

Health Center Financial Performance: National Trends and State Variation, 1998–2004

Leiyu Shi, Patricia B. Collins, Kaytura Felix Aaron, Vanessa Watters, and Leslie Greenblat Shah

For four decades, health centers have provided quality, cost-effective primary healthcare to underserved populations. Using the Uniform Data System, this study analyzes national trends in health center patients, providers, and financial performance for 1998–2004, and state-specific data for 2004. Between 1998 and 2004, health centers served increasing numbers of underserved patients, which included patients who were uninsured or on Medicaid, minorities, and patients at or below poverty level. Even though the number of health center providers and patients increased, patient-to-provider ratios did not change significantly. Medicaid remained the single largest source of health center revenue, accounting for 36.4 percent of total revenue in 2004. Compared with Medicare, private insurance, and self-pay, Medicaid consistently reimbursed health centers at the highest rate per patient. Federal and nonfederal grants to support care for the uninsured as well as enabling services such as transportation, translation, and other support systems is one of many important sources of revenue. Financial challenges for health centers included increasing costs and varied or declining rates of reimbursement for services rendered. However, health centers became more self-sufficient over time, average net revenues increased, and operating margins were predominantly positive. Data on individual states, with different numbers and types of health centers, varied widely in all of these categories. In conclusion, health centers rely on federal and nonfederal grant support in concert with the Medicaid program as major funding sources and continued financial stability will be contingent upon health centers' ability to balance revenues with the cost of managing the vulnerable populations that they serve.

KEY WORDS: Bureau of Primary Health Care, healthcare finance, health centers, Health Resources and Services Administration, Medicaid, Uniform Data System, uninsured

Health centers comprise the nation's largest unified primary care system and served as the medical home to more than 13 million patients in 2004.¹ A crucial component of the healthcare safety net, health centers offer comprehensive primary care and enabling services in federally designated medically underserved urban and rural areas, regardless of patients' ability to pay. Health centers serve a predominantly low-income, publicly insured or uninsured, racial and ethnic minority patient population.² Originally developed as part of Lyndon Johnson's War on Poverty, the health center program celebrated its 40th anniversary in 2005.

Currently, health centers are authorized under Section 330 of the Public Health Service Act and are administered by the Health Resources and Services Administration's Bureau of Primary Health Care (BPHC). Health centers are eligible for Federally Qualified Health Center status through Title XVIII, Medicare, and Title XIX, Medicaid, which entitle health centers to en-

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TABLE 1 ● Types of health center grantees, 2004*†

Type	n
CHC	817
MHC	131
HO	164
HSHC	80
PH	34
CHC/MHC	115
CHC/HO	94
CHC/HSHC	73
CHC/PH	27

*CHC indicates community health center; MHC, migrant health center; HO, healthcare for the homeless health center; HSHC, healthy schools healthy communities health center; and PH, public housing primary care health center.

†From Bureau of Primary Health Care.³

hanced Medicaid and Medicare reimbursement. The different types of health centers include community health centers, migrant health programs, Health Care for the Homeless Programs, and Public Housing Primary Care Programs.² Table 1 displays the number of health center grantees by type. Currently, BPHC supports about 1,000 health centers,¹ with more than 3,650 delivery sites.⁴ This represents an increase of more than 600 new and expanded sites since 2001, when President Bush announced the President's Health Centers Initiative.⁴

A large body of evidence attests to health centers' success in improving access to high quality, cost-efficient healthcare for vulnerable populations. For instance, an analysis of the uninsured population's access to care in 60 randomly selected and nationally representative communities found that proximity to a safety net provider reduced unmet medical needs and emergency department use and increased the proportion of people with a usual source of care.⁵ An analysis of data from the Community Health Center User Survey, the National Health Interview Survey, and the Medical Expenditure Panel Survey found that health center patients had better access to care, continuity of care, and patient-provider interactions and received more comprehensive preventive services compared to non-health center patients from vulnerable populations.⁶ In addition, the Institute of Medicine has praised health centers' strong track record of chronic care management, use of electronic patient registries, and performance measurement,⁷ and the Office of Management and Budget rated the Health Centers program as one of the most effective programs for the financial year 2004.⁸

The literature also documents health centers' potential to reduce racial and ethnic disparities in health. In *Unequal Treatment*, the Institute of Medicine cited health centers' effectiveness in improving health out-

comes for higher-risk populations.⁹ This assertion is supported by the findings of Shi, who determined that low-socioeconomic status pregnant women of all racial and ethnic groups who received care at health centers experienced better birth outcomes than did low-socioeconomic status women receiving care elsewhere.¹⁰ Another study by Shin found that areas with high health center penetration have smaller Hispanic/White disparities in infant mortality, prenatal care, tuberculosis case rates, and age-adjusted death rates.¹¹ Moreover, the General Accounting Office identified the Health Disparities Collaborative, a quality improvement initiative in health centers aimed at reducing racial/ethnic disparities, as a promising federal program that should be expanded.¹²

Health centers' decades of achievement in providing high-quality, cost-effective care to vulnerable populations have been tempered by financial challenges. A majority of health center funding comes from federal sources, most prominently Medicaid (the source of 36% of health center revenue in 2004) and BPHC grants (the source of 22% of health center revenue in 2004).¹³ For 2004, total BPHC grants to the 914 health center grantees who reported to the Uniform Data System (UDS) amounted to more than \$1.4 billion. Total Medicaid collections by these health center grantees totaled more than \$2.4 billion. Despite broad, bipartisan support for health centers from both Congress and the Bush administration, demand for health center services from increasing numbers of uninsured, low-income, and chronically ill patients has increased the costs of care. In addition, constrictions in federal and state Medicaid eligibility and benefits have threatened health centers' single largest source of revenue.¹⁴

This article examines national trends in health center patient and provider characteristics, sources of revenue, and financial status between 1998 and 2004 using secondary data from the BPHC's UDS. In addition, state-specific data are presented for 2004.

● Methods

Study design and data source

This article presents the results of analyses of nationally representative secondary data from the 1998–2004 UDS. The 2004 UDS contains information reported by 914 health center grantees and is maintained by the Bureau of Primary Care, Health Resources Services Administration, US Department of Health and Human Services. The UDS collects the following information from health centers: patient demographics (eg, age, race/ethnicity, language spoken, income, insurance status), selected diagnoses and services (health and enabling), staffing and utilization, financing, and managed care

enrollment and utilization. Details on UDS methodology and data collection protocol can be found online from the BPHC at <http://bphc.hrsa.gov/uds/>.

National trends in patient and provider characteristics, patient-to-provider ratios, and health center revenues, costs, collections, self-sufficiency, and operating margins are analyzed for the years 1998–2004. In addition, state-specific analyses in each of these categories are reported for 2004.

● Health Center Patients

The number of patients treated by health centers increased 46 percent between 1999 and 2004, the most significant and rapid growth in the past 40 years.¹⁴ This section outlines recent national trends in insurance status, race and ethnicity, and poverty status among health center patients, as well as state-specific data on these areas for 2004.

In examining national trends, we present information on both the proportion and number of vulnerable populations served. The proportional information reflects relative changes in the types of patients served. Changes in one group of patients might affect health centers' capacity to serve other groups. For instance, an increased proportion of Hispanic patients may require health centers to shift resources to hire more interpreters. In contrast, numbers of patients reflect absolute change in the targeted population served by health centers. It is important to analyze both proportions and absolute numbers of patients, because it is possible to experience proportional changes without absolute changes, if the total number of patients increases.¹⁵

National perspective

Insurance status

The ability to maintain the balance between insured and uninsured patients is an important indicator of health centers' financial stability. Caring for all patients in a medically underserved area, regardless of insurance status, is fundamental to the health center mission. While the two leading sources of revenue, federal grants and Medicaid, help health centers cover a significant proportion of the costs of care for the uninsured and Medicaid-eligible patients, respectively, securing other grants and contracts as well as maintaining a payer mix are crucial for health center solvency.

The National Association of Community Health Centers reports that the proportion of health center patients who are uninsured is more than double the national average of uninsured.¹⁴ Furthermore, the number of uninsured patients served at health centers grew nearly three times as fast as the number of uninsured

nationally between 1999 and 2003.¹⁴ As Figure 1 illustrates, the number of health center patients who are uninsured steadily increased from 3.5 million in 1998 to 5.3 million in 2004. In 2004, 40.1 percent of health center patients were uninsured, up from 38.9 percent in 2001.

The number of health center patients covered by Medicaid also increased consistently, from 2.8 million in 1998 to 4.7 million in 2004. The percentage of health center patients with Medicaid coverage increased from 32.6 percent in 1998 to 35.7 percent in 2004. The largest change in the percentage of health center patients with Medicaid coverage (2.1%) occurred between 1998 and 2001. Since 2002, the percentage of health center patients with Medicaid has remained relatively stable, hovering around 35.7 percent.

Race and ethnicity

As Figure 2 displays, racial and ethnic minorities comprised 59.9 percent of health center patients in 2004. This represents a slight decrease in proportion of minority patients over time: in 1998, 61.2 percent of health center patients were racial/ethnic minorities. The percentage of Black health center patients decreased from 25.1 percent in 1998 to 22.1 percent in 2004. In contrast, the percentage of Hispanic health center patients increased from 32 percent in 1998 to 33.6 percent in 2004.

While the proportion of Black and Hispanic health center patients shifted slightly, the absolute number of all categories of minority patients increased between 1998 and 2004, from 5.3 million in 1998 to 7.9 million in 2004. While the number of Black patients increased from 2.2 million to 2.9 million, the number of Hispanic patients increased more dramatically, from 2.8 million to 4.4 million.

Poverty

Health centers serve patients living in medically underserved areas, regardless of their ability to pay for healthcare services. As Figure 3 indicates, the majority of health center patients live at or below the federal poverty level (FPL), which was defined as \$18,500 for a family of four in the contiguous states in 2004.¹⁷ The percentage of health center patients with incomes equivalent to or below 100 percent of the FPL decreased slightly between 1998 and 2004, from 57.9 percent to 56.8 percent. Nearly three quarters of health center patients live at or below 200 percent of FPL.

Despite slight decreases in the proportion of health center patients living in poverty, the absolute number of health center patients living at or below 100 percent FPL increased from 5 million to 7.5 million between 1998 and 2004. The number of health center patients with incomes below 200 percent of FPL also increased

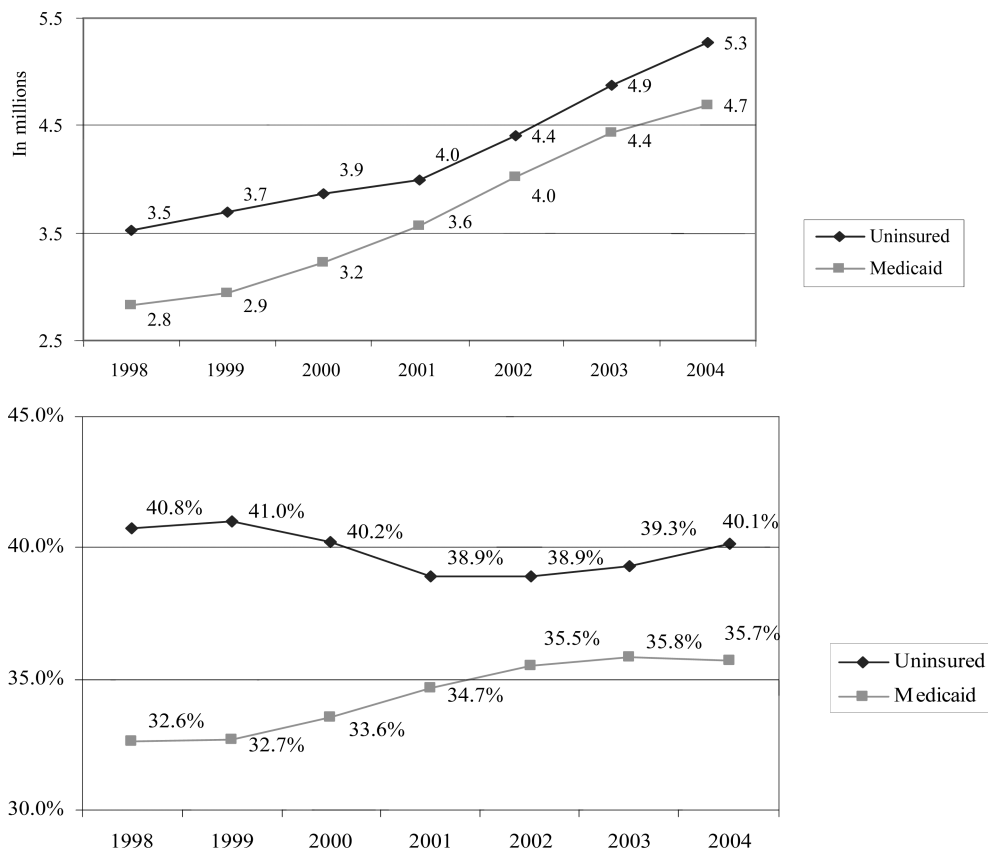


FIGURE 1. Health center patient insurance status, 1998–2004. From Bureau of Primary Health Care.¹⁶

steadily from 6.6 million in 1998 to 9.6 million in 2004. The National Association of Community Health Centers reports that the number of low-income patients served at health centers grew four times as fast as the number of low-income Americans between 1999 and 2003.¹⁴

State perspective

Table 2 is a compilation of each state’s 2004 health center patient characteristics, including number of health center grantees, total number of patients, insurance status, proportion racial/ethnic minorities served, and poverty. There was wide variation within states in all of these categories.

By far, California had the largest number of health center grantees (87). New York, with 50 health center grantees, ranked second. Nevada and Washington, DC, each had two health center grantees. In total patients, California and New York again ranked first and second; there were approximately 1.8 million Californian health center users and 1 million New York health center users. Delaware had the smallest total patient population, with approximately 19,300 health center users.

The percentage of uninsured health center patients ranged from 17.1 percent in Maine to 64.9 percent in Kansas. As indicated in Figure 1, the average health center in 2004 served a patient population that was 40.1 percent uninsured.

The proportion of health center patients with Medicaid coverage also varied widely across the states. Medicaid covered 15.9 percent of health center patients in Utah, but 49.9 percent of health center patients in Connecticut. These variations are related to state differences in Medicaid eligibility and enrollment. By 2004, every state had enacted at least one programmatic change to its Medicaid program to contain costs.¹⁴

Racial and ethnic background of health center patients varied according to the diversity of each state. For instance, Maine, which was 96.9 percent Caucasian according to the 2000 US Census, served 2.4 percent minorities in its health centers in 2004.¹⁸ In contrast, approximately 70 percent of Washington DC’s population was identified as minority in the 2000 Census, and District of Columbia’s health center patient population was 98.4 percent minority in 2004.¹⁸

Poverty of health center patients is displayed in Table 2 as percentage of patients with family incomes at or below 100 percent of FPL. Texas had the largest

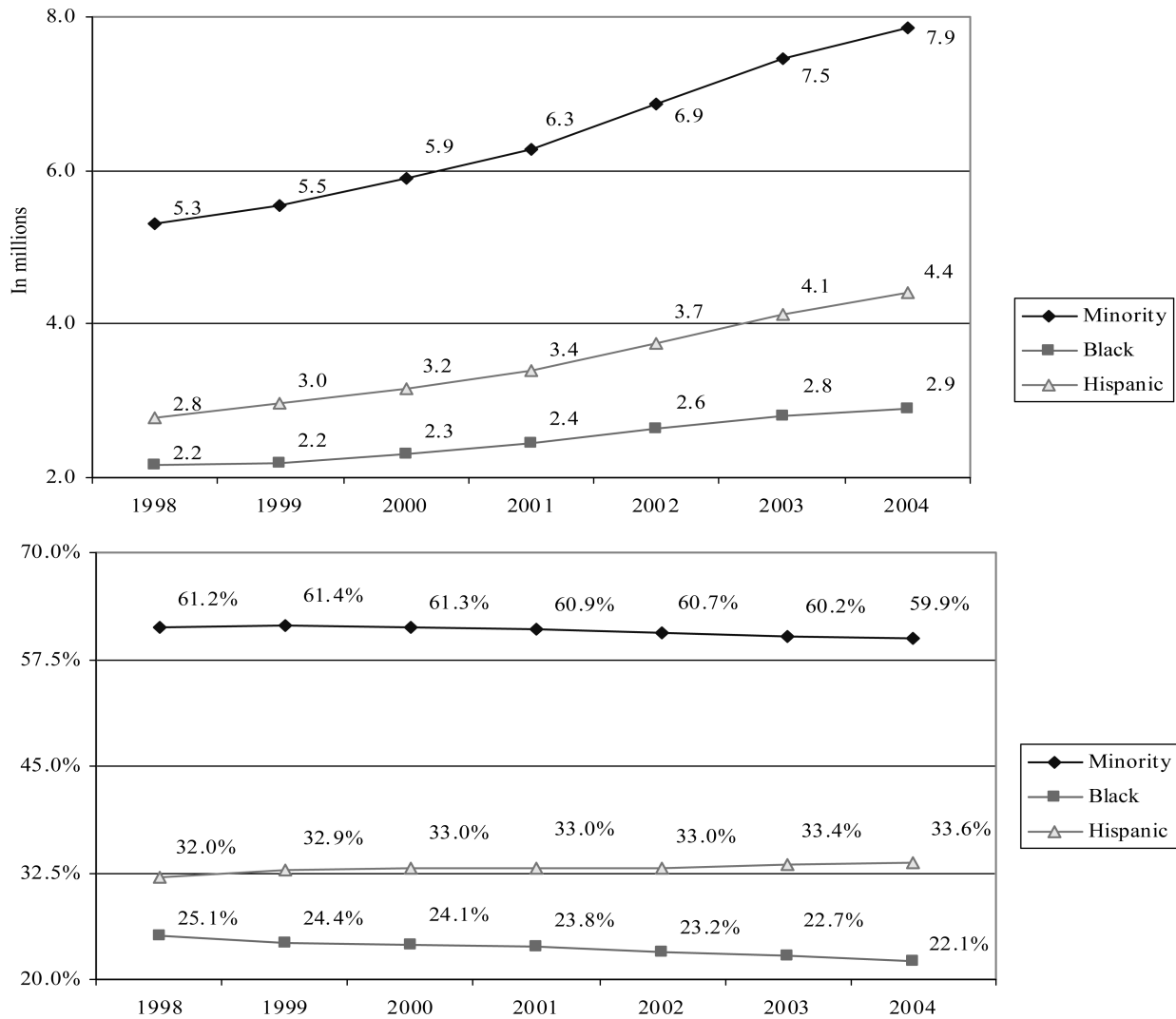


FIGURE 2. Health center patient race and ethnicity, 1998–2004. From Bureau of Primary Health Care.¹⁶

proportion of health center patients living in poverty (68.5%), and Vermont had the smallest proportion of health center patients living in poverty (17.9%). Most states (33) fell within the range of 40 to 60 percent of health center patients living at or below 100 percent of FPL. It is important to note that health centers serve not only people in poverty but also those with difficulty accessing services for other reasons, such as a lack of providers in the geographic area. Therefore, states whose health centers serve a smaller proportion of patients living in poverty still serve a very important primary care function.

● **Health Center Providers**

Health centers are staffed primarily by primary care physicians, mid-level providers (eg, nurse practitioners, physician assistants, and certified nurse midwives),

and to a much smaller extent, specialists (eg, psychiatrists and other non-primary care physicians). This section describes national trends in quantity and types of health center providers, as well as patient-to-provider ratios. State-specific data on health center providers are presented for 2004.

National perspective

Types of providers

Figure 4 illustrates trends in the quantity of different types of health center clinicians over time. The number of primary care physicians and mid-level providers increased steadily between 1998 and 2004. Primary care physicians in health centers increased by 2,400 during these 6 years, from 4,100 to 6,500. The number of mid-level providers increased by 1,500 between 1998 and 2004, from 2,200 to 3,700. The number of specialists in

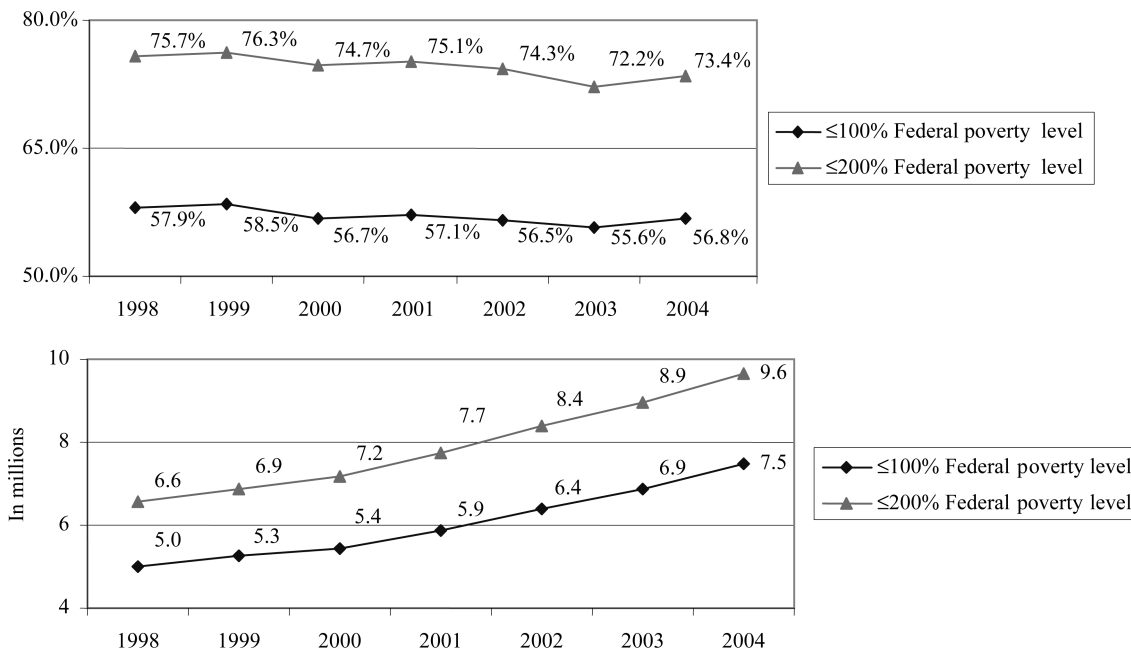


FIGURE 3. Health center patient poverty status, 1998–2004. From Bureau of Primary Health Care.¹⁶

health centers doubled in this time frame: while there were 200 specialists in 1998, there were 400 specialists in 2004.

Patient-to-provider ratios

Patient-to-provider ratios remained relatively stable between 1998 and 2004 (Figure 5). The ratio of patients to primary care physicians ranged from 3,900 patients per physician to 4,100 patients per physician. Similarly, the ratio of patients to mid-level providers varied only slightly. With the exception of 1 year, this ratio held steady at 2,800 patients per mid-level provider. There was more variation in the ratio of patients to specialists between 1998 and 2004. In 1998, the ratio was 3,800 patients per specialist, which decreased to 2,900 patients per specialist in 2002. By 2004, the ratio increased again to 3,200 patients per specialist.

State perspective

Table 3 displays health center provider characteristics by state, including total number of physicians, primary care physicians, specialists, and mid-level providers, as well as the ratio of the number of health center patients to the number of each type of provider. California and New York had the most physicians, primary care physicians, and mid-level providers. Alaska had the lowest ratio of patients to providers for all provider types (ie, 2,500 patients per physician, 2,500 patients per primary care physician, 1,200 patients per specialist, and 1,500 patients per mid-level provider).

The states with the highest patient-to-physician ratio were Alabama and Florida (4,400 patients per physician in both states). These two states, along with South Carolina, also had the highest patient-to-primary care physician ratio (4,400 patients per primary care physician). Arizona had the highest patient-to-specialist ratio (6,100 patients per specialist). Several states, including Alabama, Delaware, Indiana, Kansas, North Dakota, Nevada, Rhode Island, South Dakota, Utah, and Vermont, had no specialists directly employed by the health center. It is important to note that many health centers have referral arrangements with specialists; therefore, health center patients still have access to specialist care even if health centers do not directly employ specialists. The highest ratio of patient-to-mid-level providers occurred in California and Nevada (3,500 patients per mid-level provider).

● **Sources of Health Center Revenue**

This section describes national trends in sources of health center revenue for 1998–2004, as well as state-specific information on revenue for 2004.

National perspective

Revenue from services provided

The largest single source of health center revenue is Medicaid. In 2004, Medicaid accounted for 36.4 percent of total health center revenue, an increase from 33.7

TABLE 2 ● Health center patients by state, 2004*

State	Grantees, <i>n</i>	Total patients, in thousands	%			
			Uninsured	Medicaid	Minority	Poverty ≤100%
Alaska	20	68.6	41.5	23.2	50.1	23.4
Alabama	15	276.9	47.5	29.6	62.1	62.6
Arkansas	10	104.9	48.0	19.1	40.0	42.6
Arizona	14	265.2	34.2	39.8	64.2	53.4
California	87	1807.4	45.5	38.1	73.7	67.6
Colorado	15	392.4	46.6	31.3	59.0	48.1
Connecticut	10	182.7	26.5	49.9	69.4	67.6
District of Columbia	2	60.8	59.8	32.1	95.4	51.7
Delaware	3	19.3	40.2	43.5	86.3	48.2
Florida	33	588.8	56.8	25.0	63.1	56.1
Georgia	21	225.9	46.2	27.3	68.5	50.3
Hawaii	11	78.7	33.9	40.2	67.8	62.4
Iowa	8	92.6	38.2	31.6	35.2	49.2
Idaho	8	79.9	49.1	21.3	37.1	56.9
Illinois	33	705.9	36.8	41.8	69.9	59.3
Indiana	13	143.5	54.2	31.3	43.2	45.0
Kansas	8	51.5	64.9	17.8	51.2	53.9
Kentucky	12	192.2	46.0	27.1	25.8	51.0
Louisiana	17	101.3	47.2	36.1	67.3	60.4
Massachusetts	33	423.6	36.2	35.8	52.7	49.4
Maryland	13	161.4	29.9	39.9	60.7	33.1
Maine	14	92.1	17.1	26.8	2.4	31.8
Michigan	26	388.4	32.4	37.3	39.1	53.7
Minnesota	12	119.4	40.5	33.0	56.8	33.2
Missouri	17	270.5	36.0	42.8	46.4	52.5
Mississippi	22	310.8	44.1	30.6	67.5	61.3
Montana	12	66.2	54.4	16.5	16.1	55.2
North Carolina	24	279.1	49.9	22.9	71.0	56.4
North Dakota	4	21.6	24.3	25.8	16.2	34.2
Nebraska	5	31.3	61.0	24.1	65.4	56.5
New Hampshire	7	48.7	29.6	18.1	11.2	28.2
New Jersey	16	238.0	46.0	42.5	83.1	68.1
New Mexico	14	209.8	45.5	27.4	66.4	52.6
Nevada	2	55.6	48.9	22.3	46.8	45.0
New York	50	1030.7	26.0	46.4	67.3	55.7
Ohio	22	287.3	31.9	38.3	40.8	52.8
Oklahoma	7	79.2	50.1	27.9	30.8	57.9
Oregon	18	181.2	43.7	40.0	38.1	58.6
Pennsylvania	29	428.1	27.1	39.7	49.2	50.2
Rhode Island	7	86.0	28.4	45.9	50.0	56.7
South Carolina	21	282.5	36.9	35.0	68.2	56.0
South Dakota	7	50.6	43.8	20.0	27.7	35.9
Tennessee	23	219.0	33.3	40.3	33.9	54.4
Texas	40	562.1	59.7	24.4	81.5	68.5
Utah	11	78.6	61.5	15.9	60.5	55.4
Virginia	21	177.4	35.2	20.5	45.8	35.7
Vermont	3	33.8	18.6	30.7	6.5	17.9
Washington	22	573.6	36.8	39.7	49.4	60.6
Wisconsin	14	137.5	24.9	47.9	44.7	66.8
West Virginia	27	270.8	36.2	22.0	6.3	40.7
Wyoming	4	20.2	49.8	20.2	12.8	41.1
Total UDS	914	13,127.8	40.1	35.7	59.9	56.8

*From Bureau of Primary Health Care.³

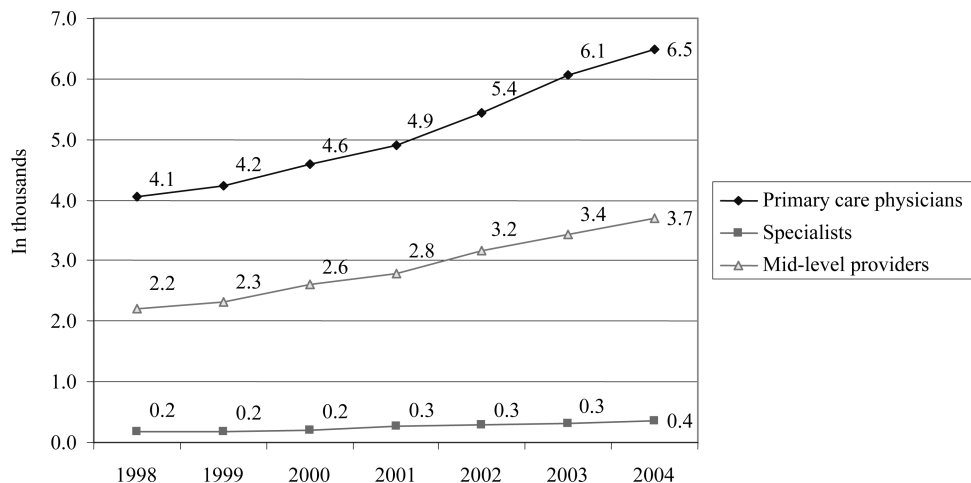


FIGURE 4. Health center providers, 1998–2004. From Bureau of Primary Health Care.¹⁶

percent in 1998 (Figure 6). Medicaid has long been a crucial component of health center revenue. As Rosenbaum and Shin relate, increasing Medicaid revenue in health centers has been shaped by several factors, including legislatively mandated Medicaid eligibility expansions between 1985 and 2001, Medicaid’s coverage of broad, comprehensive services provided by health centers (particularly for children), and the fact that Medicaid payments to health centers are governed by reasonable cost principles.¹⁹

Medicare accounted for 5.7 percent of health center revenue in 2004. Medicare reimbursement as a percentage of total health center revenue was highest in 1998 (at 6.5%), but declined to 5.7 percent by 2000. Medicare revenue remained at a fairly consistent level (5.5%–5.9%) between 2000 and 2004.

Private insurance, which reimburses based on fee schedules, may pay heavily discounted rates to health centers and may require more burdensome claims payment procedures. This may drive up administrative costs for the health center.¹⁹ In addition, compared to proportions of health center patients who are publicly

insured or uninsured, there are relatively few health center patients with private insurance coverage. As a result, health centers derive a significantly smaller proportion of revenue from private insurance. Private insurance accounted for 6.3 percent of total health center revenue in 2004, a decrease from 6.6 percent in 1998.

Patient self-pay for services in 2004 reached its highest level since 1999. In 2004, self-pay accounted for 6.2 percent of total health center revenue. There was a decline in self-pay revenue between 1999 and 2002, and self-pay accounted for only 5.8 percent of health center revenue at its low point in 2002. Since then, self-pay revenue has risen each year.

Figure 7 displays trends in health center revenue for patients with different types of insurance coverage over time. Medicaid provides health centers the largest reimbursement per patient, compared to Medicare, private insurance, and self-pay. Since 1998, revenue per Medicaid patient has increased incrementally, with the largest increase (\$42 per patient) occurring between 2003 and 2004. The data do not clarify what factors contributed to this increase, but potential explanations

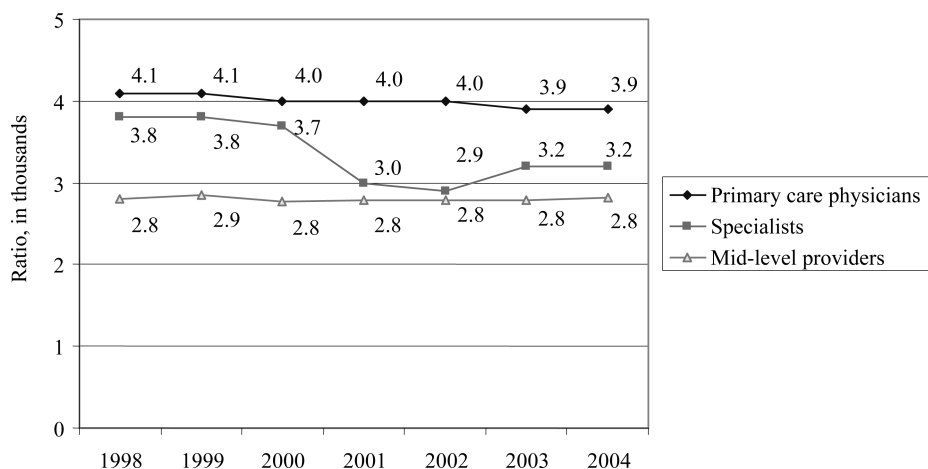


FIGURE 5. Health center patient-to-provider ratios, 1998–2004. From Bureau of Primary Health Care.¹⁶

TABLE 3 ● Health center providers by state (including patient-to-provider ratios), 2004*

State	Grantees, <i>n</i>	Total MD		Primary care physicians		Specialists		Mid-level providers	
		<i>n</i>	Ratio in thousands	<i>n</i>	Ratio in thousands	<i>n</i>	Ratio in thousands	<i>n</i>	Ratio in thousands
Alaska	20	30	2.5	29	2.5	1	1.2	62	1.5
Alabama	15	122	4.4	122	4.4	0	...	52	2.8
Arkansas	10	56	3.9	55	3.9	1	2.0	25	2.9
Arizona	14	151	3.9	147	3.8	4	6.1	67	2.6
California	87	868	4.1	829	4.2	39	3.0	468	3.5
Colorado	15	197	3.6	188	3.6	9	4.8	168	3.1
Connecticut	10	95	3.6	86	3.7	9	2.7	61	2.6
District of Columbia	2	58	3.1	55	3.0	3	3.6	12	2.2
Delaware	3	10	4.3	10	4.3	0	...	5	2.9
Florida	33	289	4.4	281	4.4	8	4.4	140	3.0
Georgia	21	118	4.0	114	4.0	4	3.2	59	2.7
Hawaii	11	68	2.7	50	3.1	18	1.8	34	2.2
Iowa	8	39	3.9	38	4.0	1	2.0	32	3.4
Idaho	8	36	3.0	34	3.1	2	2.1	36	3.0
Illinois	33	419	3.8	406	3.9	13	2.9	144	2.6
Indiana	13	59	4.2	59	4.2	0	...	53	2.3
Kansas	8	10	3.2	10	3.2	0	...	25	3.0
Kentucky	12	95	4.3	92	4.3	3	3.8	48	3.1
Louisiana	17	44	3.8	42	3.8	2	3.3	17	2.9
Massachusetts	33	294	3.2	273	3.3	21	2.5	142	2.2
Maryland	13	111	3.6	102	3.6	9	2.8	36	2.6
Maine	14	50	3.3	47	3.4	3	2.9	41	2.7
Michigan	26	160	3.9	158	3.9	2	2.2	105	3.3
Minnesota	12	44	3.8	42	3.8	2	3.3	41	2.3
Missouri	17	119	3.8	112	3.9	7	3.1	73	2.8
Mississippi	22	130	4.2	129	4.2	1	5.8	81	2.9
Montana	12	24	3.5	24	3.5	0	...	25	2.7
North Carolina	24	123	4.2	120	4.2	3	2.8	64	3.1
North Dakota	4	8	4.1	8	4.1	0	...	10	2.6
Nebraska	5	12	3.7	11	3.9	1	2.2	13	3.0
New Hampshire	7	33	3.2	33	3.1	0	...	25	2.7
New Jersey	16	130	3.8	123	3.8	7	3.8	59	2.6
New Mexico	14	100	3.6	95	3.7	5	1.2	75	2.6
Nevada	2	18	3.8	18	3.8	0	...	13	3.5
New York	50	688	3.8	609	3.7	79	4.4	325	2.5
Ohio	22	174	3.9	170	3.9	4	3.3	44	2.5
Oklahoma	7	25	3.6	24	3.6	1	5.1	21	2.3
Oregon	18	78	3.0	75	3.0	3	2.5	87	2.3
Pennsylvania	29	197	4.2	189	4.2	8	3.8	92	2.8
Rhode Island	7	51	3.4	51	3.3	0	...	26	2.7
South Carolina	21	154	4.3	151	4.4	3	3.1	79	2.9
South Dakota	7	17	3.8	17	3.7	0	...	27	2.5
Tennessee	23	85	3.7	83	3.8	2	2.2	91	3.1
Texas	40	257	4.3	249	4.3	8	3.5	149	2.8
Utah	11	34	3.7	34	3.7	0	...	31	3.4
Virginia	21	101	3.6	100	3.6	1	2.6	54	2.7
Vermont	3	16	3.7	16	3.7	0	...	16	2.7
Washington	22	262	3.6	259	3.6	3	1.6	164	3.0
Wisconsin	14	120	3.0	74	3.5	46	2.2	37	2.4
West Virginia	27	143	3.9	139	4.0	4	2.4	103	2.9
Wyoming	4	11	3.2	10	3.4	1	1.3	5	3.2

*From Bureau of Primary Health Care.³

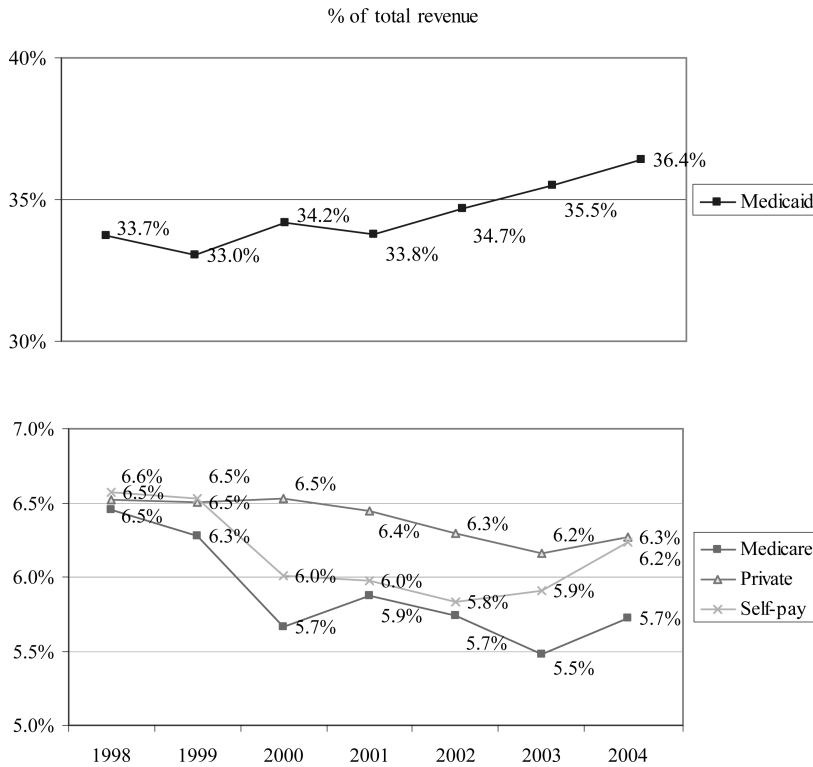


FIGURE 6. Insurance and patient self-pay revenue as percentage of total health center revenue, 1998–2004. From Bureau of Primary Health Care.¹⁶

could include more patient visits, more services provided, or other factors.

As Figure 7 shows, health center revenue per Medicare patient is significantly lower than health center revenue per Medicaid patient.

In 2004, health center revenue per Medicare patient was only \$391, compared to \$519 per Medicaid patient. Unlike Medicaid revenues, Medicare revenues did not increase each year

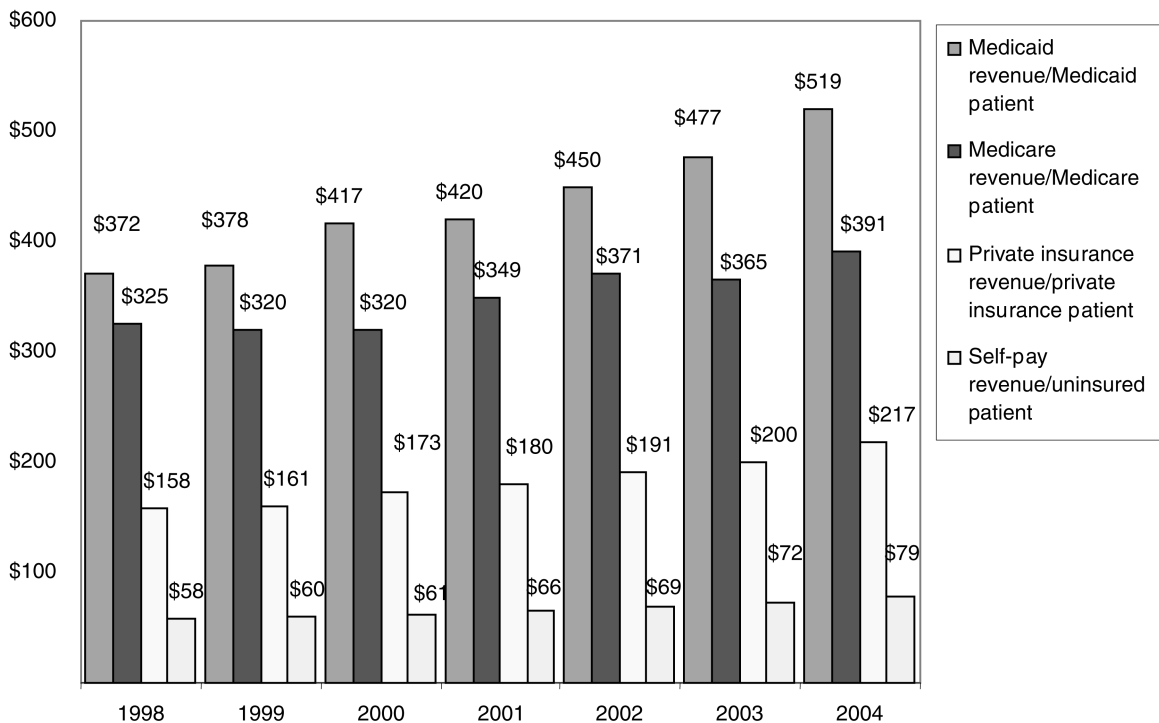


FIGURE 7. Average revenue per health center patient by insurance type, 1998–2004. From Bureau of Primary Health Care.¹⁶

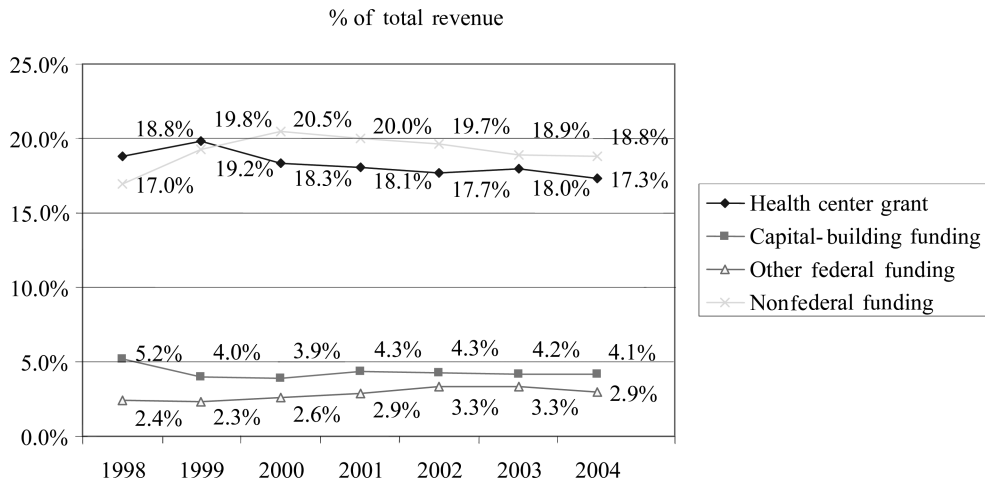


FIGURE 8. Grant and contract revenue as percentage of total health center revenue, 1998–2004. From Bureau of Primary Health Care.¹⁶

between 1998 and 2004; in fact, some years, Medicare revenues decreased compared to those in the previous year.

Revenue from grants and contracts

Federal and nonfederal grants and contracts represent another important source of revenue for health centers. The Health Resources and Services Administration disperses grants to successful health center grant applicants to help defray the costs of caring for the uninsured. As shown in Figure 8, in 1998, these health center grants comprised 18.8 percent of health center revenue; this declined to 17.3 percent by 2004.

On a smaller scale, some health centers receive funding for the Integrated Services Development Initiative, Shared Integrated Management Information Systems, and Capital Improvement Program Grants (labeled “capital-building funding” in Figure 8). These grants’ contribution to total health center revenue decreased from 1998, when they accounted for 5.2 percent of total revenue, to 2004, when they accounted for only 4.1 percent of total revenue. The “other federal funding” category of Figure 8 refers to all other federal monies that support health centers.

Nonfederal funding for health centers includes grants and contracts from state governments, state and local indigent care programs, local governments, and foundations and other private sources (labeled “Nonfederal funding” in Figure 8). These nonfederal grants and contracts provided a significant portion of health center revenue between 1998 and 2004, ranging from 17 percent to 18.8 percent of total revenue.

As Figure 9 displays, federal grant funding to cover the healthcare costs of uninsured patients, enabling services, and the underserved visiting health centers is limited. Federal grants to health centers averaged \$220

per uninsured patient in 2004 (median: \$271/uninsured patient).

State perspective

Table 4 displays sources of health center revenue for each state in 2004. As would be predicted (because of their large number of health centers and patients), California and New York had the highest total revenues of all the states: \$996 million and \$631.9 million, respectively. The smallest total revenues were collected by Vermont (\$3.1 million) and Delaware (\$9.4 million), states with few health centers and a relatively small number of patients. For all states, the mean total revenue was \$125.9 million, and the median total revenue was \$80.2 million (ie, half of the states reported total health center revenue less than \$80.2 million).

As discussed, the two largest sources of health center total revenue are Medicaid and Health Center Grants. At the state level, the relative importance of these two sources of revenue varies widely. States with large proportions of Medicaid patients receive relatively larger portions of their total revenues from Medicaid, compared to other states. For instance, Connecticut, in which 49.9 percent of health center patients had Medicaid coverage, received 44.9 percent of its total revenue from Medicaid and 12.6 percent of its total revenue from Health Center Grants. In contrast, Kansas, in which 17.8 percent of health center patients had Medicaid coverage, received 14.8 percent of its total revenue from Medicaid and 28.4 percent of its total revenue from Health Center Grants.

For all states in 2004, the mean percentage of total health center revenue derived from Medicaid was 29.9 percent, and the median was 29.5 percent. The mean percentage of total health center revenue derived from Health Center Grants was 22.3 percent, and the median was 21.8 percent.

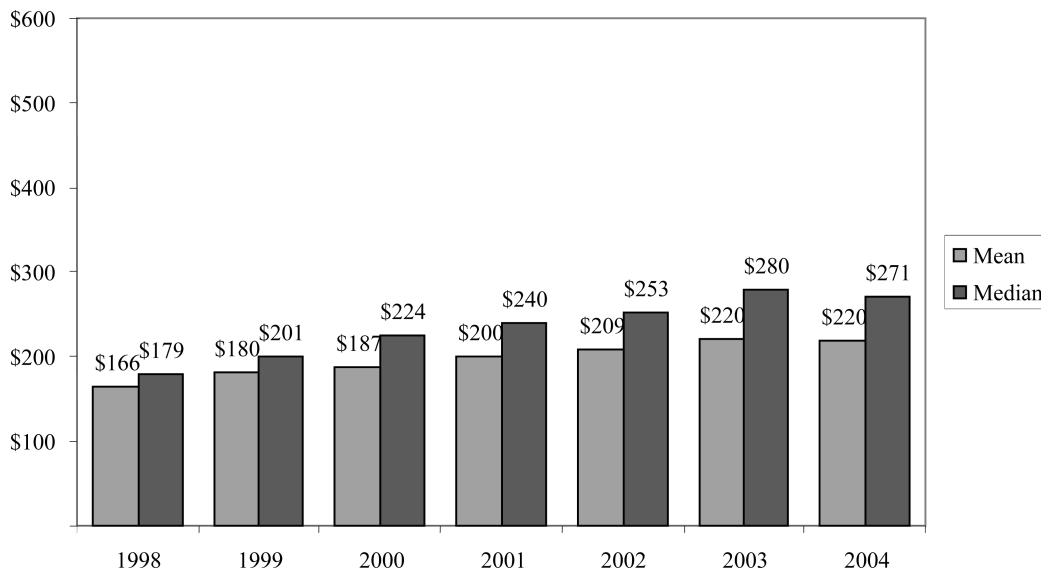


FIGURE 9. Federal health center grant funding per uninsured patient. From Bureau of Primary Health Care.¹⁶

● **Health Center Costs, Collections, Self-Sufficiency, Net Revenue, and Operating Margins**

This section describes national trends in average health center costs for patient encounters and personnel; collections from Medicaid, Medicare, and private insurance; self-sufficiency; net revenue; and operating margins for the years 1998–2004. These data are also presented state by state for 2004.

National perspective

Costs

Health centers care for patient populations who have higher risks for health problems than the general population, and who require more intensive levels of care.²⁰ All health centers offer comprehensive primary care services, and an increasing number of health centers also offer services such as dental care and mental health treatment and counseling on-site.¹⁴ The increasingly comprehensive services offered by health centers have the potential to enhance patient health outcomes. However, the costs of such care, as well as the percentage of charges health centers are able to collect from third-party payers, are a central concern for health centers.

As Figure 10 indicates, mean medical encounter costs rose steadily between 1998 (\$81) and 2004 (\$116). Median medical encounter costs were slightly lower than the means, rising from \$78 in 1998 to \$108 in 2004. Total encounter costs (which incorporate costs of enabling services) followed a similar trajectory, averaging \$92 in 1998 and rising to \$133 in 2004 (median values were \$86 in 1998 and \$123 in 2004).

Mean health center personnel costs rose from \$64,000 in 1998 to \$80,000 in 2004. Again, medians were slightly lower: \$61,000 in 1998 and \$76,000 in 2004. Mean health center medical personnel costs rose from \$118,000 to \$154,000 in the same time period (median values were \$113,000 in 1998 and \$143,000 in 2004).

Collections

As Figure 11 displays, the proportion of charges to collections varies by payer, due in part to differences in the payer’s payment methodologies and reimbursement rates. Medicaid consistently has covered the highest proportion of health center charges; health centers have a collection rate of 87 percent of charges from Medicaid. Private insurance consistently has covered the lowest proportion of health center charges, with collection rates of 57 percent of charges. Medicare has hovered between Medicaid and private coverage, where health centers receive 70 percent of charges.

Self-sufficiency

Self-sufficiency indicates health centers’ reliance on grants as a source of revenue. Self-sufficiency is expressed as a ratio of health center service revenue (eg, Medicaid revenue) to grant revenue. The closer the self-sufficiency ratio is to 1, the more self-sufficient health centers are (ie, the less reliant on grants as a source of revenue). Since the early years of the health center program, it has been a stated goal for health centers to become as self-sufficient as possible.²¹ As Figure 12 indicates, health centers became increasingly self-sufficient between 1998, when the ratio was 0.71, and 2004, when the ratio became 0.85. However, between 1999 and 2003,

TABLE 4 ● Health center revenue sources by states, 2004*

State	Grantees	Total revenue, in millions	Health center	Grants/contracts, %		Service revenue, %			
				Capital-building	Other	Medicaid	Medicare	Private	Self-pay
Alaska	20	86.9	27.9	1.1	39.8	13.1	3.5	9.3	5.0
Alabama	15	94.0	29.3	5.1	8.3	33.2	8.2	4.0	11.0
Arkansas	10	43.7	42.8	1.5	14.7	16.9	10.2	4.8	9.1
Arizona	14	135.3	17.4	3.6	14.7	39.0	4.9	9.6	8.8
California	87	996.1	9.9	4.4	27.8	40.4	4.9	3.0	4.5
Colorado	15	214.8	16.9	4.6	21.4	36.1	4.8	5.7	9.0
Connecticut	10	109.0	12.6	2.3	22.3	44.9	5.0	4.5	3.4
District of Columbia	2	38.7	10.1	7.1	54.9	23.5	3.2	0.4	0.6
Delaware	3	9.4	30.9	10.2	7.6	31.1	4.7	4.2	9.5
Florida	33	270.3	19.7	7.5	23.0	27.5	4.2	4.6	12.4
Georgia	21	87.7	29.4	7.2	15.8	21.2	11.1	6.1	9.2
Hawaii	11	67.8	12.9	1.5	33.9	37.8	4.6	6.6	2.3
Iowa	8	48.3	21.8	5.5	9.6	36.0	6.4	12.4	7.9
Idaho	8	33.4	25.8	10.9	9.4	26.3	5.5	10.0	11.8
Illinois	33	309.6	17.6	4.2	25.7	37.0	3.9	7.3	4.3
Indiana	13	71.5	17.1	4.3	29.5	38.9	2.9	2.8	4.4
Kansas	8	17.8	28.4	6.0	34.6	14.8	2.2	4.8	8.8
Kentucky	12	80.2	21.5	3.8	9.3	36.5	10.1	9.7	9.0
Louisiana	17	39.4	37.2	5.1	14.5	28.6	4.5	2.6	6.9
Massachusetts	33	326.9	9.7	2.3	49.5	22.7	4.7	7.7	2.4
Maryland	13	111.6	13.8	2.7	16.2	40.6	15.3	5.9	3.3
Maine	14	40.4	18.5	2.3	5.7	26.9	15.9	20.4	10.2
Michigan	26	170.8	16.8	4.4	12.0	41.2	6.8	12.1	5.7
Minnesota	12	59.0	16.0	8.1	24.7	29.5	5.6	8.4	5.5
Missouri	17	136.7	23.0	3.6	17.3	39.5	5.1	5.4	5.9
Mississippi	22	106.9	30.5	1.4	13.6	30.3	9.5	4.6	7.7
Montana	12	26.0	39.1	9.5	12.3	15.8	6.3	6.6	9.9
North Carolina	24	111.2	23.4	9.3	17.6	22.6	10.1	7.8	8.6
North Dakota	4	9.9	30.3	4.0	12.8	19.8	9.0	17.4	6.5
Nebraska	5	14.1	28.1	4.5	31.5	19.9	4.3	4.2	5.8
New Hampshire	7	27.8	18.1	2.1	34.0	19.4	8.0	14.2	4.1
New Jersey	16	115.5	19.5	3.5	32.0	36.4	2.6	2.4	3.6
New Mexico	14	114.8	22.0	5.5	25.4	22.2	6.6	8.2	8.3
Nevada	2	17.6	28.7	7.4	17.2	17.8	2.9	7.6	16.5
New York	50	631.9	11.5	2.6	17.4	53.9	4.3	5.8	2.7
Ohio	22	131.7	23.1	4.8	18.0	33.3	6.4	8.6	5.3
Oklahoma	7	28.8	31.7	3.5	18.8	28.8	6.1	2.9	8.2
Oregon	18	169.9	11.3	4.5	39.5	34.4	2.9	2.1	3.9
Pennsylvania	29	161.1	23.2	4.5	8.2	39.9	7.1	11.2	5.3
Rhode Island	7	44.4	20.1	2.3	14.9	49.6	2.9	7.3	2.6
South Carolina	21	113.6	29.5	2.4	8.9	33.7	9.2	6.1	9.9
South Dakota	7	20.0	31.9	3.3	7.8	21.6	9.6	14.0	11.7
Tennessee	23	77.5	29.7	3.5	7.2	36.4	9.0	7.3	6.6
Texas	40	279.9	23.4	5.0	22.1	26.9	5.7	2.0	11.9
Utah	11	35.2	25.2	5.7	23.2	18.1	3.1	12.3	12.0
Virginia	21	76.2	30.2	4.1	9.3	18.2	11.8	13.2	13.3
Vermont	3	3.1	19.5	10.0	56.9	6.1	3.0	1.1	3.4
Washington	22	18.2	17.0	2.8	7.1	36.8	12.6	16.0	7.5
Wisconsin	14	357.7	7.9	3.9	13.8	50.4	2.6	4.8	7.4
West Virginia	27	114.3	19.8	1.3	12.7	25.1	9.9	19.1	10.4
Wyoming	4	12.7	17.7	7.9	26.3	24.2	8.4	9.2	5.6
Mean	17	125.9	22.3	4.7	20.6	29.9	6.5	7.6	7.2
Median	14	80.2	21.8	4.3	17.3	29.5	5.6	6.6	7.4

*From Bureau of Primary Health Care.³

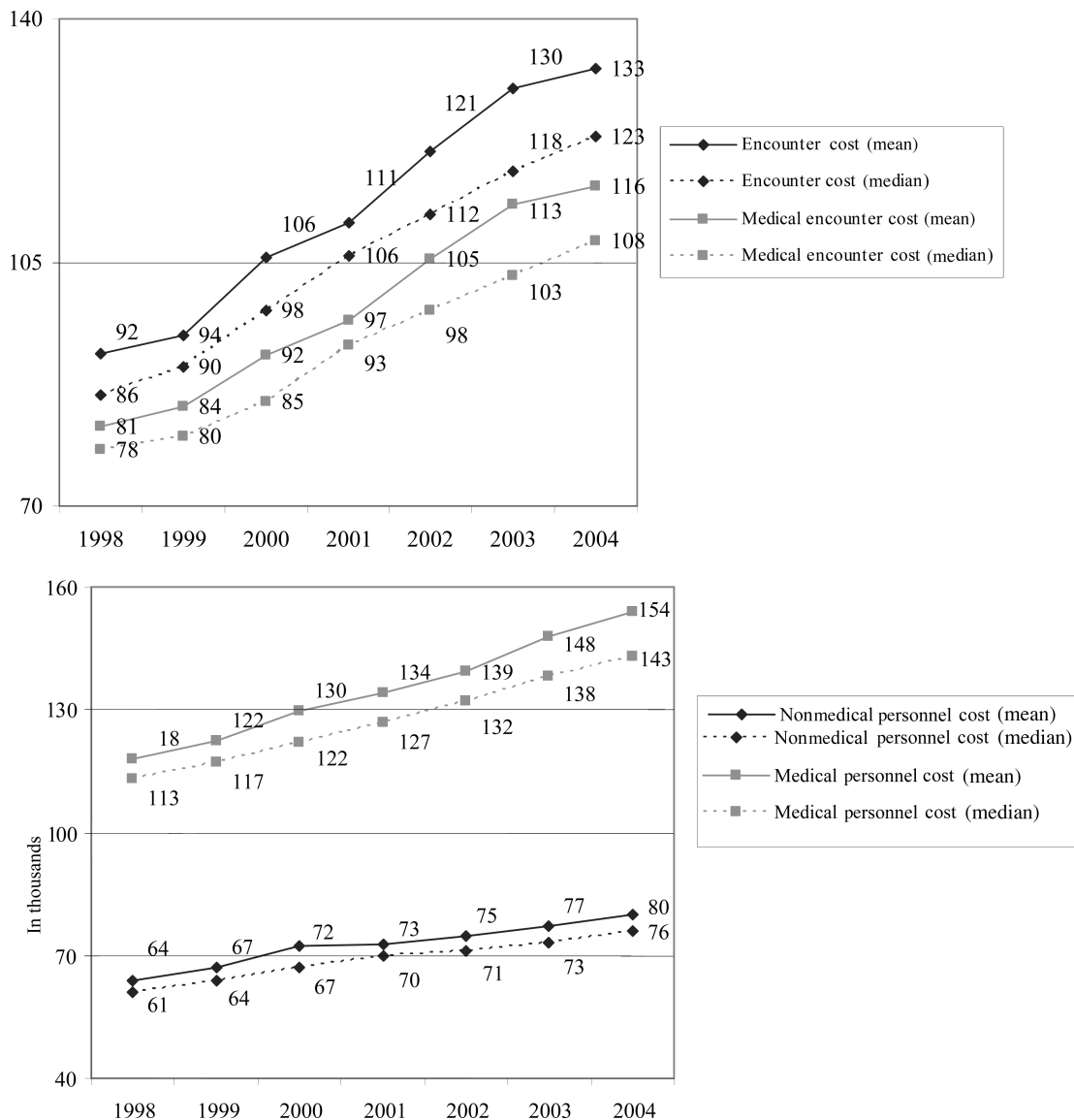


FIGURE 10. Health center costs: Medical encounters and personnel, 1998–2004. From Bureau of Primary Health Care.¹⁶

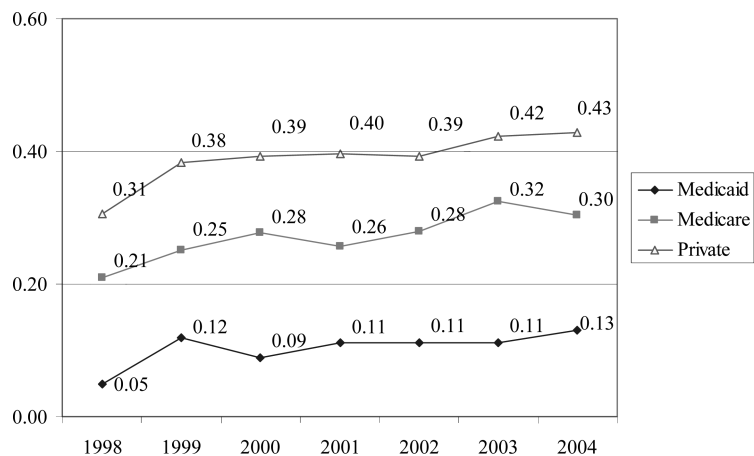


FIGURE 11. Proportion of health center charges unpaid by Medicaid, Medicare, and private coverage. From Bureau of Primary Health Care.¹⁶

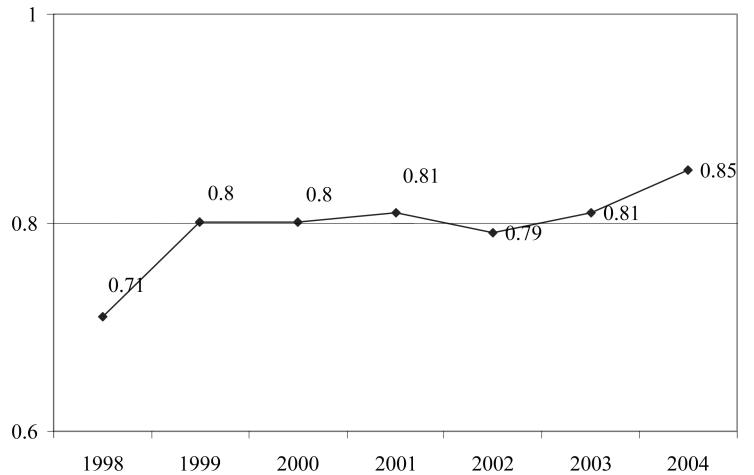


FIGURE 12. Health center self-sufficiency ratios, 1998–2004. From Bureau of Primary Health Care.¹⁶

the self-sufficiency ratio was largely stagnant, and the ratio increased by only 0.04 between 2003 and 2004. This stagnation may be a reflection of health centers’ burden of treating increasing numbers of uninsured patients.

Net revenue

Net revenue is defined as total revenue from grants, payment for services, and other sources, minus total costs. A positive net revenue indicates that a health center is financially solvent. Health centers’ mean net revenue increased from \$870,000 in 1998 to \$2,809,000 in 2004 (Figure 13). Because of outliers with relatively high and low net revenue, it is also important to consider health centers’ median net revenue, which increased from \$469,000 in 1998 to \$1,268,000 in 2004. The me-

dian indicates that half of the nation’s health centers reported net revenue greater than \$1,268,000 in 2004.

Operating margin

This study defines operating margin as health centers’ net revenue divided by total revenue, and is therefore a measure of the proportion of a health center’s revenue that remains after paying for variable costs, such as wages. Health centers rely on operating margins to ensure financial stability and can use any surplus for unexpected costs (eg, health outbreaks or natural disasters), or to care for more uninsured patients.¹² As shown in Figure 14, average health center operating margins ranged between a low of –0.2 percent in 1999 and a high of 1.3 percent in 2001. While health center operating margins are small, they have been positive every year since 2000.

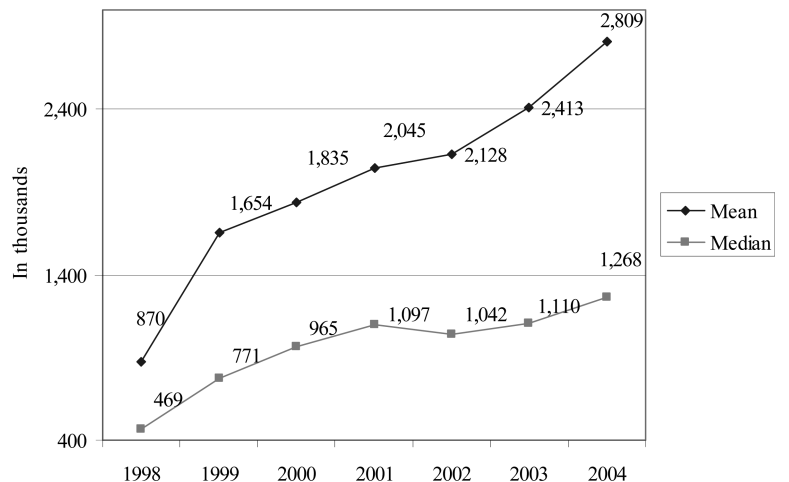


FIGURE 13. Health center net revenue, 1998–2004. From Bureau of Primary Health Care.¹⁶

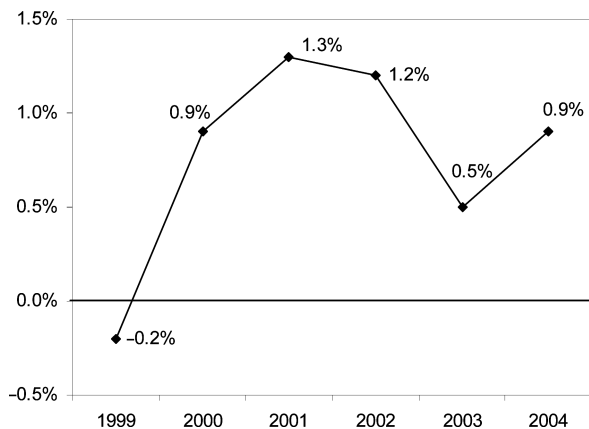


FIGURE 14. Health center average operating margins, 1998–2004. From Bureau of Primary Health Care.²²

State perspective

Table 5 displays health center costs, collections, self-sufficiency, and operating margins by state for the year 2004. The “cost” columns indicate each state’s average health center medical encounter cost and average health center medical personnel cost (for wages). The mean state cost for medical encounters was \$118 in 2004, and the median was \$112. The mean state cost of medical personnel was \$156,607 in 2004, and the median was \$149,319.

The “collections” columns list average collections for patients with Medicaid, Medicare, and private coverage. Some states collected significantly more Medicaid dollars per Medicaid patient, compared to other states. For instance, Maryland collected \$1,429 per Medicaid patient in 2004, whereas Nevada collected \$255 per Medicaid patient. The mean state collection per Medicaid patient was \$460 (median: \$435).

There was a similarly wide range of collections for private coverage. For instance, Oregon collected \$2,915 per privately insured patient, whereas Alabama and Arkansas collected \$94 per privately insured patient. The mean state collection per privately insured patient was \$257 (median: \$178).

Medicare collections were less wide ranging. States collected between \$158 (Nevada) and \$565 (Washington, DC) per Medicare patient in 2004. The mean state collection per Medicare patient was \$334 (median: \$329).

The column labeled “self-sufficiency” reveals five states’ health centers had self-sufficiency ratios less than 0.65 in 2004. Moreover, 18 states’ health centers had self-sufficiency ratios of more than 0.90. States with high self-sufficiency ratios rely very little, if at all, on federal grants for health center revenue. New York health centers’ self-sufficiency ratio exceeded 1.0, which may be because of efficiencies in place before the state’s imple-

mentation of the Medicaid Prospective Payment System. Only five states had self-sufficiency ratios less than 0.65. The mean state self-sufficiency ratio was 0.83.

The majority of states (27) reported mean net revenues between \$1 million and \$2.5 million in 2004. At the high end of the spectrum, Washington, DC, reported mean net revenue of nearly \$11.2 million. This large net revenue likely stems from very successful capital campaigns, as well as the District government’s creation of the District of Columbia Healthcare Alliance, an insurance system for the uninsured. At the lower end of the spectrum, Maine reported mean net revenue of \$517,000. Mean state net revenue was approximately \$2.55 million, but median state net revenue was lower (approximately \$1.95 million).

Table 5 also displays each state’s median health center net revenue. The broad range of health centers includes some with large net revenues, which may skew the mean. The median values provide a glimpse of the middle of the health center net revenue distribution for each state.

● Discussion

As evidenced by the analyses presented in this article, health centers have continued their long and distinguished history of caring for the nation’s most vulnerable populations. Between 1998 and 2004, increasing numbers of patients who were uninsured, members of minority groups, and living at or below the FPL sought and received care at health centers. Increasing numbers of healthcare professionals, particularly primary care physicians and mid-level providers, worked at health centers between 1998 and 2004. The stability of patient-to-provider ratios for primary care physicians and mid-level providers in this time period indicates that the increase in providers was proportionate to the increase in patients.

Trends in health center financial performance between 1998 and 2004 were primarily positive, but were also indicative of the growing strain of caring for increasing numbers of uninsured patients. Medicaid remained the most important single source of health center revenue in this time period, and Medicaid consistently reimbursed health centers more per patient compared to Medicare, private insurance, and patient self-pay. Federal and nonfederal (ie, state and local) grants, intended to cover health centers’ costs of caring for the uninsured, as well as key enabling services, also continued to comprise a significant portion of health center revenue between 1998 and 2004.

Health centers’ costs related to encounters and personnel climbed steadily between 1998 and 2004. However, health centers became increasingly self-sufficient

TABLE 5 • Health center costs, collections, and self-sufficiency by states, 2004*

State	Grantees, <i>n</i>	Average cost, \$					Self-sufficiency ratio	Net revenue, \$	
		Medical encounters	Medical personnel	Average collections, \$				Mean in thousands	Median in thousands
				Medicaid	Medicare	Private			
Alaska	20	277	255,306	680	329	398	0.58	1,343	439
Alabama	15	101	151,683	335	267	94	0.82	1,663	1,298
Arkansas	10	100	127,305	364	351	94	0.68	1,127	1,006
Arizona	14	116	149,319	471	311	238	0.95	4,872	3,083
California	87	123	178,282	611	473	507	0.83	3,562	1,730
Colorado	15	112	148,998	575	379	503	1.00	8,275	4,654
Connecticut	10	117	152,374	513	413	335	0.99	3,952	2,219
District of Columbia	2	129	106,450	435	565	100	0.77	11,159	11,159
Delaware	3	165	173,455	431	268	422	0.77	1,159	809
Florida	33	104	141,411	409	306	174	0.90	3,868	3,238
Georgia	21	104	153,479	291	329	127	0.92	2,019	1,406
Hawaii	11	170	166,435	635	506	272	0.61	1,529	728
Iowa	8	118	149,409	491	419	234	0.89	2,354	1,674
Idaho	8	104	136,941	534	243	178	0.92	1,974	1,427
Illinois	33	119	154,537	331	253	151	0.84	5,106	1,765
Indiana	13	118	135,714	455	275	108	0.72	2,150	1,182
Kansas	8	94	110,903	276	241	117	0.73	1,056	662
Kentucky	12	89	126,978	452	309	163	0.91	2,817	1,307
Louisiana	17	109	164,485	276	190	154	0.71	718	572
Massachusetts	33	127	144,410	448	455	259	0.87	5,162	3,053
Maryland	13	136	162,198	1429	449	215	0.86	2,256	2,385
Maine	14	105	162,676	488	414	212	0.85	517	358
Michigan	26	101	138,385	412	296	194	0.77	1,489	1,282
Minnesota	12	140	162,576	472	383	195	0.79	1,690	1,244
Missouri	17	117	156,176	473	342	201	0.92	2,973	1,723
Mississippi	22	98	139,125	311	353	165	0.93	2,024	1,660
Montana	12	118	159,746	317	241	119	0.75	850	845
North Carolina	24	98	152,423	377	358	186	0.90	2,139	1,155
North Dakota	4	127	167,076	295	395	233	0.83	1,025	460
Nebraska	5	100	129,783	347	480	171	0.70	866	467
New Hampshire	7	111	136,569	535	317	197	0.75	1,457	702
New Jersey	16	130	177,682	352	258	131	0.97	5,225	3,591
New Mexico	14	134	150,756	421	367	278	0.64	1,953	1,396
Nevada	2	111	284,451	255	158	143	0.96	4,193	4,193
New York	50	119	175,205	611	316	159	1.02	5,639	3,006
Ohio	22	114	147,708	339	341	171	0.76	1,395	884
Oklahoma	7	119	157,972	345	186	144	0.64	682	534
Oregon	18	145	146,172	775	394	2915	0.76	2,686	809
Pennsylvania	29	99	148,402	382	336	149	0.91	1,639	1,067
Rhode Island	7	136	148,130	555	306	151	0.77	1,389	931
South Carolina	21	100	161,435	354	291	130	0.85	2,012	970
South Dakota	7	89	144,496	376	258	200	0.81	977	418
Tennessee	23	95	129,144	321	291	135	0.91	1,293	846
Texas	40	112	139,558	477	332	149	0.85	3,499	1,675
Utah	11	107	148,762	440	250	262	0.90	1,637	1,049
Virginia	21	102	138,230	306	300	175	0.91	1,557	784
Vermont	3	96	143,227	630	452	242	0.81	583	471
Washington	22	119	148,703	778	299	239	0.78	2,458	974
Wisconsin	14	140	185,151	510	403	307	0.92	5,740	916
West Virginia	27	103	136,512	468	361	242	0.95	1,696	899
Wyoming	4	96	280,671	299	230	81	0.65	542	311
Mean	17	118	156,607	460	334	257	0.83	2,548	
Median	14	112	149,319	435	329	178	0.84	1,953	

*From Bureau of Primary Health Care.³

in this time period (ie, less reliant on federal grants, compared to service revenue). Average health center net revenue increased dramatically over the 6 years studied, and operating margins remained small, but primarily positive.

There was wide variation among states in each category of data analyzed for 2004. Tables 2 to 5 provide a useful source of data for assessing how all of the states' health center patients, providers, and financial performance compare.

Financial viability is a key fiscal goal of the health center program. However, health centers' mission of caring for all patients, regardless of ability to pay, means the long-term financial stability of health centers depends on continued support in the form of federal and state grants to cover the costs of the uninsured and ability to maximize revenue streams from various sources.

This study illustrates that Medicaid's consistent reimbursement, commensurate with the costs of health center services, has made it a cornerstone of centers' financial stability. The results of this study indicate that continued federal grant assistance for health centers, supported by the President's Health Centers Initiative, and the Medicaid program play a major role in the effort to sustain health centers and improve access to quality care for vulnerable populations.

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