

The Child and Adolescent Services Assessment (CASA): Description and Psychometrics

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IN THE CURRENT CLIMATE OF HEALTH-care reform and cost containment, it is particularly crucial for health policy decision making that accurate information on child mental health service use be available. As financial resources become more highly contested, clinicians, researchers, and policy makers need to know who gets mental health care and for what reasons, the costs of that care, and the effectiveness of treatment as related to intensity of service and restrictiveness of setting in order to chart the future course of mental health care services. The taxonomy on which policymakers base their decisions will affect individual patient prognosis, legislation, system management, and allocation of resources. To reach consensus about measurement issues and provide compatibility across studies, there must be more systematic efforts to classify services and operationalize definitions in the field of child mental health in order to supply an empirical research base on the use of services, to assess clinical and cost outcomes, and to add legitimacy to vital mental health policy recommendations (Burns, Angold, & Costello, 1992; George, 1989; Taube & Mechanic, 1989).

Mental health services research on children and adolescents has been hampered by the difficulty of obtaining accu-

The Child and Adolescent Services Assessment (CASA) is a self- and parent-report instrument designed to assess the use of mental health services by children ages 8 years to 18 years. The CASA includes 31 settings covering inpatient, outpatient, and informal services provided by a variety of child-serving providers and sectors. This instrument collects information on whether a service was ever used and more detailed information (length of stay/number of visits, focus of treatment) on services used in the recent past. A description of the instrument, information on interviewer training and coding of data, psychometric data on clinical samples, and a case study are presented.

rate information about the services that youths use to address emotional and behavioral problems. Frequently, measuring mental health service use has been done through official records (e.g., insurance, agency, clinical). Although these materials have been used both as a first resource to obtain data and as a way to validate data obtained by other means, these sources have well-known shortcomings. For example, available data provided by agencies, clinical records, or insurance files often are incomplete, contain varied definitions or operationalizations that make it difficult to compare or combine data across multiple human service sectors, and may not include information on all children (e.g., uninsured children). In addition, the types of data needed by researchers and policy planners often are not the same data that are needed by the agencies collecting the information.

Self-report of service use overcomes many of these problems. It has been

shown, at least in adult populations, to provide a reasonably valid indicator of service use (Cannell, Marquis, & Laurent, 1977; Golding, Gongla, & Brownell, 1988; Taube, Schlenger, Rupp, & Whitmore, 1986). The development and testing of self-report instruments for children has lagged behind the work for adult service use. The following discussion highlights the evolution, implementation, reliability, and validity of the Child and Adolescent Services Assessment (CASA), which was developed to fill this need (Burns, Angold, & Costello, 1992; Burns, Angold, Magruder-Habib, Costello, & Patrick, 1992).

THE INSTRUMENT

The CASA is a self-report instrument developed to assess use of mental health services by children and adolescents ages 8 years to 18 years. Such services are broadly defined to include services pro-

vided by a variety of public sectors (e.g., health, mental health, substance abuse, social service, education, juvenile justice); by private providers; and by informal, personal, and community resources. Services include efforts to identify, diagnose, or treat emotional, behavioral, or substance-related problems. The CASA also examines attitudes toward treatment, out-of-pocket costs for treatment, and perceived barriers to service use. It is a face-to-face interview that takes approximately 20 minutes to complete for a child with substantial service use. Both child and parent versions have been developed, tested, and used in a variety of studies. The child and parent versions are almost identical except that the latter includes a series of questions about family financial and demographic information not on the child version.

The CASA is administered using a mixture of respondent- and interviewer-based approaches (Angold, 1994). The interviewer adopts a conversational style, mixing close-ended questions that are often answered by "yes" or "no" with open-ended questions that allow elaboration. The order in which settings are discussed is flexible. Standardization is achieved by designating required probe questions that each interviewer must ask verbatim (unless the respondent already has given that information in response to previous questions). If further clarification is required, interviewers may choose from suggested follow-up questions on the page or tailor an appropriate question to fit the circumstance. This approach allows respondents to describe their experiences and explain their answers to ensure correct coding when a first, more limited answer might result in premature closure that misses relevant information. For example, the subject may answer "yes" to a question about having received services at a detoxification or inpatient drug/alcohol unit. In an interviewer-based approach, the interviewer is free to inquire further and may find out that the setting was actually the outpatient drug/alcohol unit of a general hospital and that the treatment primarily centered on depression.

The CASA would allow the interviewer to code the appropriate setting (outpatient drug or alcohol clinic) and describe the foci of treatment as depression, with the beginnings of treatment for a drug or alcohol problem as secondary to the depression.

The CASA is comprised of four sections: The Child Health Services Screen, The Detailed Child Services Form, Attitudes Toward Services for Children and Adolescents, and Family Demographic and Financial Information (in the parent version only). Each is described below.

The Child Health Services Screen

The Child Health Services Screen is designed to assess whether a child has ever used any of the types of services covered in the CASA. The CASA was designed to be administered in tandem with a psychiatric interview, which is given first. Thus, the connection is made between the types of service use recorded in the CASA services screen and the type of emotional, behavioral, or substance problems that have been discussed in detail in the interview. Figure 1 provides an example of a page from the services screen (see Note 1). As Figure 1 shows, the interviewer first asks whether the child has ever been to a mental health center. If the answer is no, a zero is placed in the coding box, and follow-up questions about the service in a mental health center are not asked. If the child says yes, this response would be followed by the interviewer asking, "When did you first go to a mental health center?" Interviewers are trained to ask open-ended questions ("Can you tell me a little about that?") on settings (e.g., pediatrician, emergency room) for which there is any question as to whether or not the service was sought for emotional, behavioral, or substance-related reasons. Further suggested probe questions ("Was it any help?" "Have you been there in the last three months?") are available on the page to make certain that the interviewer collects all the necessary information to code the section.

The current version of the CASA services screen includes 31 items, organized under four headings. *Overnight/inpatient* treatment possibilities include psychiatric hospital, psychiatric unit of a general hospital, detoxification or inpatient drug/alcohol unit, medical inpatient unit, residential treatment center, detention center/training school/jail, group home or emergency shelter, therapeutic foster care, or boarding school. *Outpatient* mental health services cover day or partial hospitalization, outpatient drug or alcohol clinic, mental health center, community health center, crisis center, or private professional treatment. *Other professional help* encompasses such services as school guidance counselor/psychologist/social worker, special class, educational tutoring, social services, probation officer, family doctor, hospital emergency room, religious counselor, or alternative healer. *Nonprofessional* help records services from others who are not professionally trained, licensed, and/or certified to provide mental health services for fees but who provide responses to mental health needs (e.g., crisis hotlines, self-help groups, adult relatives, friends). The specific types of services included in the services screen are not immutable. They can be modified to reflect services available in particular communities and reflect changes in the service delivery system over time.

If the child ever has used a service, information is obtained on (a) the date the child first used the service, (b) his or her perceived benefit of the service, and (c) use of the service in the recent past, which is defined as "the last 3 months." This time frame could be modified to meet the needs of a particular study, although extending the time period covered beyond 6 months is likely to decrease reliability.

Further details on the service (such as number of sessions, length of each session, focus of the treatment, and perceived adequacy of parental participation) are collected only for services received in the recent past. This approach was instituted because of concern about the validity and reliability of recall after a longer time has passed

***A mental health center?**

***A community health center?**

When did you first (go there)?
Have you (been there) in the last 3 months?

Was it any help?
In what way?
Did it make things even worse?
How?

Coding rules

MENTAL HEALTH CENTER

Ever
0=No
2=Yes

Benefit

0 = Definitely positive effect
1 = Neutral or no effect
2 = Definitely negative effect

Last 3 Months

0 = No
2 = Yes

COMMUNITY HEALTH CENTER

Ever
0=No
2=Yes

Benefit

0 = Definitely positive effect
1 = Neutral or no effect
2 = Definitely negative effect

Last 3 Months

0 = No
2 = Yes

Codes

CNB1E01
Ever

CNB1001
Ever: Onset

 /

CNB1X01
Benefit

CNB1101
Last 3 months

CNB2E01
Ever

CNB2001
Ever: Onset

 /

CNB2X01
Benefit

CNB2101
Last 3 months

FIGURE 1. Sample page from the services screen. (Copyright 1989, 1990, 1991, 1992, 1993, 1994 by B. J. Burns, A. Angold, K. Magruder-Habib, E. J. Costello, M. K. S. Patrick; Dept. of Psychiatry, Duke University.)

(Cannell et al., 1977; Harlow & Linet, 1989; Revicki, Irwin, Reblando, & Simon, 1994).

The Detailed Child Services Form

As its name implies, the Detailed Child Services Form (DCSF) gathers more specific data on services the child has used recently. These details include the setting (e.g., psychiatric hospital) and

the name of that setting (e.g., Central Psychiatric Hospital). On the DCSF, the interviewer records the number of visits and average length of sessions for an outpatient setting or the number of days spent in an inpatient setting. Up to three problem areas (e.g., school nonattendance, depression, peer relationships) may be recorded as the foci of treatment. One DCSF is completed for each service a child has used during the last 3 months. If the child has seen

two different psychiatrists in private practice over the last 3 months, one DCSF would be completed for each psychiatrist.

Additional information on the DCSF is completed on inpatient, outpatient, or professional treatments only (i.e., it is not collected on informal types of help). The degree of participation in treatment sessions by parental figures and other family members is noted, as well as whether the amount of family

participation was perceived as adequate, insufficient, or excessive. This section in the CASA also asks about out-of-pocket expenses for this service in the last 3 months.

Attitudes Toward Services for Children and Adolescents

The CASA next considers the respondent's receptivity to mental health service use in general and the barriers that might prevent the subject from using services (Leaf, Bruce, & Tischler, 1986). Specifically, the barriers section of the child version begins by determining (a) the degree to which the respondent thinks that professional services for emotional or behavioral problems are generally beneficial and are an appropriate response to major problems, (b) receptivity to treatment for the child's own personal problems, current or future, and (c) the child's assessment of his or her parents' receptivity to treatment for him or her. Similarly, parents are asked about their general receptivity to treatment, receptivity to treatment for their own child, and how they think their child feels about getting help for his or her current or future problems.

The CASA next assesses specific barriers to services. Sixteen barriers are listed, ranging from stigma issues (e.g., anticipation of negative reaction by family, friends, or others); to concerns about cost, transportation, or language; to agency hurdles. Agency hurdles include obstacles such as bureaucratic delay (waiting lists, paperwork), refusal to treat, or nonavailability of the desired treatment.

For each barrier that is identified, three issues are considered: First, whether the barrier is absent or present. Second, if the barrier and symptoms were present over the last 3 months, the respondent is asked whether there were any times he or she did not get help in that time period because of the barrier. Third, if the child has used services over the last 3 months, the respondent is asked whether the barrier under discussion actually reduced his or her use of those services. Once bar-

riers have been identified and their effects on service utilization noted, the relative impact of the barriers is ranked by the respondent, followed by a listing of which services were affected most (see Figure 2).

Family Demographic and Financial Information

Data on parental education, employment status, occupation, and family income (including sources of income) are collected in the parent interview. The person responsible for making health-care payments is identified. The parent is asked whether the child is covered by insurance and, if so, by what type (e.g., private, Medicare, Medicaid). Further questions ascertain to what extent the services are covered by the participant's insurance (none, all, or part) and, if there is a limit on benefits, whether that limit has been reached.

Follow-Up Interview

Collection of data across time is necessary to examine patterns of care over time. To facilitate the collection of such data, a short form of the CASA has been developed for administration via telephone. To date, the telephone version has been used with the parent respondent or with older adolescents who are not living with a parent or similar caretaker. This version of the CASA can also be used in a face-to-face interview with respondents who do not have a telephone.

The short follow-up CASA begins with an update of information about current address, phone number, school, and whether the child has lived with the parent or caretaker in the intervening period. Such practical updates aid in locating the participants for the next follow up and also provide some indication of how well informed the respondent may be about service use. This short follow-up form is not preceded by a psychiatric interview; however, in some cases, a checklist of symptoms or of recent life events has been used (Burns, Farmer, Angold, Costello, & Behar, in press). The respondent is asked

whether the child used any of the services on the CASA services screen over the last 3 months or since the last interview. For each service that was used, a DCSF is completed.

TRAINING

Lay interviewers can be trained to administer the CASA in a 1-day training session. To date, interviewers have been college graduates in various fields, largely without clinical experience. Prerequisites include such interpersonal skills as the ability to build rapport, to keep control of the interview while fostering an atmosphere in which the subject feels comfortable discussing very personal issues, and to listen and document while still moving the interview along.

Training includes a conceptual orientation to understanding the interviewer-based approach and familiarization with the mental health delivery system. Hands-on techniques, such as role playing and practice interviews, promote assimilation of the material and interviewing style. Trainees are taught to take pertinent notes and to code the information appropriately. Review of tape recordings (with participants' consent) and examination of notes and codings are used to assess the interviewer's skill and to control quality. The training manual is a glossary that addresses overall concepts and definitions and clarifies codings to underscore consistency and serve as a resource. Audiotapes and videotapes of model interviews supplement the didactic material and practice sessions.

Coding and Data Entry

Coding rules for the CASA are straightforward and are present in a specified place on each page (see Figures 1 and 2 for examples). In addition, the glossary for the instrument is a separate document that includes elaboration of coding rules. Notes are taken during the interview and the coding is completed after the interview is finished. Each completed interview is checked for accuracy by a supervisor.

SELF-CONSCIOUSNESS

Reluctance to use services caused by self-consciousness about admitting having a problem or about seeking help for it. Also inability to talk with anyone about such sensitive issues.

****Is it hard for you to talk to others about a problem?***

****Or to ask others for help?***

Do you feel embarrassed or self-conscious?

IF SYMPTOMS PRESENT IN LAST 3 MONTHS, ASK:

****Were there any times in the past 3 months when you didn't go to see someone because it would be "embarrassing"?***

IF SERVICES PRESENT IN LAST 3 MONTHS, ASK:

****Did this "feeling" make a difference when you got help in the past 3 months?***

What difference did it make?

ANTICIPATION OF NEGATIVE REACTION

Reluctance to use services caused by anticipation of a negative reaction from family, friends, or others to seeking treatment for an emotional or mental problem.

****Are you concerned about what your family will think about you getting help?***

****Or about what your friends would think?***

****Or about what others would think?***

What do you think they would say?

IF SYMPTOMS PRESENT IN LAST 3 MONTHS, ASK:

****Were there any times in the past 3 months when you didn't get help because you were "concerned what others would think"?***

IF SERVICES PRESENT IN LAST 3 MONTHS, ASK:

****Did "this concern" make a difference when you got help in the past 3 months?***

What difference did it make?

SELF-CONSCIOUSNESS

0 = Absent
2 = Present

S = Absent
0 = Present but did not keep from getting help
2 = Present and delayed subject from getting services in past 3 months
3 = Present and stopped subject from getting some/other particular services

S = Absent or no services used
0 = Present, but no effect on services
2 = Present and had some effect on response to services actually used in past 3 months (missed appointments, not talk freely, not follow recommendations etc.)
3 = Quit getting services

ANTICIPATION OF NEGATIVE REACTION

0 = Absent
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3 = Quit getting services

CPA3101
Intensity

CPA3102
Intensity

CPA3103
Intensity

CPA4101
Intensity

CPA4102
Intensity

CPA4103
Intensity

FIGURE 2. Sample page from CASA concerning barriers to services. (Copyright 1989, 1990, 1991, 1992, 1993, 1994 by B. J. Burns, A. Angold, K. Magruder-Habib, E. J. Costello, M. K. S. Patrick; Dept. of Psychiatry, Duke University.)

RELIABILITY AND VALIDITY

The CASA's reliability and validity have been examined using clinical samples. Test-retest reliability was assessed using a sample of 77 children (and 74 parents) who were new admissions to either an outpatient clinic or an inpatient facility (Farmer, Angold, Burns, & Costello, 1994; see Table 1). Reliability of reporting appeared to vary with the intensity or intrusiveness of the service. The most intensive services (inpatient, out-of-home, juvenile justice) were reported with very high reliability. Services with moderate intensity and/or intrusiveness (i.e., outpatient, crisis, non-mental health professionals) were reported with moderate reliability. Services provided in the child's natural settings (i.e., school services, non-professional help) were reported with fairly low reliability. It appears as if the reliability of the child report depends more on the characteristics of the setting (restrictiveness) than the characteristics of the child (age, gender, psychiatric diagnosis).

Concurrent validity was assessed by comparing CASA data with data from a mental health center's management information system (MIS). Analysis in this sphere, therefore, was limited to those services that were provided primarily by the mental health center. The validity sample included 56 children (and 50 parents) who were participating in a research project associated with the Robert Wood Johnson Foundation's Mental Health Services Program for Youth in western North Carolina (Burns et al., in press; Morrissey, Johnsen, & Calloway, 1995).

Results of these analyses are provided in Table 2. Numbers on this table indicate the percentage of children receiving a service (according to mental health center records) who reported this service on the CASA. Overall, the validity was quite good. As with test-retest reliability, the least restrictive/intrusive service (i.e., case management) showed the lowest validity. Combined reports from parent and child were more valid

TABLE 1
Parent and Child Reliability (Test-Retest Sample)

Service category	Last 3 months		Ever	
	Child ^a	Parent ^b	Child ^a	Parent ^b
Inpatient	K = 0.91	K = 0.82	K = 1.0	K = 0.91
Out of home	K = 0.92	K = 0.75	K = 0.79	K = 0.61
Outpatient	K = 0.52	K = 0.81	K = 0.51	K = 0.65
Crisis services	K = 0.58	K = 0.62	K = 0.60	K = 0.50
Non-mental health				
professional	K = 0.58	K = 0.47	K = 0.62	K = 0.56
School	K = 0.39	K = 0.62	K = 0.36	K = 0.57
Nonprofessional	K = 0.43	K = 0.59	K = 0.48	K = 0.58
Juvenile justice	K = 0.84	K = 1.0	K = 0.94	K = 1.0
Number of service settings	ICC = 0.74	ICC = 0.76	ICC = 0.76	ICC = 0.60

Note. K = Cohen's Kappa; ICC = Intraclass correlation coefficient. Based on data from Farmer et al., 1994
^an = 77. ^bn = 74.

TABLE 2
Validity of CASA Reports of Mental Health Service Use^a

Service	Parent ^b (%)	Child ^c (%)	Combined ^d (%)
MHC (compared to any report of OP by center)	74	74	86
Day hospital	60	67	80
Treatment foster care	100	100	100
Case manager	48	23	58
Any services	84	75	90

Note. MHC = mental health center; OP = outpatient.

^aOf children receiving a given service (according to mental health center records), what percentage indicate this on the CASA? ^bn = 50. ^cn = 56. ^dn = 45.

than those from either respondent alone. Three phenomena appeared to explain mismatches between the MIS data and self-report data:

1. Temporal misplacing of episodes—parents appeared to telescope (to bring forward events that happened in the months preceding the previous 3 months), whereas children underreported episodes that occurred early in the period.
2. Nonintensive services tended to be underreported. This was particularly true for low levels of case management.
3. When a child received many services, parents and children tended to report some, but not all, of them.

BRIEF CASE STUDY

Jean (name and dates are fictitious) was a 13-year-old White girl at the time of the CASA interview. Her biological parents had been divorced for several years, and her current family included her biological mother, stepfather, full brother (age 12), and two half brothers (ages 6 and 3). When interviewed in February 1993, Jean had lived at home for 2 months of the 3-month primary period of the CASA interview. For the last month she had been a patient in a psychiatric hospital, where she was interviewed as a subject in a study of children enrolled in the previously mentioned Robert Wood Johnson Foundation program (Burns et al., 1995; England & Cole, 1992).

On the CASA services screen, Jean answered positively to having used services for mental health or emotional types of problems in four settings over the course of her life and, of these, three had been used during the time period of interest. According to Jean's self-report, her first experience with services for emotional, behavioral, or substance-related problems was with her school guidance counselor. She remembered this first occurring in the fourth grade (see Note 2). She reported that she went to the counselor to discuss her fights with her brother. She had also seen the school guidance counselor for help during the 3 months preceding the interview. Information from the DCSF revealed that she visited her middle school guidance counselor for a 45-minute session once during the primary period. The focus of the discussion was her conduct (fighting) and sibling relationships. There was no cost to Jean for this assistance and no other family member participated.

The second experience with service use that Jean reported was a stay in a group home in the fall of 1992. She did not find this beneficial and had not been in that setting during the last 3 months.

Jean reported service in the mental health center setting for the first time in September of 1992 and more recently over the last 3 months. She found the service to be useful. The DCSF associated with this setting revealed one visit of 1 hour during the last 3 months. She was sent to the center for an evaluation, and the issues focused upon were her conduct, her relationship with her mother, and her depression. Her mother and other family members were involved; in Jean's opinion, her mother's participation was inadequate whereas that of other family members was excessive.

Jean was admitted to a psychiatric hospital on January 19, 1993, and was there for 1 month during the time period of interest. She reported the treatment as beneficial. The DCSF noted that payment was made by Medicaid and that treatment focused on her conduct, her relationship with her mother, and

her depression. Her mother attended five treatment sessions, but Jean believed that her mother should have been more involved. Her three brothers attended three treatment sessions; Jean also regarded their involvement as insufficient.

When asked about possible barriers to mental health treatment, Jean revealed that it was hard for her to talk to others or ask for help about a problem. She also said that she was concerned about what her family or friends would think about her seeking mental health services. These reservations, however, did not prevent her from seeking help and did not make a difference in actually getting services.

A follow-up CASA interview with Jean took place on March 15, 1994, when she was 14 years old. Jean responded positively to the use of services in numerous settings over the previous 3 months, seemingly precipitated by an event that had occurred 4 months ago. She and her mother had been arguing, her mother called the police, and Jean was charged with assaulting her mother. The following services were delivered or continued to be delivered during the primary period of the interview:

1. Placement in the custody of the Department of Social Services;
2. A stay of 2 weeks in the juvenile detention center (1 to 2 days of which fell in the primary period);
3. Assignment of a juvenile court counselor;
4. A brief emergency therapeutic foster placement;
5. A stay at a residential treatment center for 8 weeks;
6. Admittance to a medical inpatient unit for 3 days after an assault by two girls;
7. Residence for the last 12 days in a group home.

The associated DCSFs recorded the number and duration of sessions or length of stay in each setting, whether the respondent paid any of the cost, focus of treatment (which largely revolved around the charge that Jean assaulted her mother) and whether Jean felt the family's participation in her

treatment was sufficient. Jean also reported seeking advice from friends. In terms of barriers to service, Jean again reported certain reservations (previous negative experience with professionals, anticipated out of home placement), but these reservations did not interfere with receiving services, in part because of court involvement that put service use out of Jean's control.

This brief example illustrates how information on service use is coded on the CASA. It also demonstrates how the codings and interviewer notes can provide a detailed picture of the child's service use and can be used to assess patterns of service use longitudinally. Clearly, Jean's case is interesting in the number and variation of the services used. By speaking to Jean, the person most involved, the interviewer was able to obtain comprehensive information across sectors (e.g., education, juvenile justice, mental health), observe a pattern of care ranging from fairly low profile (school counselor) to quite restrictive (placement in a detention center), and determine that the cost of these treatments was largely publicly financed through Medicaid and other public expenditures (school system, social services, criminal justice).

Information from the CASA could be used by a variety of individuals interested in children's mental health (e.g., clinicians, researchers, policy makers). The CASA could aid in constructing a swift case history of a child's past and current involvement in the service system; provide information to understand patterns, sequences, and types of care; and link these data to information about the child's symptomatology, functioning, costs of care, and other relevant domains. Such information could be useful to understanding which services are being used by whom to make policy suggestions and decisions about further treatment, allocations, and priorities.

CONCLUSIONS

The CASA was developed to offer a systematic method of describing and quantifying mental health service use

by children and adolescents. Both child and parent versions have been developed to gauge use, frequency, onset, benefit, and focus of mental health services use by children ages 8 years to 18 years. Mental health services are broadly defined to refer to services supplied to identify, diagnose, or treat emotional, behavioral, or substance related problems. The measurement of mental health services is not limited to the traditional rubric of outpatient or inpatient/residential care delivered by mental health providers; rather, it includes mental health services delivered by a broad range of providers with responsibility for children such as health, education, social welfare, and criminal justice. It also indicates informal sources of support.

Current findings based on the CASA (Burns et al., 1995), have already helped to provide a more complete picture of youths' service use in the general population (Costello et al., 1995). Whereas 4% of the children reported services from the specialty mental health sector in the recent past, 16% received services from some source (education, juvenile justice, social service, general medical, informal) in the same period. One of the key findings from this use of the CASA was the large role played by the education sector in providing services for children's mental health problems.

A comprehensive effort to measure child and adolescent service use must classify a vast array of settings and provide data that can be studied separately or in aggregate (George, 1989). As the review of the case study indicates, a relatively short, easy-to-administer interview can yield substantial information. In use since 1990, the CASA has been applied in clinical and epidemiological studies and with diverse populations. It is easy to code, it works well in diverse ethnic and cultural groups, and it is the only self-report instrument of children's mental health service use with documented psychometric properties. The CASA provides both data on services that are not available from other sources and a feasible way to collect service use information on large samples of individuals.

The CASA does have some limitations. As discussed previously, reliability for school and informal services is substantially lower than for inpatient, outpatient, and other services. This may be due to several reasons: (a) these services often require less change in the routine of parent and child (for example, speaking with adult relatives or a school counselor in contrast to arranging for sessions with a psychiatrist or psychologist), and hence are less easily remembered or dated; (b) these services typically do not entail financial burdens or paperwork to qualify for financial support, also reducing the likelihood that they will be remembered or properly dated; and (c) these services may not be categorized by the parent or child as mental health services.

It is important to point out that alternative approaches to inventorying the mental health services received by a particular individual also are subject to limitations. For example, reliance on official data sources is even less likely to document the use of informal services, and instruments that do not allow the interviewer to probe the respondent's answers are less likely to address the problem that interactions in non-traditional mental health settings may be unreported even if mental health services are provided in these settings.

The CASA is an evolving instrument. These changes reflect experiences with using the instrument as well as updates that are necessary to adequately cover the changing service system for children and adolescents. The validity of self-report of mental health center services has been examined; thus, future research will include similar checks on the correspondence between self-report and agency report of service use in other sectors. The CASA also is being revised to collect service use information on younger children (i.e., younger than 8).

The development of the CASA has provided a step forward in standardizing and classifying mental health services that encompass all service sectors. The effectiveness of such services can be determined only by examining the impact of the entire ensemble of services received. Once data can be com-

prehensively described and quantified, we have the basis for policy makers and planners to evaluate these services in terms of patterns, quality, costs, and effectiveness of services.

About the Authors

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Authors' Notes

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3. Further information about the CASA, including coding rules, information packets, and training, is available from the first author.

Notes

1. Additional coding rules have been added to Figure 1 for this article.
2. When the respondent cannot pinpoint a date exactly, dating conventions that are taught for CASA administration come into play. In this case, the midpoint of the academic year that Jean was in fourth grade—or January 14, 1989—would be used.

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