

Recommendation for Center-Based Early Childhood Education to Promote Health Equity

Community Preventive Services Task Force

The Community Preventive Services Task Force recommends early childhood education programs based on strong evidence of effectiveness in improving educational outcomes associated with long-term health and sufficient evidence of effectiveness in improving social- and health-related outcomes. When provided to low-income or racial and ethnic minority communities, early childhood education programs are likely to reduce educational achievement gaps, improve the health of low-income student populations, and promote health equity.

KEY WORDS: early childhood education, health equity

● Task Force Finding

The Community Preventive Services Task Force recommends early childhood education programs based on strong evidence of effectiveness in improving educational outcomes that are associated with long-term health and sufficient evidence of effectiveness in improving social- and health-related outcomes. When provided to low-income or racial and ethnic minority communities, early childhood education programs are likely to reduce educational achievement gaps, improve the health of low-income student populations, and promote health equity. A summary of the Task Force finding and rationale is available at: www.thecommunityguide.org/healthequity/education/centerbasedprograms.html

● Definition

Center-based early childhood education programs aim to improve the cognitive or social development of children aged 3 to 5 years.

- Programs *must* include an educational component that addresses 1 or more of the following: literacy, numeracy, cognitive development, socioemotional development, and motor skills.
- Programs *may* offer additional components including recreation, meals, health care, parental supports, and social services. Some programs enroll children before they are 3 years old.

Many early childhood education programs target children from low-income families. These include state and district programs, the federal Head Start program, and model programs such as the Perry Preschool and Abecedarian programs.^{1,2}

● Basis of Finding

The Task Force finding is based on evidence from a 2014 meta-analysis of 49 studies of center-based preschool programs for low-income children aged 3 and 4 years.³ The meta-analysis (search period through November 2013) met Community Guide systematic review standards in terms of intervention definition, outcome assessment, study design and execution evaluation, and synthesis of effect estimates. Separate analyses were conducted for state and district programs (combined), the federal Head Start program, and model programs such as the Perry Preschool and Abecedarian programs.

All effects were in a favorable direction for each program type (for which they were evaluated), but not all effects were statistically significant at the .05 level.

- *Standardized achievement tests:* Statistically significant beneficial effects were found for all 3 program types.

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- *High school graduation*: A statistically significant positive effect was found for Head Start programs but not for the other program types.
- *Grade retention or assignment to special education*: This outcome was not evaluated for Head Start, and non-significant effects were found for the other 2 program types.
- *Crime and teen births*: Neither outcome was evaluated for state and district programs, and nonsignificant effects were found for the other 2 program types.
- *Self-regulation*: A statistically significant effect was found for state and district programs, a nonsignificant benefit was shown for Head Start, and this outcome was not assessed for model programs.
- *Emotional development*: Effects were negligible and statistically nonsignificant for state and district programs and Head Start programs, and an evaluation was not done for model programs.

The meta-analysis assessed the persistence of program effects on standardized achievement tests in combination with outcomes such as IQ. Eight years after program conclusion, a statistically significant program benefit remained, followed by a slow subsequent decline in effect.

● Applicability

Although all studies were conducted in predominantly low-income or racial and ethnic minority communities, programs among predominantly white, affluent children are generally of higher quality and thus are likely to be effective in these populations as well. It is important to note that publicly funded programs are effective, as are model programs. For high school graduation, the federal Head Start program is the only program type that shows statistically significant benefits.

● Considerations for Implementation

The Task Force offers the following considerations based on studies included in the evidence review,⁴ the broader literature, and expert opinion.

- Research from the broader literature indicates that inadequate staff training and turnover make it difficult to maintain program quality and consistency.
- Although the effect was not significant, programs that hired teachers who had at least a bachelor's degree showed greater effects on standardized achievement tests. In 2011, Head Start programs began requiring applicants to have at least an associate's degree in early childhood education.
- Programs with higher quality scores on the Early Childhood Environmental Rating Scale⁵ showed greater effects on educational outcomes.

- Parental involvement and modeling of effective parenting behavior are likely to increase effectiveness of early childhood education.

● Information From Other Advisory Groups

The US Department of Education recommends high-quality, publicly funded preschool for low- and moderate-income 4-year-olds. The US Department of Health and Human Services' Administration for Children and Families has been charged with 2 roles: ensuring high-quality programs for young children beginning at birth and building a strong continuum of care and learning and working to make certain that these efforts are maintained by coordinating efforts with the Department of Education for successful transition to kindergarten and elementary school. On October 2, 2014, President Obama proposed⁶:

If we make high-quality preschool available to every child, not only will we give our kids a safe place to learn and grow while their parents go to work; we'll give them the start that they need to succeed in school, and earn higher wages, and form more stable families of their own By the end of this decade, let's enroll 6 million children in high-quality preschool. That is an achievable goal that we know will make our workforce stronger.

In summary, the Task Force recommends the use of center-based early childhood education to promote health equity based on strong evidence of effectiveness in improving educational outcomes associated with long-term health and sufficient evidence of effectiveness in improving social- and health-related outcomes.

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