((Published January 2016 in 'Familiendynamik' as part of a special issue 'systemische Therapie als Teil der Gesundheitsversorgung?' (English ‘Family Dynamics 'systemic therapy as part of health care?'), please do not quote without permission)).

A Summary Report of the Cost-Effectiveness on the Profession and Practice of Marriage and Family Therapy in Real-World Heath Care Settings: An Update*

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Keywords: Cost-effectiveness, Family therapy, Medical offset, Health care utilization, Medical family therapy

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* Updated from Crane, D. R. & Christenson, J. D. (2012). A Summary Report of the Cost-Effectiveness of the Profession and Practice of Marriage and Family Therapy. *Contemporary Family Therapy: An International Journal, 34*, 204-216. doi: 10.1007/s10591-012-9187-5. Used by permission.

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Abstract

The purpose of this article is to provide a summary of the cost-effectiveness research for the practice and profession of family therapy in real-world health care settings. Given that an earlier review covered publications up to 2012 (Crane & Christenson, 2012), the present review will address work since the earlier review. Findings related to schizophrenia, post-traumatic stress disorder, eating disorders, depression, Alzheimer's disease, generalized anxiety disorder, autism spectrum disorders, and relational problems are discussed. Results continue to show that across a range of disorders (other than Alzheimer's disease), family therapy is the most cost effective form of care, followed by individual and mixed therapy (a combination of family plus individual therapy). Further, marriage and family therapists (MFTs) as a group are cost-effective providers. Finally, when compared directly, masters level providers appear to be providing services that are similar in cost effectiveness to those provided by doctoral level practitioners.

A Summary Report of the Cost-Effectiveness on the Profession and Practice of Marriage and Family Therapy in Heath Services Settings: An Update

Family therapy as a treatment modality has been found to be beneficial in a large number of treatment outcome studies (Carr, 2014; Heatherington, Friedlander, Diamond, Escudero, & Pinsof, 2015). However, the actual application to real-world health care settings is rarely studied when considering family therapy or marriage and family therapist (MFT) cost-effectiveness. This review examines several recent studies using data from large-scale US healthcare organizations, Kansas Medicaid and Cigna, to show the latest research into how family therapy compares to other modalities, and how MFTs compare to other providers. This report updates the literature from previous research reports (Crane & Christenson, 2012).

Kansas Medicaid Data

Schizophrenia (Christenson, Crane, Beer, Bell, & Hillin, 2014).

Data for this study was taken from the State of Kansas Medicaid system. Medicaid is a United States national government program that provides health care services for poor and disabled children and adults. In this case, all adults who received treatment for schizophrenia via Medicaid were eligible for inclusion. However, only 164 adults received any family therapy to help support the management of this illness.

Data were used to develop two structural equation models relating to the cost of treating adults (N = 164) diagnosed with schizophrenia. The participants were mostly males (55%), White non-Hispanic (90%), and had an average age of 30 years. The first model included only limited direct effects for family intervention (e.g., reductions in hospitalization costs). The second model reflected both direct and indirect effects (e.g., reducing hospitalizations by

increasing medication compliance), and was shown to be a better fit to the data when both models was compared. This second model showed a significant indirect relationship between family intervention and general medical costs that accounted for a savings of $586 for each session of family intervention provided. The total indirect effect of family intervention on costs was a savings of $796 for hospitalizations and $580 for general medical use for each session of family intervention provided.

Findings from Cigna Data

These retrospective studies used outpatient, administrative data from 2001-2006 obtained from a national insurance provider, Cigna. Data is unidentifiable regarding individual patients or providers but provides information on age, date of service, diagnosis, and CPT defined treatment type. A more detailed description of the data can be found in Crane & Payne 2011.

Treating Children and Adolescents (Fawcett, 2012).

Participants included 106,374 boys (53.2%) and 93,753 girls (46.8%) ages 3-18 (M = 12.1, SD = 3.9), who were treated in outpatient facilities throughout the United States. Results indicate that there are differences in dropout, recidivism, cost, and treatment length by provider license, therapy modality, diagnosis, age, and gender.

Specifically, results suggest that marriage and family therapists have the lowest rate of recidivism and are among the lowest in terms of dropout and had better cost-effectiveness. The results also suggest that family therapy is more cost-effective than individual or mixed therapy, and that mixed therapy has a much lower percent of dropout than individual or family therapy alone. There were also significant differences in dropout and recidivism by age suggesting that younger children are more likely to drop out of treatment. These results provide valuable information about mental health treatment of children and adolescents. Specifically, utilizing a

family based approach may help reduce the total length of treatment, while utilizing a mixed mode approach to therapy may help reduce the risk of dropout from treatment. Also, some diagnoses appear to be more difficult to treat, with higher percentages of dropout and requiring more time and money for successful treatment.

Eating Disorders (Horton, 2012)

This study examined the cost-effectiveness of treating Anorexia Nervosa, Bulimia Nervosa, and Eating Disorder Not Otherwise Specified (NOS), as well as the effects that modality of therapy (i.e. individual, family, and mixed therapy), license of therapist, and secondary diagnosis had on recidivism and total cost of treatment in the care of these patients. One-thousand and thirty-eight patients (56 males, 982 females) diagnosed with Anorexia Nervosa, 1,674 patients (56 males, 1,618 females) diagnosed with Bulimia Nervosa, and 1,997 patients (197 males, 1,800 females) diagnosed with Eating Disorder NOS were included in this study.

Family therapy was the least expensive form of therapy in average total cost of therapy. Individuals who had family therapy were 3.3 times less likely to return to care than those who had individual therapy and 7.5 times less likely to return to care than those who had mixed therapy. Having a secondary diagnosis on average increased the total cost of treatment by $437.34, irrespective of the type of secondary diagnosis (i.e. depression, anxiety, or substance-abuse). These findings suggest that modality of therapy should be considered in the treatment of Anorexia Nervosa, Bulimia Nervosa, and Eating Disorder NOS.

Depression (Crane et al., 2013).

Claims data for 164,667 patients diagnosed with depression were examined. Of interest was whether there would be differences in total cost and cost-effectiveness based on modality or

provider type and whether various factors (e.g., age, gender, modality, provider type, etc.) would account for difference in recidivism. Consistent with a number of the studies listed in previous reviews (e.g., Crane & Payne, 2011), the results indicated that MFTs provided services that were associated with the lowest recidivism rate. However, contrary to the findings of Crane and Payne (2011), services provided by MFTs in this study were the least costly.

Collaborative Mental Health Care in Outpatient Managed Care (Maag, 2013)

This study compared the differences in treatment length, cost, cost-effectiveness, dropout, and recidivism between a biomedical (only MD or RN), talk therapists (only MFT, LPC, Psychologists, or Licensed Social Workers), and a collaborative (biomedical plus a talk therapist) mental health model for outpatient psychotherapy insurance claims. A biomedical model was the most cost-effective with fewer sessions, but had a significantly higher dropout rate. Collaborative care had the least dropout, but also had highest costs and recidivism rates. Within collaborative models, mixed modes of therapy (individual and family therapy sessions) had the lowest dropout, but at significantly higher costs and recidivism rates.

Family therapy had the lowest recidivism and cost, but with the highest dropout rate. In terms of specific problems, eating disorders had significantly more sessions and were significantly more costly to treat than any other diagnoses, with mood disorders being the next most costly. Relational disorders had the fewest sessions, best cost-effectiveness, and lowest recidivism rates. Finally, in terms of specific mixes of provider types, the MD/MFT provider combination had the lowest dropout and recidivism rates, with the lowest cost, and a significantly better cost-effectiveness than the MD/psychologist combination. The MD/psychologist combination had a significantly higher recidivism rate, and the MD/MSW combination had the highest dropout.

Relational Problems (Moore & Crane, 2014)

This study included 3,315 patients who had participated in psychotherapy for relational problems. These included those with a diagnosis of a partner relational problem (DSM IV-R, V61.10) or those with a parent-child relational problem (DSM IV-R, V61.20). The outcomes of interest included total cost, cost-effectiveness, and recidivism. Psychotherapy dropouts (i.e., less than two sessions) were excluded from the analysis.

Those who received individual therapy for relational problems had the same recidivism rate than those who participated in family/couple therapy. Findings also showed that couples therapy was a relatively brief intervention that required an average of five sessions and cost approximately $280 for an episode of care (with recidivism of 8.43%). Including therapy for relational problems would not be costly.

Eating Disorders Treatment (Ballard & Crane, 2014).

This study examined patterns in eating disorder outpatient mental health treatment by age. Participants (n = 5,445) included patients treated for an eating disorder. Treatments for individuals 55 and older were less expensive and shorter than for any other age group. Treatments for individuals 44–55 were less expensive than for 15–24. Individual therapy is the most common treatment modality, but younger individuals are likely to receive family therapy. Younger individuals have lower dropout and higher return-to-care rates.

Oppositional Defiant Disorder (ODD), (Malloy, 2014)

Data for 9,904 children and adolescents were considered. Analyses found significant differences in total cost by the type of mental health professional providing the care. LPC's provided therapy for the lowest cost, followed in order by MFTs, MSWs, psychologists and MDs. MFTs had the lowest drop-out rate, followed by MSWs, counselors, psychologists, and

MDs. MFTs had the lowest proportion of clients returning to care, followed by MDs, counselors, MSWs, and psychologists. Family therapy was the most cost-effective treatment, although the least common modality used.

Generalized Anxiety Disorder in Adolescent Females (GAD), (Reynolds, 2014)

This study examined the cost-effectiveness by provider type and therapy modality in treating adolescents (ages 13-17) with a GAD diagnosis (DSM-IV 300.02). These cases (n = 2,932) were used to analyze the cost-effectiveness, total cost, treatment length, dropout, and recidivism rates for this population. Overall, the mean cost of treatment for GAD in the first episode of care across all provider types is $439.28.

MFTs and LPCs were the most cost-effective, had the lowest total cost and number of sessions, as well as the lowest recidivism rate among the provider types. In contrast, MSWs and psychologists were the least cost-effective, had the highest number of sessions and the highest readmission rate.

Therapy modality comparisons indicated that family therapy is most cost-effective followed by individual, then mixed therapy modalities. Significantly, fewer sessions were found when conducting family therapy upon treating adolescents with GAD

Post-Traumatic Stress Disorder (Ingalls, 2015).

This sample was 12,845 adults who were diagnosed with PTSD and received outpatient individual and family psychotherapy from one of the usual group of providers. Results were compared across treatment modality, across practitioner license type and between practitioner educational levels. The results demonstrated that family therapy was most cost-effective and used the fewest sessions, while mixed therapy was least cost-effective. Among practitioner licensure types, MDs were found to be the most cost-effective, while the group of RNs, MSWs

and MFTs were equally cost-effective compared to one another. Also, no significant differences in cost-effective treatment outcomes were found between masters level and doctoral level practitioners indicating that master's level providers are providing care similar to doctoral trained individuals.

Alzheimer's disease Management (Crane, Story, & Ingalls, under review)

This study examined the cost-effective treatment of the *management* of Alzheimer's disease using psychotherapeutic interventions. It explored therapy outcomes (treatment length, cost, cost-effectiveness) comparing for modality (individuals, family, or mixed therapy) and provider types (biomedical providers (MD, RN) and talk therapy (LPC, MFT, PSY, MSW) providers). The data set of 180 participants included 114 females (63.3%) and 66 males (36.7%), with an age range of 14-95 (M = 69.95, SD = 17.32).

Psychotherapy is a low cost treatment option for the management of Alzheimer's disease. Biomedical providers were more cost-effective and had a lower number of average sessions than talk therapy providers. There was not a significant difference in the total cost or cost-effectiveness of treatment for the management of Alzheimer's disease in comparing individual, mixed, and family therapy.

Posttraumatic Stress Disorder in Children (Crane, Fawcett, & Ballard, under review).

Another study looked at differences in therapy outcomes between children and adolescents who have a diagnosis of posttraumatic stress disorder (PTSD) and those with other anxiety diagnoses. Participants included 11,881 males (46.3%) and 13,782 females (53.7%). Participant ages ranged from four to eighteen years (M = 11.53, SD =3.98).

Children with PTSD have more total sessions, higher dropout, and higher recidivism rates than children with most other anxiety disorders. Results suggested that family therapy has lower

recidivism rates than individual therapy. Participants who were involved in a combination of individual and family therapy were six times less likely to drop out of treatment.

Mental Health Service Utilization in Autism Spectrum Disorders (Ballard, Crane, Harper, Sandberg, Fawcett, under review).

Participants (*n* = 1,614, ages 1 to 61) included all patients diagnosed with an ASD from 2001 to 2006, who had claims for outpatient mental health services. Across all age groups, cost and length was smallest for family therapy, followed by individual therapy. Mixed therapy was significantly longer and more costly. Rates of dropout and return to care were lowest for mixed therapy. Dropout was significantly higher for children than for adults or adolescents. Among providers, social workers had the lowest cost among adolescents and the highest return to care rates among adults and counselors had the longest service length and the lowest dropout rates among children.

Summary

This report provided information on current studies into the cost-effectiveness of family therapy treatment. These studies update previous research and continue to support important findings. Marriage and family therapists and the family therapy modality have been shown to be cost-effective providers and treatment for a number of disorders and across many populations. When compared to other providers, MFTs often have the lowest rates of recidivism, dropout, total cost, number of sessions, and fewest clients returning for care. They are also often the most cost-effective providers. Family therapy has been shown to be associated with lower total costs, fewer sessions, and is more cost-effective compared to other modalities.

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