Improving Access to Adult Primary Care in Medicaid: Exploring the Potential Role of Nurse Practitioners and Physician Assistants

Among the major health care challenges facing the U.S. today, the inadequate supply of adult primary care providers is a key concern. Finding a primary care physician and getting timely care are increasingly difficult, even among Medicare beneficiaries and privately insured adults. Sixty-five million people live in areas designated by the federal government as having a shortage of primary care providers. As the population grows and ages and a declining share of physicians choose primary care careers, current gaps in access to primary care are expected to widen.

Under health reform, the pressures on access are certain to grow as millions of newly insured people enter the health care system. The Patient Protection and Affordable Care Act (ACA) will expand coverage to 32 million individuals — mostly, previously uninsured adults — half through an expansion of Medicaid and half through private insurance offered on new health insurance Exchanges. By 2020, the U.S. will face an estimated shortage of 91,000 physicians, split about evenly between primary care physicians and specialists. However, the impact of this shortage is likely to be more acute among Medicaid beneficiaries due to geographic misalignment between low-income communities and physician practice locations and low physician participation in Medicaid.

Anticipating increased demands for primary care as more people gain coverage, ACA put in place an array of strategies to help build primary care capacity. One important strategy is greater reliance on primary care health professionals other than physicians. This brief provides basic information about two major types of primary care providers — nurse practitioners and physician assistants — and considers their potential to increase the supply of primary care as Medicaid expands to cover more uninsured adults.

Nurse practitioners and physician assistants

Nurse practitioners (NPs) are registered nurses who have completed graduate-level education and additional clinical training in diagnosing and treating illness. The vast majority of NPs have a master’s (84%) or doctoral (4%) degree; the others are mostly those who received their NP education before the majority of states required graduate degrees for NP recognition. NPs are the largest group of advanced practice registered nurses (APRNs), who also include clinical nurse specialists, certified nurse midwives, and certified registered nurse anesthetists. In most states, NPs must pass a national board certification exam, and NPs are licensed by the state in which they practice. NPs practice in all 50 states and the District of Columbia (DC).

NPs take medical histories, provide complete physical examinations, diagnose and treat acute and chronic illnesses, provide immunizations, prescribe and manage medications and other therapies, order and interpret lab tests and x-rays, and provide patient education and supportive counseling. In many states, NPs have authority to practice independently of physicians; however, as discussed later, due to state laws, NPs’ scope of practice varies widely by state. In 2009, there were approximately 135,000 NPs practicing in the U.S.; the most common specialty areas for practicing NPs were family practice (42%), adult practice (21%), pediatrics (9%), women’s health (10%), and acute care (7%).
Physician assistants (PAs) are health professionals trained to provide diagnostic, therapeutic, and preventive care services under physician supervision. PAs were established as and consider themselves part of a physician-led team, rather than functioning as independent practitioners. In 2008, 40% of PAs held PA bachelor’s degrees and another 43% had PA master’s degrees. PAs must pass a national certification exam to enter clinical practice, and they are licensed by the states.

As of May 2010, there were about 75,000 PAs in clinical practice (of about 89,000 eligible to practice). PAs may perform physical exams, diagnose and treat illness, order and interpret tests, counsel on preventive health care, assist in surgery, and prescribe certain medications. The supervising physician determines what services to delegate to PAs based on state practice acts, regulations, and the individual PA’s training and experience.

Federal support for NPs and PAs

National Health Service Corps. The NP and PA professions and training programs were first established in the 1960s, when the U.S. experienced a shortage and maldistribution of primary care physicians. The creation of the National Health Service Corps (NHCS), which provides scholarships and loan repayment in exchange for service in health professional shortage areas, established an important source of federal support for the development of NPs and PAs, among many other types of providers. Federal legislation over subsequent decades helped define the role of the two professions in both Medicare and Medicaid, the U.S.’s two large public health insurance programs.

Medicare and Medicaid policy. In the late 1970s, federal Medicare and Medicaid payment policy first began to address non-physician clinicians specifically, in legislation aimed at improving access to care for beneficiaries in underserved rural areas. The Rural Health Clinic Services Act of 1977 provided for Medicare and Medicaid payment to rural health clinics staffed by NPs and PAs, marking the first time the programs covered the services of these practitioners outside a physician practice. Previously, Medicare and Medicaid had paid for services furnished by a non-physician clinician only if the service was integral to a physician’s service and was provided under a physician’s direct supervision.

Over time, Congress has amended Medicare and Medicaid law to reflect increasing recognition of NPs’ and PAs’ role in providing services to Medicare and Medicaid beneficiaries. The Omnibus Budget Reconciliation Act of 1989 required state Medicaid programs to cover services provided by pediatric and family NPs and, subject to other state laws, to allow direct billing by and payment to these NPs for their services.

The Balanced Budget Act of 1997 (BBA) removed restrictions on the geographic areas and settings in which the services of NPs and PAs could be paid by Medicare, and it established that NPs practicing independently of a physician, and NPs and PAs billing under their own billing number, would be reimbursed 85% of the Medicare physician fee schedule amount that a physician would receive for the same service. (Medicare payment for NP and PA services is 100% of the physician fee schedule amount when a physician bills for the service, the NP or PA is employed by the physician, the service is provided under the physician’s direct supervision, and other conditions are met. NPs can receive direct payment under Medicare, whereas payment for PA services is made to the PA’s physician employer.

The BBA also provided states with new options to mandate enrollment of Medicaid beneficiaries in managed care plans and to cover primary care case management services in their fee-for-service programs. The law authorized states to recognize pediatric and family NPs as primary care case managers, but did not require them to do so. State Medicaid policies regarding the inclusion of NPs as...
primary care providers on managed care panels currently vary widely, with very few states requiring that they be included.

**New investments under health reform.** ACA lays the foundation for a broader role for NPs and PAs through investments in training and other provisions, described in more detail later, that support increased participation of and reliance on these providers as members of a strengthened primary care workforce.

**NPs and PAs in primary care today**

The vast majority of NPs practice in the area of primary care, as mentioned earlier. NPs are also, by far, the fastest growing segment of the primary care professional workforce; between the mid 1990s and the mid-2000s, their numbers (per capita) grew an average of more than 9% annually, compared with about 4% for PAs and just 1% for primary care physicians. Primary care NPs work in diverse clinical settings, including physician practices, health centers, managed care organizations, retail or convenient care clinics, and school-based health centers. They are a key source of primary care in community health centers and in 250 nurse-managed health clinics* across the country, which serve about 20 million patients a year. According to one account, about 10,000 NPs run their own practices. In contrast, a substantially smaller share of PAs – about a third – are in primary care, including general or family practice, internal medicine, and pediatrics.

Approximately 83,000 NPs and 26,000 PAs practice in primary care today. According to a recent analysis, in 2009, NPs accounted for 27% of primary care providers nationally, and PAs accounted for 15%. That analysis also found that NPs, and to a lesser extent, PAs, tend to make up a greater share of the primary care workforce in less densely populated, less urban, and lower income areas, as well as health professional shortage areas; further, although most counties are served primarily by physicians, in many areas, NPs and PAs make up more than half the primary care workforce or no single provider type dominates. Other research also provides evidence that NPs and PAs are more likely than primary care physicians to practice in underserved areas and to care for large numbers of minority patients, Medicaid beneficiaries, and uninsured patients.

**Quality and cost-effectiveness of NP and PA care**

**Findings on quality.** Primary care NPs and PAs are capable of providing a large proportion of the primary care services furnished by physicians. A substantial body of research examining the quality of NP and PA primary care shows that these clinicians perform as well as physicians on important clinical outcome measures, such as mortality, improvement in pathological condition, reduction of symptoms, health status, and functional status. In addition, patients report high levels of satisfaction with care provided by NPs and PAs. In fact, numerous studies show that patients are generally more satisfied with primary care provided by NPs compared to physician-provided care, and more likely to have been given appropriate advice. An analysis of the complexity profile (low, moderate, high) of the primary care services provided to Medicare beneficiaries by different types of clinicians showed that the profiles were similar between NPs and PAs and primary care physicians. Studies from England and Canada

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*The term “nurse-managed health clinic” was first defined in federal statute at Section 5208 of the ACA, as a “nurse-practice arrangement managed by advanced practice nurses, that provides primary care or wellness services to underserved or vulnerable populations and that is associated with a school, college, university or department of nursing, federally qualified health center, or independent nonprofit health or social services agency.”
indicate the ability of non-physician clinicians to increase service capacity without any loss in the quality of clinical care.\textsuperscript{34} 35

**Findings on savings.** Evidence on the savings impact associated with wider use of NPs and PAs is limited and remains inconclusive. While the average earnings of NPs and PAs are half those of primary care physicians, the lower costs could be offset if increased use of these clinicians led to increases in resource use or volume of services, or lower productivity.\textsuperscript{36} 37 Still, a study of 26 primary care practices in a large managed care organization showed that practices that used NPs and PAs more extensively in providing care had lower labor costs per visit.\textsuperscript{38} An analysis of care in retail clinics compared to other settings provides evidence that the cost of services provided by these clinics, which are generally staffed by NPs, was substantially lower than the cost of physicians’ services, while quality was generally equal or better (the researchers identified important concerns beyond the scope of the study, related to the implications of retail clinics for fragmentation of health care).\textsuperscript{39}

In an analysis of 21 options for controlling health care spending in Massachusetts (selected from an original 75), researchers at RAND included expanded use of NPs and PAs to deliver primary care. RAND estimated that this option would yield cumulative savings to Massachusetts of $4.2 billion to $8.4 billion (0.6% -1.3%) over the period 2010-2020. The upper-bound estimate assumed that NPs and PAs could provide all care for six simple acute conditions commonly treated at retail clinics, as well as all general exams and well-baby visits; nationally, these services account for about 18% of office visits. The lower-bound estimate assumed that NPs and PAs could provide care for the six acute conditions, but not the other care.\textsuperscript{40}

Collectively, this research suggests that – especially in light of current and projected physician shortages, the much greater time and cost to train physicians, and expected increases in the demand for primary care – wider deployment of NPs and PAs is a promising strategy for increasing the supply of primary care providers in Medicaid, in areas underserved by physicians, as well as system-wide. In its projections of physician supply and demand, the Association of American Medical Colleges assumes that each additional two NPs or PAs reduce physician demand by one.\textsuperscript{41}

**Evidence from health care systems.** In some integrated health care systems (both public and private) noted for the quality of care they provide, NPs play a major role in providing primary care. The Veterans Health Administration, a system that emphasizes primary care, including care coordination and disease management, hires NPs as primary care providers for patients in both inpatient and outpatient settings. Evidence from studies of the system shows superior quality and outcomes of care.\textsuperscript{42} In the Geisinger Health System, also a model of high quality, NPs staff convenient care clinics.\textsuperscript{43}

**Clearing the way for NPs to practice at the “top of their license”**

Like the practice of other health professionals, NP practice is regulated largely by the states through licensure laws and policy on scope-of-practice and prescriptive authority. States determine licensure requirements, the physician collaboration or supervision requirements for NPs, the range of services NPs can provide and the extent of their authority to prescribe medication, educational requirements, as well as the terms of payment under the state Medicaid program.\textsuperscript{44} The scope-of-practice of PAs, who are licensed to practice under the supervision of a physician, is limited only by the scope-of-practice of the supervising physician and the content of medical practice delegated to the PA.
Restricted scope-of-practice in many states. Although state scope-of-practice laws have evolved over time to extend NPs greater autonomy, many states continue to restrict them from practicing to the full extent of their training and competency, and professional resistance to expanded roles for NPs is a barrier to progress. The wide variation in scope-of-practice laws from state to state constrains the uniform expansion of NP services. It also contributes to the migration of NPs from more restrictive to less restrictive states. In addition, restrictive state practice acts present barriers to the sustainability and expansion of nurse-managed clinics that provide primary care and health education, largely to underserved communities.

There is substantial variation across states regarding NPs’ authority to provide primary care, prescribe medication and order tests, be reimbursed, and be the primary care providers of record. As of January 1, 2011, NPs in 23 states and DC were able to diagnose and treat patients without any statutory or regulatory requirements for physician collaboration, direction, or supervision; the other 27 states, however, required some degree of physician involvement in these patient care activities. In the same year, NPs in 15 states and DC could prescribe controlled and non-controlled drugs independently, but 35 states required written documentation of some degree of physician involvement in or delegation of prescription writing. Some state scope-of-practice laws may permit NPs broader authority in underserved areas than elsewhere.

Health plan restrictions. The credentialing and payment policies of managed care plans, often linked to state practice laws, can also constrain the role of NPs in delivering primary care. For example, according to a recent survey, nearly half of all major managed care plans do not credential NPs as primary care providers (PCPs) and, of those that do, 38% pay NPs at a lower rate than primary care physicians; Medicaid plans are more likely than any other category of insurer to credential NPs.

Model APRN Regulation. In July 2008, the APRN Consensus Work Group and the National Council of State Boards of Nursing issued a Consensus Model for APRN Regulation. The goal of the model rule is to
provide states with standardized regulatory language intended to improve access to care by eliminating practice barriers. Under the model rule, which addresses licensure, accreditation, certification and education, NPs and other APRNs would be licensed by state Boards of Nursing as independent practitioners with no regulatory requirements for physician collaboration, direction, or supervision.\textsuperscript{52}

**IOM recommendations.** In its recent report, *The Future of Nursing: Leading Change, Advancing Health*, the first recommendation articulated by the Institute of Medicine (IOM) is: “Remove scope-of-practice barriers.” Citing the federal government’s interests and leverage as a major health insurer and payer, its responsibility to ensure access to care for the beneficiaries of federal programs, and its role in regulating anticompetitive behavior, the IOM calls on the Congress and key federal agencies to take a variety of steps, including through Medicare and Medicaid policy, to allow NPs to practice to the full extent of their education and training. It also calls on state legislatures to adopt the model APRN regulation and to require third-party payers in fee-for-service to provide direct payment to NPs (and other APRNs) who are practicing within their scope-of-practice under state law.

**Medicaid payment for NP and PA services**

As mentioned earlier, certified pediatric and family NPs can bill Medicaid directly for the services that they are legally authorized to perform under state law or regulation, regardless of whether or not the services are provided with physician supervision.\textsuperscript{51} In some 36 states, Medicaid programs provide direct reimbursement to all advanced practice nurses.\textsuperscript{54} Close to half of state Medicaid programs pay NPs the same rate that they pay physicians for the same services. Other states pay 85% or some other share of the physician payment amount.\textsuperscript{55} Further, some states differentiate based on the service. For example, while the Kansas Medicaid program generally pays NPs 80% of the comparable physician payment amount, it pays 100% in the case of Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) services.\textsuperscript{56}

Every state Medicaid program covers services provided by PAs, although some restrict coverage to settings where PAs are directly supervised by physicians (most states do not require that the supervising physician be physically present).\textsuperscript{57} In most states, PA services are billed to Medicaid under the supervising physician’s name and provider ID number; PA-provided services are flagged and sometimes paid at a reduced rate, as low as 69% of the physician fee for the same service, but more than half the states and DC pay PAs at the full physician rate.\textsuperscript{58}

**A broader role for NPs and PAs in providing primary care under health reform**

To help ensure sufficient access to care, particularly primary care, as coverage expands to millions more Americans, ACA makes significant new investments that directly or indirectly support a larger role for NPs and PAs. On September 27, 2010, HHS announced the first awards of grants under these provisions, including:\textsuperscript{59}

- *Increasing the supply of NPs* - $31 million over five years to 26 schools of nursing to increase full-time enrollment in primary care NP and nurse midwife programs through student stipends. Grantees project that 600 NPs will be fully trained by 2015.
- *Increasing the supply of PAs* - $30 million over five years to fund 28 primary care PA training programs, which provide student stipends for two years. More than 700 PAs are projected to receive funding, with more than 600 fully trained by 2015.
- *New nurse-managed health clinic (NMHC) program* - Almost $15 million for the development and operation of 10 nurse-led clinics for three years, to provide comprehensive primary health care
services in medically underserved communities, and to assist in the training of NPs. NMHCs must be associated with a nursing school or department, health center, or independent non-profit social service agency. Grantees project that the funding will provide access to primary care for about 94,000 patients and training for more than 900 advanced practice nurses.

- **State health workforce development** - $5.6 million to states to begin comprehensive health care workforce planning or implementation, expected to result in a 10% to 25% increase in the primary care workforce over a 10-year period.

Other ACA investments also provide support for the development of a more appropriate health care workforce and system in which the full participation of non-physician clinicians is envisioned:

- **Increased funding for National Health Service Corps (NHSC)** - $1.5 billion in new funding for NHSC over five years. NHSC provides support in the form of scholarships and loan forgiveness for primary care health professionals, including NPs and PAs, who practice in urban and rural health professional shortage areas.

- **Increased funding for health centers** - $11 billion over five years in new funding for health centers, which are a critical source of primary care in underserved rural and urban communities; NPs and other advanced practice nurses provide more than 40% of the care in these settings. With the new funding, the number of patients that health centers serve each year is expected to double to nearly 40 million.

- **Medicare bonus payments for primary care** - 10% bonus payments for primary care services provided to Medicare beneficiaries by primary care practitioners, including NPs and PAs, from 2011 through 2015.

- **Increased support for development of nursing faculty** - Increased availability of loans, loan repayment, and scholarships to support the development of nursing faculty, and incentives for current graduate students or recently graduated master’s/doctoral students to serve as nursing faculty in accredited schools of nursing.

- **National Health Care Workforce Commission** - Charged to develop and evaluate education and training activities to determine whether demand for health care workers is being met, identify barriers to improved coordination at the federal, state and local levels, recommend ways to address those barriers, and encourage innovations. Among high-priority topics is workforce planning that “maximizes the skill sets of health professionals across disciplines.”

In the immediate term, a critical lever for improving access to primary care is the removal of regulatory, legislative, insurance, and institutional barriers that currently prevent NPs in many states and health care settings from practicing to the full extent of their competency. The IOM has provided the evidence base for taking such action and recommended specific federal and state steps. In particular, it calls for the expansion of federal health programs to cover NP services within the scope-of-practice under state law, the application of the ACA increase in Medicaid payment rates for primary care physicians to NPs, state adoption of the Model APRN Regulation, and a review of state regulations by the Federal Trade Commission and the Department of Justice to identify those with unjustified anticompetitive effects.

**Looking ahead**

As the broad expansion of health coverage in 2014 draws closer and shortfalls in the supply of primary care providers grow, policy reforms, along with new, more collaborative models of training and care, are needed to harness the potential of NPs, PAs, and the entire primary care workforce as fully as possible. The need for more primary care providers is particularly acute in the already-underserved areas where
many of the 16 million newly eligible Medicaid beneficiaries likely reside. Over the medium and longer term, the broad array of ACA investments that emphasize and provide incentives for primary care, strengthen the safety net, promote innovation in health care delivery systems, and support workforce development hold substantial promise. In the nearer term, identification and wider adoption of health care models that rely successfully on NPs and PAs to expand access to primary care can help to bridge current gaps in Medicaid and system-wide.

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The Kaiser Commission on Medicaid and the Uninsured provides information and analysis on health care coverage and access for the low-income population, with a special focus on Medicaid’s role and coverage of the uninsured. Begun in 1991 and based in the Kaiser Family Foundation’s Washington, DC office, the Commission is the largest operating program of the Foundation. The Commission’s work is conducted by Foundation staff under the guidance of a bi-partisan group of national leaders and experts in health care and public policy.

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