

Availability of Physician Services in New Jersey

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Physician Supply in the US

Some analysts have pointed to a number of factors to argue that there is a growing shortage of physicians in some specialties. These include a growing elderly population, an aging physician population, younger doctors desiring shorter work hours, difficulties in obtaining visas for international medical graduates, and increasing malpractice insurance premiums.¹

The Council on Graduate Medical Education (COGME), which was established under federal law to advise Congress and the US Department of Health and Human Services, had long argued that there would be enough doctors, currently practicing and in the pipeline, to meet future need. However, in 2003, that group revised its recommendations, stating that if the workforce production remains the same, the US will face a shortage of 85,000 physicians by 2010. ^{2,3}

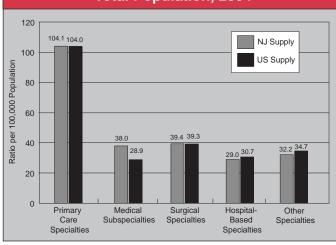
The American Medical Association (AMA) reports that twenty states, including New Jersey, are facing a "crisis" caused by the rise in malpractice insurance premiums. According to the AMA, patients in these states are facing

Characteristics of the NJ Physician Workforce

The composition of the New Jersey patient care physician supply is similar to the overall US supply, with some notable differences. Among those differences:

- New Jersey physicians are, on average, more specialized.
- The ratio of medical subspecialties to population is notably higher in NJ than nationally.
- Among primary care specialties, New Jersey has far fewer family practice physicians per 100,000 population than the rest of the nation. This difference is only partly offset by slightly higher physician-to-population ratios in other primary care specialties (see Figure 2).
- Less urbanized New Jersey counties have an especially low supply of primary care doctors.
- Despite the recent rise in cost of medical malpractice insurance and reports of financial stress among physicians in high-risk specialties, the supply of obstetricians and specialists overall did not show large declines between 2001 and 2004.

Figure 1: Ratio of NJ and US Patient Care Physicians by Specialty to 100,000 Total Population, 2004



problems with access to care because many physicians are either no longer performing high-risk procedures or are relocating to states with tort reform legislation.⁴

The most recent data available from the AMA^{5,6} describes trends in the primary care physician supply (family practice, general practice, general internal medicine, OB/GYN, and pediatrics) from 1975 to 2004. As a percentage of all active physicians, the US primary care supply has decreased from 36.8% to 33.5% during those years. Of the top 10 medical schools in terms of number of graduates and primary care graduates, eight had fewer than 33.5% graduates entering primary care, demonstrating that the supply of primary care physicians is continuing to decline.

Table 1: Ratio of Patient Care Physicians by Specialty to 100,000 Total Population*, NJ 2001 and 2004, and 2004 US Supply**

	New Jersey				
Specialty	2001	2004	% Change, 2001-04	US Supply, 2004	
Primary Care Specialties	99.2	104.1	4.9	104.0	
General Practice	4.4	3.8	-13.6	3.8	
Family Practice	16.1	17.1	6.2	26.2	
General Internal Medicine	37.8	39.3	4.0	36.4	
Obstetrics/Gynecology	14.4	14.2	-1.4	12.8	
Gynecology Only	1.3	1.5	15.4	1.1	
Geriatrics	1.1	1.5	36.4	1.1	
Pediatrics, Total	24.1	26.7	10.8	22.5	
Pediatrics, General	21.3	23.2	8.9	19.4	
Pediatrics, Subspecialties	2.8	3.6	28.6	3.2	
Medical Subspecialties	35.0	38.0	8.6	29.9	
Surgical Specialties	37.9	39.4	4.0	39.3	
Hospital-Based Specialties	26.4	29.0	9.8	31.7	
Other Specialties	29.5	32.2	9.2	34.7	
Total Supply	228.1	242.8	6.4	239.1	

Source: Tabulations by the Rutgers Center for State Health Policy; 2004 US supply estimates from "Physician Characteristics and Distribution in the US." 6

While the US supply of physicians in internal medicine has increased slightly (from 12.1% to 12.6%), as has the supply of pediatricians (from 5.5% to 6.3%), the supply of OB/GYNs has decreased (from 5.3% to 4.3%). Decreases in the supply of general practitioners (from 10.8% to 1.3%) were partly offset by increases in the supply of family medicine physicians (from 3.1% to 9.0%). Some of the decrease can be attributed to the decline of young male physicians in primary care. However, the number of young female physicians in primary care has grown substantially, and may help offset some of the decreases in primary care supply as the percentage of female physicians increases overall.

Trends in NJ's Physician Workforce

Overall, the supply of patient care physicians with principal offices in New Jersey increased 6.4% between 2001 and 2004. Medical subspecialties, hospital-based specialties, and other specialties increased approximately twice as much as primary care specialties and surgical specialties (see Table 1 and Figure 3).

When compared to the 2004 US supply of physicians (expressed as a ratio of physicians per 100,000 population), the overall supply of NJ primary care physicians in 2004

was about the same as US supply (see Figure 1), however family practice was far below the US supply (17.1 vs. 26.2). While the supply of general practice doctors is declining throughout the US because of changes in medical training, the supply of family practice physicians in NJ was only two-thirds of the US supply (see Figure 2). Although all other primary care specialties were at or slightly above the US average,

Figure 2: Ratio of NJ and US Patient Care Physicians to 100,000 Total Population, Selected Primary Care Specialties, 2004 40 36.4 NJ Supply 35 US Supply 100,000 Population 26.2 ber , 19.4 20 Ratio 17.1 15 12.8 General Family OB/GYN General Internal Pediatrics Medicine

^{*}Population denominator is the NJ total population for each year.

^{**}Population denominator is the 2004 US total population.

a 3-year (2001 to 2004) decline in supply occurred for OB/GYN. In contrast, the NJ supply of medical sub-specialties was 28% higher than US supply.

Twelve of the 21 New Jersey counties fell below the overall average US physician—to—100,000 population ratio for 2004 (see Table 2). These included primarily the rural counties in the southern and northwestern parts of the state. Physician supply was considerably higher than US supply in seven of the remaining nine counties, including those counties where the state medical schools are located. Four of the counties with supply below the US average also showed 3-year declines from 2001 to 2004.

Similarly, primary care specialties were also below US supply in the same 12 counties. In addition to primary care specialties, many NJ counties showed an under-supply of hospital-based specialties and other specialties.

In summary, the statewide supply of physicians specializing in primary care, and the supply of physicians across all specialty areas in rural

Figure 3: Total % Change in the Ratio of NJ Patient Care Physicians by Specialty to 100,000 Total Population, 2001-2004

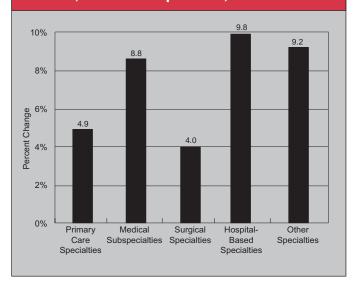


Table 2: Ratio of NJ Patient Care Physicians by County** and Specialty per 100,000 Total Population and US Supply***, 2004

NJ County	Total Supply	Total Supply % Change 01-04	Primary Care Specialties	Medical Subspecialties	Surgical Specialties	Hospital– Based Specialties	Other Specialties
Atlantic	246.1	23.5	99.4*	29.8 *	46.2	36.8	33.9 *
Bergen	301.8	0.1	121.5	49.4	52.2	39.7	39.0
Burlington	206.8*	-4.1	82.9*	36.1	27.4 *	27.6 *	32.8 *
Camden	294.3	7.1	125.5	45.8	45.6	33.5	43.9
Cape May	129.9*	-4.5	62.4*	20.1 *	15.1 *	12.1 *	20.1 *
Cumberland	163.3*	10.9	80.3*	23.3 *	28.8 *	15.8 *	15.1 *
Essex	343.5	15.3	132.9	56.4	59.7	40.7	53.5
Gloucester	117.1*	8.6	57.1*	14.3 *	18.0 *	13.5 *	14.3 *
Hudson	156.2*	13.9	75.4*	26.9 *	21.0 *	14.5 *	18.4 *
Hunterdon	189.0*	-3.0	104.0	20.5 *	22.8 *	15.2 *	26.6 *
Mercer	318.0	14.8	128.8	44.3	49.6	39.1	56.3
Middlesex	289.3	17.2	123.4	48.5	44.5	40.0	32.7 *
Monmouth	248.1	1.2	110.1	36.4	43.0	28.1 *	30.5 *
Morris	259.5	-5.0	112.3	37.8	41.1	34.3	33.9 *
Ocean	169.5*	14.1	71.8*	28.0 *	32.4 *	17.0 *	20.3 *
Passaic	192.8*	6.1	88.2*	32.1	29.9 *	23.5 *	19.1 *
Salem	149.5*	24.6	78.2*	10.2 *	25.5 *	15.3 *	20.4 *
Somerset	281.3	-2.3	138.1	40.7	38.8 *	25.3 *	38.5
Sussex	113.7*	0.5	50.6*	12.5 *	22.3 *	13.1 *	15.1 *
Union	214.2*	-0.4	93.5 *	36.7	36.7 *	22.1 *	25.1 *
Warren	182.3*	19.8	91.2*	24.7 *	30.4 *	19.9 *	16.1 *
NJ State	242.8	6.4	104.1	38.0	39.4	29.0 *	32.2 *
US Supply	239.1	4.5	104.0	29.9	39.3	30.7	34.7

Source: Tabulations by the Rutgers Center for State Health Policy.

^{*}Supply is below US Supply.

^{**}Population denominator is the respective state or county population.

^{***} Population denominator is the 2004 US total population.

counties, seems to be either inadequate or requires close monitoring to ensure access to physician services.

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CSHP's Facts & Findings

This is the fourth in a series of Facts & Findings provided by Rutgers Center for State Health Policy. These briefs highlight findings from major research initiatives at the Center, including the New Jersey Family Health Survey (NJFHS) and the New Jersey State Physician Census.

Methods

Facts & Findings data reported in this issue reflect detailed year-end American Medical Association (AMA) Physician Masterfile data for the years 2001 and 2004, and were matched to New Jersey Board of Medical Examiners (NJBME) licensure lists for the respective years. The specialty groupings were then collapsed into 5 broad categories (primary care specialties, medical subspecialities, surgical specialties, hospital-based specialties, and other specialties).

New Jersey population data for the state and by county for the years 2001 and 2004 were used to calculate physician-to-population ratios by specialty. All analyses were limited to physicians designated by the AMA Masterfile as active in patient care with their main office in New Jersey. The main office location for each physician was used for countylevel analyses. All ratios are calculated as a ratio to 100,000 total population. Additional information about the data used in this Facts & Findings can be found in Cantor et al.7

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