

PHYSICIAN AND NURSE SUPPLY: THE MISSING PIECE OF THE PUZZLE

**A Review of the Presidential Candidates' Healthcare Reform Proposals
In the Context of Physician and Nurse Supply**



PREMISE STATEMENT

The leading 2008 presidential candidates have proposed reforms to America's healthcare system with the intent of expanding access to healthcare services. None of these reforms can be successfully implemented, however, without significantly increasing the nation's supply of physicians and nurses.

OVERVIEW:

It has been widely conveyed by many healthcare policy experts, political leaders and the general public that America's healthcare system is broken and in need of repair.

How to fix healthcare delivery is shaping up as one of the key issues in the 2008 presidential elections. According to a September 2007 poll by the Gallup Organization, Americans consider healthcare to be the most important domestic policy issue facing the country today.¹

Presidential candidates on both sides of the political aisle have committed to reforming our current healthcare system should they be elected. All of the major candidates are proposing changes designed to control costs and improve the quality of healthcare delivery. However, at the center of these healthcare reform proposals is the proposition that access to healthcare services should be expanded to include some or all of those who currently are without healthcare coverage. Though their proposed methods differ, the candidates are united in their commitment to making healthcare more generally accessible.

In this report, AMN Healthcare reviews the leading presidential candidates' healthcare reform proposals as they relate to adequate physician and nurse supply. The report considers the extent to which the leading candidates address the shortage of physicians and nurses in their healthcare reform proposals, and the impact these proposals would have on patient access to doctors and nurses.

It is AMN Healthcare's contention that the supply of physicians and nurses is a critical component of healthcare delivery, one that is largely overlooked by the major presidential candidates and by others proposing to change America's current healthcare system.

¹ Gallup Organization: "What Do You Think Is The Most Important Problem Facing The Nation Today?" Gallup Poll Most Important Series, September 14 – 16, 2007

THE ROLE OF PHYSICIANS AND NURSES

Healthcare delivery in the United States has become a highly complex endeavor incorporating multiple stakeholders, including federal and state governments, insurance companies, hospital systems and the pharmaceutical industry. Despite the influence of these stakeholders, physicians and nurses remain at the core of America's healthcare system. Physicians are the principal providers of diagnostic and surgical services, either personally performing diagnoses and procedures or directing other members of the healthcare delivery team. Due to the proliferation of medical treatments and advances in medical technology, physicians today have increasingly diverse areas of expertise. According to the American Medical Association, there currently are close to 200 recognized medical specialties for which physicians can gain board certification, ranging from general, primary care specialties such as family practice and internal medicine, to highly esoteric specialties such as clinical molecular genetics. Technological advances in medicine, including multiple new, non-invasive procedures, ongoing pharmaceutical breakthroughs, gene therapy and other innovations enhance the role of physicians, who are the only medical practitioners fully trained in the delivery of these services and procedures.

In addition to having specialized skills, physicians are the gatekeepers of the medical system. Without physicians, patients cannot be admitted or discharged from hospitals and tests cannot be ordered. In many cases, physicians are needed to prescribe the more than 10,000 prescription drugs now available. Despite the growing number of advanced practice professionals such as physician assistants and nurse practitioners, it is largely physicians who drive where and how healthcare is delivered.

While physicians generally are the drivers and coordinators of care, physician/patient interaction at most hospitals tends to be intermittent. The patient's primary care physician, or perhaps a hospitalist specializing in inpatient care, may "round" on the patient once a day. The patient also may be visited periodically by a surgical or other type of specialist.

By contrast, nurse/patient interaction generally is much more continuous and takes place throughout the patient's stay. Nurses provide the most frequent point of patient contact with the hospital and are primarily responsible for ensuring continuity of patient care. Though lab technologists, physical therapists, and other allied healthcare professionals play a larger role in healthcare delivery today, it is nurses who manage patient care from admission to discharge.

Without nurses, patients would not receive education, discharge planning, medications and treatments, and continual assessment. Surgeries could not be scheduled and there would be no one to intervene on behalf of patients should their condition deteriorate. It is the nurse who typically is aware of all aspects of the treatment plan and who guides the patient and his or her family to a positive outcome. Research demonstrates that patient morbidity in hospitals significantly increases once the ratio of nurses to patients exceeds one-to-four.² In addition, incidences of hospital-based infections go up when nurse-to-patient ratios are raised, as does the average length of patient stay in the hospital.³

² Hospital Nurse Staffing and Patient Mortality, Nurse Burnout, and Job Dissatisfaction. Linda Aiken, PH.D., et al, JAMA, 2002; 288; 1987-1993

³ Executive Summary, Nurse Staffing and Patient Outcomes in the Hospital Inpatient Setting; March, 2000, The American Nurses Association.

Like doctors, nurses are increasingly specialized in such areas as Medical/Surgical, Critical Care, Operating Room, Geriatrics, Trauma, Psychiatry, Oncology and others. Advances in medical technology are creating healthcare delivery environments where increasingly specialized physicians are working in tandem with increasingly specialized nurses. At the same time, aging patient demographics require a growing supply of primary care physicians able to coordinate the care of older patients with multiple, chronic conditions, as well as a growing supply of Home Health, Rehabilitation and other nurses to provide care for these aging patients.

Any effective healthcare system, therefore, must be built on an adequate supply of physicians and nurses—the key providers of care—just as a house requires a firm foundation. However, rather than providing such a foundation, the current and emerging state of physician and nurse supply is likely to undermine efforts to expand healthcare access in the United States.

THE EMERGING SHORTAGE OF PHYSICIANS AND NURSES

The state of physician and nurse supply in the United States presents a considerable cause for concern. According to the U.S. Department of Health and Human Services (HHS), the United States currently is short about 120,000 nurses and the average hospital nurse vacancy rate is 8.5%.⁴ The HHS projects the national nurse shortage will reach 275,000 by the year 2010, a shortfall of 12%. By 2015, the U.S. will have 500,000 too few nurses, a deficit of 20%, and by 2020 the shortage will reach 1,000,000,⁵ according to the HHS. A recent study published in *Health Affairs* projects a lower number but nevertheless indicates the nurse shortage will be a severe problem in coming years.⁶

While the state of nurse supply is concerning, a positive trend is that the number of applicants to nursing schools has increased in recent years. However, this trend is largely negated by the fact that the U.S. lacks the faculty or the facilities to train/handle?? a growing number of nursing school applicants. Over 30,000 qualified applicants were turned away from four-year nursing programs in 2007 due to lack of adequate faculty and space.⁷

The nurse shortage in the United States has been a practical matter hospitals and other nurse employers have had to cope with for years and has been thoroughly documented by healthcare researchers. The physician shortage has not been as thoroughly explored, but numerous signs point to a growing deficit of doctors in the United States. Medical societies and hospital associations in 15 states, which represent more than half of the U.S. population, have issued reports that project shortages of physicians.⁸ In addition, 15 medical specialty organizations have published reports projecting national shortages in their disciplines.⁹ The Council on Graduate Medical Education (COGME) a group of healthcare experts charged by the federal government with monitoring physician supply

⁴ U.S. Department of Health & Human Services. Projected Supply, Demand and Shortages of Registered Nurses: 2000 – 2020. Washington D.C.: Health Resources & Services Administration.

⁵ Ibid.

⁶ Better Late Than Never: Workforce Supply Implications of Later Entry Into Nursing. *Health Affairs*, 26, no. 1 (2007): 178-185

⁷ American Association of Colleges of Nursing, aacn.nche.edu

⁸ It's Time to Address the Problem of Physician Shortages; Graduate medical education is the key. Richard Cooper, M.D. *Annals of Surgery*, Volume 246, Number 4, October, 2007, p. 527-534

⁹ Ibid.

once adhered to the notion that the U.S. has too many doctors. It has since reversed course. COGME now projects a deficit of some 90,000 physicians by 2020.¹⁰ Other analysts and academics project that the deficit of physicians could reach 200,000 by 2025.¹¹ The problem is particularly acute in rural communities where the number of federally designated Healthcare Professional Shortage Areas (HPSAs) has increased from 1,885 in 1998 to 3,814 in 2007.¹² In response to emerging physician shortages, the Association of American Medical Colleges has set a target of increasing the number of medical school graduates by 30 percent by the year 2020.

However, just as nurse training is inhibited by a dearth of faculty and training facilities, physician training also faces restrictions limiting the number of doctors that can be produced in the United States. Federal funding for hospital-based resident training was capped by the Balanced Budget Act in 1997. The number of medical resident training slots has been essentially frozen since that time. Indeed, for over 25 years, the number of graduating residents in the U.S. who “come out” each year to join the physician workforce has remained static at about 24,000 (this includes both U.S. medical school graduates and international medical school graduates.) Though the U.S. may be able to increase the number of medical school graduates in coming years, the net number of doctors being trained will not increase correspondingly unless residency training slots also are increased. At present, there are no plans in place that would significantly increase the number of residents trained in the U.S.

While the supply of nurses and physicians is limited, demand for nurse and physician services continues to grow. The U.S. Census Bureau indicates that the U.S. population will grow by 50 million people from 2000 to 2020. In addition, some 75 million Baby Boomers will begin reaching age 65 and be eligible for Medicare in 2011. It has been demonstrated that older people utilize medical services at a significantly higher rate than younger people.¹³ Accordingly, as the population ages, demand for medical services can be expected to increase dramatically.

Demand for medical services also is being driven by continued economic growth, advances in medical technology, lifestyle choices and other factors, as has been variously documented.¹⁴ Given current trends, it is reasonable to assume that utilization of medical services will continue to increase for the foreseeable future.

Utilization of medical services is not just a function of demographics, medical technology or related factors. The rate of healthcare utilization also is determined by the degree to which patients have access to care—the key point on which the healthcare reform debate turns. Increased accessibility to care is likely to lead to increased utilization of healthcare services. As stated above, the leading presidential candidates all propose to increase access to healthcare in some way.

¹⁰ Physician Workforce Policy Guidelines for the United States, 2000-2020. January, 2005. Council on Graduate Medical Education, U.S. Department of Health and Human Services.

¹¹ Weighing the Evidence for Expanding Physician Supply. *Annals of Internal Medicine*. November 2, 2004; (9): 705-714

¹² Bureau of Health Professions, U.S. Department of Health and Human Services, <http://bhpr.hrsa.gov/shortage/>

¹³ National Ambulatory Medical Care Survey, Center for Disease Control, <http://www.cdc.gov/nchs/>

¹⁴ Economic and demographic trends signal an impending physician shortage. Cooper, et al. *Health Affairs* .Jan/Feb. 2002; 21(1): 140-154

Following is a breakdown of the leading candidates' proposals indicating how the proposals would increase access to healthcare and which proposals make reference to the "missing piece of the puzzle"—physician and nurse supply.

LEADING CANDIDATES' HEALTH REFORM PROPOSALS

This overview has been prepared by reviewing publicly available information regarding the candidates' healthcare reform platforms, including the candidates' Web sites, articles on health reform written by the candidates, and other analyses of the candidates' reform proposals prepared by private organizations.^{15 16 17}

No assessment has been made regarding the feasibility or relative desirability of any of these plans. The sole focus of this report is to examine the candidates' proposals in the context of physician and nurse supply.

HILLARY CLINTON

Goal: Affordable, accessible healthcare for all Americans

Methods: Would expand government insurance programs such as SCHIP and Medicaid. Creates American Health Choices Menu, a Medicare-type plan to compete with private insurers. Mandates that large employers provide employee coverage or pay into the public program. Small businesses get tax incentives encouraging them to provide employee coverage. Mandates that all Americans obtain coverage. Requires insurers to participate in government programs to cover preventive services

Accessibility: Would create opportunities for tens of millions of those currently uninsured or underinsured to obtain coverage.

Nurse Supply: Proposes \$300 million to increase nursing school enrollment, establish mentor programs for recent graduates and recruit minorities into nursing. Offers funding to nursing schools.

Physician Supply: Makes no direct reference to physician supply.

JOHN EDWARDS

Goal: Insure all Americans have health coverage by 2012

Methods: Would expand SCHIP/Medicaid. Creates regional Healthcare Markets purchasing pools to give all Americans the bargaining power to purchase a high-quality health plan. Mandates that all employers with six or more employees cover their workers or contribute 6% of payroll toward coverage. Mandates that everyone obtain coverage by 2012, except those with extreme financial hardship or certain religious beliefs. Offers primary and preventive care at little to no cost.

¹⁵ Beyond the Sound Bite, Review of Presidential Candidates Proposals for Health Reform, November, 2007, Price water house Coopers' Health Research Institute

¹⁶ Guide to Healthcare in the 2008 Presidential Campaign, Modern Healthcare, November 26, 2007

¹⁷ www.hillaryclinton.com; www.johnedwards.com; www.joinrudy2008.com; www.mikehuckabee.com; www.exploremccain.com; www.barackobama.com; www.mittromney.com;

Accessibility: Would create opportunities for tens of millions of those currently uninsured or underinsured to obtain coverage

Nurse Supply: Proposes initiatives to retain 50,000 nurses who are leaving the profession and recruit and retain another 50,000 new nurses. Would increase support for nursing schools and promote partnerships with nursing schools and hospitals to increase seats at nursing schools by 30 percent over five years. Would promote nurse retention through federal challenge grants supporting “magnet hospitals” with superior work environments.

Physician Supply: Makes no reference to physician supply.

RUDY GIULIANI

Goal: Consumer-oriented solution relying on tax credits to help consumers purchase private insurance

Method: Would create tax incentives such as a \$15,000 tax deduction for families to buy private insurance instead of getting insurance through employers. Would increase efforts to enroll those already eligible for Medicaid into the program. Would encourage cross-state selling of health insurance plans to increase competition/services and reduce cost of health insurance. Links Medicaid payments to each state’s success in promoting preventive care. Would not impose mandates on consumers or employers.

Accessibility: Would increase ability for citizens to purchase private insurance. Would likely reduce number of workers ensured through their employers.

Nurse Supply: Makes no reference to nurse supply

Physician Supply: Makes no reference to physician supply

MIKE HUCKABEE

Goal: Move from employer-based to consumer-based healthcare.

Methods: Make healthcare more affordable by reforming medical liability, expanding health savings accounts to everyone, not just those with high deductibles, making health insurance tax deductible for individuals and families as it is for businesses. Low income families would get tax credits instead of deductions.

Accessibility: Would increase the ability of some low income consumers to purchase health insurance.

Nurse Supply: Makes no reference to nurse supply

Physician Supply: Makes no reference to physician supply

JOHN MCCAIN

Goal: Make healthcare affordable and accessible for all

Methods: Put more Americans in charge of their healthcare choices using health savings accounts and tax credits of \$2,500 (\$5,000 for a family) to incentivize everyone to buy insurance. Would increase Medicaid dollars by eliminating reimbursement for preventable medical errors, allowing for more coverage. Advocates a competitive, nationwide insurance market that would allow insurance companies to sell across states. Retains employer based insurance, allows states the flexibility to develop mandates or coverage requirements.

Accessibility: Tax credits and a more competitive private insurance market would expand access to some who currently are underinsured. Employers would continue to cover some 60 percent of the population.

Nurse Supply: Makes no reference to nurse supply

Physician Supply: Makes no reference to physician supply.

BARACK OBAMA

Goal: Affordable, accessible healthcare for all Americans

Methods: Would expand SCHIP/Medicaid and create a new, national health plan allowing those without insurance to buy coverage similar to that offered to members of Congress through the Federal Employees Health Benefits Program (FEHBP) covering all essential medical services. The new National Health Insurance Exchange would assist those who wish to buy private insurance by creating price and policy standards for participating plans. Mandates that all employers provide coverage, except start-ups and very small businesses. Mandates that all children have coverage. Requires that insurance plans pay for preventive services.

Accessibility: Would create opportunities for tens of millions of those currently uninsured or underinsured to obtain coverage.

Nurse Supply: Offers unspecified funding to nursing schools and potential tuition assistance to nurses.

Physician Supply: Makes no direct reference to physician supply.

MITT ROMNEY

Goal: Give every American access to quality, affordable health insurance.

Methods: Reform the system at the state level. Provide federal block grants to states and remove administrative burdens, allowing states to put in place innovations to Medicaid programs that would increase access. No federal mandates requiring employers or consumers to buy insurance, but states could develop mandates.

Accessibility: Initial indications from the state program Romney authored in Massachusetts indicate both access to and utilization of healthcare increases significantly through this type of reform.

Nurse Supply: Makes no reference to nurse supply

Physician Supply: Makes no reference to physician supply

EFFECT OF CANDIDATE PROPOSALS ON PHYSICIAN AND NURSE ACCESSIBILITY

All the plans proposed by the leading 2008 presidential candidates would be likely to increase access to healthcare coverage, and, if implemented, lead to increases in the utilization of healthcare services. The plans recommended by the Democratic candidates would be likely to create a system approaching universal access to healthcare through mandates and/or the expansion of government programs. In general, the Republican proposals do not embrace mandates and would require individual initiative to achieve the goal of greater access. As proposed, however, reforms proposed by candidates in both political parties would be likely to create access to healthcare coverage for millions or tens of millions of people who do not have such coverage now.

While this can be expected to cause an increase in utilization of health services, most of the candidates' proposals also promote the increased use of preventive care. If methods to promote preventive care are successful, utilization of healthcare services could be reduced as acute conditions are diagnosed early in their more manageable stages. Most of the candidates' proposals also include steps to increase the efficiency of providing care through increased use of information technology.

However, both preventive care and information technology have a finite ability to reduce utilization of healthcare services. Population growth, economic growth, advances in medical technology, and the other factors cited above will continue to fuel demand for healthcare services. In addition, demand will be fueled in part the health system's success in prolonging life. For example, according to the Center for Disease Control (CDC), there are an estimated 10 million cancer survivors in the United States, many of whom require ongoing care from physicians, nurses and allied healthcare professionals. While prolonging life, medical advances help ensure that labor intensive "end-stage" care will eventually be required by a growing percentage of the population.

It is difficult to gauge precisely to what extent the candidates' proposals would generate more physician and hospital visits. According to the National Ambulatory Medical Care Survey, Americans account for an average of three physician visits per year. On average, older people account for more physician visits per year than younger people, as the chart below illustrates:

Doctor Visits by Age

<i>Age</i>	<i>Average Doctor Visits Per Year</i>
66 & older	6.0
46-65	5.4
36-45	3.5
25-35	2.2
16-24	1.5
0-15	2.0
All:	3.0

Source: National Ambulatory Medical Care Survey/Center for Disease Control

Those who currently are uninsured or are under-insured have access to care through hospital emergency departments, free clinics and other venues. However, it is reasonable to assume that the uninsured and underinsured would generate more physician visits on average than they do now if they had access to healthcare insurance. If, hypothetically, a near universal system of healthcare coverage were implemented, some 40 to 47 million more Americans would have access to healthcare than do so now. Should these newly insured Americans generate on average even one more physician visit per year than they did prior to having healthcare access, an additional 47 million patient visits would have to be absorbed by the nation's limited supply of physicians and nurses.

This trend may already be observable in Massachusetts where a form of expanded healthcare access has been put in place. There are reports that access to physicians has become more challenging in Massachusetts as many previously uninsured or underinsured people have enrolled in the state's Commonwealth Care plans.^{18 19}

As noted above, plans to expand healthcare access, while laudable and necessary, will founder on the shoals of an inadequate supply of nurses and physicians under our current system of nurse and physician training.

Of the leading presidential candidates, none propose a truly adequate increase in the number of nurses. It has been projected that some 110,000 new nurses per year will be needed between 2002 and 2012 to meet rising demand. Those few candidates who do propose training more nurses are setting training levels that are too low to meet requirements under either the current healthcare system or one that would create wider public access. Even more important, none of the candidates have addressed the primary challenge in increasing nurse supply, which is to increase the number of faculty at the nation's nurse training programs.

The picture is even less promising in the area of physician supply. None of the leading candidates makes reference to increasing physician supply in their health reform plans. As in nursing, the key to increasing physician supply lies in the area of education and training. The number of U.S. medical school graduates must be increased as must the number of residency training slots in the nation's teaching hospitals. Democratic Sen. Joseph Biden of Delaware has proposed increasing residency programs in states with lower than average population-to-resident ratios through sponsorship of the Resident Physician Shortage Reduction Act. However, Sen. Biden is no longer a presidential candidate and this bill has so far failed to advance through the Senate or the House.

CONCLUSION

Demand for healthcare services will increase whether or not significant changes are made to America's healthcare delivery system. Due to the shortage of nurses in the United States and the emerging shortage of physicians, the healthcare system is not positioned to accommodate this demand. The 2008 presidential election, with its focus on healthcare

¹⁸ Massachusetts health reform builds momentum, but will a physician shortage lead to long waits for enrollees in the state's new insurance plans? Doug Trapp, *American Medical News*, October 1, 2007.

¹⁹ Analysis: Doc Shortage looms in Massachusetts. United Press International, July 28, 2007 http://www.upi.com/Health_Business/Analysis/2007/07/27analysis_doc_shortage_looms

reform, affords an opportunity to consider the role of physician and nurse supply in healthcare delivery.

Increasing access to healthcare is fundamentally an issue of increasing access to physicians, nurses and other healthcare professionals. They are the piece without which the very complex healthcare puzzle is incomplete.

ABOUT AMN HEALTHCARE

AMN Healthcare is the largest temporary healthcare staffing company in the United States. The company is the largest nationwide provider of travel nurse staffing services, locum tenens (temporary physician staffing) and physician permanent placement services and also a leading nationwide provider of allied healthcare professionals. AMN Healthcare recruits healthcare professionals both nationally and internationally and places them on variable lengths of assignments and in permanent positions at acute-care hospitals, physician practice groups and other healthcare facilities throughout the United States. AMN Healthcare is the sole funding provider of the **Council on Physician and Nurse Supply**. Based at the University of Pennsylvania, the Council is a national group of healthcare leaders committed to bring the supply of nurses and physicians in line with the nation's needs.

For further information about this report and about physician and nurse supply contact:



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