
San Francisco's Customized Approach
to the CANS Assessment:
Technical and Social Change for Children and Youth

Executive Summary

Community Behavioral Health Services (CBHS) provides mental health, substance abuse treatment, and prevention services for children, youth, and their families throughout San Francisco. The central goals of our Child, Youth and Family System of Care are to identify the kinds of support that each child or youth needs, and to deliver these in the most timely and effective way possible. We emphasize strength-based, culturally competent service delivery, and a commitment to keeping clients in the least restrictive environment. But like many other public agencies across the country that serve high-risk children and youth, our work has been hampered by insufficient data about whom we are serving and how, and whether we are offering clients the right kinds of treatment, in the right amounts.

The **CANS (Child and Adolescent Needs and Strengths)** is a standardized, easy-to-use assessment tool developed by John S. Lyons, Ph.D., that provides multi-system partners with instantly understandable information about child and youth needs, as well as treatment recommendations that can be tracked by clinicians, supervisors, agency directors, and system administrators. Now, with the help of **San Francisco technology provider AJWI**, we have created a fully automated, web-accessible data collection and data sharing system for the CANS that not only facilitates but requires communication—improving our ability to make consistent and appropriate decisions about children’s care, creating collaborations around these decisions, and intervening at any level of the system that is not working.

CBHS is building a technical tool that facilitates social change for children and youth by streamlining the flow of information among multiple collaborators, so that clinical decision-making is more transparent to all. San Francisco’s customized CANS approach is focused on meeting two critical demands: *compliance*—managing the interrelated tasks of working within our funding and regulatory structure—and *effectiveness*—grounding each level of our system in the needs and strengths of children and families. We have sought to assure that the new system is rational and transparent to users at all levels, providing both individual and aggregate feedback—specific enough to be actionable for treatment planning, and aggregated enough to help guide policy.

The accompanying White Paper describes in detail the various automated, web-accessible tools developed for the CANS in San Francisco, and their uses and effectiveness.

Introduction

Community Behavioral Health Services (CBHS) provides mental health, substance abuse treatment, and prevention services for children, youth, and their families throughout San Francisco. The central goals of our Child, Youth and Family System of Care framework are to identify the kinds of support that each child or youth needs, and to deliver these in the most timely and effective way possible. We emphasize strength-based, culturally competent service delivery, and a commitment to keeping clients in the least restrictive environment.

But like many other public agencies across the country that serve high-risk children and youth, our work has been shadowed over the past decade by a mounting sense of crisis. The county's Human Services Agency faced high numbers of children in the foster care system not finding stable homes, and even becoming re-exposed to abuse. In the schools, too many students languished for years in school-based day treatment programs, becoming "permanent clients" and never re-entering the normal school environment. In a disturbing analysis of the county's Shared Youth Data Base, *San Francisco-based technology provider AJWI* found that out of 1,083 "crossover" youth served by multiple systems, over one-half had committed a serious violent crime, and that nearly 84 percent of these had committed such a crime more than three months *after* becoming crossover clients.

Clearly, many opportunities for communication and intervention were being missed—and these overlooked patterns and warnings were becoming a crisis of public safety. Without better data on whom we were serving and how, and without more effective tools for cross-communication, we could not assess whether we were offering the right kinds of treatment, in the right amounts, to the children and youth we served.

Our concerns have been very much in line with a growing body of evidence in the scientific literature about children and youth with mental health problems:

- that systems frequently fail to identify or treat high-need children and youth who are in particularly vulnerable settings, such as foster care or juvenile justice (and, to a lesser but significant extent, in schools);¹
- that systems also over-serve some children and youth, including some with no mental health problems or only modest problems, and that when such youth are placed with more disturbed children—for example, in highly restrictive settings—they can actually get worse.

Human services systems are highly complex, the sum of well-intentioned programs and professionals that bring different perspectives and areas of expertise to bear on what a child or youth needs. But rarely do the multiple players serving the same children and youth find ways to bridge their differences, share information, and collaborate toward common goals. The resulting structure is often a kind of “Tower of Babel,” with the many people and agencies involved with a given child lacking a common language in which to talk to each other about how to meet the child’s needs. Mental health clinicians may use jargon that does not carry over into the language used by teachers, probation officers, or protective service workers—and vice versa. Crucial pieces of information about a child’s needs may not reach other concerned parties in a timely way. In the end, such disconnections can lead to youth receiving few or no services because their needs have been under-identified, or receiving the wrong services, such as staying too long (or even permanently) in the most restrictive kind of setting.

Until recently, there has been no effective, centralized way to oversee all these processes; what we had were largely isolated narratives about children and youth in care that didn’t connect. We have lacked aggregated data about each child’s individual treatment plan, and about how that child fits into the larger picture—for instance, how the child compares to others in the system; who comprises the total cohort of children being

¹ Knitzer, J. (1982). *Unclaimed children: The failure of public responsibility to children in need of mental health services*. Washington, D.C.: Children’s Defense Fund. See also the follow-up study produced 25 years later, finding that much of the identified problem persists: Cooper, J.L., Aratani, Y., Knitzer, J., Douglas-Hall, A., Masi, R., Banghart, P., & Dababnah, S. (2008). *Unclaimed children revisited: The status of children’s mental health policy in the United States*. New York, N.Y.: National Center for Children in Poverty, Columbia University.

served; how they are being served; their trajectory of care; and which approaches are demonstrably effective or ineffective.

The CANS Assessment Tool, and San Francisco's Customized Approach

The *CANS (Child and Adolescent Needs and Strengths)* is an assessment tool developed by John S. Lyons, Ph.D., that is designed to integrate information about individual children and youth and their fit within their personal context of family, foster family, school, peers, and community. The easy-to-use tool identifies which of a child's needs and strengths require action, and provides clinicians and supervisors a structured way to determine whether children are being served at the right intensity of care, and whether that care leads to positive outcomes. It is a standardized tool that allows all agencies and systems working with a child to return to a shared vision and mission—with the goal of ensuring that the child or youth's needs drive decision-making about care, and making the system truly child- and family-centered.² Every item on the CANS prompts an immediate action step, assuring that assessment translates directly into a treatment plan.

The CANS has much broader usefulness than previous approaches as a multi-level tool for managing outcomes and promoting continuous system improvement—offering “actionable” information at each level of the system, provided that this information is fed back to the appropriate party. The CANS provides multi-system partners with instantly understandable information about child and youth needs, as well as treatment recommendations, that can be tracked by clinicians, supervisors, agency directors, and system administrators. At every point of contact, the CANS is designed to be transparent.

Now, with the help of San Francisco technology provider AJWI, we have created *a fully automated, web-accessible data collection and data sharing system for the CANS*, to ensure that CANS information is immediately available to clinicians, supervisors and administrators—and to other agencies serving the child, such as schools, Juvenile Justice, and Child Protective Services—promoting effective treatment decision-making and continuous system improvement.

² Further information on the CANS is available at the Praed Foundation website, www.praedfoundation.org.

Building on the CANS assessment, AJWI has created a tool that not only facilitates but requires communication—preventing breakdowns in the sharing of information that can lead to treatment breakdowns and poor outcomes for children and youth. At each step of the process, the CANS is designed to inform and drive the treatment plan for a child or youth; provide a continuous “feedback loop” to inform all professional staff involved in the child’s plan about progress made, as well as next steps; assure accountability; and facilitate the timely and appropriate sharing of data. Reports can be generated instantly for every decision point in clinical care, from initial assessment to service reauthorization and discharge or transfer.

In effect, AJWI’s automated adaptation of the CANS has created what we call an “architecture of communication,” with the goal of facilitating both a *technical* and a *social* change process. We are building *a technical tool that facilitates social change* for children and youth by streamlining the flow of information among multiple collaborators, and by making clinical decision-making more transparent to all.

For Community Behavioral Health Services, our central goals for adopting the CANS have been:

- to improve our ability to make consistent and appropriate decisions about children’s care;
- to create collaborations around these decisions; and
- to intervene at any level of the system that is not working for children and families.

The remainder of this paper describes the technical and social change efforts undertaken to build the communication architecture that accomplishes these aims.

Implementation: The Technical Change Process

San Francisco's customized CANS approach is building an information system focused on meeting two critical demands: *compliance*—managing the interrelated tasks that allow us to work within our funding and regulatory structure—and *effectiveness*—grounding each level of our system in the needs and strengths of children and families. By automating as many of these tasks as possible to flow directly from the CANS assessment, we minimize the bureaucratic burden on children and families.

Throughout implementation of our technical change process, we have sought to assure that the new system is rational and transparent to users at all levels, providing both *individual* and *aggregate* feedback—specific enough to be actionable for treatment planning, and aggregated enough to help guide policy. Below, we describe the set of CANS-based tools available to users at each level of the system, beginning with those who are directly responsible for improving the lives of children and families: clinicians and care managers. This overview is followed by descriptions of CANS-based tools available to supervisors, and to program and system administrators.

For *clinicians*, the automated CANS system provides several key tools. To meet compliance standards, *Monthly "Tickler" Reports* and automatically generated tickler e-mails remind clinicians and their supervisors about when CANS assessments are up for renewal, due, and overdue. To help ensure treatment effectiveness, the one-page *Treatment Plan Summary* distills the information from the CANS assessment into a concise format. The clinician then reviews this information with the family, verifying whether he or she has heard and understood the child and family accurately. Once agreed, the clinician, client and family create a treatment plan based on the child or youth's CANS-identified needs. Another tool, the *Client Domain Chart*—aligned with the requirement to reassess clients every three or six months—is designed to avoid the merely rote reauthorization of services. This chart compares needs identified at the first CANS assessment with current needs identified on the most recent reassessment. This 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 charting requirements and the active monitoring of care effectiveness. Supervisors receive *Monthly Tickler Reports* and e-mails on all current, forthcoming, and overdue CANS assessments for the clinicians they oversee. This helps them oversee staff compliance in meeting the Medi-Cal requirements for accurate and appropriate charting of client cases. To help ensure effectiveness, automated CANS reports offer a transparent way to structure supervision time, focusing on therapists' effectiveness in creating client progress on CANS-identified treatment goals. They also allow supervisors to identify when progress is not occurring, and whether or not the treatment and/or the therapist is a good fit for the 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 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 then compare how particular clinicians are doing compared to each other, and also to an agency average.

For ***administrators***, the automated CANS provides on-demand reports on compliance and clinical effectiveness, with data aggregated at the client, program, and system levels. These tools track compliance by allowing the 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 the clinical reports are metrics that track the clinician's, program's, and agency's effectiveness in building client strengths and addressing client needs. We discuss the use of these administrators' tools at the individual program level, and at the system level.

At the *program* level, administrators have access to the same tools used by clinicians and supervisors, in addition to others that help them manage resources for maximum effect. Reports like the Client Improvement Report allow them to efficiently review how and whether clients' urgent needs have been addressed—and assure that demonstrated child needs, rather than an over-reliance on word-of-mouth narrative, are driving treatment and resource decisions. These reports can be used in interagency placement meetings to help 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: 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're meeting the specific needs of the population that their agency serves.

These *Agency Profile* and *Agency Clinical Formulation* reports are shared across all programs in the city, 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 programs might look for collaborators who could effectively provide ancillary services for specific client needs they are not equipped to treat. The reports also facilitate communication with other agencies that work with the same population of “cross-system” youth—allowing mental health program directors to tell Juvenile Justice workers, for instance, the results they have been able to show with young people who have adjustment-to-trauma issues, or who are a danger to others. In all these ways, CANS reports are helping program directors ensure that children and youth are getting the most appropriate care possible.

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.

The automated CANS system offers administrators useful data for system design in several ways. First, trajectories of client improvement are available from the *Agency Clinical Formulation*, allowing comparisons of the effectiveness of different programs serving similar populations. Second, such trajectories can be viewed across each level of care in the system, making it possible to estimate when clients' improved functioning in a given level of care would typically allow them to step down successfully to a less restrictive level. Such information also helps administrators allocate resources to ensure that the appropriate supports are in place to make such transitions successful. Discussions have now begun in San Francisco about evidence-based guidelines for when and how to successfully transition children and youth to less intensive levels of care.

CANS data have also helped system administrators identify an array of clients not receiving services intensively enough. The CANS indicated, for example, that certain youth who had moderate to high needs and needed more intensive outpatient treatment were waiting for services much longer than others. Community Behavioral Health Services therefore made it a priority to reach these children, and specialized programs newly charged clinicians with leaving the office and meeting children at home and in the community, providing treatment where it was most convenient for the client and family.

Before the CANS, we had not had an instrument that gave us such a precise continuum for measuring child and youth needs or measuring case complexity.

Taken together, these automated tools are helping CBHS produce systems change by enabling us to answer a series of questions about the clinical process much more precisely than before. Specifically, at every level of the system we can now ask and answer the following questions:

- Are every client's needs and strengths getting assessed at appropriate intervals?
- What are clients' needs and strengths?
- How are those needs and strengths changing over time?
- Are those changes happening at the same pace as other clients with similar needs?

Implementation: The Social Change Process

Community Behavioral Health Services' implementation of an automated, web-accessible CANS system has also been a process of social change. By both fostering and requiring improved communication at all levels of the CBHS system, we are putting a variety of social processes into place with the goal of maximizing the benefits of the CANS and the information generated from it.

CBHS staff began the implementation process by holding a series of meetings with clinicians and supervisors at over 20 agencies—asking them what their client populations looked like, how well they felt they were serving them, and what supports they needed in order to serve them better. We consistently heard two answers: that these professionals had a deep knowledge of their youth and family populations (often being, themselves, a part of the communities they served); and that their clients' needs were often poorly aligned with what other systems—such as schools, job programs, the police department, and mental health services—were able and willing to provide. They felt “up against” an array of institutions that were not effectively helping these youth. Our goal, therefore, has been to empower clients and clinicians to transform the system so that all parts of it become more accountable to the families they serve.

To see whether the CANS could help catalyze this process, we began by piloting it for several months with child protective service workers from the San Francisco Human Services Agency who worked in certain high-risk settings. In receiving very positive feedback about how this tool helped CBHS and HSA address cross-sector communication challenges, we saw high potential for scaling it up to system-wide use. This section outlines the specific steps we have taken to facilitate successful implementation of the CANS.

We began by requiring that all *clinicians and supervisors*, along with system administrators, be trained and certified in using the CANS reliably. All persons must re-certify every year in order to guarantee reliability and consistency in what they are seeing and describing in clients' lives. Supervisors participate in more intensive training, focusing on the uses of the CANS in supervisory solutions, and must certify at a higher level of reliability than clinicians. We also provide ongoing supports to all clinicians and supervisors: a point person at CBHS is available to answer CANS-related clinical or programmatic questions, and another at AJWI is available to answer technical questions about online CANS input and reports. Clinicians and supervisors also receive a suite of tools including manuals and regularly updated Q & A documents, based on answers to CANS-related questions that arise in problem-solving forums and off-line communication from clinicians.

All *supervisors* and *program administrators* participate in monthly one-hour "super-user" phone calls with CBHS staff, reviewing CANS data with an emphasis on improving client outcomes. We have seen a gradual but clear culture change in these conversations. While initial calls were focused on troubleshooting CANS implementation issues, the calls are now much more devoted to looking at how clients are doing over time, and how to serve clients better.

Supervisors and administrators now integrate CANS data into decision-making meetings at all levels of the system, such as interagency placement committees, quality improvement committees, and quarterly program manager meetings. The central goal of this integration is to change the dialogue among multiple partners from one that can be

very conflict-laden and competitive to a culture of collaboration. The use of CANS data—such as Treatment Planning Summaries, and Trajectory Reports—has provided a more neutral way to talk about the constellation of needs experienced by clients and the appropriate type and intensity of supports required to fully address them. Sharing of CANS data has also been effective in encouraging agencies to collaborate on projects and joint trainings in areas of shared strength or need, rather than competing for the same limited funds—promoting a more coordinated response for children, youth, and families with the most serious needs.

At the system level, CANS data have helped us address how well we interact with other systems, such as Juvenile Justice, the city Human Services Agency, and the San Francisco Unified School District. Looking at the same data together has fostered better communication between workers across systems, with a greater focus on pooling our resources to work collaboratively in serving children and families. One result has been the decision to “embed” mental health clinicians at partner sites such as Juvenile Hall and foster care, greatly improving our communication with these partners and at the same time making our services much more accessible to clients.

Next Steps

Community Behavioral Health Services is committed to integrating the CANS fully into our system culture at every level. Our next step, based on our CANS experience, is to document where our system’s deep knowledge of San Francisco children and youth has translated into particularly effective care. In the coming year, CBHS will be producing a community-based, evidence-based *Standards of Practice* guide that identifies and describes the most exemplary care for youth and families.

The guide will set forth our most up-to-date knowledge of best practices: what works and for whom; what are the discrete actions and ingredients that make these practices work; effective treatments and services; and trajectories of care and client improvement across different agencies. On the “harm” side, the guide will also address issues of providing the wrong intensity of care, harmful practices, the identification of

ineffective services and action steps to improve them; any subsets of children and youth whom we have not helped; and any clinical needs that we have been insufficiently trained and prepared to address.

Now, as other counties and states adopt the CANS, we are also seeing a growing potential for this approach to become the standardized way in our field to orient all clinical and administrative decisions to the identified needs of children and youth. One significant impetus has been the program-wide adoption of the CANS by independent providers who work in multiple counties. Our ultimate goal is to become part of a larger inter-county, statewide, and even national process of communicating and collaborating as effectively as possible on behalf of children, youth, and their families.

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