

Increasing Appropriate Vaccination: Provider Assessment and Feedback

Task Force Finding and Rationale Statement

Intervention Definition

Provider assessment and feedback interventions both evaluate provider performance in delivering one or more vaccinations to a client population (assessment) and present providers with information about their performance (feedback). Feedback may describe the performance of a group of providers (e.g., mean performance for a practice) or an individual provider, and may involve other components such as incentives or benchmarking.

Task Force Finding (March 2015)

The Community Preventive Services Task Force recommends assessment and feedback for vaccination providers on the basis of strong evidence of effectiveness in increasing vaccination rates: (1) among adults and children; (2) when used alone or with additional interventions; and (3) across a range of settings and populations. While there was not enough evidence to determine which characteristics of assessment and feedback contributed most to its effectiveness, various strategies have been consistently effective in a wide range of contexts.

Rationale

Basis of Finding

The Task Force finding is based on evidence from a Community Guide systematic review completed in 2008 (19 studies, search period 1997–2007) combined with more recent evidence (1 study, search period 2007–February 2012). Based on the combined evidence, the Task Force reaffirms its recommendation based on strong evidence of effectiveness.

The Task Force considered evidence from 20 studies. Of these, 16 studies with 20 study arms provided common measurements of change in vaccination rates. The median increase of 9 percentage points (interquartile interval [IQR]: 3 to 14 percentage points). Fifteen study arms provided sufficient information to calculate the change in vaccination rates and showed a median increase of 18.0% (IQR: 9.5% to 24.0%). Seven study arms evaluated the impact of assessment and feedback for providers when implemented alone and found a median increase of 11 percentage points (IQR: 7 to 12 percentage points). Thirteen study arms evaluated provider assessment and feedback with additional interventions and observed a median increase of 6 percentage points (IQR: 3 to 18 percentage points). One additional study did not provide a common measurement of change in vaccination rates, and reported no change after implementation of intervention.

Applicability and Generalizability Issues

The reviewed studies evaluated the impact of assessment and feedback for vaccination providers in a wide range of target populations and settings, and for most vaccines appropriate for adults or children. While no studies specifically evaluated the impact of assessment and feedback for vaccination of adolescents, evidence from this review is likely applicable to this population.

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

Three studies were included in the economic review (search period 1980–2012). Monetary values are reported in 2013 U.S. dollars.

All three studies covered childhood series vaccines, with one based in Canada and the remaining two in the U.S. The size of the intervention group ranged from 1643 to 18,034 clients. The cost to implement the intervention ranged from \$0.22 to \$4 per child per year. One study estimated the cost per additional vaccinated child at \$80.

Considerations for Implementation

Potential barriers to use of assessment and feedback include lack of an adequate information infrastructure, administrative burden on providers and systems, and the increasingly complex immunization schedule.

Evidence Gaps

None of the studies identified in this review evaluated the impact of provider assessment and feedback interventions on the delivery of vaccines to adolescents. Future studies should examine the effectiveness of these interventions in increasing vaccination rates among adolescents.

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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