Increasing Appropriate Vaccination: Client or Family Incentive Rewards

Task Force Finding and Rationale Statement

Intervention Definition
Client or family incentive rewards are used to motivate people to obtain recommended vaccinations. Rewards may be monetary or non-monetary, and they may be given to clients or families in exchange for keeping an appointment, receiving a vaccination, returning for a vaccination series, or producing documentation of vaccination status. Rewards are typically small (e.g., food vouchers, gift cards, lottery prizes, baby products). Incentive reward programs are distinct from interventions that increase access to vaccination services (e.g., the provision of transportation or child care, the administration of vaccinations at no or reduced cost to clients).

Task Force Finding (May 2015)
The Community Preventive Services Task Force recommends client or family incentive rewards, used alone or in combination with additional interventions, based on sufficient evidence of effectiveness in increasing vaccination rates in children and adults.

Rationale

Basis of Finding
This Task Force finding is based on evidence from a Community Guide systematic review completed in 2011 (6 studies with 7 study arms, search period 1980-2009) combined with more recent evidence (1 study, search period 2009-2012). Based on the combined evidence, the Task Force reaffirms its recommendation based on sufficient evidence of effectiveness.

Included studies showed vaccination rates increased by a median of 8 percentage points (interquartile interval [IQI]: 4 to 16 percentage points). Two study arms that assessed the effectiveness of incentive rewards alone showed similar changes in vaccination rates (8.5 and 9.0 percentage points). In the six remaining study arms, incentive rewards were combined with additional interventions.

Applicability and Generalizability Issues
Included studies evaluated programs conducted primarily in public health settings, though several involved coordinated efforts with public and private partners. Targeted client populations included adults and families with children. The vaccines delivered in these programs included seasonal influenza (1 study), Tetanus, diphtheria, pertussis (1 study), and vaccines recommended as part of the childhood series (5 studies).

Among the studies included in this review, the type of incentive reward offered to clients included government payments (i.e., of $208 AUD and childcare assistance), lottery prizes (i.e., $50 grocery voucher or $175 in monetary prizes), gift cards (i.e., $10 for baby products), baby products, and food vouchers.

Overall, the Task Force considers the evidence to be applicable to vaccinations for children and adults in a wide range of clinical and community settings, and for various types of incentive rewards.
Other Benefits and Harms
Incentive rewards may increase contact between clients and health care providers, providing opportunities for additional preventive care. On the other hand, incentive rewards may be considered coercive with the potential to influence the process of clients' informed decision making.

Economic Evidence
The economic review identified a total of 7 studies of interventions providing client incentives from a search covering 1980 through 2012. One study was based in Australia and two in Germany and the remaining studies were based in the United States. Four of these studies were for hepatitis B, one for influenza, and two for childhood series. Incentives included gift certificates, cash awards, and substantial credits for child care and maternity benefits. Monetary values are reported in 2013 U.S. dollars.

The median sample size from six studies was 774 (IQI: 39 to 18,942), the upper estimate representing participating health plan members. Based on four studies, the median intervention cost per person per year was $372 (IQI: $112 to $559). Three estimates for cost per additional vaccinated person ranged from $248 to $2,447.

The evidence indicates even small incentives can be effective in increasing vaccination rates and the reach can be substantial when such incentives are provided as part of benefits within health plans.

Considerations for Implementation
Client or family incentive rewards can also be one component of an effective combined approach to increase vaccination rates in both clinical and community settings. Based on updated, concurrent reviews the Task Force finds strong evidence to recommend health care system-based interventions implemented in combination and community-based interventions implemented in combination.

Evidence Gaps
Additional research could focus on the independent effects of incentive rewards, examine the relationship between the value of the reward and effectiveness, and explore the duration of intervention impact. It also would be useful to have more information about the effectiveness of these interventions with adolescents and adults as most of the included studies examined the use of incentive rewards on vaccination rates for children.

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.

Document last updated July 15, 2015