

## **Project CATCh: A Model of Care Coordination and Service Delivery for Children**

**Elizabeth Wack, M.A.**

University of Central Florida, Department of Psychology

**Heidi Liss Radunovich, Ph.D.**

University of Florida, Department of Family, Youth & Community Sciences

**Brenda Wiens, Ph.D.**

National Rural Behavioral Health Center, University of Florida,  
Department of Clinical and Health Psychology

### **ABSTRACT**

*The objective of this study was to determine the satisfaction of those involved in Project CATCh, and specifically a multi-disciplinary, multi-agency case review and services planning consortium designed to evaluate at-risk children and coordinate social service delivery in a rural county. Data for the study were collected from three entities involved with Project CATCh: school guidance counselors, agency members, and parents/guardians. This study investigated whether these three entities were satisfied with procedures and services. Results suggest that this model is perceived to be effective in a rural, school-based context, and those involved are generally satisfied. Based on feedback, suggestions are made for ways to improve the model.*

### **INTRODUCTION**

It has been established that up to 20% of youth under age 20 have emotional and behavioral disorders warranting intervention, and less than one in three children in need actually receive services (U.S. Public Health Service, 2000). The statistics for rural areas are even worse: 75% of children who need mental health services do not receive them, and less than 30% of those that receive care actually receive adequate treatment (U.S. Center for Mental Health Services, 1999). Clearly, there is a great deficiency in the availability and quality of mental health services for children, and this need is especially amplified in rural communities.

There has been considerable debate among mental health experts regarding the best model of care to provide services for children. In the past, community mental health systems often failed to integrate services they provided with other agencies that could have potentially enhanced treatment (Oynett & Ford, 1996). The lack of collaboration sometimes causes clients' needs to be overlooked, or allows for clients to become trapped in an approach that is not most conducive for changing or improving their situation (Knitzer, 1982).

One model meant to combat the singularity of traditional service provision is a multi-agency, multi-disciplinary team model. A multi-agency team is composed of a variety of organizations from the community and is a group that draws its resources from the cooperation of multiple entities. A multi-disciplinary team is a group comprised of individuals from various fields, orientations, or professions that may or may not work for the same entity. Professionals report that multi-agency service programs ease the task of coordinating information about children and tracking their progress across time (Crowsen & Boyd, 1993). While multi-disciplinary teams have been used often in urban areas, only recently has this model been considered in a rural setting (Kuder, Gairola, & Hamilton, 2001). The implementation and evaluation of both a multi-agency, multi-disciplinary model is rarely discussed in the literature, and when it is, specific challenges and advantages to this model of care are evident, especially for use in a rural context.

While there is much descriptive research on purely multi-disciplinary teamwork, there are fewer empirical studies documenting an investigation of the use of multi-disciplinary, multi-agency teams in mental health settings. However, the literature reveals that multi-disciplinary, multi-agency teams have been found to be effective in preliminary studies and that this type of service provision is especially useful in a rural setting as it alleviates some cost and facilitates inter-agency coordination (Ciaran, 2003; Amundson, 2001; Oldenettel & Wordes, 2000).

### **The Need for Evaluation**

Multi-disciplinary and multi-agency teams vary widely, dependent upon context and goals, and are rarely integrated. Evaluative multi-disciplinary mental health team research is in its early stages, yet has proven to be effective in identifying problematic elements and possible solutions (Moss, 1994). In order to understand the true nature of multi-disciplinary teams, it has been suggested that they be viewed as unique, and should be evaluated separately, on a case-by-case basis, rather than compared to a given model. Multi-disciplinary teams are used broadly and in many different contexts that may produce results specific to that context. Regardless, the purported benefit of this model of care, agreed upon within the literature, is that a multi-disciplinary team can provide targeted and coordinated care, and improve access to a wide range of services for individuals with a variety of problems (Cherven & Brady, 2003). However, it has been argued that such systems of care are accepted as the standard for service delivery without an appropriate critical analysis (Galvin & McCarthy, 1994). Thus, the literature emphasizes that reaching the ideals multi-disciplinary teams are seeking to attain is dependent upon the overall perceptions of efficacy and the satisfaction of those entities involved in or affected by the process (Oynett & Ford, 1996).

The literature reveals that the implementation of both a multi-agency and multi-disciplinary model is less frequent. It is less common to find a study outlining the benefits of a multi-agency approach to service provision. Although the multi-disciplinary, multi-agency team has been applied in a rural context (Amundson, 2001; Kuder, Gairola, & Hamilton, 2001), it has yet to be studied when implemented to assess, plan, and provide services for at-risk children and families.

The current study sought to address two issues deficient in the literature by evaluating a rural, multi-disciplinary and multi-agency team and surveying all components of the model: the referrers, the team members, and the consumers. In this way, the picture of the particular model evaluated took into account its rural population and the limitations and benefits therein.

### **The Prevention Management Team**

The literature reveals little about the utilization of a multi-disciplinary, multi-agency team in providing services to children and families in the school-linked setting, and thus it is important to evaluate this model in such a context. The objective of the current study was to determine the satisfaction and perceptions of efficacy of those involved in a rural, school-linked model of providing mental health care and other services to children and families that is part of Project CATCh. CATCh is a large, federally funded project conducted by a rural Florida school system in partnership with a major state university in Florida. This model of care includes the Prevention Management Team (PMT): a multi-disciplinary, multi-agency case review and services planning consortium designed to assess at-risk children and coordinate social service delivery in a rural county in Florida.

The PMT was created in an effort to develop coordinated treatment efforts for troubled youth and their families, and as a way to pool community resources to provide a comprehensive service-planning structure in an area otherwise lacking in behavioral and social services. The PMT is made up of representatives from a wide array of community agencies. Meetings are generally no longer than one hour and take place bi-monthly.

Guidance counselors refer students with emotional or behavioral problems to have a focused evaluation through Project CATCh. After the assessment, more complex cases requiring the involvement of multiple agencies are referred to the PMT, where the case is discussed among community agency members in order to develop a plan of action for the child and family. Less serious cases are quickly staffed into services through a “fast track” meeting with only the parent(s). If it is decided that a case will go to the PMT, parents, teachers, guidance counselors, and other existing service providers are invited to attend the PMT meeting to discuss concerns or suggestions with agency members. It is during these meetings that agency members pool all collected information about the child and family, share suggestions about the kinds of services that would benefit the child and family, and facilitate entry into services.

Overall, it was hypothesized that this model would be perceived as a beneficial and effective way to provide services to children and families in a school and community context. First, it was hypothesized that participating agency members would believe that the PMT is a worthwhile venture that enhances the service planning process by providing a larger variety of treatment options to clients and stimulating collaboration among community agencies. This prediction was consistent with the results of previous studies that examined provider perspectives of team value (English, Jones, & Patrick, 2003; Dobson, Dodsworth, & Miller, 2000)

Second, it was hypothesized that parents would believe that their children were recommended the best treatment available in Columbia County, and that their children benefited from their involvement in Project CATCh. Due to the particular setting in which the project is being implemented, parents are a part of the service provision process. Parents are directly affected by the procedures and services provided to them and their children, and they act as service users or consumers. Therefore, the study sought to take into account the perceptions of parents, a facet of multidisciplinary evaluation research that previously had been overlooked or highly deficient.

Third, it was hypothesized that guidance counselors would believe that the students they referred were given the most appropriate services, and that they would feel that they had an active, contributing role in the process. As the main source of referrals for the CATCh program, it was deemed important to assess guidance counselor knowledge about the program and satisfaction with procedures and outcomes.

## **METHOD**

The sample is based on those individuals involved in the CATCh process since its inception in May 2003 through March 2005. The catchment area is a rural county in Florida that has approximately 10,000 school-aged children. During this time period, 138 cases were assessed. The participants of the study were drawn from the three different entities affected by the model: agency members, parents, and guidance counselors. Each component is described separately in order to clarify and distinguish among the various methodologies and procedures unique to each evaluation.

### **Evaluation One: Agency Members**

#### ***Participants***

A total of 12 agency members were interviewed, representing all agencies that regularly send representatives to the PMT. Five agency members were male and the remaining seven were female. All agency members were Caucasian.

#### ***Procedures and Measure***

A sign-up sheet for an interview time was passed out to PMT agency members at two agency meetings. Members who were not in attendance at either meeting were contacted by phone to set up an interview time. All agency members agreed to participate in this evaluation. Agency members were contacted by phone at the time they indicated on the sign up sheet and were assured of interview confidentiality prior to the interview. The interviews were guided and semi-structured, geared toward investigating members' thoughts concerning several elements of the PMT. The interviews contained four quantitative components which were consistent with guidance counselor and parent surveys in order to make comparisons. Each quantitative item was scaled from one to five, a score of one signifying that the participant strongly disagreed with the statement and a score of five signifying that the participant strongly agreed with the statement.

The investigator kept ongoing notes during the interview and later organized the data into general themes for clarity and analysis.

### **Evaluation Two: Parents**

#### ***Participants***

A total of 36 parents whose children (N=39) were evaluated through Project CATCh were surveyed. The children ranged in age from 5 to 16, and the mean age of the children was 10.63. Approximately 77% of those children were male, which is consistent with the demographic distribution of the population of children referred to Project CATCh. Information on ethnicity was not available.

#### ***Procedures and Measure***

Parents completed separate surveys expressly created for the purpose of evaluating the CATCh procedures and the PMT from the perspective of a service user. The questions were designed by a group of researchers from a state university in Florida. The parent survey consisted of 19 scaled, quantitative questions and one qualitative component in which they were asked to provide any additional thoughts they had about CATCh services and the Prevention Management Team. Each quantitative survey item was scaled from one to seven, a score of one signifying that the participant strongly disagreed with the statement and a score of seven signifying that the participant strongly agreed with the statement. In addition, demographic questions were solicited: child's age, gender, and school name.

Parents were contacted through their interaction with CATCh counselors. After recommendations were made for services, parents were given the option to complete the survey. If the child had been referred to the PMT, it was noted on the form. It is notable that the evaluation took place before the implementation of services. Once the survey was completed, the material was returned in a sealed envelope to the researchers.

### **Evaluation Three: Guidance Counselors**

#### ***Participants***

The total number of guidance counselors who returned surveys was 18 (the total number of guidance counselors in the county), six from the elementary school level, three from the middle school level, three from the high school level, and six who did not indicate their school level. At the time of this survey, all guidance counselors in the county were female.

#### ***Procedures and Measure***

Guidance counselors received their surveys through the county school system public mail. The guidance counselor survey consisted of 15 scaled, quantitative items and 3 qualitative items in which they were encouraged to provide opinions they had about the PMT. Each quantitative survey item was scaled from one to seven, a score of one signifying that the participant strongly

disagreed with the statement and a score of seven signifying that the participant strongly agreed with the statement. The questions targeted potential difficulties in the PMT referral process as well as overall inquiries regarding satisfaction and utility of the model. Additionally, guidance counselors were asked about the number of students they had referred over the 18-month period and the type of school, whether elementary, middle, or high school. They completed the surveys and returned them via the same school mail system used for delivery, and results arrived to the researchers' mailbox, located in the school board building.

## **RESULTS**

### **Evaluation One**

It was hypothesized that agency members would believe that the PMT is a worthwhile model for service-planning that stimulates community collaboration. To test this hypothesis, each of the four questions was analyzed to measure the level of respondents' agreement with the question and the percentage of respondents who agreed or disagreed with the given statement. The results of the frequency test on the survey question, "The PMT is useful for planning appropriate services for children" indicated that the majority (75%) of agency members strongly agreed with this statement while the remaining participants agreed with (8.3%) or felt neutral (16.7%) about this question. A small portion (16.7%) of agency members felt that the PMT process was inefficient, while the majority (83.3%) believed that it was efficient.

Once coded, qualitative data indicated that agency members had generally positive perceptions of the PMT. Analysis of the data revealed that 54.5 % of comments made by those surveyed were positive in nature. The most common comments were in regard to the PMT's facilitation of community agency collaboration and the high level of comfort members felt when sharing information at the PMT. However, 29.5% of comments were negative. Negative comments mainly cited the lack of follow-up information about children previously serviced by the PMT, and the time lag for service provision as the main causes of dissatisfaction. Additionally, 16.0% of comments were coded as neutral and consisted mainly of recommendations that were outside of the scope of the current model of care, but can be used to plan future models (e.g., need for more after-school care, better school-safety tactics).

### **Evaluation Two**

It was hypothesized that those parents whose children were evaluated by Project CATCH would indicate high levels of satisfaction with the procedures and service-planning process. It is notable that not all parents had experience at the PMT. Due to some administrative confusion, information on whether or not the service provided was through the PMT or direct referral to services through the "fast track" was limited (it was only indicated on 15 of the 36 surveys). Of those parent surveys with information about type of staffing available, 57% had children who were staffed at a PMT meeting, whereas 43% had children who were staffed directly into

services. First, results of the overall group of parents will be detailed, then a comparison between those who received the PMT versus those who did not will be provided.

The majority of parents who completed the survey indicated that they had a positive experience with the CATCh program. A large majority reported that the CATCh program was fully explained to them (94.4%), they believed that their child could benefit from the program (94.4%), they felt listened to during the evaluation (94.4%), and felt comfortable (100%) and listened to (100%) during the recommendations meeting. Most also felt that participating in the process had not been too difficult (97.1%). Approximately 16.7% of respondents indicated that they had to wait too long to be evaluated, and 13.9% felt that attending the evaluation was inconvenient. Some parents (17.1%) were unsure about how well they were kept informed during the evaluation and staffing process, and some were unsure about whether confidentiality was a concern (17.1% unsure; 2.9% had mild concerns). Interestingly, correlations indicate that those parents who did not feel that their child needed to participate in the CATCh program were more likely to report less comfort with speaking at the recommendations meeting ( $r = -.379$ ;  $p < .05$ ), felt less listened to during the recommendations meeting ( $r = -.409$ ;  $p < .05$ ), expressed more concerns about confidentiality ( $r = .363$ ;  $p < .05$ ), and were more likely to view the process as inconvenient ( $r = -.510$ ;  $p < .01$ ). Those parents who reported that they had been kept informed during the process were more likely to report that the process had been explained to them ( $r = .486$ ;  $p < .01$ ), were less likely to indicate that they had to wait too long for the evaluation ( $r = -.402$ ;  $p < .05$ ), and were less likely to view the assessment as inconvenient ( $r = -.427$ ;  $p < .05$ ).

Due to a miscommunication regarding survey administration, information about participation in the PMT process was limited: only 15 of the surveys indicated whether the recommendations had been done during a PMT meeting versus a “fast track” meeting, and of those, only 8 had participated in the PMT. With such small cell sizes, it is not surprising that the two groups showed few significant differences. However, there were two questions on which the groups varied significantly. When asked whether the CATCh program had been fully explained to them, parents who attended the full PMT reported more agreement than those who attended a “fast track” meeting ( $t(13) = 2.35$ ;  $p < .05$ ), although mean agreement was high for both groups. Also, those parents who attended the full PMT meeting were more likely to agree that they felt as though they had been kept informed regarding the evaluation and treatment process ( $t(13) = 2.18$ ;  $p < .05$ ), with both groups again showing high levels of agreement. It is unclear why there were differences between these two groups, but one possibility is that the longer PMT process allowed parents to obtain more information along the way. It is notable that the groups did not significantly differ in their ratings of wait time, despite the fact that the average wait time for a PMT meeting took significantly longer than for a “fast track” meeting.

### **Evaluation Three**

It was hypothesized that guidance counselors would feel satisfied with the CATCh process, and that the students they referred to CATCh received appropriate services. A test of frequency was conducted on questions related to feelings about the model’s convenience, satisfaction with time between referrals and service provision, overall usefulness of the model, level of respect felt, efficiency of service planning, and satisfaction with the final referral plan. Approximately 89%

of guidance counselors ( $N=16$ ) indicated that they had made a referral to Project CATCh during the 18-month period. Two guidance counselors, one from an elementary school and one from a high school, indicated that they had not referred any students to Project CATCh. The elementary counselor indicated that the reason she did not refer students was due to a concern about the time lag for services, but otherwise did not answer further questions about the model. The high school counselor did not provide any feedback on the model. It is notable that, although all guidance counselors responded to the survey, not all guidance counselors completed all questions.

Of the 16 guidance counselors who referred students to CATCh, the feedback on quantitative questions was generally positive. Most felt that they could adequately explain the CATCh program to parents (87.4%), and found it easy to obtain required parent (81.4%) and teacher (81.3%) information. One area in which guidance counselors were less positive was in their rating of the time between referral and the meeting for service planning: of the 12 guidance counselors who responded to this item, nearly 42% ( $N=5$ ) indicated dissatisfaction with the amount of time it took between referral and service planning.

Of the 11 guidance counselors who provided written feedback, more than 54% ( $N=6$ ) expressed concern about the lag time between referral and implementation of services. Other concerns raised were frustration with the difficulties of getting parents to follow-through with the procedures and process (45%), a need for more counseling services (18%), a desire for more feedback to guidance counselors needed regarding case status (18%), and a need for more in-school counseling services (18%). Only 2 of the responding guidance counselors (18%) indicated that the model worked well and did not require any changes.

## **DISCUSSION**

The purpose of this study was to determine whether or not the CATCh model of service provision, and particularly the PMT, was perceived as a beneficial and efficient way to provide needed services to children and families in a rural community. Overall, results suggest that the three primary entities involved in CATCh are generally satisfied with the model, indicating that it is perceived as useful in this rural school setting. However, it is notable that there was a minority within each group who expressed dissatisfaction with the lag time between referral to CATCh and service planning. This concern was most strongly noted by guidance counselors.

The first hypothesis was supported by data, and suggested that agency members involved in the PMT believed that CATCh is a worthwhile model. A frequency test revealed that the majority of agency members strongly agreed that the PMT was useful for service planning. Further analysis of the qualitative data indicated that agency members had positive opinions regarding the time commitment, the potential to help children in the community, the quality of information provided at the meetings, and the meeting being an effective way to enhance collaboration between the various agencies represented by the PMT. However, there were some comments by members of the PMT indicating that the meeting was not the most efficient way to provide services, that there was too much delay in service provision, and that attending the meeting was so inconvenient that they did not attend anymore. A few team members indicated that they often

felt as though they had little to contribute at the meetings, so did not attend regularly. Perceptions of team members suggest that the multi-disciplinary, multi-agency approach undertaken by the PMT is generally satisfactory to those involved, but improvements could be made in order to make the meetings more relevant to all, and perhaps changes could be made in order to use the time more efficiently. For example, perhaps only those community agencies that are relevant to the case at hand should be invited to a particular PMT meeting, rather than inviting every agency to every meeting. This would also limit the number of people hearing the details of a particular case, and enhance confidentiality for the child and family, a condition whose importance can't be underestimated in a small, rural community. It is notable, though, that the benefits of having multiple agencies involved in case planning went beyond service planning for a single case: agency members noted that they enjoyed hearing about what was happening at other agencies, building relationship with other community agencies, and staying current with services available at other agencies. This enhanced each agency's ability to appropriately refer other cases when appropriate.

The second survey revealed that most parents who had contact with CATCh were generally satisfied with many elements. Results indicated that parents were invited to attend meetings, and when they did, they felt comfortable sharing their opinions, and felt that the PMT or "fast track" counselors listened to their concerns. Parents reported that accessing services through CATCh was neither too hard nor too inconvenient. These sentiments help to explain the overwhelming satisfaction parents felt about the CATCh process in general. Two of the surveyed parents indicated dissatisfaction with the process. The concerns seemed to revolve around disagreements between parents and school personnel regarding the reasons for problems with the child. Dissatisfied parents tended to feel as though their children were not in need of services in the first place, so going through the process was a waste of time. It will be important in the future to emphasize to parents the voluntary nature of the program in order to avoid a sense of coercion.

The third hypothesis also was supported by the data, suggesting that guidance counselors felt that they were confident that the students they referred were receiving appropriate services. A high percentage of those guidance counselors surveyed strongly agreed that the PMT meeting was convenient to attend, that the PMT was useful and efficient, that there was a high level of respectfulness among all parties involved, and that the action plan agreed upon for the child was satisfactory. However, an issue that could be improved on is the time between referrals and the PMT meeting. Ways to streamline the process to allow for faster review of cases and faster entry into services should be examined. For example, rather than a long evaluation conducted by clinicians, it may be more efficient to use a briefer survey that focuses on service planning needs. Such surveys could be conducted by guidance counselors or other school personnel. Further, the data suggested that guidance counselors would be more likely to refer students as long as they felt that they could satisfactorily explain the process to parents and did not perceive the process as too involved, complicated or time-consuming. Additionally, an integral component of obtaining future referrals is the perception that the PMT is useful. Thus, the data indicated that if guidance counselors fail to see the PMT as useful, there would likely be a cessation in referrals, so it will be important to provide feedback to guidance counselors regarding the outcome of student service placements so that they may see the value of the process.

## CONCLUSIONS

Overall results suggest that the CATCh model of service provision, and particularly the PMT model, is a good solution to improve service delivery in a rural community. Although feedback from referrers, consumers, and agency participants was generally positive, it is notable that some concerns were raised. One concern raised by survey participants in all groups was that the evaluation process was time-consuming, which could be burdensome to families, and could also lead to delays in receiving services. Furthermore, some agency members did not feel that the PMT meetings were a good use of their time, or that they did not have much to add to the meetings. Finally, some parents reported that they did not believe that evaluation and service planning was necessary for their children. In order to enhance the effectiveness of this model, it will be important to streamline the evaluation process to quicken entry into services, involve only those agency members who are directly relevant to a case in the PMT meeting, provide feedback regarding case outcome to agency members and referring guidance counselors, and insure that parents of referred children are in agreement that the evaluation and service provision is needed for their children. Finally, it is likely that adaptations to this model may need to be made in order to meet the needs of an individual community, but the implementation of a centralized referral system that is school-based, includes all community service providers, and utilizes a multi-disciplinary team approach should enhance service delivery to rural children.

## REFERENCES

- Amundson, B. (2001). America's rural communities as crucibles for clinical reform: Establishing collaborative care teams in rural communities. *Journal of Families, Systems & Health, 19*, 13-23.
- Chenven, M. & Brady, B. (2003). Collaboration across disciplines and among agencies within systems of care. In A. Pumariega & N. Winters, (Eds.), *The handbook of child and adolescent systems of care: The new community psychiatry* (pp. 66-81). California: Josey-Bass.
- Ciaran, K. (2003). The mental health needs of looked after children: An integrated multi-agency model of care. *Journal of Clinical Child Psychology and Psychiatry, 8*, 323-335.
- Crowsen, R.L. & Boyd, W.L. (1993). Coordinated services for children: Designing arks for storms and seas unknown. *American Journal of Education, 101*, 140-179.
- Dobson, S., Dodsworth, S. & Miller, M. (2000). Problem solving in small multidisciplinary teams: a means of improving the quality of the communication environment for people with profound learning disability. *British Journal of Learning Disabilities, 28*, 25-30.
- English, K., Jones, L., Patrick, D. (2003). Protecting society from sexually dangerous offenders: Law, justice, and therapy. In B. Winick & J. LaFond (Eds.). *Law and public policy* (pp. 265-279). Washington, DC: American Psychological Association.

Galvin, S. & McCarthy, S. (1994). Multi-disciplinary community teams: Clinging to the wreckage. *Journal of Mental Health, 3*, 157-167.

Knitzer, J. (1982). *Unclaimed children*. Washington, DC: Children's Defense Fund.

Kuder, L., Gairola, G., & Hamilton, C. (2001). Development of rural interdisciplinary geriatrics teams. *Gerontology & Geriatrics Education, 21*, 65-79.

Moss, R. (1994). Community mental health teams: A developing culture. *Journal of Mental Health, 3*, 167-175.

Oldenettel, D. & Wordes, M. (2000). *The Community Assessment Center Concept*. Washington, DC: Office of Juvenile Justice and Delinquency. (OJJDP Bulletin No. NCJ 178942)

Oynett, S. & Ford, R. (1996). Multidisciplinary community teams: Where is the wreckage? *Journal of Mental Health, 5*, 47-56.

U.S. Center for Mental Health Services, Mental Health, United States, 1998 (SMA99-3285). Washington, D.C.: 1999.

U.S. Public Health Service, Report of the Surgeon General's Conference on Children's Mental Health: A National Action Agenda. Washington, DC: 2000