Paper #1:

Oregon Health Plan Case Management Services and the Percent of Investigations that Result in Civil Commitments

Prepared by the
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Since the 1980s and the development of community support programs for consumers diagnosed with a severe mental illness (SMI), Oregon's Office of Mental Health and Addiction Services (OMHAS) has been emphasizing the need to develop case management services as an integral part of the mental health delivery system. Under the Oregon Health Plan, case management was introduced as a Medicaid service during a 25% demonstration of managed care in 1995. Medicaid mental health services were managed care statewide by the beginning of 1998. The infrastructure of this service is in its early phases of development (regulatory development, training, etc.).

There is a great deal of empirical evidence supporting the effectiveness of case management services for people with SMI. Assertive community treatment (ACT) case management, for example, is accepted as evidence based practice (Phillips, Burns, Edgar, Mueser, Linkins, Rosenheck, Drake, & Herr, 2001). Lehman, Dixon, Kernan, DeForge, and Postrado (1997) have demonstrated ACT's effectiveness in treating homeless consumers with severe mental illness. Lehman and associates have also supported ACT as an effective treatment recommendation for consumers with schizophrenia (Lehman, Steinwachs, Dixon, Goldman,Osher, Postrado, Scott, Thompson, Fahey, Fischer, Kasper, Lyles, Skinner, Buchanan, Carpenter, Levine, McGlynn, Rosenheck, & Zito, 1999). Other forms of case management, such as the strengths based model (Rapp, 1998), have also been demonstrated to be effective in community mental health settings.

Effectiveness is usually associated with a particular model of case management, and not all case management models have been shown to be effective in helping consumers with severe mental illness. In a comparison study of case management models, Bedell, Cohen, & Sullivan (2000) found evidence for good outcomes with a "full service model" of case management, while finding little evidence of improved outcomes for "broker" or "hybrid" models of case management. Schmidt-Posner & Jerrell (1998) found positive

outcomes associated with an ACT model but failed to find similar outcomes for an intensive broker model.

Services such as individual therapy and daily structure and support (DSS) were available in Oregon under Medicaid fee-for-service before managed care was introduced. Individual therapy and DSS had been the dominant forms of mental health service prior to managed care—not necessarily because of any evidence of their effectiveness, but more for their revenue producing potential under the fee-for-service system. Therefore, it is not surprising that they linger as a viable services for consumers diagnosed with a severe mental illness. OMHAS' strategy since managed care has been to shift the focus away from services like individual therapy and DSS for consumers with SMI, to more practical and effective interventions that can be functions of case management services.

Despite the general emphasis place on case management as case coordinators after managed care, there appears to have been little evolution in how case management is practiced within Oregon. Hromco, Moore, and Nikkel (unpublished document) found that case managers were doing the same activities with consumers in 2000 as they were in 1991. What constitutes case management has changed very little in Oregon from 1991 to 2000. According to that study, case managers in 1991 and 2000 view their main role as providers of supportive therapy. Case managers see the potential roles of advocates, brokers, and providers of crisis and supportive intervention as being less important.

With the understanding that practices related to case management in Oregon has not change much over the past decade, the Applied Research and Evaluation Workgroup from the Office of Mental Health and Addiction Services examined the impact of case management services on civil commitment. As discussed previously, certain case management models have been associated with positive outcomes in the mental health service population. A high rate of civil commitments is considered a poor outcome for mental health service system. Despite evidence that case management services in Oregon have not made widespread movement towards any of the more evidence-based models, the workgroup still assumed that the services might lead to a positive impact on civil commitment rates.

The initial hypothesis was that counties with high rates of case management and low caseloads would have low civil commitment rates. Upon analysis of a set of data from calendar year (CY) 2000, the correlation between case management rate and civil commitment rate was found to be not significant, r = .06, n.s. A non-significant correlation (r = .20) was also found between caseload size and civil commitment rates. Directionally, at least, this finding does fit with case management literature, where higher caseloads usually led to adverse consumer effects (Rapp, 1998).

During a given year, many of the frontier counties in Oregon may have very few or no civil commitments. So, it was decided that examining rates at the county level would not necessarily be powerful enough to reveal the relationship between civil commitments and case management services. The population under study was narrowed to those who were investigated for civil commitment, and data was examined at the statewide level rather than the county level. The topic of analysis became service variables that affected the percent of investigations that ended in a civil commitment.

- It was hypothesized that case management services would lower the likelihood of an investigation leading to civil commitment.

Methodology and Results

CY 2000 investigations were examined for service impact. Information about pre-civil commitment investigations and the results of the investigations was drawn from the Client Process Monitoring System (CPMS). For the past several years, there have been 5000 to 6000 investigations conducted annually. It was found that a similar percent of investigation led to civil commitments during the CY 2000 period compared to fiscal years 98-99 and 00-01:

- FY 98-99 % investigations to civil commitments: 14.1%
- FY 00-01 % investigations to civil commitments: 13.6%
- CY 2000 % investigations to civil commitments: 15.2%

To examine the services received in the months prior to the investigation, a smaller sample of consumers was selected based on

whether or not they possessed an Oregon Health Plan Prime ID. This group represented 63% (n=2586) of the original investigations from CY 2000. This sample group had a slightly higher percent of investigations leading to civil commitments, 18.7%. This suggests that this group of consumers may have been slightly more at risk for commitment than the total population of investigations that year.

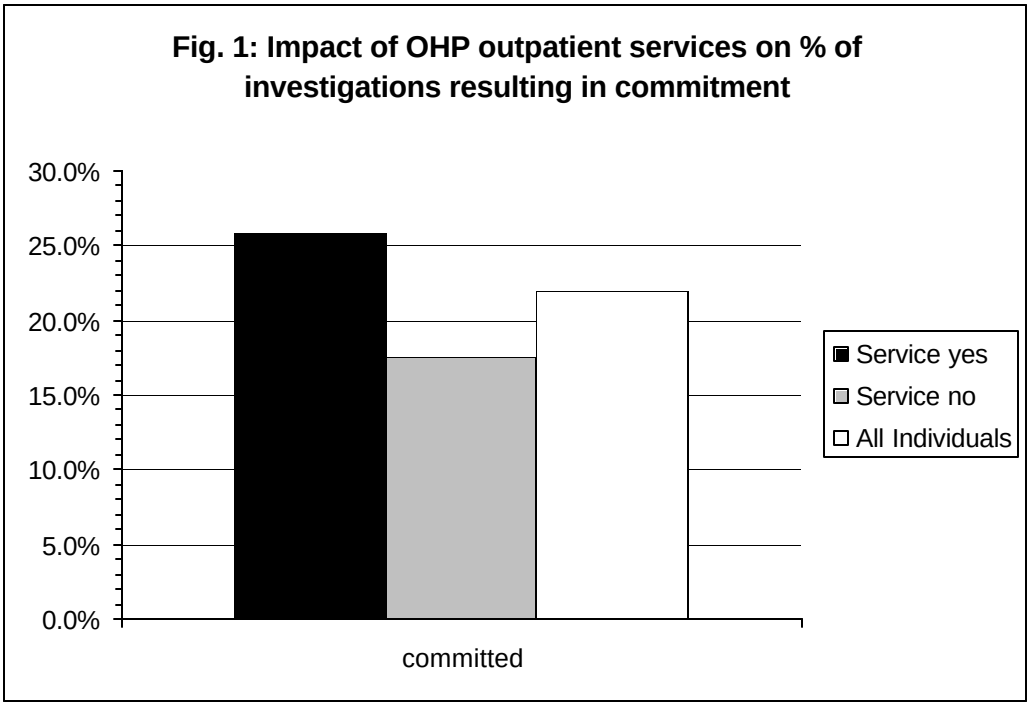
Within our sample, several consumers were investigated more than once and in some cases were committed more than once. For analysis purposes, the variable of interest was whether or not an individual had been committed at least once during CY 2000. Among unique individuals in the sample 21.8% were civilly committed at some point during the year.

For each of the unique individuals within our sample, it was determined whether or not each individual had received OHP outpatient services prior to their latest petition date and since July 1, 1999—six months prior to the earliest investigation in our sample. About 53% of the individuals, received outpatient services prior to the investigation and after June 1999. More specifically, 29% had received case management services.

The number of acute hospital admissions prior to each individual's last petition date was also determined. Among our sample, 44% of the individuals had been recently hospitalized in an acute setting prior to the investigation. All information describing services was drawn from the Office of Medical Assistance's Medicaid Medical Information System (MMIS).

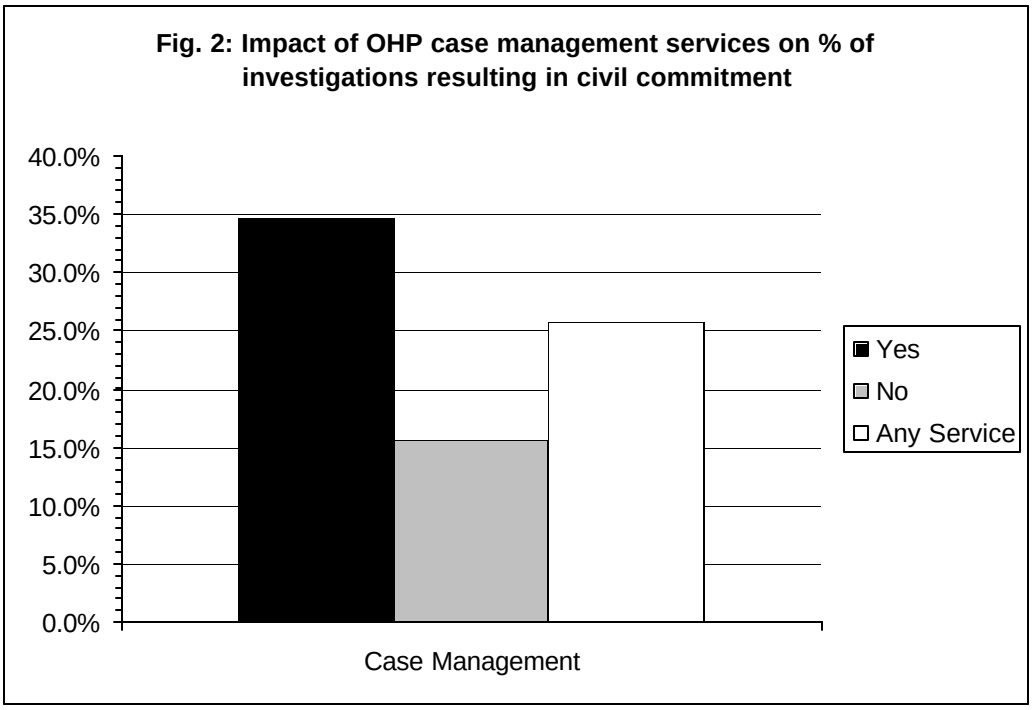
The impact of any outpatient service on the percent of investigations leading to civil commitment was examined first. The results are in Figure 1. The percent in the chart labeled "all individuals" are for all consumers in the sample, regardless of service. The percent in the chart labeled "yes" are for all consumers who received some kind of outpatient treatment prior to their last investigation date in CY 2000. The percent in the chart labeled "no" are for all consumers who did not receive outpatient services prior to their last investigation date. As can be seen in the chart, the percent of consumers civilly committed was greatest for those who had received some outpatient service prior to investigation, 25.8%, and lowest for those had not received

outpatient service prior to investigation, 17.5%. It was expected that the opposite would be the result.



For all subsequent analyses only consumers who had received some type outpatient service were aggregated to filter out the effect of not receiving any service.

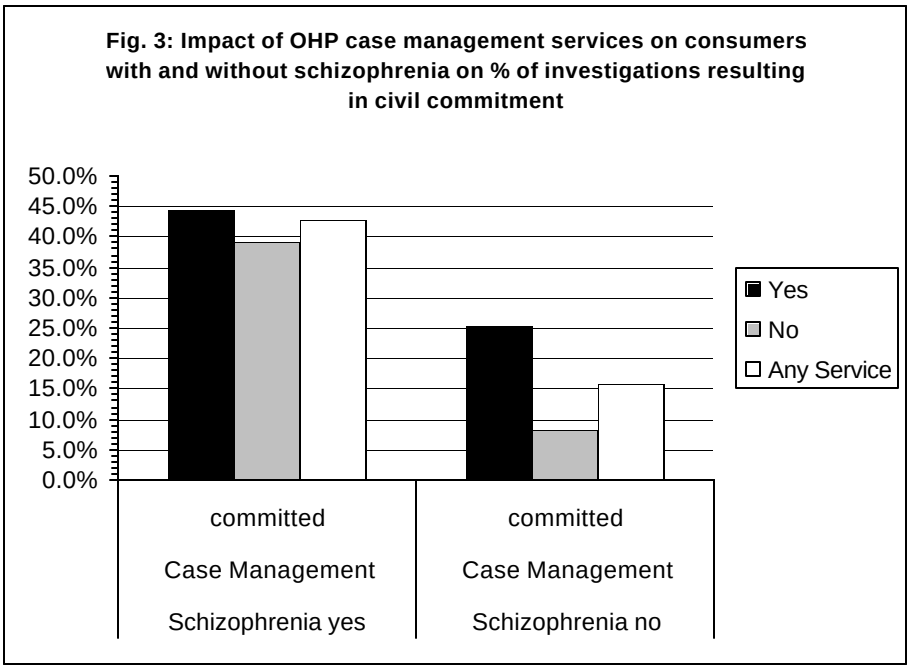
The next chart (Fig. 2) demonstrates the impact of case management on the percent of investigations that result in commitments. It was expected that case management service would be related to a lower percentage of commitments. The consumers tallied in the bar labeled “yes” received case management services, either exclusively or in combination with other services. Those in the bar labeled “no” received a service or combination of services that did not include case management. The bar labeled “any service” represent the results for all consumers receiving service.



The expected impact of case management services on the percent of civil comments was not found. One possible explanation was that the results might be related to the diagnostic characteristics of the consumers. A second explanation may be related to the symptom severity of the consumers. Both of these possible explanations were examined.

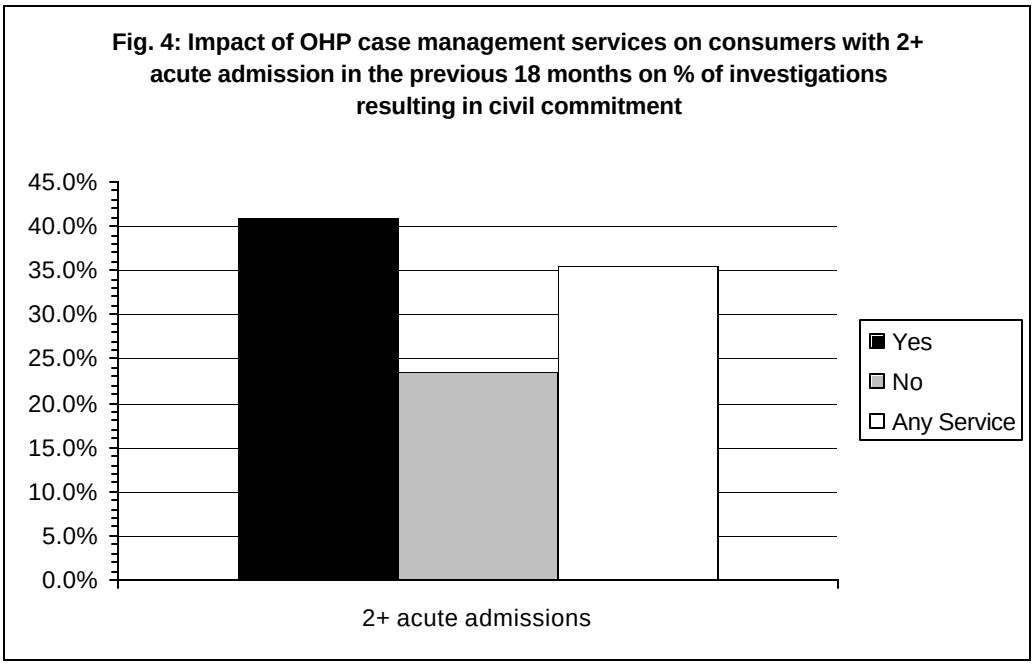
To examine the diagnostic characteristics, the sample was split into two groups those with a diagnosis of schizophrenia (32%) and those with a different diagnosis. Consumers with schizophrenia who are investigated are much more likely to be committed. In our sample, 40.6% of the investigated consumers diagnosed with schizophrenia were committed, compared to 13.0% of those diagnosed with some other mental illness.

The same pattern found in earlier analyses was found again whether or not schizophrenia was indicated as the diagnosis. Consumers receiving case management services are associated with the greatest percentage of commitments, as can be seen in Figure 3.



Symptom severity was also examined. It was reasoned that matching consumers in terms of their symptom severity might demonstrate the expected relationship between case management and civil commitment. The number of admissions to acute care was used as a proxy for some other more accurate measure of symptom severity. The sample was split in three different groups based on the number of admission: no admissions, one admission, and two or more admissions.

The now familiar pattern for those receiving case management services was revealed. As an example, Figure 4 shows those receiving case management services had a much higher percent of commits compared to consumers who did not receive case management service for the 2+ acute admissions group.



Discussion

The hypothesized relationship between case management services and civil commitments was not demonstrated in this report. What may not be obvious is that services are being directed towards the service population that is being civilly committed. Consumers who are being investigated for civil commitment and certainly those who are civilly committed are high-risk consumers. So, it is definitely a good sign that case management service are being directed towards those who may most benefit. However, the expected outcome between case management services and civil commitment is not apparent.

A reasonable explanation of the outcome demonstrated in this report is that case management models vary across the state and in many cases do not fit with a model demonstrated to be effective. As described in the introduction, good outcomes for case management are generally associated with a particular model. In Oregon many case managers view their main role as providing supportive therapy (Hromco, Moore, & Nikkel, in press). This does not fit with any case management model that is generally thought to be effective.

The development of mental health case management is in its early stages for many programs in Oregon. Regulatory requirements for case management services in Oregon were implemented in 2001. In

most areas of the state, the delivery system is still making the shift from individual therapy and day treatment reimbursement systems under fee-for-service to case management systems under managed care and capitated rates. The OMHAS, Mental Health Organizations, and Community Mental Health Programs are converting a 20-year-old self-perpetuating service system infrastructure to a service system that will meet the needs and demands of managed care and consumer recovery in the 21st century.

Although the information in this report does not demonstrate the lack of evidence based case management services in Oregon, it is thought that the results highlight the need for the adoption of evidence-based practices (EBP) in Oregon. The practice of case management services should be accompanied with the expectation of superior outcomes, which was not found in this case. In this report, the term "case management" refers to any number of a broad range of services that can be construed to fit with the definition of the service code used under the Oregon Health Plan. This makes it difficult to truly assess the effectiveness of the services offered as case management in Oregon.

EBP, on the other hand, are grounded in consistent research findings that are specific enough to permit the assessment of the quality of the practices rendered, as well as the outcomes. For example, consumers receiving the services of ACT are more likely to remain in contact with services, less likely to be admitted to a hospital, and spent less time in the hospital than people receiving standard community care. Scott and Dixon, 1995, concluded that the border between ACT and traditional case management systems are not always clear, and advocate for the use of fidelity when implementing a new program such as ACT.

Case management services in Oregon are not accompanied by any expectations of fidelity to a particular model, and are quite varied. This fact would actually support the findings in this report. The varied approach to case management across the state could not be expected to be associated with positive outcomes.

Conclusion

This study examined the relationship between Medicaid case management services and the percent of investigations that result in civil commitments. Most EBP literature substantiates the fact that ACT models of case management reduce hospital admissions, lower hospital use, and engage consumers into treatment. Other forms of case management such as strengths based case management have also been demonstrated to be effective. Based on information related to EBPs, findings from other studies (e.g. Hromco, Moore, & Nikkel, in press), the present study, and observations gathered through county site reviews and state sponsored case management trainings, a new hypothesis is emerging—the foundation of case management in Oregon has not been evidence based.

The adoption of the new Adult Rule for mental health services has created new direction for case management. As training and experience increase across the state, it will be imperative to watch for improved outcomes related to case management services. If improvement outcomes are not found, the possible adoption of a particular model or set of models that can be monitored by fidelity measures may be a solution.

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