CANS White Paper

Alameda County BHCS

CANS (Child and Adolescent Needs and Strengths): A Single County-Wide Assessment Tool for BHCS Children's Services

BHCS needs to know whether or not children are receiving the services they actually need and where the gaps exist within the service delivery system. From a quality improvement perspective there needs to be a standardized way to provide both individual and aggregate feedback – specific enough to be useful for prioritizing interventions , treatment planning, and informing decision-making at the direct services level; and aggregate enough to help guide policy, measure outcomes, and inform planning at the systems level. The accompanying White Paper presents the CANS (Child and Adolescent Needs and Strengths) as the Single County-Wide Assessment Tool of choice and describes a roll-out plan for system-wide implementation in Alameda County.

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What is the CANS

The **CANS (Child and Adolescent Needs and Strengths)** is a standardized, easy-to-use assessment tool developed by John Lyons, Ph.D., that:

- Provides multi-system partners with instantly understandable information about child and youth needs
- Supports care planning , level of care decision-making and treatment recommendations
- Enables clinicians, supervisors, agency directors, and system administrators to effectively monitor progress and outcomes.
- The CANS was developed from a communication perspective so as to facilitate the linkage between the assessment process and design of individualized service plans including the application of evidence-based practices.

The CANS is easy to learn and is well-liked by youth and families, providers and other partners in the services system because it is easy to understand and does not necessarily require scoring in order to be meaningful to a child and family. The way the CANS works is that each item suggests different pathways for service planning. There are four levels of each item with anchored definitions; however, these definitions are designed to translate into the following action levels (separate for needs and strengths):

For NEEDS:	**For STRENGTHS:**
0 = No evidence	**0** = Centerpiece strength
1 = Watchful waiting/prevention	**1** = Strength that you can use in planning
2 = Action	**2** = Strength has been identified-must be built
3 = Immediate/Intensive Action	**3** = No Strength identified

Decision support applications include the development of specific algorithms for levels of care including treatment foster care, residential treatment, intensive community services, supportive, and traditional outpatient care. Algorithms can be localized for sensitivity to varying service delivery systems and cultures.

In terms of quality improvement activities, a number of settings have utilized a fidelity model approach to look at service/treatment/action planning based on the CANS assessment. A rating of **2** or **3** on CANS need suggests that this area must be addressed in the plan. A rating of **0** or **1** identifies a strength that can be used for strength-based planning and **2** or **3** a strength that should be the focus on strength-building activities.

The CANS has demonstrated reliability and validity. With training, anyone with a bachelor's degree can learn to complete the tool reliably, although some applications require a higher degree. The average reliability of the CANS is a .75 with vignettes, .84 with case records, and can be above .90 with live cases. The CANS is auditable, and audit reliabilities demonstrate that the CANS tool is reliable at the item level. Validity is demonstrated with the CANS relationship to level of care decisions and other similar measures of symptoms, risk behaviors, and functioning.

The CANS is an open domain tool that is free for anyone to use. There is a community of people who use various versions of the CANS and share experience and additional items and supplementary tools. For additional resources, the Praed Foundation (which holds the copyright to all CANS-based instruments, in order to keep their use free and appropriate) is a great place to explore the background, various uses, and forms of the CANS. Their address is: www.praedfoundation.org

Monitoring Outcomes

The CANS tool can be used to monitor outcomes in two ways. First, items that are initially rated a **2** or **3** are monitored over time to determine the percent of individuals who move from a rating of **0** or **1** (resolved need, built strength). Or, dimension scores can be generated by summing items within each dimension (Symptoms, Risk-Behaviors, Functioning, etc.). These scores can be compared over the course of treatment. CANS dimension (domain) scores have been shown to be valid outcome measures in residential treatment, intensive community treatment, foster care and treatment foster care, community mental health, and juvenile justice programs.

Administrators have access to reports which can zoom in to any level of the system: client, clinician, supervisor, program, and system. These reports allow administrators to see client needs and service effects at any level of the system (client, clinician, supervisor, program, system levels). Administrators can also monitor compliance with Assessment and charting requirements. Other states have begun to use the CANS to benchmark change rates and build contract performance indicators which provide incentives for meeting an effectiveness standard.

CANS and BHCS Children's Services

In May 2012, leadership staff from BHCS network of county and community-based providers attended a meeting with Dr. Lyons to learn more about the CANS and the feasibility of implementing the tool across our BHCS Children's System of Care. *At that meeting Alex Briscoe (HCSA Agency Director), clearly stated that there needed to be a single assessment tool for BHCS Children's Services and that the CANS is high on the list. The reasons he gave for this were the following:*

- Services can be fragmented as youth and their families are provided services at different agencies without a common assessment tool that can follow the family or be accessed by different providers.
- In the current realignment funding reality there is a need to be able to show progress toward meeting goals and objectives and show positive outcomes for the cost of services.
- From a quality improvement perspective there needs to be a way to review aggregate system-wide data that will enable BHCS to provide more effective services to youth and families.
- Helps develop a common language for collecting assessment information.

Over the past nine years, BHCS Children's Services has dramatically expanded its delivery of services for children in the following areas or populations;

- Children ages 0-5
- Services that are school based
- Children involved with Child Welfare and Juvenile Probation

Yet, even with this strong expansion of services, our work has been hampered by insufficient outcome data about who we are serving and how. We presently lack aggregate data about each child's treatment plan, and how the child fits into the larger picture. For example, how the child compares to others in the system; snapshots of who comprises the total cohort of children being served; how they are being served; their trajectory of care; and which approaches are demonstrably effective or ineffective. Basically, we rely on isolated narratives or stories about the children and youth in care that didn't connect.

BHCS needs to know whether or not children are receiving the services they actually need and where the gaps exist within the service delivery system. From a quality improvement perspective there needs to be a standardized way to provide both individual and aggregate feedback – specific enough to be

useful for prioritizing interventions , treatment planning, and informing decision-making at the client/family level; and aggregate enough to help guide policy, measure outcomes, and inform planning at the agency level.

One of the primary goal for implementing the CANS system-wide across HCSA/BHCS Children's network of county-operated and community-based providers is to create a common language to improve communication between BHCS and its service network, coordinate treatment with other systems in which the child/family is involved, and help clinicians better serve children and their families. Until recently, there has been no centralized way to oversee all of these processes and streamline the flow of information. The **CANS (Child and Adolescent Needs and Strengths)** assessment, used in 38 states and several California Counties offers this ability.

On 9/20/12, a **CANS Project Workgroup** was convened composed of leadership from BHCS (Finance, Quality Assurance, Quality Improvement, Family Relations, Ethnic Services, Decision Support, Network Office, Children's System of Care, Transition-Age Youth System of Care, Information Technology), HCSA (Our Kids, Our Families), and partner community-based organizations (West Coast Children's Clinic, A Better Way, Alternative Family Services, and United Advocated for Children and Families' Family Partnership Program). The outcome of this meeting was:

1. Overwhelming support to move forward with the CANS
2. A decision to develop a White Paper for HCSA / BHCS leadership to present the CANS as the Assessment Tool of choice and describe a roll-out plan for system-wide implementation in Alameda County.

<u>Implementation Steps for CANS Rollout</u>

Phase I: Communication Plan

- **BHCS Collaborative Partner Agencies**

From the outset, it is important to emphasize that the system-wide implementation of the CANS is a multi-level, cultural shift to improve our ability to make clinical decisions, monitor outcomes, and to facilitate quality care of service delivery. It is essential that HCSA/BHCS leadership engage our partners in Social Service, Juvenile Justice and Schools to promote the CANS as a neutral way to talk about the constellation of needs experienced by shared clients and the appropriate type of intensity of supports to fully address them. *The CANS is a standardized assessment that allows all agencies and systems working with a child to return to a shared vision and mission, with the goal of ensuring that child or youth's needs drive decision-making about care, and making the system truly child and family-centered.*

- **Clinical Programs (BHCS Provider Network)**
    1. Acknowledge that nothing is perfect, but the CANS is better than other single assessment tools.
    2. The strength of the CANS has been that it easy to understand and is easy to use, yet reliably provides sufficiently complex information regarding clinical status as well as the needs and strengths of child, youth and the family context that can be translated into treatment recommendations, program planning, and policy.
    3. Emphasize that "nothing is really different," as assessments are being done right now; the CANS is just an organized and standardized approach for recording the clinical information that they already collect.
    4. Stress that the CANS is an information integration tool, providing both individual and aggregate feedback – specific enough to be actionable for treatment planning, and aggregated enough to help with policy. Lastly, it is vital that we describe the benefits of CANS-based tools available to

users at each level of our system (clinicians, supervisors, program-level, and system-level administrators)

Phase II: Stakeholder Engagement and Conceptual Design

Prior to rolling out training, it strongly recommended that we hire a CANS Project Manager to coordinate and oversee all of the below activities. Additionally, this person should oversee the customization process to ensure agreement on core content. Three components have been identified for customization (TAY, 0-5 and cultural responsiveness). From a provider and a family perspective, it is strongly recommended that we decide on basic CANS core elements that must be used and incorporate that into the assessment plan that all providers will have to do. Preliminary feedback suggests that we should convene three workgroups to customize the CANS to accommodate early childhood (birth to 5), transition-age youth and cultural responsiveness.

- **Cultural Responsiveness**: The Acculturation domain in the CANS should be customized to reflect the diversity of Alameda County. This is an opportunity to incorporate California Brief Multicultural Scale (CBMCS) Training into a culturally responsive practice to enhance a family's engagement in the assessment process by teaching clinicians about how to have conversations with families about the complexities of race, ethnicity, language, and culture. Members to include representatives from Ethnic Services, Family Relations and UACF/Family Partnership Program.

- **TAY/Early Childhood (0-5)**: Similar processes need to occur prior to launch with regard to our Early Childhood and TAY systems of care. The first step would be to use the November 2012 CANS General training and orientations slots to for the TAY SOC Director, Early Connections Coordinator, Ethnic Services Manager and Family Partnership Program representatives to become familiar with the tool before convening their respective workgroups. It should be noted, that there are TAY and 0-5 versions of the CANS that are currently being used in other systems across the United States.

- **Technical Assistance:** The CANS Project Manager would be the point person at BHCS, available to answer technical questions about on-line CANS input and reports
    - Develop a CANS Fact Sheet of benefits (TCOM, Communimetrics, cross-system applications with juvenile justice and social services, level of care decision-making)
    - Develop a CANS Cheat sheet of Frequently Asked Questions (FAQ) based upon answers to CANS related questions that arise in problem-solving and off-line communications with clinicians and supervisors.
    - Develop a learning collaborative that incorporates the Total Clinical Outcomes Management (TCOM) philosophy, strategies and tactics to promote better buy-in and collaboration.
    - Facilitate monthly "super-user" webinars or conference calls with all supervisors, program administrators and BHCS staff with emphasis on improving outcomes utilizing CANS data
    - Provide training for Probation and SSA around the potential impact of CANS Assessment on shared BHCS Youth

- **Quality Assurance/Documentation**: What paper work goes away? The current Community Functioning Evaluation (CFE) is not an evidenced-based tool. The CANS however, is evidenced based and captures similar data. Therefore, the CANS should replace the CFE.

Phase III: Information Technology/Decision Support/ Training Design and Delivery Plan

To ensure that CANS information is immediately available to clinicians, supervisors and administrators we need to have a web-accessible data collection and sharing system. BHCS County-Operated Clinics currently use Clinician's Gateway to enter Progress Notes and Billing. We need to explore whether or not add all contracted BHCS Children's providers to Clinician's Gateway. It may be cost-effective to embed CANS into our existing system and to serve as the main repository of information that could be web-accessible. Given that many providers have already invested in software to capture billing and documentation, we may want to avoid making Progress Notes a requirement. Do we require everyone to use Clinician's Gateway? What about double entry issues? San Francisco currently uses AVATAR as their Electronic Health Record which has been problematic as the main repository. Recommendations for Supporting Infrastructure (Training, Certification, Technical Assistance, Data Collection, Sharing, and Reporting)

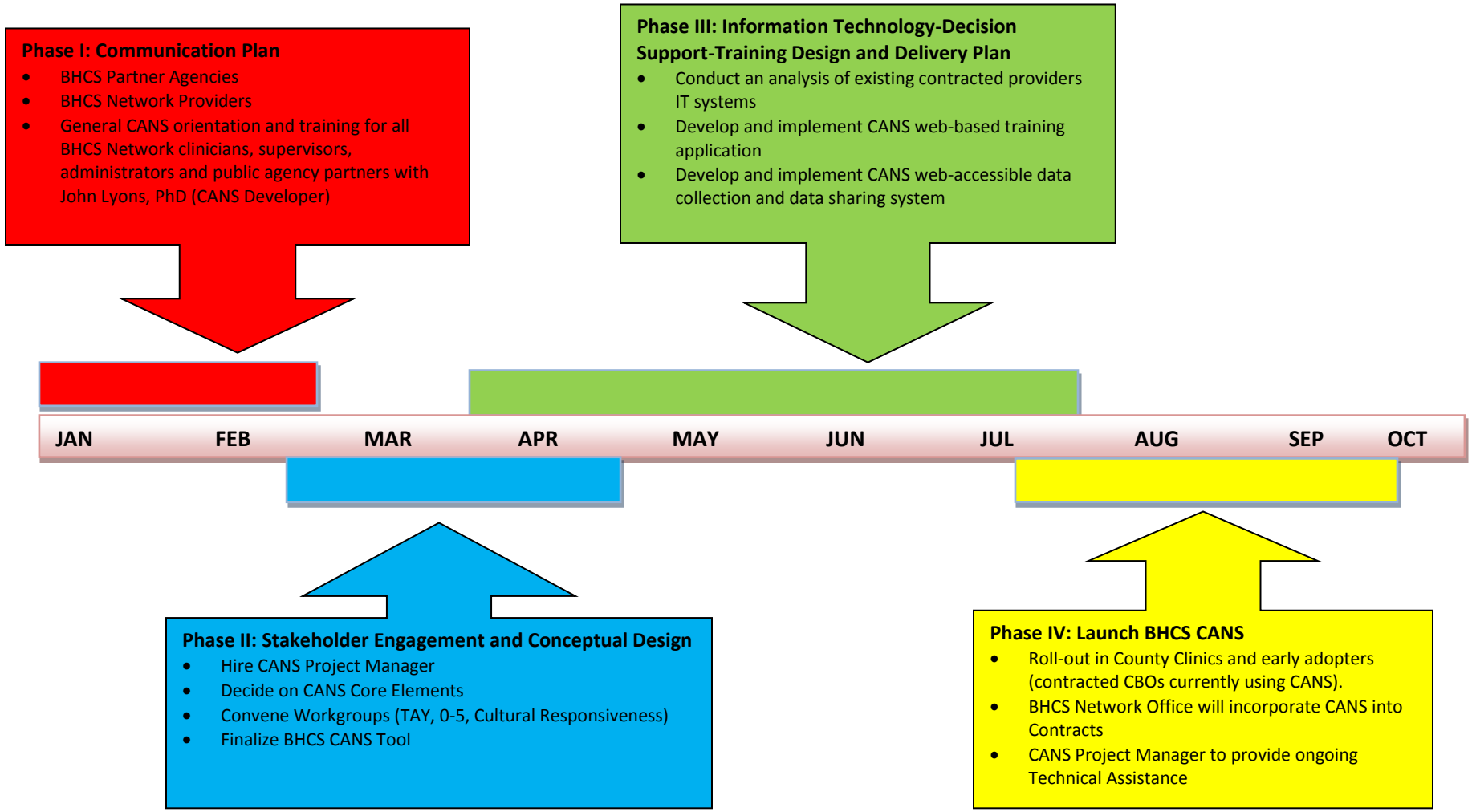
- Conduct an analysis of existing contracted providers IT systems (advanced, moderate, basic, non-existent). Other considerations include, Level of Care Provided and businesses/work in other counties.
- Develop and implement two inter-related fully automated CANS web-based applications
    - **CANS web-based training application** that will provide the training and related materials, establish certification, and store credential information for all professionals who will be using the CANS. It should be noted, that many of our providers prefer live-training versus on-line training; however, given that BHCS contracts out 85% of its services to over 50 community-based organizations it may not be cost-effective to provide face-to-face training to all users. Another consideration is for the CANS to be an effective tool; each clinician must have appropriate competencies and must obtain the same results as all other professionals who are using the instrument (inter-rater reliability). This can only be accomplished using a standardized training protocol and controlling the use of the instrument. Therefore, all clinicians using the CANS are required to complete the training and become certified for its use. Only individuals with current certification are allowed to provide CANS Assessment information. Additionally, in order to ensure that reliability is maintained, professionals are required to re-certify on an annual basis. **Train-the-Trainer**: Clinical Supervisors participate in more intensive training, focusing on the use of the CANS in supervisory solutions, and must certify at a higher level of reliability as compared to clinicians.

    - **CANS web-accessible data collection and data sharing system**. Essentially this application is a database to collect and store the CANS assessment data, calculate level of care algorithms, and generate quality management reports for clinicians, supervisors, and administrators. It should be noted that CANS data will include both demographic and identifying information, which will allow each provider working with a family to access previously collected data that should minimize families from having to answer the same questions over and over as they work with multiple providers.

Phase IV: Launch

If we are successful in completing all of the above steps, the BHCS Network Office will work with Providers to adopt CANS and incorporate expectation into FY 2013-14 Contracts. So, we may be able to launch this initiative in Fall 2013.

BHCS CANS Timeline



APPENDIX

Appendix A: CANS Project Workgroup Members

Name	Department/Agency/Program
Janet Biblin	BHCS Decision Support
Kyree Klimist	BHCS Quality Assurance
Toni Tullys	BHCS Quality Improvement
Ellen Muir	BHCS Children's Services/ EPSDT
Jeff Rackmil	BHCS Children's Services/Administration
Alex Jackson	BHCS Children's Services/Outpatient
Sara Cohen	HCSA, Our Kids Our Families
Sandi Stier	BHCS Information Systems
Leda Frediani	BHCS Finance
Cecelia Serrano	BHCS Finance
Wendi Vargas	BHCS Network Office
Allison Massey	UACF/Family Partnership Program
Gigi Crowder	BHCS Ethnic Services
Michelle Burns	BHCS Transition-Age Youth SOC
Margie Padilla	BHCS Children's Services /Early Childhood
David Channer	A Better Way
April Fernando	West Coast Children's Clinic
Lisa Hilley	Alternative Family Services

Appendix B: CANS Domains

Child and Adolescent Needs and Strengths

The following table is intended to provide an overview of the data that will be collected for each child. The assessment process rates each item on a four point scale. The data collected is the rating (score) for each item.

CHILD BEHAVIORAL/EMOTIONAL NEEDS
Psychosis
Impulse/Hyper
Depression
Anxiety
Oppositional
Conduct
Adj. to Trauma
Anger Control
Substance Use
Eating Disturbance

CHILD RISK BEHAVIORS
Suicide Risk
Self-Mutilation
Other Self Harm
Danger to Others
Sexual Aggression
Runaway
Delinquency
Fire Setting
Social Behavior
Bullying

LIFE DOMAIN FUNCTIONING
Family Living
Situation
School
Social Functioning
Recreation
Developmental
Communication
Judgment

LIFE DOMAIN FUNCTIONING
Vocational
Legal
Medical
Physical
Sleep
Relationship Permanence

CHILD STRENGTHS
Family
Interpersonal
Optimism
Educational
Vocational
Talents/Interests
Spiritual/Religious
Community Life
Relationship Permanence
Youth Involvement
Natural Supports

ACCULTURATION
Language
Identity
Ritual
Cultural Stress

CAREGIVER NEEDS & STRENGTHS
Physical
Mental Health
Substance Use
Developmental
Safety
Employment
Transportation

Supervision
Involvement
Knowledge
Organization
Social Resources
Accessibility to Care
Family Stress

Appendix C: CANS Automated Reports (San Francisco CBHS' Customized Approach)

At the family and youth level, the CANS may be used by all clinicians as primary assessment tool and the foundation on which treatment plans are built.

- For clinicians, several tools may be utilized to meet compliance standards, including: **Monthly Tickler Reports** (automatically generated e-mails to remind clinicians and their supervisors when CANS assessments are up for renewal, due and overdue); **Treatment Plan Summary** (distills information from the CANS assessment into a one-page format, thus allowing clinician to review information with the family, verifying whether he or she has heard and understood the child and family accurately. Once agreed upon, the clinician, client and family may create a treatment plan based on the child or youth's CANS-identified needs.); **Client Domain Chart** (aligned with the requirement to reassess clients every 3-6 months and is designed to avoid merely rote reauthorization of services. This chart compares needs identified in at the first CANS assessment with the current needs identified on the most recent assessment. Allows the clinician, client and family to see whether a child or youth's functioning has improved over the course of treatment. If functioning has not improved, the clinician and client have justification to change the services being provided)

- For clinical supervisors, the automated system facilitates both the oversight of clinicians' Medi-Cal documentation requirements and the active monitoring of care effectiveness. Supervisors may receive **Monthly Tickler Reports** and e-mails on all current, forthcoming and overdue CANS assessments for the clinicians they oversee. This helps them to oversee staff compliance in meeting Medi-Cal requirements for accurate and appropriate clinical care documentation. To help ensure effectiveness, automated CANS reports offer a transparent way to structure supervision time, focusing on clinicians' effectiveness in creating client progress on CANS-identified treatment goals. Also allows for supervisors to identify when progress is not occurring, and whether or not the treatment and/or clinician are a good fit for client. Two distinct types of reports facilitate this work. First the **Caseload Mix Report** allows supervisors to manage the number of high-need clients served by particular clinicians. This helps to ensure that clinicians are not overburdened, and have the appropriate resources to provide effective care to all clients. Second, customized **Client Improvement Reports** measure domain-by-domain change in client functioning over time, allowing supervisors to monitor how effectively each clinician is treating each client. These Client Improvement Reports also provide performance averages for how all clients on the clinician's caseload are functioning. Supervisors can compare how particular clients are doing compared to each other, an also to an agency average.

- For administrators, the automated CANS provide on-demand reports on compliance and clinical effectiveness, with data aggregated at the client, program, and systems levels. These tools track compliance by allowing a quick review of all decision points in which an assessment was completed or is still outstanding. Integrated into clinical reports are data points that allow for the intensity of need and length of stay across all clients in care. The core of clinical reports are metrics that track the clinician's, program's, and agency's effectiveness in building client strengths and addressing client needs.

- At the **program** level, administrators have access to the same tools used by clinicians and supervisors, in addition to others that will help them manage resources for maximum effectiveness. Reports like the **Client Improvement Report** will allow them to efficiently review how and whether clients' urgent needs have been addressed, and assures that demonstrated child needs (rather than relying on word-of-mouth narratives) are driving treatment and resource decisions. These reports can be used in interagency placement meetings to ensure that specific high-risk and high-priority clinical needs are met. In addition to reports that highlight the functioning of a single client, **Agency Profile Reports** give program directors a snapshot of the most frequent clinical, behavioral, and functional concerns that all agency clients show at entry. This information can be used in a number of ways, such as: to better identify whether clients are well matched with clinicians' training and expertise; to track client trajectories over time to assess the effectiveness of services provided; and to identify any client needs that clinicians are not effectively addressing. The **Agency Clinical Formulation** then tracks client functioning over time on those needs and risk behaviors most frequently endorsed by clients, allowing agencies to understand how well they are meeting the specific needs of the population their agency serves. These **Agency Profile** and **Agency Clinical Formulation** reports may be shared across all programs in the county, helping directors identify potential partners for closer collaboration. Programs with a similar client base might take part in shared trainings on clinical issues of interest, or might look for collaborators who could effectively provide ancillary services for specific client needs they are not equipped to treat. These reports also facilitate communication with other agencies that work with the same population of "cross-system" youth – allowing BHCS program directors to better partner with their counterparts in Social Services Agency and Juvenile Justice, by having CANS data to aid in identifying service gaps or highlight effective treatment provided.

- At the ***system*** level, administrators are charged with managing resources and monitoring treatment effectiveness across programs and levels of care. The potential of the CANS is already being recognized in addressing this difficult task—above all by newly offering data on the relative effectiveness of services being provided. Previously, system administrators only had service utilization data to make decisions about how to allocate resources. These data, however, left them unable to tell whether services were used because they were effective, or simply because they were available. Recent clinical data from the scientific literature have shown that children and youth can actually be harmed by receiving the wrong type and intensity of care; therefore, knowing which services are helpful, and which ones may be harmful, is enormously helpful in making decisions about system design.

Appendix D: Total Clinical outcomes Management (TCOM) – John Lyons, PhD

Human services, including health care, are often complex because of the number of different people involved in the process of care. In complex systems participants always have different perspectives and often have competing responsibilities and objectives. Total Clinical Outcomes Management is a conceptual framework for managing complex system. Within this framework there is a philosophy, a strategy, and a set of tactics all designed to facilitate an effective and integrated approach to addressing the needs of people.

- **Philosophy:** The TCOM approach is grounded in the concept that the various perspectives in a complex service system create conflicts. The tensions that results from these conflicts are best managed by keeping a focus on common objectives—a shared vision. In human service enterprises, the shared vision is the person (or people served). In health care, the shared vision is the patient; in the child serving system, it is the child and family, and so forth. By creating systems that all return to this shared vision, it is easier to create and manage effective and equitable systems.
- **Strategy**: In order to accurately represent the shared vision, a structured assessment is created that directly informs service/intervention planning. This assessment tool is used to communicate the shared vision throughout the system. Since the individuals working directly with people are in the best position to already make their decisions based on the shared vision (the people they are serving), it is critical that the structured assessment is useful to them so that it is completed with reliability and validity.
- **Tactics**: Figure 1 displays example TCOM tactics. This grid is organized by types of applications of information from the structured assessment in the rows to levels of the system in the columns. The idea is that one strategy can be used to perform a variety of activities at different levels of the system, from service planning at the individual level to resource management at the system

Figure 1: TCOM Grid of Tactics

	Family & Youth	Program	System
Decision Support	Service Planning Effective practices EBP's	Eligibility Step-down	Resource Management Right-Sizing
Outcome monitoring	Service Transitions & Celebrations	Evaluation	Provider Profiles Performance/Contracting
Quality Improvement	Case Management Integrated Care Supervision	CQI/QA Accreditation Program Redesign	Transformation Business Model Design