Reducing Vaccine Underuse: A $53 Billion Opportunity

Targeting the $53 billion spent annually because of vaccine underuse requires building on proven practices and implementing policy actions that target the root causes of the problem.²

Vaccine underuse represents a significant source of wasteful health care spending. The causes of vaccine underuse are complex and systemic, resulting from shortages, exemptions from vaccination requirements, provider financing issues and health disparities.

THE PROBLEM

Scope of Vaccine Underuse
• One of every five children is not completely up to date on recommended immunizations.³
• More than one in 10 parents uses a vaccination schedule for their children other than the U.S. Recommended Immunization Schedule, including delaying some shots and refusing others.⁴
• Twenty-five percent of children lack full protection against vaccine-preventable communicable diseases.⁵
• Coverage levels for adolescents and adults are well below Healthy People 2010 targets.⁶
• Avoidable Deaths: For each birth cohort of children immunized, 14 million cases of vaccine-preventable diseases (VPD) are avoided and 33,000 VPD-related deaths are averted.⁷
• Influenza: 36,000 deaths annually in the elderly are due to the flu or its complications.⁸

Costs of Vaccine Underuse
• Financial Cost: $10 billion in annual direct health care costs.⁹
• Societal Cost: $43 billion in annual indirect costs.¹⁰

Causes of Vaccine Underuse
• Shortages: Interruptions in production and supply, higher-than-expected demand, and the time lag between the initial development and production contribute to vaccine shortages.¹¹
• School Exemptions: Exemptions from school immunization requirements, often easily obtained, have risen over the last decade.¹²
• Provider Financial Barriers: The product-related costs of vaccine supply acquisition and maintenance and inadequate reimbursement for administering vaccines to children can be prohibitive.¹³
• New, Costly Vaccines: The number of new vaccines has increased in recent years, and newer vaccines are substantially more expensive than “traditional” vaccines.¹⁴
• Public Opinion: Increased concern regarding the supposed link between vaccines and autism, despite studies refuting the relationship, has led some to refuse vaccinations.¹⁵
• Income: Childhood poverty is a major risk factor for under-immunization.
• Race and Ethnicity: Immunization rates for Hispanics (47 percent) and Blacks (52 percent) are significantly lower than for Whites (65 percent).¹⁶
• Age: Adolescents and adults in general have lower vaccination rates than children.¹⁷

SOLUTIONS

Invest in Research and Development
• Proven Practice: Firms in the U.S. and abroad are experimenting with alternative production tech-
Innovations in vaccine development, the promotion of medical home models of care, increasing the immunizations of children and encouraging entry into untapped markets can significantly increase the appropriate use of vaccines.

These interventions increase access to the appropriate use of vaccines and help to lower the costs of vaccine administration and distribution.

Promote Medical Home Models

- **Proven Practice**: Children in states with a higher number of medical home practices received childhood vaccinations at a higher rate than others.19
- **Proven Practice**: Children achieve higher immunization rates when clinicians and providers focus on ensuring that every child receives all recommended vaccines.20
- **Policy Action**: Promote the immunization of children covered by Medicaid via medical home approaches.

Increase Timely Immunization of Children

- **Proven Practice**: Undertaking community interventions that include education and outreach and increase the adoption of effective practices by health care providers.21,22
- **Policy Action**: Adopt public policies to ensure adequate vaccine supply and financing and to improve tracking systems and participation in immunization registries.23,24

Enhance Medical Leadership

- **Policy Action**: Garner the support of hospital executives and physician leaders to educate hospital staff, patients and their communities about the appropriate use of vaccines.
- **Policy Action**: Medical organizations should work in partnership to educate policymakers on the appropriate use of exemptions from mandatory immunizations.25

Encourage Market Entry

- **Policy Action**: Provide financial incentives to accelerate the development and approval of new vaccines, such as those to prevent Dengu, AIDS, SARS and others.26

Revise Funding Models

- **Policy Action**: Encourage evidence-based practices that increase the number of vaccines appropriately given by linking payment reimbursements to multipie, simultaneous vaccine administrations as well as timely immunizations.

Promote Vaccine Registries and IT

- **Policy Action**: Registries and information technologies have shown demonstrable successes in identifying vaccine underuse; further promotion of these approaches should help to improve the appropriate administration of vaccines.

**SOLUTIONS**