This executive summary presents evaluation findings and conclusions from a 4-year study of a demonstration project focusing on a school-based and school-linked interprofessional case management approach to dropout prevention. The project, funded by the U.S. Department of Education, was administered by the Center for the Study and Teaching of At-Risk Students (C-STARS) at the University of Washington and Washington State University. During the project, a generic model for interprofessional case management was introduced in 5 school districts (28 schools). The model consisted of a set of guidelines for site-tailored delivery of case management services, and it included an evaluation component to assess outcomes. Each district targeted case management services in consideration of its unique demographic and service need priorities. An inner-city district, a suburban district, and districts with high numbers of American Indians, Hispanic American students, and low-income rural students participated. An analysis of attendance, academic grade, and misconduct data revealed that students who met the C-STARS criteria generally improved in these areas while receiving case management services. Over the 4 years there were measurable improvements in all three areas, and there was an increase in progress toward or attainment of service goals each of the last 3 years of the project. Factors that contributed to effective case management were identified, and it was also found that the involvement of teachers and family members in the case management process was essential. Overall, findings demonstrate that school-based interprofessional case management as demonstrated at these sites is a viable means of addressing problems of at-risk students and their families. (SLD)
Washington State Coordinated Service Initiative for At-Risk Youth and Families.
Washington State Coordinated Service Initiative for At-Risk Youth and Families

Executive Summary

Background and Introduction

This report presents evaluation findings and conclusions from a four-year (1991-95) study of a demonstration project focusing on a school-based and -linked interprofessional case management approach to dropout prevention. This demonstration was funded by the US Department of Education's Dropout Demonstration Assistance Program (Grant No. S201C12560). The demonstration project was administered by the Center for the Study and Teaching of At-Risk Students (C-STARS), co-housed in the College of Education at the University of Washington in Seattle and Washington State University in Pullman.

During the duration of the project, a generic model for interprofessional case management was introduced in five very different Washington State school districts to 28 pre/K-12 schools including an alternative secondary school. Each district and/or its individual case management teams developed and implemented its unique site-based adaptation of this generic model through the four years of the demonstration.

The case management model being demonstrated consists of a set of guidelines for site-tailored delivery of case management services. These guidelines include an operational definition for case management that is multi-disciplinary in orientation, a set of seven interrelated functions corresponding to the definition, and a structural framework for delivery of case management services. The model also includes an evaluation component designed to (1) assess outcomes to students and their families who participate with these case management activities and (2) assess the efficacy of the process(es) used for delivery of these site-specific variations of this case management model.

Each of the five participating school district-communities chose to target case management services in consideration of its unique demographic and service need priorities. Participating in the project were (1) an inner city area adjacent to two large military bases located near Tacoma; (2) a district in Western Washington including a moderately sized tribal reservation; (3) a district in Southeastern Washington serving high numbers of migrant Hispanic farmworker students and families; (4) a remote area of a geographically large district, located in a rural isolated and economically depressed area approximately fifty miles west of Tacoma; and (5) a suburban school district located near Spokane. Each of these school districts reported annual dropout rates far in excess of state averages over a five-year period (Office of the State Superintendent of Public Instruction, 1990).

At the beginning of the project, each school district was asked to form case management teams and identify who would be designated to act as case managers. C-STARS project staff then introduced each team or cluster of teams to the generic guidelines for interprofessional case management along with the evaluation design. Each team subsequently developed and began field-testing its site-specific variation of the generic model. From 1991 to 1995, full case management services were activated with 934 students and their families. Approximately 7,000 additional children and their families received short term or one time only services.
Evaluation Highlights

Both qualitative and quantitative evaluation methodologies were used throughout the study including end of year reports, surveys, focus group consultations, key informant interviews, reviews of student files, and reviews of service plans.

An outcome evaluation component attempted to determine whether student outcomes specific to attendance, grades and/or classroom behavior could be attributed to or associated with case management activities. These indices were selected based on a poll of case managers, team members, and school administrators from previous C-STARS sites, as well as a review of the literature. The following "benchmarks" were used to identify students who were considered to be "at-risk" in these areas: Absences - 10% or more days missed within a reporting period; b) Academic Grades - 10% or more low or failing grades on academic subjects within a reporting period; Misconduct - One or more conduct referrals to the school office within a reporting period, including suspensions.

The primary questions addressed with this evaluation component were:

1. Do students targeted for case management services because of attendance concerns show significant improvement in attendance?

2. Do students targeted for case management because of low grades show significant improvements in academic performance?

3. Do students targeted for case management because of classroom behavior concerns show significant improvements in classroom behavior?

The methodology used to address and answer these questions consisted of analyzing baseline to end-of-year changes, referencing data collected at regular intervals (e.g., quarter, semester). In addition, correlation and inferential analyses were used to note any associations between these indices and specific service interventions.

A process evaluation component attempted to provide evidence of "best case management practice" from perspectives of families and children, the different service providers working on or with teams and the policy makers and administrators of the different service systems that participated with the project. This component addressed the "what", "how" and "why" aspects of the case management programs. This was intended to help determine what lessons case management team members learned from their experience, and also how the program was perceived by other school staff, family members, and outside agency personnel.

Questions addressing this evaluation component included:

1. Who assumed case manager roles and responsibilities as members of these case management teams?

2. How many students and their families did case management teams work with?

3. To what extent are goals listed in individual service plans accomplished?
4. What differences in case management functions and structure may be discerned from successful and unsuccessful case management experiences?

5. Does the active involvement of teachers with case management teams contribute to successful case management?

6. Does the active involvement of parents with case management teams contribute to successful case management?

The methodology used to address and answer these questions consisted of an analysis of service plan components, including a) risk indicators, b) goals set, c) planned actions steps, d) progress reported, e) problems or lack of progress reported, and f) follow-up steps taken. The frequency and types of activities reported under these categories were examined at regular intervals, using progress report and update protocols. The correspondences between service functions and outcomes reported were also examined.

A "lessons learned" component was added during the 1994-95 school year to further describe the intentions and consequences of case managers, their teams, and their programs. This component attempted to document a) what lessons case management team members learned from their experience, using a modified critical incident procedure called the Critical Case Review (CCR), and b) how the program is perceived by other school staff, family members, and outside agency personnel (i.e., stakeholders). Each team identified a successful case and a less than successful case, with an examination of each facilitated by C-STARS personnel. Surveys and focus group consultations were used for this process.

A Summary of Findings

An analysis of attendance, academic grade, and misconduct data revealed that students who met the C-STARS criteria generally improved in these areas while receiving case management. In many cases, this improvement was statistically significant. A summary is as follows:

**Absences** - There were measurable improvements in all four years. These improvements were statistically significant in three of the four years. A slight reduction in absenteeism occurred during the first year of the project in which some school sites were still "tooling up." Across the 1994-95 school year, the percentage of students meeting the C-STARS risk criterion for absenteeism dropped from 21 to 14, a proportional improvement of .33 (t=2.94, p<.005). This trend was a continuation from previous years, with proportional reductions of .14 (t=1.10, n.s.) in 1991-92, .39 (t=3.53, p<.001) in 1992-93, and .47 (t= 5.09, p<.000) in 1993-94.

**Low Grades** - There were measurable improvements in all four years. These improvements were statistically significant in years two and four. Changes in the percentages of students with low grades (e.g., F's, D's, U's, Incompletes in competency-based grading systems) were less dramatic, albeit in the right direction and consistent across the four years of the project, with proportional improvements ranging from .09 in 1993-94 (t=1.50, n.s.) to .20 in 1994-95 (t=2.52, p<.01). The 1991-92 proportional improvement was .10 (t=1.49, n.s.), and 1992-93 proportional improvement was .16 (t=2.61, p<.01).
Misconduct - There was measurable improvement in all four years. These improvements were statistically significant three of the four years. Reductions in the number of conduct referrals showed the most substantial proportionate gains, ranging from .28 in the 1992-93 school year ($t=1.86$, n.s.) to .66 in the 1994-95 school year ($t=6.74$, $p<.000$). Other proportional improvements included .53 ($t=3.86$, $p<.000$) in 1993-94 and .62 ($t=5.02$, $p<.000$) in 1991-92.

Other Findings

About Case Managers: Most districts employed full-time case managers. However, two utilized school counselors with part-time C-STARS caseloads and numerous other counseling responsibilities. In one site, the case manager served an oversight function and Spanish speaking paraprofessionals designated as home visitors routinely met with the school teams. All school counselors and home visitors had offices in the schools where they had case loads. In two of the districts, case managers were housed in central offices and had less direct contact with the targeted students and their families.

About Case Loads: Depending on whether the case manager or counselor devoted full or part time to the C-STARS students and families, full service caseloads ranged from 8 students and families (10% time devoted) to 45 students and families (100% time devoted). It was generally accepted that a full-time case manager could be expected to service an average case load ranging from 15 to 25 targeted children and their families. In addition, there were widely varying numbers of short-term service students reported.

About Service Goal Attainment: There was an increase in progress toward or attainment of service goals each of the last three years of the project. In year two, case managers reported progress or attainment of 33% of the goals set in service plans. In the final year of the project, case managers reported progress toward or attainment of 66% of the goals set in service plans. Note: During years three and four, case managers became more systematic in developing service plans i.e., targeting risk indicators to goals to service activities, etc. This may have been influenced by the introduction in year three of CARAS software, which replaced most previously used data gathering instruments.

About Case Management Practices: Factors that case managers and team members identified as contributing to successful case management were also documented. Five of the more prevailing ones included: 1) Interprofessional case management must be treated as an integral service within the regular school program; 2) A balanced school/family/community service orientation must be achieved; 3) The decision to reassign existing personnel or hire non-school personnel for case management must be carefully weighed against advantages and disadvantages of each; 4) Case management services must be defined as an outcome oriented mission rather than as a process applied to a particular student group; and 5) The wide variety of problems and needs to be addressed among at-risk students mirrors the variability necessary in case managers' and team members' knowledge, skill and proficiency of practice.

About Parent and Teacher Involvement: The lessons learned component also found that school, family, and outside agency personnel felt it was essential for teachers and/or family members to be active in the case management process. More than half of the referrals for case management were generated by
teachers. Case managers also reported higher frequencies of parental involvement with successful case management experiences.

Correlational and inferential analyses showed that case management services delivered by case managers and teams were highly individualized in consideration of unique indicators of each case. While the "core" functions (assessment, service plan development, service implementation, monitoring and evaluation) were consistently applied to almost all cases, the "relational" functions (brokering, advocacy, mentoring) were not. These analyses noted that there were few specific relationship functions operating in common by case managers or teams with most students and families. These analyses also revealed some trends toward categories of family services and behavior problem interventions associated with positive changes in attendance and conduct of students referred because of these concerns. This was observed primarily with primary-age students. For example, there were statistically significant correlations between progress on goals and academic ($r = .48, p< .02$), behavior ($r = .47, p<.02$), and family ($r = .43, p< .04$) activity groupings.

Conclusions and Recommendations

C-STARS' findings suggest that school-based interprofessional case management in the several forms and applications represented by the participating school sites was generally demonstrated to be a viable means of addressing the myriad problems represented by at-risk children and their families. In addition to addressing students' school-related problems in their service plans, case managers also focused on characteristics associated with families.

Students who met initial benchmarks and were referred because of concerns relating to one, two, or all three primary risk indicators -- attendance, grades, conduct -- showed marked improvements concurrent with, and following their receipt of case management services. The degree of student improvement increased as the efficiency (e.g., greater correspondence between risk indicators identified, goals set and goals met) of case management increased in the latter years of the project.

Interventions with families played a major role in the C-STARS school programs. As the programs developed, parents' attitudes and participation levels tended to shift away from a prevailing mistrust of schools and disengagement from school activities, and toward more trusting relationships and increased involvement with their children's schooling. Moreover, several indirect benefits such as increased family stability, employment, and the capacity to "do for themselves" were reported by parents and team members.

Conclusions and Caveats Addressing This Evaluation

Several characteristics of this particular project made it very difficult to evaluate. Several of these difficulties have been experienced with research and evaluation activities addressing similar models for school-linked comprehensive services. These include:

- The complexity and flexibility of these programs make it difficult to adequately identify and characterize the independent variables of interest.
- The difficulty in assessing quality and degree of collaboration.
• The interdisciplinary nature of these endeavors involving researchers from different fields who rarely communicate with each other (Kagan, 1991; Knapp, 1994).

• The difficulty in studying impacts of contextual factors, particularly cultural factors, on the processes and outcomes of these interventions.

• Ways to conduct evaluations that are appropriate and congruent with the culture of the community in which services are located.

• The difficulty of identifying and developing evaluators who understand and operate sensitively in different cultural settings.
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