

Increasing Appropriate Vaccination: Clinic-Based Client Education When Used Alone (2011 Archived Review)

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Review Summary

Intervention Definition

Clinic-based client education interventions focus on the content and provision of education to individuals or groups served in a medical or public health clinical setting. Educational approaches include the use of brochures, videotapes, posters, vaccine information statements (VIS), and face-to-face sessions designed to inform and motivate clients to obtain recommended vaccinations in the clinic. These activities are usually delivered in advance of and in addition to the client-provider interaction.

Summary of Task Force Recommendations and Findings

The Community Preventive Services Task Force finds insufficient evidence to determine the effectiveness of clinic-based client education when implemented alone in increasing vaccination rates or reducing rates of vaccine preventable illness.

Although the four included studies otherwise provide sufficient evidence on effectiveness, the Task Force finding reflects concerns about applicability beyond the specific experiences of a limited number of researchers to the broader range of potential educational activities in clinic-based settings. Results from the included studies, which showed increases in immunizations for pneumococcal polysaccharide vaccine among older adults with very low baseline coverage, may not generalize to other vaccines and populations.

Results from the Systematic Review

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 1997-2009). 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. This finding updates and replaces the previous Task Force finding on Clinic-Based Client Education (read the evidence review and Task Force finding in our library).

Four studies with six study arms qualified for this review (one from the previous review and 3 from the more recent search).

- In two studies conducted by the same group of investigators, vaccination rates for pneumococcal vaccine among older men increased substantially. In both studies, educational brochures were:
 - Given to patients in an outpatient clinic for use during an appointment with their provider
 - Used by patients to request a discussion with their provider about the immunization
- The other two included studies did not show increases in vaccination rates.

Economic Evidence

An economic review of this intervention was not conducted because the Task Force did not have enough information to determine if the intervention works.

Task Force Finding and Rationale Statement

Intervention Definition

Clinic-based client education interventions focus on the content and provision of education to individuals or groups served in a medical or public health clinical setting. Educational approaches include the use of brochures, videotapes, posters, vaccine information statements (VIS), and face-to-face sessions designed to inform and motivate clients to obtain recommended vaccinations in the clinic. These activities are usually delivered in advance of and in addition to the client-provider interaction. Educational approaches delivered in other settings (e.g. schools or child care centers), and multi-component interventions in which clinic-based education is combined with additional interventions (such as client reminder/recall or standing orders) are reviewed elsewhere.

Task Force Finding (February 2011)

The Community Preventive Services Task Force finds insufficient evidence to determine the effectiveness of clinic-based client education when implemented alone in increasing vaccination rates or reducing rates of vaccine preventable illness. Although the four included studies otherwise provide sufficient evidence on effectiveness, the Task Force finding reflects concerns about applicability beyond the specific experiences of a limited number of researchers to the broader range of potential educational activities in clinic-based settings. Results from the included studies, which observed increases in immunizations for pneumococcal polysaccharide vaccine among older adults with very low baseline coverage, may not generalize to other vaccines and populations.

Rationale

Based on the results of this systematic review update, the overall Task Force finding remains unchanged in 2011. A subset of the available evidence, however, suggests a potentially useful approach to the delivery of education in the clinic setting designed to increase vaccination interactions between the client and their provider.

The Task Force review considered four studies with six measurements of change in vaccination rates. Although the overall median absolute percent change in rates was an increase of 9.8 percentage points (range of values: +1.7 to +25 percentage points), individual study arm results were inconsistent and focused on older adults and the pneumococcal polysaccharide vaccine.

Two randomized controlled trials, both from the same group of investigators in one outpatient setting and client population, demonstrated a consistent improvement in vaccination rates with the use of an educational brochure that: (1) was delivered immediately prior to the client-provider interaction, (2) encouraged the client to take the brochure into the examination room with them, and (3) provided a specific request for a discussion with their provider about the immunization. In both intervention arms using this brochure, vaccination rates increased by 16 percentage points, albeit for client populations with very low baseline coverage rates. In contrast, an additional intervention arm which viewed an educational videotape alone observed only a small change in vaccination rates.

The remaining four study arms evaluated different educational formats, and observed inconsistent results with a median absolute increase in vaccination rates of 3.2 percentage points (range of values: +1.7 to +25 percentage points).

The Task Force identified no specific evidence on harms of clinic-based client education when implemented alone, and no significant barriers to implementation of these interventions in clinic settings.

Clinic-based client education can be one component of an effective, combined approach to increase vaccination rates. Based on the findings of updated reviews, the Task Force finds strong evidence to recommend [health care system-based interventions implemented in combination](#) and [community-based interventions implemented in combination](#).

Client education in clinical settings, if effective, provides an efficient opportunity to convert individual motivation into vaccination. Although the evidence identified in this systematic review is small and inconsistent overall, at least one format demonstrates sufficient evidence of effectiveness. The Task Force considers the applicability of this educational approach to other vaccines and populations as an important question for further clinic-based intervention implementation and evaluation.

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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