

## Benefit-cost Study

### Background and Need

Benefit-cost analysis holds much promise for influencing policy related to children, youth, and families. With the passage of health care reform, there is increased potential for federal financial support of effective preventive services for children, youth, and families, particularly for those that have proven to be good resource investments. Much attention has focused on indicated preventive interventions, such as screening for disease or disorder, but a growing number of universal and selective preventive interventions have shown efficacy and/or effectiveness in controlled trials in reducing a wide range of physical, mental and behavioral health problems of young people (National Research Council/Institute of Medicine, 2009). Adoption of evidence-based prevention policies, practices, and programs as part of the health care system will be enhanced when decision makers can see benefits to public health accruing from investments that achieve better outcomes and offer sound financial returns.

Benefit-cost analysis offers a tool for determining whether resource investments make sense when measured against their near and long-term financial benefits. Its application to the field of prevention has grown over the past two decades. Benefits from investing in certain early childhood education programs for children from economic disadvantage are among the most well documented (Karoly, 2010). More recently, Aos and colleagues (Aos et al., 2011; Lee et al., 2012) have conducted benefit-cost analyses of a broad set of prevention programs for children and youth, showing that some, but not all, prevention investments are cost-beneficial.

Recent projects highlight the potential of benefit-cost analysis to shape social policy, particularly in response to increasing calls for evidence-based decision making as well as responsible investment of limited public resources. In 2006, benefit-cost analyses performed by Aos, Miller, and Drake (2006) showed that by investing in a portfolio of evidence-based crime prevention programs, the Washington state legislature could avoid the need to construct a new prison while reducing crime rates and saving taxpayers \$2 billion. In 2007, the Legislature used these findings as the basis for expanding investments in evidence-based crime prevention, which resulted in a lowering of the

state's long-term prison forecast such that a new 2,000 bed prison was no longer needed (Aos and Drake, 2010). The Results First initiative of the Pew Center for the States and the MacArthur Foundation also encourages greater use of benefit-cost analysis by state governments. The initiative is currently assisting twelve states in assessing policy options by understanding the associated costs and benefits. These states plan to use results from benefit-cost analyses to shift investments away from ineffective programs and towards those that are evidence-based and cost-beneficial.

However, benefit-cost analysis is not without controversy. Most come from mistrust of methods and assumptions, which are not applied uniformly, making it difficult to compare findings obtained from different studies. (Karoly, 2010), for example, describes two benefit-cost analyses of the Perry Preschool program, an early childhood education intervention for children from economically disadvantaged backgrounds, performed by different researchers, but using the same age 27 follow-up data. The analyses yielded very different benefit-cost ratios, \$4.11 versus \$8.74 in benefit per dollar invested, because they relied on different discount rates and made different assumptions about the scope of avoided crime costs included in the benefits estimate. Results are often reported differently as well, with different levels of cost and benefit disaggregation and different levels of detail about underlying assumptions. The absence of broad-based agreement and consistent application of theoretical, technical, and reporting standards for benefit-cost analyses could diminish the use of benefit-cost analysis of preventive interventions for children, youth, and families by policy makers.

#### References:

Aos, Steve and Elizabeth Drake. WSIPP's Benefit-Cost Tool for States: Examining Policy Options in Sentencing and Corrections. Olympia: Washington State Institute for Public Policy, Document No. 10-08-1201. 2010.

Aos, Steve, S. Lee, E. Drake, A. Pennucci, T. Klima, M. Miller, L. Anderson, J. Mayfield, and M. Burley. Return on investment: Evidence-based options to improve statewide outcomes. Document No. 11-07-1201. Olympia: Washington State Institute for Public Policy. 2011.

Aos, Steve, Marna Miller, and Elizabeth Drake. Evidence-Based Public Policy Options to Reduce Future Prison Construction, Criminal Justice Costs, and Crime Rates. Olympia: Washington State Institute for Public Policy. 2006

Karoly, Lynn A. "Toward Standardization of Benefit-Cost Analyses of Early Childhood Interventions," paper presented at the 2011 annual meetings of the American Economics Association, RAND Working Paper WR-823, December 2010. [http://www.rand.org/pubs/working\\_papers/WR823.html](http://www.rand.org/pubs/working_papers/WR823.html).

National Research Council. Preventing Mental, Emotional, and Behavioral Disorders Among Young People: Progress and Possibilities. Washington, DC: The National Academies Press, 2009.

Pew Charitable Trust, John D. and Catherine T. MacArthur Foundation. Pew-McArthur Results First Initiative. Accessed 2012 <http://www.pewstates.org/projects/pew-macarthur-results-first-initiative-328069>.