

*Accountability &  
Information Systems*

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*Chapter 3*

## Chapter 3: Accountability & Information Systems

# *Symposium*

## *The Ecology of Outcomes: Successful Approaches to Building Outcome Accountability*

### **Introduction**

A growing sense of urgency regarding the need to reform present patterns of delivering human services to children and families underscores the need for systems to have mechanisms that ensure accountability. One strong element of this reform is that human services need to become accountable for achieving measurable outcomes rather than continuing to focus on technical compliance with rules or on simple demonstration of service need. Doug Nelson, Executive Director of the Annie E. Casey Foundation notes, "It has become a well-worn observation that success in human services is too often measured by persons served or services provided and too rarely by results achieved. Difficult though it may be, the reform required is clear. Helping agencies, service programs and schools need to be held genuinely accountable for progress on specific, publicly articulated and accurately tracked outcomes for the children and families they serve." (Nelson, 1993). The summaries that follow describe an evolutionary process for incorporating use of outcome information into planning and program development.

The opening summary of this symposium presents the *Ecology of Outcomes* framework, an overall framework designed to guide the development of outcome information systems. This framework provides a foundation for utilizing outcome information in ways that provide opportunities for learning and self-correction; it emphasizes using outcome information to inform decisions that shape service planning and delivery. As discussed below, components of the

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Ecology of Outcomes framework include the Principles for Outcome Accountability, Prerequisites and Building Blocks for building outcome accountability, guidelines for Implementing an Outcome Information System, and an approach for Utilizing the Results. This framework was developed through the System Accountability Study, an initiative of the federally funded Research and Training Center for Children's Mental Health.

During the symposium, three presentations described initiatives that exemplify the principles and components of the Ecology of Outcomes. These included development of the statewide information system for the Texas Children's Mental Health Plan; lessons learned from the Pennsylvania's SumOne for Kids, developed by Pressley Ridge School; and California's system of care approach to outcome tracking. Summaries of the Texas and Pennsylvania activities are presented in this volume.

## ***The Ecology of Outcomes: System Accountability in Children's Mental Health***

***Mario Hernandez, Ph.D. & Sharon Hodges, M.B.A.***

### ***Introduction***

A fundamental reason for tracking outcomes in applied service settings is to determine whether the person receiving services benefits in an observable manner as a result of the services provided. For the purposes of this summary, outcomes are defined as the results or the impact of services provided to children and their families. Furthermore, outcome accountability can be defined as the systems of care's responsibility for accomplishing publicly articulated goals of service provision, as measured through accurate monitoring over time.

The purpose of this summary is to present a framework that can serve as the foundation for utilization of outcome information to provide

opportunities for learning and self-correction. The four sets of components of the Ecology of Outcomes framework include 1) Principles for Outcomes Accountability; 2) Prerequisites and Building Blocks for building outcome accountability; 3) guidelines for Implementing an Outcome Information System; and 4) an approach for Utilizing the Results. The Ecology framework's emphasis on outcome information as a resource for use in decision making is evident in the Principles for Outcome Accountability. The next sections of this summary present the principles for outcome accountability, and then discusses each component of the framework.

### ***Principles for Outcome Accountability***

Stroul and Friedman (1986) recognized that although the components and organizational structure of a child-serving system might vary from state to state or community to community, the development and implementation of a system of care should be guided by a set of values and principles. Similarly, there are principles central to the successful development and integration of outcome information into the planning and delivery of services that transcend the variability and unique characteristics of any child-serving system's components and organizational structure. Ten guiding principles have been identified for the development and utilization of outcome information in systems of care (Hernandez & Hodges, 1996). These principles, listed below, are central to the design and operation of an outcome accountability approach because they specify what drives and shapes the development and implementation of the framework.

1. Outcome information cannot be collected in isolation of information about who is served and what services are offered.
2. Outcome information should be used to improve service planning and delivery
3. Outcome information should be relevant and accessible to key stakeholders in the system of care.

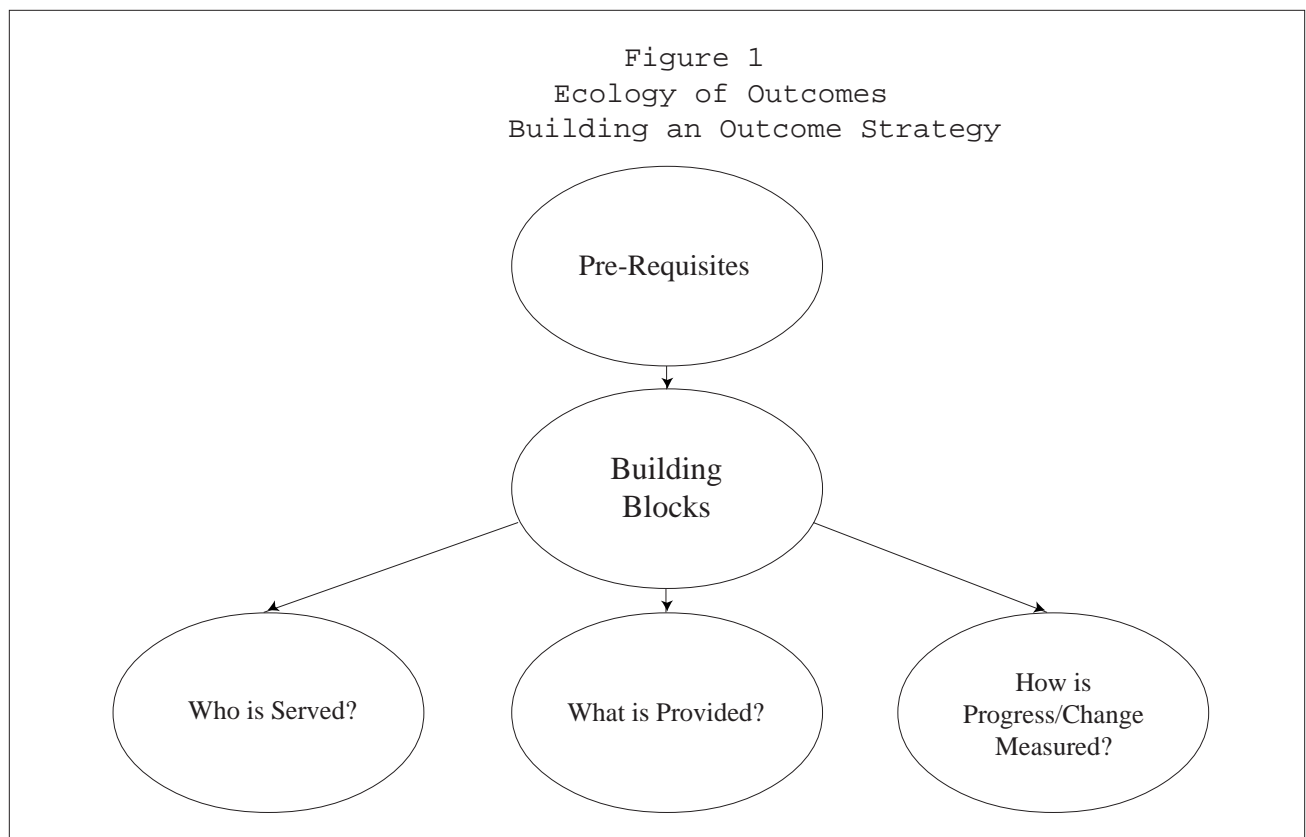
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4. The application and use of outcome information should be informed by the available research base.
5. Outcome information should support culturally competent decision making in service planning and delivery.
6. Key stakeholders should be involved in identifying and selecting outcomes to be measured.
7. Data elements for the outcome measurements should be clearly defined.
8. Outcome information should be useful to managers, administrators, and direct service providers.
9. The process for collecting, analyzing and communicating outcome results should be timely and occur on a predictable schedule.
10. Outcome information should provide the opportunity for corrective action.

### ***Prerequisites and Building Blocks***

*Prerequisites* and *Building Blocks*, discussed below, are two essential components of successful implementation of an outcome accountability approach. They should be seen together as laying a foundation on which accountability can be built and thrive (see Figure 1).

The purpose of the *Prerequisite* component is to assess a service system's level of commitment to building an outcome accountability system. In essence, the Prerequisite phase should be used to determine if there is enough momentum and motivation to establish and sustain an outcome system. Two aspects, leadership and political climate are key to the Prerequisite phase of the Ecology of Outcomes framework.



The *Building Blocks* component represents the development of a plan for building and implementing an outcome system. The primary tasks for this component involve clarifying the reasons for developing an outcome system, describing what needs to be accomplished in order to implement accountability, and determining baseline levels to establish the current status of relevant data. The primary aspects of the Building Blocks phase of development are (a) establishing a process for involving stakeholders; (b) clarifying the language of outcome and accountability; (c) assessing current capacity for building a system of outcome accountability; and (d) planning for implementation.

The significant challenge inherent in both components is building a shared vision among stakeholders about what shape the accountability approach will take when complete. While this can be a formidable task, if not addressed, it can lead to a breakdown in the development process (Meadowcroft, Pierce, and Beck, 1994).

When successfully completed, activities described by the aspects of Building Blocks and Prerequisites components yield consensus among key stakeholders about who the system hopes to serve, what services are expected to be provided, and what outcomes the system hopes to produce. All three elements of consensus are critical to a fully functioning and useful accountability approach (Usher, 1993a,b). If only outcomes were tracked and reported, it would be impossible to use the information to improve service delivery; that is information and data without context, purpose, and interpretation is useless.

### ***The Outcome Information Components***

The Ecology framework maintains that outcome information cannot be used in isolation of information about who is being served and what services

are being provided. From this perspective there are three components to the outcome information framework: 1) populations targeted for services; and 2) what services are provided; and 3) information about what outcomes have been achieved.

With respect to answering questions of who is being served, the Ecology framework suggests that tests that two broad categories of information about children and families will be useful in service planning and delivery: 1) information about children and families that makes it possible to determine whether the system serves the children and families it intended to serve; and 2) other information about child and family characteristics that may influence the system's outcomes.

Fundamentally, service providers and other stakeholders need to know that the populations they intend to serve are, in fact, being served. A system which fails to serve its intended population cannot accurately assess its outcomes. In addition to information about target population characteristics, information about other child and family characteristics can be useful in the interpretation of what may have influenced an achieved outcome. Burns (in press) provides a list of suggested child and family characteristics which may influence outcomes. These include risk factors such as poverty, family history of mental illness; illness severity, chronicity and comorbidity; family strengths and tolerance of stress; social support; family member's case management skills; and treatment adherence by family members and therapists. Combining a limited number of carefully chosen child and family characteristics with information about whether target populations have been served can greatly enhance a system's ability to interpret its outcomes more confidently.

In considering how to describe services that are being provided, the Ecology framework suggests that four aspects are useful for tracking and monitoring services, as well as interpreting future outcome

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information (Hernandez & Goldman, 1996). These are: 1) intensity, frequency and duration of services; 2) location of services; 3) variety and sequencing of services; and, 4) integrity of services.

This approach requires that planners in organizations articulate, in operational terms, what services they expect to offer. This operationalization and tracking of service aspects gives service systems personnel confidence that the results of their efforts can be plausibly related to the type of services they provide (Dym, 1996). The Ecology framework sees outcome information as a measure of what the system has accomplished. It should be emphasized that the Ecology framework stresses the use of outcomes in the context of managerial needs rather than for purposes of generalizability and application to larger social contexts. It is necessary to establish specific criteria for the selection of outcomes to be measured. The Ecology framework uses a series of questions, shown below, to guide the selection of outcomes.

- Is the outcome information useful to managers and administrators?
- Is the outcome information useful to front-line workers?
- Do the outcome results provide opportunity for corrective action?
- Do the outcome results support the achievement of cultural competence?

Once outcome domains have been selected, a second layer of decision making has to occur in order to select the indicators. That is, decisions must be made as to what indicators will be used to measure the outcomes and what criteria should be applied in making the selection. The Ecology framework offers several questions which may be useful in selecting the indicators. These are shown below:

- Does the indicator adequately represent the status of an outcome?
- Is the indicator easily measured?

- Is the process of data collection and reporting realistic and sustainable?
- Does the indicator provide valid and reliable information about the outcome?

### ***Utilizing the Results***

The Ecology framework assumes that using outcome information is a process, not an event (Burns, in press). Two primary elements in the process of utilizing the results rest on this assumption. These elements are 1) the process of interpreting the outcome information, and 2) action decisions made as a result of what has been learned. Figure 2 illustrates that output is produced by the child-serving system in the form of system information regarding who the system has served, what services have been provided, and what outcomes have been produced.

This interpretive process requires returning to the work generated in the Building Blocks component and measuring outcomes against goals that were developed for the service system. The interrelationships among who was served, what services were provided, and what outcomes have resulted must be considered in the interpretive process. Baseline information about all elements at the beginning of the measurement period becomes the reference for understanding the meaning of the information and results.

The focus of the action step is on modifying service planning and delivery, as needed, based on an assessment of the status of the results. This use of the interpretive process to inform a decision to either change or not change aspects of service planning and delivery is best understood as a process of working toward improved results rather than an end result. Rather than a static, one-time process, a system of utilizing the results should be embedded into day-to-day management.

### Implications for Children's Mental Health

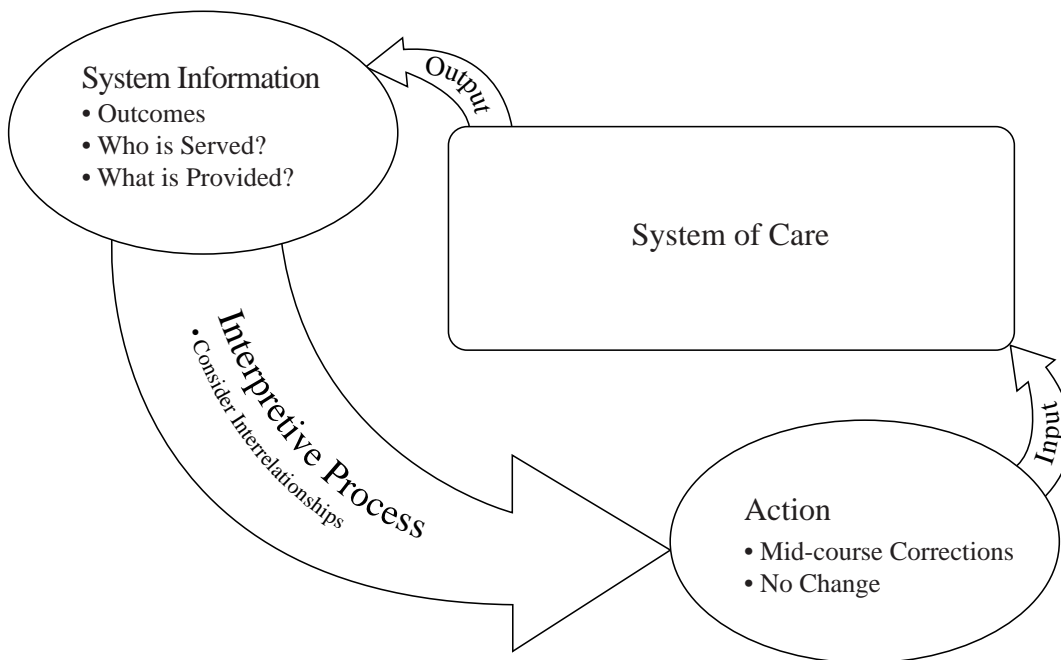
The shift in interest toward results-based accountability raises hopes that mental health systems will respond more flexibly to those they serve, that public faith in the ability of human service institutions to accomplish their intended purposes will be restored, and that communities will be better able to plan their support of children and families (Schorr et al. 1994). A *System of Care for Severely Disturbed Children and Youth* (Stroul & Friedman, 1986) more clearly defined the concept of system of care and provided guidance in how to build systems that would allow children to receive services while remaining at home and in their communities. We believe the Ecology of Outcomes framework will both complement and expand the systems of care concept by helping policy makers and

administrators establish strategies to build outcome information systems and incorporate outcome information into decisions that impact the planning and delivery of services to children and their families.

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Figure 2  
Ecology of Outcomes  
Utilizing the Results



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## ***The Development of a Continuous Evaluation System for the Texas Children's Mental Health Plan: Building an Evaluation- Stakeholder Feedback Loop***

***Lawrence W. Rouse, Ph.D.***

### ***Introduction***

This summary focuses on the development of an ongoing evaluation system associated with the Texas Children's Mental Health Plan (TCMHP) and the steps taken to build a feedback loop between evaluators and stakeholders. The Texas Children's Mental Health Plan is an interagency effort to develop a continuum of community-based mental health services for children, adolescents, and their families based on the federal Children and Adolescent Services System Program Model (CASSP). The ongoing evaluation was developed in order to provide children's mental health administrators at the state and local level with information about children's mental health services and demonstrate accountability to the consumers and funding sources.

The purpose of this summary is to: (a) explain how outcomes are important to the basic philosophy of TCMHP; (b) describe the system for providing information to stakeholders (e.g., consumers, service providers, program managers, advocates, and legislators); and (c) describe the interactions that have taken place between evaluators and various TCMHP stakeholders in creating an ongoing stream of evaluation information for decision making.

### ***The Texas Children's Mental Health Plan***

In 1992, the Texas legislature appropriated monies to the Texas Department of Mental Health and Mental Retardation (TXMHMR) for the implementation of the Texas Children's Mental Health Plan. The primary goal of the TCMHP is to develop and implement a public community-based mental health system for children, adolescents, and their families through the coordination of resources of all the state child-serving agencies. An essential feature of the TCMHP is the participation, at the state and local level, of the child-serving agencies, advocates, and consumers in management teams with the express purpose of making collaborative decisions about TCMHP activities. TCMHP services are organized into three components: (a) "core" mental health services, (b) services to children referred from the juvenile justice system, and (c) early intervention and prevention services. During FY '95, a total of 26,000 children were served through TCMHP services.

Another essential feature of the plan is a list of outcomes to be measured for each of the components of the TCMHP. The outcomes were written into the plan from the very beginning to assure the stakeholders, as well as the state legislature, that the effectiveness of the services were being measured and that decisions about the TCMHP were being assisted by evaluation data. In addition, TXMHMR has been committed to the implementation of the principles of Total Quality Management (TQM) as a work philosophy. One of the hallmarks of the TQM approach is the measurement of work activities, using this information in modifying work processes to increase productivity and effectiveness. Finally, in its shift towards a managed care organizational mode, TXMHMR has recently begun incorporating "outcomes to be attained" in its contracts with each of the community service sites. Therefore, the collection and dissemination of evaluation information to TXMHMR and community site managers is central to the continual development of the TCMHP.

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### ***Description of the Evaluation***

The development of a continuous evaluation system for the TCMHP was characterized by three stages that began in 1990. The first stage was a summative evaluation of the impact of one main service type on child and family functioning at five mental health centers. In 1992, the evaluation was extended to 16 sites and included the ongoing evaluation of 14 service types. By 1994, the evaluation was implemented at all 45 community mental health authorities across the state. The evaluation currently involves all children served in the public mental health system and 18 service types.

The evaluation is managed by a committee of professional evaluation personnel representing the nine state agencies which participate in the TCMHP, representatives from consumer advocate groups, program directors from the sites, and a parent representing the viewpoint of the consumers.

The basic evaluation design is characterized by pretreatment, post-treatment, and follow-up measurements of consumer demographics, history, outcomes, and satisfaction with services. Outcomes of services include general psychological functioning, behavioral-emotional functioning, out-of-home placement rates, and social-community functioning. A multi-method/multi-rater approach to measurement is employed to collect information from the service providers, children, parents, and collateral providers using interviews, checklists, and rating scales. Data is collected primarily by the service providers at pre-and post-treatment. Follow-up data is collected by the TXMHMR research office.

Communicating evaluation results has been accomplished through the establishment of the Quarterly Service Report, Quarterly Report Review, and special reports. The Quarterly Service Report provides a summary of key indicators in the areas of numbers served, demographics, and outcome

measures. The Quarterly Report Review is used as a vehicle for a discussion of the figures on the Quarterly Service Report and also provides an opportunity for the publishing of other evaluation results that may be relevant. Special reports are also produced for TXMHMR center managers and other stakeholders as requested. A catalogue of special reports is maintained and available for reference. Taken together, these publications are seen as an essential tool in facilitating a most important set of evaluation-stakeholder transactions (i.e., a feedback loop).

### ***Evaluator-Stakeholder Feedback Loop***

The feedback loop for the TCMHP is characterized by at least four major activities that are constantly being reiterated. The loop begins as stakeholders raise questions about the program. Evaluators collect and analyze data in response to these questions. Evaluators then collaborate with stakeholders in using results, and stakeholders use conclusions about results in making decisions, which lead to new questions, beginning the cycle again.

Within each of these activities, interactions between evaluators and stakeholders provide inertia for the reiteration of the feedback loop. Throughout the development of the TCMHP evaluation, these interactions have contributed to modifications in major activities in order to meet the needs of both the evaluators and the stakeholders.

### ***Stakeholders Raise Initial Questions***

The provision of guidelines for evaluation of TCMHP outcomes created an important dialogue between the authors of the plan and the evaluation committee. These interactions established evaluation as part of the plan from the beginning and also helped formulate and clarify the initial evaluation questions. During this process, the evaluation committee voted on specific evaluation questions,

methods and measures. As the evaluation progressed, new members were added to the evaluation committee to provide additional guidance.

#### *Collection and Analysis of Data*

Perhaps the most attention has been paid to the process for the collection of information and the analysis of data. The original evaluation design included the measurement of outcomes for each service type resulting in several assessments for each child. In order to make the evaluation an integral part of service activity, the design needed to be simplified. Through meetings with groups of service providers and surveys of program directors, it was determined that too much effort was needed to collect multiple assessments, and it was unlikely that clients could distinguish between the different service types. This impression was confirmed through flowcharting of the evaluation process conducted by the evaluation committee. When pictures of the processes and transactions involved in the evaluation were analyzed, a dramatic picture of a complicated and cumbersome flow of activity was revealed. Consequently, a less complex evaluation design was created based on an episode of care.

In order to reduce the burden of data collection on the service providers and provide managers with a minimum set of key outcome indicators, the measures were revised. Program directors were surveyed as to which measures were most meaningful to them. They suggested use of the CBCL and satisfaction forms and elimination of the provider completed pre- and post-treatment assessment forms. Concurrently, the initial measures were reviewed for the frequency of use in data analyses and their psychometric properties. It was discovered that service providers' ratings of treatment plan completion were infrequently used, and subscales of provider completed pre- and post-

assessment measures had mixed psychometric properties. Satisfaction forms, however, showed good reliability and validity.

A major effort also was made to integrate the evaluation into preexisting processes to minimize paperwork for service providers while supporting efforts to document compliance with standards. The evaluation was dove-tailed with the Department's efforts to meet defined mental health community standards such as continuity of care, service type descriptions, outcome standards, and client assessment and treatment plan requirements. Additionally, the evaluation utilized the state-wide client registration and assignment data base, thus automating many of the data collection procedures.

Technical assistance to the field was viewed as an essential part of implementation of the evaluation. As a first step, the evaluation committee felt that program directors and service providers would benefit from information on evaluation, data management, and how the state and local computer systems worked. Regional trainings were implemented to introduce the evaluation, followed by on-site evaluation and telephone training. Initially, training was provided to serve providers and program directors. Later, staff from medical records and information services were included. High ratings in five of six training sessions suggested that participants found the sessions to be informative and helpful in implementing work tasks.

As the evaluation proceeded, quality control measures were implemented so the data used in analyses would be credible. The computerized data collection system was edited to force completion of data elements. Additionally, manual editing of data forms was performed and feedback has been given back to the centers. To further assess the accuracy of data, a pilot has been implemented to dovetail with SQA audits.

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Special emphasis was placed on empowering staff to make their own decisions about how to implement the evaluation at their own center. Efforts were made to communicate to the staff that the evaluation instructions were often guidelines and they needed to operationalize and consider local needs. For example, on site decision issues included data management and the coordination of data collection tasks with naturally occurring clinical activities. As a result, staff included pre- and post- assessments in intake and discharge activities, and integrated registration and history information into center-specific computer system data entry.

### *Collaborating with Stakeholders*

Evaluators must collaborate with the stakeholders in using the results of evaluation. Managers and service providers need education to read and interpret data from clinical and administrative viewpoints. A service report was created to report data back to stakeholders on a regular basis, presenting data in a tabular fashion. Later, a text was produced to discuss the data, to provide suggestions on what the data meant, as well as how it could be used to monitor programs. Finally, graphic representations of trends were provided.

Surveys were then implemented to determine if the presentation of evaluation information was adequate for the needs of TXMHMR managers and program directors. Results suggested that the service report and accompanying text met their needs. Additionally, informants indicated that preferred elements of evaluation reports included data about outcomes, graphics, and information in a bullet format. Data about consumer satisfaction was a less frequent preference. In response to this feedback, a new format for the service reports has been developed which features more outcome information. In addition, the increase over time of requests for special data runs demonstrates that stakeholders are finding value in the evaluation process.

### *Evaluation Results and Program Decisions*

If evaluation data are not used in decision making, then the evaluation has not reached its intended goal. Up to this point, the emphasis of the TCMHP has been placed on putting an evaluation system in place. Future activity must measure the extent to which the evaluation data are being used to assist in making program decisions.

Currently, the only measure of the use of evaluation data is anecdotal information such as program directors' reports that the data have been helpful in particular instances. However, there has been increased contact from program directors and TXMHMR managers to request information, and TXMHMR managers have requested that special reports be prepared for legislative aids to support the funding process.

## **Discussion**

The implementation of an ongoing evaluation system for the TCMHP has been a developmental process of implementation and revision, obtaining feedback from external and internal customers and revision again. Establishing interactions with the stakeholders to solve the problems of implementing a continuous evaluation seems best accomplished by starting small and expanding once major issues are identified.

Clearly, the development of an evaluation process has much to offer to the system to be evaluated. In the present situation, the TCMHP evaluation has helped the program directors define the services they are offering and interpret specific aspects of the community standards. It has helped establish outcomes to be included in contract negotiation and monitoring and changed the statewide client data system to be more relevant to children and families served in the system.

Taken together, these experiences and lessons learned seem to indicate that once the initial turn of the feedback loop is accomplished, then further iterations of the loop are more easily attained.

## ***SumOne for Kids: Measuring and Improving Results in Services for Children and Families***

***Pamela Meadowcroft, Ph.D.***

### ***Introduction***

SumOne for Kids is a multi-agency outcome monitoring system developed through a collaboration between The Pressley Ridge Center for Research and Public Policy and 31 private, nonprofit child serving agencies in Pennsylvania. The original goal was to create a system with all technology supports, including functional software, all measurement tools and other data collection devices, training and audit services that was (a) low cost, (b) could be used at the agency or program level for program improvement, (c) would form the basis of a central database that would produce reports useful to policy makers and providers, and (d) would answer the questions: Who are the children and families we serve? What services do they receive at what cost? What is the impact of these services on their lives? To create the central database, all participating agencies would agree to upload a key set of data elements from which aggregate reports would be generated for comparison purposes. In this way, agencies could compare their own results with the combination of all agencies and aggregate reports could better inform policymakers of the results of children's services.

The initial pilot provider agencies served over 5000 children and families every day from all of the major child-serving systems including mental health, child welfare, juvenile justice, and special education. The types of services they provided also represent the full array of services to children and families, including in-home and family preservation services, adoption, day treatment and partial hospital programs, foster family care, therapeutic foster care, group homes, and residential treatment. Therefore, the outcome evaluation system was designed to be useful for all children's services and do-able by provider agency staff.

The following are some of the lessons learned and values developed from the mistakes we made and the barriers we experienced in creating SumOne for Kids.

### ***Lesson 1***

The first rule of comedy, politics, and sex, and now outcome measurement, is that *timing is everything*. The original start-up for SumOne for Kids six years ago was painfully slow. Funding was not immediately available since the Foundation community at that time did not view outcome evaluation to be an urgent priority. Nor did the payers of children's services view measurement of outcomes as a necessity. For example, for eight years the results of the direct services programs at Pressley Ridge had been evaluated by contacting the few hundred children and families whose services had been completed the year before. This follow-up evaluation served as the prototype for SumOne for Kids and provided Pressley Ridge management, clinicians, and the board of trustees with a way of focusing priorities for each year's program development activities. However, not once in the eight years did the agency's referral of funding sources ask for or use the outcome results. Such disinterest has dramatically changed in the last two years. The pace and subsequent funding and interest in outcome evaluation in general, and SumOne for Kids in particular, has exploded.

### ***Lesson 2***

Build on what the users of the outcome monitoring system are already doing. SumOne for Kids staff take participating agencies through a design process that builds on what they are already collecting. The original pilot group of agencies helped determine all of the data elements that fully describe the children and families served and the types of services received. In replications, this same customizing process is used to ensure that participating groups have input into the data that is required by the outcome system. The pilot agencies

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also fully tested the outcome interviews that were developed, the forms that were used to catch the data elements, and the initial software.

### **Lesson 3**

Make the data useful and easy to get. Most provider agencies already collect lots of data. But the data are only useful when (a) it is in a readily retrievable, readable form (i.e. attractive, easy to read reports); and, (b) when it can be compared to benchmarks so the results have meaning. SumOne for Kids built into the software standardized reports that the pilot agencies tell us are essential for the day to day operating of their services. The standard reports were designed and tested to be readable by nonresearch staff; hence, agencies can use the reports without research staff.

### **Lesson 4**

There must be a strong incentive for agencies/systems to become accountable. The impetus for SumOne for Kids came in 1989 when it began to look as if a system of accountability might be imposed on Pennsylvania providers by the legislature. The provider agencies decided to be pro-active, develop their own system, and then turn it over to the state for use as a state-imposed monitoring system (bottom-up/top down approach). While SumOne for Kids is based on self-evaluation assumptions in which agencies want to know how effective their services are, outcome monitoring will require mandates in some form to insure the level of commitment required of agencies to produce accurate, timely data. Only recently has Pennsylvania begun to mandate outcome evaluation in different forms. For example, in Allegheny County, outcome evaluation is now part of the contracting process with all Children and Youth Services providers.

### **Lesson 5**

Get political support early on and throughout the development and implementation of any outcome monitoring system. An outcome monitoring system may be technically valid and sophisticated,

but not at all useful if it does not have widespread political support. When SumOne for Kids began, a group of bureaucrats, policy makers, educators, researchers, and practitioners was assembled for the purpose of articulating a vision of what such a system might look like and how it might operate. Everyone present gave high praise to the concept, pledged the full support of their offices, and asked to be kept informed of project status. The same process has been used even more successfully in Maryland, where there are no regulatory requirements for program evaluation in residential services.

### **Lesson 6**

“Outcomes” lack clear definition. Although outcomes are now talked about by persons at a variety of levels and in many kinds of systems, there is little agreement on what they are. Practitioners are interested in clinical outcomes that relate to the child’s treatment plan. Program managers and states are more often interested in process measures, such as numbers of service units provided, or number of children served, and will consider these the “outcomes” of importance. Project staff, however, took a stand early-on that we would look at socially significant impacts of the services provided on the lives of children and families served. Such functional outcomes can appeal to the practitioner, program manager, as well as state level policy-makers.

To assess functional outcomes requires a commitment to looking at the results of services *after* receipt of these services. Project staff found numerous barriers to this view of outcome measurement. Many providers believe their accountability ends when the child leaves their program. Others feel that post-discharge results can be useful in determining program change, but there is no agreement on how long after discharge that responsibility lasts. The project decided to ask a large group of varied children’s services stakeholders to define outcomes for us, thus avoiding having to debate the outcomes definition with evaluation experts or anxious providers.

### **Lesson 7**

Involve stakeholders in key aspects of developing outcome measures. This lesson, as all the others, was learned over and over again. A large-scale social validation survey of over 700 Pennsylvania stakeholders of children's services defined the outcome indicators for us. (This survey was reported at the Research Conference in 1992.) The survey asked respondents to indicate how important various issues were to them and how satisfied they were with the services available in their community to address those issues. With a 90% response rate, project staff felt they had solid evidence of what issues should be put forward as the most important ones to measure, which were:

- stability and restrictiveness of children's living environments;
- use of drugs and alcohol;
- school attendance and graduation;
- employment and job readiness; and
- protection from harm.

The 31 pilot agencies provided SumOne for Kids staff with the sites to test out the various tools that were designed to measure the above outcome indicators. A similar stakeholder survey was conducted in Maryland with over 1000 participants. The results bore a striking similarity to that of the Pennsylvania survey.

### **Lesson 8**

Generate products quickly and keep the momentum active or participants will lose interest, at best. A certain momentum must be achieved and maintained to keep participants involved, and there needs to be regular communication between project staff and its participants. Newsletters, reports on results of each project step, getting part of the data system operating and producing results right away are some of the tactics project staff learned along the way to keep project participants interested. Dispose of research methods that are time-consuming and opt for ones that, while less rigorous, will produce reasonably valid results with less time.

### **Lesson 9**

William of Ockham of the middle ages gave us this lesson: "*keep it as simple as possible, but no simpler.*" SumOne for Kids aimed to create a "simple" product—one that was useful and easy to use. The final product is far bigger than originally thought necessary. It was perhaps inevitable because this first-of-its-kind product used a consensus model involving over 31 agencies and other stakeholders in the design and development. The first "final" product (which includes a comprehensive database on describing the children and families served, services received, and results produced in five major functional outcome areas) has been met with enthusiasm by those who have used it but with concerns by those who see it as too much. Our interaction with others who are developing outcome measurement systems indicates that the move to complex is quicker than the move to elegant simplicity. Future developments will be a balance of adding more to the system (such as "protective factors" and eliminating complicated protocols and unused data.

### **Discussion**

The project proved sufficiently successful to be spun-off into a separate corporation called the Corporation for Standards and Outcomes (CS&O). CS&O is now replicating and improving upon SumOne for Kids in Maryland through the Maryland association of 65 child-serving agencies in that state and has made participation in SumOne for Kids mandatory for agency members. Given the multi-agency, multiple systems represented by these provider agencies, and statewide nature of the SumOne for Kids outcome measurement system, staff believe that the results will ultimately have a powerful impact on children's services in Pennsylvania and Maryland.

# *Building Outcome Accountability in Children's Mental Health: Interviews with Center for Mental Health Services Grantees*

## **Introduction**

The *Building Outcome Accountability in Children's Mental Health* project was an effort to learn more about how each of the twenty-two Center for Mental Health Services (CMHS) grantees were conceptualizing and implementing a local process of outcome evaluation. This study was conducted as part of the System Accountability Study, a 5-year research effort of the Research and Training Center for Children's Mental Health (RTC) designed to investigate the impact that utilizing measurable outcomes has on service systems.

The Building Outcome Accountability project focused on the conceptualization and implementation of outcome-based information systems at the twenty-two CMHS sites. These sites received grants designed to promote the development of systems of care that include mental health, child welfare, education, juvenile justice, and other appropriate agencies to meet the multiple and changing needs of children and adolescents and their families. A related activity, the core evaluation of the CMHS initiative, conducted by Macro International, Inc. and its partner, the University of South Florida, is focused on the child, the system, and the interaction between the two. The Building Outcome Accountability project focused on how outcome results were being used in CMHS systems of care in a effort to understand how using measurable outcome data affects service planning and delivery.

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## Methodology

The data for the Building Outcome Accountability project were collected through a series of structured key informant telephone interviews with employees at each of the CMHS sites. Two interview protocols were developed for this research project: 1) Survey A, designed for sites with established outcome information systems; and 2) Survey B, designed for sites which had not yet established outcome information system. Each site determined who would participate in the interview and whether Survey A or Survey B would be completed.

Both survey instruments asked participants to comment on the array of services offered by their system of care, how and when the system of care was established, and demographic information about the population served. Both surveys also asked participants to comment on the involvement of stakeholders in the process of selecting outcomes to be tracked and the impact of outcome tracking on service planning and delivery. In addition, systems which identified themselves as having established outcome tracking systems were asked to comment on what kinds of outcomes were tracked, how often they are tracked, how these outcomes are measured, and the level of inter-agency collaboration required to monitor outcomes. They were also asked to discuss how outcome information is being reported, who receives these reports, and how it is being used. Finally, respondents that completed the survey questions for sites with an established outcome information system were asked to comment on the continued use of outcome data when the national evaluation is completed.

The interviews for this project were conducted during a five-month period beginning October 1995 and ending in February 1996. Nineteen out of the twenty-two grantee sites (86%) participated in the interview process. All participants were advised

that the results of this study would be reported in aggregated form and that the identities of individual systems of care and respondents would remain anonymous. Ten of the respondents (53%) represented sites with an established outcome information system, while nine participating sites (47%) did not have such a system established.

## Results

The data was analyzed across three domains: 1) stakeholder involvement in selecting outcomes; 2) the impact of outcomes on service planning and delivery; and 3) using outcomes when the national evaluation is completed. The results are discussed below.

### Stakeholder Involvement

Participants were asked to rate the importance of stakeholder involvement on a Likert-type scale from 1- *not important at all* to 5 - *crucial*. All but one of the participating sites considered stakeholder involvement in the process of selecting outcomes to be *very important* or higher. The single site not responding in this range reported that they chose not to respond, believing it to be irrelevant to their situation because they had uniformly adopted the outcome measures currently being used in the national evaluation. While nineteen sites considered stakeholder involvement important to the process of selecting outcomes, 5 sites (one site which considered stakeholder involvement *very important* and four which considered it *crucial*) reported having no vehicle currently developed to facilitate this involvement. One respondent commented that there is no systematic way of involving stakeholders at this time, although they anticipated doing so in the future. Another commented that there is a "growing discussion of how stakeholders can be involved." These results imply that while almost all of the respondents thought stakeholder involvement was important, some sites (26%) had no mechanism for achieving this goal. This

## Building Outcome Accountability: Interviews with CMHS Sites

indicates that agreement with the principle does not always equate to implementation.

### **Impact on Service Planning and Delivery**

Nineteen of the twenty participants in this study chose to answer the series of questions relating to the impact of outcome tracking on service planning and delivery. One site declined because they believed there was not yet enough outcome data available yet to comment. Respondents were asked to rank the impact of outcome tracking—anticipated or actual—on service planning and service delivery on a Likert-type scale of 1- *no impact* to 5 - *tremendous impact*. Ten participants (53%) responded that the impact on services planning was *tremendous*, eight responded the impact was 4 - *considerable*, and one responded outcome tracking had 3 - *some* impact. The ten sites which rated the impact of outcomes on service planning as *tremendous* also believed the impact of outcome tracking on service delivery to be *tremendous*. Of the remaining nine sites, six rated the impact of outcomes on service delivery as *considerable*, and three believed outcomes would have *some* impact on service planning.

A common concern expressed by respondents was for the burden and consequent stress that the process of establishing a system of outcome information places on management and staff. One respondent commented, “Putting an outcome system in place can be painful because of the procedural changes, increases in paperwork, and increased need for management and staff training.” Other respondents echoed this statement. Concern was expressed that, “outcome tracking adds paperwork and takes time away from actual service provision.” Another commented that “tracking outcomes requires ongoing training and technical assistance on how to and why outcomes are collected. People are intimidated by data and forms. You must keep reinforcing the process.”

The experience of staff at CMHS sites which have established outcome information systems indicates that the stress and burden of implementation may be a short-term concern. One respondent discussed the short term impact: “Service providers are heavily impacted by the demands of the outcome process. It is difficult to implement in the short-run because the most immediate impact is that clinicians are overwhelmed by the process.” According to some respondents, however, once outcome information becomes available, stress-levels are reduced.

Several respondents expressed concern for fears associated with how outcome information is used. One respondent stated, “there exists a real fear on the part of clinicians that outcomes will be used to demonstrate they are not doing a good job – what if we’re not doing well?” There was consensus that training was an important way to promote understanding of how outcomes can be used in a positive way to improve service delivery.

### **Continuation of Outcome Monitoring**

Respondents representing the ten sites with established outcome information systems were asked a series of questions about whether, and under what circumstances, they might continue tracking outcome information after completion of the national evaluation. All ten responded that they anticipate continuing the process of outcome monitoring, although the strength of the replies ranged from “Yes, hopefully, it depends on available funding” to “Yes, definitely, outcomes very similar to the national evaluation are included in our state plan.” When asked to identify factors that would influence the decision to continue outcome tracking, it is noteworthy that eight of the ten sites mentioned available funding as the central deciding factor.

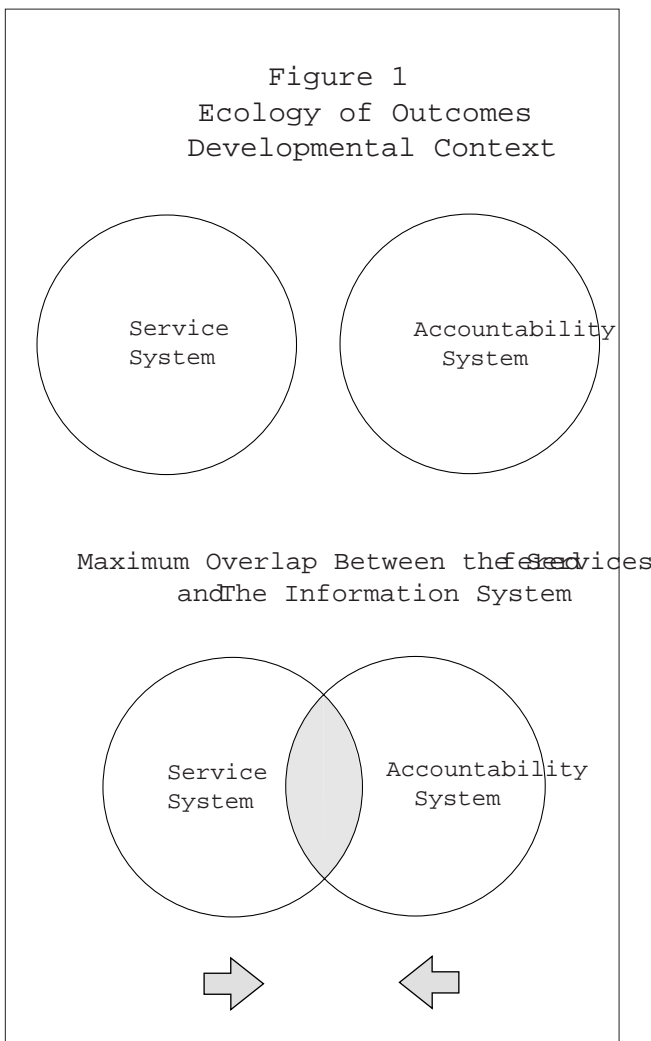
## Conclusions

It was recognized early in the development of the interview instruments used in this project that there would be variation among the CMHS grantees in the degree to which their systems of care had been conceptualized and implemented, as well as the degree to which their information accountability systems were developed. The amount of overlap between the level of development of the service system and the outcome information system seemed to have an impact on how outcome information is used by the system of care (see Figure 1). This can be

seen in how information about clinical outcome measures is used. Descriptions of three example sites follow to illustrate varying degrees of overlap between the level of development of the service systems and the accountability systems in this study.

A respondent whose system of care began developing within the past few years reports that the site is also just beginning to collect outcome information. This site respondent indicates that the system does not have a vehicle for involving stakeholders in decisions regarding outcomes at this time. Interagency collaboration at the site occurs only at the direct-service level where interagency teams serve individual children and their families. Although this respondent noted that the “CAFAS [Child and Adolescent Functional Assessment Scale] is an excellent measure,” staff are still struggling with trying to determine what outcomes they need to track and how to use the results. This system seems to represent a situation in which the service system and the outcome accountability system are both developing in parallel and exist independently of one another at this point in time.

Another grantee in the early stages of system development describes their system as having “lots of pieces for the past eight or so years, but we only recently began building an integrated system.” This respondent describes the site as relying heavily on the input of a broad range of stakeholders as it expands its array of services. Also, interagency relationships are growing in strength and he/she believes that “to take a systems point of view, we need to know what our connection with other systems is.” This respondent reports that the site is already using clinical data to make decisions at the treatment level, but does not yet have a way of using this information at a program or system level. This site represents a system at the early stages of both system and information development. Some



## Building Outcome Accountability: Interviews with CMHS Sites

degree of overlap in the development of the services offered and the information system seems to be indicated by the use of clinical outcome data to inform treatment at the child and family level.

In contrast to the previous examples, one of the more developed systems of care sites has already focused on potential uses for outcome results or information at the system level. The respondent for this site reported that its system of care had been developed for more than ten years, and it had been measuring and reporting outcome information for several years. The initial outcomes tracked through the system of care were more global; for example, emphasis was placed on system level measures such as out-of-home placements, school attendance and achievement, and juvenile justice recidivism rather than clinical measures. Discussions at the site concerning different aspects of the information system focused on issues of sharing information across the system, such as creating electronically connected information systems to lower technical boundaries so that outcome data could be accessed. This site's focus on clinical outcome measures went beyond their use at a child level/direct service level to recognition of how clinical status information might be used to learn more about how effectively the system is functioning. This site seems to represent a system of care which is well developed with an information system which is well established. In addition, there seems to be a high degree of overlap between the system of services and the information system. This takes place through its efforts to create a seamless source of interagency information and its interest in using clinical outcome information to evaluate system effectiveness in addition to informing treatment decisions.

In conclusion, the CMHS sites represent varying degrees of both systems development outcome accountability development. For outcomes to have a maximum positive impact on

service planning and delivery, it may be necessary for there to be a high degree of overlap between the service system and the information system. The data collected in this study illustrate a range of overlap from a service system which seems to exist independently of the information system being developed to support it, to one which seems to have a high degree of overlap, as evidenced by the multiple uses of clinical outcome measures for informing service planning and delivery.



# *A Comparison of the Standards for the Mental Health Statistics Improvement Project (MHSIP) with Selected Children's Information Systems*

## ***Introduction***

Mental health decision makers need comprehensive, uniform data in order to conduct analysis and planning on the national and state levels. A major initiative to promote uniform mental health data began in 1989 when the federally funded Mental Health Statistics Improvement Project (MHSIP) defined a set of standard data elements recommended for mental health information systems (NIMH, 1989). Following the publication of the MHSIP standards, the Task Force on Enhancing MHSIP to Meet the Needs of Children and Youth in 1992 recommended additional MHSIP data elements specific to children's mental health.

States are still struggling to fully implement MHSIP standards in their mental health information systems. One of the obstacles seems to be a perceived conflict or competition between agency information systems' priorities and the requirements of the MHSIP standards.

Agency managers' top priority is to have a system that provides data for management of clients and programs. In addition, they periodically need specific data to respond to evaluation inquiries. If evaluation data are not available, then special data collections have to be carried out to meet each data request. If collecting the information to meet either of these goals appears to conflict with implementing the MHSIP standards, agency needs often take priority over the MHSIP standards.

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An additional obstacle can arise when mental health agencies wish to share data with external multi-agency children's data bases. This requires the mental health agency to have the appropriate data in a format acceptable to other agencies. The value of sharing data with larger data bases may be perceived to supersede the importance of meeting MHSIP standards.

If children's mental health administrators perceive the MHSIP standards to be an additional burden that uses resources they would rather be using to meet important data needs, then MHSIP will not be implemented. We all recognize that no information system will be able to meet every need, but the ideal is a system that provides as much of the necessary data as possible so that special data collections are rare.

The purpose of this study was to examine the extent to which children's mental health agencies can meet the information needs they consider the most important and still support the MHSIP standards. Since the focus of the study was on agency information decisions, the data sources and study questions were selected to reflect real life situations.

### **Method**

Three children's data sets were selected for this analysis to represent three different agency information priorities:

- An information system for client and program management to represent the data needs for agency management.
- The data set for a national children's mental health program evaluation to identify typical evaluation data needs.
- A social service agency data set for children involved in foster care and adoption to illustrate the data needs of a different type of child-serving agency.

The analysis used real life scenarios, with the questions framed from the point of view of an agency administrator making decisions about information systems. Each question asked if an agency had an information system designed to meet one purpose, what alterations would be required to expand the system to meet an additional purpose.

- If a children's mental health agency has an information system that meets their management needs, what changes would have to be made for the system to also meet MHSIP standards?
- If an mental health agency has an information system that meets MHSIP standards, what changes would be needed for it to also provide evaluation data?
- If a social service agency is developing a foster care and adoption information system, what changes would a mental health agency have to make for the system also to meet MHSIP standards?

In order to compare the data elements across systems, the client and event data elements in the MHSIP standards and the selected data sets were subdivided into the following domains: (a) *Program Information*, (b) *Client Demographics*, (c) *Family Structure/Placement*, (d) *Referral*, (e) *Health/Mental Health Status*, (f) *Plan of Care*, and (g) *Outcomes*. *Program Information* included record number, state of residence, and dates of client's enrollment or discharge from the program. *Client Demographics* contained basic client demographic elements such as name, social security number, sex, race, and insurance. *Family Structure/Placement* included information on current and historical family structures – including birth parents, foster and adoptive parents, and other caretakers – as well as placement information. *Referral* included information about referral source, intake, previous involvement of other agencies and presenting problem. *Health/*

## Mental Health Statistics Improvement Project

*Mental Health Status* captured assessment tools and other indicators of health and functioning including school placement. *Plan of Care* addressed services information and multi-agency involvement, and *Outcomes* included indicators of client status over time and at termination from the program.

### **Results**

This study found that the MHSIP standards were very compatible with mental health agency needs for program and client management data, as well as with needs for evaluation data. In addition, when agencies wish to merge their data into larger children's data bases outside the agency, with the exception of data elements specific to mental health operations, a high degree of compatibility between these data bases and the MHSIP standards can be expected. More specifically, the analysis suggests:

- Agencies with typical management information systems should be able to meet MHSIP standards with minimal effort.
- MHSIP-based agency information systems show substantial agreement with a typical evaluation data set except for some missing data elements in the domains of Family Structure/Placement and Outcomes
- In spite of the differences in their missions and purposes, social service agency data bases contain a substantial number of the same data elements as children's mental health data bases, with only the data elements specific to the mental health activity missing.

### **Discussion**

Children's mental health agencies attempt to be part of several worlds. Within the comprehensive mental health system, they need to cooperate with the data collection and reporting strategies of that system. As part of a total system of care for children, they need to cooperate in data sharing with the other agencies and partners who serve children and families. While trying to accommodate the needs of both of these complex systems, they need to manage the programs and clients for which they are responsible and regularly respond to internal reporting and evaluation needs. Achieving an information system that specifically meets each of these demands, and yet is flexible enough to accommodate all of them, is challenging. This analysis found that there is a high level of overlap in data elements across systems representing each of the requirements. Therefore, designing a system which will meet several of the needs, or alternatively expanding an existing system to accommodate new purposes, need not be an insurmountable task.

### **References**

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