

Immunization Policies and Funding in New Jersey

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ABOUT NEW JERSEY

New Jersey is a small but populous northeastern state, with 21 counties. Its nearly 8 million people make it ninth in the United States in population. The state is very small in geographic area (46th) but is the nation's most densely populated state. It is also the most urbanized state, although it has no truly large city. The state as a whole is wealthy—the second-wealthiest state in the nation, after Connecticut—with a per capita income of \$33,937, compared to the U.S. average of \$26,412.¹ It has the highest median household income of any state, exceeding Connecticut on this statistic.² Reflective of its relative wealth, fewer New Jersey residents are poor, compared to the nation: approximately 8.7% (700,000) of New Jersey's population in 1995 was below the poverty level, compared to the U.S. average of 13.8 percent.

The state's population quite closely reflects the race and age mix of the rest of the country. Children under age 18 account for more than 36% of New Jersey poor compared to 40% nationally. New Jersey has a slightly higher percentage of minorities than the national average (20% vs. 17.8%). The minority population is slightly younger overall since children represent 8.6% of the minority population in New Jersey. Minorities comprise 24% of New Jersey's population under age 5.³

Despite its wealth, New Jersey also has pockets of extreme need. Approximately a dozen communities in New Jersey, and pockets within these, qualify as "high need." These pockets of need are in the larger urban areas including Newark, Patterson, Trenton, Jersey City, and Camden. These inner cities suffered the highest attack rates during the 1989–1991 measles outbreak.⁴

The state has a diverse economy. Chemical, pharmaceutical, and electronic manufacturing are particularly important (e.g., Merck, AT&T, and Lucent), and growth has been especially strong in the trade and service industries (insurance, financial services). The state remains relatively high in union membership and health insurance coverage. The average unemployment rate over the first six months of 1999 was 4.6%, which mirrors the national average during the same time.

On the vast majority of demographic and health indicators, New Jersey is at or near the national average. The state does have a high level of noncitizen immigrants, 8.8% (the national average is 6.4%) who come from all over the world with no one nationality dominant.⁵ New Jersey ranks sixth nationally with an estimated 135,000 undocumented aliens.⁶

Consistent with national experience, during the past decade there has been a substantial decline in the percentage of the population with health insurance coverage. As of the second quarter of 1997, 16.5% of the New Jersey population was without health insurance, compared to

16.1% nationally; for children under 18, the uninsured rates were 15.1 and 15.0, respectively.⁷ The black population has consistently had a higher uninsured rate than the total population, and the proportion of Hispanics without health insurance has been at least 25%.

New Jersey's measured health risks and outcomes are mainly similar to those for the United States as a whole, aside from the high number of AIDS cases. Although low-birth-weight and infant mortality rates are average, they are much worse among the black population.⁸

Immunization coverage levels in New Jersey are similar to those nationally (see Table 1). Coverage rates for 2-year-olds for four diphtheria–tetanus–pertussis (DTP), three polio, and one measles-containing vaccine (MCV) doses (4-3-1), in New Jersey were 75, 78, 78, and 85% in 1995–1998,^{9,10,11,12} compared to national figures of 76, 78, 78, and 81% for the same 4-year period.¹³ Coverage rates for single antigens are considerably higher in New Jersey and nationally. New Jersey as a whole exceeded the 90% coverage goals for all but one single antigen (DTP 4) in 1997.¹⁴ However, coverage rates in Newark were the second lowest in the nation among urban areas sampled—63, 70, and 66% for 4-3-1 in 1996 to 1998. Retrospective first grade data show a steady increase in coverage levels (4-3-1) as well, from 50% in 1992, before federal monies became available to 78% in both 1996 and 1997 and 85% in 1998.¹⁵ It is noteworthy that both the National Immunization Survey (NIS) and retrospective first grade data show a jump in coverage in 1998, even though they use different samples and represent different cohorts. A New Jersey Immunization Strategic Plan has recently been submitted to help ensure that the year 2000 goals are attained.

TABLE 1. Immunization Coverage Levels
(percent), New Jersey, Newark, and the Nation:
4 DTP, 3 Polio, 1 MCV

	1995	1996	1997	1998
New Jersey	75	78	78	85
Newark	68	63	70	66
National	76	78	78	81

HEALTH CARE ENVIRONMENT

In New Jersey, health issues are the purview of the Department of Health and Senior Services (DHSS), an entity created in 1996 by merging the Department of Health with the Long Term Care Services from the Department of Human Services, Division of Medical Assistance and Health Services. This new department serves to underscore New Jersey's emphasis on health care for older citizens and possibly is a harbinger of a national trend as the baby boom generation ages. The New Jersey DHSS is responsible for traditional public health activities, including disease control and monitoring; licensing and inspection of medical facilities; the Supplemental Food Program for Women, Infants, and Children (WIC); and some health care delivery programs, such as immunizations, maternal and child health, and family planning. The immunization program, which encompasses adult as well as pediatric immunizations, is in the Communicable Disease Service of the Division of Epidemiology, Environmental, and Occupational Health. It is headed by an assistant commissioner who is also the state epidemiologist and reports

directly to the commissioner on some issues and through the senior assistant commissioner on others. The Maternal, Child, and Community Health (MCH) Program is in a parallel division, headed by an assistant commissioner who reports directly to the commissioner of Family Health Services for some issues and through the deputy commissioner for others.

The New Jersey Department of Human Services (DHS) oversees the state-supported insurance programs for low-income children—in both Medicaid and the new Child Health Insurance Program (CHIP)—as well as food stamps, Aid to Families with Dependent Children (AFDC)/Temporary Assistance for Needy Families (TANF), social services, and mental health and mental retardation services. The two departments work collaboratively on health care issues.

Health issues generally have not had a high public profile in New Jersey. Although Medicaid and hospital funding issues always demand policymakers' attention, more general health matters tend to have a lower profile. Taxes and budget balance have dominated policy discussions. New Jersey's health care system, however, does have a history and some distinguishing features that have helped to shape policy decisions. The following are salient features of the health care landscape:

- New Jersey has an unusually strong tradition of home rule and local control as well as an unusually large number of local health departments (LHDs). There are 116 local health departments throughout the state, some of moderate size and some extremely small. Some are so small that they are able to operate their clinics for only half a day a week. Although logic might suggest the need for some consolidation, local control is strong, and consolidation has been successfully resisted.
- Local health departments are financed primarily through local tax dollars, which constitute 67% of their budgets; state officials have limited direct authority over LHD activities. The next largest share of the budget is the approximately \$4.1 million state-appropriated Public Health Priority Funds (PHPF). LHDs apply for these funds, which must be used for state-specified priority areas. However, LHDs receive limited or no state-level programmatic immunization funding, and many do not choose to use the PHFP for immunization-related purposes. Thus, the immunization program and other state programs as well request and monitor actions at the local level, rather than exercising direct control over health services provided attendant with budget share. There are, however, certain state-mandated "minimum standards" that all health departments must meet. In addition, other project standards must be met if the LHD is a recipient of state health service grants or contracts.
- Most health care is delivered by private, office-based physicians. The DHSS estimates that approximately 90% of the immunizations (and thus primary care) are given by private physicians. Local health departments act as a safety net, serving uninsured, underinsured, immigrant, and undocumented children.
- Because of their proximity to the major drug companies and their volume of business, physicians in New Jersey may have been able to negotiate vaccine purchase prices as good or better than the federal rates. It is believed that in the past, the fee-for-service Medicaid reimbursement system allowed some physicians to realize a small profit on purchasing vaccine under Medicaid.

The primary strategy for ensuring that more New Jersey children receive appropriate health care, including immunizations, is through enrollment in New Jersey's state-supported insurance program, called "NJ KidCare." This is a mixed-model program for both Medicaid expansion and

CHIP children, which provides state-supported coverage for up to 350% of the federal poverty level (\$58,450 for a family of four). New Jersey is extremely generous in the extent of coverage and currently is the only state to provide coverage up to 350% of poverty, the maximum allowed by federal law.

New Jersey is not a universal purchase state but has developed a strategy to provide free vaccine for both Medicaid and CHIP children. New Jersey does this by reserving a portion of state funding earmarked for the CHIP program to purchase vaccine for CHIP children. Thus, physicians receive free vaccine for all children in state-supported insurance programs. New Jersey has taken a number of steps to make vaccine policies as seamless as possible from both a patient and a provider point of view for children in state-supported insurance programs, as described further in the next section.

Children who are uninsured or underinsured, including New Jersey's large undocumented community, rely primarily on the safety net clinics. These consist of the well-baby clinics (Child Health Conferences) operated by the 116 LHDs at 175 sites, approximately 12 federally qualified health centers (FQHCs), and hospital pediatric clinics. The small size and limited service of some of the LHD clinics mean that the safety net is also limited and fragmented in some areas.

Because of the extensive coverage through state-supported child health insurance on the one hand and limitations of the safety net services on the other, New Jersey has adopted a policy of encouraging safety net providers to limit their services to those who have no other alternatives and of discouraging private providers from referring insured children to public clinics. For example, the state has drafted a provision into next year's proposed contract with health maintenance organizations (HMOs) that permits LHDs to bill HMOs for immunization services given to Medicaid or NJ KidCare children. The policy of penalizing private providers who refer insured individuals to public facilities is not limited to children but is being extended to adults as well. The state is fostering an agreement between LHDs, HMOs, and Empire (the payer of Medicare HMO claims) that would permit LHDs to bill for adult influenza and pneumococcal immunizations given to Medicare patients. This project was originally intended as a pilot project in three sites but is being proposed for implementation statewide by the fall of 2000.

The very limited DHSS support to LHDs has led to an overall DHSS strategy of offering consultation, medical expertise, technical assistance, and leadership in order to influence actions at the local level. However, as stated earlier, while the state programs can recommend, their ability to require is limited.

1

NJ KidCare—A Mixed Model for Medicaid and CHIP

New Jersey used its new child health insurance dollars to create "NJ KidCare," a four-tiered mixed model that includes an expansion of Medicaid as well as CHIP. The entire NJ KidCare program is operated by DHS, with collaboration from DHSS. NJ KidCare is funded through a combination of federal and state funds, with a ratio of 65% (federal) to 35% (state). NJ KidCare Plan A is New Jersey's Medicaid expansion and covers children up to 133% of the federal poverty level (FPL). New funds were used to expand Medicaid so that it now covers children up to age 19 (previously, only children up to age 6 within the federal poverty guidelines were covered). NJ KidCare Plans B, C and D are the New Jersey CHIP program and cover children from 133 to 350% FPL, as follows:

- NJ KidCare Plan A: up to 133% FPL (Medicaid),
- NJ KidCare Plan B: 134–150% FPL (CHIP),

- NJ KidCare Plan C: 151–200% FPL (CHIP), and
- NJ KidCare Plan D: 201–350% FPL (CHIP).

New Jersey has designed the NJ KidCare program to be as seamless as possible from both the provider's and the patient's point of view. At the physician level, vaccine reimbursement policy is the same for all children, whether they are Medicaid children in Plan A or CHIP children in Plans B, C, and D. Medicaid children in Plan A receive vaccines through the Vaccines for Children (VFC) program. The state uses a portion of the state funds allocated to the CHIP program to purchase vaccine at the Centers for Disease Control and Prevention (CDC) contract price and distribute it to physicians for children in Plans B, C, and D. Thus, physicians receive vaccines up front for all children in state-supported insurance programs. They also receive an \$11.50 administration fee, which is calculated into the HMO capitation rate paid by the state to HMOs.

Further, the health care service package is the same for Plans A, B, and C and is the basic Medicaid Early Periodic Screening, Diagnosis and Treatment (EPSDT) package. However, although children in Plans A through C receive the same health care package, children in Plans B and C do not receive the total set of wraparound services (e.g., livery service) that children in Plan A do. The health service package in Plan D is patterned after that in the most popular commercial insurance plan. Children enrolled in Plans A and B do not pay at all. There is a monthly premium of \$15 per family and copayments for Plan C; there is a sliding-scale payment system for Plan D and copayment for some covered services.

Managed care is mandatory for all children in Medicaid and all of NJ KidCare (with exceptions only for children with special needs and disabilities), resulting in an estimated 90% managed care penetration rate. The state contracts with 6 HMOs (down from 13 one year ago) to provide services. The reduction in plans came about for a variety of reasons: some went out of business, and some consolidated. The state would rather monitor and oversee fewer managed care organizations (MCOs) and sees regulating 6 well-established MCOs as preferable to regulating 13. Two of these serve Medicaid or CHIP children only; two serve primarily Medicaid or CHIP children, along with a few children covered by commercial insurance; and two have a more balanced mixture of Medicaid or CHIP and commercially covered children. According to program administrators, there was some physician resistance to contracting with managed care plans, especially in the beginning, but now despite the resistance, all six MCOs have extensive physician networks, in part because participation in managed care is the only avenue by which physicians can see Medicaid children.

The state pays HMOs a standard capitation rate, but HMOs may contract different rates with their physicians. The VFC administration fee, which in New Jersey is \$11.50, is included in HMO capitation. Medicaid administration arrived at \$11.50 through an algorithm that allowed the new fee to be cost neutral to the New Jersey Medicaid program. The state has encouraged HMOs to pass on this separate administration fee to physicians, and all six have followed this suggestion. Physicians receive the administration fee after they have immunized the child.

The HMOs monitor immunization rates and report them to the state as part of their Health Plan Employer Data and Information Set (HEDIS) requirements. The state, in turn creates report cards from these data, which are distributed in hard copy and on the state website. The New Jersey HMO average for commercial enrollees attaining 4-3-1 by 24 months of age was 57% for 1996 and 63% for 1997.¹⁶ This number is considerably lower than the NIS figures and may indicate that HMOs do not have access to complete data for children in their care. HMOs have not

released their coverage rates for Medicaid enrollees yet, but expect to do so soon. They claim that coverage rates are higher for Medicaid than for commercial enrollees. This may reflect the fact that providers need to report immunizations to receive their \$11.50 administration fee; thus, HMOs may have more complete administrative data for this population.

For the last 12 months, New Jersey has mounted aggressive outreach efforts to find and enroll eligible children in NJ KidCare. Table 2 shows the status of the effort, as of November, 1999.

TABLE 2. Enrollment in NJ KidCare as of November 1999*

NJ KidCare	FPL (%)	Number of Children Enrolled in Each Plan	Number of Eligible, Uninsured Children
Plan A Medicaid	<133	23,811	43,657
Plan B	134–150	5,550	15,460
Plan C	151–200	16,499	36,662
Plan D	201–350	3,192	62,937

*Plan D only became effective on September 1, 1999. Future growth expected.

Along with an increase in enrollment in NJ KidCare, New Jersey has seen a decline in children evaluated in the safety net institutions. MCH estimates that the number of children seen in its clinics dropped from approximately 77,000 in 1994 to 53,000 in 1998. At the same time, the number of public clinics available dropped from approximately 215 sites in 1994 to 175 in 1998. Most children who continue to use public clinics are uninsured or underinsured and truly in need of the safety net.

1 Department of Health and Senior Services Immunization Efforts

New Jersey DHSS activities include operation of the immunization program, MCH and WIC, support for local health departments, and several special initiatives. There are immunization activities in all programs, as described below, and program managers report high levels of cooperation in developing immunization initiatives.

New Jersey Immunization Program

New Jersey's state immunization program is supported through federal Section 317 and VFC funds as well as through state funding. Table 3 shows spending from various state sources from 1992 through 1999. The state has contributed to vaccine purchase (\$20,000 per year) as well as operating expenses. The total state operating expense grew significantly from \$125,000 in 1992 to \$1,107,267 in 1999. State appropriations for New Jersey Health Care Information Networks and Technologies (NJ HINT), cost-of-living adjustments (COLAs), FQHC support, and aid to LHDs through the PHPF are expected to continue at approximately the same levels in 2000, whereas state funding for WIC under Family Health Services is not expected to continue.

TABLE 3. State Source Spending

Spending	1992	1993	1994	1995	1996	1997	1998	1999
Vaccine purchases	20,000	20,000	20,000	20,000	20,000	20,000	20,000	N/A
Personnel expenses	20,000	25,000	31,256	19,218	19,257	24,131	47,209	40,267
Contracted expenses— NJ HINT	0	0	0	0	0	0	0	125,000
Aid to county or city funding (PHPF)	100,000	100,000	100,000	100,000	113,000	108,000	308,895	150,000
Other contracts or grants								
State COLAs to local health departments	0	0	0	0	0	0	73,000	246,000
FQHC support	N/A	N/A	N/A	350,000	350,000	350,000	275,000	205,000
Family Health Services— WIC	0	0	0	0	0	0	250,000	340,000
Other operating expenses	5,000	5,000	5,000	27,853	10,000	6,000	6,000	1,000
Equipment or capital outlay	0	0	0	5,000	0	0	0	0
Total, excluding vaccine purchases	125,000	130,000	136,256	502,071	492,257	488,131	960,104	1,107,267

NOTE: All years are calendar years; N/A = not available.

Section 317 Funds Spent and Carried Over

Figure 1 shows Section 317 financial assistance (FA) funds spent and carried over between 1990 and 1998. As shown in this figure, spending rose between 1990 and 1997, reaching a peak of \$7.159 million in 1997. New Jersey carried over large portions of its Section 317 FA funds for all years between 1990 and 1996; in two of these years the amount carried over exceeded the amount spent. By the end of 1997 the bulk of the funds carried forward from previous years had been spent, programs were in place, and funds carried over dropped by 75%.

Funding for Infrastructure

Infrastructure funding in New Jersey comes from three sources: Section 317 Immunization Action Plan (IAP) FA, operations (the basic 317 FA grant), and VFC FA funding. Table 4 shows the level of award from each of these sources for calendar years 1995 to 1999; figures before 1995 are not available. Total awards for infrastructure funding decreased from more than \$11 million in 1995 to \$4.7 million in 1999. Both 317 IAP or infrastructure funds and basic 317 grant awards were lower in 1999 than in previous years, and both show a substantial decline from their peak years. It should be noted that there are discrepancies between the 317 FA funds awarded for infrastructure shown in Table 4 and funds spent and carried forward on Figure 1. Funds spent in a given year can come from funds awarded in the prior two years as well as from the current award.

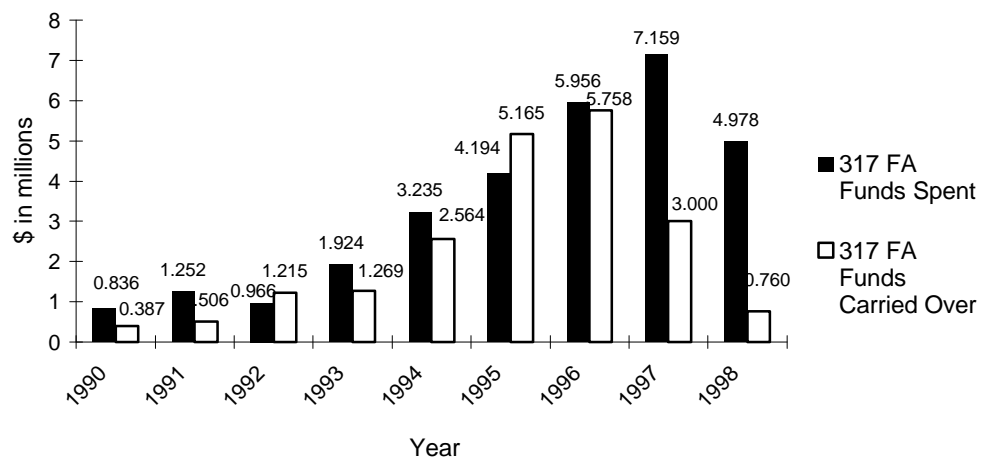


FIGURE 1. Comparison of Section 317 FA funds spent and carried over.

TABLE 4. Immunization Funding Summary for Infrastructure—Funds Awarded

	1995	1996	1997	1998	1999
Section 317 infrastructure (IAP)	4,523,688	7,218,351	7,549,920	2,998,671	1,232,000
Operations (basic 317 grant)	5,167,714	2,966,303	1,958,133	1,722,722	1,846,800
VFC FA	1,642,003	1,529,199	851,829	3,495,387	1,605,050
Other infrastructure	0	0	0	0	0
Total	11,333,405	11,713,853	10,359,882	8,216,780	4,683,850

NOTE: All years are calendar years.

Priorities for Federal Section 317 Funding and Effect of Funding Cuts

Upwards of \$1.4 million of the Section 317 expenditures were used to support state-level program staff and their operations from 1996 to 1999. Before the funding cuts, the priority areas were assessment and vaccination services in AFDC and WIC sites, special services in Newark and other pockets of need, the FQHC “Together for Tots” initiative, and the New Jersey Immunization Information System (NJIIS). Table 5 shows the way in which 317 funds were spent from 1996 through 1999 and illustrates the areas that received cuts. New Jersey DHSS budget analysts developed these figures to illustrate the impact of funding cuts and have numbers like these only for 1996–1999.

Table 5. Immunization Program CDC Budget—Financial Assistance

Category	Dollars Expended 1996	Dollars Expended 1997	Dollars Expended 1998	Dollars Awarded 1999
BASIC—Section 317				
DHSS staff and operations	1,494,555	1,459,895	1,485,961	1,896,800
Contractual	4,368,256	5,622,298	2,940,764	1,232,000
Registry	957,240	1,431,429	302,636	500,000
WIC	656,242	1,071,724	413,148	291,000
Media campaign	0	203,785	0	0
Newark LHD	315,455	473,025	365,958	375,000
Other LHD	1,082,579	731,927	575,388	0
FQHC	212,548	218,360	218,360	0
AFDC/TANF	851,624	1,166,231	632,305	0
Other	292,568	325,817	432,969	66,000
Subtotal Section 317	5,862,811	7,082,193	4,426,725	3,128,800

NOTE: All years are calendar years.

Funding services in AFDC (now TANF) sites has been a focus since 1991 when the first on-site immunization clinic was funded in an AFDC site in Jersey City, with funds from the CDC. This effort was expanded gradually even before the influx of Section 317 funding, and when 317 monies became available, the expansion was accelerated. Carryover funds were also used for this effort, and by 1995 there were 10 AFDC centers with on-site immunization services. During 1998, approximately 13,000 children were vaccinated at these clinics. These activities were reduced by half in 1998 to absorb the first wave of cuts and then were eliminated in 1999.

WIC had been a priority area as well, and 317 monies were used to fund nurses to immunize in several WIC clinics, as well as data entry of immunizations into the WIC immunization database. Support to WIC centers has been reduced by half.

Development of the New Jersey Immunization Information System was funded through support from the Robert Wood Johnson Foundation, with a pilot registry project in the Camden area. The state took over NJIIS operations at the end of the grant period, June 1997. At that time, the NJIIS moved from the local pilot registry to statewide deployment. The immunization registry requires an annual operating budget of approximately \$1 million. It is funded now with carryover monies. If Section 317 funds remain level and carryover funds run out, the state will need to further reduce funds to WIC immunization sites and to Newark in order to support the registry at the level required. Summary of registry funding from various sources is presented in Table 6.

The activities that were curtailed as a consequence of funding reductions flowed from the evolving strategy for health delivery. In general the New Jersey Department of Health and Senior Services had been moving away from direct services into a leadership, technical assistance, or enabling role. At the same time, the funding for insurance for children was increasing, and the focus was on getting as many children as possible covered through NJ KidCare and monitoring them to see that they received appropriate care in their “medical homes”. Thus, the activities that were cut were those that involved immunizing outside the medical home as well as special service projects in urban areas other than Newark. Cuts were made in support for AFDC/TANF on-site immunization clinics, on-site immunization services in WIC, public or parental education,

special services in FQHCs, and all special pocket-of-need projects, except for the project in Newark.

With these cuts comes an emphasis on using Section 317 funds only for safety net services and a need to restrict services under 317 to uninsured, underinsured, undocumented, or other children not covered with other forms of insurance. As one staff person put it, “317 vaccines need to go into 317 arms.” The immunization registry also became a key component of the state role.

TABLE 6. Registry Expenditures

	1993	1994	1995	1996	1997	1998	1999
FA funds spent on registry	50,000	150,000	222,759	1,579,428	2,298,433	864,157	853,474
State HINT	0	0	0	0	0	0	250,000
State COLAs	0	0	0	0	0	23,813	110,000
State	N/A	N/A	N/A	N/A	N/A	49,769	0
R.W. Johnson Foundation	0	1,000,000	1,000,000	1,000,000	0	0	0
Total	50,000	1,150,000	1,222,759	2,579,428	2,298,433	937,739	1,213,474

NOTE: All years are calendar years; N/A = not available.

The Federal Vaccines for Children Program

Physician Participation. New Jersey was the last state to implement the VFC program in the private sector: it was finally rolled out in New Jersey in January 1999, more than four full years after enactment of the federal program in October 1994, amid resistance from private physicians. The reasons cited for this resistance are varied. They include factors present in many states—for example, complaints about paperwork under VFC—but some are peculiar to New Jersey. As stated earlier, it is widely believed that physicians were able to negotiate favorable rates for volume vaccine purchases and that under a fee-for-service vaccine cost reimbursement system, they were actually profiting from immunizations. Apparently, if private physicians had sufficiently large practices they could negotiate directly with drug manufacturers and receive favorable rates. This allowed them to realize a small profit when they received reimbursement from Medicaid for vaccine costs, plus a 15% incentive fee and a \$2.00–\$2.50 administrative fee. This profit was lost when they received “free” vaccine. Also, in New Jersey, managed care for Medicaid and CHIP was implemented in a similar time frame as VFC, and some believe that the general resistance to managed care carried over to VFC. However, physician resistance was not the only reason for the delay in implementing VFC; problems in developing and bidding contracts for warehousing and distributing and for ordering and accountability vendors also contributed to slow implementation.

Although New Jersey’s private physicians were initially resistant to participating in VFC, approximately 1,500 physicians in 744 sites were enrolled nine months after its introduction. Enrollment continues to increase by approximately 10 new physicians per week. Projections of total physician enrollment put target numbers between 1,500 and 2,000 private physicians; thus, the enrollment targets are close to being met.

As shown in Table 7, 280 public sites have been part of the VFC program since 1995. The number of public sites receiving vaccine dropped in 1999 when private providers began receiving vaccine, because entities that were considered public—such as FQHCs and hospital pediatric clinics—were counted as private in 1999. The 744 private sector sites receiving vaccine shipments served approximately 389,469 children from birth to 18 years of age. By comparison, the 133 public sector sites receiving vaccine served just 38,903 children from birth to 18 years, or 10% of the number served by the private sector.

TABLE 7. Number of VFC Provider Sites in New Jersey, 1995–1999

	1995	1996	1997	1998	1999
Public	280	280	280	250	133
Private	0	0	0	0	744*

*Number of private physician sites enrolled nine months after phase-in (represents 1,515 doctors).

Vaccine Administration Fee and Vaccine Reimbursement Policies. Prior to VFC, physicians purchased vaccine often at privately negotiated and favorable rates, as mentioned earlier. They were reimbursed by Medicaid for the average wholesale cost of vaccine and, in addition, were given an “incentive fee” amounting to 15% of the vaccine cost and an administration fee that ranged from \$2.00 to \$2.50 per dose given. After VFC, physicians received vaccine up front at no cost to them and also received an administration fee of \$11.50. Under the NJ KidCare program, the administration fee is part of the capitation rate paid by the state to HMOs. HMOs theoretically are free to pass it on to physicians or not. However, they have received strong encouragement from the state to pass the fee on, and now all six do. The state actively discourages HMOs from referring children to public clinics for vaccination. Next year’s proposed contract between the state and HMOs, which is currently under review and not yet approved, would permit LHDs to bill HMOs for immunizations given to their Medicaid managed care children in public clinics if those children were referred by the HMO or Medicaid HMO participating physician.

New Jersey has designed the NJ KidCare program so that at the physician level, vaccination reimbursement policy is identical for all children, whether they be Medicaid children in Plan A or CHIP children in Plans B, C, and D. The state did this by spending a portion of its federal–state CHIP funds to purchase and distribute vaccine to physicians. Thus, physicians receive free vaccine up front for all Medicaid and NJ KidCare children, as well as the administration fee of \$11.50 passed through by HMOs.

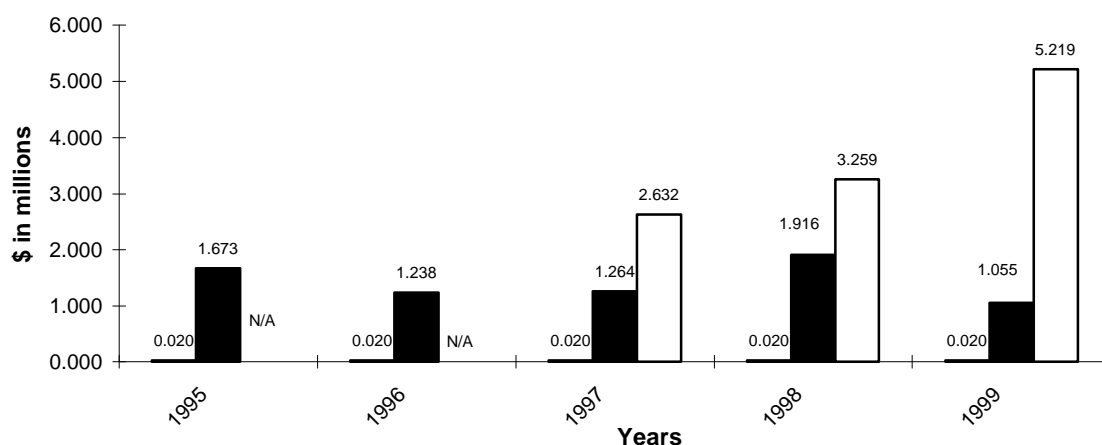


FIGURE 2. Expenditures for publicly purchased vaccines, 1995–1999.

Expenditures for Publicly Purchased Vaccines

Figure 2 shows the expenditures for publicly purchased vaccines from 1995 to 1999. State source spending for vaccines stayed level at \$20,000 for the five years and represents 1% or less of total expenditures in each of these years. The state used these funds to purchase hepatitis B (Hep B) and some flu and pneumococcal vaccines. Hep B vaccines were targeted primarily to those households with newborns who were born to HbsAG-positive mothers. Pneumococcal vaccines were used to help LHDs who ran out and especially to help with increased demand in areas where the governor promoted flu vaccines. The major source of funds for vaccine purchase is the federal VFC direct assistance (DA) program. These increased from \$2.6 million in 1997 to \$5.2 million in 1999 and represented a full 83% of the total expenditures in 1999. Federal Section 317 DA funds represent the next largest share of expenditures in most years and contributed 17% in 1999.

Children Receiving Publicly Purchased Vaccines by Eligibility Category

In 1999, 422,856 children less than 18 years received publicly purchased vaccine. Figure 3 shows the fraction of these 422,356 children by VFC eligibility categories. Medicaid children account for the largest fraction (75%), followed by uninsured children (18%), non-VFC children such as 317 or state source (6%), and all others (<1%).

Vaccines for Children—Financial Assistance

New Jersey expenditures for VFC FA increased steadily from 1996 to 1998 and then increased dramatically in 1999, reflecting the fact that contracts with warehousing and distribution and ordering and accounting vendors were finalized that year. These contracts paved the way for the participation of private physicians, which also was initiated in 1999. The bulk of funds awarded could not be spent until contracts were in place and physicians enrolled—hence the discrepancy between funds awarded (Table 4) and spent (Table 8).

TABLE 8. Expenditure of Federal Vaccines for Children FA Fund, 1996–1999

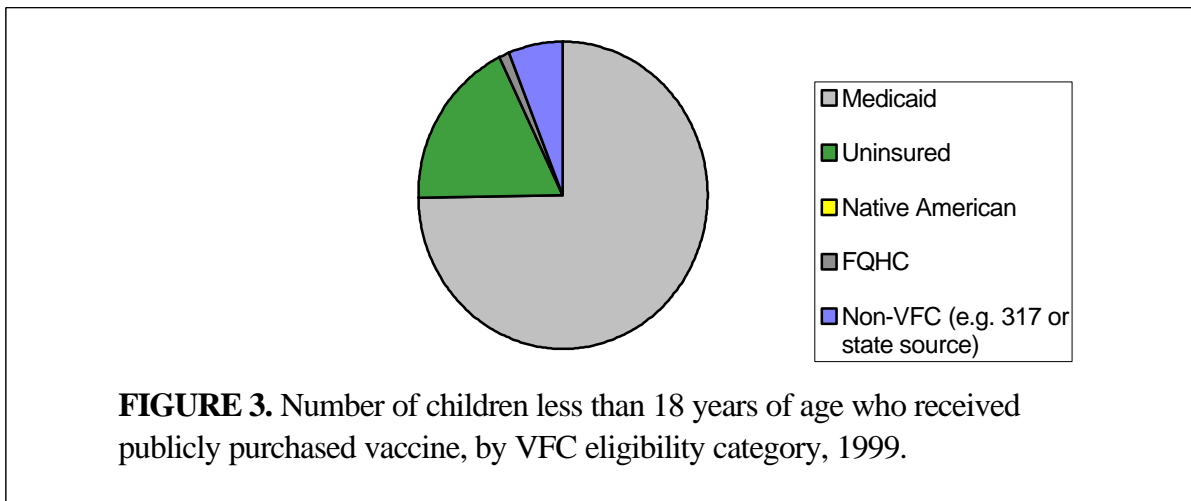
Category	Dollars Expended 1996	Dollars Expended 1997	Dollars Expended 1998	Dollars Awarded 1999
DHSS staff and operations	93,199	132,402	169,041	178,461
Contractual				
Warehousing and Distribution	0	0	216,000	324,000
Ordering and Accounting			75,000	700,000
Subtotal—VFC	93,199	132,402	460,041	1,202,461

NOTE: All years are calendar years.

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Adult Immunization

The importance that New Jersey places on health services for older adults is underscored by the fact that they are overseen by Department of Health and Senior Services. The emphasis that New Jersey places on older-adult immunizations is also indicated by the fact that hospitals and



nursing homes are now under mandate to offer influenza and pneumococcal vaccines to their in-patients. New Jersey is one of three states with such a mandate for nursing homes and the first to issue a mandate for hospitals. In fact, the hospital mandate only went into effect on November 15, 1999.

Consistent with the general operating strategy, the DHSS offers leadership and technical assistance but minimal direct funding support for adult immunization activities. Rather, direct support activities are funded for uninsured adults through HMOs and the fee-for-service Medicare program and for uninsured adults through local health departments. DHSS has, however, made it possible for LHDs to purchase influenza and pneumococcal vaccines under the state’s contract at rates almost as favorable as the federal rates. In addition, approximately \$97,000 of state-appropriated Health Care Priority Funds were provided to LHDs for older-adult immunization activities in 1999; this represented approximately 65% of the total award.

Medicare claims data from 1997 indicate that 30% of flu shots were given in public health clinics. (In the 1998–1999 flu season, LHDs dispensed 150,000 doses of flu and 25,000 doses of pneumococcal vaccines.) The remaining immunizations were given by private providers (63%), hospitals (0.2%), home health agencies (4%), and skilled nursing facilities (2%).¹⁷ Immunization coverage rates for both flu and pneumococcal vaccines were lower in New Jersey in 1997 than in the United States as a whole. (Behavioral Risk Factor Surveillance System data show coverage rates for flu vaccine of 61 and 66% for New Jersey and the United States, respectively, and for pneumococcal vaccine of 34 and 45%, respectively. Medicaid claims data show coverage rates for New Jersey approximately 20 percentage points lower than the nation for flu and 10 percentage points lower for pneumococcal vaccination.¹⁸)

Because public funds are limited, there is an effort to ensure that individuals getting immunized at local health departments are the ones who truly need the safety net services as well as a corresponding effort to encourage immunizing in the medical home, so that the state does not pay twice—once to the provider in the capitation payment and again to the public clinic. As part of this effort, the state expects to have in place by the fall of 2000 an agreement enabling local health departments to bill HMOs for immunizations given to their members.

The state exerts leadership through such activities as the “Flu and Pneu campaign,” which promotes simultaneous pneumococcal vaccination of adults 65 years and over during annual flu immunization campaigns carried on by Visiting Nurse Associations (VNAs) and local health departments. Leadership activities also include participating in a statewide Partnership for Prevention Coalition with many medical, insurance, university, business, and other entities concerned about raising the immunization status and overall health of seniors. There has been special participation on steering committees or work projects with local health departments, VNAs, other intra-agency divisions, and the New Jersey Peer Review Organization (PRO). In 1999, the state began to develop a Statewide Influenza Pandemic Strategic Plan. Monitoring is also an important part of leadership. The New Jersey Peer Review Organization (PRO) has performed AFIX (Assessment, Feedback, Incentives, eXchange) assessments of 450 physicians in six South Jersey counties using Medicare claims for flu and pneumococcal vaccines.

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Maternal and Child Health Programs

The Maternal, Child, and Community Health Program administers programs funded through Title V MCH block grants, as well as the WIC food supplement program. The MCH program has used Title V funds for an early-childhood program and for a school and adolescent program. Like other parts of the New Jersey state-level health care enterprise, the MCH program had adopted a strategy of assistance rather than direct support. Approximately five years ago, MCH began the transition from delivering direct services to delivering “enabling services,” and at present, there is no MCH direct financial support for clinics. Instead, the MCH program seeks to improve the health of mothers and children through such enabling services as consultation or technical assistance and targeted projects in areas of need. The MCH program provides consultative services to local health departments for “child health conferences,” or CHCs, the name given to their well-baby clinics.

The number of insured children seen in CHCs is declining with the growth in NJ KidCare enrollment, from approximately 77,000 in 1994 to 53,568 in 1998, and most of them are uninsured, underinsured, or undocumented children who are truly in need of safety net services.

Targeted MCH direct support comes from the \$1 million for enabling services through the Preventive Oriented Services for Child Health (PORSCH) program to ensure access to primary

care for high-need children. Currently there are funded programs in high-need communities, including the urban areas of Plainfield, Camden, Trenton, Irvington, Paterson, and Jersey City. A separate program in Newark presently focuses exclusively on lead-poisoning prevention because Newark accounts for more than 40% of the cases of lead poisoning statewide. Other PORSCH grants are directed to needy children in Burlington, Middlesex, Warren, Gloucester, and Monmouth counties.

The MCH program also administers a project to reimburse outpatient charity care encounters in eligible FQHCs. There are 11 such FQHCs in medically underserved, high-need areas. Funds for this program come from the New Jersey Health Care Subsidy Fund. Last year, \$8.5 million was spent on such outpatient charity care visits, approximately \$1.2 million of which went for pediatric primary care, specialty care, and dental visits.

WIC

The MCH program also administers the WIC program. Grants are awarded to 18 local WIC agencies, who in turn operate at 150 locations where WIC services are provided. WIC workers are trained to assess immunization histories for up-to-date status. Before the funding cuts in 1998, Section 317 funds supported nurses who administered immunizations at several WIC sites and provided funds to support clerical and professional staff in local WIC agencies. Some nurses were funded in 1999 with MCH block grant funds to provide a transition, after which time the on-site immunization nurses will no longer be funded. However, local WIC nutritionists and staff will still assess immunization status and refer children who are not up-to-date to a health care provider (medical home, if possible).

The WIC program has implemented its own immunization database, which includes approximately 130,000 records; Section 317 funds had been supporting data collectors to enter immunizations from the personal immunization card into the WIC database, and this is still occurring to some extent. The long-term plan is to have the WIC database and the NJIIS registry exchange data. At this point, a two-way exchange is not occurring, although one-way transfer from the WIC database to the NJIIS was expected to begin in January 2000. Some officials in the DHSS believe that it would be more appropriate and efficient to maintain one registry only, and the one registry would be the NJIIS. The WIC database would upload data to the NJIIS, and WIC workers would be able to query the NJIIS registry about a child's immunization record for their assessment and referral. Individuals who espouse this view often point out that the goal is to have children served in their medical homes and to have the providers who are responsible for their immunizations report them to the NJIIS registry and use the registry for management purposes.

MONITORING IMMUNIZATION RATES

Immunization rates are monitored in several ways. First, the state conducts retrospective first grade surveys in approximately 35 schools statewide according to previously established CDC standard methodology. In addition, the state encourages LHDs to conduct retrospective surveys in grade one while LHD officials are in the schools auditing records for compliance with school entry immunization regulations. State officials stress that although this activity is strictly voluntary on the part of LHDs, almost half of the LHDs participate to some extent. Last year, 276 schools were surveyed in 13 of the 21 counties. In addition, the Immunization Program con-

ducted Clinical Assessment Software Application (CASA) assessments in 63 private physician offices between June and December 1998 as part of a statewide building-blocks program in partnership with the state American Academy of Pediatrics (AAP) and American Academy of Family Physicians (AAFP), and found the 4-3-1 rate to be 82%. Funding from some of the major drug companies and the AAP has supported the Partners to Immunize Newark's Kids or "PINK" program, which conducts AFIX assessments at baseline and six months later in Newark private physicians' offices, where 49 physicians have received initial assessments with a composite 4-3-1 completion rate of 50%.

Finally, immunizations are key outcome variables, stressed by HMOs in their monitoring and by MCH, WIC, and Medicaid EPSDT as well. HMOs are required to assess and report to the state the coverage levels for their 2-year-old populations as part of the HEDIS reporting requirements. The HEDIS Report Card published in 1998 revealed a commercial pediatric patient coverage rate of 63% for 4-3-1.

New Jersey monitors the performance of managed care plans, publishing an annual report card beginning in 1997 that includes specific measures of a plan's success in delivering preventive and primary care. For example, the state looks at the percentage of children up to 2 years of age who have received appropriate immunizations, as well as breast and cervical cancer screenings for women and eye care screenings for diabetics. Over time, health care plans are expected to improve areas of weakness identified in the report cards.

CONCLUDING COMMENTS

New Jersey health care policies for low-income children are moving in the same direction as most states in the nation: toward expanding insurance coverage and encouraging provision of services in a medical home. Also, like many other states, New Jersey is funneling public insurance funds through HMOs and mandating enrollment in managed care for almost all (95%) recipients. Managed care companies are then responsible for the quality of care, including provision of immunizations, with the state monitoring the performance of MCOs.

Thus, the degree to which New Jersey's poor children are immunized depends in large measure on how well the outreach and enrollment campaigns work and how well HMOs monitor quality. In New Jersey the HMOs emphasize, promote, monitor, and report immunizations, all of which are likely to have a positive impact on immunization rates. However, HMOs focus on immunization rates for their HEDIS sample, which represents children continuously enrolled for a year. Other children might fall through the cracks.

The degree to which uninsured or underinsured children are immunized then depends on the quality of the safety net. Reductions in Section 317 funding have a direct bearing on this. The first reductions were in immunization services outside the direct health care system—in AFDC and WIC sites—but further reductions impacted funds directed to safety net services in pockets of need. In light of the reductions in federal 317 funds and limited state funds, the DHSS strategy of involvement through leadership, technical assistance, and encouragement makes sense. The ultimate impact of the shifts in funding strategy remain to be seen.

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The opinions expressed are the authors,' as are any omissions or errors.

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