INCORPORATE ACCESS TO PRIMARY CARE SERVICES BY ALLOWING
ADVANCED PRACTICE REGISTERED NURSES TO PRESCRIBE

Both nationally and in Texas, advanced practice registered nurses have helped mitigate the effects of a general practice physician shortage. An advanced practice registered nurse is a registered nurse with an advanced degree, certification and license to practice as a nurse practitioner, clinical nurse specialist, nurse-midwife, or nurse anesthetist, in some cases with a focus on a defined population.

Although advanced practice registered nurses practice as autonomous or nearly autonomous primary care providers in 20 states and the District of Columbia, Texas limits their ability to establish a medical diagnosis and prescribe medications. The state’s site-based, delegated model of prescriptive authority limits patient access to affordable, quality healthcare providers, particularly in rural and health professional shortage areas. Developing a tiered model for prescriptive authority, in which an advanced practice registered nurse could apply for an autonomous prescriptive authority license after working within a delegated prescriptive authority arrangement for two years, would increase the availability of lower-cost primary healthcare providers.

FACTS AND FINDINGS

♦ While advanced practice registered nurses work as healthcare providers for patient populations they have been educated to treat in accordance with scope of practice models defined by national certification agencies, they are licensed and regulated by state boards of nursing.

♦ Advanced practice registered nurses serve as primary care providers in a variety of acute and outpatient settings, including pediatrics, internal medicine, anesthesiology, geriatrics and obstetrics.

♦ Regulations defining scope of practice for advanced practice registered nurses vary widely by state. Texas is among the most restrictive. Twenty states and the District of Columbia allow advanced practice registered nurses to practice either autonomously or nearly autonomously.

♦ No studies comparing the care provided by physicians and advanced practice registered nurses have shown better health outcomes for patients in states with more restrictive regulatory environments.

CONCERNS

♦ As of October 2010, Texas had 180 areas or counties designated as primary care health professional shortage areas, which means they have an exceptionally low physician to population ratio.

♦ Even though they are educated and trained to perform many routine aspects of primary care, advanced practice registered nurses lack the statutory authority to diagnose illnesses and prescribe medicines in Texas and therefore are underutilized in the provision of primary care.

♦ Texas’ statutes regulate advanced practice registered nurses differently depending on the location of the practice site. This inconsistency limits patient access to qualified primary care providers and is especially onerous for physicians and advanced practice registered nurses in rural areas.

RECOMMENDATIONS

♦ Recommendation 1: Amend the Texas Occupations Code, Chapter 301, to include “advanced assessment, diagnosing, prescribing, and ordering” in the scope of practice for advanced practice registered nurses.

♦ Recommendation 2: Amend the Texas Occupations Code, Chapter 301, to require the Board of Nursing to adopt rules for assigning prescriptive authorization to a qualified advanced practice registered nurse who has completed 3,600 hours of practice within a delegated prescriptive authority arrangement with a physician or fully authorized advanced practice registered nurse and to establish a surcharge to cover the administration of the tiered prescriptive authority.

♦ Recommendation 3: Include a contingency rider in the 2012–13 General Appropriations Bill to appropriate surcharge revenue to the Texas Board of Nursing to administer the tiered prescriptive authority.

DISCUSSION

In 2007, the American Medical Association reported that medical students are less likely to choose primary care and
more likely to pursue careers as specialists. The result is that each year there are fewer primary care physicians entering the workforce. This decline combined with population growth and aging contributes to a nationwide deficit of primary care practitioners that could be between 35,000 and 44,000 by 2025.

Both nationally and in Texas, advanced practice registered nurses (APRNs) have helped mitigate the effects of this shortage. An advanced practice registered nurse is a registered nurse with either a masters or doctoral degree who has passed a national board certification exam and is licensed to practice in one of four roles (nurse practitioner, clinical nurse specialist, nurse-midwife, or nurse anesthetist), in some cases with a focus on a given population.

Certified nurse practitioners (NPs) are educated and trained to provide a range of primary and acute care, including taking medical histories; providing physical examinations; ordering and interpreting diagnostic tests; and diagnosing, treating and managing acute and chronic illnesses and diseases. They are certified and licensed to provide care to a defined population-focus area. The Texas Board of Nursing (BON) recognizes nine population-focus areas for nurse practitioners:
- Acute Care – Adult;
- Acute Care – Pediatrics;
- Adult;
- Family;
- Gerontological;
- Neonatal;
- Pediatric;
- Psychiatric-Mental Health; and
- Women’s Health.

Clinical nurse specialists (CNS) are also educated to diagnose, treat and prescribe for patients within their population-focus, but most of them work in specialty clinics, hospitals and nursing education programs to analyze healthcare systems and improve patient outcomes. BON recognizes six types of clinical nurse specialists:
- Adult Health/Medical Surgical;
- Community Health;
- Critical Care;
- Gerontological;
- Pediatric Nursing; and
- Psychiatric-Mental Health.

Certified nurse-midwives (CNM) provide a full range of primary and obstetrical healthcare services to women. This range includes prenatal and postpartum care, childbirth, newborn care, and gynecological and family planning services. Nurse-midwives are not certified with a population-focus, as their education and certification already defines the population with whom they work.

Certified registered nurse anesthetists (CRNA) provide anesthesia care for individuals whose health status range from healthy to any level of acuity, including those with immediate, severe or life-threatening injuries. Like CNMs, nurse anesthetists do not further narrow their focus, since they already have the educational preparation to work with all client populations.

**APRN EDUCATION, CERTIFICATION AND LICENSING**

All APRN education programs are accredited, and housed within nationally accredited graduate programs. They also provide a broad-based curriculum, including graduate-level courses in pathophysiology, health assessment, pharmacology, and courses in their population-focus area.

The educational program must also include a 500-hour practicum. APRN applicants seeking recognition in more than one role or population-focus area (for instance, a nurse practitioner who focuses on neonatal and pediatric care) must have 500 hours in each role or area.

Following completion of an education program, but preceding state licensure, an APRN must pass a national certification exam in their particular APRN role. These exams assess the APRN candidate’s core, role and (if applicable) population focus competencies. Certification programs accredited by a national certification accreditation body administer the exams. In Texas, BON designates the certification exams acceptable for a state license.

In addition to completing a recognized graduate education program and passing a designated certification exam, applicants to practice in Texas must:
- hold a current, unrestricted license as a registered nurse in Texas;
- have practiced for 400 hours or have completed schooling in the previous two years; and
participate in 20 hours of continuing education in each advanced practice role and population-focus in which BON authorizes the candidate to practice.

Sanctions for failing to meet BON’s standards for using a particular title, or using an APRN title without being recognized by the agency, include termination of rights to practice as an APRN.

APRNs renew their licenses to practice in Texas every two years. To maintain their licensure, APRNs must have 20 hours of continuing education every two years. APRN’s with prescriptive authority must have an additional five hours of continuing education in pharmacotherapeutics. The APRN must also practice a minimum of 400 hours each biennium.

Though APRNs are educated and certified according to national standards, states regulate scope of practice differently, sometimes widely.

Twenty states and the District of Columbia allow APRNs to practice as autonomous, or very nearly autonomous, healthcare providers, up to the limits of their education and training. In these states, the boundaries of their scope of practice are defined by the APRN’s education and certification and enforced by the state’s regulatory agency. When confronted with a patient whose diagnosis or treatment may be outside their scope of practice, APRNs in these states refer to the appropriate general practice or specialist physician.

The states that do not allow autonomy have a range of regulations on APRNs’ practice. They require a collaborative practice agreement between an APRN and a physician, but in most cases APRNs retain their ability to diagnose and prescribe.

**LIMITATIONS ON AN APRN’S PRESCRIPTIVE AUTHORITY IN TEXAS**

Texas has some of the most restrictive scope of practice guidelines in the U.S. for APRNs. Only physicians have statutory authority to establish a diagnosis or write prescriptions for drugs, devices or other therapeutic treatments. An APRN’s ability to establish a diagnosis and prescribe medication is delegated by a physician. In Texas, an APRN’s delegated ability to diagnose does not carry any supervisory requirements for the delegating physician.

The delegated prescriptive authority, however, does put limitations on APRNs, physicians, and patients. Physicians may only delegate to APRNs in one of four types of practice sites: a primary site, an alternate site, site serving a medically underserved population, or a facility-based practice.

**PRIMARY PRACTICE SITES**

A physician may delegate prescriptive authority to a total of four APRNs (or four full-time-equivalents) at their primary practice site. At a primary site, there are no specific supervisory requirements, but the physician must maintain protocols for delegation and quality assurance and be available by phone for consulting with the APRN.

**ALTERNATE PRACTICE SITES**

A physician may also delegate at an alternate practice site provided they are there at least 10 percent of the time each APRN is onsite. Physicians are limited to delegating prescriptive authority to no more than four APRNs between the primary and alternate practice sites. Alternate practice sites must be within 75 miles of the physician’s primary practice site or residence, and must offer the same type of healthcare services as the primary site. The physician must also review 10 percent of each APRN’s patient charts and be available as needed by phone.

**MEDICALLY UNDERSERVED SITES**

At site serving a medically underserved population, there is no limitation on the number of APRNs a physician may delegate prescriptive authority. However, the physician is limited to delegating prescriptive authority at no more than three medically underserved sites that have a combined 150 operating hours per week. The physician is required to be onsite once every 10 business days that the APRN is onsite, audit 10 percent of the APRN’s patient charts, keep a log of their other supervisory activities, and receive daily telephone calls regarding complications or problems not covered by the physician’s protocols.

**FACILITY-BASED SITES**

Certain physicians may also delegate at hospitals and long-term care facilities, collectively referred to as facility-based sites. Physicians delegating at hospitals may delegate to as many APRNs as they like, but the physician is limited to delegating at just one hospital. A physician who is a medical director at a long-term care facility may delegate authority to up to four APRNs between a maximum of two long-term care facilities.

**LIMITATIONS ON CONTROLLED SUBSTANCES**

Eight states, including Texas, restrict an APRN’s ability to prescribe controlled substances. Controlled substances are drugs with a potential for addiction. They are classified in terms of Schedules I–V, with Schedule I being either illegal...
narcotics or drugs with no medical use. When prescribing controlled substances, Schedules III–V, an APRN in Texas may not write a prescription that is for more than 90 days, authorize a refill beyond the initial 90 days without consulting the delegating physician, or write a prescription for a child under age two without consulting with the delegating physician.

Texas APRNs are prohibited from prescribing Schedule II controlled substances to any patient, even if it is the standard of care. For example, attention deficit hyperactivity disorder (ADHD) is generally managed by prescription of a Schedule II controlled substance, such as Adderall. Managing ADHD is within the scope of practice of pediatric, adult and family nurse practitioners, although in Texas they are legally prohibited from prescribing medication to treat the disorder.

In addition to these statutory regulations, a delegating physician may place additional limitations on an APRN’s prescriptive authority. This lack of uniformity limits patient access to qualified primary care providers and is especially onerous for physicians and APRNs in rural areas.

**PRIMARY CARE PROVIDER SHORTAGES**

The Texas Department of State Health Services’ (DSHS) Primary Care Office maintains and updates the state’s shortage designations. The U.S. Department of Health and Human Services recommends a provider-to-patient ratio of one primary care physician to every 2,000 individuals (1:2,000). The threshold for health professional shortage area (HPSA) designation is a physician to population ratio of 1:3,500. In areas with exceptionally high rates of poverty or infant mortality, the threshold is 1:3,000. Counties can be designated HPSAs in whole or in part.

As of October 2010, there were 132 counties in Texas designated as whole county primary care HPSAs. Forty-eight additional counties were partially designated as primary care HPSAs. Approximately 26 percent of the state’s population lives in these areas.

Texas is below the U.S. average in its primary care physicians-to-population ratio. According to the DSHS Center for Health Statistics, the rate of growth of primary care physicians in the state is also slowing. From 1981 to 1988, the ratio of primary care physicians to 100,000 population increased from 53.5 to 59.3. From 1988 to 1998, the physician to 100,000 population ratio increased from 59.3 to 65.0. But from 1998 to 2009, the ratio only increased from 65.0 to 67.7.

Overall, the numbers of APRNs in Texas have steadily increased since 1990, especially nurse practitioners. Estimates by the DSHS Center for Health Statistics shows that their rates per 100,000 population increased from 5.6 to 12.4 between 1991 and 2000. From 2000 to 2009 the rates of nurse practitioners per 100,000 population increased from 12.4 to 23.1, an increase of 86.3 percent.

The supply of NPs in Texas is still lower than the US average. It is also lower than states with less restrictive regulatory environments. A study published in the New England Journal of Medicine found that states with favorable practice environments had a greater supply of NPs.

Using data from the US Census Bureau and state boards of nursing, Legislative Budget Board staff estimated the rates per 100,000 population of NPs in each state whose scope of practice laws allow autonomous, or near-autonomous, practice. This data counted more NP licenses than did the DSHS Center for Health Statistics, which counted only active NP licenses. The results in Figure 1 still show the Texas ratio to be below the ratio in states that allowed more autonomy.

In addition to limiting the supply of and access to APRNs, restrictive scope of practice laws may also limit the expansion of retail clinics, which generally employ APRNs to provide a limited range primary healthcare. A 2008 report in a San Antonio newspaper quoted a pharmacy-based retail clinic chain executive as stating Texas’ scope of practice regulations were a factor in that company’s decision not to expand as quickly in Texas as they do in other states.

**SAFETY OF APRNS**

A number of healthcare and policy researchers have compared physician and APRN patient outcomes and found them comparable. These findings are consistent across studies; no findings have shown better health outcomes for patients in states with more restrictive regulatory environments.

An Institute of Medicine (IOM) report published in October 2010 recommends that states amend their scope of practice laws to allow APRNs to practice to the full extent of their education and training in order to meet the demand for primary and preventative care resulting from the federal healthcare reform legislation of 2010. That report cites positive outcomes resulting from Pennsylvania’s expanded APRN scope of practice in 2007 and concludes that regarding quality of care it is difficult to distinguish states with restrictive and more expansive scopes of practice.
INCREASE ACCESS TO PRIMARY CARE SERVICES BY ALLOWING ADVANCED PRACTICE REGISTERED NURSES TO PRESCRIBE

A 2009 RAND Corporation study of Massachusetts’ universal health insurance law recommends the state change its scope of practice regulations to allow nurse practitioners to practice autonomously to the limits of their education and training as primary care providers. In making this recommendation, RAND cited the state’s critical shortage of primary care physicians, the comparability of patient outcomes under NP-provided care, and the need to contain overall healthcare costs.

A number of factors, including the aging of World War II veterans and the wars in Afghanistan and Iraq, have increased demand on the federal Department of Veterans Affairs (VA). To meet this demand, the VA has transformed from a hospital-based system into one that focuses on primary care and chronic disease management. To do so, it expanded its use of nurse practitioners to provide primary care in inpatient and outpatient settings. Multiple studies of the VA’s model have shown that in terms of quality of care, patient outcomes, and spending per enrollee, the VA compares favorably to or exceeds the results of Medicare’s fee-for-service program.

A number of other studies and articles, including a 1998 editorial in the Journal of the American Medical Association have also concluded that within their particular scope of practice, nurse practitioners offer a quality of care equivalent to that of physicians.

EXPANDING PRESCRIPTIVE AUTHORITY FOR ADVANCED PRACTICE REGISTERED NURSES

Amending statute to authorize APRNs to diagnose and prescribe up to the limits of their education and professional scope would allow NPs, CNMs, and certain CNSs to provide care for patients within their professional scopes without

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FIGURE 1
NURSE PRACTITIONERS IN TEXAS AND AUTONOMOUS PRACTICE STATES, OCTOBER 2010

<table>
<thead>
<tr>
<th>STATE</th>
<th>NURSE PRACTITIONER LICENSES</th>
<th>POPULATION (IN MILLIONS)</th>
<th>NURSE PRACTITIONERS PER 100,000 POPULATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Texas</td>
<td>8,142</td>
<td>24.8</td>
<td>32.9</td>
</tr>
<tr>
<td>New Mexico</td>
<td>753</td>
<td>2.0</td>
<td>37.5</td>
</tr>
<tr>
<td>Idaho</td>
<td>584</td>
<td>1.5</td>
<td>37.8</td>
</tr>
<tr>
<td>Iowa</td>
<td>1,265</td>
<td>3.0</td>
<td>42.1</td>
</tr>
<tr>
<td>Utah</td>
<td>1,259</td>
<td>2.8</td>
<td>45.2</td>
</tr>
<tr>
<td>Arizona</td>
<td>2,999</td>
<td>6.6</td>
<td>45.3</td>
</tr>
<tr>
<td>Washington</td>
<td>3,407</td>
<td>6.7</td>
<td>51.1</td>
</tr>
<tr>
<td>New Jersey</td>
<td>4,560</td>
<td>8.7</td>
<td>52.3</td>
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<tr>
<td>Kentucky</td>
<td>2,339</td>
<td>4.3</td>
<td>54.2</td>
</tr>
<tr>
<td>Maryland</td>
<td>3,172</td>
<td>5.7</td>
<td>55.7</td>
</tr>
<tr>
<td>Colorado</td>
<td>3,008</td>
<td>5.0</td>
<td>59.9</td>
</tr>
<tr>
<td>Oregon</td>
<td>2,317</td>
<td>3.8</td>
<td>60.6</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>700</td>
<td>1.1</td>
<td>66.5</td>
</tr>
<tr>
<td>Hawaii</td>
<td>930</td>
<td>1.3</td>
<td>72.2</td>
</tr>
<tr>
<td>Montana</td>
<td>722</td>
<td>1.0</td>
<td>74.1</td>
</tr>
<tr>
<td>Maine</td>
<td>980</td>
<td>1.3</td>
<td>74.3</td>
</tr>
<tr>
<td>New York</td>
<td>14,578</td>
<td>20.0</td>
<td>74.6</td>
</tr>
<tr>
<td>Connecticut</td>
<td>2,900</td>
<td>3.5</td>
<td>82.4</td>
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<tr>
<td>Wyoming</td>
<td>462</td>
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<td>84.9</td>
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<tr>
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<td>650</td>
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<tr>
<td>New Hampshire</td>
<td>1,435</td>
<td>1.3</td>
<td>108.3</td>
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<tr>
<td>District of Columbia</td>
<td>1,640</td>
<td>0.6</td>
<td>273.5</td>
</tr>
</tbody>
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SOURCE: Legislative Budget Board.
INCREASE ACCESS TO PRIMARY CARE SERVICES BY ALLOWING ADVANCED PRACTICE REGISTERED NURSES TO PRESCRIBE

physician oversight or supervision. It would not completely sever the relationship between an APRN and physician, as identifying problems whose complexity is beyond their scope is an integral component of ARN education and training. In such cases, the APRN’s professional responsibility is to refer the patient to the appropriate healthcare provider (such a general practice or specialist physician).

Third-party payers can reimburse most NPs, CNMs and CNSs. All APRNs who bill the Texas Medicaid Program directly are reimbursed at 92 percent of the physician’s rate. If an NP or CNS bills Medicare, they are paid 85 percent of the fee paid to physicians.

Recommendation 1 would amend the Texas Occupations Code to allow APRNs to establish a diagnosis and prescribe medication.

Recommendation 2 would amend the Texas Occupations Code to require BON to adopt rules for assigning a prescriptive authorization to an advanced practice registered nurse who has completed 3,600 hours of practice within a delegated prescriptive authority arrangement and allow the agency to establish a surcharge on advanced practice registered nurse license renewals to generate revenue to fund the cost of licensing APRNs and overseeing the tiered prescriptive authority.

In 2009, Colorado adopted a similar tiered system. As of July 2010, APRNs in Colorado earn a provisional prescriptive authority license through a post-graduate mentorship lasting 1,800 hours. During this period, the APRN does not have prescriptive authority and a fully authorized prescriber must sign all their prescriptions. Following the mentorship phase, the APRN must practice for 1,800 hours with a provisional prescriptive authority under the guidance of a physician or fully authorized APRN. Upon completion of their provisional prescriptive authority hours, the APRN can submit an articulated plan for safe prescribing to the state’s board of nursing and be granted full prescriptive authority. Because Texas’s delegated model of prescriptive authority is a combination of both of Colorado’s tiers, dividing the 3,600 hours into two tiers of 1,800 hours is unnecessary.

Recommendation 3 would include a contingency rider in the 2012–13 General Appropriations Bill to appropriate surcharge revenue to the Texas Board of Nursing to administer the tiered prescriptive authority.

FISCAL IMPACT OF THE RECOMMENDATIONS

Recommendation 1 has no fiscal impact.

As shown in Figure 2, Recommendation 2 would generate $128,348 in General Revenue Funds during the 2012–13 biennium. This revenue would be used by BON for the licensing and regulatory requirements related to establishing a tiered model of prescriptive authority. This estimate is based on a surcharge of about $12 on 5,500 APRN license renewals (the average number of annual license renewals between 2006 and 2010). The costs associated with implementing Recommendation 2 include staffing and technology costs. BON has staff dedicated to processing initial and renewal RN and APRN licenses, but would require one additional full-time-equivalent position to implement the two tiers of licensing and regulatory requirements of Recommendation 2.

The introduced 2012–13 General Appropriations Bill does not include any adjustments as a result of these recommendations.

<table>
<thead>
<tr>
<th>FISCAL YEAR</th>
<th>PROBABLE GAIN IN GENERAL REVENUE FUND</th>
<th>PROBABLE (COST) IN GENERAL REVENUE FUND</th>
<th>CHANGE TO FULL-TIME-EQUIVALENTS COMPARED TO 2010–11 BIENNIAL</th>
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<tbody>
<tr>
<td>2012</td>
<td>$67,657</td>
<td>($67,657)</td>
<td>1</td>
</tr>
<tr>
<td>2013</td>
<td>$60,692</td>
<td>($60,692)</td>
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<tr>
<td>2016</td>
<td>$60,692</td>
<td>($60,692)</td>
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</tbody>
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FIGURE 2

FIVE-YEAR FISCAL IMPACT
FISCAL YEARS 2010 TO 2016