prescription orders co-signed by their supervising physician within 24 hours of issuance. This is not true for nurse practitioners working in the same State. Rural providers in New York suggest that it is easier to hire a nurse practitioner for remote practice because the conditions for practice are less demanding of the cooperating physician. In Ohio, the countersignature requirement for medical orders written by a physician assistant may be a deterrent to hiring. A physician considering the benefits of hiring one kind of professional or another might consider a nurse practitioner over a physician assistant since a NP is not subject to that same strict review requirement as a PA in Ohio. In California, other interesting circumstances affect hiring practices. The unionization of nurses (and therefore, nurse practitioners) in hospitals has led some hospitals to show a preference for hiring physician assistants who are not subject to strict union rules.

Changes in professional practice have occurred at varying rates across the States and with varying emphasis. The practice environment for the professions has only recently evolved as substantially in Illinois as it has in other States over the last decade. Illinois is a State where a strong medical lobby represented by the national presence of the American Medical Association and the American Hospital Association has been more reluctant to provide expansion of practice in law for these professions. In 1998, Illinois was the last State to enact advanced practice nursing legislation that directly addressed practice by nurse practitioners and certified nurse midwives. Prior to that time, the professions had been regulated under the nurse practice act as registered nurses. Prescriptive authority for CNMs and NPs in the State is still "delegated" authority. Physician assistants in Illinois received delegated authority to prescribe some controlled substances in the year 2000.

There are also variations in professional practice within States across the professions. Nurse midwives in New York were previously more confined by the language within their professional practice legislation than were nurse practitioners. Sekscenski rated New York as among the most hospitable environments for physician assistants and nurse practitioners in 1992 and these favorable conditions for PAs and NPs continue to prevail today. Nurse practitioners can own independent practices in the State and collaborate with physicians in many healthcare settings. Physician assistants work with physicians under indirect supervision guided by verbal or written agreements. In 1992, however, the practice environment for Certified Nurse Midwives was much more limited. CNMs have made significant progress within the State both legislatively and operationally. Presently, Certified Nurse Midwives in New York experience one of the top ranked practice environments in the 2000 index created as part of this study. In fact, New York State presently has more licensed midwives than any other State in the country except California.

The privileges allowed the three professions within States also vary. In Ohio, Nurse Practitioners have been granted prescriptive authority for controlled substances in Schedule III to V if the NP meets certain educational and training requirements. Physician Assistants who practice more consistently with physicians in a medical paradigm rather than a nursing model have yet to attain these same privileges. Physician assistants have no prescriptive authority and may only *convey* a doctor's medication orders in the State. The legislative dynamics in Ohio are particularly interesting since there is a strong medical lobby bolstered by the presence of seven medical education programs and the presence of a world-renowned medical center, the Cleveland Clinic. These political forces have seemingly been historically resistant to the expansion of privileges for the three professions.

Another concern of informants in the seven States was that significant expansion of privileges for many professions over the last decade might actually result in some backlash from regulatory and medical communities. At times, physicians and their professional organizations react as if threatened by the incursions on their professional practice. Some wariness was expressed about continuing to seek further expansion of legal scope for these professions by some of the informants. At times, the physician community seems to be entrenched in resistance to further change because of the pressure on physicians to continually grant more privileges to other professions.

Fieldwork participants suggested that researchers examine the differences in how professional practice legislation affects provision of and access to care in outpatient versus inpatient settings. Variation in requirements by setting results in different styles of practice for the professions depending on the location where services are provided. Informants indicated that they felt that the three professions were often viewed as being most appropriate in primary care outpatient settings where practice is differently configured than in acute care settings. In fact, all three professions practice in all kinds of settings, types of practice, and types of facilities.

Hospital privileges (inpatient environments) provide an example of how complex the interplay between enabling legislation and practice environments can be. Although the law may permit hospitals to provide NPs, PAs, and CNMs with admitting privileges and may prohibit hospitals from discrimination in the awarding of admitting or staff privileges, in actual practice there is tremendous variation in the granting of privileges to the three professions. Even though legal supports are present in law, hospitals may choose, in voluntary environments, not to provide privileges to the professions. In situations where privileges are mandated, they may impose a co-admission regulation that requires a physician to co-admit with the NP, PA, or CNM. Such

requirements effectively restrict direct patient admissions by the professions. Some hospitals offer admission privileges but require that every patient have a physician of record on file. Again, this requires direct physician involvement and restricts practice for the professionals.

In Oregon, hospitals may not discriminate against NPs, PAs, and CNMs, but they may impose a co-admission requirement. Informants in the State suggest that obtaining staff privileges in rural hospitals is a major challenge. The standards to qualify for admitting privileges may require an internship. Nurse practitioners and nurse midwives do not meet those requirements since their educational process differs from that of physicians and PAs who are trained in a medical model, and often in inpatient settings.

PAs also seem to have fewer problems gaining hospital privileges because of their traditional rapport with physicians. The relationship between physician and physician assistant is supervisory in nature and PAs are often viewed as members of a two-person team. This perception seems to help them to more easily gain hospital admitting privileges. As one informant suggested, PAs gain "more independence from their dependence on physicians". Physician acceptance of PAs may actually result in more autonomy in practice since PAs are seen as less threatening. NP professional practice, although legally more autonomous than that for PAs, may cause more resistance or wariness from physicians when certain privileges, such as hospital admissions, are involved.

PAs in New York suggest that external regulatory groups have some influence over how admitting privileges in hospitals are awarded. JCAHO, for instance, influences how hospitals credential staff. PAs and NPs are increasingly working in hospital environments where the numbers of resident physicians have been reduced by funding changes over the last decade. NPs and PAs are also working increasingly in specialty practices that admit to inpatient beds. Informants expressed concern that hospitals might potentially restrict professional practice for NPs and PAs in inpatient settings in order to comply with regulatory guidelines. Regulations from certifying and accrediting bodies could result in the creation of an environment that is too restrictive for effective practice for PAs and NPs. Examples of such restriction include authority to write medical or prescription orders for inpatients.

The importance of these professions to the provision of inpatient care should not be ignored. PAs are substituting in some hospitals for residents who are no longer working on service for as many hours as was historically the custom. Additionally, Departments of Medicine are giving up residency positions in some medical education programs and physician assistants are filling the gaps in care caused by the lower number of resident positions. Restricted practice in hospitals can affect the efficiency of care in inpatient environments. As an example, a PA in Ohio cited the difficulties in ordering medication for inpatients as a burdensome process since, in that State, PAs may only convey physician's direct orders. The example of a patient needing Tylenol and having to call the doctor in the early hours of the morning for authorization was offered as an instance where practice may be unduly restrictive.

Economic Positioning and Reimbursement Issues

Fieldwork participants in North Carolina suggested that the view of NPs, PAs, and CNMs as "providers of less expensive care" positions the professions poorly and puts them in competition with family practice doctors and other primary care physicians. There was consensus across the fieldwork States that this economic emphasis places the three professions at a disadvantage. The

professions prefer, instead, to foster a public image that emphasizes *quality* care provided *efficiently* and *effectively*.

To completely ignore the economic advantage in hiring these professions would, however, be specious in an economy seeking reduction in cost as a primary objective. Cost of care is a universal concern for all stakeholders. The cost effectiveness of the professions is indisputable. Nurse practitioners, physician assistants, and certified nurse midwives are paid lower salaries than physicians. At certain levels of care when reimbursement is equal, the "profits" of a provider organization are increased when services are provided by lower paid and therefore, less costly providers. NPs, PAs, and CNMs suggest that placing only this kind of value on their work ignores the quality of the services they provide. One Texas informant described this as viewing these professions as "cash cows" to be used only to increase the volume of patient visits resulting in increased reimbursement and net profit. A more comprehensive view of the professions as providing "cost effective in a cost conscious health care environment" more accurately reflects the benefits of the care provided.

The refusal of many managed care organizations to empanel these professionals (contract with NPs, PAs, and CNMs as participating providers) was another recurring issue across States in the various fieldwork experiences. The issue of managed care organizations providing ambivalent responses to these professions was discussed. Of particular note at this juncture in our report is the consistency between the philosophies advanced in nursing education and the managed care mantra of prevention and early diagnosis. Nursing professions have long fostered, as a primary goal, education of patients about prevention of illness and careful management of diagnosed illnesses. This nursing paradigm is precisely that espoused by the managed care model, which is constructed on the fundamental premise that prevention, early diagnosis of illness, and appropriate intervention with effective medical management is less expensive for the system. Although the motivations vary, positive patient outcomes achieved through provision of preventive services and effective management of chronic illness are the ultimate goal for both nursing professionals and MCOs (managed care organizations). However, even though the nursing professions and HMOs are in philosophical agreement about desired outcomes, there is a disconnect in the paths defined to achieve those goals. Managed care and preferred provider organizations have been reluctant to embrace NPs, PAs, and CNMs as full participants in the process of achieving these commonly valued outcomes by providing them with participation agreements as contracted approved professionals on provider panels.

The educational aspects of medical encounters are part of the problem. Although patient education is an important part of prevention and management, payers have been reluctant to pay for those services. The economic accent in provision of care is on treating an acute or emergent condition as quickly and effectively as possible. There is little financial incentive in current reimbursement methodologies to address chronic issues or to provide patient management services. This emphasis is contrary to the practice paradigm for advanced nursing professions. Patient education requires extra time during an encounter and reduces the number of patients seen in a day. New York State informants indicate that this is an example of reimbursement driving the delivery of health care when delivery should be driven by best practices and patient need. The importance of finding a way to reimburse for educational services was a recurrent theme in all seven States. The expertise of nurses in providing education services is recognized by physicians as one of the many incentives to hire NPs and CNMs.

The lack of available reimbursement for patient education affects the clinical precepting of professionals in training in addition to the nature and duration of patient encounters. Training a student requires time from the clinical preceptor and many physicians and other professional providers feel they can no longer afford to take time from patient visits to educate clinicians in training. Clinicians who precept students often see reduced patient volumes with a concomitant reduction in reimbursable services. This situation contributes to the lack of available clinical rotations for students of the professions.

Direct reimbursement to NPs and CNMs was another recurrent issue among fieldwork participants. Of the three professions, physician assistants were the least concerned about current reimbursement methodologies. Physician assistants are more aligned with supervising physicians and the profession is generally comfortable with current reimbursement mechanisms.

Informants suggested that the prevailing reluctance by managed care organizations to pay NPs, PAs, and CNMs directly may be an indirect reverberation from the physician community. Many health maintenance organizations are associated with independent practice associations and managing boards dominated by physicians. These physicians recommend and establish the standards for participation by and payment of providers and they have been reluctant to place professions that are perceived as "lesser" on the same provider panels, which positions them with similar privileges as the physician community.

There were some contradictions in the private and public behavior of physicians noted by fieldwork participants. Many physicians in private practice will hire NPs, CNMs, and PAs to augment their professional practice and their profits. An employing physician will lament that these employees are paid at lower rates by public payers, such as Medicare and Medicaid, who require that NPs, PAs and CNMs bill directly for the services they provide to patients. (Medicare only reimburses NPs and PAs at 85 percent of the physician fee schedule and CNMs at 65 percent of that same schedule. Midwives are actively working to increase the Medicare reimbursement rate to make it more proportionately equal. Medicaid reimbursements vary by State from a low of about 70 percent of the physician fee schedule for these professions to as much as 100 percent in some locales.) Physicians express discontent with these proportionate reimbursements.

However, physician attitudes are more ambivalent when payment is solicited from private third party insurers who allow NP, PA and CNM services to be billed using the physician identifier. This practice results in the actual provider of the service becoming effectively invisible to the payer. The need for change in this regard is seen as pressing by NPs and CNMs. Physicians, in this context, seem content with the status quo since they receive full reimbursement through their HMO participation regardless of who provided the service.

Placing PAs, CNMs, and NPs on approved provider panels, raises some significant questions. Should these providers be paid at the same rates as physicians for services rendered at the same level of care? Lower payment rates would directly impact the income of their practices. And would such recognition foster moves to "independent" practice? These issues are surfacing in several States and are occupying a dominant place among practice issues for the professions across States. In New York, reimbursement was a common issue throughout all fieldwork discussions. This is a more complex issue than might appear, because lack of reimbursement is often a major barrier to access to and provision of care.

The inability to identify the actual provider of services on claims has implications for analysis of the practice characteristics and patterns of providing care. Such billing practices affect the ability of researchers to assess the effect of NPs, PAs, and CNMs on access to care for underserved populations. Data on the kinds of services provided and on the patient populations served are largely unavailable because NPs, PAs, and CNMs are not identified in billing documents as providers. Federal legislation under HIPAA will require a provider identifier for each professional involved in diagnosis or treatment. However, until third party payers actually require use of those provider identifiers and/or change participation and payment policies across the States, the lack of visibility for these professions will continue as will the inability to assess to whom care is provided, at what level of service, in what locations.

This situation is further complicated when public and private payers contract in cooperative agreements to provide Medicaid Managed Care Plans, Child Health Insurance Plans, and Medicare risk contracts. In indemnity models, in which government payers traditionally operate, access to NPs, PAs, and CNMs is generally unimpeded. However, when government contracts with MCOs to administer these public programs, access is affected. MCOs limit patient access to a defined list of participating providers. If NPs, PAs, and CNMs are not on the lists, access to them is prohibited.

In Oregon where the Oregon Health Plan engaged a number of insurers in their Medicaid Managed Care Plan, NPs were particularly well positioned by their autonomous professional practice to provide care in that system. They were able to contract with the managed care organizations as participating providers. Several of these insurers are now abandoning their contracts with Oregon Health, and NP practices in the State are jeopardized by the change in payers. If they do not have contracts with the remaining MCOs in the program, patients will be unable to access them.

Throughout the fieldwork States, private payers appear to limit participation by NPs, PAs, and CNMs in their preferred provider plans or HMOs. This is an interesting issue since this study demonstrates direct statistical correlation between the growth of these professions within States and HMO penetration rates. One of the findings of this study is that the growth of the professions is directly correlated with the increasing penetration of HMOs during the decade.

Even when insurance reimbursement is mandated in law through “any willing provider” legislation or through State insurance law providing that qualified providers must be paid for services provided if a physician would have been paid for the same service, the actual implementation of the law may differ from the legislative intent. There are many factors that affect compliance. For instance, ERISA, which is a Federal law, exempts companies who self-insure from having to meet State insurance mandates. Federal law supersedes State legislation and ERISA-protected plans are not required to comply with State insurance mandates.

Implementation of law is circumvented in a variety of other ways. HMOs may avoid the full force of insurance law by not contracting with NPs, PAs, and CNMs as plan providers. Insurance law does not require that HMOs contract with NPs, PAs, and CNMs, only that they pay them equitably when they are participating. This is another example of legislation providing supportive pathways for professions, but actual practice environments have an influence on the implementation of the law. There is significant variation in interpretation and application of law across States in regards to reimbursement.

North Carolina was cited as a good example of a State where private insurance policy and public health policy vary. Whereas there is strong public support and financial incentives in the public sector for these professions to practice in public health settings, private insurance carriers have been less willing to embrace the professions as participating providers. Although there was acknowledgement within the State that managed care penetration had fostered growth of the professions, there is still significant resistance by private payers to full recognition and empanelment.

Prescriptive Authority

Prescriptive authority is an important aspect of practice when meeting patient needs. Prescriptive authority includes writing prescriptions as well as the ability to provide samples or dispense medication in certain practice settings. Prescriptive authority has been a major focus for all of the professions over the decade since it enhances the efficiency of patient encounters. The ability to provide sample medications or to dispense medications also contributes to increased access. Dispensing authority for samples or other pharmaceuticals is particularly critical when services are provided to populations who cannot afford to buy needed drugs or when travel to a pharmacy is difficult because a drug store is not conveniently located.

Expanded prescriptive authority was seen as a major issue for NPs in Texas. A restrictive formulary and the inability to prescribe controlled substances were identified as barriers to effective practice. NPs in the State have no prescriptive authority for scheduled drugs and work from a limited formulary when prescribing legend drugs. This is seen as an impediment to effective care.

Physician Assistants in Ohio also view the lack of prescriptive authority as a major impediment in practice particularly in inpatient environments. The requirements for physician participation were seen as unduly restrictive. Physician assistants have only delegated prescriptive authority in the State.

The reluctance of HMOs to empanel NPs, PAs, and CNMs occasionally impedes the use of their prescriptive authority in States where they have been granted those privileges. When an HMO provides coverage for prescriptions, there may be a requirement that the script be written or signed by a participating physician. Scripts authored by professionals, such as NPs, PAs, and CNMs, who are not listed on the panels of MCOs may not be reimbursed to the pharmacy or the patient. These circumstances often force a countersignature by the collaborating physician. This is the kind of detail in practice environments that impedes and complicates provision of care.

In New York State, informants suggested that prescriptive authority is important to many professions and that NPs were fortunate to have the privilege. NP educators cited the example of licensed psychologists studying in NP programs in the State in order to gain prescriptive privileges for their practices. In Ohio, when prescriptive authority was discussed, informants suggested that prescriptive authority was difficult to obtain and that physician advocacy groups are inclined to favor permitting only professions which require graduate education to have prescriptive authority.

Relationships with Physicians

There was general agreement in the fieldwork States that professional acceptance for nurse practitioners, certified nurse midwives and physician assistants is important to efficient and effective practice. The ideal relationships in health care environments were seen as symbiotic,

interdependent, and team based. However, it is considered important that physicians are not always positioned as leaders of the team. Representatives of the three professions recognize that physicians have advanced training and education that qualifies them for more complex medical decision-making. However, the professions, jointly and individually, seek recognition for the special expertise they have developed through defined education, special training, and (often) extensive experience. Independence versus dependence was seen as an archaic way of framing relationships within the system. Interdependence seemed a preferable descriptive term.

The impact of the professions on the character of health care practices varies. Physicians suggest that they sometimes end up with different, more complicated practices when they collaborate with NPs, PAs, and CNMs who are providing acute and preventive care to patients. Since these services tend to be largely primary and straightforward, physicians in practices that include NPs, PAs, or CNMs often see greater numbers of patients with complex medical conditions and co-morbidities that may be more chronic in nature and more difficult to manage. This has ramifications for the practice and for the professionals who are providing care.

Of concern to informants in several States was the legal relationship between physicians and NPs, PAs, and CNMs. In both Ohio and New York, informants were concerned about the assumption that doctors are liable for the acts of the professionals in their employ. Representatives of the three professions in those States indicate that they are licensed professionals with independent responsibility for their work performed within the scope of their training and education. The assumption of "vicarious liability" by physicians for the practice of NPs, PAs, and CNMs jeopardizes positive relationships between the professions and physicians and alters their participation in patient care.

Professional informants suggest that, although there are similarities in their interactions with physicians, each of the professions has a unique relationship that is affected by their particular training and skills. Whereas NPs and PAs tend to fill complementary roles in physician practices, CNMs, although also complementary to physicians, often have a somewhat more competitive relationship with physicians. In certain locations they compete both directly and indirectly with family care physicians for patients.

Primary care physicians who provide obstetrical services and CNMs compete indirectly for the same target population of childbearing women who are at minimum risk for complications in both rural and urban settings. CNMs also compete with family physicians for back-up obstetrical specialist physicians to provide help with difficult deliveries and at-risk obstetrical patients.

Another source of competition is the requirement by health maintenance organizations that each patient have a primary care gatekeeper who will screen and refer for higher-level services only as needed. This issue was discussed in the Texas and North Carolina fieldwork as an aspect of the present health care delivery system that affects the provider of care. HMO gatekeepers include family practice doctors who may be reluctant to refer obstetrical patients to Ob/Gyn practices for normal obstetrical care or for well woman gynecological care, since they can provide those services. These patients are traditionally the patients seen by CNMs. Since CNMs are most often employed in Ob/Gyn practices, this further limits CNM access to patients. This is not as important in some States, such as New York, where direct access to obstetrician/gynecologists without referral by their primary care physician is legislated by the State. Women can determine independently from whom they will seek maternity or gynecological care.

The same issues arise with Medicaid insured patients in States where Medicaid contracts to HMOs. Access to nurse midwives may be limited under those circumstances. This would not seem to be an issue because Medicaid insured patients often have difficulty finding providers because of the generally lower reimbursement rates. However, in some States, the opposite is true. Interestingly, informants in both Ohio and New York suggest that State Medicaid programs have built waivers for at-risk childbearing women that reimburse providers at very close to the commercial rates, which makes Medicaid-insured pregnant women attractive to private practice doctors. This experience suggests that an increase in Medicaid rates for other services might also enhance access for Medicaid-eligible patients needing other kinds of services.

Relationships between the Professions

NPs and PAs are more likely to compete between themselves for available practice positions. Although the three professions have many common attributes that are made more obvious by their positioning in the health care delivery system, they are undoubtedly different professions. Each of the professions is affected variously by the environments in which work is performed, by the education and training of the professional, and by the relationships with other providers. The greatest overlap in function seems to occur between PAs and NPs whose roles in private practice and hospital settings are somewhat similar. However, the models on which they base their practices are quite distinct.

An informant in Oregon described these differences as "diverging practice paradigms – independence from physicians and adherence to the nursing model for NPs versus dependence and adoption of the medical model for PAs." However, the variations in practice orientation may only be apparent to those with extensive knowledge of the differences between NP and PA training and education. Informants suggest that most patients receiving care from an NP or PA would find it difficult initially to differentiate the kind of services being provided.

CNMs are less competitive with NPs and PAs. Although CNMs are legally enabled by advanced practice nurse (APN) legislation in many States, their practices are usually more limited than that of NPs. Certified nurse midwives generally treat women of childbearing age. This positions them to be less competitive with physician assistants and nurse practitioners for practice positions than NPs and PAs are with each other. Although women's health nurse practitioners provide similar services, the numbers in this NP specialty are not yet substantial. NPs and PAs often work with a more diverse population than CNMs, i.e., both males and females, pediatric populations, etc. This helps to reduce the competition.

It must be noted that this competition is often subtle. The individual professions understand there is danger inherent in undermining another of the similar professions. There is recognition that competition needs to be kept in check. However, informants commented that competition for clinical training sites currently exists between NPs and PAs. Additionally, concern was expressed in several States that, should an oversupply of these providers be present, there is likelihood of competition developing in the workplace for jobs. Some of that competition may already exist in a variety of markets across the States as noted variously by fieldwork informants.

Participants in the fieldwork discussions in the various States indicate that it is important that these professions be given recognition and appropriate positioning within the delivery system. Providers who encounter resistance to their roles from peers, other providers, payers or the public are more likely to leave the professions because of lack of acceptance. It is important for

these professionals to work in cooperative, collaborative environments where their skills and talents are understood and used effectively.

Access to Care

Definitive assessment of the impact of these professions on access to care continues to be elusive. In all States, professionals suggest that access to care is enhanced by the use of these providers in a myriad of settings. Researchers were reminded by representatives of the professions in the various States that the professions share common roots grounded in the provision of primary health care to patients with limited access. The professions were all conceived and legally enabled because of national policy concerns about meeting the health care needs of underserved populations. In fact, informants suggested that for many years NPs, PAs, and CNMs worked in underserved settings in greater numbers proportionately than physicians. For instance, in North Carolina, NPs and PAs originally practiced only in health clinics and public health settings. They have subsequently moved into more mainstream practice environments as the professions have become more recognized.

Initially, Federal reimbursement policy encouraged practice in underserved settings by limiting public reimbursement for services to special public health, institutional and clinic settings. The 1997 Balanced Budget Act (BBA) equalized reimbursement across all settings providing less of an incentive to remain in locations designated as underserved. The BBA extended a 10 percent bonus for physicians practicing in identified underserved locations but did not extend that same benefit to NPs, PAs, and CNMs practicing in the same settings. Informants suggested that this is counterproductive to Federal policy, which is to encourage NPs, PAs, and CNMs to work with populations who have limited access to health services.

The present increase in specialization for PAs and NPs was cited as concerning. As these professions move to specialty and sub-specialty care, the opportunities for practice with needy populations are reduced. Since specialist physicians are not found in great numbers among the medically underserved or in health professional shortage areas, NPs, PAs, and CNM s with whom specialist physicians collaborate are also less likely to be found in those settings.

Determining if care is being provided to the underserved by NPs, PAs, and CNMs is a complex undertaking, which has less than satisfying results. Informants suggest that underserved populations can be found in almost any medical setting and limiting assessment of provision of care to particular locations was of concern. As an example, in New York, PAs discussed institutionally-based care in a non-HPSA certified facility. This is not identified as care to the underserved even though there is a significant provision of care to underserved individuals in such settings. There are many “needy” patients who would be classified as underserved who receive treatment in community hospitals, major medical centers, and even private physician offices. Care to patients who are uninsured or publicly insured is provided by medical professionals who work in settings not traditionally identified as meeting the needs of underserved populations. However, the care provided is often considerable and should be identified as contributing to access. Evaluating to whom, by whom, where, and how this care is provided is difficult and may involve the need to track patients on public assistance rather than provider data to ascertain care patterns. In any case, when considering the issue of how to increase access, these settings should not be ignored.

Once again, informants reiterate that reimbursement affects access to care. Uninsured populations and publicly insured populations do not always have the same access as privately

insured patients. One informant described the Balanced Budget Act of 1997 as "a house of cards". Rural health was greatly affected by its implementation since clinics with greater than 50 beds were no longer supported. Larger clinics closed causing some professionals working in underserved areas to leave for other positions.

In Texas, informants indicate that reimbursement is an especially difficult issue in rural areas. Lack of funding for services to needy populations is a disincentive to practice in locations where those populations are located. Reimbursement policies impact both utilization by patients and recruitment of professionals since payment for services is a fundamental issue for all medical professionals.

Informants suggest that many newer graduates are not interested in working with underserved populations. They are more interested in practicing where the money is. Students were viewed as being savvier and more aggressive than they had been in the past. This change in orientation affects the pool of providers who might have traditionally sought work with the underserved.

According to informants, public initiatives that encourage professionals to work in health professions shortage areas encounter difficulty because decisions about where to practice are often driven by personal preferences. Individuals make decisions about where they will practice based on personal background, personal goals, family obligations, and practice opportunities. Economics is an important factor, for instance, for new graduates who have loans to repay. Educational indebtedness may obligate the new professional to find a position that is lucrative versus one that may be more professionally satisfying but doesn't pay as well. These are exogenous factors over which policymakers have little control.

However, there was a feeling among fieldwork participants that there are several policy initiatives that encourage professionals with potential interest to practice in underserved environments. Examples of valued inducements would be expanded loan repayment programs, expansion of the number of clinical rotations for student professionals available in underserved settings, and targeted efforts to recruit new professionals into underserved areas. These are considered important strategies for increasing the numbers of NPs, CNMs, and PAs available to provide primary care to underserved populations.

An example of a successful collaborative effort to increase the numbers of PAs, CNMs, and NPs in underserved settings, is an educational initiative called Partnerships in Training, funded by the Robert Wood Johnson Foundation. The program has as its objectives, "the development and implementation of a regional educational system for nurse practitioners, physician assistants, and certified nurse midwives involving a culturally competent interdisciplinary curriculum, distance learning modalities, and shared resources among the education partners."[39] The program presently operates in eight States, Arkansas, California, Colorado, Michigan, Minnesota, New Mexico, North Carolina, and Wisconsin.[40] In California, the partnership consortium is operated in collaboration with several area health education centers as well as several college and university programs. Potential NPs, PAs, and CNMs are recruited from underserved communities and then educated in or near those same communities. The program encourages students to remain in their home communities after training. A recent survey by the California Center for Health Workforce Studies, indicates that 39 percent of NPs, 39 percent of PAs, and 47

[39] Partnerships for Training, San Joaquin Valley Health Consortium, http://www.sjvhc.org/programs/pft/index.htm.
[40] Partnerships for Training Projects, http://www.uchsc.edu/ahec/mapp/about/pft.htm.

percent of CNMs surveyed in the State presently practice in underserved settings.[41] Informants credit the program with encouraging new providers who have increased access to care.

Informants were concerned about the move by various States and the Federal government to increase educational requirements for the professions and the concomitant impact on the professional workforce. New York informants suggest that a requirement for graduate education for the professions changes the complexion of the professional programs and places these professional credentials out of the reach of some potential candidates. Concern was expressed that the cost of elevated educational requirements would adversely affect the diversity of graduates from programs and further impede the creation of a culturally competent workforce. Liberal loan repayment programs or scholarship support for diverse students would provide at least a partial remedy.

The environment in which the professional is educated and trained affects employment opportunities and prospects. Changes in educational models may also affect choice of work after graduation. Physician assistants in New York indicate that present educational models affect practice patterns. PA education in New York was initially provided mostly in community programs with clinical rotations provided in community settings. This subtly encouraged graduating PAs to work in community settings by acquainting them with those workplaces. Many PA programs in the State have now turned to the medical training model in which clinical training occurs in hospitals and large medical centers. Graduates from these programs are not as likely to have connections to a community health provider and may be less inclined to return to community healthcare settings when seeking employment.

At Duke University in North Carolina, which housed the first physician assistant training program in the country, the PA program uses Title VII funding to support clinical rotations in medically underserved areas. Several informants suggested that providing clinical rotations in a variety of environments was critical to the process of placing the professions in settings where they are exposed to needy populations. Students sometimes discover that they particularly enjoy working in those environments and will choose to work in them after graduation because of their exposure to the opportunity during training.

Legislation affects access to care in very direct ways. For instance, State requirements for the professions to have supervisory relationships with physicians affects practice in rural locations. In Ohio, a physician assistant or an NP with prescriptive authority must work within 60 minutes travel time of his/her supervising physician. This requirement significantly limits practice opportunities for PAs and NPs in the far reaches of Appalachia where supervising physicians are largely unavailable. PAs and NPs might contribute to care for those populations if the distance limitations did not exist.

Special circumstances tend to influence CNMs and the locations where they choose to practice. CNMs are especially constrained in rural areas because of their need for backup physicians in case of obstetrical emergency. In many areas of very rural North Carolina there are no physicians to provide on-call services, so CNMs are prevented from working in such places. Although the relationship with physicians constrains the NPs and PAs, most patients of NPs and PAs are able to travel to a physician to whom they have been referred for more complex care, even if distance

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[41] Office of Statewide Health Planning and Development and the Center for California Health Workforce Studies at the University of California, San Francisco, "*Nurse Practitioners, Physician Assistants, & Certified Nurse Midwives in California",* San Francisco, California, Spring 2000.

is great. However, obstetrical patients are limited by their emergent medical situations from traveling long distances to any provider. Collaborating physicians must be available to come to the obstetrical patient for delivery rather than having the patient come to them. CNMs, therefore, encounter very particular professional difficulties.

In Oregon, informants suggested that CNMs are rarely available in rural practice even though Medicaid guarantees coverage for services provided for the poor in underserved areas in the State. CNMs in Oregon suggested that opportunities to work in rural areas are scarce largely due to opposition from rural physicians who face an oversupply of obstetricians in the State. Some CNMs in Oregon have even chosen not to provide obstetrical services and instead provide only well-woman gynecological services in their practices.

Informants viewed provision of health care in rural environments as a special issue since the physical aspects of the rural environment affect practice. The example of prescriptive authority was provided to illustrate how location can influence practice. Expanded prescriptive authority for nurse practitioners is of no use in a location where there is no pharmacy available to fill the prescription, unless the NP also has the ability to dispense samples or to dispense medications. These conditions require rural providers to be creative and collaborative. A rural provider must establish extensive networks and negotiate a variety of cooperative agreements with other providers including pharmacies in order to operate effectively and provide all needed services. Dispensing authority for nurse practitioners in such locations is one such solution. Clinics could then stock many needed medications to meet the needs of the service population.

The unique circumstances of rural communities require and inspire unique responses to limiting situations. In upstate New York, for instance, emergency rooms in very small, qualifying hospitals (under 15,000 visits per year) are staffed solely by physician assistants. This is effective in providing rural populations with access to care in emergency situations.

Another example of creative collaboration in rural New York State is a health care cooperative which involves the participation of a variety of stakeholders. A family care physician conceived and implemented a creative model for delivery of care to small rural communities in the Adirondack Mountains. Town governments in a variety of locations participate in cooperative arrangements with a medical network, the Hudson Headwaters Health Network, by providing buildings and other support services for the medical practices. The managing healthcare organization staffs the facilities with providers on an ongoing basis. The resulting health consortium provides a range of physician, PA, NP, and CNM professional services in each practice location. This strategy has resulted in an effective delivery system that manages a broad network of providers working cooperatively in an extensive geographic area. Several locations are staffed strictly by one or another of the three professions with physicians traveling to a clinic only on particular day(s) of the week to see complicated cases and to review caseloads with the staff providers. A network of specialist physicians and local hospitals has been developed to provide referral mechanisms for more complicated care for patients living in these remote areas. The consortium covers a significant geographic area and serves a large number of patients.

The characteristics of rural practice dictate different responses to provider resources. In Oregon, informants suggested that rural practices have more difficulty predicting the need for providers and for assuring that they can afford them since patient caseload and insurance is unpredictable and the pool of potential patients is smaller.

In Ohio, physicians in a rural area suggested that employing other providers creates special challenges. Ohio has particularly strict rules about the supervision of PAs. A physician must review the PA's medical orders for patients on an ongoing basis. One rural physician informant suggested that, although hiring a PA had been wonderful for his patients because it had increased opportunities for them to see a medical provider on a more frequent basis, his caseload had effectively doubled because of record review requirements. He is not only required to document the records of his patients on a daily basis, but he is also required to review his PA's notations in patient records. Additionally, the severity of his patient caseload has increased since his PA sees many of the patients with routine illness or needing preventive services. The physician's schedule now includes a high number of patients with more complicated or chronic problems. Although it is helpful that he is more available to these patients, the time required from him for their medical management has also increased. As a result, the physician was finding his practice more burdensome even though he had more help. When considering whether to hire another provider for his practice in the future, the informant felt he would give serious consideration to hiring a physician who would be more independent in practice and not require ongoing supervision.

Rural populations are also seen as having different characteristics. In Texas, informants indicate there are a number of illegal aliens in the State who are afraid to seek care for fear of deportation. Farm and migrant workers are also unable to take time off from work to see a health care provider. In fact, many border workers travel to Mexico for care since medical services are available in that country at more convenient hours for the working poor. Getting to medical appointments is also an issue for people without private transportation. In Texas, mobile health care clinics or clinicians who can travel to the colonias in the evening to provide care and medications enable access.

Cultural competency among providers is also an issue. There are not enough providers and there are even fewer who are culturally diverse or culturally competent. Texas informants cited the shortage of physician providers in underserved areas as a reason for the absence of nurse practitioners, nurse midwives, and physician assistants who must be supervised in practice. If doctors are not available for supervised practice then NPs, PAs, and CNMs are not able to practice.

Some States have implemented special statutory and regulatory provisions that create exceptions for professionals who wish to practice in underserved areas. For purposes of this study, we have identified these states as "dual scope of practice environments". The legal requirements for supervision or collaboration by a physician, the parameters for prescriptive authority and reimbursement are expanded in defined locations to encourage practice with medically underserved populations or in health professional shortage areas. Texas and Oregon are examples of States where these kinds of provisions exist.

In Oregon, physician assistants are permitted to apply for remote supervision by a physician, which is intended to extend provision of care to medically disadvantaged areas. PAs must apply for this privilege and must have the ability to directly communicate with a supervising physician in case of need. Additionally, the ratio of physician-to-physician assistants is expanded in the State to allow every physician in an underserved area or facility to supervise up to 4 PAs, rather than the 2 PAs allowed in traditional practice settings.

In Texas, physician assistants can practice with underserved populations under special circumstances that permit the PA and supervising physician more latitude. The physician must visit the clinic site every 10 days, perform a review of at least 10 percent of the medical records on a timely basis, and be available by telecommunication on a continuing basis.

Government programs dedicated to increasing access are important. In rural upstate New York, a prenatal program, which initially provided care only in the early stages of pregnancy has been quite successful and has now expanded to include a full range of obstetrical services. CNMs and NPs provide much of the care to pregnant and parenting women in the program, which reaches some of the more remote mountain communities of the State.

Increasing provider incentives to work in rural areas is also important. Oregon provides a $5,000 yearly income tax credit to rural providers including NPs, PAs, and CNMs. Financial incentives might create an inducement to more remote practice.

Education Programs

The following table reflects the number of educational programs in each of the fieldwork States for each of the three professions and includes the total number of graduates from those programs in each of the professions in the year 2000.

An analysis of the educational programs in these seven States indicates that 95.6 percent of the Nurse Practitioner programs award a masters degree, 2.2 percent award a certificate, and 64.8 percent offer a post-master's certificate. Over 82 percent of the programs offer study to become a family nurse practitioner, with a total of 28 areas of specialization and sub-specialization being offered within the 91 programs examined. These include such areas of study as neonatal, cardiovascular, neurocognitive, palliative care, and child and adolescent health nurse practitioner.

The majority of PA programs in the fieldwork States award bachelor's degrees (54.1 percent) while 35.1 percent award master's, 8.1 percent award associate degrees, and 10.8 percent offer a certificate. Most PA programs focus on primary care study, but 5.4 percent of the programs offer specialty study in surgery with a total of 8 possible areas of specialization including orthopedic, cardiothoracic, and neurosurgery physician assistant programs.

The number of education programs for the three professions has grown over the decade. Many States have not, until recently, had education programs for these professions. When programs did exist, they were often insufficient in number or size to supply the needs of the State. PAs have only been educated and trained in Oregon since 1995. Presently, there are two programs providing PA education in that State, and only two programs training NPs. CNMs are trained in a single program. According to the State Area Health Education Center, 52 percent of the NPs in the State were trained elsewhere, largely in California, Washington, or on the east coast. [Oregon fieldwork reference AHECS, 2000].

In North Carolina where the physician assistant profession began, NPs were legally recognized as early as 1970. However, education programs for nurse practitioners lagged in that State. Six programs for NPs have opened there in the past 10 years. North Carolina has implemented some public policy that fosters the use of these professionals in underserved areas, including funding incentives with public dollars for health centers that employ them.

Table G-1
Numbers of Educational Programs and Graduates in 2000 for Nurse Practitioners, Physician Assistants, and Certified Nurse Midwives in the Seven Fieldwork States

State	# NP Ed Progs	# NP Grads+	# PA Ed Progs	# PA Grads^	# CNM Ed Progs	# CNM Grads*
California	21	385	6	331	7	51
Illinois	10	162	4	218	1	14
New York	26	773	14	579	5	82
North Carolina	6	80	2	131	1	6
Ohio	9	228	4	90	3	6
Oregon	2	38	2	37	1	16
Texas	17	260	5	334	4	21

\+ National Organization of Nurse Practitioner Faculties and the American Association of Colleges of Nursing, 1999-2000 Enrollment and Graduations.
^ American Academy of Physician Assistants
* The American College of Nurse Midwives

Federal programs, which provide funding to train more of these professionals, have contributed to the proliferation of educational programs. One of the conditions for access to and continuation of Federal funding for training programs is documentation of growth in the numbers of students. Several informants across States indicate that an infusion of funds for educational programs occurred at the same time that registered nurses were looking for expanded practice opportunities. These circumstances worked synergistically to create a growing supply of advance practice nurses over the last decade.

Presently, there is concern about further expansion in the number of educational programs for the professions. Containment is seen as desirable for several reasons. Controlling the number of available slots for new students permits education institutions to be more selective in admitting students. This in turn supports the development and implementation of important educational standards which helps to maintain the high quality of practitioners in the professions. These are important considerations in any strategy to avoid an oversupply of competently trained professionals. This strategy may also restrict access to the professions, which could result in higher salaries and therefore higher costs of care.

New York informants discussed the importance of primary health care education to the professions since much of the care provided, regardless of setting or specialty is primary in nature. Discussion among informants revealed that even when NPs and PAs are working in specialty environments, they are still providing a high volume of primary care services to patients. These professionals need to be broadly trained to acquire the sets of skills needed to provide both primary care and specialty care services.

Access to educational programs is a critical issue for potential students according to those who participated in discussions in New York State. Most CNM programs in New York are located in or near New York City making them inaccessible to working nurses in other areas of the State. The need for programs that are geographically dispersed was discussed. A nurse midwifery program located near New York City at the State University of New York, Stony Brook has a distance-learning component, which allows students to visit the school for orientation and then to do their academic work on line while doing their clinical placements in their respective communities under the supervision of regional clinical faculty. Even though the program is located on Long Island, 85 percent of the students are in upstate New York.

Programs for distance learning may be particularly important for increasing the opportunities available to a profession and for encouraging graduates to remain in underserved communities. The Frontier School of Midwifery in Hyden, Kentucky was cited across the fieldwork States as an exemplary model for professional education. The focus of the program is the education of professionals for practice in locations where there is medical need. This is one of the two oldest midwifery schools in the country having been founded in 1925 by Mary Breckenridge, the granddaughter of a U.S. vice-president. Nurse midwives trained in England initially staffed the Frontier Nursing Service that eventually evolved into an educational program.

The educational program component of the Frontier Service, the Community Based Nurse-Midwifery Education Program, is a graduate-level distance-learning program, now associated with Case Western Reserve University in Ohio, which allows students to remain in their own communities for clinical training while completing on-line course work. Several trips to Kentucky for training with clinical faculty are required during the 2 year program. Regional faculty representatives monitor student placements and oversee the clinical practicums in the home communities.

Interdisciplinary training in medical institutions was seen by informants in New York as a desirable way to introduce the professions to each other and to physicians-in-training and to increase understanding of the competencies of the respective professions. Interdisciplinary training is also an important way of educating professionals about effective collaborative relationships and recognizing and respecting the unique skills that each of the professions brings to the delivery of health care. New York and California informants discussed productive interfaces that occurred within interdisciplinary training programs in their States. Nurse midwives who taught resident physicians felt that the experience helped new doctors to understand and respect the profession. A physician assistant working in emergency rooms who trained residents indicated that there were many positive outcomes from her experience including recognition of the substantive skills of the PA by the physicians.

The importance of training in clinical rotations with other professionals was a recurring theme. In Ohio and in Illinois, informants suggested that they encountered more resistance in their professional practices as NPs, CNMs, and PAs from international medical graduates. Many of these physicians come from countries where NPs and PAs do not exist. Foreign grads are unfamiliar with these providers because they have not encountered them in their training and they often lack a clear understanding of the skills and competencies of NPs, PAs, and CNMs.

Finding clinical placements for students is seen as a particularly difficult issue. As previously stated, there is presently no funding mechanism to cover the cost of internships for the three professions. This is especially true for certified nurse midwives. There are not as many

institutional supports for midwifery programs as there are for nurse practitioner and physician assistants. These circumstances make it especially difficult to find clinical placements for midwives-in-training. Physician assistant training programs are often located in or affiliated with medical centers where clinical opportunities are readily available. One nurse midwife educator in New York suggested that she had never denied acceptance to her program to a qualified student for lack of space within the program but she had refused acceptance to students because of lack of availability of clinical placements in which to train.

Informants in New York feel that clinical placements in public health clinics are an excellent way of identifying or screening competent and compatible PAs and NPs as prospective hires. However, lack of a source for reimbursement for time spent educating new professionals is a significant impediment for clinics interested in offering clinical rotations. There was strong agreement among informants that time spent precepting should be reimbursable since it requires a substantial investment of resources for the person supervising the clinical rotation. Previously, rate differentials helped professionals absorb some of the costs of clinical precepting. Whereas it was possible, in the past, to cross-subsidize some of these activities under previous health care reimbursement streams, new payment methodologies presently make this impossible. Equalization of payment rates across payers has occurred so that there are no longer higher rates available to help offset unreimbursed education costs in medical settings.

Although Federal policy is important to address the needs of the medically underserved, State policy also has very direct effects on access to care. State responses to the needs of underserved populations vary. North Carolina is a State that identified and responded to some of its public health issues. The Governor of the State convened a conference to address the high maternal-infant mortality and morbidity rates early in the decade. One of the strategies identified to address the problem was to fund nurse midwives to work in critically underserved areas of the State. This initiative resulted in a 1990 mandate for the establishment of a nurse midwifery education program at East Carolina University (ECU) to train professional nurses for this role. The Office of Rural Health manages the program that resulted in improvements to obstetrical care for the targeted populations. Prior to that time, there was no midwifery education program in the State. Nurse midwives are now trained in both the ECU program and through the Frontier School of Nurse Midwifery in Kentucky.

The aging of faculty is a particular problem for educational programs, as is the ongoing need for new PhD faculty to staff graduate programs. This is particularly relevant because so many of the programs were created or grew quickly in response to the availability of increased funding. Faculty may not have been as well prepared as desirable in the years when significant program growth occurred because faculty were needed immediately to staff developing programs.

Another factor that affects the qualifications and the number of faculty is the competing employment environment. It is very difficult to attract NPs from practice in direct care settings to staff educational programs when salaries are not competitive in academic institutions. Another problem for NP faculty is that they are often required to meet the same educational standards as academic faculty in other departments of the college or university where the nursing programs are located. In fact, a nursing professor may need very different competencies than a professor in a purely academic program. A nurse faculty member with significant clinical experience and technical training enhances a nursing education program in much the same way that a professor with an advanced degree might enhance an academic program. Informants supported the concept that clinical experience should be given greater weight in faculty appointment processes.

Elevating the level of required educational attainment for the three professions, although seen as easing the path to such expanded privileges as prescriptive authority, is also seen as an impediment to the education of a culturally competent workforce. A requirement for a graduate degree might limit potential professionals coming from poorer backgrounds who are without the funds for extensive education. However, education at the graduate level is seen as critical for increasing professional practice. In a discussion in Ohio, nurse practitioners suggested that the reason that prescriptive authority was legislated for NPs in the State (and not for other professions) was that master's education is required for certification for NP practice and legislators and advocates are more comfortable with expanding privilege when professional education is extensive.

Texas informants suggested that the requirement for a master's education for NPs was an impediment in border towns because it reduces opportunities to recruit a minority workforce. On the other hand, advanced degrees are perceived to provide more credibility and respect for the profession. A solution might be educational loan programs to help bridge the resource gap for some minority populations. Existing loan programs are perceived to be extremely limited in amount of funding and in repayment options.

Educational loan repayment incentives are important for the professions and help to increase access to care. Students with scholarships who are required to work in underserved areas as a condition of repayment sometimes remain in those locations after their commitment is fulfilled. PA informants in New York indicate that clinicians may find greater opportunity to work with a wider variety of patients and more latitude in public health settings and health clinics that serve indigent and underserved populations. This makes employment in those settings more appealing to professionals who are challenged by such environments. PA practice in mainstream or traditional settings may be limited to performing more routine tasks like histories and physicals while in clinic locations, practice is often more varied and challenging. It is important that states not be overly restrictive about the settings in which graduating students work to repay loans. If clinical opportunities are too limited in designated settings, students won't access the scholarships, further limiting exposure to underserved populations.

Some education programs, like Cornell University's PA program in New York City, recruit PA students directly from underserved areas. The Cornell program fosters the education of physician assistants who are interested in returning to their home areas to work. The Partnerships in Training Program of the Robert Wood Johnson Foundation also encourages the education of individuals from underserved areas. The program operates in several states including California and North Carolina and targets student recruits from medically underserved areas and diverse populations. Students are encouraged to remain in or return to their home communities to work after graduation.

Another strategy is to place students in settings with underserved populations by offering clinical rotations in community hospitals and health clinics. These opportunities are important because they provide exposure to the special characteristics of those settings. These practice environments are appealing to some graduating professionals because of the expanded practice opportunities available. Informants suggest however, that initially new graduates may want to practice in larger environments to gain some professional experience and to reinforce the skills introduced but not mastered in their educational programs. This does not preclude a professional from eventually choosing to work in an underserved area or with medically underserved

populations. However, informants acknowledge that there is some danger that, once established in a practice setting, a professional might be more reluctant to move.

Supply of the Professions

Fieldwork in this project was fueled by the idea that hospitable legal environments foster growth in the supply of these health professions within a State. A greater supply of providers would then, hypothetically, result in an increase in access to care for underserved populations. The issue of the supply of these health professions generated interesting responses from fieldwork participants.

The following counts (the most recent available when the compilation was done) suggest that the numbers of these professionals working in the fieldwork States vary considerably. The mix of the professions is also quite various across the seven States. Counts of Nurse Midwives and Nurse Practitioners in Illinois were unavailable for 1999 since they have only recently been licensed separately in that State. In prior years, they were regulated as registered nurses.

Informants in the fieldwork States indicate that there is presently a relatively sufficient supply of PA, NP, and CNM professionals. Informants suggest that lack of supply is most probably not the issue of concern when discussing access. Rather, it is important to consider how these professionals distribute themselves in health care settings across the States. Statistics gathered for this study suggest that, unlike physicians who demonstrate greater density in urban areas, the three professions appear to be more evenly distributed across States. However, informants also suggest that the practice patterns of NPs, PAs, and CNMs tend to parallel those of physicians. Legal requirements for physician supervision and collaboration tend to support the hypothesis that these professions will be found in the same places as we find physicians. Since legal supervision or collaboration requires the cooperation of physicians, it is to be expected that practice patterns are analogous.

Table G-2
Numbers of Nurse Practitioners, Physician Assistants And Certified Nurse Midwives in the Seven Fieldwork States

State	Nurse Practitioners 1999*	Physician Assistants 2001^	Certified Nurse Midwives 1999*
California	9,259	3,929	1,006
Illinois	N/A	923	N/A
New York	9,607	4,894	895
North Carolina	1,613	2,125	130
Ohio	2,074	1,162	264
Oregon	1,470	371	197
Texas	3,831	2,511	331

* Data obtained by the University of Wisconsin from the National Council of State Boards of Nursing, from individual State Boards of Nursing, or the Regulating Agency within a State.
^ American Academy of Physician Assistants, Census Report 2001.

Complicating the interlinking of the professions in practice settings is the move to specialty certifications within the professions. The development of the three professions mirrors the evolution of the physician workforce. NPs, PAs, and CNMs, although rooted in primary care, are now expanding into specialty practices as the supply of providers has increased and as the demand for their services has become more pervasive across the spectrum of care. Specialty physicians are more likely to be attached to major medical centers located in urban environments where there is a greater population resource. NPs, PAs, and CNMs who collaborate with those specialists are, thus, also in those environments.

The distribution of professionals is difficult to influence or predict. There is a strong element of personal choice that contributes to the selection of work settings. There are several elements that affect personal choice:

- A professional who enjoys an urban environment will probably choose to live and to work in an urban environment, just as one who wishes to be in a rural setting will seek employment there.
- The availability of jobs also affects the distribution of these professions. The location of healthcare delivery facilities and organizations determines job opportunity and there is often a concentration of health systems in urban areas. Obviously, professionals work where the jobs are most available.
- Professionals may distribute differently depending on the legal limitations on practice in a State. Most States require supervision or collaboration with a physician which plainly dictates physical proximity. A few States even place legislated limits on distance or travel time that separates the physician from the professionals with whom collaboration occurs.
- The choice of location in which to practice may be attributed to patient demand. There are greater supplies of potential patients and more opportunities for successful practice in larger metropolitan areas.
- The shortage of nurses has also had an effect on the supply of potential nurse practitioners and nurse midwives. Many RNs presently work overtime to meet the staffing needs of their employers. This prevents them from making the commitment to further their education because they simply do not have the extra time to devote to study. As well, the higher salaries and the overtime pay currently available to an RN diminish the financial incentives of advanced practice.

Whatever the reasons a concentration of professionals may occur in a certain environment, quality healthcare is still unavailable to some populations in rural and urban areas.

The issue of supply of the three professions is also complicated. Some informants in Illinois suggest that there is job market saturation in that State for these professions, but other informants suggest that the situation is not that simplistic. There are significant regional variations in job markets that are difficult to understand and the reasons are many and multi-faceted.

PAs in New York indicate that the profession has addressed the threat of oversupply by moving into new areas of specialization, thereby, creating new demand. PAs in the State have found jobs in pain management, in oncology, and in other specialties where PAs would not traditionally be found, thus moving the profession into new areas of expertise. Contributing to specialization is the fact that there are a number of PAs who have come from other health professions with

backgrounds that provide them with special talents. For instance, medical examiners hire physician assistants with medical technology backgrounds since they have a good understanding of laboratory forensics, pathology, etc. PA providers in New York saw the profession in that State as growing with these increased opportunities.

Offsetting this growth is the closure of some education programs New York. PAs expect to see stabilization in the number of graduates over the coming years. There is a feeling that new graduates are more aggressive in finding new opportunities for practice as they begin their careers than had been the case with past PA graduates.

NP informants in New York suggest that there may be job market saturation for NPs in the State. Educators observe that graduates are leaving New York in order to find employment. Some NP informants there expressed concerns that the profession is out-pricing itself and that increased wage compression will create demand for physicians. If an experienced NP is priced at just below the wage level for an inexperienced physician, the employer may consider hiring a physician who is more legally autonomous and can provide care at a higher level. The balance between affordability and extent of professional practice must be maintained.

Also in New York, informants expressed concern about the lower numbers of young people who are entering nursing. Since NPs are often experienced nurses looking for expanded practice opportunities, the reduced numbers of incoming nurses is likely to affect future supply. More supports for nursing staff which encourages new recruits including such things as more autonomy for nurses at patient bedsides, more release time for advanced or continuing nursing education, and fewer mandates requiring compliance by nursing staff would be helpful.

Summary of the Statutes and Regulations

The discussion that follows summarizes the statutes and regulations related to professional practice for the three professions as presented by the various informants contacted during the field work.

Nurse Practitioners

California

- Licensed in California Business and Professional Code
- Regulated by the Board of Registered Nurses in the State Department of Consumer Affairs
- Title Protected 1985
- Professional practice same as that for RNs but expanded by standardized procedures in law contained in written supervisory agreement that is site specific.
- National certification required
- Supervisory relationship with physicians but collaborative practice as well
- Effective in 1997 can “furnish or order” Schedule III (under patient specific protocols) to V controlled substances except for NPs in solo practice

- Maximum of four NPs to one supervising physician
- Medicaid in the State reimburses Family and Pediatric Nurse Practitioners as primary care providers.
- Effective in 2001, the NPs name will appear on drug containers along with the supervising physician's name.

Illinois

- Until1998, NPs were regulated as a special class of registered nurses. In that year, the legislature passed the Advanced Practice Nursing Act.
- Licensure available to NPs beginning in 2001.
- Practice is limited to direction from physician but no employment relationship is required
- Periodic review of records is required
- Title protected
- The last State to enact specific legislation regarding Nurse Practitioners
- National certification and master's degree required for licensure.
- Now regulated by Advanced Practice Nursing Board
- Collaborative agreement with physician determines prescriptive authority but it is delegated authority only. NPs may prescribe, dispense and administer Schedule III to V controlled substances.

New York

- NPs are certified to practice in the State since 1989 and are regulated by the Department of Education and the Board of Nursing (this is unique among State's regulatory authority)
- National certification is an option but not required
- Nurse Practitioners are defined as independent practitioners
- Collaborative relationship with physicians based on written agreement between the physician and NP
- Collaborative agreement addresses practice coverage, record review and practice protocols and must be kept at the practice site for inspection by the State as requested
- Review of patient records must occur not less than every 3 months
- Nurse Practitioners are qualified as primary care gatekeepers under the State's Medicaid Managed Care Law
- NPs must obtain a certificate to prescribe in the State after demonstration that they have completed an educational program with a pharmacy component.
- NPs have authority to prescribe Schedule II to V controlled substances in the State

North Carolina

- A joint subcommittee of the Board of Nursing and the Board of Medicine regulates NPs.

- Since 1993, third party reimbursement has been available to NPs
- Rules changed in 1994 to allow NPs to prescribe controlled substances and to expand prescriptive privileges for refills of legend drugs. At that time, the previous formulary was discarded in favor of practice specific drug and device agreements between physician and NP. Controlled substances may be prescribed for a period of only 30 days. NPs can procure, prescribe, order, compound and dispense drugs in the State.
- Since 1999, an NP can sign any form that would require the signature of a physician.
- The statutes contain some collaborative language but a supervising physician is still a legal requirement.
- Review of records is achieved periodically through a Quality Improvement Process between the NP and supervising doctor.

Ohio

- NPs are regulated by the Board of Nursing
- Licensed since 1997 as a distinct category of Advanced Practice Nurse. Prior to that time they were allowed to use titles obtained from educational program completion but were regulated as registered nurses.
- Certificate of authority to practice as NP issued when all conditions for certification are met.
- Standard care arrangements with physicians are a requirement to practice along with a regular review of patient care outcomes.
- Effective 2001, all new NPs must have a master’s degree.
- Prescriptive authority for controlled substances in Schedule III to V since 2000 but limited to a formulary of drugs and devices. Schedule II may be prescribed under very limited conditions such as to terminally ill patients. Prescriptive authority governed by a Joint Commission of the Boards of Nursing, Medicine, and Pharmacy.
- Since 1997, Medicaid reimbursement is available to Family, Pediatric, Adult and Women’s Health NPs.

Oregon

- NPs are title protected
- NPs are issued a certificate of special competency to practice
- A master’s degree is required
- Considered independent providers.
- Prescriptive Authority for Schedule II to V from an exclusionary formulary. NPs may write prescriptions but may dispense medications only in geographically remote areas.
- Mandated third party reimbursement.
- Medicaid reimbursement at 100 percent of physician fee schedule (unusual)

- Fair practice legislation in the State permits hospitals to grant admitting privileges to NPs but hospitals may and often do enforce a co-admission requirement (MD must also admit.)
- NPs can sign death certificates in the State.

Texas

- NPs are approved to practice in the State.
- Statutory language is both supervisory and collaborative depending on the setting in which services are to be provided and on whether prescriptive authority is being exercised.
- The Board of Nursing in the State regulates NPs but the Board of Medical Examiners influences their prescriptive authority.
- Effective in 2003, a master's degree will be required for NPs (this is consistent with Federal legislation implementing the same requirement.)
- A written practice agreement between physician and NP must be maintained on site.
- A physician cannot collaborate with more than three NPs in the State.
- Hospital privileges are defined in law as clinical privileging conditions.
- Prescriptive authority is limited to legend drugs in the State. The supervisory agreement with the physician defines the privilege that is site specific and includes medically underserved areas, health professional shortage areas, facility based sites and private medical practices.

Certified Nurse Midwives

California

- Regulated by the Board of Registered Nursing with a Midwifery Committee in the State Department of Consumer Affairs.
- Title protected.
- Receive a certificate to practice when qualified by education, national certification and licensure as a nurse in the State.
- The Medical Board of California under different rules and regulations regulates non-nurse midwives in the State.
- Professional practice for CNMs in the State includes obstetrical, postpartum, and family planning services.
- Mode of practice is indirect supervision by a physician under standardized procedures and protocols developed between CNM and collaborating physicians and facilities.
- CNMs who meet specific additional criteria may prescribe Schedule III (only under patient specific protocols) to V controlled substances and legend drugs.
- No more than four nurse midwives may collaborate with one physician at any time.
- Mandated reimbursement by third party payers in the State.

Illinois

- CNMs are regulated as advanced practice nurses in the State.
- Master's degree is required effective in 2001.
- Delegated prescriptive authority for Schedule III to V controlled substances. CNMS may receive and dispense samples through the authority given them in their collaborative agreement.

New York

- CNMs are regulated under different statutory and regulatory guidelines than NPs in the State of New York.
- They are licensed by a Board of Midwifery in the Department of Education with a broadly defined professional practice that includes not only obstetrical and postpartum care but also well-woman gynecological care.
- Statutory language is collaborative and consultative. It is possible for CNMs to practice independently in the State.
- CNMs can refer directly for other health care services as needed by their patients.
- Direct entry midwives are licensed under the same practice act in the State but are subject to different regulations.
- Public Health Law in the States require that women have direct access to care from ob/gyn physicians and nurse midwives.
- Medicaid provides 100 percent reimbursement of physician fee schedule to CNMs in the State.
- CNMs have prescriptive authority to prescribe Schedule II to V and legend drugs in the State.

North Carolina

- A Midwifery Joint Committee that includes members of the Board of Nursing, the Board of Medicine and CNMs regulates CNMs under the Nurse Midwifery Act of 1983.
- CNMs in the State operate under a professional practice as defined by the professional association.
- The statutes contain collaborative language but CNMs must have supervising physicians in the State.
- Legislation in 1993 required that third party payers reimburse CNMs for services.
- 1994 Legislation gave CNMs prescriptive authority for legend drugs and controlled substances in Schedules II to V. This privilege is defined in the supervisory agreement between the CNM and the physician.
- Medicaid reimbursement for services is at 100 percent of the physician fee schedule.

Ohio

- Since 1997, CNMs are authorized to practice in the State as a category of advanced practice nurse.
- CNMs are regulated by the Board of Nursing with no specific midwifery representation.
- National certification is required for authorization to practice.
- A master's degree is required effective in 2001.
- Collaborative language is included in the statutes.
- CNMs practice under standard care arrangements in the State, which are written protocols developed by the CNM and the collaborating physician.
- Professional practice includes well women gynecological care as well as obstetrical and postpartum care.
- Regular review by the physician of care outcomes is required.
- There is a legal prohibition for hospitals to discriminate against midwives if maternity services are provided at the facility.
- Legislation in 2000 gave CNMs prescriptive authority for legend drugs and Schedule II to V controlled substances.
- There is mandated third party reimbursement in the State for nurse midwifery services if an employer provided health benefits to workers.
- It is presently illegal in the State to provide services for compensation as a DEM.

Oregon

- CNMs are a category of nurse practitioner.
- National certification is not required but licensure as a nurse is.
- CNMs provide independent care in consultation or collaboration with other providers.
- Prescriptive authority, hospital admitting privileges and insurance reimbursement are all governed by NP statutory and regulatory limitations. CNMs may prescribe legend drugs and controlled substances in Schedule III to V and may dispense those drugs in geographically remote locations.
- A master's degree is required in the State.
- Regulated by the Board of Nursing with no specific midwifery representation.
- The title of Nurse Practitioner is protected in the State, title used is dictated by education.
- CNMS are issued a certificate of special competency when requirements for licensure are met.
- A 1993 statute governs direct entry midwifery.

Texas

- CNMs are approved for practice according to the statutory language and authorized to practice in regulation.

- They are required to use the title specified on their authorization and may not call themselves Advanced Practice Nurses.
- The Board of Nursing regulates them with involvement by the Board of Medicine when prescriptive authority is involved.
- Regulations speak of independence or collaboration for nursing aspects of care but require that protocols or written physician authorization provide authority for medical aspects of care. These protocols need not be detailed.
- Midwifery Act of 1993 provides for the regulation of non-nurse midwives by the Texas Board of Midwifery
- A 1999 State law provides due process privileges when hospitals extend privileges to Advanced Practice Nurses.
- Prescriptive authority is limited to legend drugs in eligible sites such as HPSAs, MUAs, primary care locations and health facilities except that Nurse Midwives can provide one or more doses of controlled substances during intrapartum care if so directed by a physician.

Physician Assistants

California

- Enabled to practice in the State since 1971.
- Regulated by a Physician Assistant Committee of the Medical Board of California in the State Department of Consumer Affairs.
- Separate legislation to cover osteopathic physician assistants (this legislation will soon sunset in the State.)
- Title protected since 1996
- Since 1997, PAs are licensed in the State.
- Must practice under continuous supervision of a physician.
- Physician may only supervise two PAs at any one time.
- Physician assistants may transmit a drug order in the State for legend drugs and under patient specific orders from the supervising physician for controlled substances in Schedule II to V.

Illinois

- Initial PA legislation enacted in 1976
- Since 1987, PAs are licensed in the State
- National certification is required.
- A seven member Physician Assistant Committee makes regulatory recommendations to the Medical Licensing Board in the Illinois Department of Professional Regulation
- As of 1997 ratio of 1 physician to two PAs in force but there is no limit on alternate supervising physicians

- In 1994, legislation required written guidelines for practice to be developed between the PA and the supervising physician.
- Delegated prescriptive authority for Schedules III to V. PAs may prescribe, dispense and administer if so delegated

New York

- PAs are registered in the State (RPA-C) but are issued a license.
- Professional practice for PAs in the State is defined by the individual PA and the supervising physician in accordance with the education and training of both.
- PAs are supervised under indirect supervision in all locations
- PAs are reimbursed at 100 percent of the Medicaid fee schedule for physician services.
- PAs may prescribe legend drugs and controlled substances in Schedule II to V.
- A physician may only supervise 2 PAs in private practice. Greater ratios are allowed in special settings.

North Carolina

- PA profession born in North Carolina at Duke University in late 1960s.
- PAs in the State are licensed by and registered with the North Carolina Medical Board.
- A change in rules governing PAs occurred in 1993 easing some of the restriction on practice.
- PAs are not listed on MCO panels and are considered medical assistants in hospitals rather than as part of the medical staff.
- Supervision requirement for PAs requires that all outpatient charts be reviewed within 7 days.
- Payment for services performed by a PA within professional practice is mandated in law.
- Prescriptive authority is defined in the supervisory agreement reached by the physician and PA and may include not only legend drugs but also Schedule II to V controlled substances with Schedule II and III being limited to a 30 day supply only.
- Since 1993, a seat on the North Carolina Medical Board is available to a PA.

Ohio

- PAs in the State are issued a certificate of registration which is a license to practice.
- A Physician Assistant Committee that is appointed by the medical board regulates PAs in the State.
- National certification is required
- State regulations require that a standard utilization plan be approved for the PA and the supervising physician. Any further extension of that standard plan must be filed with the board for approval as a supplemental utilization plan.

- PAs practice under continuous supervision in the State but may not practice more than 60 minutes travel time from their supervising physician.
- A physician may not supervise more than 2 PAs at any one time.
- PAs may not prescribe, dispense, or order medication in the State but they may carry out physician's orders for medication.
- Medicaid reimburses PA services at 85 percent of the physician fee schedule in the State.

Oregon

- PAs are licensed in the State and title protected. They are obligated to register as a PA if they are employed as a PA.
- A PA committee of the Board of Medical Examiners regulates PAs in the State.
- The physician and the PA define the professional practice options for the PA in the State but the Board of Medical Examiners must approve the written agreement between the parties. Under certain circumstances remote supervision is permitted to extend care to medically disadvantaged areas as long as direct communication is available. This privilege must be specifically applied for.
- Physicians may supervise two PAs (up to four in underserved areas) and PAs may have four supervising physicians.
- Prescriptive authority is defined in the written agreement between physician and PA and may include Schedule III to V prescription drugs. PAs may administer and dispense drugs in emergency situations.
- A regular review of the PAs work is required.

Texas

- PAs are licensed in the State
- The Texas State Board of PA Examiners regulates PAs.
- The PA and physician must notify the boards of their employment agreement and include their names, addresses, licenses and phone numbers on the notification.
- A physician may supervise up to 3 PAs or their full-time equivalent.
- Prescription authority is limited to legend drugs in the State and must be authorized through delegation of the physician or through standing medical orders and is limited to the primary practice site and certain underserved locations.
- PAs may supply drugs in properly labeled containers in public health clinics.

Appendix H. References

This appendix contains a comprehensive listing of the reference documents used in the conduct of this study and the preparation of this report.

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