

# Increasing Appropriate Vaccination: Reducing Client Out-of-Pocket Costs for Vaccinations

# **Task Force Finding and Rationale Statement**

# **Intervention Definition**

Reducing out-of-pocket costs (ROPC) to clients for vaccinations involves program and policy changes that make vaccinations or the administration of vaccinations more affordable. Costs can be reduced by paying for vaccinations or administration, providing new or expanded insurance coverage, or lowering or eliminating patient out-of-pocket expenses at the point-of-service (e.g., copayments, coinsurances, and deductibles).

# **Task Force Finding (September 2014)**

The Community Preventive Services Task Force recommends interventions that reduce client out-of-pocket costs based on strong evidence of effectiveness in improving vaccination rates. The effectiveness of these interventions has been demonstrated among children, adolescents, and adults, in a range of settings and populations, when applied in varying levels of scale from individual clinical settings to statewide programs to national efforts, and whether used alone or as part of a multi-component intervention.

#### **Rationale**

# **Basis of Finding**

This Task Force finding is based on evidence from a Community Guide systematic review completed in 2009 (15 studies; search period 1997 - 2009) combined with more recent evidence (5 studies, search period 2009 - 2012). Based on the combined evidence, the Task Force reaffirms its recommendation based on strong evidence of effectiveness.

Eleven studies provided a common measurement of change in vaccination rates and showed a median increase of 22 percentage points (interquartile interval [IQI]: 6 to 33 percentage points). Six studies examined the impact of reducing client out-of-pocket costs alone (median increase of 28 percentage points; IQI: 2 to 47 percentage points) and 5 studies examined reducing client out-of-pocket costs as part of a multi-component strategy (median increase of 20 percentage points; IQI: 6 to 20 percentage points). The nine qualifying studies that did not provide a common measurement of change also reported overall increases in vaccinations received or administered.

#### **Applicability and Generalizability Issues**

Included studies evaluated intervention effects on childhood vaccination series (3 studies), influenza (9 studies), pneumococcal (6 studies), hepatitis B (2 studies), and human papilloma virus (1 study). The reviewed studies evaluated the effectiveness of interventions that reduced client out-of-pocket costs in a range of client and provider populations and settings.

#### **Other Benefits and Harms**

A review of included studies and the broader literature did not identify any additional benefits or potential harms associated with this intervention.

#### **Economic Evidence**

The economic review includes three studies (search period 1980 – 2012): two that reduced out-of-pocket costs for influenza vaccinations and one that addressed the childhood series. Monetary values are reported in 2013 US dollars.



The two influenza studies estimated intervention cost at \$35 and \$54 per person per year, resulting in \$15,050 per life year saved and \$114 per additional person vaccinated, respectively. Another study used modeling to report that eliminating out-of-pocket costs for vaccination series given to children born in the state of Georgia during 2003 would cost \$221.56 per child and \$3165.18 per additional vaccinated child.

### **Considerations for Implementation**

Policies adopted in the United States, including the Federal Vaccines for Children Program and the Affordable Care Act, have expanded access to many vaccines at reduced out-of-pocket cost. Barriers to expanded implementation of efforts include the adequacy and timeliness of reimbursement for the costs of vaccines, storage, and administration.

In the United States, the ability of health care systems and providers to implement these interventions may depend on the adequacy and timeliness of reimbursement for the costs of the vaccines, storage, and administration.

#### **Evidence Gaps**

Additional research is needed to determine the effectiveness of reducing client out-of-pocket cost interventions to increase rates of recommended vaccinations for adolescents (e.g., HPV, meningococcal, influenza). In addition, the Task Force suggests additional research to determine if these interventions are effective options to increase receipt of annual influenza vaccinations. Future research should also examine whether reducing client out-of-pocket cost interventions are essential components of school-based vaccination programs and on-site vaccination programs in general.

The data presented here are preliminary and are subject to change as the systematic review goes through the scientific peer review process.

#### **Disclaimer**

The findings and conclusions on this page are those of the Community Preventive Services Task Force and do not necessarily represent those of CDC. Task Force evidence-based recommendations are not mandates for compliance or spending. Instead, they provide information and options for decision makers and stakeholders to consider when determining which programs, services, and policies best meet the needs, preferences, available resources, and constraints of their constituents.

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