

Arizona's Children's System of Care Practice Review Fiscal Year 2011 Statewide Report

Debra Mowery, Linda Callejas, Wei Wang, and Mario Hernandez

University of South Florida

Kevin Flynn and Kim Engle
Arizona Department of Health Services/Division of Behavioral Health Services

Table of Contents

Executive Summary	3
Background	7
Methodology	11
Results Section	18
References	44
Technical Appendix	45
Index of Tables	48
Index of Figures	49

Executive Summary

Background

Research has identified that outcome evaluation is key to achieving and sustaining transformation initiatives in Systems of Care (Hodges, Hernandez et al., 2002). The System of Care Practice Review (SOCPR) was implemented in FY2009-2010 as the Arizona Department of Health Services/Division of Behavioral Health Services (ADHS/DBHS) practice review method of choice in Arizona. It was developed at the University of South Florida (USF) by Dr. Mario Hernandez, Ph.D. Research has demonstrated high inter-rater reliability in the use of the tool, which is based on face to face interviews with multiple informants as well as file/record reviews (Hernandez et al., 2001). A total of 170 reviews were conducted across Arizona in FY2010-2011.

Methodology

Interviews were drawn from a sample of children and families identified as having high/complex levels of need. Thus, the sample pool of cases contained all children and youth age 6-18 years who had scores of 4 or higher on the Child and Adolescent Service Intensity Instrument (CASII). Children ages 0-5 were included if they had met the criteria of being involved in two or more child-serving systems. These could include Child Welfare, Juvenile Justice, or the Department of Developmental Disabilities, in addition to Behavioral Health. In addition, selected cases had to be enrolled in services at least 90 days, and be currently active at the time the sample was drawn. For each agency under review, a case manager could have no more than 2 of their cases identified for the SOCPR review.

The SOCPR uses a case study methodology informed by caregivers, youth, formal providers, informal supports, and extant documents related to service planning and provision. The SOCPR tool itself is comprised of 4 domains and 13 sub-domains:

- Child-Centered, Family-Focused (CCFF)
 - O Individualized, Full Participation, and Case Management
- Community Based (CB)
 - Early Intervention, Access to Services, Minimal Restrictiveness, and Integration and Coordination
- Culturally Competent (CC)
 - O Awareness, Sensitivity and Responsiveness, Agency Culture, and Informal Supports
- Impact (IMP)
 - O Improvement and Appropriateness

SOCPR results include a combination of quantitative and qualitative data. Quantitative data are scored on a scale of 1-7. Scores from 1–3 represent lower implementation of a system of care principle, and scores from 5–7 represent enhanced implementation of a system of care principle. A score of 4 indicates a neutral rating, meaning a lack of support for or against implementation. Qualitative data are analyzed for themes that are identified in at least half of examined cases.

Results

Quantitative Summary

In addition to results related to the four domains, other areas of analysis included: demographics, service system involvement, and receipt of services or treatments. The demographic profile showed that males were more commonly represented, a little over 64% of the sample, with the overall average age at 11.02 years. With regard to ethnicity, half of the sample was White, while nearly 21% was Hispanic, and the remaining 29% of the sample was Black, Asian, Native American, and multi-racial groups. From a total range of 1-4 systems, the average number of child-serving systems involved per child was 2.22. In addition, a review of the behavioral health services utilized showed 94.1% of the children received case management services, followed by individual counseling at 70% and psychiatric medications (63.5%). The average number of types of behavioral health services received in each of the cases reviewed was 4.35.

Scores range from a low of 1 to a high of 7, with scores 5 and higher representing enhanced implementation of the item of interest. For the statewide sample of 170 cases, scores ranged from 4.92 to 5.71 for the 4 SOCPR domains, with an overall case mean score of 5.23. It should also be stated that because of the sample size variance between Geographic Service Areas (GSAs), comparisons between GSAs is not possible.

SOCPR Domain Scores

CCA (NI_170)	Case	CCFF	СВ	CC	IMP
GSA (N=170)	Mean (SD)				
Statewide	5.23 (0.83)	5.27 (1.03)	5.71 (0.74)	4.92 (1.06)	5.02 (1.29)
	Min 1.65	Min 1.84	Min 2.54	Min 1.00	Min 1.00
	Max 6.76	Max 6.92	Max 7.00	Max 6.88	Max 7.00

Across the State, providers performed best at including the Community Based system of care value in service planning and provision. This was followed by the Child-Centered Family-Focused domain, and then the Impact domain. Providers were most challenged in the Culturally Competent domain.

While many of the mean scores for SOCPR domains and subdomains were in the 5 (enhanced implementation) range, there were several scores that fell outside that area. In the Community-Based domain for example, the Access to Services subdomain was the highest scoring subdomain at 6.20. The area of Appropriate Language within this subdomain also scored high. The Minimal Restrictiveness subdomain also had a high score at 6.17. These areas represent strengths in Arizona's Children's System of Care, as reviewed through these 170 SOCPR cases.

The data also revealed areas for improvement. For example, within the Child-Centered Family-Focused domain, the subdomain Individualized showed three areas with scores below 5. These lower scores indicate the need for improving individualization of services through attention to service planning and the types and intensity of services and supports provided. In the Culturally Competent domain, opportunities for improvement were evident in the subdomains of Sensitivity and Responsiveness and Informal Supports. Awareness of Providers Culture was also an area for improvement. It should be noted that the higher standard deviation scores in these areas suggest that variability exists across cases and that while some cases scored poorly, others were more exemplary. Finally, the domain of Impact also provides an area in which opportunities for improvement can be made in terms of increasing the appropriateness of services, which in turn improves the outcomes of children and youth.

A series of variables were tested to identify if there was a statistically significant relationship to the outcome of the SOCPR results. There were no significant differences in demographic variables. Significant differences in types of service system involvement were sometimes found for both SOCPR case and domain scores. Those children and youth who received Child Welfare Services and Developmental Disabilities Services had significantly higher Child-Centered Family-Focused domain scores. Those children and youth with educational services had significantly lower Culturally Competent domain scores. There was no significant difference found for mental health, juvenile justice, or total number of systems.

Treatment Services and Medical Services showed significant differences in SOCPR case and domain scores. As might be expected, those children and youth receiving some type of Treatment Services had higher SOCPR scores. For example, significant differences were found for (overall) SOCPR case, Child-Centered Family-Focused, and Community Based scores. For Medical Services, SOCPR case and Community Based domains were significant.

Receiving Individual Counseling, Family Counseling, and Family Support services were all associated with higher SOCPR scores. These findings indicate that some community based services are associated with better adherence to system of care values.

Qualitative Summary

Qualitative comments were derived from brief narratives developed by SOCPR reviewers to support final ratings to the Summative Questions which conclude the SOCPR. Themes derived from Summative Questions narratives are organized by SOCPR domain and subdomain. The frequency of responses to Summative Questions were examined and analyzed for emerging patterns/trends. Some notable strengths that were identified across case files include timely assessments, services provided at convenient locations and times, awareness of the family's culture, and improvements in the youth's functioning. Opportunities for improvement were also identified. Some of these include ensuring youth and family strengths are incorporated into service planning goals, increasing identification of informal supports for families, and ensuring the services and supports provided are appropriate for the youth and family.

Background

Arizona's Behavioral Health Care System

The Arizona Department of Health Services / Department of Behavioral Health Services (ADHS/DBHS) is responsible for administration of Arizona's publicly funded behavioral health service system for individuals, families, and communities. As such, ADHS/DBHS provides services both to populations eligible for federal entitlement programs such as Title XIX and Title XXI of the Social Security Act, as well as those receiving State funding only. ADHS/DBHS funding is derived from a variety of sources: Title XIX (Medicaid), TXXI (Kids Care), federal block grants, state appropriations, and intergovernmental agreements.

Service Provision

ADHS/DBHS' mission includes providing services to children and adults with substance use and/or general mental health disorders. Sub-populations include children with a serious emotional disturbance and adults with a serious mental illness. Children's Behavioral Health Services in the State of Arizona are delivered in accordance with the 12 principles of the Children's System of Care (see appendix), and delivered via the "Arizona Practice Model". This "System of Care" approach to service delivery in Arizona developed in response to the JK class action lawsuit, as part of the settlement agreement between ADHS/DBHS and the plaintiffs in the case.

The Arizona Practice Model is based on the "wrap-around" model (VanDenBerg, 2003), and includes formation of Child and Family Teams as a means of organizing and directing care. The Child and Family Team may be composed of family members, behavioral health service providers, and representatives of other child-serving agencies, as well as other identified helpers and "natural supports". Teams are typically facilitated by a case manager or other behavioral health representative, and are responsible for identifying the strengths and needs of children and families and identifying and monitoring treatment goals and tasks. Teams are also responsible for obtaining any and all covered behavioral health services *not* requiring prior authorization by the Regional Behavioral Health Authority (RBHA). Teams may also request services requiring prior authorization, which will be subject to medical necessity determination by the RBHA. Services requiring prior authorization include out of home care and psychological testing. Other ADHS/DBHS Covered Services include (for a comprehensive list refer to the ADHS/DBHS Covered Behavioral Health Services Guide):

- Treatment Services behavioral health counseling and therapy
- Medical Services medication services and laboratory
- Rehabilitation Services living skills training
- Support Services case management, home care training, respite and transportation
- Crisis Intervention ADHS/DBHS also oversees a statewide crisis system including crisis phones, warm lines, mobile teams, and inpatient psychiatric and detoxification facilities which operate seven (7) days a week.

ADHS/DBHS also oversees provision of prevention programs for children and adults. These services are funded separately, and are not included as Medicaid covered services.

In Arizona, services for children and adults have separate funding streams, and state law prohibits children's services from being funded with adult monies and vice versa. For purposes of this report, the focus will be on children/youth under the age of 18 (and their families) served by ADHS/DBHS. Quality improvement and evaluation activities related to services provided to adult populations are considered to be outside the scope of this report.

Contracting Process

Contracts are bid on a 3-5 year competitive cycle. There are six Geographic Service Areas (GSAs) across the state. Currently four (4) Regional Behavioral Health Authorities (RBHAs) serve the 6 GSAs. In addition there are five (5) Tribal Regional Behavioral Health Authorities (TRBHAs) and Tribal Contractors. Each T/RBHA contracts with various provider agencies to deliver the full array of covered behavioral health services to children and families within its region. Augmenting the efforts of these service providers are Family Run Organizations, who partner with ADHS/DBHS and the T/RBHAs to promote family involvement as well as family and youth voice and choice across the system. Additionally, they are also providers of services to support youth and families.

Coordination of Care

ADHS/DBHS works in tandem with a variety of potential stakeholders on behalf of youth and families. Child and Family Teams may include one or more of these stakeholders in addition to behavioral health system providers. These include:

- Physical healthcare providers
- Arizona Department of Economic Security (including):
 - o Department of Developmental Disabilities
 - o Rehabilitation Services Administration
 - Division of Children, Youth and Families (DCYF) (child welfare)
- Department of Juvenile Corrections
- Administrative Office of the Courts
- Arizona Department of Housing
- Arizona Department of Corrections
- Arizona Department of Education

Since Child Welfare, Developmental Disabilities, Education, and Juvenile Justice are funded separately in Arizona, a mixture of cooperative agreements and contractual relationships have been defined. Of the stakeholder organizations, only the Department of Developmental Disabilities has established a contract with ADHS/DBHS to provide behavioral health services for its eligible members. All other stakeholder agencies operate with collaborative agreements developed individually with each T/RBHA. These agreements define how the respective agencies are to work

together to provide services such as counseling, crisis intervention, and residential treatment on behalf of individuals and families "shared" by the systems. Each T/RBHA has regular meetings with representatives of these stakeholder agencies to coordinate their collaborative efforts. In addition, ADHS/DBHS maintains communication and collaboration through ongoing meetings involving stakeholders and state-level leadership.

Adoption of the SOCPR

Research has identified that outcome evaluation is key to achieving and sustaining transformation initiatives in Systems of Care (Hodges, Hernandez et al., 2002). This is illustrated by a five-year study of children's mental health sponsored by the University of South Florida. In the study, researchers identified key elements for accomplishing goals and sustaining theory-based efforts at system change. These included the finding that organizations must have methods to ensure that service implementation is consistent with underlying theory, "regardless of the information source". According to the authors, it is important that organizations have a means to confirm that their theory-based strategies are actually serving intended recipients, are providing intended services and supports, and are producing desired results. Finally, the authors conclude that as a consequence of such outcome evaluation, decision makers are better equipped to identify and to anticipate challenges to implementation and sustainability.

For ADHS/DBHS, research findings underscoring the need for outcome measures coincided with requirements of the settlement agreement entered into by ADHS/DBHS with plaintiff's counsel in the Jason K. class action lawsuit. Under the terms of this agreement, ADHS/DBHS committed to undertake development of a process to evaluate the quality of practice throughout the state. The J.K. Settlement Agreement, provision VIII, under "Quality Management and Improvement System", indicates that the measurement process will include as an integral component, "an in-depth case review of a sample of individual children's cases that includes interviews of relevant individuals in the child's life". In response to this agreement, in its 5th Annual JK Action Plan, ADHS/DBHS established twelve objectives. One of these pertained to the implementation of the Practice Improvement Review process, and stipulated that ADHS/DBHS would settle on a practice review instrument for use statewide.

As of June of 2007, the practice review method in use by ADHS/DBHS was the Wraparound Fidelity Assessment Scale (WFAS), developed by Dr. Eric Bruns of the University of Washington. The WFAS, as implemented in Arizona, consisted of two components; the Wraparound Fidelity Index (WFI), and the Document Review Measure (DRM). The WFAS was used to evaluate the degree to which services were being delivered according to the 12 Principles, and in keeping with Child and Family Team Practice. In October 2008, ADHS/DBHS implemented a taskforce to evaluate the efficacy of the WFAS as a performance improvement measure for Arizona's System of Care. This taskforce, chaired by the ADHS/DBHS Medical Director for Children's Services, included representatives from a number of ADHS/DBHS functional areas, including Children's System of Care, Children's Networks, Quality Management, and Clinical Practice Improvement.

The taskforce recommendations included: 1. Finalizing the Arizona-developed "Low Needs Tool", (henceforth referred to as the Brief Practice Review), and 2. Combining what had been separate moderate and high needs reviews into one process, to be referred to as the Practice Review for Children with Complex Needs. For purposes of implementing a practice review tool, ADHS/DBHS determined that it was not practicable to employ the same method for reviewing cases with a high level of complexity/acuity as for those with a lower level of complexity. The Child and Adolescent Service Intensity Instrument (CASII) was identified as a mechanism for providers to rate levels of need/acuity on a scale from 0-6, with 6 representing the greatest intensity of need. Thus, the initial sample pool of cases deemed "high complexity" contained all children and youth age 6-18 years who had scores of 3 or higher on the CASII (changed to 4 for FY2011). Children ages 0-5 were also included if they had met the criteria of being involved in two or more child-serving systems in addition to Behavioral Health. These might include Child Welfare, Juvenile Justice, or the Department of Developmental Disabilities. All other children not meeting these criteria were included in the sample for the Brief Practice Review.

In response to the taskforce's first recommendation, a workgroup was formed, and subsequently developed "The Practice Review for Children with Standard Needs". This tool, consisting of 15 questions, was to be administered telephonically with a child's primary caregiver. To address the second objective, the taskforce consulted with a number of local and national experts in practice review and survey development, including Mario Hernandez, Ph.D., of the University of South Florida. Ultimately, the Committee determined that the System of Care Practice Review (SOCPR) methodology developed by Dr. Hernandez would satisfy its requirements for the Complex Needs review process in Arizona. Subsequently, the SOCPR was adopted by ADHS/DBHS as its practice review methodology with implementation beginning in FY 2010.

SOCPR and Quality Management / Practice Improvement

SOCPR results constitute one of the many data sources utilized by the ADHS/DBHS Quality Management (QM) Department. These results are intended to be used as a mechanism to provide feedback to the Behavioral Health System regarding areas of strength and areas where improvement is needed in System of Care implementation. The feedback/improvement process occurs at two levels. The first is the individual provider agency level, where SOCPR feedback is utilized to develop individualized performance improvement plans. Second, as trends and common themes are identified across the state, these are incorporated into the ADHS/DBHS System of Care Planning and Development process as goals and objectives for the T/RBHAs for the coming year.

Methodology

SOCPR Introduction

The System of Care Practice Review (SOCPR) collects and analyzes information regarding the process of service delivery to document the service experiences of children and their families, and then provides feedback and recommendations for improvement to the system. The process yields thorough, in-depth descriptions that reveal and explain the complex service environment experienced by children and their families. Feedback is provided through specific recommendations that can be incorporated into staff training, supervision, and coaching, and may also be aggregated across cases at the regional or system level to identify strengths and areas in need of improvement within the system of care. In this manner, the SOCPR provides a measure of how well the overall system is meeting the needs of children and their families relative to system of care values and principles.

The reliability of the SOCPR has been evaluated, and high inter-rater reliability has been reported in its use (Hernandez et al., 2001). The validity of the protocol is supported through triangulating information obtained from various informants and document reviews. The SOCPR was found to distinguish between a system of care site and a traditional services site. Moreover, Hernandez et al. (2001) found in their study that the SOCPR identified system of care sites as being more child-centered and family-focused, community based, and culturally competent than services in a matched comparison site offering traditional mental health services. System of care sites were more likely than traditional service systems to consider the social strengths of both children and families and to include informal sources of support such as extended family and friends in the planning and delivery of services. In addition, Stephens, Holden, and Hernandez (2004) found that the SOCPR ratings were associated with child-level outcome measures. In their comparison study, Stephens and colleagues discovered that children who received services in systems that functioned in a manner consistent with system of care values and principles compared with traditional services had significant reductions in symptomatology and impairment one year after entry into services, whereas children in organizations that did not use system of care values demonstrated less positive change. The study also found that as system of care-based practice increased, children's impairments decreased.

SOCPR Method

The SOCPR relies on data gathered from interviews with multiple informants, as well as through case files and record reviews. Document reviews precede interviews and provide an understanding of the family's service history, including the presence and variety of services from sectors outside of mental health care systems. These reviews also provide the chronological context of service delivery and help to orient the reviewer to the child and family's strengths, needs, and involvement with services.

The interviews are based on a set of questions intended to obtain the child and family's perceptions of the services they have received. Questions related to accessibility, convenience, relevance, satisfaction, cultural competence, and perceived effectiveness are included. These questions are open-ended and designed to elicit both descriptive and explanatory information that might not be found through the document review. The questions provide the reviewer with the opportunity to obtain information about the everyday service experiences of the child and family and thereby gain a glimpse of the life experience of a child and family in the context of the services they have received.

The SOCPR uses a case study methodology informed by caregivers, youth, formal providers, informal supports, and extant documents related to service planning and provision. The unit of analysis is the family case, with each case representing a test of the extent to which the system of care is implementing its services in accordance with system of care values and principles. The family case consists of the child involved in the system of care, the primary caregiver (e.g., biological parent, foster parent, relative), the primary formal service provider (e.g., behavioral health case manger, therapist), and if present, a primary informal helper (e.g., extended family member, neighbor, friend).

Domains

The SOCPR assesses four domains relevant to systems of care: 1) Child-Centered and Family-Focused, 2) Community Based, 3) Culturally Competent, and 4) Impact.

Domain I, Child-Centered and Family-Focused, is defined as having the needs of the child and family dictate the type and combination of services provided by the system of care. It is a commitment to adapt services to children and families, as opposed to expecting children and families to conform to pre-existing service configurations. Domain I has three subdomains: 1) Individualized, 2) Full Participation, and 3) Case Management.

Domain II, Community Based, is defined as having services provided within or close to the child's home community in the least restrictive and most appropriate setting possible, and coordinated and delivered through linkages between a variety of providers and service sectors. This domain is composed of 4 subdomains: 1) Early Intervention, 2) Access to Services, 3) Minimal Restrictiveness, and 4) Integration and Coordination.

Domain III, Cultural Competence, is defined by the capacity of agencies, programs, services, and individuals within the system of care to be responsive to the cultural, racial, and ethnic differences of the population they serve. Domain III has four subdomains: 1) Awareness, 2) Sensitivity and Responsiveness, 3) Agency Culture, and 4) Informal Supports.

Domain IV, Impact, examines the extent to which families believe that services were appropriate and were meeting their needs and the needs of their children. This domain also examines whether services are seen by the family to produce positive outcomes. This domain has two subdomains: 1) Improvement and 2) Appropriateness.

Taken individually, these measures allow for assessment of the presence, absence, or degree of implementation of each of the domains and subdomains. Taken in combination, they speak to how close a system's services adhere to the values and principles of a system of care. The findings can also highlight which aspects of system of care-based services are in need of improvement. Ultimately, results provide the basis for feedback, thus allowing a system's stakeholders to maintain fidelity to system of care values and principles.

Organization of the SOCPR

The SOCPR is organized into 4 major sections.

Section 1:

Includes demographic information and a snapshot of the child's current array of services.

Section 2:

Organizes the case records review and comprises the Case History Summary and the Current Service/Treatment Plan; the Case History Summary requires the reviewer to provide a brief case history based on a review of the file. It also provides information about all of the service systems with which the child and family are involved (e.g., special education, mental health, juvenile justice, child welfare). It summarizes major life events, persons involved in the child's history and current life, outcomes of interventions, and the child's present status. Review of the Individualized Service Plan provides information about the types and intensity of the services received, integration and coordination, strengths identification, and family participation. The Document Review is completed prior to any interview so that the information gathered through the documents can inform and strengthen the interviews.

Section 3:

Consists of the interview questions organized by the type of informant (primary caregiver, youth, formal service provider, informal helper); the interviews are designed to gather information about each of the four identified domains (Child-Centered and Family-Focused, Community Based, Cultural Competence, and Impact). Questions for each of the four domains are divided into subdomains that define the domain in further detail and represent the intention of the corresponding system of care core value. Questions in each of the subdomains are designed to indicate the extent to which core system of care values guide practice. Data are gathered through a combination of closed-ended questions (i.e., quantitative) that produce ratings and explanatory responses from participants through more open-ended questions and narrative responses (i.e., qualitative). The open-ended questioning provides an opportunity for the reviewer to probe issues related to specific questions so that answers are as complete as possible. In addition, direct quotes from respondents are recorded whenever appropriate and possible.

Section 4:

Consists of the Summative Questions, the section in which reviewers record their ratings and the evidence derived from the file review and interviews to support the reviewer rating for each summative question. These ratings represent the reviewer's belief of the extent to which system of care values and principles are actualized.

Training of the Interview Team

Training for the SOCPR follows strict procedural guidelines which are outlined below. These steps were implemented and followed by the ADHS/DBHS review team. Before data collection begins, the team conducting the SOCPR must be identified and trained. Case reviews may be conducted using single reviewers or paired review teams. The use of single reviewers allows for more cases to be reviewed at a lower cost. Pairing reviewers provides the advantage of being able to validate and discuss what is being learned through the review process. The use of paired reviewers is obviously more costly and may not always be feasible. However, when individual reviewers are conducting the SOCPR, it is recommended that reliability checks be conducted with another reviewer.

The didactic training includes a review of the values and principles of systems of care, an orientation regarding the purpose and objectives of the SOCPR, and practice sessions for interviewing and rating the summative questions within the SOCPR. In addition, because much of the useful information about a family is collected through interviews, it was important to train reviewers in the proper methods for conducting interviews and documenting information from the responses that emerge during the review. Without this part of the training, reviewers may not probe adequately, or they may overlook information that helps with both the summative ratings and with the feedback that is later provided to the system of care. In addition, interview training was important so that the reviews are respectful, effective at ensuring that all questions are answered, and able to create a comfortable experience for informants.

During the training of reviewers, it is recommended that each trainee be shadowed by the trainer or another person with experience using the SOCPR protocol. This hands-on training includes the shadowing of a trainee by an experienced reviewer who participates in all aspects of the case review. The trainee conducts the interviews and leads the case review, and the shadow is available to provide support, clarify procedures, answer questions, and complete a separate set of ratings for comparison. Once a training case is completed, the trainee and shadow debrief about the case. It is essential that the debriefing include a discussion of why the ratings were given and the ways in which the notes resulting from the review will be used to give feedback to system stakeholders. Trainees, shadows, and the primary trainer typically meet together for group debriefing.

The coaching/shadowing of two cases per trainee allows for an examination of the trainee's ability to conduct the SOCPR in an appropriate and reliable manner. The reliability of a trainee can be examined through the calculation of three different measures: 1) the percentage of summative question ratings that were exact matches between the trainee and the shadow; 2) the percentage

of summative question ratings that were scored in the same direction (i.e., positive or negative scores) by the trainee and the shadow; and 3) the discrepancy value between the trainee and shadow scores displayed as a percentage.

Selecting Cases and Informants

Implementing the SOCPR involves the selection of cases for review and the selection of the key informants for interviews. The number and type of cases to be examined is determined by the agency or system of care using the SOCPR and should be tailored to meet the specific needs and interests of that agency or system. Cases are selected based on characteristics such as the child's age, gender, and the service sector with which the child is involved. For example, an agency or system may be interested in assessing its service delivery for young children who are not yet in school or for youth involved within the juvenile justice sector. A system of care should be purposeful in its approach to sampling to ensure the usefulness of the results. If a few cases are drawn from too large a pool of services and programs, it will be difficult to understand the results and to later know to whom and in what manner feedback should be provided. Determining the number of cases to be examined and the system's reason for implementing the SOCPR is critical to the usefulness of the results.

Arizona's sample of SOCPR cases could not be guided by examples from other communities who have used the SOCPR, as Arizona is the first state to implement the SOCPR in a systematic statewide manner.. The sample pool of cases for this fiscal year contained all children and youth age 6-18 years who had scores of 4 or higher on the CASII. Children 0-5 were included if they had met the criteria of being involved in two or more child-serving systems; this might include Child Welfare, Juvenile Justice, or the Department of Developmental Disabilities, in addition to Behavioral Health. In addition, cases had to be enrolled in services for at least 90 days and at an entity currently open at the time the sample was drawn. At a specific agency, a case manager could have no more than two of their cases identified for the SOCPR review.

The next step involved examining the number of children who met this complexity designation at each Provider Network Organization or service agency in the state. No cases were chosen for the SOCPR from agencies who served fewer than 25 children who met the eligibility criteria. For agencies who served 26 to 300 eligible children, five cases from the agency were chosen for the SOCPR. For agencies who served 301 or more children who met the criteria, 10 cases were chosen. Agencies were contacted and asked to pull a random oversample based on the criteria described above. This oversampling was intended to provide substitute cases where families were not able to be located, chose not to participate in the process, or who upon review were found not to meet the "high complexity" designation. This process resulted in a total of 170 cases being completed in FY2010-2011.

SOCPR Data Analysis and Reporting

The analysis of the SOCPR follows a sequential process in which data are coded, sorted, rated,

and examined. Data are integrated, and ratings are determined for each question, embedded within a subdomain of one of the four main domains, with higher scores indicating that a family's experiences are more consistent with system of care principles. All of the interview questions in the SOCPR are organized into a predetermined coding scheme. This allows for questions to be sorted by interview (e.g., primary caregiver, child, formal provider) and by domain. Once all of the required data for the protocol have been collected, the information is integrated to rate the summative questions, each relating to a specific domain. The ratings specified for each subdomain are averaged to provide a global rating for that domain. In addition, the summative questions for each domain are clustered, with their average rating representing a measurement of the individual components in each domain. Finally, reviewers support their final ratings with a brief explanation and direct quotes from the interviews.

The SOCPR produces findings such as mean ratings that reveal the extent to which the services and/or system under review adhere to the system of care philosophy (i.e., the extent to which services are child-centered and family-focused, community based, and culturally competent). A mean rating is also completed that assesses the impact of services on children and their families. The ratings are supported and explained by reviewer's detailed notes and direct quotes from respondents to provide objective, evocative, and in-depth feedback. The findings are used to document the specific components of service delivery that are effective or that need to be further developed and improved to increase fidelity to the system of care approach. One of the strengths of the SOCPR derives from its production of both quantitative and qualitative data. The mean ratings provide a discrete number to indicate the level of system of care values and principles implementation that is present within the family case. The file review data, interview contents, and reviewer reasoning to support summative question ratings provide the "why" to support the mean ratings scores. In addition, overall themes can be gleaned from these writings to provide information about larger systemic issues, community resources or needs, or other unique events that affect system of care values implementation.

IBM SPSS (Statistical Package for the Social Sciences Version 20) software was used to analyze the quantitative data. The results of the SOCPR are organized and presented on the basis of the four domains: Child-Centered and Family-Focused, Community Based, Cultural Competence, and Impact. Each summative question is rated on a scale of -3 (disagree very much) to +3 (agree very much). These scores are then transformed on a scale from 1 (disagree very much) to 7 (agree very much) to eliminate the - and + signs. Thus, -3 is transformed to 1; -2 to is transformed to 2; -1 is transformed to 3, and so forth.

Thus, a rating ranging from 1–7 is derived for each of the domains and their embedded measurements. Scores from 1–3 represent lower implementation of a system of care principle, and scores from 5–7 represent enhanced implementation of a system of care principle. A score of 4 indicates a neutral rating, meaning a lack of support for or against implementation.

Means were calculated for the overall case, domains, subdomains, and individual items. The range of scores, minimum and maximum values, and standard deviations for each data point were

also examined. The total set of cases as well as groups of cases determined by GSA were "slices" of data used to examine the relationship between SOCPR scores and a variety of demographic variables, including age, gender, race/ethnicity, child's primary language, service systems utilized, specific services accessed, and length of services at the agency. SOCPR quantitative score comparisons among GSAs were not made, as each GSA encompasses a unique set of children and families receiving services, and provider agencies providing services. Data are reported to provide state-level information to guide ADHS/DBHS planning and to assist provider agencies within a specific GSA to improve their services to best serve their children and families.

ATLAS.ti software was used to assist with the qualitative data analysis. Two methods of code development were used. The first, based on theoretical principles, were derived prior to coding. These codes were based on the structure of the SOCPR (domains and subdomains), the type of data (file review, interview, or reviewer reasoning), respondent (youth, caregiver, formal provider, informal helper), and case characteristics (GSA, reviewer). The second set of codes were more emergent codes, derived from the quantitative results (specific service types) and reviewer comments recorded in addition to summative ratings (keywords, emergent themes, strengths, challenges, concerns). The frequency of Summative Question responses were examined and analyzed for emerging patterns/trends. In order to be considered a trend, at least half of the cases had to provide similar information.

Data Quality

Initial verification of data from SOCPR reports were conducted by the contractor who reviewed submitted SOCPR instruments, and identified any omissions or other obvious errors in recording. Subsequently, data were forwarded to ADHS/DBHS for entry into the SOCPR database. The quality of the SOCPR data was checked again as data entry was completed for each provider agency. A summary of each provider's quantitative data was produced and reviewed again for errors. If errors were found, clarification was sought from the data collection team leader and corrected in the database. Quantitative data was also compared by reviewer and provided to the data collection team leader in order to ensure accuracy. As part of preparation for provider feedback sessions, data from each provider agency review was assembled into a report format, which was forwarded to the Children's System of Care Bureau Chief and staff to review prior to sending to the contractor for final report preparation. Annually, various data reports were completed as part of the quality check process to assist with training and ensure continued data integrity needs were addressed.

Qualitative data derived from Summative Questions were monitored as follows. Summaries were reviewed for clarity and edited for consistency in of use of terms, spelling, jargon, and identifying information. Additionally, a sample of responses from each rater was reviewed for consistency between the rating and the narrative summary by the Project Manager with the individual rater. The scope and quality of these brief narrative responses can, however, vary.

Results

Demographics

The 170 SOCPR cases completed during Fiscal Year FY2010-2011 were sampled from all 6 GSAs in Arizona. A summary of the demographic characteristics are presented in Table 5. Due to the sampling scheme employed by ADHS/DBHS (previously described in the Methodology section), different numbers of cases were completed in each GSA. The most populous area, GSA 6, provided the greatest number of case for the sample (n=60). The other GSAs provided between 10 and 30 cases, as can be seen in Table 5.

Table 1. Demographic Characteristics of SOCPR Cases

Variable	Statewide	GSA 1	GSA 2	GSA 3	GSA 4	GSA 5	GSA 6
	N=170	n=30	n=10	n=10	n=30	n=30	n=60
Age (years)	11.02	11.5	9.9	11.7	10.3	12.1	10.7
Gender (Male)	64.1%	50.0%	80.0%	80.0%	63.3%	66.7%	65.0%
Race							
White	50.0%	70.0%	20.0%	50.0%	43.3%	50.0%	48.3%
Black	7.7%	0	0	20.0%	10.0%	3.3%	11.7%
Asian	1.2%	0	0	0	0	3.3%	1.7%
Latino/Hispanic	20.6%	10.0%	30.0%	20.0%	36.7%	23.3%	15.0%
Native American	4.1%	10.0%	10.0%	0	3.3%	0	3.3%
Multi-racial	16.5%	10.0%	40.0%	10.0%	6.7%	20.0%	20.0%
Primary Language							
English	97.7%	100%	100.0%	100.0%	100.0%	93.3%	96.7%
French	0.6%	0	0	0	0	3.3%	0
Spanish	1.8%	0	0	0	0	3.3%	3.3%

As shown in Table 5, the overall mean age for the 170 cases was 11.02 years. The means for age across GSA ranged from 9.9 to 12.1. A little over 64% of the sample was male, ranging from 50% in GSA 1 to 80% in GSA 2 and GSA 3. Of the sample, 50% was White, and almost 21% was Latino/Hispanic. The remaining 29% of the sample was Black, Asian, Native American, or multiracial. Statewide, almost 98% of the children and youth in the sample spoke English as their primary language. In four GSAs, English was the only language reported as the primary language in the 170 cases. Both French and Spanish were reported as primary languages in two GSAs. Chisquare analyses were used to look for demographic differences in cases by GSA, with age bands, gender, race, and primary language under consideration.

Service System Involvement

Five different child-serving systems and an "Other" category were used to capture service system involvement as part of the services profiles of children and youth whose cases were chosen as part of the sample. All 170 cases were recorded as showing behavioral health system

involvement, the system with the greatest participation, as shown in Table 6. The SOCPR protocols documented 43% of the cases had child welfare involvement, followed closely by education, then developmental disabilities, juvenile justice, and "Other". The "Other" system category was documented by three GSAs. The services included issues such as CRS (Community Rehabilitation Services), medical, and adoption agency.

Table 2. Child-Serving Systems Involvement

System	Statewide N=170	GSA 1 n=30	GSA 2 n=10	GSA 3 n=10	GSA 4 n=30	GSA 5 n=30	GSA 6 n=60
Mental Health	100%	100%	100%	100%	100%	100%	100%
Child Welfare	43.0%	23.3%	20.0%	70.0%	46.7%	63.3%	40.0%
Juvenile Justice	16.5%	10.0%	10.0%	20.0%	23.3%	13.3%	18.3%
Education	40.0%	30.0%	40.0%	30.0%	60.0%	20.0%	46.7%
Developmental Disabilities	19.4%	10.0%	30.0%	40.0%	10.0%	20.0%	23.3%
Other	2.9%	0	0	0	3.3%	6.7%	3.3%

The results of the 170 cases were plotted by histogram to explore the distribution of cases for total number of systems involved. The results are seen in Figure 1. The horizontal axis displays the total number of services, while the vertical axis represents the number of cases with that total number of services. The 170 cases represent children and youth who either were receiving behavioral health system services or had recently completed services from the behavioral health system. In addition, cases were only chosen for SOCPR review if the youth was identified as having complex needs.

Overall, cases identified a range of 1-4 systems involvement, with the mean being 2.22. The shape of the histogram is symmetrical, resembling a normal distribution. One might expect that children and youth in this sample to be involved in a significant number of child-serving systems and thus expect the shape/distribution to skew to the right, towards a greater number of service systems. Explanations for this finding might include inadequate record documentation, differences in reviewer interpretations of how to record service system involvement, or data entry errors.

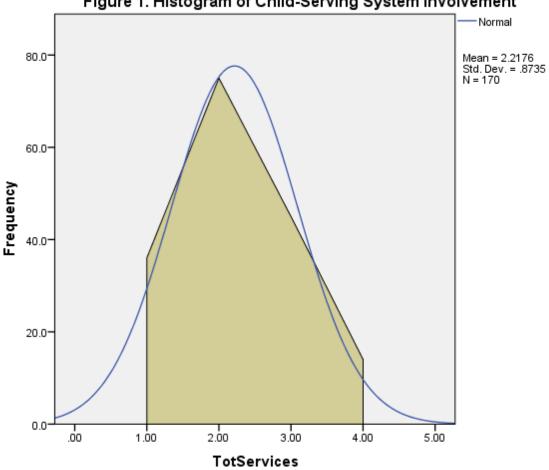


Figure 1. Histogram of Child-Serving System Involvement

Receipt of Services or Treatments

Similar to child-serving systems, the kinds of services or treatments children and youth in the sample received were also counted. Fourteen named types of services as well as an "Other" category were used to identify service provision. These service types are shown in Table 7.

Table 3. Services or Treatments Received by Children and Youth

C	Services or Treatment Statewide CSA 1 CSA 2 CSA 4 CSA 5 CSA 6							
36	Jervices or freatment		GSA 1	GSA 2	GSA 3	GSA 4	GSA 5	GSA 6
		N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
Treatme	ent Services	134 (78.8)	24 (80.0)	5 (50.0)	8 (80.0)	26 (86.7)	23 (76.7)	48 (80.0)
•	Individual Counseling	119 (70.0)	21 (70.0)	4 (40.0)	8 (80.0)	24 (80.0)	20 (66.7)	42 (70.0)
•	Family Counseling	72 (42.4)	16 (53.3)	1 (10.0)	4 (40.0)	17 (56.7)	11 (36.7)	23 (38.3)
•	Group Counseling	28 (16.5)	5 (16.7)	0	3 (30.0)	2 (6.7)	7 (23.3)	11 (18.3)
•	Alcohol/Drug Counseling	11 (6.5)	0	0	0	4 (13.3)	1 (3.3)	6 (10.0)
Medical	Services							
•	Psychiatric Medication	108 (63.5)	20 (66.7)	4 (40.0)	7 (70.0)	14 (46.7)	20 (66.7)	43 (71.7)
Support	Services	163 (95.9)	29 (96.7)	10 (100)	10 (100)	27 (90.0)	30 (100)	57 (95.0)
•	Family Support	69 (40.6)	14 (46.7)	8 (80.0)	3 (30.0)	15 (50.0)	11 (36.7)	18 (30.0)
•	Peer Support	14 (8.2)	1 (3.3)	2 (20.0)	1 (10.0)	2 (6.7)	1 (3.3)	7 (11.7)
•	Respite Support	46 (27.1)	8 (26.7)	4 (40.0)	6 (60.0)	7 (23.3)	10 (33.3)	11 (18.3)
•	Home Care Training	24 (14.1)	10 (33.3)	3 (30.0)	5 (50.0)	1 (3.3)	4 (13.3)	1 (1.7)
•	Case Management	160 (94.1)	29 (96.7)	9 (90.0)	10 (100)	25 (83.3)	30 (100)	57 (95.0)
Inpatien	t Services	23 (13.5)	3 (10.0)	0	1 (10.0)	3 (10.0)	5 (16.7)	11 (18.3)
•	Psychiatric Hospitalization	18 (10.6)	3 (10.0)	0	1 (10.0)	1 (3.3)	5 (16.7)	8 (13.3)
•	Level I Residential	8 (4.7)	1 (3.3)	0	0	3 (10.0)	0	4 (6.7)
Resident	tial Services	14 (8.2)	0	0	0	2 (6.7)	7 (23.3)	5 (8.3)
•	Level II Residential	10 (5.9)	0	0	0	1 (3.3)	5 (16.7)	4 (6.7)
•	Level III Residential	4 (2.4)	0	0	0	1 (3.3)	2 (6.7)	1 (1.7)
Other		48 (28.2)	7 (23.3)	6 (60.0)	2 (20.0)	6 (20.0)	10 (33.3)	17 (28.3)

Statewide, the most widely utilized service, based on percentage of cases using the service, was Case Management (94.1%) followed by Individual Counseling (70.0%) and Psychiatric Medication (63.5%). Across GSAs, Case Management was consistently the most highly utilized service (six out of six GSAs). Individual Counseling was the next most utilized service (four of the six GSAs), followed by Respite Support (three of the six GSAs).

Individual Counseling (Treatment Service), Respite Support (Support Service), and Psychiatric Medication (Medical Service) were documented most frequently in GSA 3. On the other hand, GSA 2 utilized Individual Counseling and Psychiatric Medication less frequently as compared to the others GSAs. GSAs 2 and 3 represent the lowest number of cases because they had the smallest samples as a part of the overall statewide sample. Specific services within the category of Support Services differed by GSA. Family Support services were highly utilized in GSA 2 but were less frequently used in GSAs 3 and 6. Home Care Training (HCTC) services were more frequently recorded in GSA 3, and much less frequently in GSAs 4 and 6. Peer Support services were utilized more

frequently in GSA 2 but much less frequently in GSAs 1 and 5.

Usage of some services appears to be unusually high. For example, 60% of cases in GSA 2 had "Other" services. Since GSAs vary widely in the number of SOCPR cases completed, the 60% of "Other" services represents only 6 children or youth, as only 10 SOCPR cases were completed for this GSA. Almost 30% of the treatments or services reported were identified as "Other" (see Technical Appendix). Several of the services variables differed significantly by GSA, and are shown in Table 4. Only statistically significant chi-square statistics are reported.

Table 4. Significant Associations between GSA and Specific Services

Treatment	Chi-Square Statistic
Treatment Services	
Individual Counseling	
Family Counseling	
Group Counseling	
Alcohol/Drug Counseling	
Medical Services	
Psychiatric Medication	
Support Services	
Family Support	X ² (5, N=170)=11.45, p=.043
Peer Support	
Respite Support	
Home Care Training (HCTC)	X ² (5, N=170)=32.40, p=.000
Case Management	
Inpatient Services	
Psychiatric Hospitalization	
Level I Residential	
Residential Services	
Level II Residential	
Level III Residential	
Other	

In order to examine the breadth of services used by children and youth in the sample, a simple summation was calculated for the 15 potential service categories. Thus, the possible range for this variable was from 0 to 15 services utilized. For the total 170 cases in the sample, the range of services used was 1 to 9. These data were displayed via histogram to examine the distribution of total number of services used. The results are displayed in Figure 2. Again, the histogram fairly closely resembles a normal distribution, in which a mean of 4.35 services per child or youth were recorded. The number of services used over the time a case was open could vary greatly, depending on child and family needs, available service array, and the length of time the case as open.

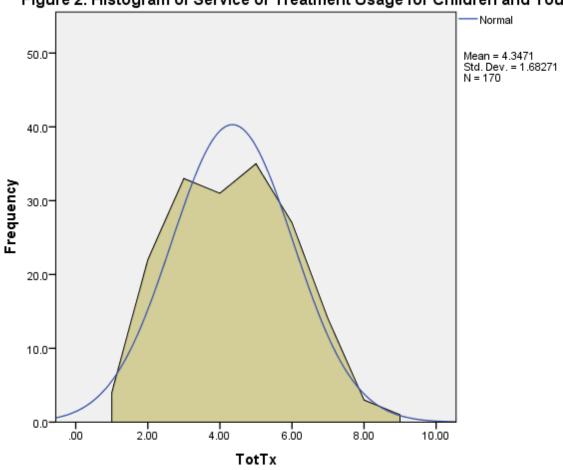


Figure 2. Histogram of Service or Treatment Usage for Children and Youth

Quantitative Analysis

SOCPR Scores – Overall Case and SOCPR Domains

Mean scores were computed for the overall case, as well as for each of the four SOCPR domains (Child-Centered Family-Focused, Community Based, Culturally Competent, and Impact). In addition, mean scores were computed for those subdomains contained within the domains. Finally, each summative question was examined individually. In general, the mean score for each item of interest was an important statistic to be examined. In addition, the minimum and maximum scores, as well as the standard deviation for each item of interest, were examined. Using these four statistics, an understanding of the range of scores, the average score, as well as an indication of the variability from case to case, could be examined. This section will report on the overall findings, and then report on specific items of interest which demonstrate extreme scores.

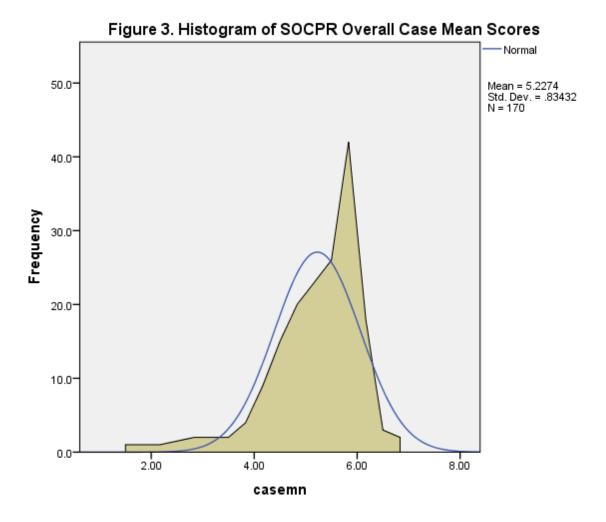
Table 9 shows the overall case scores as well as those for each SOCPR domain for the entire statewide sample of 170 cases, indicated by individual GSA. As explained in the Methodology section, SOCPR scores range from a low of 1 to a high of 7, with scores 5 and higher representing enhanced implementation of the item of interest. At the statewide level, SOCPR scores ranged from 4.92 to 5.71 with an overall case mean score of 5.23. While the SOCPR scores for the case and domains are not normally distributed and so the standard deviation is a less useful statistic, in conjunction with minimum and maximum scores, a more complete picture of the data emerges. The statewide overall case score suggests that, like all of the SOCPR domains, great variability exists across cases. The minimum and maximum scores are to their greatest possible extremes, representing exemplary cases of good and poor system of care values implementation. The means range from the high 4s to the high 5s, showing neutral to slightly enhanced implementation of system of care values. The scores indicate that across the state, behavioral health provider agencies included in the sample performed best at including the Community Based system of care value in service planning and provision. Behavioral health provider agencies were most challenged by providing culturally competent care.

Table 5. SOCPR Case and Domain Scores

CCA (NI_170)	Case	CCFF	СВ	CC	IMP
GSA (N=170)	Mean (SD)				
Statewide	5.23 (0.83)	5.27 (1.03)	5.71 (0.74)	4.92 (1.06)	5.02 (1.29)
	Min 1.65	Min 1.84	Min 2.54	Min 1.00	Min 1.00
	Max 6.76	Max 6.92	Max 7.00	Max 6.88	Max 7.00
1 (n=30)	5.32	5.40	5.69	5.00	5.18
2 (n=10)	5.56	5.54	6.12	5.27	5.30
3 (n=10)	5.31	5.32	5.47	5.00	5.48
4 (n=30)	5.15	5.11	6.00	4.85	4.64
5 (n=30)	5.24	5.33	5.68	4.92	5.03
6 (n=60)	5.14	5.19	5.56	4.82	5.00

Minimum and maximum values are not presented for GSAs, as they are a subset of the statewide scores. The GSA data show similar patterns when compared with statewide scores. Additionally, standard deviation data are not presented at the GSA level because two of the six GSAs had small sample sizes; therefore, presenting standard deviation data would not be statistically meaningful. Because of the sample size variance among the GSAs, comparisons between GSAs are not possible.

Histograms were drawn at the statewide level to better demonstrate the range of SOCPR scores for the overall case and the four SOCPR domains. These results are displayed in Figures 3-7. Scrutiny of these graphs shows a similar pattern for the case and each SOCPR domain. The data are not normally distributed but are skewed slightly towards the right, toward higher scores. This is a desirable pattern, with even more skewing in this direction being preferable.



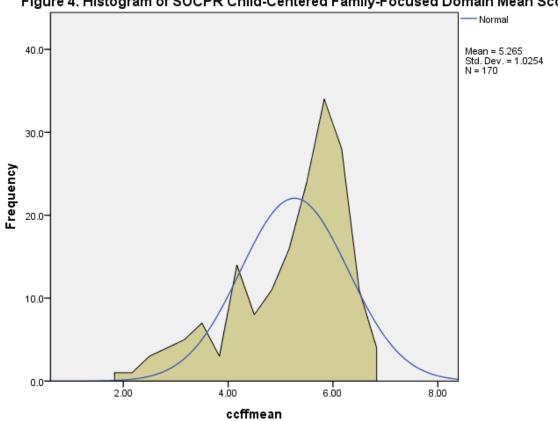


Figure 4. Histogram of SOCPR Child-Centered Family-Focused Domain Mean Scores

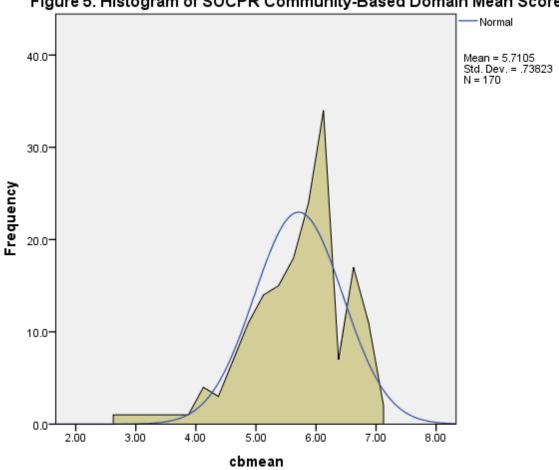


Figure 5. Histogram of SOCPR Community-Based Domain Mean Scores

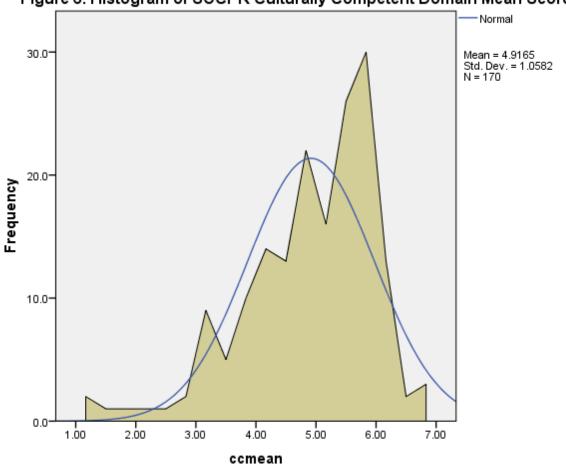
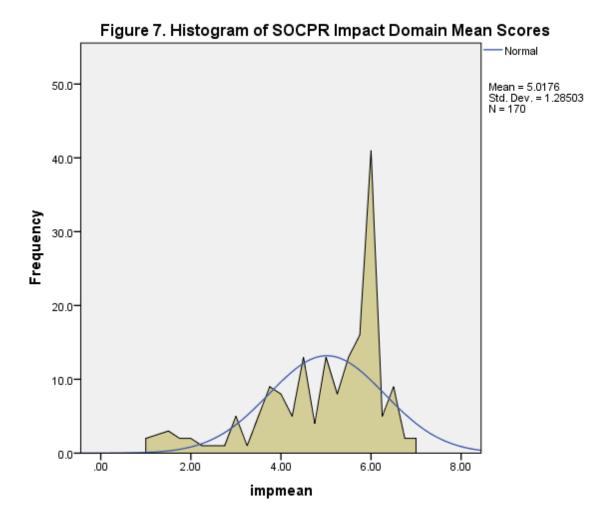


Figure 6. Histogram of SOCPR Culturally Competent Domain Mean Scores



SOCPR Scores – SOCPR Subdomains

Table 6 presents statewide SOCPR data for most levels of the instrument, including the total case mean score, SOCPR domain scores, and SOCPR subdomain scores. Because two of the six GSAs had very small sample sizes, the standard deviation data are not statistically meaningful; consequently, SOCPR subdomains and their areas of interest are not reported at the GSA level.

Table 6. Arizona Statewide SOCPR Scores by Domain and Subdomain

Overall Score – all cases: 5.23 (0.8	Areas	Subdomain
	X (SD)	X (SD)
Domain I: Child-Centered, Family-Focused: 5.27 (1.03)		
Individualized		5.00(1.06)
Assessment/Inventory	5.54(0.74)	
Service Planning	4.81(1.14)	
Types of Services/Supports	4.86(1.57)	
Intensity of	4.80(1.75)	
Full Participation		5.58(1.05)
Case Management		5.21(1.50)
Domain II: Community-Based Domain Score: 5.71 (0.74)		= == (
Early Intervention		5.37(1.32)
Access to Services		6.20(0.76)
Convenient Times	5.99(1.36)	
Convenient Locations	5.97(1.20)	
Appropriate Language	6.62(0.89)	
Minimal Restrictiveness		6.17(0.88)
Integration and Coordination		5.11(1.36)
Domain III: Culturally Competent Domain Score: 4.92 (1.06	6)	
Awareness	•	5.10(1.15)
Awareness of Child/Family's Culture	5.14(1.22)	3,10,110,
Awareness of Providers' Culture	4.89(1.50)	
Awareness of Cultural Dynamics	5.26(1.35)	
Sensitivity and Responsiveness	, ,	4.67(1.61)
Agency Culture		5.46(1.27)
Informal Supports		4.44(1.75)
Domain IV: Impact Domain Score: 5.02 (1.29)		= 4.4/4.20)
Improvement		5.14(1.29)
Appropriateness		4.90(1.42)

As reported previously, the highest scoring SOCPR domain was Community Based. This was followed by Child-Centered Family-Focused, Impact, and finally Culturally Competent. While more than half of the mean scores for both SOCPR domains and subdomains were in the 5 range, there were some scores that fell both above and below that range. For example, in the Community Based domain, the Access to Services subdomain was the highest scoring subdomain at 6.20. Within this subdomain, the area of Appropriate Language also scored high. The subdomain of Minimal Restrictiveness also had a high score of 6.17. These areas represent strengths in Arizona's Children's System of Care, as reviewed through these 170 SOCPR cases.

The data also revealed areas for improvement. For example, within the Child-Centered Family-Focused domain, the subdomain Individualized showed three areas with scores below 5. These low scores indicate the need for improving individualization of services through attention to service planning and the types and intensity of services and supports provided. In particular, efforts to better integrate child and family strengths in goals would greatly improve scores in this subdomain. In the Culturally Competent domain, opportunities for improvement were evident in the subdomains of Sensitivity and Responsiveness and Informal Supports. Awareness of Providers Culture was also an area for improvement. It should be noted that the higher standard deviation scores in these areas suggest that variability exists across cases and that while some cases scored poorly, others were more exemplary. Finally, the domain of Impact also provides an area in which opportunities for improvement can be made in terms of increasing the appropriateness of services, which in turn improves the outcomes of children and youth.

SOCPR Scores and Tests of Significant Differences

Because the SOCPR case and domain scores do not fit the pattern of a normal distribution, nonparametric statistical tests were performed to examine the data for differences between groups within a specific variable in relation to SOCPR scores. SOCPR scores are continuous data, while most of the other variables were categorical data. Thus, for statistical tests in which the variable to be examined in relation to SOCPR scores consisted of more than 3 groups, such as race, the Kruskal-Wallace test was performed. For variables with only 2 groups, such as gender, the Mann-Whitney U test was performed. Age was transformed into an Age Band variable with 3 groups: 0 through 5, 6 to 12, and 13 to 18. Table 11 shows the results of these statistical tests for a variety of variables. A value of .05 or lower indicates a significant difference between groups for the variables involved in the statistical test, with lower scores indicating a higher likelihood of true significant differences.

Table 7. SOCPR Scores and Significant Differences with Variables of Interest

Variable	Case	CCFF	СВ	CC	IMP
Demographics					
Age Bands					
Gender					
Race					
Primary Language					
GSA					
Case Longevity					
Service Systems					
Mental Health					
Child Welfare		.030		.028	
Juvenile Justice					
Educational				.043	
Developmental Disabilities	.038	.001			
Total Systems					
Services Categories					
Treatment Services	.012	.000	.002		
Medical Services	.039		.015		
Support Services					
Inpatient Services					
Residential Services					
Services					
Individual Counseling	.045	.002	.002		
Family Counseling			.036		
Family Support	.044		.041		
Respite Support					
Case Management					
Psychiatric Hospitalization					
Total Number of Services					

There were a variety of significant differences in SOCPR case and domain scores across the variables examined. None of the demographic variables measured showed significant differences.

Significant differences in service system involvement were sometimes found for SOCPR case and domain scores. Those children and youth who received child welfare services had higher overall Child-Centered Family-Focused and Culturally Competent domain scores. Those children and youth with educational services had significantly lower Culturally Competent domain scores. Children and youth who received developmental disabilities services had significantly lower case and Child-Centered Family-Focused domain scores. There was no significant difference found for mental health, juvenile justice, or total number of systems.

Treatment Services and Medical Services were the only Services Categories that showed significant differences in SOCPR case and domain scores. As might be expected, those children and youth receiving some type of Treatment Services had higher SOCPR scores. For example, significant differences were found for SOCPR case, Child-Centered Family-Focused, and Community Based scores. For Medical Services, SOCPR case and Community Based domains were significant. Although 15 different services or treatments were tracked as part of this study, only two showed statistical significance as being related to SOCPR case or domain scores (see Table 9).

Receiving Individual Counseling, Family Counseling, and Family Support Services were associated with higher SOCPR scores. These findings indicate that some community based services are associated with better adherence to system of care values. Because children and youth who utilized all of these services have complex and severe behavioral health needs, the impact of these services may be more fully explained by examining the information obtained from the qualitative analyses of this study.

SOCPR Scores – FY2009-2010 and FY2010-2011 Comparison

Table 12 shows a comparison of domain and subdomain scores across two administrations of the SOCPR. All domains showed positive although not statistically significant improvements from FY2009-2010 to FY2010-2011. Although all domains showed improvement in scores, almost one-third of the subdomains showed decreases in mean scores. These decreases were not statistically significant. Two of the four domains, Culturally Competent and Impact, showed improvement across all subdomains and areas. It should be noted that the sample of children and families interviewed in FY2010-2011 had higher scores on the CASII (4 and higher) than those interviewed in FY2009-2010 (3 and higher). To determine if there is a difference in the samples based on these cutoff scores, additional analyses would need to be conducted.

Table 8. SOCPR Score Comparisons between FY2009-2010 and FY2010-2011.

	2009-2010		2010-	-2011	Change	р-
	Mean	(SD)	Mean	(SD)	Change	value*
Overall Score	5.16	(1.18)	5.23	(0.83)	0.07	0.50
Domain I: Child-Centered Family-	5.25	(1.35)	5.27	(1.03)	0.02	0.87
Individualized	5.03	(1.32)	5.00	(1.06)	-0.03	0.81
Assessment/Inventory	5.46	(1.16)	5.54	(0.74)	0.08	0.42
Service Planning	4.93	(1.39)	4.81	(1.14)	-0.12	0.36
Types of Services/Supports	4.96	(1.65)	4.86	(1.57)	-0.10	0.55
Intensity of Services/Supports	4.77	(1.83)	4.80	(1.75)	0.03	0.87
Full Participation	5.57	(1.28)	5.58	(1.05)	0.01	0.93
Case Management	5.15	(1.78)	5.21	(1.50)	0.06	0.72
Domain II: Community-Based	5.68	(1.02)	5.71	(0.74)	0.03	0.74
Early Intervention	5.12	(1.63)	5.37	(1.32)	0.25	0.10
Access to Services	6.25	(0.85)	6.20	(0.76)	-0.05	0.55
Convenient Times	6.03	(1.40)	5.99	(1.36)	-0.04	0.78
Convenient Locations	5.94	(1.32)	5.97	(1.20)	0.03	0.82
Appropriate Language	6.78	(0.59)	6.62	(0.89)	-0.16	0.05
Minimal Restrictiveness	6.20	(1.02)	6.17	(0.88)	-0.03	0.76
Integration and Coordination	5.13	(1.67)	5.11	(1.36)	-0.02	0.90
Domain III: Culturally Competent	4.79	(1.46)	4.92	(1.06)	0.13	0.32
Awareness	4.89	(1.65)	5.10	(1.15)	0.21	0.15
Awareness of Child/Family's	4.90	(1.69)	5.14	(1.22)	0.24	0.11
Awareness of Providers' Culture	4.83	(1.81)	4.89	(1.50)	0.06	0.73
Awareness of Cultural Dynamics	4.94	(1.78)	5.26	(1.35)	0.32	0.05
Sensitivity and Responsiveness	4.59	(1.91)	4.67	(1.61)	0.08	0.66
Agency Culture	5.29	(1.59)	5.46	(1.27)	0.17	0.25
Informal Supports	4.39	(1.79)	4.44	(1.75)	0.05	0.79
Domain IV: Impact	4.94	(1.50)	5.02	(1.29)	0.08	0.58
Improvement	5.04	(1.48)	5.14	(1.29)	0.10	0.49
Appropriateness	4.85	(1.66)	4.90	(1.42)	0.05	0.75

^{*} The p-values were obtained through a two-sided two independent samples t-test.

There is consistency in the strengths of Arizona's Children's System of Care as evident in the ranking of domain scores across both FY2009-2010 and FY2010-2011. For example, the highest scoring SOCPR domain was Community Based across both administrations. This was followed by Child-Centered Family-Focused, Impact, and lastly Culturally Competent. Again, the subdomain of Access to Services was the highest scoring subdomain across both years and Appropriate Language

the highest scoring area. The subdomain of Minimal Restrictiveness scored high as well.

Opportunities for Improvement were most evident in the domain of Culturally Competent. In FY2009-2010 only one subdomain (Agency Culture) was in the 5 range while in administration two, 4 of the 8 subdomains or areas were in the 5 range. This shows an overall improvement in rating scores indicating that the cultural, racial, and ethnic background and identity of the agency and the child/youth and family being served are recognized and accommodated. The Culturally Competent domain had the lowest mean scores across both years, although it was one of the two domains which showed positive improvements across all of its domains and subdomains. Again consistency of improvement is evident across both administrations of the SOCPR.

The Culturally Competent domain showed the greatest amount of positive change across the two administrations of the SOCPR. Change scores ranged from .05 to .32. These improvements indicate that not only is there an understanding and awareness of culture by service providers, but also responsiveness to the needs of families because of formal feedback like the SOCPR.

Community Based domain has the largest number of subdomains and areas with change in the negative direction, although this change is not statistically significant. Interestingly, the negative change is on the highest scoring subdomains (Access to Services, Minimal Restrictiveness, and Integration and Coordination) and areas (Convenient Times and Appropriate Language). Decreases in scoring over time, especially in the area of language, may be due to a change in the way rating techniques were implemented across two administrations of the SOCPR.

Qualitative Analysis

This section reports a summary of qualitative data compiled from responses to Summative Questions that SOCPR reviewers use to summarize and integrate the information gathered throughout the Document Review and the series of interviews completed with a particular child/youth and family to address each of the four SOCPR domains. The Summative Questions call for the reviewer to provide a rating for each statement and to give a brief narrative in support of that rating. Individual ratings serve as indicators of the extent to which the subdomain elements (e.g., individualized, full participation) are being implemented. In the final analysis, ratings for each measurement are clustered and considered in conjunction with reviewers' narratives to determine an overall rating for each domain, indicating the extent to which each subdomain was achieved. The narrative portion of each Summative Question response was used to assess the degree to which SOCPR items tied to each domain were met and an explanation for the evidence provided. Where an overall summative rating relates to a

reviewer's determination of completion of a *thorough assessment*, for instance, qualitative analysis examines the evidence provided to explain the rating.

The compiled narratives for all Summative Questions were coded and sorted to assess the degree to which System of Care principles were implemented in each SOCPR domain area (N=170). The frequency of Summative Question responses were examined and analyzed for emerging patterns/trends. In order to be considered a trend, at least of half of the cases reviewed had to provide similar information for a given domain/subdomain area. The qualitative findings section also highlights successes and opportunities for growth related to each of the SOCPR Domain Areas as reported in responses to Summative Questions.

Qualitative Findings

Domain 1: Child-Centered and Family Focused Services

The first domain of the SOCPR is designed to measure whether the needs of the child/youth and family determine the types and mix of services provided within the System of Care. This domain reflects a commitment to adapt services to the child and family rather than expecting them to conform to preexisting service configurations. The review reflects the effectiveness of the site in providing services that are individualized, that families are included as full participants in the treatment process, and that the type and intensity of services provided is monitored through effective case management.

Overall, descriptive comments provided by SOCPR raters, suggest that providers within the System of Care are generally providing child-centered and family-focused services. The overall review of cases using the measures associated with *Child-Centered and Family-Focused Services* suggests that assessments of youth in this sample were completed across multiple life domains.

When considering whether youth and family received *Individualized Services* within the System of Care, reviewers noted that service plans generally reflect the strengths and needs of the child/youth and family, and that providers reported informally acknowledging child/family needs and strengths even when these are not adequately documented in case files. Moreover, most raters indicated that the intensity of services reflects the needs of youth and family needs. A key challenge related to this subdomain area was reflected in discussion related to clear reflection of child/youth and family strengths in documented service plan goal statements. More clearly articulated strengths are needed in order to develop strengths-based goals that can encourage child/youth and family participation in service planning.

Overall, reviews reported finding *Full Participation* on the part of children/youth and families in the development, implementation, and evaluation of service plans. In general, reviewers reported that child/youth and caregivers regularly attended service planning meetings that most often included multiple providers. In addition, reviewers noted that most caregivers appeared to understand the service plans developed for their children and families. However, reviewers also noted that although caregivers often said they understood plans, children/youth were less likely to attend service planning meetings and/or fully understand service plans. In general though, reviewers suggest that cases reflect adequate participation in service planning on the part of providers and caregivers who are working toward reaching common goals.

With regard to the *Case Management* subdomain, reviewers reported that one individual appeared to be responsible for coordinating child/youth and family services and was doing so successfully. Overall, service planning appears to be responsive to the changing needs of the family and that service plans are updated in a timely fashion. Where challenges have been reported to exist, reviewers noted that family members reported experiencing long wait times when changing service providers or when child/youth emotional and/or behavioral issues result in crisis.

System Successes in the Provision of Child-Centered and Family-Focused Services

- Assessments of youth conducted across multiple domains
- Service plans reflect needs and strengths of youth and family
- Strengths of youth and family are informally acknowledged by providers
- Intensity of services reflects youth and family needs
- Child/youth and family attend planning meetings
- Caregivers understand the service plan
- Service planning includes providers
- Case managers successfully coordinate services
- Service planning is responsive to changing needs and plan is updated accordingly

Opportunities for Growth in Domain 1

- Service plan goal statements do not appear to reflect child/youth and family strengths
- Children/youth are less likely to attend service planning meetings
- Children/youth are reported to be less likely to understand service plans

Domain 2: Community-Based Services

The second SOCPR domain is designed to measure whether services are provided within or close to the child/youth's home community, in the least restrictive setting possible, and

moreover, that services are coordinated and delivered through linkages between providers. The subdomains in this area are used to evaluate the effectiveness of the site in identifying needs and providing supports early, facilitating access to services, providing less restrictive services, and integrating and coordinating services for families.

When assessing whether child/youth and families received *Early Intervention* related to the child and/or family's identified needs, reviewers overwhelmingly reported that child/youth and family needs were identified at intake and that services were provided within four weeks of intake.

Overall, reviewers reported that case files demonstrated that the System was ensuring *Access to Services* for children/youth and families. In general, reviewers noted that services were scheduled at convenient times for the child/youth and family and that these services were most often provided within or close to the home community of the child/youth. Because of the success in providing services that were located within or in close proximity to the child's home community, providers reported that they did not need to provide additional support to increase access to service locations. When evaluating the linguistic competence of service delivery, reviewers assigned consistently high ratings. The majority of reviewers noted that case files presented ample evidence that service providers make every effort to verbally communicate with and provide written documentation to families in their primary language.

When assessing for *Minimal Restrictiveness* in service delivery, raters reported that overall, services appeared to be provided in environments that feel comfortable to the child/youth and family, in the least restrictive and most appropriate environment. SOCPR raters also noted that case files reflected ongoing communication between formal service providers and family members and that links to additional services were made with few challenges.

System Successes in the Provision of Community-Based Services

- Child and family needs were identified at intake
- Services are provided within the first 4 weeks of need identification
- Services are scheduled at convenient times for the child and family
- Services are provided within or close to the child and family's home community
- Service providers verbally communicate in the primary language of the child/youth and family
- Written documentation regarding services/service planning is in the primary language of the child and family
- Services are provided in environment that feels comfortable to the child/youth and family

- Services are provided in the least restrictive, most appropriate environment
- There is ongoing communication between formal service providers and family members
- The child and family are linked to additional services with few challenges

Opportunities for Growth in Domain 2

• In developing treatment plans, providers can work to more clearly articulate child, youth, and family strengths in order to develop strengths-based goals that can encourage child/youth and family participation in service planning.

Domain 3: Culturally Competent Services

The third domain of the SOCPR is intended to measure whether services are attuned to the cultural, racial, and ethnic background and identity of the child/youth and family. Ratings provided in each subdomain are meant to evaluate the level of cultural awareness of the service provider, whether evidence shows that efforts are made to orient the family to an agency's culture, whether sensitivity and responsiveness is shown for the cultural background of families, and whether informal supports are included in services.

Reviewers assessing for *Cultural Awareness* noted that providers generally understand the culture and community of the child/youth and family, and that such awareness is minimally documented within case files. However, reviewers noted that providers did not always clearly document how cultural, neighborhood, and community context informed a child/youth and family's identity. Overall, raters reported limited documentation related to youth and family concepts of health. However, reviewers did note that providers were more aware of "family culture" and discussed how it and health beliefs influence the family's decision-making in interviews. Raters also noted that providers reflected awareness of their own culture during interviews and how it influences the interaction with the child/youth and family.

When evaluating the *Sensitivity and Responsiveness* of the System, raters noted that there was limited documentation indicating that providers translated awareness of family culture into action. However, a number of reviewers noted that caregivers reported via interviews that they felt that providers understood their culture. Moreover, these caregivers felt that providers were responsive to their culture by adapting services whenever possible. In addition, raters noted that providers generally offered families information to help them better understand their agency's rules and expectations. Providers also appeared to generally provide families with some assistance in understanding/navigating the larger service system.

With regard to *Informal Supports*, a majority of raters indicated that case files lacked documentation of informal support participation in service planning. Thirty-five percent of

cases were rated as having little to no documentation that informal supports were ever identified for family members or included in service planning, even if family members reported relying on such support outside of the service planning process. Another 60% of cases were rated as providing insufficient evidence that informal supports when identified had not been adequately engaged in case planning – even when caregiver interviews suggested that they would be welcome. In the remaining cases, raters noted that many family members had declined offers to include informal supports in the service planning process. The findings related to this particular subdomain suggest that more training and support for providers is needed to help them develop ways to discuss the importance of informal supports and help families identify them.

System Successes in the Provision of Culturally Competent Services

- Providers generally understand the culture, neighborhood, and community of children/youth and family
- Providers exhibit limited awareness of youth and family's concepts of health and family
- Providers have some awareness of their own culture
- Providers have some awareness of cultural dynamics involved when working with families whose culture may be different from their own.
- Some providers translate awareness of family culture into action
- Families report that providers are responsive to child and family culture
- Providers provide families with information to help them understand system/agency rules and expectations
- Providers give family some assistance in understanding /navigating service system

Opportunities for Growth in Domain 3

- Reviewers noted that providers did not always clearly document how cultural, neighborhood, and community context informed a child/youth and family's identity.
- Limited documentation found to indicate that providers translate awareness of family culture into action.
- Case files lack documentation associated with the identification and participation of informal supports in case planning.

Domain 4: Impact

The final SOCPR domain evaluates whether services have produced positive outcomes for the child and family. This domain includes two subdomains: *Improvement* and *Appropriateness of Services*, which are meant to determine whether services have had a positive impact on the child/youth and family and if so, whether these services met the child/youth and family's identified needs.

In general, raters found that services provided to children and families had produced a positive impact. When reflecting on the evidence provided for this subdomain, raters noted that family members and providers were not always in complete agreement as to the degree of progress and improvement that they and their children had made as a result of services. However, a review of most cases suggests that multiple team members in each case identified improvement on the part of the child/youth and family. Similarly, raters generally indicated that the services provided to children/youth and families had been appropriate because they adequately met identified needs.

In less than a quarter of reviewed cases, reviewers noted that services had not had a positive impact on children/youth and families and had not adequately met the identified needs of children/youth. In 34% of cases, however, reviewers reported that they did not feel that the services identified in case files adequately met family needs. In many of these cases, families had experienced multiple and difficult challenges and felt that providers had not yet adequately identified their needs or that services did not adequately meet needs even when identified correctly. The reasons given for these final determinations were diverse and most often associated with family context and/or the severity of needs. These cases may be reviewed more closely to determine whether they reflect low ratings in other SOCPR Domains.

System Successes

- Reviewers generally agree that the accumulated evidence shows that services provided to children/youth have improved their situation
- Reviewers generally agree that the accumulated evidence shows that services provided to families have improved their situation
- Reviewers generally agree that the services and supports provided to children/youth have adequately met their needs
- Reviewers generally agree that services and supports provided to families have adequately met their needs

Opportunities for Growth in Domain 4

 Review cases with low ratings related to improvement of child/youth and family situations and the appropriateness of services provided to them. These may be further examined to assess whether these low ratings correspond to low ratings in other domains.

Overall, qualitative analysis of responses to Summative Questions suggest that the Statewide System of Care has achieved success in its effort to implement System of Care values

and principles in its service delivery to children/youth and families. These findings indicate that these successes are most evident in the SOCPR Domain associated with Community-Based Service Delivery, especially with regard to the Access subdomain.

References

- Hernandez, M., Gomez, A., Lipien, L., Greenbaum, P. E., Armstrong, K., & Gonzalez, P. (2001). Use of the system of care practice review in the national evaluation: Evaluating the fidelity of practice to system of care principles. *Journal of Emotional and Behavioral Disorders*, 9, 43-52.
- Hodges, S., Hernandez, M., Nesman, T., & Lipien, L. (2002). Creating Change and Keeping it Real: How excellent child-serving organizations carry out their goals. Tampa, FL: University of South Florida
- Ottawa Children's Coordinated Access & Referral to Services. (2008). System of Care Practice Review Final Report 2007-2008. Ottawa: Ottawa Children's Coordinated Access & Referral to Services.
- Stephens, R.L, Holden, E.W., & Hernandez, M. (2004). System-of-care practice review scores as predictors of behavioral symptomatology and functional impairment. *Journal of Child and Family Studies*, *13*, 179-191.
- VanDenBerg, J. (2003). The History of Wraparound. Retrieved from http://www.vroonvdb.com/about wraparound.html
- Vergon, K. S. (2010). Successful Kids System of Care Practice Review Study, Fiscal Year 2007-2010. Tampa, FL: Louis de la Parte Florida Mental Health Institute, University of South Florida.
- Vergon, K. S., & Dollard, N. (2007). One Community Partnership System of Care Practice Review Study, September 2007. Tampa, FL: Louis de la Parte Florida Mental Health Institute, University of South Florida

Technical Appendix

SOCPR Revisions for Fiscal Year 2011 Reviews	47
"Other" Category, Treatments and Services	48

Technical Appendix

SOCPR Revisions for Fiscal Year 2011 Reviews

DEMOGRAPHICS

- 1. On page one, questions #9 and #10, additional options were added to the question regarding the Primary Caregivers relationship to the Child and the options for both questions were made congruent.
- 2. On page two, question #14 where the Clinical diagnosis is to be noted, a blank was added below where the Axis V: GAF score listed to include the CASII level scored at the time the sample was pulled.
- 3. Page 3 was expanded to two pages (3a and 3b) in order to add a section for Formal Provider 2 and a section for Informal Helper/Natural Support 2
- 4. On pages 3a and 3b, on question #4 regarding race, the instructions to "circle all that apply" was removed.

SOCPR REVIEW SECTIONS

- 1. Everywhere in the SOCPR that "informal services" were referenced, there was revision to also reference "natural supports" i.e.; "Informal Services/Natural Supports". These adjustments can be found on pages; 11, 23, 31, 35, 42, 47, 56, 60, 66, and at the bottom of pages 59-68.
- A number of prompts were added to address the development and quality of the Strengths, Needs and Cultural Discovery. These prompts can be found on pages; 12, 22, 35, 46, and 60.
- 3. Prompts were added to obtain clarity when the primary language is the same for caregiver, youth, and providers but where there may have been questions regarding the caregiver or youth's ability to comprehend, read or otherwise understand the information being communicated. These prompts can be found on pages; 17, 28, 40, and 52.
- 4. At the top of the first page of each interview section, blanks were added to identify the date of *the interview* and the *Role of the person being interviewed*. These are found on pages; 21, 34, 40, 46, and 59.
- 5. The list of domain areas on pages 10, 46, and 116 were adjusted so they each contain the same language and domain listings.

ADDITIONAL CHANGES

- 1. On pages 69-105 for all the Summative Questions 1-37, the "Explain Ratings" section was expanded to allow more space for the justification of scoring.
- 2. Page 89, SQ #21, a Not Applicable (N/A) box was added at the end of the -3 to +3 scale.

"Other" Category Treatments and Services

Almost 30% of the treatments or services reported were identified as "Other". Below is a list and frequency of the treatments or services identified as "Other".

"Other" Category Treatments and Services	N
Applied Behavioral Analysis	1
Art Awakenings, equine treatment, partial care, mentor	2
Behavior Coach	3
Case Management via Therapist	1
Correctional Facility	1
Counseling and Consulting Services	1
Court Appointed Special Advocate	1
Day Treatment Program, MST Therapy	3
Direct Support Program and work through AZ Youth & Family Services; Behavior Coach; Skill Training; Whatever It Takes Program; CFSS; Touchstone; Placement Preservation; Art Awakenings	8
Education-Speech, Occupational & Physical Therapy, Respite	1
Flex Funds, Living Skills Training, Transportation	1
Foster Care	1
Functional Behavior Assessment	1
Group Home	1
Habilitation, Speech Therapy, Occupational Therapy	1
Intensive Eating Disorder Program In-home Direct Support	1
Living Skills Training (Behavior Coach)	1
Matrix Substance Abuse Services	1
Occupational Therapy, Direct Support Services	1
Parent Aid	1
Physical and Speech Therapy	1
Play Therapy	1
Psycho Education to Foster Parent, Coaching/Modeling	1
Psycho Social Rehab	1
Residential Facility through Child Protective Services	1
Skill Building	1
Skill Training and Development; Transportation;	7
Specialized Therapy	1
Transportation, Skill Training, and Development	2
Youth and Family Specialist	1
TOTAL	49

Index of Tables

Table 1 – Demographic Characteristics of SOCPR Cases	19
Table 2 – Child-Serving Systems Involvement	20
Table 3 – Services or Treatments Received by Children and Youth	22
Table 4 – Significant Associations between GSA and Specific Services	23
Table 5 – SOCPR Case and Domain Scores	26
Table 6 – Arizona Statewide SOCPR Scores by Domain and Subdomain	32
Table 7 – SOCPR Scores and Significant Differences with Variables of Interest	34
Table 8 – GSA SOCPR Summary Themes – Strengths	36

Index of Figures

Figure 1 - Histogram of Child-Serving System Involvement	21
Figure 2 – Histogram of Service or Treatment Usage for Children and Youth	24
Figure 3 – Histogram of SOCPR Overall Case Mean Scores	27
Figure 4 – Histogram of SOCPR Child-Centered Family-Focused Domain Mean Interest	28
Figure 5 - Histogram of SOCPR Community-Based Domain Mean Scores	29
Figure 6 - Histogram of SOCPR Culturally Competent Domain Mean Scores	30
Figure 7 - Histogram of SOCPR Impact Domain Mean Scores	31