This collection of symposium paper summaries presents analyses of data addressing the role of system changes in decision-making and service utilization in child and adolescent mental health emergencies. The analyses compare data for child and adolescent (C/A) recidivists at mental health emergency screening sites in pre- and post-managed care time periods, defined by the implementation date for Medicaid managed care. The included summaries are: (1) "Impact of Managed Care on the Clinical Profiles of Recidivists" (Lorna Simon and Stephen Dine-Young); (2) "Factors Contributing to a Child or Adolescent Becoming a Recidivist at an Emergency Mental Health Screening Site Pre- and Post-Managed Care" (Stephen Dine-Young and Lorna Simon); and (3) "The Question of Patterns of Dispositions" (Joanne Nicholson and Joseph R. Mara). Among findings were: the number of emergency room recidivists increased after the implementation of managed care; a diagnosis of adjustment disorder (the least severe diagnostic category) negatively predicted a client becoming a recidivist in both the pre- and post-managed care periods; and neither clinical nor payer characteristics were related to a change in level of restrictiveness of dispositions in the pre- or post-managed care periods for recidivists. (DB)
Symposium:

The Impact of Managed Care on the Utilization of Child and Adolescent Mental Health Services: Recidivists in an Emergency Screening Team Site

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Impact of Managed Care on the Clinical Profiles of Recidivists

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Introduction

This collection of summaries presents the latest analyses of data addressing the role of system changes in decision-making and service utilization in child and adolescent (C/A) mental health emergencies. In Massachusetts, private management of mental health and substance abuse benefits in the public sector began in 1992. Since then, increased management of these benefits has occurred in the private sector as well. The findings reported in this symposium are part of on-going efforts to evaluate private sector strategies to manage public sector mental health benefits.

In previous analyses (Young, Simon, Nicholson, & Bateman, 1996), the Child and Adolescent Service System Program (CASSP) concepts of least restrictive environment, community-based services, and individual need provided a framework for exploring the contributions of demographic, clinical, and fiscal variables to dispositions in emergency mental health screening of children and adolescents, before and after the private management of Medicaid benefits. As expected, the volume of screening episodes increased after managed care was implemented. There was, however, a significant decline in the proportion of dispositions to inpatient hospital settings, suggesting that children's needs
In this symposium, we present three analyses of data from C/A recidivists at a mental health emergency screening site in pre- and post-managed care time periods, defined by the implementation date for Medicaid managed care. These analyses were conducted to address the fears of many clinicians that, in a managed care environment, clients are provided brief, "band-aid" services that do not fully address underlying problems. The assumption made by many clinicians is that utilization reviewers are reluctant to approve more costly services that clients may really need, or that they will not approve them until less costly services have been tried. The common concern is that clients will have to keep coming back for treatment until their needs are adequately met.

The following questions were addressed regarding the impact of managed care on recidivists at an emergency screening site:

- Was there a change in the number of recidivists and, specifically, in the number of Medicaid recidivists following the implementation of managed care?
- Which clinical, client, and fiscal variables predicted becoming an Emergency Mental Health Services (EMHS) recidivist in the pre- and post-managed care periods?
- What were the disposition patterns for recidivists in the pre- and post-managed care periods?
Method

Data for all three analyses were drawn from the daily log sheets of the EMHS program at the University of Massachusetts Medical Center in Worcester, MA. These logs contain: (a) demographic and clinical characteristics for clients receiving services, (b) type of insurance, (c) referral source, and (d) disposition.

We looked at clinical and fiscal variables and dispositions for children and adolescents over a 2-1/2 year period from October, 1991 to March, 1994. We divided the 2-1/2 year period into 3 parts: (a) pre-managed care (i.e., one year prior to the implementation of managed Medicaid mental health benefits on October 1, 1992); (b) a six month transition period; and (c) post-managed care (i.e., the year following the start-up of the managed Medicaid program). We did not include the transition period in our analyses to avoid drawing conclusions based on the normal fluctuations that are involved in any major systems shift.

Although Medicaid recipients account for the majority of EMHS episodes across the 2-1/2 year period, EMHS also became the screening site for a number of private managed care organizations during this time. Therefore, the research period really represents a time of overall systems change. For this reason, both Medicaid and non-Medicaid recidivists were included in our analyses, unless otherwise noted.

Impact of Managed Care on the Clinical Profiles of Recidivists

Lorna Simon, M.A. and Stephen Dine-Young, M.A.

In this summary, demographic, clinical, and insurance profiles of C/A recidivists in the pre- and post-managed care periods were compared using chi-square tests. Again, clients screened in the transition period were excluded.

There were a total of 482 children and adolescents seen in the pre-managed care (10/1/91 to 9/31/92) and post-managed care (4/1/93 to 3/30/94) periods. Of these clients, 101 were recidivists. The clinical and payor characteristics of the recidivists are presented in Table 1. The gender split was relatively even. A majority of recidivists were adolescents, and most either lived with family or at a residential treatment facility. The difficulties that recidivists were most likely to present with were harmful to self or other and problem behaviors (i.e., "acting out"); these difficulties corresponded to frequent diagnoses of disruptive D/O, Post Traumatic Stress Disorder (PTSD)/Anxiety D/O, and Adjustment D/O. Over two-thirds of the recidivists had Medicaid insurance, while most of the remaining clients had some form of private insurance (either indemnity or HMO).
Of the 101 C/A recidivists, 37 (17% of the total C/A clients) were screened in the pre-managed care period, and 64 (24% of the total C/A clients) were screened in the post-managed care period—an increase that was statistically significant ($c^2 = 4.01, p < .05$).

Although none of the clinical or demographic variables were significant across the two time periods, there was a statistically significant increase in the proportion of recidivists who were Medicaid beneficiaries in the post-managed care period (75% versus 54% in the pre-managed care period; $c^2 = 4.65, p < .05$).

There was an increase in the number of emergency room recidivists after the implementation of managed care. This difference can be attributed to the management of benefits through support by the additional finding that there were no differences in clinical characteristics in the pre- and post-managed care periods, suggesting that there was little change in the client population across the two time periods. The finding that a larger proportion of the recidivists were Medicaid clients in the post-managed care period can probably be attributed to new regulations requiring that all Medicaid clients be screened at EMHS before receiving other services.

Factors Contributing to a Child or Adolescent Becoming a Recidivist at an Emergency Mental Health Screening Site Pre- and Post-Managed Care

Stephen Dine-Young, M.A. and Lorna Simon, M.A.

In the second summary, demographic, clinical, and insurance variables were tested as predictors of C/A clients becoming recidivists before and after the implementation of managed care.

Method

Logistic regressions for the pre- and post-managed care time periods were conducted to predict the odds of becoming a recidivist, as determined by more than one visit to EMHS during the time period. For each of the periods, the following predictors were considered: age, gender, diagnosis, and insurance. Adjusted odds ratios were calculated for each predictor.

Results

The results of the logistic regression for the pre-managed care period are presented in Table 2. Only a diagnosis of adjustment disorder significantly predicted whether a C/A client became a recidivist in the pre-managed care period, and the relationship was negative ($\beta = -1.69; p < .01$). A child diagnosed with this a disorder was less than one-fifth as likely to be an EMHS recidivist than a child diagnosed
as likely to be an EMHS recidivist than a child diagnosed with disruptive D/O.

The results of the post-managed care logistical regression are presented in Table 3. Again, only the coefficient for adjustment disorder was significant and the relationship was negative ($\beta = -1.04; p < .05$). In addition, being a Medicaid client also significantly predicted whether a C/A client would become a recidivist ($\beta = 1.42; p < .001$). Medicaid clients were more than 4 times as likely to return to EMHS than non-Medicaid clients.

It also should be noted that in the pre-managed care period there was a trend toward significance for mood disorders ($\beta = 1.87; p < .1$) and PTSD/Anxiety disorders ($\beta = .98; p < .1$). These trends were not evident in the post-managed care period.

**Conclusions**

The finding that adjustment disorder negatively predicted a C/A EMHS client becoming a recidivist in both the pre- and the post-managed care periods is understandable in that it is the least severe of any of the diagnostic categories; clients assigned adjustment disorder diagnoses are probably less likely to need repeated care. Given the post-managed care period requirement that Medicaid recipients be screened at EMHS, the finding that having Medicaid insurance significantly predicted a C/A client becoming a recidivist also is not surprising.

Clinicians may be concerned about the trend toward significance with the diagnoses of mood disorder and PTSD/anxiety disorder in the pre-managed care period that did not exist in the post period. While these findings are not strong enough to draw clear interpretations, there is some indication that clinical factors are being given less consideration in the post-managed care period. Further investigation is necessary.

**The Question of Patterns of Dispositions**

Joanne Nicholson, Ph.D. and Joseph R. Mara, B.A.

In this summary, levels of restrictiveness of dispositions for C/A mental health emergency screening recidivists in the pre- and post-managed care period were considered. In previous analyses (Young et al., 1996), it was found that although emergency screening volume increased significantly in the post-managed care period, admissions to inpatient settings significantly decreased. In addition, this decrease seemed to be in direct proportion to the volume of episodes resulting in referrals to newly developed crisis stabilization programs (e.g., community-based care). It was assumed that an increase in referrals to community-based services was a good thing.
There are questions, however, that may nag certain stakeholders (i.e., both providers and consumers). Does this increase in referrals to community-based services reflect a lack of access to the appropriate level of care for those children and adolescents in greatest clinical need? Also, do children keep coming back until their needs are ultimately addressed via the inpatient level of care they really needed in the first place? If this is the case, costs, both dollar and clinical, may only be delayed and higher as an end result.

**Method**

We developed a very simple coding scheme for describing the pattern of dispositions for C/A mental health screening recidivists. We examined the dispositions for recidivists over time, and if the level of restrictiveness of the dispositions remained the same, a code of "no change" or "=" was assigned. If the level of restrictiveness of the dispositions decreased over time, this was coded as "decrease" or "-". If the level of restrictiveness of the dispositions increased over time, this was coded as "increase" or "+".

There is a weakness in this strategy; change over time was condensed into one code. In doing this, important information was lost that may have contributed to changes in dispositions over multiple emergency screening episodes (e.g., changes in age of the child or adolescent and related changes in available service options and the developing course of a disturbance or disability).

Chi-square tests were used to determine if there were significant differences between pre- and post-managed care periods in patterns of dispositions.

**Results**

None of our independent variables (i.e., clinical and payor characteristics) were related to change in level of restrictiveness of dispositions in the pre- or post-managed care periods, either for the total group of recidivists or the Medicaid subscribers who were recidivists. It would seem that the implementation of managed care had no impact on the pattern of restrictiveness of dispositions for this sample, as far as our simple coding scheme could detect.

**Discussion**

One way to think about this finding is that children are continuing to receive the care they need. There may be something about their ages or stages of illness that is more powerful than the payor variable in determining disposition.

There was no increase in numbers of children and adolescents in the increasing level of restrictiveness group, which would have suggested that children were being kept from the level of care they required until the gatekeepers,
despite their efforts to contain costs, could no longer deny them access. Rather, we still see the same proportions of children for whom alternative plans are tried before they are hospitalized. And, even if they are eventually hospitalized, there may be some clinical benefit to trying alternatives first.

What is clear is the need for coordinated evaluation efforts among public and private sector agencies and providers if we are to truly understand the impact of managed care on such important issues as decision-making, service access and quality of care.

References


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