

Cost Estimates for NVAC Finance Recommendations:

Assuring Vaccination of Children and Adolescents without Financial Barriers

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February 2009 NVAC Meeting



DEPARTMENT OF HEALTH AND HUMAN SERVICES



Scope of Presentation

- **NVAC approved finance recommendations September 16, 2008**
- **Assistant Secretary of Health (ASH) received recommendations December 9, 2008**
- **Cost estimates**

Structure of Recommendations

- **Block 1** **Lance** **Public sector vaccine purchase**
- **Block 2** **Lance** **Vaccine administration reimbursement**
- **Block 3** **Angela** **Business practices in private provider offices**
- **Block 4** **Angela** **Health insurance plans**
- **Block 5** **Angela** **Activities of federal agencies**
- **Block 6** **Angela** **Activities of state agencies and offices**
- **Block 7** **Angela** **Adolescent vaccination in complementary venues**

The Measles Epidemic

The Problems, Barriers, and Recommendations

The National Vaccine Advisory Committee

The nation has experienced a marked increase in measles cases during 1989 and 1990. Almost one half of all cases have occurred in unvaccinated preschool children, mostly minorities. The principal cause for the epidemic is failure to provide vaccine to vulnerable children on schedule. Major reasons for the low vaccine coverage exist within the health care system itself, which creates barriers to obtaining immunization and fails to take advantage of many opportunities to provide vaccines to children. Ideally, immunizations should be given as part of a comprehensive child health care program. However, immunization cannot await the development of such an ideal system. Essential changes can and should be made now. Specific recommendations include improved availability of immunization; improved management of immunization services; improved capacity to measure childhood immunization status; implementation of the two-dose measles vaccine strategy; and laboratory, epidemiologic, and operational studies to further define the determinants of decreased vaccine coverage and to develop new combinations of vaccines that can be administered earlier in life. The measles epidemic may be a warning flag of problems with our system of primary health care.

(*JAMA*. 1991;266:1547-1552)

school- and college-age students who had not been vaccinated or who had been vaccinated unsuccessfully. Because vaccine failure remains a problem, beginning in 1989, a second dose of vaccine was recommended to be administered at the time of enrollment in either primary school or middle or junior high school.^{2,3} Since this is a long-term solution requiring 7 to 13 years to reap the full benefits, aggressive revaccination during school-based outbreaks will be needed in the interim.

Studies reveal no change in the effectiveness of the vaccine during recent years (G. E. King, MD, unpublished data, 1991). The vaccine, licensed and in use since 1963, protects about 95% of those who receive it. About three fourths of those with measles during

The Last Sentence ...

tion of available information, the National Vaccine Advisory Committee estimates that implementation of all of the recommendations will require a net increase of immunization funds by \$40 million to \$50 million annually.

NVAC. The Measles Epidemic. JAMA 1991; 266:1547

317 Methods- Background

- **Cost estimates derived from 317 Report**
- **Annual report requested by Congress to determine the scope of the 317 program and to estimate funding needs**
- **The report focuses on 4 areas; Vaccine purchase, Operations, Vaccine administration and Vaccine safety**
- **Focus on Underinsured children and adolescents who are not eligible for VFC**

317 Methods-Data Sources

Data Sources:

- Population Estimate Survey (PES)
 - Used to determine the adolescent and childhood VFC-eligible population for each state
- 2006 National Immunization Survey (NIS) Insurance Module
 - Used to estimate the size of populations of underinsured children and adolescents
- 2005 National Health Interview Survey (NHIS)
 - Used to determine the insurance status of U.S. noninstitutionalized population
- Federal Medical Assistance Percentages (FMAP) Rates
 - Used to determine the federal and state contributions towards vaccine administration fees

Data Calculations:

- Vaccine Budget
 - Represents the minimum federal contract cost to purchase the recommended vaccines for children and adolescents
- Vaccine Operations
 - Estimated FY 2009 need benchmarked against FY 2000 budget
- Vaccine Administration
 - No estimate for children and adolescents

Block 1 (Rec 1): Public sector vaccine purchase

Rec. #	Recommendation	Cost (millions)
1	Extend VFC eligibility for Underinsured to be served in public health department clinics in addition to FQHCs and RHCs.*	\$95.3 M \$48.2 M- children \$47.1 M- adolescents

Source: CDC

*Requires legislative change

Approach: Recommendation 1, Extend VFC eligibility for Underinsured to be served in public health clinics in addition to FQHCs and RHCs.

- **Estimated:**
 - the number of Underinsured children
 - 430,985 children
 - 747,158 adolescents
 - the cost to vaccinate a cohort at 100% coverage levels
 - Children: DTaP, Hib, MMR, IPV, Hep B, Varicella, PCV7, Rotavirus, and Hep A
 - Adolescents: MCV4, Tdap, HPV
- **Methods consistent with “Report to Congress on the Section 317 Immunization Program” (<http://www.317coalition.org/learnmore/>)**

Block 2 (Rec. 2-5) : Vaccine administration reimbursement

Rec. #	Recommendation	Cost
2	Expand VFC to cover vaccine administration reimbursement for all VFC-eligible children and adolescents.*	\$865.3M \$315.4M savings to states
3	CDC and CMS to publish and update Medicaid administration reimbursement rates by state.	N/A**
4	CMS to update and publish the maximum allowable Medicaid reimbursement information for all states.	N/A**
5	Increase the federal match for vaccine administration reimbursement in Medicaid.*	Variable

NVPO, CDC

*Requires legislative change

**Within existing agency processes

Approach: Recommendation 2, Expand VFC to cover vaccine administration reimbursement for all VFC-eligible children and adolescents.

- **Estimated number of doses of VFC vaccine needed in FY 2009**
- **FMAP rates used to determine proportion of current state and federal contributions**
- **Administration fees were weighted by the VFC population size for each state**
- **Population Estimate Survey (PES) was used to determine VFC-eligible population by state**

Block 3 (rec. 6-9): Business practices in private provider offices

Rec. #	Recommendation	Cost (millions)
6	AMAs RVS Update Committee to review the RVU coding to accurately reflect non-vaccine costs of vaccination including the potential cost and savings from the use of combination vaccines.	N/A**
7	Vaccine manufacturers and 3rd party distributors of vaccine to work with providers to reduce the financial burden of maintaining vaccine inventories.	N/A**
8	Medical organizations to educate their members on best business practices associated with immunizations. Organizations may receive assistance from CMS.	N/A**
9	Providers partner together to purchase vaccines to reduce costs.	N/A**

Source: NVPO

**Within existing agency processes

Block 4 (Rec. 10-13): Health insurance plans

Rec. #	Approach	Cost (millions)
10	CDC, professional organizations and other stakeholders to support employer health education efforts.	N/A**
11	Health insurers and all private payers to adopt flexible contract language to permit coverage & reimbursement for new/altered ACIP recommendations & periodic price changes.	N/A**
12	All public and private health insurance plans should voluntarily provide first dollar coverage for all costs associated with the acquisition, handling, storage and administration for all ACIP recommended vaccines.	\$864.5 M Children \$1,142.7 M Adolescents
13	Health insurers and purchasers of health care should assure reimbursement for vaccinations in their plans are based on sound methodologies.	N/A**

Source: NVPO, ASPE

**Within existing agency processes

Approach: Recommendation 12, All public and private health insurance plans should voluntarily provide first dollar coverage for all costs associated with the acquisition, handling, storage and administration for all ACIP recommended vaccines.

Estimated incremental cost from 1992 to fully vaccinate children and adolescents using 2008 recommendations

- Used 2007 Current Population Survey**
- Looked at current coverage rates and vaccine costs by type of insurance (public and private)**
- Calculated cost of vaccine purchase and administration fee**
- Estimated the number of children not fully vaccinated**

Block 5 (Rec. 14-17): Activities of federal agencies

Rec. #	Recommendation	Cost
14	Congress to request an annual report about the size and scope of the 317 program appropriations needed and ensure adequate funding.*	\$442.1M
15	CDC and CMS collect and publish data on the costs associated with private and public purchase vaccine administration, every five years. ***	\$600,000
16	NVPO calculate the marginal increase in insurance premiums if insurance plans were to provide coverage for all routinely ACIP-recommended vaccines.	N/A**
17	NVAC convene expert panels to determine if policy options could be developed to address stakeholder concerns about financing hurdles for the private sector (i.e. tax credit, etc).	N/A**

Source: CDC, NVPO, ASPE

*Requires legislative change

**Within existing agency processes

***This figure represents CDC's cost estimates only

Block 5 (Rec. 18-21): Activities of federal agencies

Rec. #	Recommendation	Cost (millions)
18	Substantially decrease the time from creation to official publication of ACIP recommendations.	N/A**
19	Expand section 317 funding to support the additional national, state and local health infrastructure needed for adolescent (and children) vaccination programs for new recommendations (i.e. Influenza).*	\$260.6 M
20	Continue federal funding for cost benefit studies of vaccinations targeted for children and adolescents.	<1 M
21	Increase number of providers who participate in VFC.	N/A**

Source: NVPO, CDC

*Requires legislative change

**Within existing agency processes

Approach: Recommendation 14, Congress to request an annual report about the size and scope of the 317 program appropriations needed and ensure adequate funding.

- **Determined the cost for activities associated with vaccine purchase, operations, vaccine administration and vaccine safety costs**
- **Costs to vaccinate only pertain to the Underinsured population and are based on the costs to fully vaccinate a cohort of children and adolescents**
- **Methods consistent with “Report to Congress on the Section 317 Immunization Program” (<http://www.317coalition.org/learnmore/>)**

Approach: Recommendation 15, CDC and CMS collect and publish data on the costs associated with private and public purchase vaccine administration, every five years.

- **Estimates based on previous extramural studies funded by CDC.**
- **Internal studies are existing activities of CDC**

Recommendation #19: Expand section 317 funding to support the additional national, state and local health infrastructure needed for adolescent (and children) vaccination programs for new recommendations (i.e. Influenza).

- **Operations funding supports vaccination infrastructure and direct service delivery**
- **Methods consistent with “Report to Congress on the Section 317 Immunization Program” (<http://www.317coalition.org/learnmore/>)**

Block 6 (Rec. 22): Activities of state agencies and offices

Rec. #	Recommendation	Cost (millions)
22	State and localities develop mechanisms for billing underinsured children and adolescents served in the public sector. CDC to provide best practices guidance.	N/A**
Source: CDC **Within existing agency processes		

Block 7 (Rec. 23-24): Adolescent vaccination in complementary venues

Rec. #	Approach	Cost
23	Ensure adequate funding to cover all costs associated with adolescent immunization requirements for school attendance.	N/A**
24	Promote shared public and private sector approaches to funding school based and other complementary venue adolescent immunization efforts.	N/A**

Source: NVPO/Adolescent WG

**Within existing agency processes

Conclusion

- **Full text of finance recommendations:**
<http://www.hhs.gov/nvpo/nvac/CAVFRrecommendationsSept08.html>
- **More detailed information on methods – available upon request**
- **317 report to Congress:**
<http://www.317coalition.org/learnmore/>
- **NVAC members: Comments on NVAC recommendations for publication (Briefing book)**