Community Preventive Services Task Force

Increasing Appropriate Vaccination: Vaccination Programs in the Special Supplemental Nutrition Program for Women, Infants and Children (WIC) Settings

Task Force Finding and Rationale Statement

Intervention Definition

Vaccination interventions in Special Supplemental Nutrition Program for Women, Infants and Children (WIC) settings aim to assess the immunization status of participating infants and children and help them get recommended vaccinations. At a minimum, these interventions involve the periodic assessment of each child's immunization status and referral of underimmunized infants and children to vaccination providers as appropriate.

Additional intervention components may include client reminder and recall systems, manual tracking and outreach efforts, or adoption of monthly voucher pickup schedules that require more frequent WIC visits when vaccinations are not up-to-date. In addition, vaccination services may be provided in WIC settings, or through collocation and coordination of WIC programs with available healthcare services.

Task Force Finding (March 2015)

The Community Preventive Services Task Force recommends coordinated vaccination interventions in WIC settings based on strong evidence of effectiveness in increasing vaccination rates in children. Evidence on effectiveness was considered strong based on studies in which assessment of client immunization status and referral to vaccination providers was combined with: 1) provision of vaccinations on-site or in a collocated healthcare facility, or 2) additional interventions such as monthly voucher pickup requirements, manual tracking and outreach, or client reminder and recall systems. Evidence was limited regarding the effectiveness of assessment and referral in WIC settings when implemented alone.

Rationale

Basis of Finding

The Task Force finding is based on evidence from a Community Guide systematic review completed in 2009 (15 studies, search period January 1980-November 2009). A more recent search for evidence (search period 2009-February 2012) did not identify any new studies to be included in the systematic review.

The combined evidence included 15 studies of programs that coordinated assessment and referral in WIC settings with additional interventions. Only one study evaluated the use of assessment and referral programs when used alone and found no effect. Of the included studies, 8 (10 study arms) provided a common measurement of change in vaccination rates and observed a median increase of 10.5 percentage points (interquartile range [IQI]: 4 to 19 percentage points). The most common additional interventions were monthly voucher pickup (5 studies) and provision of vaccinations on-site or in collocated healthcare facilities (4 studies).

Applicability and Generalizability Issues

All of the included studies evaluated WIC programs in urban settings and populations. Despite the lack of evidence from suburban and rural settings, the Task Force considers the overall evidence on effectiveness to be applicable in most WIC settings and populations.

Other Benefits and Harms

Administering vaccinations outside of the client's primary source of care may lead to discontinuity of care and disrupt well-child care visits or receipt of clinical preventive services. This outcome may occur when vaccinations services are provided on-site in WIC settings. One study, however, found that collocating WIS services with a health clinic also increased delivery of well-child care, follow up, and clinical preventive services.

Economic Evidence

The economic evidence is based on three studies that looked at the childhood vaccination series (search period 1980 – 2012). Monetary values are presented in 2013 U.S. dollars. Based on two studies, the intervention cost per child per year ranged from $9.72 to $29.24 with a mean of $17.77, and the cost per vaccinated child ranged from $28.89 to $110.76 with a mean of $67.96. The cost estimates varied because interventions were for monthly voucher pickup programs that used different referral types (e.g., off-site, collocated facility, or on-site) or included additional monitoring. The third study provided an incomplete estimate for intervention cost, reporting only the cost of assessment for age-appropriate vaccination status (range: $1.90 to $3.93), with the higher cost attributed to the addition of an on-site nurse.

Considerations for Implementation

WIC services provide opportunities for regular and ongoing contact with families who may have limited access or substantial barriers to immunization services. Although on-site or collocation of vaccination services can substantially enhance access, these approaches require ongoing communication and coordination between WIC programs and healthcare providers in order to minimize missed vaccination opportunities while maintaining continuity of care.

Evidence Gaps

Only one study examined vaccination status assessment and referral when implemented alone. Additional studies are needed to determine the effectiveness of this basic approach. More research is needed on efforts to collocate WIC and health care services, on the adoption of monthly voucher pickup requirements, and on the impact of providing WIC interventions outside of the medical home.

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

Disclaimer

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