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Effectiveness Research on the Cost of Family Therapy

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## Abstract

This paper provides a summary of effectiveness research on the costs of including family therapy in mental health services. Data was available from three 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; and 3) a US health insurance company with nine million subscribers. Results suggest that family therapy may reduce the number of health care visits, especially for high utilizers. Also, studies in two different health care systems suggest that including family therapy as a treatment does not increase health care costs.

### Effectiveness Research on the Cost of Family Therapy

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 emotional disorders, domestic violence, illness and physical disorders and severe mental illness (e.g., Carr, 2000, 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, & 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 three 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 entire State of Kansas in the United States (US); and 3) a large national US health insurance company with several million subscribers.

#### A. 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, was available for all persons, couples and families who received mental health services. Health care records for individuals were collected for six 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 one (Law & Crane, 2000):

In this study, the medical utilization rates of groups who received different types of therapy were compared for six months before therapy, six months after therapy began and at one year after therapy. Results suggest that family therapy was associated with a significant decrease in health care use at one year after therapy began.

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

\*=  $p < .05$

Study two (Law, Crane & Berge, 2003):

“High Utilizers” (n = 65) defined as four or more medical visits in the 6-month period were selected from the study one 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 one year follow-up health care utilization rates for high utilizers demonstrate dramatic decreases in health care use for all types of therapy.

Type of Therapy	N of subjects	% Change in Health Care
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MFT Combined	43	-53*
Marital/couple	15	-50*
FTIP	12	-50*
FTOP	16	-57*
Individual	22	-48*

\*p = < .05

Conclusion: MFT treatments reduce health care use in generally with very large reductions for high utilizers.

#### B. Medicaid system in the State of Kansas

The second naturally occurring health care system studies 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 Study one (Crane, Hillin, & Jakubowski, 2005). Retrospective health care costs data for almost 4,000 multi-ethnic 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 was 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. Healthcare 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. For those receiving in-office family therapy, the average cost was \$11,116. Youth who received in-office family therapy received \$5,144 (32%) less care on average than those receiving only individual therapy. Those who received in-home family therapy averaged \$1,622 over the follow-up the 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.

Type of Therapy	N of Subjects	Total Average Health Care Costs
No family therapy	3,086	\$16,260*
In-office family therapy	164	\$11,116*
In-home family therapy	503	\$ 1,622*

$p < .01$

The second study sought to determine the influence of family interventions on the overall health care costs of adults diagnosed with schizophrenia (Christenson, Crane, & Hillin, in review). Data from the Kansas Medicaid system was used to test two path analysis models of health care costs for 164 patients who had participated in family intervention. Results showed a significant indirect relationship of family therapy on general medical costs through other psychological treatment that showed a savings of \$586 for each unit increase in the provision of family therapy. In addition, the total indirect effects for family therapy showed a \$580 savings for general medical costs and \$796 for hospitalization 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 lower health care costs than youth who did not experience any form of family therapy.

4. Our second study in the Medicaid system involving families in the care of those diagnosed with schizophrenia does not increase total health care costs. Although not testable for statistical significance, the total indirect effect of family intervention on hospitalization costs and general medical costs showed that a one unit increase in family therapy was associated with a \$796 and \$580 savings, respectively.

### C. CIGNA Behavioral Health

CIGNA is a large national US health insurance company and administers 37 different health plans with over 9 million health care plans.

Approximately 3 million billed mental health disorders were available for costs analysis.

Preliminary results suggest:

1. Across all mental disorders and diagnoses, persons who received family or couples' treatment alone required approximately 38% less psychotherapy than those who received individual therapy alone (Crane, Bergman, Payne & Smith, in preparation; Prohofsky, 2005).

### Summary and Conclusions:

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 are not appropriate. There are undoubtedly pre-existing differences between persons and families who received different forms of treatment. 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.

## References

- Carr, A. (2000) Evidence-based practice in family therapy and systemic consultation I. *Journal of Family Therapy*, 22, 29-60.
- Christenson, J. D., Crane, D. R. and Hillin H. H. (in review). Family Intervention and Health Care Costs for Kansas Medicaid Patients with Schizophrenia.
- Crane, D. R., Bergman, D. M., Payne, S. H. & Smith, R.D. (in preparation). The Costs of Providing Individual and Family Therapy: A Comparison of the Professions.
- Crane, D. R., Hillin, H. H., & Jakubowski, S. (2005) .Costs of Treating Conduct Disordered Medicaid Youth with and without Family Therapy. *The American Journal of Family Therapy*. 33 (5), 403-413.
- Law, D. D., & Crane, D. R. (2000). The influence of Marital and Family Therapy on health care utilization in a Health Maintenance Organization. *Journal of Marital and Family Therapy*, 26 (3), 281-291.
- Law D. D., Crane, D. R., & Berge, J. (2003) The Influence of Marital and Family Therapy on High Utilizers of Health Care. *Journal of Marital and Family Therapy*, 29, (3), 353-363.
- Prohofsky, J. A. (2005) *Relational Therapies and Managed Care*. Plenary presented at the annual conference of The American Association for Marriage and Family Therapy, Kansas City, KS
- Sprenkle, D. H. (Ed.) (2002) *Effectiveness Research in Marriage and Family Therapy*. Alexandria, VA: American Association for Marriage and Family Therapy.
- Stratton, P. (2005). *Report On The Evidence Base Of Systemic Family Therapy*. Association for Family Therapy.