Measuring Treatment Outcome and Client Satisfaction Among Children and Families

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Abstract

As the delivery and reimbursement methods for mental health services change rapidly, measuring treatment outcome and client satisfaction has become critical. This article describes a case example of a treatment outcome and client satisfaction assessment program at the Children's Health Council, a private nonprofit agency affiliated with Stanford University that provides comprehensive mental health services to children and families in Palo Alto, California. Approximately 300 families receive mental health treatment per year at the agency. The simple and inexpensive program presented herein can be used and modified by other mental health professionals and agencies struggling to develop satisfactory treatment outcome and client satisfaction evaluation programs.

During rapidly changing times in the mental health care industry and professions, the need to assess treatment outcome and client satisfaction has become critical.[1-4] Historically, mental health professionals were able to treat patients as they wished, maintaining legal and professional standards of care as dictated by state laws and discipline-specific ethical principles. Fee-for-service policies and generous insurance reimbursements were assumed, and rarely did insurance carriers question the activities of the treating professionals.

The industry has changed dramatically over the past several years. The demand for mental health services has grown, but professional and financial resources have diminished steadily. Intense competition for funds and support has developed among mental health service agencies, which have been required to prove their effectiveness and their ability to use these limited resources efficiently. To maintain preferred provider status and to establish mental health contracts with private insurance carriers as well as federal, state, and local government agencies, measuring outcome and satisfaction has become mandatory in many areas. Legislative bodies continue to set more demanding standards of accountability for agencies that receive government funds.[5] For example, Santa Clara County, California, recently mandated providers of county Medi-Cal services to measure treatment outcome for all patients to maintain contracts for service.

With the escalating costs of mental health services, the primary focus of recent policy has been on cost containment. This has created an environment in which outcome and satisfaction information is necessary to ensure that the quality of mental health care is not compromised in the name of cost

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effectiveness. Standards must be set as to what constitutes quality care, and policymakers, payers, patients, and providers must be informed as to what treatments or aspects of treatment allow the most efficient use of funds according to these standards.[2,6]

Despite the need to measure treatment outcome and client satisfaction, there is enormous resistance among mental health professionals to begin their own assessment programs. Objective assessment of outcome and satisfaction results in a perceived lack of control among professionals, confidentiality is potentially compromised, and the notion of being more accountable to insurance carriers and others is often very unappealing. However, if the mental health industry does not take responsibility for regulating itself in this area, then it can be assumed that others in the executive and legislative branches of government, as well as in the private sector, will do so with little input from the mental health community.[2]

Even clinicians who are interested in and enthusiastic about measuring treatment outcome and satisfaction are often unsure of exactly how to incorporate evaluation programs into their agencies or practices. The purpose of this article is to describe a case example of a comprehensive program of measuring treatment outcome and client satisfaction at a private nonprofit agency that specializes in the treatment of children and families. The Children's Health Council is a Stanford University-affiliated diagnostic and treatment facility serving more than 300 families in psychotherapy each year. Other mental health clinicians and agencies who specialize in the treatment of children and families may benefit from a review of this evaluation program, which has been designed to be both inexpensive and simple to implement.

Program Development Procedures

Designing an Assessment Package

Volunteer undergraduate research assistants completed a comprehensive review of the professional literature, using *Medline*, *PsycINFO*, and *Psychological Abstracts* to survey the treatment outcome and client satisfaction measures available. This search resulted in 98 different measures obtained.

Using telephone directories and mental health agency referral lists, the research team then identified 57 agencies in the San Francisco Bay area that provide mental health treatment to children and families. All of these agencies were contacted by telephone with requests for information on the methods they used to measure treatment outcome and client satisfaction. Whereas the majority of these agencies reported not having formal or comprehensive programs for such an assessment, those that did were requested to supply our research team with copies of their measures. All agencies with outcome and satisfaction programs agreed to mail the researchers a copy of their materials.

A research team consisting of three undergraduate research assistants, three psychology interns/postdoctoral fellows, two staff psychologists, and one staff marriage and family counselor met weekly to review all available treatment outcome and client satisfaction measures. For the assessment measures to be considered for inclusion in the program, they needed to meet the following three criteria:

1. Have adequately documented reliability and validity information published in refereed professional journals;
2. Be suitable for parents (and/or clinicians) to complete; and
3. Be brief, simple, and inexpensive to use.

Once all of the measures were screened using these criteria, the team reviewed and discussed the resulting items in detail, arriving at a consensus on which materials to use. This screening process was conducted to examine all of the possible treatment outcome and client satisfaction questionnaires available and choose the package that would meet the listed criteria and best meet the needs of the Children's Health Council. For example, questionnaires suitable for a wide range of ages, child and family disorders, and treatment plans were necessary. The final package included the Child and Adolescent Adjustment Profile (CAAP),[7] the Brief Psychiatric Rating Scale for Children (BPRS-C),[8] an author-modified version of the Client Satisfaction Questionnaire-8 (CSQ-8),[9] and a Demographic Questionnaire (DQ) designed by the research team. These measures clearly met the criteria listed and were appropriate for children of both latency age and adolescence, all DSM-IV diagnoses, as well as brief, long-term, individual, and group treatments. The package was then reviewed by the executive director, associate director, and members of the board of directors of the agency for final approval. Details regarding the assessment measures follow.

Instruments

Child and Adolescent Adjustment Profile. The CAAP is a 20-item self-report measure that assesses five factor-analyzed areas of child and adolescent adjustment.[7] The CAAP Scale can be used by parents, teachers, treatment staff, counselors, and other adults working or living with children and/or adolescents. The five factors of the CAAP Scale are peer relations (e.g., "gets along with others"), dependency (e.g., "wanted help but could have done on own"), hostility (e.g., "upset if others don't agree"), productivity (e.g., "works hard at assignments"), and withdrawal (e.g., "daydreams"). Scoring is based on a 4-point Likert-type scale that rates behaviors as occurring from *rarely* to *almost always*. Scores are then converted to *t* scores based on group norms. An item measuring the level of stress within the family as a whole was added to the CAAP Scale form by the research team. Families of individuals with mental illnesses can be affected greatly, and their level of discomfort is an aspect of treatment outcome that should not be overlooked.[10]

The CAAP Scale has shown acceptable degrees of reliability in both internal consistency and test-retest stability. It has also been shown to have validity as measured by comparing scores between individuals in varying stages of treatment to control groups.[7]

Brief Psychiatric Rating Scale for Children. The BPRS-C is a 21-item measure designed to assess general psychiatric symptoms and was developed to be completed by treating clinicians.[8] The items are scored on a 7-point Likert-type scale ranging from *not present* to *extremely severe*. The scale measures the following seven factor-analyzed areas of symptoms: behavior problems (e.g., hostility), depression (e.g., suicidal ideation), thinking disturbance (e.g., hallucinations), psychomotor excitation (e.g., hyperactivity), withdrawal retardation (e.g., blunted affect), anxiety (e.g., tension), and organicity (e.g., disorientation). All seven factors of the BPRS-C were shown to be adequately reliable in a test with paired clinician raters.[11]

Client Satisfaction Questionnaire-8. The CSQ-8 is an eight-item questionnaire used to measure client satisfaction.[9] The items are scored on a 4-point Likert-type scale (e.g., "How would you rate the quality of service you received?"). The CSQ-8 is an abbreviated form of the longer 31-item Client Satisfaction Questionnaire (CSQ) developed by Larsen et al.[12] The CSQ-8 has acceptable internal reliability and construct validity.[13] For the purposes of this study, the questions of the CSQ-8 were reworded to be applicable for ongoing as well as terminated treatments (i.e., past- and present-tense versions were used).

Demographic Questionnaire. The DQ, developed by the research team, is used to obtain a variety of information pertaining to demographic background. Items on the DQ include age and gender of child, full-scale IQ, ethnicity, marital status of parents, birth order, religious affiliation and attitude, living situation, family and personal history (including experiences of abuse, neglect, trauma, physical illness, or disability), and diagnostic information (see Appendix). The relationships between these factors and outcome and satisfaction may prove valuable, and having these data allows for the study of many groups that have been underrepresented in traditional treatment research, such as minority youth, children of alcoholics, victims of abuse and neglect, and children with chronic illnesses or physical disabilities.[14-16]

Assessment Procedure

CLINICIAN ASSESSMENT

The BPRS-C is completed by the treating clinician after the second treatment session and again after the last treatment session. Waiting until after the second session is intended to allow the clinician enough time to interview the parents and to observe the child directly. The DQ is completed at the same time as the BPRS-C (i.e., after the second treatment session).

These measures are delivered to clinicians along with other agency forms by the unit secretary when cases are first assigned. In this way, clinicians are assured of receiving questionnaires for every new client. Clinicians are expected to notify the research assistants as clients terminate so that they may receive the posttreatment copies of the outcome measurements. Extra copies are available from the unit secretary as well.

PARENT/GUARDIAN ASSESSMENT

The CAAP Scale is completed by a parent or guardian at the first session, every 3 months during treatment, and during a 6-month follow-up to termination. Because the children treated at the Children's Health Council range in age from 5 years through adolescence (with a mean age of about 9 years), questionnaires suitable for parents (rather than children) to complete were used. Because many of the treatment plans (including managed care contracts and state funding contracts) used 3-month intervals, the assessment periods were chosen to reflect every 3 months of treatment. An accompanying letter requests that the questionnaires be completed by the same parent during each administration. The CSQ is administered with the CAAP Scale at the same intervals, although it is not administered at the client's first session.

Parents complete the questionnaires while waiting in the lobby for their appointments. For this type of administration, return rates are often more than 90% compared to 40 to 50% for mail survey methods.[13] Lobby administration is practical as the questionnaires take only a few minutes to complete. The clinic receptionist both delivers the questionnaires to the parents and collects them. Parents are informed that their questionnaire results are confidential and will not be seen by their therapists. Removing the therapists from the administration process in these ways minimizes demand characteristics and maximizes honesty.[17]

The CAAP Scale is administered with standard agency intake papers (e.g., consent to treatment form), and an accompanying note asks that a parent complete the form immediately and return it to the reception desk. Research assistants keep track of each 3-month interval during which a client should receive another set of questionnaires. Weekly clinician schedules are used to determine when specific clients will arrive for services, and the receptionist is notified by the research assistants to administer the questionnaires at that time. Two weeks of leeway is allowed in case the client is not scheduled for a particular week, fails to appear for his or her session, or does not complete the questionnaires for any other reason.

Six-month follow-up questionnaires are administered to parents by mail, with reminder telephone calls from the research assistants as necessary. Although the majority (59%) of child therapy outcome studies have not used a follow-up assessment, it is very important.[14] Some treatments that appear effective in the short run may fail to impart sustained improvements. The effects of other treatments may seem insignificant at termination but later prove to be quite profound.[18-20] A summary of the program can be found in Table 1.

Questionnaires are scored and entered on a computer database by research assistants using SYSTAT. Clinicians do not review individual patient responses to ensure patient confidentiality in their ratings. General feedback is provided to the clinicians during weekly treatment rounds. The information is also used by the administration of the Children's Health Council to review and evaluate professional services and to secure grant/foundation funding as well as managed care contracts. This project represents a first step in the development and implementation of a treatment outcome and client satisfaction evaluation program. Collection of several years worth of data will be necessary to allow for a large number of families to receive treatment and complete follow-up assessments.

Implications for Mental Health Services Delivery

In this quickly changing time of mental health administration, assessing treatment outcome and client satisfaction has become critical. The challenge to mental health administrators is to design an assessment program that provides useful, reliable, and valid data in an easy-to-use and cost-effective manner. Further, measures must be used with patients experiencing a wide range of problems and treatment plans. The use of global measures (as in this program) versus more specific or specialized measures must be weighed carefully in outcome and satisfaction evaluation research. Whereas global measures may not provide the kind of detail assessment needed among some agencies, specialized measures may not be appropriate for all patients. Hopefully, the assessment program outlined in this article may assist other mental health organizations focusing on the treatment of children and families to develop their own programs. A number of challenging issues surfaced during the implementation of this treatment outcome and client satisfaction assessment. As a review of these issues may be helpful to others interested in using a similar approach, they are highlighted here.

Lack of accurate and up-to-date records is one issue. To implement an evaluation program of this kind, there must be an accurate record of which individuals are currently receiving treatment and by whom. Although the therapists usually know the treatment statuses of their particular clients, this information is always changing as new clients start treatment and other clients terminate or change treatments. Remaining informed of all changes so as to keep the outcome and satisfaction assessment running smoothly can be more difficult than expected. The magnitude of this problem depends on many factors such as the size of a clinic and its organization. It can be complicated by the presence of clients receiving services other than psychotherapy (e.g., diagnostic assessment, consultations, psychological testing) and can be especially confusing when a client starts service as a diagnostic case and later begins some form of treatment. Also, it is not necessarily clear which therapist a client is seeing. Cases may transfer from one therapist to another, or a client may see more than one therapist for different services. If the clinic is a training facility, then there will be additional challenges due to temporary clinician rotations.

Finally, it is often difficult to ascertain whether or not a client has actually terminated therapy. For example, some clients leave therapy temporarily only to return at a later date (e.g., school vacations, temporary moves). Other clients finish one form of treatment (e.g., family therapy) but then begin a different type (e.g., group therapy). Others may no longer have a regular schedule of treatment sessions but continue to receive treatment on an as-needed basis.

Client and staff cooperation is a second issue. To conduct outcome and client satisfaction research and evaluation, the participation and cooperation of many different people are required. Parents and clinicians must complete questionnaires in a timely manner, and clinicians must be responsive in keeping their caseload information accurate. If receptionists are depended on to administer questionnaires, then they must be constantly vigilant and responsible. To maximize cooperation, the instruments used should be very brief and easy to complete, and lobby administration should be used rather than mail survey methods. Clients and staff should fully understand the need for outcome measurement and the potential benefits of evaluation (e.g., improved client service, maintenance of insurance contracts). Research assistants reminding clients and staff to complete all forms and to perform various other assessment duties helps to ensure cooperation. The use of volunteer research

Table 1

Summary of Outcome and Satisfaction Program at the Children's Health Council

Month	Clinician Assessment	Parent/Guardian Assessment
0	BPRS-C and DQ	CAAP Scale
3		CAAP Scale and CSQ-8
6		CAAP Scale and CSQ-8
Every 3		CAAP Scale and CSQ-8
Termination	BPRS-C	CAAP Scale and CSQ-8
6-month follow-up		CAAP Scale and CSQ-8

Note: BPRS-C = Brief Psychiatric Rating Scale for Children; DQ = Demographic Questionnaire; CAAP = Child and Adolescent Adjustment Profile; CSQ-8 = Client Satisfaction Questionnaire-8.

assistants significantly reduces the cost of a program, but volunteers can often work only for a limited number of hours and typically have a high turnover rate. Frequent training may be necessary, and a comprehensive procedure manual can be useful in orienting new researchers.

Missing data is a third issue. Even with the best intentions and organizational skills, missing data can be a significant problem. Clients may not attend sessions regularly. Many will receive therapy periodically with long breaks in between appointments. If it is time for a client to receive a questionnaire and he or she is not currently being seen, missing data will result. Some clients may not check in at the front desk consistently; in these cases, the receptionist administering questionnaires to clients will have no way of knowing whether or not they have arrived. Sometimes a parent may bring a child in for therapy but not accompany the child into the waiting room. When this happens, the child can bring the questionnaire home to the parent, but this seriously lowers return rates. Finally, of course, there are always a number of last-minute cancellations, reschedulings, and simple failures to appear. In this study, 2 weeks of leeway for each data point was allowed to help ameliorate these problems, but some missing data may be unavoidable.

Conclusion

The need for treatment outcome and client satisfaction assessment programs is now very real and pressing for mental health service agencies. These programs must be as efficient and organized as possible, bearing in mind that few agencies have the resources to afford elaborate, time-consuming, or expensive methods. Outcome and satisfaction studies require data collection in real-life settings, and their success depends on the cooperation of many individuals. These factors can vastly complicate the implementation of an otherwise simple procedure. We hope that the example presented here will help others to design and implement their own outcome and satisfaction programs.

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Appendix

Demographic Questionnaire

Please complete the following to the best of your ability at this time
(this is epecially important if the case is nearing termination).

Age of client: ________

Gender: ________

Full-scale IQ (if known): ________

Number of sessions in treatment as of this date: ________

Ethnicity:
________ Caucasian
________ African American
________ Latin American
________ Asian American
________ Native American
________ Other ____________

Marital status of client's parents:
________ Never married
________ Married
________ Divorced
________ Widowed
________ Separated
________ Divorced and remarried
________ Widowed and remarried
________ Other____________

Birth order of client:
________ Oldest
________ Middle
________ Youngest
________ Other ____________

Family religious affiliation:
________ Catholic
________ Protestant
________ Jewish
________ None
________ Other ____________

Family religious attitude:
________ Atheist
________ Agnostic (doubting)
________ Indifferent
________ Moderate
________ Strong
________ Unknown

continued

Appendix

Demographic Questionnaire

Primary living situation during therapy:

________ Both parents (biological)
________ Single parent
________ Blended family (one parent, one stepparent)
________ Joint custody arrangement
________ Other family (other relative as primary caregiver)
________ Adoptive family
________ Foster family
________ Residential care/group home

History of (mark all that apply, and indicate client and/or family):

________ Physical abuse (________ in client, ________ in family)
________ Sexual abuse (________ in client, ________ in family)
________ Neglect (________ in client, ________ in family)
________ Alcohol/Drug abuse (________ in client, ________ in family)
________ Suicidal behavior (________ in client, ________ in family)
________ Trauma (violence, domestic violence, disaster, war, etc.)
(________ in client, ________ in family)
________ Learning disabilities (________ in client, ________ in family)
________ Chronic illness (________ in client, ________ in family)
________ Physical disability (________ in client, ________ in family)

Diagnostic categories best describing client's problems (no more than three):

________ Psychotic (schizophrenia, psychotic depression, paranoid)
________ Post Traumatic Stress Disorder (dissociative secondary to childhood trauma)
________ Major depression/mood disorders (dysthymia, bipolar)
________ Disorders of bodily functions (insomnia, encoprasis, enuresis, anorexia, bulimia)
________ Behavioral disorders (conduct, oppositional defiant, attention deficit)
________ Anxiety disorders (obsessive compulsive, phobias, panic, separation anxiety)
________ Developmental disorders (learning disability, pervasive developmental)
________ Adjustment disorders
________ Others (Tourette's syndrome, attachment disorders)