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SOAPBOX

Research on the Cost of Providing Family Therapy: A Summary and Progress Report

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ABSTRACT

This article provides a summary of effectiveness research on the costs of including family therapy in mental health services. Data was available from four different sources: 1) a large western Health Maintenance Organization with 180,000 subscribers in the local Utah region; 2) the Medicaid system of the entire State of Kansas in the United States; 3) a US health insurance company with several million subscribers; and 4) a Family Therapy training clinic. Results suggest that family therapy reduces the number of health care visits, especially for high utilizers. These results were also replicated in a graduate student training clinic. Also, studies of two different health care systems (and a cost projection study) suggest that including family therapy as a treatment option does not significantly increase health care costs.

KEYWORDS

effectiveness, family therapy, research

FAMILY THERAPY HAS been shown to be an effective form of psychotherapy for a number of mental health disorders and concerns including: Affective disorders, alcohol and substance abuse, conduct disorder and delinquency, childhood behavioral and

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emotional disorders, domestic violence, illness and physical disorders and severe mental illness (e.g. Carr, 2000; Cottrell & Boston, 2002; Sprenkle, 2002; Stratton, 2005).

However, efficacy research which emphasizes controlled experimental and clinical trials, under specific conditions, does not adequately address the effectiveness of family therapy in real-world situations. While treatments that are found to be effective in the lab, under ideal and carefully controlled conditions, may reveal powerful effects, the replication of the same treatments in applied settings is more difficult. Additionally, there are few known studies on the costs of providing family therapy in real-life conditions.

Although the evidence base for family therapy is good, very few studies have been done that address the issue of the costs of including this service as a treatment option in health care and mental health care systems. As a result, some policy makers have been reluctant to include this type of psychotherapy in health care systems since little is known about what the economic impact of adding this service might be.

In an effort to address this issue, a number of effectiveness studies have been done to investigate the economic impact of having family therapy in existing health care systems (e.g. Crane, Hillin, & Jakubowski, 2005; Law & Crane, 2000; Law, Crane, & Mohlman-Berge, 2003). Effectiveness research is concerned with the effect of real services to real people by real practitioners. In other words, the effect of mental health services conducted under the same conditions in which most therapy is provided.

The advantage of effectiveness studies is that real people, under real service conditions, are the topic of interest. The main disadvantages of these types of studies are that they are inherently difficult to control since they must investigate conditions as they naturally exist and very little experimental control is possible. In addition, because of the difficulty in establishing experimental control, cause and effect relationships cannot be established. The strongest interpretations must be cautions and discuss associations and relationships, not cause and effect.

The data which was used for the effectiveness studies to be discussed come from four sources: (1) A large western United States Health Maintenance Organization (HMO) with 180,000 subscribers in the local Utah region; (2) the Medicaid system of the State of Kansas in the United States; (3) a large national US health insurance company with several million subscribers; and (4) a family therapy training clinic at a large western university.

Health Maintenance Organization (HMO)

The first set of studies was concerned with the possible 'medical offset' of marital/couples and family therapy provided in a large local HMO system. An 'offset' occurs when people reduce their use of medical services following some type of psychotherapy or behavioral health intervention.

The HMO system which housed the first studies on family therapy medical use offset was typical of many such health care systems in the United States. In this type of system, employers and employees contract with the HMO to provide all of their health and mental health care. The cost of health care is shared by both employers and employees for a fixed price per month.

Providers from almost all health and mental health disciplines are employed by the HMO to provide care to those enrolled in the plans. All providers are licensed by the state government to provide health or mental health care in the state in which the care is given.

Data from this HMO, in the form of paper medical charts, were available for all persons, couples and families who received mental health services. Health care records

for individuals were collected for 6 months before, during and after therapy. These studies used outpatient care as the dependent variable. Outpatient visits were defined as medical care for illness, injury, psychotropic medication management, health screening, urgent care, laboratory work, or x-rays. Emergency room, prescription, and hospitalization data were not available.

Participants were randomly selected from those who had used individual, marital, or family therapy. In order to assure distinct groups for comparison purposes, the ratio of the predominant type of therapy (individual, marital/couple, or family therapy) to other types of therapy needed to be at least 3:1.

Five different types of therapy were considered: (1) Marital/couples therapy; (2) family therapy identified patient (FTIP) (identified as the 'reason' the family is seeking therapy); (3) family therapy other patient (FTOP) (participants in family therapy who were not the identified patient); (4) those who received individual therapy; and (5) a comparison group of HMO subscribers who had not received any form of psychotherapy.

Study 1

In this study (Law & Crane, 2000), the medical utilization rates of groups who received different types of therapy were compared for 6 months before therapy, 6 months after therapy began and at 1 year after therapy. Results suggest that family therapy was associated with a significant decrease in health care use at 1 year after therapy began (Table 1).

Study 2

In Study 2 (Law et al., 2003) 'high utilizers' ($n = 65$), defined as four or more medical visits in the 6-month period, were selected from the Study 1 sample. Analysis of the health care use rates of these individuals was unable to differentiate chronic health conditions from those who might be experiencing some form of somaticization of their emotional concerns. Consequently, the results undoubtedly contain persons with both types of concerns.

Results when comparing pre and 1-year follow-up health care utilization rates for high utilizers demonstrate dramatic decreases in health care use for all types of therapy (Table 2).

Study 3

Study 3 (Crane, Wood, Law, & Schaalje, 2004) explored the role of professional discipline, age, amount of experience, and gender of therapists in producing a medical offset. The results of logistic regression analysis suggested that psychotherapy in general, rather than professional training or therapist characteristics, is responsible for reductions in health care utilization. In other words, all providers regardless of training, age, gender, or experience level produced the same amount of medical use offset.

Table 1. Results when comparing pre and posttherapy utilization rates in a HMO

Type of therapy	N of subjects	% change in health care
MFT combined	272	-21.5*
Marital/couple	52	-21
FTIP	60	-9.5
FTOP	60	-30.5
Individual	60	-10
Comparison group	60	+12.2

* $p < .05$.

Table 2. Results when comparing pre and posttherapy utilization rates for high utilizers

Type of therapy	N of subjects	% change in health care
MFT combined	43	-53*
Marital/couple	15	-50*
FTIP	12	-50*
FTOP	16	-57*
Individual	22	-48*

* $p < .05$.

Study 4

Study 4 (Crane & Christenson, 2006), sought to further investigate the 'offset effect' by breaking down the dependent variable into different types of outpatient care. In order to assess a 'stress' hypothesis, this study considered specific areas of outpatient care separately. 'Urgent care' visits showed a significant 47% reduction from pre to post-intervention time periods, with such changes evident for subjects who attended marital and family therapy. Health care use reductions were more prominent for high utilizers and were found across a number of different types of outpatient care. With high utilizers, those who participated in MFT showed significant reductions of 68% for health screening visits, 38% for illness visits, 56% for laboratory/x-ray visits, and 78% for urgent care visits.

The conclusion is that MFT treatments reduce health care use in general with very large reductions for high utilizers.

Medicaid system in the State of Kansas

The second naturally occurring health care system studied used data from the Medicaid system of the State of Kansas. Medicaid is a federally funded health care system for poor children and some adults with disabilities. It is the largest single health care provider for children in the United States.

The first study was focused on conduct disordered youth (Crane et al., 2005). Retrospective health care costs data for almost 4000 multiethnic youth diagnosed as 'conduct disordered' were identified and tracked over a 30-month period. The total costs of all health care (including mental health care) were available for analysis.

Data were available for 3753 youth. Overall, 3086 youth received care that included individual therapy (and no family therapy), 503 received in-home family therapy and 164 others received in-office family therapy. Health care costs for a period of two and one half years after therapy were available for analysis.

The average cost of healthcare for youth receiving no family therapy was \$16,260 (Table 3). For those receiving in-office family therapy, the average cost was \$11,116. Youth who received in-office family therapy received \$5144 (32%) less care on average than those receiving only individual therapy. Those who received in-home family therapy averaged \$1622 over the follow-up period. Those who received in-home family therapy were least expensive of all, averaging at least 85% less than any form of in-office therapy and 90% less than those who had no family therapy.

The second study addressed the costs of treating adults with schizophrenia (Christenson, Crane & Hillin, 2006). Past research has shown that family intervention with schizophrenic patients is effective when included as a component of treatment. Despite a number of studies investigating the effect of pharmacotherapy on costs, there

Table 3. Total health care costs for conduct-disordered youth

Type of therapy	N of subjects	Total average health care costs
No family therapy	3086	\$16,260*
In-office family therapy	503	\$11,116*
In-home family therapy	164	\$1,622*

* $p < .01$.

has been little attention given to the effect of family intervention on health care costs. In this study, data from the Kansas Medicaid systems were used to test two structural models of health care costs for 164 patients with schizophrenia who had participated in family intervention. The results showed that a model which included direct and indirect effects of family intervention provided the best fit to the data. The results also provided partial support for the hypothesis that family intervention is associated with a decrease in health care costs. Specifically, although results are at the level of a trend, each family therapy intervention was associated with a \$500 decrease in total health care costs. In contrast, each new prescription given was associated with a \$1000 increase in total health care costs.

Conclusions

1. Our first research question was to determine if including family therapy in the treatment program for adolescents increases the costs of health care. The results suggest that it does not;
2. Surprisingly, in-home family therapy was associated with youth who used fewer medical services than either of the other two groups;
3. In-office family therapy was least common, but also was associated with lower health care costs than youth who did not experience any form of family therapy;
4. In our second study, preliminary results suggest that family involvement does not increase total health care costs. Indeed, there may be a reduction in total health care costs when families are involved in care.

A large national US health insurance company with several million subscribers

Psychotherapy costs data for all billed mental health disorders over a 4-year period were extracted. In all over 600,000 individual psychotherapy bills were available for analysis.

Preliminary results suggest that across all mental disorders and diagnoses, persons who received family or couples' treatment required an average of 37% less psychotherapy than those who received individual therapy (Prohofsky, 2005).

Medicare cost projection study

In addition to direct studies of health care organizations, a specific cost projection of including family therapists in a large national health service (Medicare) was conducted (Christenson & Crane, 2004). Although not a projection of adding a service, it focused on the cost of adding a specific group of new providers to an existing health care system.

Medicare is a large national provider of health care services in the United States. Beneficiaries are approximately 43 million senior adults and disabled adults. Medicare provides a comprehensive range of medical and mental health services.

This study sought to estimate the cost of adding approximately 39,000 independently licensed marriage and family therapists (MFTs) to panels of mental health providers. Historical trends were determined using psychotherapy cost data for the years 1999 through 2001, and projections for the years 2002 through 2006 were made with marriage and family therapists included as providers. The estimated net increase in cost due to adding MFTs was \$2.1 million per year for the entire USA, less than one-tenth of 1% of Medicare mental health budget. This amount is well within measurement error and thus constitutes a nonsignificant potential increase in Medicare expenditures.

Family therapy training clinic

This clinic is housed at Brigham Young University and provides approximately 10,000 hours of low-cost individual, group, marital/couple and family therapy each year. Therapists are students in masters and doctoral programs in marriage and family therapy, clinical psychology and social work. For the purposes of our studies, only clients seen by family therapy trainees are included.

Health care use data were collected at three times. First, at the beginning of therapy, second, at 6 months after therapy began, and finally, at 1 year after the beginning of therapy.

Study 1 (Christenson, Crane, Marshall, & Schaalje, 2006), investigated the influence of therapist experience levels in producing an offset effect for persons receiving family therapy services. The number of self-reported health care visits before and at 1 year after the beginning therapy was compared ($N = 112$). Results demonstrate a 37% decrease in health care use when comparing health care use before and after treatment.

Study 2 (Jakubowski et al., in press), focused on the basic research issue of self-reported medical use versus chart reviews of medical records. In other words, are the self-reports and reports about other family members significantly correlated, to the degree that self- and family reports could eliminate the need for chart reviews when doing family-based research?

For self-reports, the number of self-reported health care visits was significantly related to medical charts ($r = .541, p < .001, n = 147$). In addition, spousal reports on their partner's medical use, was significantly positively correlated with medical records ($r = .665, p < .001, n = 149$). Finally, parents' reports of their children's medical use was significantly positively correlated with medical records ($r = .703, p < .001, n = 42$).

Conclusions

1. Treatment provided by family therapy trainees was associated with decreased health care use at a level at least as high as that provided by professional therapists;
2. Self-report and family reports of health care use are good substitutes for hand review of medical charts.

Summary and conclusion

The effectiveness research related to family therapy has demonstrated reductions in health care use and that including family therapy in health care programs does not seem to increase overall health care costs. If these results are replicated in additional studies, health care managers may wish to allow family therapy to be provided to those who request such service, or who may benefit from this form of therapy.

There are, of course, a number of limitations to this type of research. First, cause-and-effect relationships cannot be established; only true experimental designs can establish such relationships. Second, direct comparisons between groups who received different forms of therapy, or received treatment from different providers are not appropriate. There are undoubtedly preexisting differences between persons and families who received different forms of treatment, and from different providers. However, these results are interesting and suggestive of effectiveness when family therapy is applied to different real world situations and that costs probably will not be accelerated.

Clinical implications

The main implications for clinicians are related to advocacy and policy. Health care policies are set by a number of different types of people acting in different roles. Often, they seek input from senior and other managers, payers, users and respected providers. Policy makers may be interested in the information this research provides, but are less likely to spend time considering it unless consumers or respected providers bring it to their attention.

One can only imagine the amount of information related to all forms of medical care that policy makers, managers and payers must process on a regular basis. It might be possible, but it is probably unlikely that they are updated regularly on the effectiveness of research on the costs of family therapy. It seems that the best mechanism of providing information to influential policy makers can be from providers and users of the service.

Another group of highly influential people who may want to be educated are past users of family therapy services. The purpose is not to exploit families for selfish purposes. Rather, it is to give a 'voice' to those whom mental health services policies are designed to benefit. Especially when families have sought, received and benefited from family therapy services that were not provided by their health care plans; plans that they have helped pay for, either directly through payroll deductions, or indirectly through taxation. It would seem that families should be able to choose to receive family therapy services if they desire, and especially when mental health services are already available in their health care plans.

Clinicians who wish to advocate for the inclusion of family therapy in general can do so themselves, but it is also possible to encourage families they work with to do the same. Certainly such encouragement should occur only after treatment and without using coercive or unethical methods. Policy makers do listen to families who wish to come forward and share their stories.

Also, few large health service provider companies or organizations are able to do quality assurance surveys of their subscribers for a service they do not as yet cover. Hence they are unlikely to uncover the value to users of family therapy services in their regular quality assurance processes.

In summary, given that family therapy has been shown to be effective in numerous reviews and that including it in health care systems does not seem to increase health care costs, now may be the time to begin to educate policy makers and begin to offer this form of care to families who desire to receive it.

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