

# Cost Effectiveness of Prevention and Early Intervention



**P**revention and early intervention programs for children with mental illness produce positive outcomes for our youth and are cost-effective for our communities. However, while one in five American children has a mental illness or disorder, many never receive treatment.<sup>1,2</sup> Nearly half of all diagnosable mental illnesses show symptoms by age 14, and 75% begin by the age of 24,<sup>3</sup> yet only 1 in 5 adolescents between 12-17 years-old receive treatment or counseling.<sup>2</sup> When left untreated, these disorders can lead to tragic and costly consequences, such as substance abuse, school drop-out, involvement with law enforcement, and suicide. To ensure our children transition into healthy, productive adults, communities can implement prevention and early intervention programs to prevent, identify, and effectively treat youth with mental illness at the earliest stages.

## Costs of Childhood Mental Illness

- Mental, emotional, and behavioral disorders among youth cost \$247 billion annually in mental health and health services, lost productivity, and crime.<sup>2</sup>
- The National Center for Mental Health and Juvenile Justice found that 70.4% of youth in the juvenile justice system have been diagnosed with at least one mental health disorder.<sup>4</sup> High-risk youth are estimated to cost society \$1.2 to 2 million each in rehabilitation, incarceration, and costs to victims.<sup>5</sup>
- In 2008, state mental health agencies spent \$36.7 billion on mental health services. California spent the most, at \$5.5 billion, while North Dakota spent the least, at \$47.8 million.<sup>6</sup>
- Poor social and emotional skills in young children are predictors of early school failure, leading to continuing school problems and possible involvement in the high-cost child welfare, mental health, and juvenile justice systems.<sup>7</sup>

## Cost Effectiveness of Prevention and Early Intervention

- Prevention and early intervention programs for youth are consistently found to have the greatest long-term economic impact through increased earnings and decreased criminal activity.<sup>8,9</sup>
- The Centers for Disease Control recommends implementing publicly-funded, center-based, and comprehensive programs for low income children aged 3-5 to prevent developmental delay. Studies have shown that such programs' benefits—higher graduation rates, higher rates of employment, and higher monthly earnings—exceed their costs.<sup>2</sup>
- The National Research Council and the Institute of Medicine state that despite the limited studies on cost-effectiveness and cost-benefit analyses of mental health prevention, there is consensus that intervention benefits are often efficient, effective and offer benefits greater than their costs. One study concluded that 10 out of 12 substance use prevention programs for youth were highly cost-effective, with benefit to cost ratios ranging from 3:1 to 1000:1.<sup>2</sup>
- The Substance Abuse and Mental Health Services Administration reports high levels of cost-effectiveness among community mental health services delivered through systems of care, which require collaboration among the multiple public systems in which children with serious disorders are often involved:<sup>10</sup>
  - The average reduction in per-child hospital days from initial entry into services through 12 months resulted in an average savings of \$2,776.85 per child.
  - From entry into community systems of care through 18 months, the number of children who utilized inpatient facilities decreased by 54%.
  - The percentage of youth who purposefully harmed themselves or attempted suicide decreased 32% after 12 months in systems of care.

- The implementation of prevention programs in public schools has shown positive economic effects.
  - The Seattle Social Development Project, an intervention implemented across 18 elementary schools in diverse, high-crime neighborhoods, reported 11% fewer mental health disorders and higher overall educational and economic attainment in young adults in a fifteen year follow-up.<sup>9</sup>
  - Fast Track—implemented in Durham, NC; Nashville, TN; rural Pennsylvania; and Seattle, WA—targets individual children at high risk for antisocial behavior and provides a range of services from first through tenth grades. Fast Track has been found to have a significant impact in preventing the diagnosis of conduct disorder among the youth at highest risk.<sup>11</sup>
- Functional family therapy and multi-systemic therapy are evidence-based interventions for youth in the juvenile justice system and have been shown to reduce juvenile justice system costs, crime, and recidivism. These therapies produce savings (benefits minus costs) of \$47,776 (functional family therapy) and \$17,694 (multi-systemic therapy).<sup>12</sup>

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