
Funding Expanded School Mental Health Programs

Nicole L. Cammack, Nicole Evangelista Brandt,
Eric Slade, Nancy A. Lever, and Sharon Stephan

Mental health services for students across the developmental spectrum are often limited and difficult to access (National Scientific Council on the Developing Child, 2008). For example, about 70 % of school-aged children and adolescents with a mental health disorder do not receive treatment (Greenberg et al., 2003). Because education in the USA is an entitlement for all children, schools have been identified by the federal government as a natural setting and best site to provide mental health treatment and prevention services due to the large number of children and adolescents who can be reached in a school location (Anglin, 2003). In recognition of the value of providing services directly where students are, over the past 20 years, policies and programs that integrate mental health services into schools have flourished, and research continues to demonstrate their positive impacts on educational and mental health outcomes of students. The Surgeon General's report on Children's Mental Health (US Department of Health and Human Services, 2000) and the President's New Freedom

Commission on Mental Health (New Freedom Commission on Mental Health, 2003) while identifying schools as a major setting for providing mental healthcare utilization children and adolescents did not address funding issues related to how to finance these recommended services. Developing and sustaining funding streams to support the delivery of school mental health services and prevention programs continues to be an obstacle at local, state, and national levels (Evans et al., 2003).

In order to meet the needs of all youth, it is critical to identify funding of mental healthcare in natural settings (i.e., schools) (Kazak et al., 2010). Expanded school mental health (ESMH) programs have been successful in overcoming logistical barriers to care and decreasing the stigma of mental help seeking, which has resulted in dramatic improvements in access to care to youth who may not otherwise receive those services (Bringewatt, & Gershoff, 2010; Weist, Evans, & Lever, 2003). Specifically, through partnerships between schools and community agencies, hospitals, and universities, ESMH programs have increased the types of mental health services available in schools, by providing a full array of mental health promotion and intervention services to youth in both general and special education classes. Comprehensive mental health services such as assessment, therapy (e.g., individual, family, and group), staff consultation, and prevention activities add to the services provided

N.L. Cammack (✉) • N.E. Brandt • E. Slade
N.A. Lever • S. Stephan
Department of Psychiatry, Center for School Mental Health, University of Maryland School of Medicine, 737 West Lombard Street, 4th Floor, Baltimore, MD 21201, USA
e-mail: ncammack@psych.umaryland.edu;
nbrandt@psych.umaryland.edu; nlever@psych.umaryland.edu; sstephan@psych.umaryland.edu

by other school-hired mental health professionals (e.g., school psychologists) and increase schools' capacities to provide treatment of mental health problems and prevention programs (Flaherty, Weist, & Warner, 1996; Flaherty & Weist, 1999; Weist, 1997). However, despite this widely documented need for mental healthcare provided within schools and the benefits of ESMH programs, funding to provide these services continues to be a struggle for many programs. For example, financial support for ESMH services has not increased at a rate that is consistent with the need for these services. Specifically, a 2002–2003 Substance Abuse and Mental Health Services Administration report on school mental health revealed that 69 % of school districts across the USA reported an increase in student need for mental health services during the prior 2 years, but only 15 % of schools reported an increase in their funding budgets for school mental health services (Foster et al., 2005).

Expanded school mental health programs face a challenging funding environment due to persistent budgetary deficits at the local, state, and national levels. Additionally, funding opportunities change and evolve over time, and the differences between local, state, and national budgets and specifications of how awarded funds can be utilized further complicate funding of ESMH programs. This chapter will identify barriers to funding ESMH programs in schools, summarize funding strategies to support ESMH programs, and review the differences in funding opportunities of ESMH programs at the local, state, and national levels. We build on prior overviews of school mental health funding (see Kutash, Duchnowski, & Lynn, 2006; Poirier & Osher, 2006; Price & Lear, 2008; Weist, Goldstein et al., 2003), discuss cost analyses of ESMH, and consider ESMH funding within the context of healthcare reform and economic analyses.

Common ESMH Funding Mechanisms

In order to sustain the delivery of mental health services, it has become incumbent upon ESMH programs to secure funding from multiple

sources. Mental health support services for students are primarily funded through public sources (i.e., federal government), insurance companies, managed care companies, charitable groups, and foundations (Poirier & Osher, 2006). Although some potential funding sources may be underutilized (e.g., from EPSDT, Safe and Drug-Free Schools, Title I), the most frequently utilized sources of funding (e.g., Medicaid fee-for-service) are difficult to obtain and may not provide sufficient revenue to cover the costs associated with ESMH programs (Center for Health and Health Care in Schools, 2003; Evans et al., 2003). In addition, funding provided by education systems is usually limited, and when community mental health mechanisms are used, challenges are presented on how to provide services to students without Medicaid (Lever, Stephen, Axelrod, & Weist, 2004; Mills et al., 2006). To help ESMH programs secure funding to sustain mental health services in schools, this chapter will detail and provide examples of common categories of funding including federal funding, state and local funding, solicited funding, blended funding, and braided funding that are common mechanisms for funding ESMH programs.

Federal Funding

Federal funding sources have defined regulations to mandate how funds may or may not be used by ESMH programs (Freeman, 2011). Federal and state funding are traditionally designed to pay for treatment services of diagnosable mental health disorders and are not intended to fund mental health prevention or promotion activities. Prevention and promotion activities are more commonly supported through grant dollars and require ongoing advocacy to maintain. Federal grants can be allocated in four ways: (1) block grants, (2) project grants, (3) legislative earmarks, and (4) direct payments to provide states with a portion of funding needed to support ESMH programs in the schools (Kutash et al., 2006; Poirier & Osher, 2006). Specifically, *block grants* use a formula to provide a fixed amount of funding (based on population, unemployment

levels, and other demographic characteristics), which is provided to states. A state then determines the appropriate use of those funds and allocates them within the state. The Community Mental Health Services Block Grants is example of a block grant that supports activities that improve the quality of mental health services through the use of evidence-based practices, quality improvement, and good consumer outcomes (Poirier & Osher, 2006). *Project grants* (also known as discretionary grants) are awarded through a competitive process and are intended to fund specific projects or services over a fixed period of time. Next, *legislative earmarks* are awarded noncompetitively and specify how funding should be allocated within a larger program. It is important to note that legislative earmarks only provide funding over one fiscal year and do not continue over multiple fiscal years. Public or private agencies are eligible for either “hard” earmarks which are written into legislation and specify recipients and the amount of funding or “soft” earmarks which are awarded based on conference reports. Lastly, *direct payments* are a form of federal assistance provided directly to individuals who meet eligibility requirements (e.g., Medicaid) (Poirier & Osher, 2006).

Under federal regulations (Centers for Medicare and Medicaid Services, 1997), schools that bill Medicaid for services cannot provide students in regular education programs and non-Medicaid-eligible students the same services, unless a sliding scale fee and the capacity to bill private insurance plans are also implemented. Three specific financing strategies that can be utilized to maximize Medicaid to support mental health services for students include fee-for-service claiming (i.e., Medicaid-eligible services are reimbursed by the state Medicaid agency), administrative claiming (i.e., claiming federal reimbursement for the costs of Medicaid administrative activities, such as assisting with Medicaid enrollment, performed in the school setting), and leverage (i.e., two or more agencies partner to commit funding contingent upon committed funding from the other parties). ESMH programs can be viewed as providers of primary care and preventative services and therefore can utilize patient care reimbursements (Evans et al., 2003).

However, critical components of successful ESMH programs (e.g., teacher consults, classroom observations, parent management) are not reimbursable through fee-for-service claims.

Other common sources of federal funding that ESMH programs may utilize include the Department of Education, Department of Health and Human Services, Office of Juvenile Justice and Delinquency, IDEA (Individuals with Disabilities Education Act) which was reported as the national top federal source of funding for school mental health intervention (Anglin, 2003; Foster et al., 2005), Title I (Elementary and Secondary Education Act of 1965), Title IV (Safe and Drug-Free Schools and Communities program), Title V Maternal and Child Health Block Grant, Title XI funds for disadvantaged youth, Title XX Social Services Block Grant, and the Preventive Health and Health Services Block Grant.

State and Local Funding

On average, almost half of all public and secondary school revenues come from state sources. In fact, some states include school-based health and mental health services in their budgets (Weist, Goldstein et al., 2003). The Children’s Health Insurance Program (CHIP) is an example of a state-driven, federally funded initiative designed to provide insurance coverage for children from low-income families who do not meet eligibility for Medicaid coverage (Weist et al., 2003). In some states, this program operates as an extension of Medicaid, with higher income limits for eligibility, increasing the population to whom services can be administered. Examples of mental health services funded by CHIP include support assessment and treatment services in schools for youth with established problems (Maag & Katsiyannis, 2010). Additionally, states can apply for waivers to customize their ESMH programs, such as the waiver for children with chronic and severe mental illness in New Jersey (State of New Jersey, 2011) and the waiver for children with serious emotional disturbances in Kansas (State of Kansas, 2012).

Recently many states have initiated grant programs as a mechanism to expand the funding stream of ESMH programs. For example, in 2007, the Minnesota Department of Human Services released a Request for Proposals totaling over \$10 million to fund projects that develop the infrastructure of school-based mental health over a 3-year period (Minnesota Department of Human Services Children's Mental Health Division Request for Proposals, 2007). Under this initiative, funding was provided by the state to support programs that provide mental health interventions and treatment including parent training and consultation. In addition, applicants could request additional funds from the state grant to cover costs associated with establishing billing procedures, developing partnerships with school personnel, providing staff development in mental health and social-emotional learning, and building outreach activities and referral networks.

At the local level, school districts have the power to determine what mental health services are funded and can allocate funds toward programs that treat mental health disorders within the school setting. Local revenue funds are typically limited because they are intended to support basic school components. Bershad and Blaber (2011) note, however, that local funding may be more easily accessed if funders are provided with evidence of the association between student mental health and academic outcomes. School district revenues can either be general revenue (i.e., for any educational purpose) or categorical revenue (i.e., targeted for specific purposes). Categorical revenues are intended to increase educational resources for specific student populations in need of supplemental services. Because local revenues for education are typically lower in school districts with higher levels of poverty, categorical funding can be utilized as an important mechanism to fund ESMH programs to at-risk youth (Poirier & Osher, 2006).

Solicited Funds

A significant private funding source of school mental health programs is foundation support (Weist, Evans, & Lever, 2003) because they can

provide supplemental and often less restrictive support (e.g., more flexibility for the provision of mental health promotion and prevention-related services) and resources to ESMH programs (Evans et al., 2003). For example, the Health Foundation of Greater Cincinnati (<https://www.healthfoundation.org/>) funds the implementation of mental health prevention programs in schools, and the Blue Cross/Blue Shield Foundation in South Carolina provides seed grants to help supplement school mental health clinician salaries in an effort to retain clinicians in areas with budget shortages (Freeman, 2011). However, many traditional organizations such as The Duke Endowment, (<http://www.dukeendowment.org/>), which in the past provided funding to support planning and start-up costs associated with school-based mental health centers, have experienced a decline in assets resulting in a limited ability to fund new grants (North Carolina School Psychology Association, 2011).

Coordinating Funding Streams

To combat the difficulties associated with securing funding and the challenge of any one source having the means to cover all financial expenses to support ESMH services, many programs seek funding from multiple funding streams. This helps ensure that programs receive adequate funding to supplement the costs associated with providing mental health services in schools and helps protect against a program being overwhelmed and needing to shut down if the funding source is cut. For example, findings from a comprehensive assessment of the New Hampshire's school mental health system suggest that the state utilizes funding from multiple sources, successfully integrates Medicaid services with IDEA-funded services, and has partnerships between the school districts and community health centers (Norton & Tappin, 2009).

Two common strategies to combine multiple funding streams are *braided funding* and *blended funding*. Braided funding involves coordinating multiple funding streams that were initially separate to pay for services provided by a given program. Under braided funding, ESMH programs

must maintain the separate budgets of each funding stream and carefully detail how funds from each stream were utilized (Bershad & Blaber, 2011; Mauery, Vaquerano, Sethi, Jee, & Chimento, 2006). This can be administratively challenging to ensure that each funding stream is only paying for activities eligible under that funding stream. ESMH programs that utilize braided funding may risk becoming “locked” into providing specific types of services on the continuum, as dictated by contract requirements (Poirier & Osher, 2006). For example, programs that rely on third-party reimbursements may have limited time to provide universal or targeted prevention services if specified by braided funding sources (Center for School Mental Health, 2003).

Blended funding involves combining funds from multiple funding streams into a single budget. ESMH programs are able to allocate funds to provide services without the need to track and report back to funders which funding stream paid for exactly which services and expenses (Mauery et al., 2006; Poirier & Osher, 2006). The benefit to blended funding is that administrative reporting may be less burdensome than in braided models, and all funders are supporting the same overarching deliverables and program goals. However, it should be noted that some funding mechanisms may not allow for the blending of funds.

Examples of Sustained Funding of ESMH Programs

Washington, DC Commission

In 1999, 17 public charter schools in Washington, DC were awarded the Safe Schools/Healthy Students Initiative grant to implement a comprehensive violence prevention initiative. Through the SS/HS Initiative grant, the Washington, DC Department of Mental Health was subcontracted to develop a school-based mental health program to implement in 16 public charter schools who were recipients of the grant (Price & Leah, 2008). An additional 18 schools were added to the grant during the 2005–2006 academic year. The DC Department of Mental Health utilized the ESMH framework (Weist, 1997) as a model to develop

their school mental health program (SMHP). The SMHP provides prevention, early intervention, and treatment services through three targeted levels of care: primary prevention (universal prevention services), secondary prevention (selective prevention services), and tertiary prevention (indicated prevention services).

Since 2003, the Washington, DC Commission has successfully sustained funding for its school mental health services. The DC school mental health programs are predominantly funded by local dollars from the city government that is given to the DC Department of Mental Health and utilizes a very small percentage of their budget from fee-for-service (for treatment services) revenue. In the 2011–2012 academic year, school mental health services are being provided by the DC Commission with 43 clinicians across 13 charter schools and 41 public schools in Washington, DC. This project demonstrates the value of using federal grant dollars as a foundation to build, implement, and document the impact of a program. The documented successes with the project and the relationships formed as part of the work helped to build buy-in and needed programmatic and financial support from the local government and community when the federal grant had ended.

Boys Town South Florida

One example of how funding has been secured for social, emotional, and behavioral health services for young children and their families in schools is found in Florida. Boys Town South Florida (www.boystown.org/south-florida) implements two programs in Palm Beach County: School & Family Support Services (SFSS) and Primary Project. The SFSS program provides in-school and in-home services to children in 70 elementary schools. Primary Project is an evidence-based program developed by the Children’s Institute and provides child-led play sessions in 12 elementary schools in the county. Both programs are primarily funded through local tax dollars that are collected by an independent, special taxing district, which is set up as a quasi-governmental entity. The funding organization has a local board that sets

funding priorities and oversees the distribution of funds, as well as monitors for child and system level outcomes. In addition, services provided within the SFSS program can be eligible for reimbursement under a state-authorized Medicaid carve-out plan for the at-risk population. Under this plan, the child needs to be at-risk for child abuse or neglect, as evidenced by a variety of risk factors.

Baltimore, Maryland: Expanded School Mental Health Network

Baltimore City is well recognized for its 23-year history of providing comprehensive mental health services in City Schools and its 10-year history of providing mental health services in City Head Start Centers. In 2011, the Expanded School Mental Health (ESMH) clinicians served 89 City Schools, and Early Childhood Mental Health (ECMH) clinicians served 14 Head Start Centers. The expanded school mental health network has relied on a blended funding model that has pooled and leveraged funding from multiple agencies and programs including the City Schools, Baltimore Mental Health Systems, Inc. (the local core service agency for the state mental health authority), Baltimore Substance Abuse Systems, Inc. (the substance abuse authority for Baltimore City), Baltimore City Health Department, the Family League of Baltimore (a quasi-governmental nonprofit organization that works with a range of partners to develop and implement initiatives that improve the well-being of Baltimore's children, youth, and families), and the Department of Labor. The funders for the project have worked together as part of the leadership team of ESMH to establish funding guidelines, deliverable requirements for ESMH clinicians, an online statistical reporting system, and clear expectations for principals receiving services within their schools. The ESMH network in Baltimore City demonstrates the value of leveraging dollars and the importance of defining and documenting service provision and student-level outcomes (see Weist, Paternite, Wheatley-Rowe, & Gall, 2009).

Implications of Health Reform

State and federal legislation is critical in determining the funding and coordination of integrated mental health services for children and adolescents in schools. For instance, at the state level, the Mental Health Services Act in California (also known as Proposition 63) gave the Department of Mental Health the authorization to establish guidelines and fund the implementation of prevention and early intervention activities and workforce education and training throughout the state (California Department of Mental Health, 2004). Under Title V of the District of Columbia's Public Education Reform Amendment Act of 2007, an Interagency Collaboration and Services Integration Commission was created to foster collaboration between agencies to promote social and emotional skills among children and youth. Specifically this integrated system focused on using data to identify and assess youth that receive services through various agencies in Washington, DC, provide evidence-based programs, and evaluate the results (Public Education Reform Amendment Act of 2007, 2007). As such the commission is eligible to combine local, federal, and other resources to provide multidisciplinary assessments, integrated services, and evidence-based programs to youth and receive and disburse federal, state, and local funds to provide funding to at-risk children, youth, and families (Public Education Reform Amendment Act of 2007, 2007).

At the federal level, the Patient Protection and Affordable Care Act (Affordable Care Act [ACA], 2010), also known as national healthcare reform, was signed into law by President Barack Obama in 2010. Over the course of a decade, the ACA intends to expand health and mental health services to a larger population and make health insurance coverage more affordable. Specifically, ACA increases Medicaid coverage eligibility to younger children (i.e., under age 6 living in families with incomes at or below 133 % of poverty), youth in foster care, and children with preexisting

medical conditions and provides grant funding to integrate mental health services and expand mental health prevention. ACA affords more children and adolescents access to behavioral health outreach, screening, assessment, and intervention (ACA, 2010; Children's Health Fund, 2011; Cunningham, Grimm, Evangelista, Lever, & Stephan, 2012). The ACA also preserved CHIP, which provides medical insurance coverage to children from low-income families who are not eligible for Medicaid and cannot afford health insurance. The CHIP Act of 2009 authorized funding of school-based health centers within schools to increase student access to health and mental health services. Since the ACA law passed, \$95 million has been awarded to fund school-based health centers (U.S. Department of Health and Human Services, 2011). Legislation that supports the funding of grants and programs that provide ESMH services and other mental health interventions expand mental health services to vulnerable and underserved populations, further highlighting the importance of school mental health professionals working with legislators and advocating for the funding of integrated comprehensive mental health services for children and adolescents in schools.

Steps Needed to Fund School Mental Health Programs

Expanded school mental health programs continue to face numerous challenges with sustaining funding to provide mental health services, prevention and intervention efforts, and targeted services that reduce the impact of mental illnesses on child and adolescent functioning in schools. To meet this challenge and to help sustain ESMH services, programs must identify ways to enlarge their funding pool. Specifically, conducting a full comprehensive examination of existing funding opportunities at the national, state, and local levels for grants, contracts, fee-for-service payments, interagency agreements, etc., can result in identification of funding streams that were not previously utilized by ESMH programs. It is possible to pool multiple block grant

funds together to support ESMH programs. For instance, the Community Mental Health Services Block Grant, Social Services Block Grant, Juvenile Accountability Block Grant, Education Block Grant, Early Childhood Block Grant, and Community Development Block Grant are examples of block grants that support early intervention mental health services provided by ESMH programs.

It is also important to analyze education funds at the national, state, and local levels to determine the availability of funding for nonacademic learning supports such as ESMH programs. For example, prior research has shown that students who receive mental health services and prevention and intervention programs through school-based services are more likely to achieve in school (Greenberg et al., 2003; Welsh et al., 2001; Zins et al., 2004), reduce special education referrals and improve school climate (Bruns et al., 2004; Substance Abuse and Mental Health Services Administration, 2005), decrease grade retention (Substance Abuse and Mental Health Services Administration), and reduce levels of emotional and behavioral difficulties (Hussey & Guo, 2003). Thus, the positive academic and emotional outcomes associated with school-based mental health services may qualify many ESMH programs for educational grants that support non-academic learning supports. In addition, it is beneficial for ESMH programs to align goals with education priorities and explore the possibilities for direct education funding for mental health promotion and early intervention. For example, in the states of Ohio and North Carolina, federal education funds have been used to support the implementation of evidence-based programs and interventions (Price & Lear, 2008). Examples of federal educational supports include Title I (Part D: Children and Youth who are Neglected Delinquent or At-Risk), Title IV (Part A: Safe and Drug-Free Schools and Communities; Part B: Twenty-First Century Community Learning Centers), and Title V (Promoting Informed Parental Choice and Innovative Programs). In addition, the Individuals with Disabilities Education Act designates a portion of the special education budget to provide intervention services

to youth who have not qualified for special education services yet, making it possible to fund early intervention work through ESMH programs.

Expanded school mental health programs are also encouraged to develop relationships with other agencies (e.g., community mental health centers) or professionals (e.g., child psychiatrists) who can access categorical funding that many ESMH programs are not eligible to receive. Through this partnership, ESMH programs and other outpatient agencies can work together to develop and create a full continuum of integrated mental health services for students. For example, Price and Lear (2008) suggested that an ESMH program that is not eligible for Medicaid funding can develop a relationship with a Medicaid-certified provider who can bill for Medicaid services provided to Medicaid-eligible students.

Assessing Cost of ESMH Program Delivery and Establishing Cost-Effectiveness

Expanded school mental health programs have a critical role in ensuring that schools effectively reinforce positive social behaviors and provide needed mental health services to students with emotional and behavioral problems. Although, these programs also have important mental health and educational economic benefits, they generally receive little or no funding via general education revenue sources in the USA. Most economic research on education's benefits emphasizes the value of academic skills, but recent studies also recognize the economic value of positive social and emotional behaviors among students (Heckman, 1999). Behaviors that are often developed and reinforced in ESMH programs, including adaptive classroom behaviors, completing homework, and positive peer interactions, are increasingly recognized to be equally as important to later economic outcomes as are academic skills. Such behaviors tend to be associated with greater employment stability, higher earnings, and lower chances of needing public welfare supports and becoming involved in the criminal

justice system. Rigorous economic evaluations, conducted in collaboration with schools, are needed to demonstrate the numerous economic benefits and positive outcomes associated with students who receive ESMH services. Consequently, it is increasingly clear that these programs' opportunities to garner sustained financial support will depend to some extent on whether their costs and benefits are well documented in evaluations.

Evaluations of the costs and benefits of ESMH programs are increasingly of interest to policy-makers and organizations that provide these services. Economic assessments may be used to document the costs and the potential future economic value of ESMH programs and to inform decisions about future spending on programs and services. Given the need for such assessments, it is perhaps surprising that they are rare. In fact, few schools and ESMH programs have the infrastructure and expertise needed to carry out such evaluations (Levin, 2001). This section summarizes the basic elements of economic evaluations of ESMH programs and current obstacles to their wider use, with the aim of providing information to clinicians and administrators who may be interested in developing a capacity for economic evaluation in schools.

Cost Analyses

Several types of cost analyses are used by economists to evaluate programs. Cost (or cost-consequences) analyses provide estimates of a program's impact on resource utilization. A *cost analysis* provides estimates of both the direct costs of paying for a program's implementation and operation and the costs of any resources used or saved as a result of the program's implementation. For example, implementation of a school-wide prevention program results in direct costs, such as expenses for an instructor who delivers the intervention and any materials that are used. This prevention program may also result in indirect costs to teachers and school administrators, who may have to complete additional behavioral assessments of students and enter their assessment data

into a database. Some resources may be saved, for example, if the prevention program results in fewer visits by students to the principal's office. A *cost study* would provide an estimate of the total resource costs of a program (i.e., direct costs, indirect costs, and saved resources) regardless of whether services result in direct payments. For example, a school administrator's time may be valued using the administrator's salary plus benefits divided by total annual work hours. A cost study can consequently provide an assessment of the total resource impacts or *opportunity costs* of various initiatives and programs.

To carry out a comprehensive cost study, schools usually need databases that track resource use at the individual student level. Individual-level measures of service delivery costs and other related education costs are needed to assess the opportunity or resource costs of programs. However, few schools have the capacity to extract reliable information on the average costs of resources used within the school, let alone costs at the individual level. Most schools' accounting systems record aggregated costs for all students or for particular expense categories within the school (e.g., salaries, facilities, vendor services, supplies), but do not define categories in a way that allows tracking of costs for particular types of services or specific programs. One reason for this lack of capacity is that schools have not historically been required to maintain this level of information and have not had to provide regular reports on their expenditures for individuals or specific services and programs within the school. Electronic information systems that are designed to track resource costs and services at more disaggregated levels may become more prevalent in the coming years, as many schools are now required to comply with more stringent cost-reporting standards for purposes of public accountability.

Cost-Benefit Analyses

In a *cost-benefit analysis*, all costs and benefits of a program are monetized (i.e., measured in dollars), and the costs are subtracted from the

benefits to calculate the program's *net benefit*. Costs are defined as the value of resources used, whereas *benefits* are defined as the value of resources gained (or saved). If a program is said to have a positive net benefits, it means that the value of the resources gained as a result of the program are thought to exceed the value of the resources used to provide the program. Consequently, programs whose net benefits are positive are considered to be worthwhile public investments.

Cost-benefit evaluations of any type of education program are rare [for reviews, see (Barnett, 1995; Karoly, 1998)]. However, a few education programs have been evaluated extensively over multi-year periods of time, even up to several decades. Of these, the High/Scope Perry Preschool program study, a study of disadvantaged African-American children enrolled in a high-quality preschool education program in the 1960s, is perhaps the longest and most extensive study (Heckman, Moon, Pinto, Saveliev, & Yavitz, 2010). The results of follow-ups through age 40 of children randomized either to High/Scope or the no intervention condition have demonstrated that the benefits of the program far exceeded its costs (Barnett, 1985, 1996; Belfield, Nores, Barnett, & Schweinhart, 2006). In the most recent of these cost-benefit analyses (Belfield et al., 2006), the estimated intervention costs were \$15,166 per child and the estimated (lifetime) benefits (estimated as of age 40) were \$195,261 per child, implying a net benefit of \$180,455. Approximately two-thirds of these benefits (65 %) were attributable to lower costs of criminal activity, suggesting that the program's largest single benefit was improvements in adaptation to behavioral norms in adulthood.

Two other programs, the Child-Parent Center Early Education program (Reynolds, Temple, Robertson, & Mann, 2002; Reynolds, Temple, White, Ou, & Robertson, 2011) and the Carolina Abecedarian Project (Barnett & Masse, 2007) also provide evidence of substantial net economic benefits associated with high-quality early education programs. The payoffs to such cost-benefit evaluations have been substantial. The positive net benefits demonstrated by the High/Scope Perry

Preschool project and other similar demonstration projects during the period were instrumental in securing and sustaining federal Head Start and Early Head Start funding (Levin, 2001).

One of the greatest obstacles to cost-benefit evaluation of ESMH programs is the long period of time that must often elapse until the economic benefits of a program occur. Many important economic outcomes, such as employment and earnings, receipt of publicly provided income supplements and subsidies, and expenditures by other public programs on services and supports, are not observed until well into adulthood; whereas most school-related prevention and mental health intervention programs are used during childhood and adolescence. Thus, cost-benefit analyses of ESMH programs have limited potential for application, except in cases where the program being examined is expected to result in substantial near-term benefits, such as sharp reductions in expensive special education placements. This obstacle has led to other forms of economic evaluation, such as cost-effectiveness analysis, that do not require such lengthy periods of follow-up.

Cost-Effectiveness Analyses

A *cost-effectiveness analysis* refers to a method for comparing program and policy alternatives according to their impacts on the use of resources (i.e., their costs) relative to their effectiveness in improving outcomes (Gold, Siegel, Russell, & Weinstein, 1996). The summary measure in a cost-effectiveness analysis is a ratio of the increase in costs associated with a program divided by the resulting improvement on a standardized measure of outcome, such as improvement on a measure of academic achievement. This ratio is interpreted as the cost (in terms of resource utilization) of obtaining a unit of improvement on a chosen outcome measure. Alternatives that can be obtained at lower cost for a given improvement in outcome and alternatives that result in a greater improvement in outcome for a given cost have lower cost-effectiveness ratios and consequently are considered more “cost-effective” (i.e., a better overall value).

Cost-effectiveness analysis could be used to evaluate ESMH programs and compare the provided services’ value to the value of other types of education programs. School prevention and mental health interventions in principle can reduce the frequency of problem behaviors (e.g., disruptiveness and violence, substance use, serious rules violations, school absences) in children and adolescents that tend to be associated with adverse health, social problems, and economic difficulties in later adolescence and adulthood. Consequently, programs that result in fewer behavior problems in school are likely to have future economic benefits that partially or fully offset their costs.

The cost-effectiveness evaluation of the Fast Track intervention (Foster & Jones, 2006) provides a good example of the cost-effectiveness analysis of an experimental school program aimed at reducing behavior problems. Fast Track is an intensive, multicomponent school-based intervention for elementary school-aged children, which targets the prevention of aggression in youth (McMahon et al., 1999). Intervention components are delivered in 1st through 10th grades and target multiple determinants of development including parenting, peer relations, and social-cognitive and cognitive skills. During the elementary school phase of the intervention, families are offered group-based parent training with home visitation, academic tutoring, and social skills training. In addition to group meetings, individual support is provided through peer pairing and home visitation to children and parents. Starting in 2nd grade, children are assessed for academic skills, and those whose assessments suggest unmet needs are offered individual tutoring supports. In 4th grade, participants are paired with same-gender same-race mentors. In 5th and 6th grade, monthly group sessions for parents and youth focus on the challenges of transition to middle school. Additional sessions and individualized planning were provided in subsequent years. In addition to indicated individual and group interventions, a universal classroom intervention focusing on promoting a more competent and less aggressive social ecology was implemented.

The Fast Track intervention was estimated to cost \$58,283 per child (Foster & Jones, 2006).

Given the intensity, duration, and multicomponent nature of the Fast Track intervention, such a high cost is not surprising. In terms of outcomes, Foster and colleagues (2006) assigned the following dollar amounts to the value of preventing three study outcomes: \$1 million for the prevention of a case of conduct disorder, \$160,000 for the prevention of an index crime (e.g., armed robbery), and \$50,000 for the prevention of interpersonal violence (e.g., serious assault). In contrast, Fast Track had an actual cost of \$3.5 million per case of conduct disorder prevented, \$423,480 per index crime prevented, and \$736,010 per act of interpersonal violence prevented. Based on these numbers, Fast Track was not considered cost-effective.

Although the Fast Track intervention is not cost-effective when offered as a universal intervention, it may be cost-effective if the intervention is targeted to a group of students who are at high risk for developing later conduct problems. Program targeting, using predetermined criteria to select participants for an intervention or program, can have dramatic effects on improving cost-effectiveness. For example, as was demonstrated in the evaluation of the Fast Track intervention (Foster & Jones, 2006), the intervention was more likely to be cost-effective for boys that were highly aggressive at entry into the Fast Track intervention compared to their peers, thus resulting in a more cost-effective implementation of the program than would an untargeted implementation.

Cost, cost-benefit, and cost-effectiveness analyses can have an important influence on budgetary priorities in education and may be helpful in demonstrating the value added by ESMH programs, prevention programs, and mental health intervention programs. Even a small number of well-selected and well-designed cost-benefit or cost-effectiveness studies could have a large effect on public decision makers' view of the value of ESMH programs in schools. Programs that have preliminary evidence of positive effects on school-related behaviors and functioning, are designed to be upward scalable, and are implemented on a larger scale would make good candidates for economic evaluation.

Making economic evaluations a more routine component of program evaluation in schools

will require commitments of resources by state and/or federal agencies to set up evaluation infrastructure and obtain needed evaluation expertise. In order to carry out these types of assessments, schools need databases that provide detailed information on resource and program costs tools that are designed to extract information from existing school accounting databases and other systems. Regular collections of data on standardized student-level outcome metrics that are appropriate to the education setting are also needed. Standardized measures of academic achievement, such as adaptive quantitative test scores, are probably too narrow for this purpose, because they may not be sensitive to changes in behavior or emotional health. Other scales for measuring academic progress or adaptive behaviors in school could form the basis for a standardized cost-effectiveness outcome in education.

Even though expertise in economic evaluation methods is also needed for economic evaluation, schools can obtain this expertise in various ways. Forming academic partnerships and partnerships with consulting organizations represents the most expedient approach. School or program staff could also acquire evaluation skills through training programs, such as master's level or mini-course economic evaluation training programs that now are offered by several universities.

Even if economic evaluations are not used regularly to assess prevention and mental health intervention programs in schools, an appreciation of the economic approach to evaluation offers a potentially valuable perspective for clinicians and administrators who are involved in these programs. The economic value of these programs depends largely on whether they significantly improve child and adolescent behavioral functioning in school and students' academic progress. If programs are able to improve these outcomes, it is likely that they will generate positive future economic benefits. This perspective suggests that programs should make every effort to track these outcomes in their programs and should adopt "evidence-based" prevention and intervention models that have been demonstrated to result in improvements in behavioral functioning and academic progress.

Conclusions

To combat the challenges associated with obtaining funding and sustaining ESMH programs, it is imperative that ESMH programs explore various levels (e.g., national, state, and local) of funding to build a collection of funding streams to adequately sustain programs. Multiple sources of funding are needed in part because funding agencies often stipulate the types of services that can be reimbursed and the population of students (i.e., general education vs. special education) who can receive services. According to Price and Lear (2008), ESMH programs need to expand their capacity to successfully compete and obtain grant funding, through several key characteristics including building collaborative partnerships, strengthening interagency communications, refining system of care models of mental health services, and identifying advocates for policy and program changes. In addition, it is important that policies at the national, state, and local levels commit funds to support mental health services in schools. For instance, if school districts such as in Los Angeles County, California, budget general school district funds (i.e., district tax dollars that are not tied to any particular program) to support the delivery of mental health services in schools, it will increase the capacity of ESMH programs in treating youth with emotional and behavioral problems. Lastly, as schools enter an era of more rigorous review of their budgets, they require knowledge of the costs and cost-effectiveness of their programs. Schools may find advantages in implementing processes and systems to track resource use and to estimate the costs of the services they provide, including SMH services. Tracking costs more accurately can reveal how a school's resources are being allocated and can create an opportunity to meaningfully compare the cost implications of alternative uses of a school's resources further supporting the need to fund ESMH programs.

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