Increasing Appropriate Vaccination: Provider Assessment and Feedback (2008 Archived Review)

Table of Contents

Review Summary ................................................................. 2
Intervention Definition .......................................................... 2
Summary of Task Force Recommendations and Findings ............. 2
Results of the Original and Updated Systematic Reviews .......... 2
Previous Review (search period 1980–1997) .......................... 2
Updated Evidence (search period 1997–2007) .......................... 2
Task Force Finding and Rationale Statement ........................... 3
Intervention Definition .......................................................... 3
Task Force Finding ............................................................... 3
Rationale ............................................................................. 3
Disclaimer ........................................................................... 4
Review Summary

Intervention Definition
Provider assessment and feedback involves retrospectively evaluating the performance of providers in delivering one or more vaccinations to a client population and giving them feedback on their performance. Assessment and feedback can also involve other activities (e.g., incentives or benchmarking).

Summary of Task Force Recommendations and Findings
The Community Preventive Services Task Force recommends assessment and feedback for vaccination providers based on strong evidence of their effectiveness in improving vaccination coverage:

- In adults and children
- When used alone or with additional components
- Across a range of settings and populations

Results of the Original and Updated Systematic Reviews
The Task Force finding is based on evidence from a Community Guide systematic review published in 2000 (search period 1980-1997) combined with more recent evidence (search period 1997-2007). The systematic review was conducted on behalf of the Task Force by a team of specialists in systematic review methods, and in research, practice, and policy related to increasing appropriate vaccination.

Previous Review (search period 1980–1997)
Fourteen studies qualified for the systematic review.

- Median increase in vaccination coverage: 16 percentage points (14 studies)

Updated Evidence (search period 1997–2007)
Nineteen studies were identified in the search period considered in this update. Of these, 16 studies with 20 study arms provided common measurements of change in vaccination coverage.

- Median increase in vaccination coverage:
  - Overall: 9.4 percentage points (20 study arms)
  - Provider assessment and feedback alone: 11 percentage points (7 study arms)
  - Provider assessment and feedback with additional components: 5.7 percentage points (13 study arms)
- Reviewed studies evaluated the effectiveness of provider assessment and feedback in a wide range of client and provider populations and settings.
Task Force Finding and Rationale Statement

Intervention Definition
Provider assessment and feedback involves retrospectively evaluating the performance of providers in delivering one or more vaccinations to a client population and giving this information as feedback to the providers. Assessment and feedback can also involve other activities (e.g., incentives or benchmarking).

Task Force Finding (February 2008)
Assessment and feedback for vaccination providers is recommended based on strong evidence of effectiveness in improving vaccination coverage: (1) in adults and children; (2) whether used alone or with additional components; and (3) across a range of settings and populations. The review team could not determine which of the characteristics of assessment and feedback contributed most to its effectiveness; however, a variety of assessment and feedback strategies have been consistently effective in a wide range of contexts.

Rationale
In 1997 the Task Force found strong evidence of effectiveness for provider assessment and feedback. Based on the findings of this 2007 update, the Task Force reaffirms their original recommendation.

Our previous review (search period 1980–1997) included 14 studies with a median absolute increase in vaccination coverage of 16 percentage points. Five studies evaluated assessment and feedback for providers when implemented alone (median absolute increase of 17 percentage points), and nine studies examined this intervention with additional components (median absolute increase of 16 percentage points).

The updated review (search period 1997–2007) identified 19 additional studies. Of these, 16 studies with 20 study arms provided common measurements of change in vaccination coverage. The median absolute change was an increase of 9 percentage points (interquartile interval [IQI]: 3 to 14 percentage points). Fifteen study arms provided sufficient information to calculate the relative change in vaccination coverage with a median increase of 18.0% (IQI: +9.5% to +24.0%). Seven study arms evaluated the impact of assessment and feedback for providers when implemented alone with a median absolute increase of 11 percentage points (IQI: 7 to 12 percentage points). Thirteen study arms evaluated provider assessment and feedback with additional components, and observed a median absolute increase of 6 percentage points (IQI: 3 to 18 percentage points).

The reviewed studies evaluated the impact of assessment and feedback for vaccination providers in a wide range of target populations, settings, and for most vaccines with universal indications for adults and for children. Although no studies specifically evaluated the impact of assessment and feedback for vaccination of adolescents, the Task Force considers the available evidence as applicable to efforts to improve vaccination coverage in this population.

No evidence of harms regarding the use of assessment and feedback for providers was identified in either the original review or in this update.

The Task Force notes that the studies included in this 2007 review had changes in vaccination coverage that are smaller in magnitude than those reported from studies included in the 1997 review. However, the effect estimates from this review remain of sufficient magnitude to support a conclusion of effectiveness and a recommendation for the use of assessment and feedback for providers to improve vaccination coverage.
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.

Document last updated April 14, 2015