In years past in Indiana, parents of children with serious emotional disturbances had to navigate a complex maze of agencies to get help, even though their children were in dire need of services. As a result, these children often did not receive the care that they needed to improve. In 1997, in an effort to address this problem, a group of providers who serve children and youth in Indianapolis created the Dawn Project, an integrated system of care that involves a treatment team.

About 8 percent of all young people (ages 9 to 17) in Indiana have a serious emotional disturbance (SED). SED is a diagnosable disorder that severely disrupts social, academic, and emotional functioning (DHHS, 1999). Historically, mental and behavioral health care for young people with SED and their families consisted of a fragmented array of uncoordinated services. These families with children in severe need of services had to appeal to multiple agencies for help. If parents were able to access services, they frequently had to consent to their child being placed in a residential treatment facility, often in another state.

Traditional child-serving agencies typically have not been focused on strengths. They often failed to listen to the families’ wishes and involve them in the treatment process, and they restricted the types of services that could be obtained with public funds.

One of the most important changes in the provision of services to young people with SED and their families over the last two decades has been the development of integrated systems of care (Behar, 1985; Kamerman & Kahn, 1991; Stroul & Friedman, 1988a, 1988b). Systems of care are designed to provide a wide spectrum of strengths-based non-overlapping, family-focused, community-based, and culturally appropriate care consistent with the complex needs of this population (Anderson, 2000; Behar, 1985; Stroul & Friedman, 1988a, 1988b).

The Dawn Project—What is it?
In 1997, in an effort to improve service provision in Indiana for young people with SED, local and state leaders, including providers who served children and youth in Indianapolis, created the Dawn Project. The Dawn Project was Indiana’s first integrated system of care for young people with SED, is administered by Choices, Inc., a nonprofit care management organization, and provides service coordination and wraparound services to children with SED and their families.

Wraparound is a process whereby families and professionals work together to develop plans in which both formal and informal services are created and, when necessary, coordinated and tailored to the individual strengths and needs of the child and family (Behar, 1986; Burchard & Clarke, 1990; Clark & Clarke, 1996; Friedman, 1996; VanDenBerg & Grealish, 1996). Young people are referred to the Dawn Project if they are viewed as being among the most difficult to serve (i.e., if they have severe emotional and behavioral challenges and cross-system needs).

The Dawn Project—What does it do?
The aim of the program is to facilitate a team-based approach to service planning using child and family teams (CFTs). When a young person and family are initially referred to the program, the family is assigned a Care Coordinator who meets with them to conduct an initial strengths-based assessment and to determine who should be represented on the CFT. The CFT is made up of the young person, his/her immediate caregiver(s), the Care Coordinator, representatives from all agencies providing services to the youth or the family, and other community members identified by the family as key supports (e.g., other family members, friends, church members). While there is no limit on the number of people who can be on a CFT, most have eight active members, on average, at any given time.

Once established, the CFT meets at least monthly to determine individualized treatment goals for the young person, decide on services that would help the family meet those goals, and monitor progress in meeting the stated treatment objectives. A critical philosophical commitment in the Dawn Project is that all decision-making must be family-focused, family-driven, and involve the young person to the extent possible given the child’s age and level of functioning. All decisions regarding treatment and service provision are consensus based, unless a legal mandate requires otherwise.

One unique aspect of the Dawn wraparound process is that CFTs have the authority to approve and pay for services that will meet a family’s needs through a cooperative financial agreement among the four funding agencies: child welfare, juvenile justice, education, and mental health (Anderson, Wright, Kooreman, Mohr, & Russell, 2003; Wright, Kooreman, & Anderson, 2004).
The Dawn Project—Is it effective?

Because the program brought about a new way of providing services, both the developers of the Dawn Project and other community stakeholders have questions about the outcomes for the young people and families who have participated. In 1998, researchers at Indiana University (IU) and Indiana University–Purdue University Indianapolis (IUPUI) developed an interest in evaluating the program and began assisting the participants informally in answering stakeholder questions. In 1999, Choices, Inc., was awarded a multimillion dollar, six-year federal grant from the Center for Mental Health Services (CMHS) of the Substance Abuse and Mental Health Services Administration (SAMHSA). The grant provided six years of funding to enhance the Dawn Project; provided technical assistance and training to allow the program to serve new populations; enhance its cultural competence; improve its social marketing; and increase family involvement in program planning, implementation, and evaluation. The grant also supported the development and implementation of a formal evaluation effort: the Dawn Project Evaluation Study (DPES), which integrated the requirements of a national evaluation effort with local interests and data needs. The DPES was designed by a multidisciplinary team of researchers from IUPUI and IU, in collaboration with Choices, Inc., parents, and representatives from the primary referring agencies.

Sources of data for the evaluation

Data for the evaluation were collected from both quantitative and qualitative sources. The data analyzed for this report come from three primary sources:

- The Clinical Manager (TCM)—TCM is the program’s management information system. Information stored in TCM provides basic information on the demographic and clinical background of young people, the services used and paid for by the Dawn Project, and qualitative information on the clinical progress and treatment planning process maintained in case notes by Care Coordinators.
- In-depth interviews with the youth and primary caregiver—some of the requirements of the federal grant included in-depth interviews with the young people and their primary caregivers at the time of enrollment and at six-month intervals for the 36 months following their admission into the program. The interviews consisted of federally-mandated questionnaires as well as questions developed locally by the DPES team. Due to difficulties retaining families in the study at both the 30- and 36-month follow-up periods, the number of interviews completed for those time points was relatively small. Therefore, the DPES team focused its analyses on data collected through the two-year (24-month) follow-up date.

**Comparison of Strengths-Based and Non-Strengths-Based Approaches**

<table>
<thead>
<tr>
<th>Strengths-Based Assessment &amp; Ongoing Treatment</th>
<th>Not Strengths-Based Assessment &amp; Ongoing Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information on strengths is obtained. Use of a strengths-based assessment protocol.</td>
<td>Information on child and family strengths omitted or perfunctory.</td>
</tr>
<tr>
<td>Parents invited to participate in evaluations or assessments of the child.</td>
<td>Evaluation of the child involves the child alone.</td>
</tr>
<tr>
<td>Parents participate in development of treatment approaches.</td>
<td>Professionals develop treatment approaches alone.</td>
</tr>
<tr>
<td>Treatment promotes positive relationships, not just immediate improvement in behavior.</td>
<td>Focus on behavior alone, without attention also to supporting primary relationships needed to sustain improvements.</td>
</tr>
<tr>
<td>The child or adolescent is given opportunities to participate actively and to make meaningful decisions.</td>
<td>The child or adolescent is seen as incapable of meaningful responsibility, or as intractably resistant.</td>
</tr>
<tr>
<td>Professionals support parental competence and teach specific skills, as appropriate.</td>
<td>Professionals and support staff continue to perform tasks that can with teaching or training, be transferred to parents.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Strengths-Based Attitudes and Beliefs by Professionals</th>
<th>Not Strengths-Based Attitudes and Beliefs by Professionals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appreciation that caution toward professionals, if present, may be an appropriate response to past experience.</td>
<td>Regard caution as “resistance,” lack of readiness, or character-based hostility.</td>
</tr>
<tr>
<td>Recognition of the primary expertise of parents, who are full partners in treatment, in relation to their child.</td>
<td>Parents seen as obstacles to treatment, or as entirely dependent on the expertise of professionals.</td>
</tr>
<tr>
<td>Recognition of children and adolescents as resilient, with desire for approval from adults, and capacity to make choices of their own.</td>
<td>Children seen as fragile or unreachable and unable to make meaningful personal decisions.</td>
</tr>
<tr>
<td>Recognition that effective treatment involves intrinsic (non-professional) resources, not just professional services.</td>
<td>Continuing dependence on services and professionals to produce change.</td>
</tr>
<tr>
<td>Recognition that specific racial and cultural factors influence the treatment process and that the child’s cultural heritage and practices need to be understood and respected.</td>
<td>Belief that “everyone is the same,” and that good intentions without awareness of culture is sufficient.</td>
</tr>
<tr>
<td>Belief that meaningful change is attainable; problems are barriers to progress, not fixed pathology.</td>
<td>Problems are seen as result of regression, fixation, and pathology. Tendency to fix blame.</td>
</tr>
</tbody>
</table>

• In-depth qualitative interviews with stakeholders and family members—Since the beginning of the project, the research team has made an effort to compile qualitative observational and interview data to better understand system-level processes and the local social context in which the program operates. These data are critically important to help the researchers better understand the complex trends in the quantitative data. We also use these data as a formal assessment tool to document the changes observed in the local Dawn system of care.

Key Findings

Background characteristics of youth enrolled in the DPES

Since May 1, 1997, a total of 1,106 young people have been enrolled in the Dawn Project. The majority of young people referred to the Dawn Project are African-American or biracial males (40.1 percent), followed by Caucasian males (29.8 percent), African-American or biracial females (17.1 percent), and Caucasian females (12.9 percent).

The typical Dawn youth is 12.8 years old at the time of enrollment. The length of stay in the program is, on average, 13 months. The largest percentage of young people referred to the program has come from the Indiana Department of Child Services (41.9 percent). More than one-third (35.3 percent) of young people entering the program have come from the Marion County juvenile justice system. Young people have also entered the program through the Indianapolis Public School System (13.5 percent), the Indiana Department of Education (5.9 percent), and the Indiana Division of Mental Health and Addiction (3.4 percent).

Young people entering the program generally have a variety of problems. These presenting problems are not exclusive, and young people typically have challenges in more than one category. The most commonly reported presenting complaints involve:

- conduct problems or involvement with law enforcement (80.4 percent);
- school-related problems (57.7 percent);
- family problems (56.1 percent);
- mental health-related concerns (55.0 percent);
- physical abuse, sexual abuse, and neglect (50.8 percent); and
- alcohol or drug abuse (13.4 percent).

A Success Study

Robert (not his real name) was referred to the Dawn Project by the Department of Education in June 1999. He was physically and verbally aggressive and often truant from school. He showed similar aggression problems at home, where he lived with his mother and younger brother.

The Dawn Project care coordinator initially met with Robert and his mother to begin to build relationships, assess needs, and gain trust. Within a few months, the Care Coordinator established that Robert’s anger was targeted towards his mother who admitted to a substance abuse problem and major depression.

The Care Coordinator developed a Child and Family Treatment Team including a home-based therapist and a mentor. The therapist began individual therapy for Robert and family therapy for his mother, while the mentor provided support at school and developed a plan to help Robert learn to deal with his anger.

Within the first few months of the referral, the team decided to remove Robert and his brother from their mother’s home because of her substance abuse problems. Soon after, Robert was placed in a respite home with close family friends. Although Robert continued to struggle in school, Robert’s mother finally found success in an outpatient drug recovery program. Eventually, Robert was reunited with his mother in June 2000.

Robert continued to receive support and services from his team, and by spring 2001, his grades had improved from well below average to above average and his anger-related incidents had improved. His mother returned to work full time and remarried. Robert learned to manage his anger, forgive his mother, and began to develop a positive relationship with her.

The most commonly recorded psychiatric diagnoses for Dawn Project youth are conduct/oppositional disorders, attention deficit disorders, and mood disorders. Additional information gathered for the evaluation indicates that most young people entering the program are from single-parent households, live below the poverty level, and commonly are from families with histories of domestic violence, mental illness, criminal activity, and substance abuse.

Outcomes for young people

Outcomes for young people in the DPES sample were defined in terms of changes in four key areas: functional impairment, psychiatric symptoms, behavioral and emotional strengths, and school performance.

Changes in functional impairment were measured using the Child and Adolescent Functional Assessment Scale (CAFAS), which provides an overall measure of a young person’s level of
impairment and takes into account the areas of: school/work, home, community, behavior toward others, moods/emotions, self-harmful behavior, substance abuse, and thinking. Total scores can range from minimal impairment (0) to extreme impairment (240).

At the time of the initial interview, the average CAFAS score for the DPES sample was 134 (see Figure 1). By the time of the 24-month interview, the average CAFAS score had dropped to 114. An over-time analysis of impairment scores indicates that the change in impairment scores from baseline to the 24-month follow-up period was statistically significant. The 20-point change also represents a clinically significant, observable improvement in overall functioning.

Changes in psychiatric symptoms were measured with the Child Behavior Checklist (CBCL), which yields scores for internalizing symptoms such as depression, anxiety, or physical complaints; externalizing symptoms such as hyperactivity, aggression, or delinquency; and overall psychiatric symptoms. Scores on any of these three global scales of 63 or higher indicate a clinically significant level of psychiatric symptoms.

The over-time analysis of the CBCL scale scores show that from baseline to the 24-month follow-up interview, the young people showed statistically significant improvement in externalizing behaviors and total behavior problems. While scores for young people across all follow-up time points on these two scales remained in the clinically significant range of impairment, they did not return to their initial level of severity (see Figure 2). Internalizing behaviors also showed statistically significant improvement. By the 18-month data collection period, scores had dropped below the clinical threshold. Though internalizing symptoms increased slightly by the 24-month data collection point, symptoms remained below the level of impairment recorded at enrollment.

The Behavioral and Emotional Rating Scale (BERS) was used to provide an overall score for behavioral and emotional strengths. The BERS considers interpersonal strengths, intrapersonal strengths, affective strengths, family involvement, and school strengths. During the evaluation period, strength scores improved from below average at baseline to average by the end of the 24-month data collection period (see Figure 3). The improvement in overall strengths was statistically significant.

**School functioning** was determined by tracking school attendance, discipline, and grades on a three-point scale over the 24-month evaluation period. A score of 1 on the scale indicates poor functioning, a score of 2 indicates average functioning, and a score of 3 indicates above average functioning.

At the time of enrollment, school attendance did not appear to be a primary concern, with most young people being described as having average or above average attendance. But discipline was a concern with over 47 percent of the DPES sample rated as having below average discipline (i.e., higher rates of school suspensions, detentions, and/or expulsions). Academically, 60 percent of the sample was rated by their caregivers as having either average (33.0 percent) or above average (26.8 percent) grades, while 40 percent was said to have below average grades. During the evaluation period, caregivers reported statistically significant improvement from baseline in the three school-related domains (see Figure 4).

Treatment plans for families enrolled in the Dawn Project are built around each family’s individual strengths and needs, and may or may not include changes that can be measured by standardized assessment tools such as the CAFAS, CBCL, or BERS. The evaluation team used the reason a young person was discharged from the Dawn Project as an indicator of improvement. Young people could

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**Study Samples**

The analyses were completed on three different groups of young people who were part of the Dawn Project. The three samples are not mutually exclusive of one another:

- 359 young people and caregivers who participated in the federally-funded evaluation (the DPES sample)
- a sample of 753 young people who had been discharged from the Dawn Project and for whom care-coordinator-made ratings of functional impairment at entry into the program were available
- the total cohort of 1,106 young people served by the Dawn Project since May 1, 1997, and the ending date of the evaluation grant, August 30, 2005
be discharged from the Dawn Project because they met the goals established by their CFT or for other reasons such as moving away, turning 18, or being pulled out of the program by a referring agency. We chose to define success in the program as being discharged by meeting the CFT treatment goals. By defining success in this manner, we were able to complete analyses on 753 young people who had been discharged and had baseline Care Coordinator-completed CAFAS data available.

The evaluation staff determined that overall, 62 percent of the young people in the sample successfully met their treatment goals. The evaluation team completed a series of analyses to determine if any demographic or clinical characteristics were associated with a better chance of successfully completing the program. The most robust predictor of success was found to be a young person’s age at the time of enrollment into the program. As age increases, there is a gradual, but steady drop in the probability that a young person will complete their treatment goals. For example, a young person enrolling in the program at age 7 has an 80 percent chance of meeting his or her treatment goals. On the other hand, if a young person is not enrolled in the program until age 17, the chance that she or he would meet their treatment goals was 50 percent.

**Services coordinated for young people and related expenditures**

To better understand what services are coordinated for young people and the expenditures incurred by the program, the evaluation team completed an audit of service and expenditure information on the sample of 753 young people who had been discharged from the program since May 1997, and for whom Care Coordinators had provided CAFAS scores at the time of enrollment. The wide array of services accessed by the program can be grouped into seven main categories. Table 1 provides a brief description of each service category, the percentage of young people in the sample who received the service, and expenditure information.

The average cost from enrollment to discharge for a typical young person in the analysis sample was $41,726. Services and expenditures were found to be predictive of a young person’s final disposition in the program. Young people who required residential treatment and/or crisis/respite services were somewhat less likely to meet their treatment goals. The analysis also suggests that there is a modest increase in the probability of success as expenditures increase. However, the impact of expenditures on success appears to change little after expenditures for one youth reach $60,000. In short, the expenditures have only a minimal effect on improving the probability of success of individual youth and this effect is limited to the high end of the distribution of expenditures.

**Outcomes for caregivers**

Caregiver outcomes were assessed in three areas: satisfaction with the Dawn Project, change in caregiver strain over time, and improvements in employment. Outcomes for caregivers could only be followed for the DPES sample.
During the four follow-up interviews, caregivers were asked to rate their level of service satisfaction with various aspects of the Dawn Project. Over the evaluation period, the majority of caregivers (75 percent or more) reported being satisfied with the services their children had received, with the level of cultural competence of the program staff, and with the amount of involvement they had in the treatment planning process for their child.

Caregiver strain was measured using the Caregiver Strain Questionnaire (CGSQ), which includes questions that ask caregivers to rate the extent to which issues such as finances, loss of personal time, embarrassment in public, etc., were a problem due to their child’s SED. Scores on the CGSQ indicated that over the course of the evaluation period, caregivers reported improvement in their level of caregiver strain. The level of improvement over time was statistically significant.

Due to the challenges of parenting a young person with SED, caregivers often find it difficult to obtain or maintain employment. When young people are enrolled in the program and begin to receive services, an indirect benefit for caregivers appears to be an improvement in the family’s employment status. During the course of the evaluation, between 63 percent and 75 percent of caregivers reported that someone in their household was employed. Of the families where someone was employed, 50 percent or more of caregivers consistently reported that receiving services had improved the employed person’s ability to work and had allowed the person to miss fewer days of work. A smaller percentage (37 to 43 percent) also reported that the employed person’s income increased somewhat due to the services their child received.

Thoughts for policy makers
Because the development of the Dawn Project brought with it significant changes in service provision for young people with SED, the DPES wanted to document the impact of the program on Marion County’s social service system over time. To understand how the social service system had changed since the Dawn Project’s inception, interviews were conducted with 20 key informants. The informants included system and agency leaders and parents. All informants had been involved in the children’s social services system in Marion County at the inception of the program and through the first five years of its existence.

Informants believed the Dawn Project brought about many positive changes to the child-serving system, including:

1. The Dawn Project helped increase the collaboration and coordination among and across service providers and service systems.
2. The Dawn Project helped systems and providers realize the importance of including families in all levels of service delivery.
3. The Dawn Project has highlighted the importance of having flexible funds that can be used to acquire nontraditional services.
4. The Dawn Project has encouraged the adoption, use, and proliferation of strengths-based approaches to care.
5. The Dawn Project has pushed systems to take a more global approach to treatment; one that focuses not only on the young person, but also on the young person’s family and environment.

Table 1. Service and Expenditures for Young People Discharged from the Dawn Project (n=753)

<table>
<thead>
<tr>
<th>Service Categories</th>
<th>Description</th>
<th>Number who received service</th>
<th>Percent who received service</th>
<th>Expenditures for those who received the service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental/Behavioral Health</td>
<td>Any form of outpatient psychotherapy including individual, group, and family therapy.</td>
<td>505</td>
<td>67.1%</td>
<td>$4,521 $5,351</td>
</tr>
<tr>
<td>Physical Health</td>
<td>Services which assist with physical health problems, such as visiting nurses, medication management, eye or dental exams.</td>
<td>137</td>
<td>18.2%</td>
<td>$195 $273</td>
</tr>
<tr>
<td>Crisis/Respite</td>
<td>Services which provide temporary placement of young people with foster families as a way to give primary caregivers a break or as a way to help caregivers and young people step away from family conflicts and regain self-control.</td>
<td>262</td>
<td>34.8%</td>
<td>$4,024 $11,673</td>
</tr>
<tr>
<td>Foster Care</td>
<td>Services which provide family-based placements for young people who cannot be placed in the home of a biological family member.</td>
<td>231</td>
<td>30.7%</td>
<td>$17,424 $17,430</td>
</tr>
<tr>
<td>Residential Treatment</td>
<td>Inpatient-type mental and behavioral health services which are provided in a structured, self-contained residential facility.</td>
<td>364</td>
<td>48.3%</td>
<td>$47,647 $39,310</td>
</tr>
<tr>
<td>Mentoring</td>
<td>Services provided in a one-on-one fashion by a mentor to aide the young person in developing appropriate peer relations and social skills in community and/or school settings.</td>
<td>467</td>
<td>62.0%</td>
<td>$9,228 $13,100</td>
</tr>
<tr>
<td>Discretionary Funds</td>
<td>Flexible funds which can be used to provide nontraditional services which meet the unique needs of each family. Examples would include helping with utility bills, assisting with rent, paying for art or karate classes.</td>
<td>732</td>
<td>97.2%</td>
<td>$1,764 $2,446</td>
</tr>
</tbody>
</table>
Citing the success not only of the Dawn Project but also of Circle Around Families, a CMHS-funded demonstration site in northwestern Indiana, in 2000, the Indiana Division of Mental Health and Addiction (IDMHA) implemented the statewide Systems of Care (SOC) network:

- Currently, there are 51 SOCs funded by the IDMHA covering all areas of the state (see Map 1).
- Technical support and quality control of all state-funded SOCs is provided by the Technical Assistance Center managed by Choices, Inc.
- About 75 percent of Indiana’s youth live in areas served by a SOC program.

The goal is to make SOCs and wraparound services the primary methods of providing services to young people with SED and their families throughout Indiana, building community among families, policymakers, and workers in child welfare, juvenile justice, education, mental health, and community-based organizations.

Map 1. Active Systems of Care Sites, February 2007

References


Indiana’s Future: Identifying Choices and Supporting Action to Improve Communities

This project, funded by an award of general support from Lilly Endowment, Inc., builds on the Center’s research to increase understanding of Indiana. The Center’s faculty and staff work to identify choices that can be made by households, governments, businesses, and nonprofit organizations to improve our quality of life. Our goal is to understand the people, economics, problems, and opportunities in Indiana, and to help decision-makers understand the impact of policy decisions. The Center also works to mobilize energy to accomplish these goals.

This issue brief was developed by researchers at the Indiana University Center for Health Policy with the help of Jeffrey Anderson, associate professor with the IU School of Education and area coordinator for special education programs. It is one result of ongoing efforts at the Center for Health Policy to inform decision-makers about vital issues that affect the health of Indiana citizens.

The Center for Health Policy is a newly established research unit at the School of Public and Environmental Affairs at Indiana University—Purdue University Indianapolis. It is a partner center with the Center for Urban Policy and the Environment.

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