By Joanne M. Pohl, Charlene Hanson, Jamesetta A. Newland, and Linda Cronenwett

ANALYSIS & COMMENTARY
Unleashing Nurse Practitioners’ Potential To Deliver Primary Care And Lead Teams

ABSTRACT Highly skilled primary care is a hallmark of high-performing health care systems. We examine nurse practitioners’ role in delivering primary care and the effects of current restrictions on their ability to practice. By resolving differences between states’ individual scope-of-practice regulations, we can fully benefit from the skills of advanced-practice nurses in all fifty states. We recommend substantive changes in the way health care professionals in all disciplines are trained, and in their roles, so that patients can receive appropriate and cost-effective care from skilled and fully functional health care teams.

If primary care is the foundation of the future health care system in this country, and if access to primary care for all is to be ensured while containing or reducing costs of care, then nurse practitioners will be crucial to achieving these aims. In many countries, much of the primary care for women and children is provided by nurse-midwives, nurses, and community health workers, with outcomes superior to those in the United States. Primary care in today’s world must be a team effort; it cannot be fully provided by any one person or any one profession. Collaboration among providers is essential, and all providers must be able to practice to their fullest capacity and educational preparation. There is no place for limitations or regulations that are not based on evidence.

We argue that two areas in particular must be addressed before nurses, and advanced-practice nurses in particular, are able to fully contribute to primary care delivery nationwide. First, there must be changes in scope-of-practice laws and in the regulation of nurse practitioners (NPs). The diversity of state regulations on scope of practice and prescribing authority has been a major barrier to fully using nurse practitioners and providing increased access to primary care. Second, there must be substantive changes in health professional education that will foster true collaboration and teamwork among physicians, nurse practitioners, and nurses in general, so as to capture the full benefit of diverse competencies inherent in a true team.

Regulation And Scope Of Practice
Safety is the basis for the regulation of the health professions. Medicine was the first of these professions to be regulated and to have recognition and protection of professional practice authority. By the beginning of the twentieth century, every state had enacted a medical practice act defining medical practice. Nursing regulation followed, and scope of practice was carved out of the broad medical authority.

In many states, the scope of practice for advanced-practice nurses continues to be a delegated medical act. As the NP role evolved, many states revised their nurse practice acts to recognize the more autonomous role of advanced-practice nurses. However, the scope and autonomy of advanced-practice nursing, and specifically nurse practitioners, continue to vary from state to state. This variation results in substantial differences among states in terms of NPs’ authority to provide primary care, to prescribe medications and order tests, to be re-

DOI: 10.1377/hlthaff.2010.0374
©2010 Project HOPE—The People-to-People Health Foundation, Inc.

Joanne M. Pohl (jpohl@umich.edu) is a professor and adult nurse practitioner at the University of Michigan School of Nursing, in Ann Arbor.

Charlene Hanson is a professor emerita and a family nurse practitioner at the Georgia Southern University School of Nursing, in Statesboro, Georgia.

Jamesetta A. Newland is a clinical associate professor and a family nurse practitioner at the New York University College of Nursing, in New York City.

Linda Cronenwett is a professor and dean emerita at the School of Nursing, University of North Carolina at Chapel Hill.
imbursed, and to be primary care providers of record.2,3

Paradoxically, the route to licensure for nurse practitioners, certified nurse-midwives, clinical nurse specialists, and certified nurse anesthetists is similar across states in spite of the variation in recognition of practice authority—which suggests that at least in this one area, the states have agreed on common procedures. All states require graduate nursing education, and most require certification by nationally accredited bodies.

Nurse practitioners have several proprietary certification bodies related to specialty areas. These include the American Nurses Credentialing Center, the American Academy of Nurse Practitioners Certification Program, the National Certification Corporation (for women’s health NPs), the American Midwifery Certification Board, and the Pediatric Nursing Certification Board (for pediatric NPs). Individual states use certification as one mechanism to verify competence for licensure.

Impact Of Scope-Of-Practice Limits

Across the fifty states, there is wide variation in regulation of nurse practitioners. In twenty-eight states and the District of Columbia, NPs are regulated solely by boards of nursing. In twenty-two states, boards of medicine or pharmacy share this authority with boards of nursing. The lack of shared standards for practice among states generates sizable barriers to NPs’ mobility from state to state.2,4

States with sole board-of-nursing regulation have been found to be less restrictive. Meanwhile, having another professional board involved in regulating NPs is correlated with more restrictions on consumer access and less than full implementation of NPs into the state’s health care provider workforce.3,6 Nancy Lugo and colleagues’ concluded that the regulations that are in place for NPs across the country seem to be arbitrary and unrelated to evidence about associations between restrictions to NPs’ practice and patient safety.

Effects Of Limitations These regulatory limitations affect patients’ access to care. Moreover, in limiting the full use of the skill sets of less costly primary care providers, these restrictions create barriers to achieving the nation’s goal of providing efficient, cost-effective primary care to all.3,7

Variations in scope-of-practice and regulatory policies affect the primary care workforce differentially by state. Studies indicate that states that restrict NPs’ autonomy and the range of services they can deliver lose potential NPs to states that have more supportive practice acts, rules, and regulations governing NPs’ practice.3,8,9

Financing and reimbursement modalities are also affected by the level of accountability for one’s practice. Malpractice insurance for collaborative physicians—physicians who work in collaboration with nurse practitioners or other advanced-practice nurses—is sometimes higher if they are expected by law to be accountable for an NP’s practice. This also leads to fewer NP providers.9 Lugo and colleagues’ ranked states on access to patients’ choice of providers related to the level of restrictiveness of regulation of NP practice. Favorable practice and regulatory environments were associated with greater supplies of—and thus greater access to—nurse practitioners and physician assistants.3,10

Goal Of Improving Care The goals and benefits of less restrictive regulatory environments are access, efficiency, quality, and cost of care. The goal is not “independent” practice, per se. The ability for nurse practitioners to practice in full collaboration with physicians is the optimum goal for patients, for nurse practitioners, and for physicians as well. But part of this goal is also to have all primary care providers practicing under their own licenses, without the superficial and costly requirements for supervision that currently exist in many states, and with all providers identified, paid, and held similarly accountable for their practice outcomes, costs, and commitment to continuous improvement of care.

Growing Need For Primary Care Primary health care needs related to management of chronic illness and the numbers of patients and families with potential access to primary care are expected to expand greatly over the next decade.11,12 A policy brief from RAND Health13 addressed the rising costs of health care in Massachusetts after that state adopted near-universal health plan coverage. The brief’s authors made multiple recommendations including to “expand scope of practice and change payment policies for nurse practitioners and physician assistants.” They went on to say that these two practitioner types are underused despite being qualified to provide primary care at a lower cost than other providers.

Benefits Of Team Care The literature confirms that a team approach to care is best and is strengthened by real or virtual collaborative practice between physicians and their nurse practitioner and physician assistant colleagues.9,11,14,15 In fact, the opportunities for collaboration and mutual support between physicians and NPs have been enhanced in recent years by information technologies that support virtual collaboration. These include online con-
The concepts of teamwork and collaboration may be viewed differently by physicians and nurse practitioners.

Primary Care Teams, Teamwork, And Collaboration

A 2003 Institute of Medicine (IOM) report, Health Professions Education: A Bridge to Quality, offered a new vision for health professions education: “All health professionals should be educated to deliver patient-centered care as members of an interdisciplinary team, emphasizing evidence-based practice, quality improvement approaches and informatics.” But educational programs in each of the professions fail to lay the foundation for strong, meaningful, collaborative primary care practice.

True Meaning of Collaboration

The terms “team” and “collaboration,” often used synonymously, are given lip service by NPs and physicians in primary care in both education and practice settings. There is little argument that it does take a “team” and “collaboration” to provide the full range of primary care services, especially health care services included in the models being proposed for various forms of population-based care. The IOM and the American College of Physicians both identify collaboration between providers as an essential component of quality primary care. Yet, in reality, in training primary care professionals, little attention is paid to developing the knowledge, skills, and attitudes related to teamwork and collaboration.

Impediments

First, the concepts of teamwork and collaboration may be viewed differently by professional organizations representing physicians continue to block regulations that would allow NPs to take full accountability for their practices. The variation and divisiveness also has a pronounced negative impact on our collective ability to envision model primary care roles—and, in particular, to help answer the question of how health care providers of the future should be trained. Under current conditions, that question would have to be answered as follows: “They should be trained differently from state to state.” In states that require supervision with reference to written specific protocols—something generally impossible to maintain in actual practice—physicians and NPs might be expected to learn how to enact good practice, given the regulations. Regulations developed twenty or thirty years ago are outdated and no longer useful. It is time to envision the desired roles for each provider at the national level and bring training into alignment with these roles.

Promising Developments

Several positive developments are on the horizon. The number of advanced-practice nurses and physicians sitting jointly on standard-of-practice and standard-of-care committees is increasing. And advanced-practice nurse and physician faculty are cross-teaching students from both disciplines more frequently.

Another heartening development is the collaborative work of six health care regulatory organizations—from medicine, nursing, social work, pharmacy, physical therapy, and occupational health—to guide regulatory decision making with regard to scopes of practice for health care professions. The premise of their work is that the only factors relevant to scope of practice are those designed to ensure that all licensed practitioners are capable of providing competent care to patients. It is hoped that these collaborative guidelines will assist legislators and regulatory agencies in making sound policy decisions.

Role of Professional Organizations

Anecdotally, at the grassroots level, NPs and many physicians report that colleagueship is alive and well. The divisiveness occurs at the state and national levels, where professional organizations representing physicians continue to block regulations that would allow NPs to take full accountability for their practices. The variation and divisiveness also has a pronounced negative impact on our collective ability to envision model primary care roles—and, in particular, to help answer the question of how health care providers of the future should be trained. Under current conditions, that question would have to be answered as follows: “They should be trained differently from state to state.” In states that require supervision with reference to written specific protocols—something generally impossible to maintain in actual practice—physicians and NPs might be expected to learn how to enact good practice, given the regulations. Regulations developed twenty or thirty years ago are outdated and no longer useful. It is time to envision the desired roles for each provider at the national level and bring training into alignment with these roles.

Promising Developments

Several positive developments are on the horizon. The number of advanced-practice nurses and physicians sitting jointly on standard-of-practice and standard-of-care committees is increasing. And advanced-practice nurse and physician faculty are cross-teaching students from both disciplines more frequently.

Another heartening development is the collaborative work of six health care regulatory organizations—from medicine, nursing, social work, pharmacy, physical therapy, and occupational health—to guide regulatory decision making with regard to scopes of practice for health care professions. The premise of their work is that the only factors relevant to scope of practice are those designed to ensure that all licensed practitioners are capable of providing competent care to patients. It is hoped that these collaborative guidelines will assist legislators and regulatory agencies in making sound policy decisions.
physicians and nurse practitioners. Although Jill O’Brien and colleagues found numerous areas of agreement, physicians in their study expected nurses to be seekers of collaboration. While “physicians believed that communication would improve if what they said was heard and heeded,” nurse practitioners “believed they were not heard” at times by physicians.

For nurse practitioners, one of the thorniest issues is the way the term collaboration has been interpreted in national and state regulations. Too frequently, normal definitions of collaboration are uniquely redefined in regulatory language that affects NPs. For example, Medicaid and Medicare reimbursement for NPs requires a “collaborative agreement” with a physician, while many states emphasize collaboration in regulatory language applying to NPs’ scope of practice. Unfortunately, the term collaboration has been interpreted to mean supervision. This interpretation has hindered the advancement of true collaborative relationships between physicians and nurse practitioners and has impeded access to NPs’ primary care.

A related issue is the profession-based disagreement about who is capable of leading primary care teams. In the many NP primary care models we have reviewed, all provide for strong collaborative relationships between health care providers, even though some are nurse-managed (that is, nurse-led) practices. Nurse practitioners, and many physicians, believe that the level of communication and teamwork among providers is the fundamental characteristic that determines the quality of primary care practices, rather than the type of provider that is the accountable leader of a particular practice.

Another issue is the complexity of the phenomenon itself and the significant interpersonal commitment involved in building collaborative relationships. The educational preparation of primary care providers occurs in isolation and rarely includes a focus on interprofessional collaboration. Students are not expected to develop collaborative relationships with members of other disciplines, do not learn conflict management skills, and are rarely exposed to faculty from other disciplines. The American College of Graduate Medical Education (ACGME); the American Association of Colleges of Nursing; the National Organization of Nurse Practitioner Faculties competencies; and the learning objectives outlined in work recently reported by a Robert Wood Johnson Foundation–funded project, Quality and Safety Education for Nurses, have all included teamwork and collaboration as essential competencies for practice.

**INTERDISCIPLINARY EDUCATION** Occasionally, initiatives have been launched to support interdisciplinary education. One was funded by the Robert Wood Johnson Foundation Partnerships for Training initiative in the late 1990s. This project brought together nurse practitioners, physician assistants, and certified nurse-midwives, along with multiple university partners, to teach core primary care content. It did not include medicine, unfortunately, and many of the programs did not continue once external funding ended.

A federally funded example of interdisciplinary education is the Area Health Education Centers funded under the Bureau of Health Professions. This funding, in existence for more than thirty years, addresses health care workforce issues by exposing students to health care career opportunities that they otherwise would not encounter. Area Health Education Centers establish community-based training sites for students in service-learning and primary care disciplines and provide continuing education programs for health care professionals across disciplines. These training centers exist in all but a handful of states and could provide important team-based clinical experiences for primary care students across disciplines.

Although there is a strong emphasis on interdisciplinary education within the Area Health Education Centers, requirements established when the program was initiated more than thirty years ago are now out of date. Area Health Education Center funding requirements specifically pertain to medical students only. They are silent on other provider students such as nurse practitioners, certified nurse-midwives, and physician assistants. These requirements need to be changed to recognize such practitioners as primary care providers.

Although academic silos and accreditation...
requirements have precluded interdisciplinary education in the past, there is reason to hope. Strategies such as online conferencing, webinars, and other interactive uses of technology will lead to greater integration of the education of primary care provider students from different disciplines. Health reform will also drive educational changes, as the need for providers who can work in teams inevitably becomes greater. We hope that teamwork and collaboration will be included in the curricula to prepare all primary care providers.

Creating A Vision

The issues above are important ones, but the biggest barrier to achieving a world with effective, efficient primary care teams is our collective lack of vision for primary care roles that will serve us into the future. Currently, each discipline—physician assistant, nurse practitioner, and physician—prepares providers for essentially the same role—or for roles with greatly overlapping scopes of practice. Role ambiguity and duplication of costs and efforts are the natural result.

CONFLICTING DRIVERS

Primary care physicians are pushing both for higher incomes and for the “lead” roles in coordination of care. Yet our society desperately needs to reduce the cost of care. Team training emphasizes the need for a “common mental model” of what is to be accomplished by each team member. But our disparate views about primary care roles play out in education, regulation, reimbursement for services, and the ability to provide patient-centered care.

PATIENT-CENTERED MEDICAL HOME

The patient-centered medical home concept is a model of health care that embodies the full spectrum of primary care based on patient-centered care; clearly defined provider-patient relationships; and primary care standards of accessibility, continuity, comprehensiveness, integrated care, and interdisciplinary care.26,27 The overall goal of the medical home concept is a full spectrum of care—preventive and curative, longitudinal, and coordinated.26

However, most of the language to date about the patient-centered medical home concept is physician-centric and presents the physician as the sole leader of the team. This is true despite two critical trends: the looming shortage of primary care physicians,28 and evidence that other, probably lower-cost, primary care providers and models of care are equipped and willing to provide a patient-centered medical home—and have been doing so—for diverse populations.29,30

NURSE-MANAGED HEALTH CENTERS

Nurse-managed health centers have embodied many of the characteristics of the patient-centered medical home concept for years.29 Yet they have often been inhibited by federal, state, and insurer reimbursement and practice policies that limit the full scope of practice. An American College of Physicians monograph11 supports testing new models of primary care, including those that are led by nurses. Together, groups representing doctors of medicine, doctors of osteopathy, physician assistants, and nurse practitioners need to map out high-quality, cost-effective primary care models that can accomplish the desired aims.

REDEFINED ROLES

If we redefine the roles for primary care physicians, nurse practitioners, and physician assistants and standardize professional regulation across states, then (and only then) will it be possible to enact curricular strategies that prepare new graduates with the competencies needed to perform in these roles.

Conclusion

We recommend substantive changes in the way health care professionals in all primary care disciplines are trained, regulated, and held accountable for the care they deliver. Most important, we recommend that all primary care providers be required to develop skills that support effective collaboration, with each other and with patients, families, and communities. If we accomplish these goals, we can dramatically improve access to effective primary care and create health systems with lower overall costs and improved outcomes.