Overview

The Mental Health Services Program for Youth (MHSPY) in Massachusetts is an interagency collaboration aimed at demonstrating the effectiveness of an intensive combination of mental health, pediatric and substance abuse services for children and youth with serious emotional disorders who would otherwise risk placement out of their homes and communities. The MHSPY program grew out of broad stakeholder recognition that legislatively defined “categorical funding” created gaps and ambiguities in the mandates of the state’s main child serving agencies (Medicaid, mental health, juvenile justice, child welfare and education), which contributed to the difficulty of caring for children and families with complex needs. During two years of consensus building and planning, child mental health clinicians, policy experts, parents, administrators, state agency staff, and community representatives came together to form the MHSPY Steering Committee.

The Massachusetts MHSPY program was a recipient for one of twelve Robert Wood Johnson (RWJ) Foundation and Washington Business Group on Health (WBGH) replication grants awarded in 1997, which supported development of the model. Now using blended public agency funding, the program provides traditional and non-traditional services through Neighborhood Health Plan, a private, not-for-profit, managed care organization.

From its inception, MHSPY has straddled identities as a research and demonstration project for an integrated clinical care intervention, a state Medicaid contracted service for a special population, and an innovative financial and shared governance model. Special population screening instruments and eligibility criteria, clinical quality guidelines and program performance measures were selected by the MHSPY Steering Committee to address all of these program identities and their unique customers. Performance measures needed to be located within the four overarching outcome domains of: level of clinical functioning, service intensity and utilization, program cost, and family, youth and referring agency satisfaction.

Goals

The MHSPY program aims specifically to address the fragmentation of care that surrounds youth with psychiatric illnesses and their families. For these children, access barriers to appropriate clinical screening and treatment, as well as lack of coordinated decision-making across state agencies (e.g. mental health and child welfare), frequently cause them to be placed in residential facilities, group or foster homes far away from their relatives, neighborhood schools, and communities.

The MHSPY Steering Committee, representing the major child serving agencies in the state, as well as community and family representatives, created a state pilot to investigate whether allowing greater flexibility within available resources, and using an individualized, child-specific care planning team, would work better than “usual care.” The RWJ Foundation MHSPY model, as replicated in Massachusetts, was intended to decrease reliance on expensive, out-of-home placements and to stretch limited mental health resources by developing an extensive support service system for children with severe emotional disturbance and their parents.
The MHSPY design was greatly influenced by the federal Child and Adolescent Service System Program (CASSP) principles. Children and their parents were placed at the center of a system of care involving mental health services, the schools, child welfare, and juvenile justice. The Massachusetts MHSPY replication is unique in that physical health care also is included in the benefit. A better-integrated system of care, as defined by the RWJ Foundation, was expected to envelop the child and his/her family and thereby promote continuity of care and improved outcomes. The MHSPY Replication grant sites, including Massachusetts, additionally were required to be accountable for outcomes, able to maximize funding sources and be designed to take place within a managed care context. This accountability has been highly beneficial in establishing the legitimacy of guidelines and required training and fidelity enhancement activities. Massachusetts MHSPY adapted the systems of care model in order to maintain the strengths of financially accountable, intensively clinically managed care, while combining that with a family-driven, collaborative approach consistent with the CASSP principles.

**Background**

MHSPY is a clinically intensive home and community-based intervention that uniquely combines medical, substance abuse and psychiatric care, as well as “wraparound” support resources, for Medicaid youth and their families. The program is administered through a three-tiered shared governance structure that requires: (1) collaboration and communication about policy across separate state agencies and between the public (EOHHS) and private sectors (Neighborhood Health Plan) at the state level; (2) shared decision-making about resource use, referrals and disenrollments at the area agency operations level; and (3), active participation in all service decisions by the involved local agency staff at the service delivery level.

Program funding is based on blended public agency funds from multiple state agencies, including: Medicaid, Department of Social Services (child welfare), Mental Health, Department of Youth Services (juvenile justice), and Education. These funds are used to purchase all medical, mental health, substance abuse and social services, including “wraparound” 78 resources, based on clinical criteria and in the context of family-based care planning teams79. This highly specialized health care delivery system, which combines public and private dollars, has multiple sources of accountability, and requires transparency in both financial and clinical decision-making (see Figure 1).

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79 Pires, S.A (2002). Health care reform tracking project (HCRTP): Promising approaches for behavioral health services to children and adolescents and their families in managed care systems, 1: Managed care design & financing (FMHI Publication #211-1). Tampa, FL: University of South Florida, Louis de la Parte Florida Mental Health Institute, Research and Training Center for Children’s Mental Health.
Figure 2. MHSPY Model Design and Infrastructure

- Satisfaction
- Cost
- Clinical Functioning
- Utilization

PAL = Parent Advocacy League
DMH = Department of Mental Health
DOE = Department of Education
DYS = Juvenile Justice
DSS = Child Protection
DMA = Medicaid
DPH = Department of Public Health
Schools = Local School Districts
The overlapping mandates allow the delivery of highly coordinated clinical care and other supports, but bring with them complex reporting expectations that address unique state agency obligations, as well as those needed for the purpose of clinical quality management and pilot evaluation. This results in multiple instruments being used in order to address information needs at various levels of the program.

When the group of stakeholders that became the MHSPY Steering Committee achieved consensus regarding the MHSPY program mission, there was recognition that “usual care” left many youth under-diagnosed or misdiagnosed and that the nature of child mental health conditions was that clinical presentation sometimes evolved over time. Therefore, there was a focus on intensity of service need, rather than diagnosis for selection of youth to enroll. At the same time, the public sector agency purchasers were wary of losing managerial oversight over such a broadly flexible benefit and wanted to make sure that appropriately complex youth were enrolled. A single screening instrument score was felt to be insufficient to this purpose. Ultimately, the following combined criteria for enrollment eligibility were determined:

**MHSPY Eligibility Criteria**
- children three through 18 years of age
- residents of the pilot communities
- eligible for services from Medicaid and at least one other state agency and/or receiving special education services
- demonstrably impaired for greater than six months and either already out of the home or at-risk of out of home placement
- Child and Adolescent Functional Assessment Score (CAFAS) \(^{80}\) greater than 40
- a parent or guardian willing to consent to child’s treatment and to participate in the care planning process.

The Steering Committee agreed on a definition of the expanded Medicaid and multi-agency “benefit” which included a continuum of care from least (home-based) to most restrictive (hospital and residential) settings. In addition, the MHSPY intervention was to draw upon the “wraparound philosophy” and included flexible funding to support individualized, strength-based service planning for each child, facilitated by a MHSPY Care Manager and the Care Planning Team.

**Description**

MHSPY enrollees are referred by local representatives from the Massachusetts Departments of Mental Health, Social Services (Child Welfare), Youth Services (Juvenile Justice), and local special education departments. MHSPY offers an integrated care model for youth with significant mental health needs; referring agencies often select youth for whom previous

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interventions have failed. Each youth is assigned a Care Manager to work with the youth and his/her family and help them articulate their needs and goals via a strength-based process. MHSPY Care Managers are responsible for a caseload of eight youth and their families.

The intensive treatment approach involves creation of a Care Planning Team, made up of the family, a MHSPY Care Manager (a Master’s level clinician who chairs the team), and all providers or informal supports identified by the family as involved in their child’s care. The team defines the “mission” for the youth and the individualized interventions (physical, social, mental health, educational, wraparound, etc.) based on understanding of family culture, strengths and needs, including immediate and long-term concerns, and the establishment of trust among team members. MHSPY Care Managers are responsible for direct clinical intervention (face-to-face home-based care for the child), care coordination (linkage with professional and non-professional community resources), and case administration (authorization of services and documentation).

The intervention process and culture is reinforced via multiple layers of training and concurrent supervision. A Clinical Supervisor oversees five Care Managers. The MHSPY care planning processes, which combine to create the impact of the overall intervention, include: (1) the Care Planning Team; (2) the resulting Individual Care Plan, which specifies all interventions and wraparound resources to facilitate implementation; (3) measurable goals for each intervention with concurrent monitoring of results; and, (4) shared accountability among all members of the Care Planning Team regarding outcomes.

In addition to the Care Management services, MHSPY includes: a standard Medicaid physical health benefit, including inpatient and outpatient medical, surgical, and pharmacy; standard Medicaid covered mental health and substance abuse services, including inpatient and outpatient treatment, neuropsychology assessment and medications; non-traditional services, including parent partners, therapeutic after-school program, and respite; and, wraparound services, such as transportation and camp.

The community based, interagency referral and clinical review team, known as the MHSPY Area Level Operations Team (ALOT), contributes clinical expertise, along with a depth of individual case knowledge, to supplement the screening process that accompanies application of the eligibility criteria, including administration of the CAFAS, at the time of referral. Youth who do not meet eligibility criteria are referred to alternate resources outside of MHSPY. For those who do meet eligibility criteria and are enrolled, a battery of baseline assessments are done to establish youth functioning and overall parent or family status at the time of enrollment. In order to best interpret results in both baseline and repeated measures of functional status, information is collected from multiple sources, including parent and teacher reports, youth self-report, Care Manager assessment, and administrative data. Details of the overall methodology for the collection of individual clinical information in MHSPY are provided in Table 4.
### Table 4. Massachusetts Mental Health Services Program for Youth Evaluation Methodology

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Parameter</th>
<th>Source</th>
<th>Measure</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Level of Functioning</td>
<td>Home</td>
<td>Caregiver</td>
<td>CAFAS(^1)</td>
<td>Baseline, Every 6 Months; Disenrollment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Caregiver</td>
<td>CBCL(^2)</td>
<td>Baseline, Every 6 Months; Disenrollment</td>
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<tr>
<td></td>
<td></td>
<td>Child</td>
<td>YSR(^3)</td>
<td>Baseline, Every 6 Months; Disenrollment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Caregiver</td>
<td>FCBS4</td>
<td>Baseline, Every 6 Months; Disenrollment</td>
</tr>
<tr>
<td></td>
<td>School</td>
<td>Teacher or Counselor</td>
<td>CAFAS</td>
<td>Baseline, Every 6 Months; Disenrollment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Teacher or Counselor</td>
<td>TRF6</td>
<td>Baseline, Every 6 Months; Disenrollment</td>
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<tr>
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<td></td>
<td>Office of Special Education</td>
<td>IEP6 (if applicable)</td>
<td>Baseline, Upon Revision</td>
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<tr>
<td></td>
<td>Community Mental Health</td>
<td>Caregiver</td>
<td>CAFAS</td>
<td>Baseline, Every 6 Months; Disenrollment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Care Manager</td>
<td>PAT7, CGAS8</td>
<td>Baseline, Every 6 Months; Disenrollment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Care Manager</td>
<td>CAFAS</td>
<td>Baseline, Every 6 Months; Disenrollment</td>
</tr>
<tr>
<td></td>
<td>Physical Health</td>
<td>Pediatrician</td>
<td>Medical Record</td>
<td>Baseline</td>
</tr>
<tr>
<td>II. Service Utilization</td>
<td>Referring Agency</td>
<td>Special Education via five participating school districts, Child Welfare (Dept. of Social Services), Mental Health (Dept. of Mental Health), Juvenile Justice (Dept. of Youth Services)</td>
<td>IEP Service Plan, Treatment Plan, Court Records</td>
<td>Baseline</td>
</tr>
<tr>
<td></td>
<td>Mental Health</td>
<td>Neighborhood Health Plan, MHSPY Clinical Records</td>
<td>Utilization Reports</td>
<td>Baseline, Monthly; Disenrollment</td>
</tr>
<tr>
<td></td>
<td>Wraparound</td>
<td>MHSPY Clinical Records</td>
<td>Authorization Data; Chart Records</td>
<td>Baseline, Monthly; Disenrollment</td>
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<tr>
<td></td>
<td>Physical Health</td>
<td>Neighborhood Health Plan, Primary Care Physician</td>
<td>Medical Records; Claims, Authorizations</td>
<td>Baseline, Monthly; Disenrollment</td>
</tr>
<tr>
<td>III. Cost</td>
<td>Captitated Claims</td>
<td>Neighborhood Health Plan</td>
<td>Financial Reports</td>
<td>Baseline, Monthly; Disenrollment</td>
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<td>Fee for Service Claims</td>
<td>Neighborhood Health Plan</td>
<td>Claims</td>
<td>Monthly</td>
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<td>Non-MHSPY Services</td>
<td>Referring Agencies</td>
<td>Agency Data</td>
<td>Baseline</td>
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<td>IV. Satisfaction</td>
<td>Home</td>
<td>Youth, Caregiver</td>
<td>Questionnaire</td>
<td>Disenrollment</td>
</tr>
<tr>
<td></td>
<td>Stakeholder</td>
<td>Referring Agency</td>
<td>Questionnaire</td>
<td>Disenrollment</td>
</tr>
</tbody>
</table>

1. CAFAS: Child and Adolescent Functional Assessment Scale (Hodges, 1998).
5. TRF: Teacher Rating Form (Achenbach, 1991).
6. IEP: Individualized Education Program
7. PAT: Mental Health Patient Assessment Tool (Grimes, 1990).
Measurement of level of functioning is collected at baseline, every six months, and at discharge using the following standardized instruments: the Child and Adolescent Functional Assessment Scale (CAFAS),\textsuperscript{81} the Child Behavior Checklist (CBCL), Youth Self Report (YSR), the Teacher Report Form (TRF),\textsuperscript{82} and the Family Centered Behavior Scale (FCBS).\textsuperscript{83}

These measures are administered by the MHSPY Enrollment Manager at baseline and by the Clinical Outcomes Coordinator at subsequent intervals. Additionally, two instruments are administered by MHSPY clinicians: the Child Global Assessment Scale (CGAS),\textsuperscript{84} and the child Patient Assessment Tool (PAT).\textsuperscript{85} These clinician-rated instruments are intended to be used to inform the care planning process. Finally, satisfaction surveys are administered by the Clinical Outcomes Coordinator to the youth, the family, and the leading agency involved when a child is discharged. Findings from these various instruments are used concurrently as part of the clinical quality management conducted by Senior Clinical Managers and supervisory staff, as well as combined semi-annually for aggregate analysis at the program level.

**Individualized, Culturally Competent Family-Focus**

Consistent with the historic link to the CASSP principles in the organized system of care model, the MHSPY program stresses individualized, comprehensive and culturally appropriate care. This care is strengths-based, designed and implemented in partnership with families and youth. Caregiver involvement is crucial to the care planning process. The Care Planning Team (CPT) is a family-based team that develops and monitors the child’s care plan; a meeting cannot be held without a parent or guardian present. Each child’s individualized care plan is created in partnership with the family and youth who must agree with the plan and help select the interventions, which need to fit the family’s culture. The CPT creates a mission, a “picture of how they want things to look” for the child, stated in the family’s words, and then works actively together to build a sustainable plan to accomplish that mission. The degree to which this has happened determines the family team’s assessment of when a youth is ready to “graduate” from MHSPY.

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81 The CAFAS was developed in 1989 by Kay Hodges, Professor of Psychology at Eastern Michigan University, who holds copyright ownership of the instrument. For more information regarding CAFAS, readers should refer to the Michigan section in this publication.


Impact of Service Availability

MHSPY purchases services for MHSPY enrollees based on the needs identified in real time by the Care Planning Team. Individualized interventions, using both standard mental health treatment categories, such as psychotherapy or medication, and non-traditional services, such as transportation to a specialized after-school program, are matched to the goals (supported by the known strengths) and authorized directly by the MHSPY Care Manager. There are no external review committees or remote administrative processes to interfere with bringing appropriate resources to meet the need. However, there are times when the desired service can be difficult to find and creating capacity is challenging when demand is intermittent.

In Massachusetts, MHSPY has operated as a “pilot” under a Medicaid waiver, which allowed access to MHSPY for some communities only. While an EPSDT lawsuit seeking greater access to home and community-based services is in process in Massachusetts, at the present time, most parts of the state have only “usual care” available for children with serious emotional disturbance. The fact that only a relatively small number of families in total can access the non-traditional services that MHSPY is able to develop and purchase through flexible funds means that the provider community does not widely offer such services. Therefore, while clinical guidelines do not restrict service availability for MHSPY members, there can be challenges in locating convenient respite resources, for example, or Spanish speaking in-home family therapists, when the overall purchasing power and program capacity is too small to generate significant provider response.

Training, Fidelity and Oversight

Intensive supervision to ensure fidelity to the model is a key element in the conceptual framework of shared purpose or “continuity of intent” that underlies the MHSPY program. This includes the assumption that higher degrees of morbidity require greater attention to detail on the part of all providers, with specified processes to facilitate coordination and integration across interventions. While health care recipients with low or moderate levels of severity may be able to advocate for themselves in order to get what they need, youth and families with high levels of severity and barriers to accessing care appear to benefit from highly specified, intensely supervised clinical interventions.\(^{66}\)\(^{67}\) Therefore, MHSPY Care Managers use the manualized MHSPY clinical intervention process to: (1) assess the strengths and needs of each child, (2) to facilitate the creation of a dedicated team of individuals (teachers, friends, relatives, state agency staff, pediatricians and other clinicians) identified by the family to participate as their Care Planning Team and (3) to monitor treatment efficacy so that appropriate changes in the intervention plan can be made in real time for the youth and family as needed.

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Care Managers directly work with the MHSPY youth and their families, so this allows them to use their own clinical training, for example, to recognize safety or crisis circumstances that require adjustments of the plan on an urgent basis. This shift in treatment strategy might occur between Care Planning Team meetings, but team members would be either consulted or notified, depending on the need. The Crisis/Safety plan for each child is reviewed weekly by the clinical staff. Care Managers also use the Child-Patient Assessment Tool (PAT), a clinician assessment, to establish functional status of child and family at baseline or program entry. This measure, along with the CGAS, is repeated by the Care Manager every six months. Training on the PAT is done during orientation for all new clinical staff and at periodic intervals to ensure inter-rater reliability. Clinical Supervisors and the Medical Director review PAT scores and other formal instrument results in their regular supervision meetings with the Care Managers.

In addition to information gathered from documentation by Care Managers, formal data collection via standard instruments is conducted through the Research Department. The Clinical Evaluation and Enrollment Manager first administers the CAFAS, CBCL, YSR, TRF and FCBS at enrollment (baseline) for all new program enrollees. Follow-up data collection using each of these measures at 6 month intervals is conducted by the Clinical Outcomes Coordinator. The Outcomes Coordinator receives training and supervision, which includes inter-rater reliability checks with the Clinical Evaluation and Enrollment Manager. MHSPY staff who are responsible for administering the instruments keep up with any suggested protocols to enhance reliability and validity, such as the CAFAS training protocols, which include refresher testing every 6 months and yearly vignette write-ups. Follow up CAFAS scores are determined using multiple sources to help ensure accurate scoring in adherence with the CAFAS guidelines for administration. Families are interviewed for the follow-up Child Behavior Check List and Family Centered Behavior Scale measurement, teachers are asked to complete the Teacher Rating Form on a six-month basis, and adolescents are given the Youth Self-Report every six months. The persons administering the instruments are not involved in the youth's care. Interest in participation by families in the data collection is high, which increases confidence in the reliability of the findings.

Part of the MHSPY process is for Care Managers and Clinical Supervisors to train “system partners” (i.e. child protective service workers, teachers) in the model so that expectations among care planning team members are congruent, and so that a shared culture, such as using a strength-based approach, can be developed. As MHSPY staff have the opportunity to work again with someone they know from a previous case, it is clear that the prior experience helps a great deal with establishing ground rules about participation and team process. Frequently, these relationships and skills built around one child's Care Planning Team contribute directly to referrals of other youth in need and/or to improvements in service delivery for similar children.

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Experience to Date

MHSPY uses multiple instruments and clinical decision-making supports throughout the program. This occurs at the level of the individual youth, from the CAFAS score to assist with screening and eligibility at baseline, to multiple measures of functional status or clinical improvement over standard intervals to assess the degree of treatment effectiveness and to note if treatment changes are needed. Such information also contributes to the determination of overall family readiness for “graduation” from the program. No tools or guidelines are used for the purpose of limiting or restricting care. A MHSPY member does not need to reach a certain “score” on an instrument to make them eligible for a greater level of service intensity. Nor do improved scores create a risk of being disenrolled from the program. Both kinds of decisions are made at the level of the Care Planning Team and are based on expressed needs and associated strengths.

Major Benefits, Concerns and Lessons Learned

Benefits to the instruments and assessments in use now by MHSPY include that all of the individual child measures also “roll up” in aggregate for purposes of evaluation of program effectiveness. These aggregate reports provide longitudinal information about trends in clinical, cost, level of restrictiveness and other programmatic results, which have directly impacted the knowledge base among policy makers regarding the quality of program outcomes, which, in turn, has aided sustainability. Familiarity with the performance measures has also helped in communicating with state level decision makers regarding the degree of reliability in MHSPY outcomes, including the fact that the results from a second MHSPY site have replicated the first regarding level of restrictiveness and success in keeping enrolled youth in their homes and communities.

MHSPY has found that no one instrument provides all the information necessary to determine care decisions, track outcomes and provide data for quality improvement efforts, but that combining information from several sources allows useful secondary analyses to be done. For example, to address the important stakeholder question of who is best served by access to MHSPY, program analysts are reviewing characteristics of youth most likely to respond to MHSPY versus those least likely to respond. Upon completion, MHSPY will be able to use information from the standardized measures to inform purchaser/stakeholders regarding future referral policies and procedures within their own agencies. Information from clinical instruments is most helpful to such stakeholders when presented in conjunction with data on service use and cost, as well as in the context of family and youth satisfaction reports.

Another benefit to the use of standardized measures is that there is information available for many of the instruments, such as the CAFAS, regarding the meaning of certain percentage points of change. Also, since the tools are widely used, it is possible for clinicians, program administrators and policy makers to compare results with other programs across the country.
Concerns include the fact that intensive training and quality monitoring, such as that done by MHSPY, require staff time and resources that standard state agency contracts generally do not support. Thus, program administrators risk being expected to provide detailed reports based on “evidence based” interventions, without any additional funding being provided to support such activities. Additionally, many instruments require licensing agreements and/or the purchase of software applications for scoring, which brings additional expense, not to mention that any such data collection requires staffing both for the collection efforts and entry of the resultant data, even before analytic time is considered. Another concern is that, except in cases where states or programs have obtained generous federal Center for Mental Health Services (CMHS) grant awards, there is no funding for “follow up” post enrollment data to assess the degree to which improvements are sustained and what helps sustain them.

Lessons learned, in addition to the fact that information is not free, include that the training of clinical care managers is unlikely to be heavily research based and that it is more difficult than might be imagined to bridge the two cultures – research and clinical - when integrated program results. Therefore, even when the data are captured reliably and transferred expeditiously to care managers, it is not necessarily transparent or obvious to care delivery staff how to integrate the information into the clinical decision-making process taking place within the Care Planning Team. Further challenges occur when either an existing instrument loses favor, and the protocol for collection needs to be modified, giving all prior longitudinal data trends an artificial endpoint, or when a new instrument acquires a following that make it necessary to add it (plus training, collection and reporting expenses) to the program’s procedures. There is an inherent tension between information processing needs that value stability of data definitions and reporting methods and the realities of a field such as child psychiatry where the science base is evolving, bringing with it new instruments and new strategies for analysis. Sometimes, it is external policy changes that create the need for modifications in the use of guidelines and instruments. A recent example of this involves the potential addition of the Child and Adolescent Needs and Strengths (CANS) to the MHSPY instrument panel in the near future because the state of Massachusetts child welfare agency (DSS) has chosen the CANS as a required tool for private organizations under contract with the agency. While there are some overlaps in the two instruments, MHSPY does not currently intend to replace the CAFAS with CANS but rather will add the administration of the CANS to the instrument protocol. Although information gatherers will potentially be facing redundancy regarding some of the items, using both makes it possible to be in compliance with policy directives from a major purchaser, while continuing to report established data elements from a standard instrument on a longitudinal basis.

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89 CANS, the Child and Adolescent Needs and Strengths, is an instrument developed by John S. Lyons, Ph.D., at Northwestern University.