SUMMARY OF KEY FINDINGS

- The maldistribution of primary care providers appears to be a more significant problem than an overall shortage. There has been a small but steady increase in the numbers of primary care providers, but their practice areas are not evenly matched with areas of greatest need.

- State laws have increased the scope of practice of nurse practitioners and physician assistants although there is wide variation among states. NPs are one of the fastest growing health professions. The majority of NPs practice in primary care and they get high marks for quality.

- New practice models are redefining primary care. These models create interdisciplinary teams and foster collaboration among providers. The new models of care are shifting the focus away from workforce “headcounts” to how to best organize primary care.

Why is this issue important to policy-makers?

- When fully implemented, the recently passed Patient Protection and Affordable Care Act (PPACA) will require most U.S. citizens to have health insurance. As a result, an estimated 32 million people will be newly insured, many of whom will be seeking a source for primary care.

- The number of people with chronic conditions is increasing at high rates and new practice and payment models such as medical homes and accountable care organizations rely on primary care clinicians to better manage their care.

What is the supply of the U.S. primary care workforce?

The primary care workforce is made up of physicians (pediatricians, family practice, and internal medicine), nurse practitioners and physician assistants. Collectively, this group numbers approximately 400,000 clinicians providing primary care (Reference 1). In addition, primary care is also provided by some specialists, particularly obstetricians and gynecologists.

There has been a small but steady increase in the primary care workforce over the last decade (Table 1). Physicians make up approximately three-quarters of the primary care workforce, with nurse practitioners and physician assistants accounting for the remainder (Reference 1).

Table 1: Growth in primary care workforce

<table>
<thead>
<tr>
<th></th>
<th>Years</th>
<th>Average annual percent change per capita</th>
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</thead>
<tbody>
<tr>
<td>Primary care physicians</td>
<td>1995–2005</td>
<td>1.1</td>
</tr>
<tr>
<td>Nurse practitioners</td>
<td>1999–2005</td>
<td>9.4</td>
</tr>
<tr>
<td>Physician assistants</td>
<td>1995–2007</td>
<td>3.9</td>
</tr>
</tbody>
</table>

Source: GAO, 2008 (Reference 2)

Studies projecting current or imminent shortages in primary care providers have significant limitations. Few studies of workforce needs consider interprofessional collaborative models and teams or adjust for changing practice patterns. In addition, technology innovation will affect practitioner productivity, but in unknown ways.

The primary care workforce is not evenly distributed across the United States and this maldistribution results in shortage areas. Federal programs such as the National Health Service Corps and similar state programs which offer scholarships and loan repayment in exchange for practicing in underserved areas have been successful, but there are too few slots available to meet the need in underserved areas.
The primary care workforce in the United States

Physician supply tends to be lower in areas with high proportions of low-income and minority residents, who tend to have greater health needs. This phenomenon is known as the “inverse care law”. Rural and some inner-city neighborhoods have had difficulty finding physicians to serve their communities. Between 1979 and 1999, for every physician who settled in a low-supply region, 4 physicians settled in regions with already high supply (Reference 4).

Many states have passed laws expanding the scope of practice for nurse practitioners (NPs). Over 60 percent of NPs practice in primary care, where they play significant roles meeting patient needs (Reference 5). Greater reliance on NPs could be a viable option to reduce the workloads of primary care physicians. Meta-analyses of numerous pilots, controlled studies and research projects have found the quality of primary care delivered by NPs to be comparable to that of physicians for similar services (Reference 6).

Workforce supply and capacity is cyclical. The total number of individuals working in a profession is affected both by capacity (those trained and authorized to provide services in question) and actual supply (qualified individuals who want to work). As high wait times or provider shortages become apparent, educational programs expand, producing more graduates, while legal scopes of practice may grant broader practice authority to some professions in underserved areas. At the same time, practice models shift to integrate new workers into care delivery, effectively expanding capacity. Efforts to increase capacity may coincide with economic trends producing higher than anticipated numbers of individuals wanting to work. Evidence of the cyclical nature of workforce supply is the recent undersupply followed by oversupply of nurses (Reference 7).

What is the demand for primary care?

Demand for primary care will be driven over the next decade and a half by the mandating of near universal coverage, an aging population and overall growth in the size of the U.S. population of almost 20 percent. This growth in demand will be accompanied with a shift from acute care services to more chronic care management as the nation’s disease patterns change as the population ages.

The care-seeking behavior of those expected to be newly insured under PPACA is not well known. On one hand, the uninsured have lower rates of common chronic conditions and are generally healthier than the insured (Reference 8). On the other hand, the uninsured are less likely to have a usual

Primary Care Payment Policies

In health care, as in most markets, what is paid for is what gets addressed. In this regard there are several historical problems associated with the reimbursement for primary care services.

There is significant variation in incomes for primary care and specialty care physicians. Primary care physicians’ total compensation is less than that of specialists and their income is increasing at a slower rate (Reference 3). The gap in income, combined with various other factors such as high medical school debt and professional prestige, influences the decisions of recent medical school graduates.

Most payments are tied to direct contact between a patient and clinician (physician, NP or PA). This policy does not allow payment for follow-up calls by a medical assistant, home visits by a community health worker, or well baby care delivered by a registered nurse (as opposed to a nurse practitioner). In addition, it may impede advances in telemedicine.

Many primary care services related to education, prevention, wellness and chronic disease management are not fully reimbursed. The United States is slowly moving toward paying for function and outcomes, not individual professional time or effort, as evidenced by recent legislative efforts.

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The newly insured may exacerbate the maldistribution of primary care providers.

source of care, which may result in an increased demand for primary care once they become insured (Reference 9). After implementing state health reforms, Massachusetts experienced delays due to a sudden increase in the number of newly insured patients seeking primary care, but the surge was temporary (Reference 10). Given the state’s low initial rate of uninsured residents relative to the national average, it is unclear whether Massachusetts’ experience can be extrapolated to the rest of the United States.

**Shifts in demand resulting from PPACA may exacerbate the maldistribution of primary care providers.** States with the fewest primary care physicians—those in the South and Mountain West—are expected to see the largest growth in Medicaid enrollment while states with high numbers of primary care providers—those in the Northeast—are expected to see more modest increases in Medicaid enrollment (Reference 13).

**How will primary care evolve?**

Various pressures ranging from policy and market forces to technology and an aging and growing population are forcing primary care to evolve. Alternatives to the traditional primary care delivery model have been explored in practices and policy conversations across the country. While there is no one right solution, a number of common characteristics have emerged in successful models:

**Successful models rely on strong teamwork.** Teamwork includes appropriate leadership and delegation of duties, collaboration, integration, and hand-off. Facing ongoing physician recruitment challenges, community health centers have long been leaders in using teams that include NPs, PAs, medical assistants, community health workers, promotores and others.

**Innovative models incorporate meaningful use of technology, including telehealth.** Information technology allows health care information to be more widely available and used by a wider variety of health care team members. The use of telehealth may help mitigate the maldistribution of primary care providers.

**New practice models are redefining primary care.** Some models question whether to continue to include everything that has traditionally been grouped under primary care. One option is to distinguish efforts to manage acute conditions like influenza from those managing chronic conditions like diabetes. Physicians, nurse practitioners and physician assistants all may have a different role in the management of acute and chronic conditions.

**SCOPE OF PRACTICE LAWS**

States have authority to regulate health professionals, including physicians, nurse practitioners and physician assistants. While the regulation of physicians across states is more or less consistent, the regulation of NPs and PAs varies.

Ten states require physician supervision of NPs, while about a dozen states authorize NPs to practice to the full extent of their competence without physician supervision. Many states fall somewhere in the middle, either requiring physician supervision only with respect to prescriptive authority or requiring NPs to work in collaboration with physicians, although ‘collaboration’ is often vaguely or inconsistently defined. The vast majority of states allow NPs to have prescriptive authority although most require the involvement of a physician (Reference 11).

Laws regarding scopes of practice for physician assistants also vary by state, although to a lesser degree than NPs. Unlike NPs, PAs in all states must practice with physician supervision. However, the level of supervision varies as does specific requirements regarding certain activities such as prescribing (Reference 12).
Policy Implications

The Patient Protection and Affordable Care Act will add to the demand for primary care services as the population approaches universal insurance. Primary care is not a static commodity, but an evolving service that will be provided by teams and a broad range of health professionals. To promote this evolution, policy-makers could:

> **Continue to provide incentives to primary care providers who practice in underserved areas.** Programs such as the National Health Service Corps, which provides incentives to physicians to practice in Health Professional Shortage Areas, have been successful but have a limited capacity relative to need. In addition, the scope of practice for nurse practitioners could be expanded.

> **Consider how services will be paid in reshaping the health delivery system.** Reimbursement could be focused on the services provided and not by what type of professional is providing them. Demonstrations of new practice models could be allowed to move towards a more functional and outcomes-based primary care system.

> **Fund demonstrations of innovative delivery systems that include the data collection necessary to make meaningful comparisons of outcomes.** Evidence-based comparisons of innovative delivery models and modes, such as telehealth, will allow policy-makers to target scarce resources.

THE SYNTHESIS PROJECT (Synthesis) is an initiative of the Robert Wood Johnson Foundation to produce relevant, concise, and thought-provoking briefs and reports on today’s important health policy issues.

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