



New Hampshire Vaccine Association A 10-Year Review

When Jonas Salk's polio vaccine was introduced to the public in 1955, Americans feared polio almost as much as the atomic bomb. On average, polio was killing about 17,000 people a year and paralyzing another 37,000.¹ Since then the disease has virtually disappeared in the U.S., as have at least two other killers, smallpox and diphtheria. Indeed, the Centers for Disease Control and Prevention (CDC) currently lists 28 vaccine-preventable diseases, many of which have been eliminated or nearly eliminated through rigorous childhood immunization programs.²

Here in New Hampshire, the picture is particularly rosy. In 2011, childhood immunization in the state was ranked #2 by the CDC's National Immunization Program. While immunization statistics vary from one reporting agency to another, the favorable trend in NH is clear: according to one national analyst, New Hampshire's childhood immunization rate stood at 95.7 percent in September 2012, higher than the national average and up meaningfully from 77.6 percent a decade earlier.³

Universal Purchase of Childhood Vaccines

There are several factors contributing to New Hampshire's ability to immunize so many of the state's children, but arguably none is more important than the availability of childhood vaccines through the state's universal purchase system. New Hampshire is one of eight states (and two territories) with universal purchase policies for all childhood vaccines recommended by the CDC's Advisory Committee on Immunization Practices (ACIP). This means that⁴:

- The state buys enough of the recommended vaccine dosages each year to immunize every child in the state, from birth through age 18, regardless of the child's income or insurance coverage.
- The state distributes the vaccines to health care providers at no cost.
- No one is billed for the vaccines.

¹ Centers for Disease Control and Prevention, Department of Health and Human Services, "Your Baby's First Vaccines: What You Need to Know," September 18, 2008.

² Centers for Disease Control and Prevention web site, "[Vaccines & Preventable Diseases](#)," accessed September 2012.

³ Reported on the America's Health Rankings [web site](#) and accessed September 2012. Immunization coverage is measured as the average percentage of children ages 19 to 35 months who have received these individual vaccinations: four or more doses of DTP, three or more doses of poliovirus vaccine, one or more doses of any measles-containing vaccine, and three or more doses of HepB vaccine.

⁴ National Conference of State Legislatures, reported on six states in the "[Issues & Research](#)" section of the NCSL web site, April 2012. Accessed September 2012. Those six states (New Hampshire, New Mexico, Rhode Island, Vermont, Wisconsin, Wyoming), American Samoa, and the Northern Marianas Islands were listed as having universal purchase programs. In addition, the states of Washington and Maine, after reviewing the success of New Hampshire's program, have recently established universal purchase programs funded by payer assessments to cover privately-insured children.

Few public or private health care professionals would argue the value of universal purchase. Simply put, it is one of those programs that seems to benefit everyone. In addition to ensuring a single standard of immunization care for all children, universal purchase provides the following benefits to health care constituencies:

<i>for FAMILIES</i>	<i>for PROVIDERS</i>	<i>for PUBLIC HEALTH</i>	<i>for PAYERS</i>
Removes the cost barrier from vaccination decisions	Supplies vaccines at no charge	Reduces the risk of certain communicable diseases	Offers vaccines at favorable rates
Eliminates vaccine-preventable diseases	Eliminates significant cash outlay required for private purchase	Streamlines vaccine management and quality assurance	Reduces claims for diseases that could have been prevented
Enables children to be vaccinated by their own pediatrician or health care provider	Avoids separate storage of privately purchased and federally funded vaccines	Ensures access to vaccines in children's medical homes	Preserves an efficient purchase and distribution system

Yet, as with so many worthy programs, universal purchase requires funding — either from state or federal governments, the insurance industry, or some combination of all three. Across the country, federal money pays for the states' uninsured and Medicaid-eligible children who qualify for the Vaccines for Children (VFC) entitlement program. That leaves privately insured children, the largest segment of children in New Hampshire.

Although universal purchase funding models differ, in states like NH payers for private health benefits fund vaccines for their states' privately insured children in universal purchase states vaccines for the fully insured usually are purchased under the federal contract, saving payers both direct and indirect costs. In 2011, for example, the federal contract prices for ACIP-recommended childhood vaccines averaged 33 percent less per dosage than if the vaccines had been bought through private sources.⁵ In addition to the payers' savings, lower vaccine costs can ultimately benefit everyone who pays premiums for medical coverage, including consumers, businesses, and government organizations.⁶

The New Hampshire Vaccine Association

New Hampshire was one of the first states to establish a universal purchase system to fund vaccines for all the state's children. In 1991, an insurers' fund was created to pay for childhood vaccines not covered by federal and state funds. Initially, health insurance carriers doing business in New Hampshire made voluntary contributions to preserve universal purchase, but not

⁵ Based on August 2012 research conducted by Peter M. Smith, financial analyst for KidsVax.org™, which handles all administration for the New Hampshire Vaccine Association. Yearly savings are derived from the average discount percentage for all vaccines based on an equal number of dosages being administered to children across all vaccines. However, since the CDC discounts individual vaccines at different rates, the discount percentage actually varies based on the number of dosages administered in a given period.

⁶ Both New Hampshire and the new federal health care law take actual medical costs into account when regulating insurance premiums.

all paid their proportionate share. To right the imbalance, leaders from New Hampshire's Insurance Department, Department of Health and Human Services (DHHS), and other private and public health care entities eventually worked with state legislators to stabilize funding by broadening the payer base to make it more equitable.

In June 2002, thanks to strong bipartisan support, the New Hampshire legislature enacted Revised Statutes Annotated (RSA) Chapter 126-Q. The statute gave birth to the New Hampshire Vaccine Association, an independent, nonprofit organization whose sole purpose was (and still is) to collect annual assessments from licensed health insurance carriers and remit those funds to the state, thereby giving all the state's children, including the privately insured, access to the same standard of immunization care.

The Funding Model: Among the funding models for universal purchase, New Hampshire's is one of the simplest. The design is based on the concept of *covered lives* used by the New Hampshire Health Plan (NHHP),⁷ the nonprofit high risk pool that, under state statute RSA 404-G, provides health coverage to state residents who might otherwise have trouble getting insurance. Similarly, RSA 126-Q mandates that the New Hampshire Vaccine Association assess licensed insurance carriers in proportion to the number of individual lives each one covers, as reported annually to the NHHP. By basing assessments on covered lives, RSA 126-Q has avoided the added cost of a second assessment mechanism and separate reporting requirements.

In addition, the Vaccine Association collects funds from the same group of insurers as the NHHP, specifically "all licensed insurance carriers currently writing or maintaining health insurance in New Hampshire,"⁸ including those in the individual health, group health, and stop-loss insurance markets. The legal definition does not, however, directly apply to self-insured organizations or third-party administrators (TPAs).

As for the assessment formula itself, the annual amount that each licensed insurance carrier contributes is calculated as follows:

$$\frac{[\# \text{ of covered lives reported to the NHHP for the second quarter of each year}] \div [3]}{[\text{the Vaccine Association's annual assessment rate}]} = \text{insurer's annual assessment}$$

The Vaccine Association's board of directors sets the annual assessment rate each year, but not without considerable input from the New Hampshire Immunization Program (NHIP). Every year, program staff analyze several factors to estimate the number of vaccine dosages needed for the coming year, including vaccine trends, administered vaccines for the current year, the latest ACIP recommendations, and any new school requirements.

⁷ Under Revised Statutes Annotated (RSA) 404-G:2, V, "covered lives" includes any person who is covered under an individual health or group health insurance policy issued or delivered in New Hampshire, or is protected, in part, by a group excess loss insurance policy.

⁸ Revised Statutes Annotated (RSA) Chapter 126 Q:3, section I.

From there, NHIP staff calculate the cost of vaccines for the coming year, subtract the estimated federal and state contributions, and arrive at the amount that will be needed from insurance carriers. That figure is reported to the Vaccine Association board for the final assessment rate, which also includes a reasonable amount for program administration and contingencies. Insurers who fail to pay their assessment are subject to fines or the loss of their licenses by action of the state insurance commissioner. (Since the Vaccine Association's inception, however, assessments have been collected without deploying these sanctions.)

Operations: To improve efficiency, stabilize operations, and control costs, the Vaccine Association is administered by KidsVax.org™ under a fixed-cost administrative services contract subject to annual renewal. KidsVax specializes in system administration, vaccine assessment management, administrative staffing, financial reporting, IT services, communications, and other administrative services for nonprofit and quasi-public entities, especially those focusing on childhood vaccines. In addition to the New Hampshire Vaccine Association, KidVax is currently under contract with the Washington Vaccine Association and the Maine Vaccine Board. The organization also supports other states seeking input on various approaches to funding childhood vaccines.

Overseeing all Vaccine Association operations, including the work of KidsVax, is the multi-disciplinary, seven-member board of directors, which includes three representatives from commercial health plans, two health care providers, and the commissioners of both DHHS and the New Hampshire Insurance Department (or their designees) as voting *ex officio* members. (See page 7 for a current list of board members.)

A 10-Year Success Story

Not surprisingly, the Vaccine Association's start-up year a decade ago was, in the words of one prominent health care activist, "remarkably smooth, like putting a hot knife in butter." Prior to the passage of RSA 126-Q, health insurance carriers were accustomed to New Hampshire Health Plan assessments based on covered lives, and many were already paying a portion of the childhood vaccine tab voluntarily. As a result, the shift to a stable funding mechanism seemed more formality than substantive change. Furthermore, in a state whose citizens take pride in their independence, insurers, providers, and public health entities, alike, approved of the new Vaccine Association's status as nonprofit and entirely independent of government.

Now, a decade later, it is safe to say that by any measure the New Hampshire Vaccine Association has succeeded in its mission. By preserving universal purchase, it has saved licensed insurance carriers an average 34.7 percent a year⁹ in vaccine costs, alone, while helping to maintain one of the highest immunization rates in the country. In addition, studies have shown

⁹ Based on August 2012 research conducted by Peter M. Smith, financial analyst for KidsVax.org™. His complete retrospective tabulation is attached as Appendix A.

again and again that immunization saves society billions of dollars in future medical claims. According to the CDC, every \$1 invested in childhood vaccines for 13 preventable diseases saves \$10.20 in future medical costs. All told, the CDC estimates that for each birth cohort year, by preventing 20 million cases of disease, the investment saves \$13.6 billion dollars in direct costs and a total \$68.9 billion when you add in indirect costs to society, such as missed work, long-term disability, and death.¹⁰

The Changing Marketplace

The last 10 years has seen a dramatic increase in the number, complexity, and costs of childhood vaccines, making the role of New Hampshire Vaccine Association more important than ever. At the same time, however, shifts within the insurance marketplace have caused concern over the long-term efficacy of the current assessment mechanism. Here's why:

Scope of Childhood Vaccines: When the Vaccine Association collected its first assessments in late 2002, the average per-dosage cost at the federal contract rate was \$17.97. Fast forward to 2011, and the average cost is now more than double that at \$36.46.¹¹

In addition, the number of vaccines has increased markedly in the last decade, and many earlier vaccines have evolved over time. Consider the complexity of the pneumococcal conjugate vaccine (PCV), for example, which protects against life-threatening pneumococcal diseases, such as meningitis and virulent forms of pneumonia. Where a decade ago children were immunized against seven strains of the pneumococcal in one dosage, immunization now involves 13 strains and four dosages.

As for the rising number of vaccines, human papillomavirus (HPV), tetanus and diphtheria toxoid and acellular pertussis (Tdap), rotavirus, and meningococcal conjugate vaccines, as well as more effective forms of other vaccines, have all been added to the ACIP's recommended list in recent years, many for adolescents and teenagers. Over time, the expanding childhood immunization schedule has, of necessity, increased assessment rates, from \$4 in 2002/03 to the current rate of \$22.23.¹²

Assessment Base: Meanwhile, the number of covered lives — the basis of Vaccine Association assessments — has declined since the passage of RSA126-Q in 2002. For 2002/03, the first year in which the state's licensed insurers were formally assessed under the statute, 610,934 lives

¹⁰ Dr. Anne Schuchat, Assistant Surgeon General and Director of the CDC's Center for Immunization and Respiratory Diseases, presented at the annual meeting of the Association of Immunization managers, February 1, 2012. Data is based on an update to the 2005 report by *Zhou et al*, which analyzes savings for each birth cohort vaccinated against 13 diseases in accordance with the 0-6 childhood vaccine schedule for DTaP, Hib, IPV, MMR, Hepatitis B, Varicella, Hepatitis A, Pneumo-7, and Rotavirus vaccines.

¹¹ Ibid.

¹² Ibid

were reported. For 2011/12, the reported number has dwindled to 436,012, or 29 percent fewer covered lives than a decade ago.¹³

To be sure, New Hampshire has one of the lowest birth rates in the country,¹⁴ but changes in the insurance marketplace are clearly in play, as well. There is evidence to suggest that since 2006, more employers have left the private insurance market in favor of self-funding their employees' health care benefits. As self-insurers they are no longer directly subject to annual assessments by the Vaccine Association.¹⁵

It also appears that some self-insured businesses are forgoing stop-loss coverage (also known as excess insurance), which has traditionally been purchased to protect the self-insured against unpredictable losses above certain limits. Since by law licensed stop-loss insurers are subject to Vaccine Association assessments, a decrease in stop-loss policies automatically reduces the number of covered lives reported and narrows the pool of assessed payers.

Just as in the 1990s when contributions to the insurers' childhood vaccine fund were voluntary, the shift in New Hampshire's health insurance landscape has triggered an imbalance among private payers helping to fund childhood vaccines. By all accounts, the assessment model mandated in the original legislation was a near perfect solution at the time. But to safeguard one of the oldest and most successful universal purchase programs in the country, the state's insurance, health care, and legislative leaders may very well have to re-align the funding model to current marketplace realities.

For more information about the New Hampshire Vaccine Association, please contact KidsVax.org™ at 1.855.543.7829 or visit the Vaccine Association's web site: www.NHvaccine.org.

¹³ Ibid.

¹⁴ Kaiser Family Foundation, <http://www.statehealthfacts.org>, 2009. Rankings are based on the number of births per 1,000. In 2009, New Hampshire had a rate of 10.1 births, second only to Vermont at 9.8. The U.S. average in 2009 was 13.5 births per 1,000 people.

¹⁵ New Hampshire Insurance Department, "Supplemental Reports on the Health Insurance Market," 2007-2010. Although these supplemental reports show growth in the self-funded category since 2006, according to a department financial analyst, the findings are unreliable with respect to the precise percentage of covered lives under self-funded accounts. The reports are available [on the department's web site](#).

New Hampshire Vaccine Association Board of Directors 2011-2012

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New Hampshire Department of Health and Human Services

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Appendix A

NEW HAMPSHIRE



NEW HAMPSHIRE
VACCINE ASSOCIATION

c/o CML Administrators, LLC d/b/a KidsVax.org™
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Year	Assessment Rate	Covered Lives	Estimated		Estimated Program Year Savings	Cumulative Savings
			Amount Remitted to State of NH	%		
'02/'03 - Year 1	\$ 4.00	610,934	\$ 2,158,261	39.2%	\$ 1,389,142	\$ 1,389,142
'03/'04 - Year 2	\$ 3.50	636,419	\$ 2,190,056	49.8%	\$ 2,174,630	\$ 3,563,772
'04/'05 - Year 3	\$ 4.62	636,716	\$ 2,724,428	31.7%	\$ 1,264,381	\$ 4,828,153
'05/'06 - Year 4	\$ 6.63	606,312	\$ 4,111,425	38.9%	\$ 2,616,280	\$ 7,444,433
'06/'07 - Year 5	\$ 16.50	544,074	\$ 8,472,069	28.2%	\$ 3,322,131	\$ 10,766,564
'07/'08 - Year 6	\$ 34.15	517,846	\$ 17,063,492	34.0%	\$ 8,805,298	\$ 19,571,862
'08/'09 - Year 7	\$ 33.00	553,440	\$ 16,402,814	32.1%	\$ 7,757,989	\$ 27,329,850
'09/'10 - Year 8	\$ 23.00	488,222	\$ 8,992,444	32.6%	\$ 4,352,633	\$ 31,682,484
'10/'11 - Year 9	\$ 22.00	501,563	\$ 12,261,538	30.3%	\$ 5,334,124	\$ 37,016,608
'11/'12 - Year 10	\$ 22.23	436,012	\$ 9,690,757	30.2%	\$ 4,184,586	\$ 41,201,194

