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INTERNAL EVALUATION AT THE NIAGARA CHILD DEVELOPMENT CENTRE

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Abstract: The internal evaluation system at the Niagara Child Development Centre is described. Evaluation is viewed as part of the management system, providing information to assist in improving the quality of services. Evaluation is conducted at the case, program, and agency-wide level. Specific examples of evaluation activities are presented.

Résumé: Le système d'évaluation interne au Niagara Child Development Centre est décrit. L'évaluation fait partie du système de gestion et fournit des informations visant à l'amélioration de la qualité des services. L'évaluation est faite aux niveaux du cas, du programme et de l'agence. Des exemples spécifiques d'évaluation sont présentés.

There are a multitude of therapeutic approaches used to help children and families. Although there is some evidence that mental health treatment is more effective than no treatment for children (Casey & Berman, 1985) or families (Hazelrigg, Cooper, & Borduin, 1987), there is no agreement on which interventions are more effective for which clients, on which measures. Certainly, not all treatment strategies can be supported by the research literature. Rather, clinicians seem to select a particular treatment based on a judgement of what *should* work for the client, without a strong empirical basis for that judgement. In one study (Morrow-Bradley & Elliott, 1986), almost one-half of *American Psychological Association* respondents indicated that the most important source of information determining their choice of psychotherapy was their own experience with clients. Only 10% of respondents indicated that research activities were the primary source of information about the effectiveness of psychotherapy.

Kazdin (1986) assigned some of this isolation of clinical practice from research to methodological weaknesses in treatment outcome studies. Not only have there been some questions about the adequacy of research in this field, but also available research results may not be oriented to practitioners (Havelock, 1969), thus further limiting their utilization. Yet, Cohen (1981) argued that the technical limitations of mental health research have not been a major cause of its low utilization. He reported that research design flaws may be overlooked when the evaluation results are favorable to an organization but highlighted when the results are controversial.

A second area that has been identified as contributing to the gap between research and clinical practice is the process of conducting evaluation in clinical settings. The nature of consultation with clinicians and administrators about evaluation seems to affect the probability the results of that evaluation will be adopted (Tash & Stadler, 1982). The more that program evaluation is conducted in isolation from policy development and clinical decision-making in the organization, the less likely it is key individuals in the organization will trust the evaluation results and use them in modifying service delivery (Glaser & Backer, 1979).

Finally, the characteristics of the organization may determine the extent to which evaluative information is used. Utilization of evaluation can only be understood by looking at the broader forces affecting policy decisions in human service organizations. In making policy decisions, managers are faced with a number of competing sources of information and pressures (e.g., effect on staff, influences of the funding body). In the presence of this compelling information, managers may see evaluative results as carrying less weight than other pressures. Bigelow (1975) found that managers within American community mental health centres tend to rate evaluative data as having a low impact on planning decisions and staff input as the most influential.

Such apparent lack of impact of evaluative information in mental health raises questions about models for conducting internal evaluation in agencies. In the following pages we describe the model of program evaluation used at one children's mental health centre in Ontario.

THE NIAGARA CHILD DEVELOPMENT CENTRE

The Niagara Child Development Centre (NCDC) is a children's mental health centre located centrally in the Niagara region of Ontario (population about 300,000 people), serving children with emotional and learn-

ing problems from birth to 12 years of age and their families. At the time of this writing, four programs were offered at the centre: child and family counselling, where assessment and treatment intervention were provided on an outpatient basis; the day treatment program, where children attended a school-like treatment setting for approximately one year; parent connection program, which was a parent training and preschool program; and the community-based program, where social skills training was provided in community schools and consultation offered to local agencies.

Approximately five years prior to this writing, a concerted effort was made to develop a strategic planning system, annual planning cycle, and quality assurance model. This planning and quality assurance was seen as the responsibility of the senior management group, composed of the executive director, office manager, program administrator, supervising psychologist, supervising child care worker, and education officer. The group met bimonthly under the direction of the executive director.

Prior to the development of the quality assurance model, evaluation consisted mainly of two types of activities. The first was periodic evaluation reports on selected issues (e.g., gains of children while in day treatment). The results would be written up by one staff member and circulated within the agency. The second type of evaluation activity was case audits. A staff committee, under the direction of a senior manager, would evaluate a randomly selected case file. For the most part, staff viewed case audits as value laden and judgmental. There was an unclear connection between the case audits, the evaluative reports, and the clinical or management systems within the agency. As a result, few decisions affecting service delivery were made on the basis of the results of those evaluative activities.

FEATURES OF THE EVALUATION SYSTEM

Integral part of the management system. The quality assurance system at NCDC evolved slowly over a three-year span under the direction of the senior management group. The first step was to clearly articulate the role of evaluation in the agency and its role in the overall management system. It was this work as a group that enabled us to write this article. Evaluation was viewed as a necessary part of the clinical management system, providing feedback on the extent to which services in the agency operate as planned. Evaluation was included in the agency's mission statement, which read: "The mission of the Niagara Child Development Centre is . . . to routinely evaluate our impact and through such feed-

back, to keep our service adaptive to current needs in the Niagara Region."

Commitment to action. A further step in the development of the quality assurance system was to put into operation a way of (a) generating evaluative questions, (b) anticipating possible findings and the contingent actions to be taken on those findings, and (c) conducting ongoing review of evaluative activities and the follow-through of action to be taken.

As part of the annual planning cycle, program supervisors submitted an evaluation plan indicating the evaluative questions they wished to address over the course of the year. This planning did not preclude later deletion or addition of evaluative activities. The plan specified in writing the questions to be addressed, the hypothetical outcome of the evaluation, anticipated action, and responsibilities for follow-through. An example of this evaluation is shown in Table 1.

This process enabled management to commit to action before knowing the results of a planned evaluation. Regardless of whether the results confirmed or challenged what one hoped to find, some action was normally taken. The evaluation plan was reviewed by senior management every three months, and action to be taken was discussed.

This commitment to action was based on management's shared belief in accountability. We believed that in providing a professional service, an agency is implicitly entering into a social contract with clients, the community, and the funding body. The agency puts itself forth as able to help children and families, and it is important to be able to demonstrate that the services provided fulfill what is implicitly promised.

Utility focus. Program evaluation needs to produce results that have practical ramifications for the program under review. Ideally, program evaluation should result in action taken to affect service delivery. It is important to ensure that evaluation is useful and that the results have impact. Hence, nontechnical language was used in describing the proposed evaluation as well as in the later report of the results. The discussion tended to focus on the purpose of the evaluation and the implications of the results, and devote less space to methodology. Without this emphasis on utilization, evaluation would be viewed as an esoteric activity by management and staff, who typically do not have a strong research background.

Table 1
An Example of an Evaluation Plan

Research	Results	Implications	Action	By Whom - By When	Done
Follow-up on five day treatment children	1. Children referred to day treatment are distinguished from comparison children in the same class by lower academic achievement, more teacher requests, and more off-task behaviors 2. There is no difference in behavior problems 3. The changes in children are immediate (two weeks) after admission 4. Gains did not last after discharge	1. Train receiving teachers in techniques 2. Change the environment in day treatment to better prepare children for community schools 3. Changes in children are due to the social environment 4. Look at alternatives to day treatment 5. Need better preparation for discharge	1. Family/child support connections put in place while child is in day treatment 2. Improved treatment planning based on assessment of skills on admission	M.E. - December 31, 1987	Yes
Preschool integration study	1. Social skills training increased positive play of special needs in integrated settings 2. The changes were associated with increased teacher reinforcement rate 3. Treatment effects generalized over time and across settings	1. Evidence of an integration model where handicapped children are helped by the regular preschool 2. Evidence of an effective preschool social skills training for children 3. Promotes model of resource teacher as consultant	1. Disseminate research results both verbally and in writing 2. Consult to preschool on the implementation of the social skills program 3. Review the use of the social skills program in PC	1. J.H. - Write by May 15, 1988 2. Give presentation on request - J.H. 3. Present to CSC preschool committee M.E. - May 15, 1988 M.E. - May 15, 1988	Doing Doing

Evaluation at three levels. We conceptualized service delivery as occurring at three levels within an agency: case level, program level, and agency-wide level. We attempted to undertake evaluation at each of these levels and used the results to guide action that needed to be taken. At a case level, such data as pre/post changes on a parent rating scale or the results of a case audit served to inform the clinician and supervisor about the service delivery's impact for that client. At a program level, aggregate information about pre/post changes on client ratings and a program audit were undertaken to address more general questions about the extent to which a program was functioning adequately. These activities addressed issues that cut across the services provided to clients within the program. Finally, evaluation may be undertaken concerning agency-wide issues. An agency audit may address such questions as the extent to which the range of services delivered within the agency matches the needs and priorities within the community, the adequacy of resource allocation, and professional development within the agency.

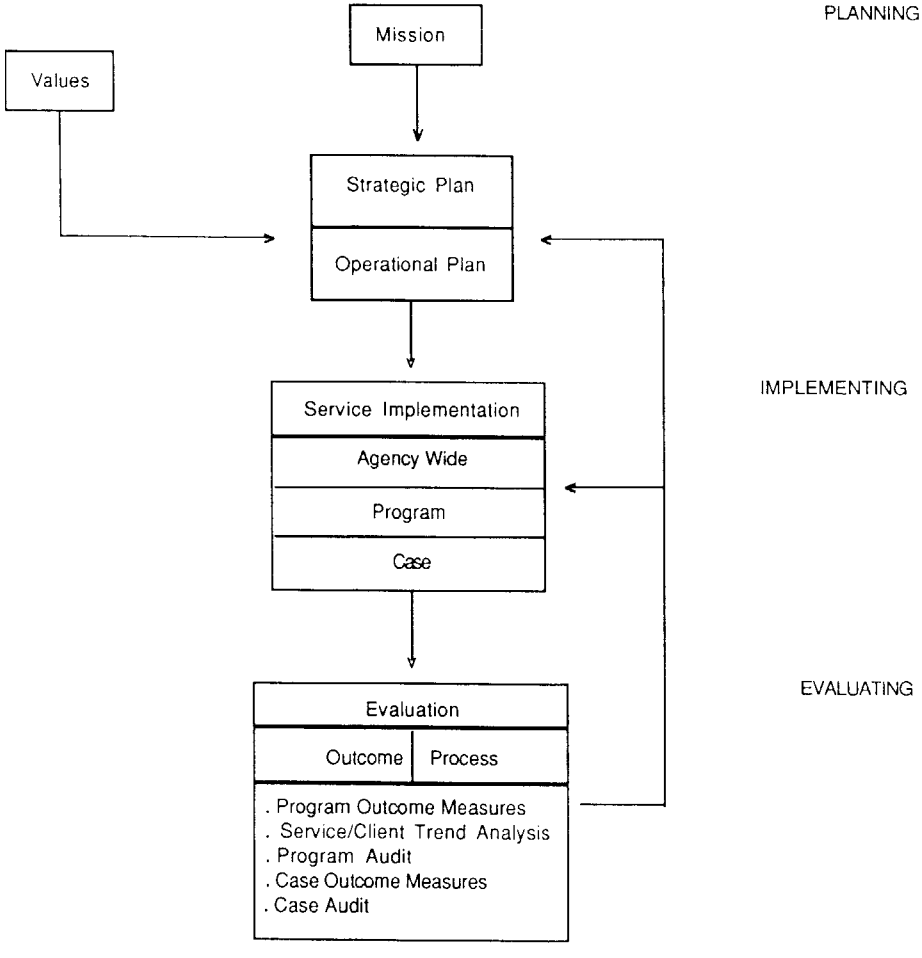
The evaluation at each level was designed to reflect a self-evaluation process where the key individual(s) responsible for the service takes charge of the evaluation. Other individuals served as a check that divergent perspectives were reflected and that there was follow-through on the evaluative information. In this way, the threat of the evaluative information was lessened and the results were more apt to be implemented.

The term *evaluation* in this paper refers to a process of collecting and analyzing data pertaining to features of a program with the intent of improving upon the program. This definition is consistent with those suggested by Smith and Glass (1987). It is important to point out that unequivocal distinctions between evaluation and quality assurance (Clemenhagen & Champagne, 1986) or program evaluation and research (Smith & Glass, 1987) may not be possible. The uniqueness of evaluation seems to lie within the intent of the investigator (Smith & Glass, 1987) and in the process of conducting the evaluation (Tash & Stadler, 1982). Evaluation is often seen as a part of a broader management system in which the evaluative information is used to help system managers make decisions about a specific program.

In formulating the evaluation model at the Niagara Child Development Centre, we were influenced by the evaluation theories of Smith and Glass (1987) and Sinclair and Frankel (1982). More specifically, the evaluation framework we used is depicted in Figure 1.

The Niagara Child Development Centre developed an overriding mission statement that described the purpose of the agency in general terms.

Figure 1
Evaluation Framework at the Niagara Child Development Centre



The mission statement, combined with an understanding of community needs and an examination of available resources, lead to the formulation of a "strategic," or long-term, plan. A more immediate or yearly operational plan fell out of the longer term plan. The operational plan was reflected in how services were implemented at a case level as well as the more aggregate levels of program and agency-wide concerns.

Evaluation was seen as a key component of this management system, providing information on the outcome and process of service implementation at the three levels of analysis. Coulton (1982) suggested that both process and outcome criteria are critical in examining the quality of services. The internal evaluation mechanism that provided information on the process and outcome of service is depicted in Figure 1.

EVALUATION ACTIVITIES

Service and Client Characteristics

Information was routinely collected about clients (e.g., age, presenting problem) and the nature of the service they received (e.g., length of stay) in all programs at the centre. This information was then periodically aggregated and reported to management. Trends in service delivery (e.g., the length of stay in the program is decreasing) were discussed four times a year, and adjustments to services were contemplated, based on any identified trends.

Outcome measures of treatment effectiveness were routinely administered to clients in each of our programs. The Achenbach Child Behavior Checklist (CBCL; Achenbach & Edelbrock, 1983) and the Parenting Stress Index (PSI; Abidin, 1983) were administered before and after treatment, and aggregated results were reported to management and staff.

Screening of Day Treatment Clients

Because day treatment was the most intrusive program that this agency provides, it was important to look at ways of screening clients into the program. This concern became more pressing when research evidence suggested that many of the clients in day treatment were not presenting problems much more severe than children receiving assessment only or outpatient treatment at the time (Hundert, Cassie, & Johnston, 1988). These results prompted the agency to examine ways of improving screening for the day treatment program to ensure that the more severe children would be selected.

A battery of measures were then given to determine whether the child being considered for day treatment was similar in presenting characteristics to children previously admitted to that program. A discriminate function analysis was calculated on collected results of the CBCL and PSI for day treatment and child and family counseling children. Weightings of variables were determined that allowed one to predict the likelihood that a newly referred child was similar to previously admitted day treatment children. Other measures in addition to these two tests included teacher completion of the CBCL, direct observation of the child's behavior in the community school in comparison to the behavior of two randomly selected peers in the same classroom, and an academic achievement test. All of this information was entered into a computer program that summarized the results in narrative form and provided a printout for the day treatment team conducting the assessment. The computer printout also indicated the probability of the referred child's similarity to children previously admitted to the program, on the discriminate function analysis weightings. Despite the number of measures taken, it was stressed to the day treatment team that the final decision must be based on their overall impression, not the numbers presented.

Specific Targeted Evaluations

In addition to the routine data collection already described, from time to time specific questions are generated for evaluation. These are typically questions that management and staff are examining and wish more information on which to base program decisions. For instance, there was some concern about how to assist child and family counseling clients who were waiting four to eight weeks for service. A study was undertaken in which clients on the waiting list were randomly assigned to three groups. The first group received an invitation to attend a parent support program, the second group received a telephone call from the therapist asking how things have been for them and the child, and the third group received no contact. Pre/post changes on the sense of competence subscale from the Parenting Stress Index were used as an outcome measure, as well as parent rating of coping during the waiting period. The results indicated a lack of difference across the three groups, and therefore no intervention was introduced.

Audits

There were two types of audits conducted at the Niagara Child Development Centre. One was a case self-audit that dealt with the quality of service provided to an individual client. This audit procedure consisted

of a list of questions tapping such areas as file completion, manner with clients, and consistency between goal setting and assessment results. In the day treatment program, a child was selected at random from active cases in the program. The specific staff involved with that child then answered a list of questions to evaluate their service adequacy. Also present in the meeting were the supervisor of the program and staff from other day treatment teams, who had read the case file and served as a check about the case. The purpose of this self-audit procedure was to generate a list of strengths and areas of development for that team. At least three areas requiring development and three areas of strength were identified from a discussion of the audit results, specific action was identified, and responsibility was assigned to follow-through under the direction of the supervisor of the day treatment program.

A similar model was used to conduct program audits: Staff within a program evaluate the functioning of that program against a list of questions dealing with such topics as the extent to which clients are treated with respect. From that discussion, a list of strengths and areas needing to be developed was generated.

The supervisor of the program and two staff then met to discuss the audit results with individuals from other local agencies, lay individuals, board members, and other management staff. In addition, the results of consumer feedback from a discharged client and a person who referred children to the program were presented at the meeting. After input from the outside people has been received, a specific action plan was generated based on areas of strengths and areas needing to be developed, and responsibility for action is assigned to the supervisor of the program.

Research

The final type of evaluation conducted periodically at NCDC was experimental studies, which addressed more general questions that may be of broader interest and were conducted in a more comprehensive manner than program evaluation. Two research grants had been received. One research grant investigated the relative effectiveness of alternative programs for children with emotional problems: day treatment, behavioral adjustment classes in the school, assessment only, and the outpatient program. The results of this research have been published (see Hundert, Cassie, & Johnston, 1988). A second research grant was obtained to examine a class-wide social skills program for the integration of handicapped preschoolers.

The formation of advisory groups on implementation of the research and dissemination of the results provides us with an opportunity to discuss important service delivery issues with local service providers and other children's mental health centres.

CHALLENGES AND OBSTACLES

There remained a number of challenges and obstacles to our internal evaluation. One such challenge was to increase staff's use of evaluative information. Staff may not have seen the relevance of much of the evaluative information that was collected at the centre, yet it was important that they made use of the available evaluation results and research literature so that they could have input into any ramification for service delivery. Moreover, evaluation provided important feedback to staff about the strengths of their service. The cause of some of this lack of interest may have been that many evaluation activities did not assist a clinician in his/her work with a specific client. We found that making evaluative information more relevant (such as by providing a computer-generated narrative of parent rating results) increased staff utilization of that information.

A second challenge was the need to develop specific standards of quality against which evaluation results were judged. In conducting quality assurance, one needs to specify standards that enable one to determine whether performance levels are acceptable (e.g., whether the current mean length of stay is beyond a targeted criterion, or whether the percentage of agency objectives achieved matches anticipated accomplishments). Discrepancies between results and set standards suggest that adjustments in planning are needed. Without such specified standards of quality, evaluation results may be difficult to interpret.

Finally, we did not have a mechanism to evaluate our evaluation. The same principles that apply to evaluation of services may need to be applied to the quality assurance activities themselves. Such questions as the extent to which the evaluation conducted at the Niagara Child Development Centre led to improved clinical and management decision-making can, and perhaps should, be addressed in some objective manner.

SUMMARY

Conducting evaluation within a children's mental health centre may be a risky undertaking. As previously discussed, evaluation in human services may be met with apprehension, because the results may not be confirming. As a result, program evaluation may require a number of structures to ensure its viability within a children's mental centre.

Agency Culture Supporting Evaluation

It is important that the agency be permeated by an atmosphere of acceptance. Developing such an atmosphere takes time and positive experiences where evaluation has been seen as useful. Part of the development of such a "culture" may be the separation of personal needs for acceptance and confirmation, where evaluation may be seen as judgmental, from a professional commitment to common agency goals, where evaluation provides a sense of direction (Levy, 1980).

Resources for Evaluation

A considerable amount of staff is needed to conduct and report an evaluation. It is important to secure trained personnel with sufficient time to conduct the evaluation. We had the services of a program evaluation technician who has an undergraduate degree in psychology and worked at the centre two days a week. That individual acted as a consultant to all the programs and attempted to facilitate data collection. The program evaluation technician did not generate the evaluative questions or address the implications. These were management responsibilities, where management attempts to incorporate evaluative information within its overall planning cycle.

An Articulated Model of How Evaluation Fits within the Management System

It seems also to be important to have written policies and a clear understanding about how evaluation fits within the management system of an agency. Here, a policy on quality assurance indicating what type of information is collected, and how that information fits within the planning cycle of an agency, is important. This enables the evaluation to be seen as an integral part of the management system and provides feedback on the goals and objectives to be met. Such policy development requires some work at the management level to conceptualize quality assurance and program evaluation.

Procedures for Implementation

In addition to development of a conceptual model of evaluation, clear procedures about how evaluative questions are to be generated and a clear mechanism for follow-through on the results are needed. There may be a definite advantage to incorporating program evaluation within the agency's annual planning cycle.

Networking

There may not be many staff within the organization with interests similar to those of program evaluators. The need to affiliate with other program evaluators may be important to keep abreast of new developments as well as to discuss evaluation issues. Contact with university researchers or membership in a committee or association of individuals interested in program evaluation may provide a source of support to the program evaluator.

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REFERENCES

Abidin, R.R. (1983). *Parenting Stress Index.* Charlotteville, VA: Pediatric Psychology Press.

Achenbach, T.M., & Edelbrock, C. (1983). *Manual for the Child Behavior Checklist.* Burlington, VT: University of Vermont.

Bigelow, D.A. (1975). The impact of therapeutic effectiveness data on community mental health centre management: The systems evaluation project. *Community Mental Health Journal, 11,* 64–73.

Casey, R.J., & Berman, J.S. (1985). The outcome of psychotherapy with children. *Psychological Bulletin, 98,* 388–400.

Clemenhagen, C., & Champagne, F. (1986). Quality assurance as part of program evaluation: Guidelines for managers and department heads. *Quality Review Bulletin, 12,* 383–387.

Cohen, L.H. (1981). Factors affecting the utilization of mental health education research findings. *Professional Psychology, 26*, 357–364.

Coulton, C.J. (1982). Quality assurance for social service programs: Lessons from health care. *Social Work, 27*(5), 397–402.

Glaser, E.M., & Backer, T.E. (1979). Organization development in mental health services. *Administration in Mental Health, 6*, 195–215.

Havelock, R.G. (1969). *Planning for innovation through the dissemination and utilization of knowledge*. Ann Arbor, MI: Institute for Social Research, University of Michigan.

Hazelrigg, M.D., Cooper, H.M., & Borduin, C.M. (1987). Evaluating the effectiveness of family therapies: An integrative review and analysis. *Psychological Bulletin, 101*, 428–442.

Hundert, J., Cassie, J.R.B., & Johnston, N. (1988). Characteristics of emotionally disturbed children referred to day treatment, special class, outpatient and assessment services. *Journal of Clinical Child Psychology, 17*, 121–130.

Kazdin, A.E. (1986). Comparative outcome studies of psychotherapy: Methodological issues and strategies. *Journal of Consulting and Clinical Psychology, 54*(1), 94–105.

Levy, C.S. (1980). Personal motivation as a criterion in evaluating social work practice. *Social Casework, 61*, 541–547.

Morrow-Bradley, C., & Elliott, R. (1986). Utilization of psychotherapy research by practising psychotherapists. *American Psychologist, 41*(2), 188–197.

Sinclair, C., & Frankel, M. (1982). The effect of quality assurance activities on the quality of mental health services. *Quality Review Bulletin, 8*(7), 7–15.

Smith, M.L., & Glass, G.V. (1987). *Research and evaluation in education and the social sciences*, Englewood Cliffs, NJ: Prentice-Hall.

Tash, W.R., & Stadler, G.J. (1982). Enhancing the utilization of evaluation findings. *Community Mental Health Journal, 18*, 180–189.