



## Collaborative family health care: What do practitioners think?

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**ABSTRACT.** Although in recent years, family therapy practitioners have been working in physical health environments, this process has been confusing as to the proper role of the family therapist in such settings. This article describes a quantitative study, using a survey design, that attempted to better define the collaborative practice between medical and psychosocial providers in health care. For that purpose, a questionnaire was developed based on a prior qualitative design that included ethnographic interviews that generated theoretical concepts inductively derived from family therapists and family physicians' detailed descriptions of their experience in collaborative health care. The study's goal attempted to provide more information regarding the practice of the interdisciplinary approach in health care. Results showed that the major area of concern for all types of practitioners is training both in private as in not-for-profit settings. The distinction between different types of practitioners and their contribution for collaborative health care was also acknowledged. The integration between the biomedical model and the systemic model is still a problematic area for those who practice a collaborative approach. Implications of the results towards the practice and the operationalization of the collaborative approach are emphasized.

**KEYWORDS.** Collaboration. Health care. Biopsychosocial. Providers' perceptions. Survey Design.

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**RESUMO.** Embora nos anos recentes, os terapeutas familiares estejam integrados nas equipas médicas, o processo continua confuso em relação ao seu papel nos settings clínicos. Este artigo descreve um estudo quantitativo que utilizou um questionário, na tentativa de melhor definir a prática da colaboração entre profissionais médicos e profissionais psicossociais em settings clínicos. Com este objectivo em mente, foi desenvolvido um questionário com base num estudo qualitativo prévio que incluiu entrevistas etnográficas responsáveis pelos conceitos teóricos derivados indutivamente das descrições detalhadas das percepções dos terapeutas familiares e médicos de família em relação à sua experiência de colaboração. O objectivo do estudo pretendeu fornecer mais informação sobre a prática interdisciplinar da medicina no sistema de saúde. Independentemente do tipo de profissional envolvido, a maior área de preocupação è o treino isto quer para os profissionais que trabalham em settings clínicos privados quer estatais. A distinção entre diferentes tipos de profissionais e a sua contribuição para a prática da medicina é apresentada. A integração entre o modelo biomédico e o modelo sistémico è também uma das áreas problemáticas para os que praticam uma abordagem colaborativa. Implicações dos resultados em relação à prática e operacionalização da abordagem colaborativa são enfatizadas.

**PALAVRAS CHAVE.** Colaboração. Sistema de saúde. Biopsicossocial. Percepções dos profissionais. Inquérito

**RESUMEN.** A pesar de que en los últimos años los terapeutas de familia están integrados en equipos médicos, el proceso continúa confuso con respecto a su papel en los contextos clínicos. En este artículo se describe un estudio cuantitativo que utiliza un cuestionario con el objetivo de definir mejor la colaboración entre profesionales médicos y profesionales psicosociales en contextos clínicos. Con esta finalidad se desarrolló un cuestionario basado en un estudio cualitativo previo, que incluía entrevistas etnográficas sobre conceptos teóricos derivados intuitivamente de detalladas descripciones de las percepciones de terapeutas familiares y médicos de familia, en relación a sus experiencias de colaboración. Este estudio pretende proporcionar información sobre la práctica interdisciplinar en el sistema de salud. Independentemente del tipo de profesional implicado, la mayor área de preocupación es el entrenamiento, tanto de los profesionales que trabajan en clínicas privadas como estatales. La distinción entre diferentes tipos de profesionales y su contribución a la práctica de la salud es discutida. La integración entre el modelo biomédico y el modelo sistémico es a su vez un área problemática para los que practican abordajes interdisciplinarios. Por último, se enfatizan las implicaciones de los resultados con respecto a la práctica y operacionalización de las aproximaciones interprofesionales.

**PALABRAS CLAVE.** Colaboración. Sistema de salud. Biopsicossocial. Percepciones de los profesionales. Encuesta.

### Introduction

The development of the biopsychosocial model has emphasized the importance of the biological, psychological and social aspects of illness (Engel, 1977). Fundamental to this view is the conviction one cannot understand a patient' illness without knowing

the emotional and social context in which the disease occurs. In 1983, Donald A. Block coined the term Family Systems Medicine with the publication of the journal "Family Systems Medicine". This new territory was characterized by an alliance between medicine, family therapy, and systems thinking and emerged as a functional related unit having, as its base, the systemic paradigm in medicine or the use of the biopsychosocial model. In fact, the history of Family Systems Medicine traces the evolution, in medicine, from an individual to a family approach. The systemic paradigm in medicine involves the biological, psychological, and social variables in the study of disease (Engel, 1977) and promises to end the reductionist pattern of health care, to require less technology (Bloch, 1985, 1988), to be cost effective (Glenn, 1985; Ramson, 1985), and to be more satisfying for patients (Glenn, 1985, 1987). In 1996, the journal of *Family Systems Medicine* changed its name to *Family, Systems and Health* and is now titled *Collaborative Family Health Care* reflecting the changes in health care (McDaniel and Campbell, 1996) that have happened since then. With the increased attention on health care reform and an emphasis on interdisciplinary in health care delivery (Glenn, 1987), it is important to understand what perceptions influence the collaborative approach, how physicians and therapists perceive their role in the process, and how they characterize collaborative family health care or the family systems medicine's approach. Although in recent years, family therapy practitioners have been working in physical health environments, this process has been confusing as to the proper role of the family therapist in such settings (Bloch, 1992). Also, in the practice of biopsychosocial medicine the distinction between the role of the family therapist and other mental health professionals, in medical settings, has not been clearly defined in the literature. In the past, qualitative designs, although more congruent with the epistemological beliefs of the systemic paradigm (Atkinson and Heath, 1987; Moon, Dillon, and Sprenkle, 1990), have been criticized for being non-replicable and not subject to disconfirmation (Cavell and Snyder, 1991). Quantitative designs, on the other hand, have been long criticized for not taking in consideration the context, being reductionist, and inadequate for systemic research (Dell, 1982, 1985; Tomm, 1983, 1986). Wynne (1988) argued that in the initial stages of development of a new field, emphasis should be given to discovery-oriented research and hypothesis-generating research rather than confirmatory research. In his view, quantitative designs become more appropriate to confirm/disconfirm the theoretical concepts generated by previous qualitative research so that generalization of results becomes possible. As a result, both research designs would complete each other and their integration would provide the researcher with information that neither of the methods alone could generate.

This article describes a quantitative study using a survey design that attempted to better define the collaborative practice between medical and psychosocial providers in health care. The development of the questionnaire was based on a prior qualitative design that included ethnographic interviews that generated theoretical concepts inductively derived from family therapists and family physicians' detailed descriptions of their experience in collaborative health care. The use of a survey was decided to be appropriate for the quantitative research design since the aim was to generalize findings from a pilot qualitative study to a theoretical population (Louis, 1982; Sieber, 1973)

and decide whether the study's hypothesis that emerged from the qualitative study could be supported or disconfirmed with a broader random sample. Furthermore, this study attempted to clarify medical and psychosocial providers' perceptions of family systems medicine or collaborative family health care and provide more information towards the operationalization of the field.

A domain analysis (Spradley, 1979) of physicians and family therapists' verbatim reports yielded five domains regarding collaborative health care: Collaboration, Practice of Collaborative health care, Referral, Training and Roles.

Research questions:

- Can the five parameters of collaborative health care that emerged from the qualitative pilot study be confirmed in a random sample?
- Are there any differences among medical and psychosocial providers in how they define the five parameters of collaborative health care?
- Are there any differences in the way medical and psychosocial providers who work in private versus not-for-profit settings perceive the five parameters of collaborative family health care?

This article follows the structure proposed by Bobenrieth (2002).

### **Method**

This investigation is a descriptive study with surveys (Montero and León, 2002).

#### *Measure Development*

The questionnaire' development for the purpose of this study followed Spradley' analysis of ethnographic interviews. Each transcribed text of the ethnographic interview was subjected to a domain analysis as specified by Spradley's DRS model (1979). Each domain identified by a cover term became a subscale in the questionnaire, included terms became items within each subscale, and the emerged category that pulled all similar domains together into a core category became a scale. A more detailed description of the measure development has been presented elsewhere (Pereira and Smith, 2001). The final questionnaire contained five scales: 1) Collaboration, 2) Practice of Collaborative Health Care, 3) Referral, 4) Training and 5) Roles. Each scale had several subscales. As a result of Spradley's domain analysis, some scales had less or more items than others. The final questionnaire included a total of 45 items. The coefficient alpha for all the 45 items was .76, which was acceptable for this exploratory study (Nunnally, 1972).

#### *Sampling Frame*

Subjects for this study were selected from the population of those who subscribe to the journal of "Family, Systems and Health". A random sample of 698 was generated. American and International subscribers were included. This database was selected because it was assumed that it accurately represented members who most likely are Collaborative Health Care Practitioners and/or endorse a collaborative approach to health care. Procedures for this study were patterned after Dillman's Total Design

Method (TDM) for conducting mail surveys (Dillman, 1978). Table 1 summarizes the data regarding the sample sociodemographics' characteristics.

**TABLE 1.** Sample characteristics.

	N = 350	%
<i>Age</i>	Mean = 47      SD 8.1	
<i>Gender</i>	Female = 220      Male = 127	Female 63%      Male 36%
<i>Degree</i>	<ul style="list-style-type: none"> <li>• M D</li> <li>• MSW/ MFT/ MA/MS/ MEd/ MSN</li> <li>• PhD</li> <li>• PsyD</li> <li>• EdD</li> <li>• RN</li> <li>• Other</li> </ul>	13% 48% 47% 3% 3% 1% 3,5%
<i>Primary Employment Setting</i>	University Medical School Hospital Private Practice Residency Program Health Care Organization Family Practice Other	14% 13% 37% 5% 3% 3% 15%
<i>Length of Collaborative Practice</i>	Two years or less      57 More than two Years      293	16% 84%
<i>Primary Collaborator</i>	Family Therapist Family Physician Social Worker Psychiatrist Nurse Other Physicians Other	11% 25% 6% 7% 17% 10% 15% 7%

The total sample was composed of 350 respondents. The mean age for the sample was 47 (SD=8.1). 63% were female and 36% were male. In terms of primary employment 168 (48%) had a masters degree, 96 (27.4%) a doctoral degree, 46 (13.1%) a medical degree and finally, 4 (1.1%) had a nursing degree. In terms of employment setting, 13% worked in a hospital setting, 14% at a university/medical school and 37% in a private practice. The majority of respondents (n=293) reported that they had been practicing a collaborative approach for more than two years (83.7%) while the remaining respondents

(16.3%) reported less than two years in collaborative practice. Respondent's primary and secondary titles were also analyzed. Table 3 summarizes that data. Of the respondents, 30% reported their primary title to be family therapists. The second largest group was approximately the same for four groupings: "Program / Department / Unity Director" (n=39) constituted 11.1%, "Psychotherapist" (n=38) constituted 10.9%, "Social Worker" (n=37) constituted 10.6% and finally, "Academic Professor" (n=34) constituted 9.7% of the total sample. For the secondary title, family therapists (n=81) again constituted 23.1% of the total sample. The second major groupings were "Program/Department/Unit Director" (n=22) with 6.3%, and "Academic Professor" (n=19) constituted 5.4% of the total sample (Table 2).

**TABLE 2.** Respondents' title.

	<i>Respondent's Title</i>	<i>N</i>	<i>%</i>
<i>Primary Title</i>	Academic professor	34	10
	Program/Department/Unit Director	39	11
	Family Therapist	106	30
	Family Physician	20	6
	Psychiatrist	7	2
	Other Physicians	5	1
	Nurse	16	5
	Psychologist	41	12
	Psychotherapist	38	11
	Social Worker	37	11
	Other	4	1
	<i>Secondary Title</i>	Academic professor	19
Program/Department/Unit Director		22	6
Family Therapist		81	23
Family Physician		7	2
Psychiatrist		1	.3
Other Physicians		3	.9
Nurse		20	5.7
Psychologist		14	4
Psychotherapist		21	6
Social Worker		20	6
Other		2	.6

As we can see for both the primary and secondary title "family therapists" are the best represented in our sample.

### Results

Due to the nature of this study, a conservative estimate of the variance and alpha level were made to determine sample size. A power analysis was performed to estimate  $n$  for each inferential analysis. A sample size of 175 was satisfactory to conduct the inferential analysis proposed in the study.

To determine whether the five parameters of collaborative health care that emerged from the pilot study could be generalized, i.e. the perceptions of the random sample of those professionals who endorse a collaborative approach to health care corroborate the perceptions of those practitioners who served as informants in the qualitative study (research hypothesis one), the binomial test was performed on each of the five domains or scales.

Although the binomial test is a non-parametric test, the binomial distribution tends toward the normal distribution with samples larger than 35 (Siegel and Castellan, 1988). The binomial test allows us to determine if there are significant differences between the levels of agreement to the content of the items that comprised each scale. If respondents agreed with the content of the items, the mean for that particular domain or scale would be greater than four since choices 5, 6 and 7 in the Lickert scale demonstrated levels of agreement and option 4 indicated neutrality in relation to the content of the item.

The results for scale one (collaboration), scale two (practice of collaborative health care), scale three (referral) and scale four (training), confirmed the qualitative study. However this was not true for scale five (roles) indicating that the results for this scale cannot be generalized. Table 3 presents the results of the binomial test.

**TABLE 3.** Binomial test.

<i>Scales</i>	<i>Mean (SD)</i>	<i>Sample Choosing &gt;4</i>	<i>Sample Choosing &lt;4</i>	<i>Proposed Value</i>	<i>Observed Prop</i>	<i>P</i>
<i>Collaboration</i>	5.18 (.46)	345	5	.5000	.0143	$P \leq .01$
<i>Practice of Collaborative Health Care</i>	4.53 (.52)	293	57	.5000	.1629	$P \leq .01$
<i>Referral</i>	4.45 (1.04)	220	130	.5000	.3714	$P \leq .01$
<i>Training</i>	4.35 (1.01)	213	137	.5000	.3914	$P \leq .01$
<i>Roles</i>	3.85 (.075)	131	219	.5000	.6257	$P \leq .01$

Although respondents, in average, agreed with the content of Scales One, Two, Three, and Four, a description of respondents' answers to each item of the questionnaire with their percentages of agreement and disagreement is presented for each scale. An analysis of items with practical significance follows.

*Collaboration*

Table 4 presents the results for scale “collaboration”. The numbers in () identify the item number of the questionnaire.

**TABLE 4.** Collaboration.

<i>Item Content</i>	<i>% Agreement</i>	<i>% Disagreement</i>	<i>Mean</i>
Collaboration between family physicians and family therapists results in a treatment plan that includes medical and psychosocial components. (21)	<b>95.5</b>	5	6.31
One of the benefits of collaboration between physicians and family therapists are improvement in patient compliance. (1)	<b>92.9</b>	2	6.03
Collaboration between family therapists and family physicians works best with patients who have a problem that is not strictly medical. (2)	29.8	<b>53.4</b>	3.43
Patients see their physicians less often when the cause of the problem is psychosocial and they have a therapist. (6)	<b>88.1</b>	9.9	5.32
Collaboration between family therapists and family physicians strengthens the bond between physician-patient and therapist-patient. (7)	<b>96.8</b>	2.6	5.87
Collaboration with physicians increases therapists' understanding of the biomedical aspects of disease. (26)	<b>96.5</b>	1.2	6.30
Collaboration between family physicians and family therapists decreases the quality of care and decreases health care costs. (33)	<b>97.1</b>	2	6.29
Collaboration between family physicians and family therapists is particularly helpful for patients with physical symptoms that are stress-related. (38)	<b>96.0</b>	2	6.09
Collaboration with family therapists helps physicians understand concretely how families work. (4)	<b>86.3</b>	4.3	5.59
When physicians and family therapists work together closely in the same setting, patients are more comfortable in seeking therapy or accepting therapy referrals. (12)	<b>97.5</b>	1.4	6.11
Collaboration between family therapists and family physicians makes practice more interesting. (17)	<b>97.9</b>	1.2	6.36
Collaboration between physicians and family therapists requires too much time to be implemented into an HMO. (24)	12.5	<b>77.2</b>	2.49
In the practice of Family Systems Medicine the physician is in charge and the therapist is the outside member. (35)	15.7	<b>72.6</b>	2.56
The difference in salaries between family physicians and family therapists create conflict in the collaborative relationship. (44)	36.1	<b>40.3</b>	3.83



An analysis of results revealed that respondents perceived collaboration to result in a better treatment plan, to improve compliance, increasing the quality of care, lessening physicians' visits, providing a more interesting practice, helping therapists to better understand the biomedical aspects of disease, physicians to better understand how families work and, finally, to strengthen the bond between physician-patient and therapist-patient relationship. Respondents also perceive that collaborative family health care can be implemented in a HMO, the difference in salaries between therapists and physicians not as a problem for collaborative practice and perceive therapists together with physicians in charge of treatment.

#### *Practice Of Collaborative Health Care*

Table 5 presents the results for scale 2 "Practice of Collaborative Health care".

**TABLE 5.** Practice of collaborative family health care.

<i>Item Content</i>	<i>% Agreement</i>	<i>% Disagreement</i>	<i>Mean</i>
Family Systems Medicine is too vague to be included into family physicians' daily practice. (30)	6.6	<b>88.3</b>	2.00
In order to practice of medical family therapy, family therapists need to follow the DSM-IV diagnostic categories regardless of their epistemological beliefs. (37)	<b>40.2</b>	39.4	3.91
The focus of Family Systems Medicine is on prevention. (39)	<b>39.4</b>	30.6	4.26
Family Systems Medicine is the application of Behavioral Medicine expanded to the "family" level. (40)	<b>41.2</b>	36.7	3.99
Family Systems Medicine is an area of specialization within family therapy. (45)	<b>74.8</b>	11.7	5.37
Physicians do not know enough about family systems to understand the psychosocial aspects of illness. (3)	<b>62.1</b>	25.4	4.71
Sharing information with patients about their diagnoses and prognoses requires physicians to be trained in counseling. (5)	<b>44.3</b>	40.2	40.3
In the practice of medical family therapy, patients' access to their charts, that include personal notes of therapists, can create ethical problems. (9)	37.8	<b>40.0</b>	3.95
In order to be accepted by the "medical culture", family therapists need to help physicians identify a need that family therapy can meet (11).	<b>87.6</b>	7.1	5.76
Dependence on the medical provider for Reimbursement of therapy services for Medicare or Medicaid patients limits the practice of family systems medicine. (13)	<b>71.4</b>	11.2	5.40
Patients with complicated physical problems make the family systems medicine approach impractical. (14)	3.1	<b>94.6</b>	1.60

<i>Item Content</i>	<i>% Agreement</i>	<i>% Disagreement</i>	<i>Mean</i>
Physicians feel intimidated by therapists because patient's psychosocial concerns have not been addressed by physicians in their own lives. (23)	<b>36.6</b>	29.7	4.03
Practicing Family Systems Medicine is like learning a new skill or procedure that requires practice. (25)	<b>93.7</b>	2.8	5.95
In order for Family Systems Medicine to become mainstreamed, psychosocial issues should be included in physicians' assessment. (29)	<b>94</b>	3.1	6.11
There are no financial rewards for physicians to discuss patients' condition with therapists. (31)	39.2	<b>41.5</b>	3.89
If Family Systems Medicine is to prosper, it needs to develop a strong empirical base regarding the effects of collaboration. (36)	<b>92.3</b>	2.9	6.12
In order for Family Systems Medicine to survive, health care delivery has to become interdisciplinary. (43)	<b>88.9</b>	5.8	5.90

To be accepted by the "medical culture", the majority of respondents (88%) believed that collaborative family health care must be able to provide services that meet physicians' needs in providing treatment for patients. Therefore, it is not surprising that in order for collaborative health care to be main streamed, the majority of respondents believed that psychosocial issues must be included in physician's assessment, health care delivery must become interdisciplinary, and that collaborative health care must develop a strong empirical base regarding the effects of collaboration.

In the practice of collaborative family health care, most respondents (71%) believed that the dependence of family therapists on medical providers for reimbursement of therapy services for Medicaid or Medicare patients is a limitation in the practice of collaborative family health care. Respondents were divided regarding the possibility of ethical problems if patients have access to charts with therapists' notes attached. There was also an ambivalence in respondents' answers regarding: 1) the need for family therapists to follow the DSM-IV diagnostic categories regardless of their epistemological and ontological beliefs, 2) the focus of family systems medicine to be on prevention, 3) the need for physicians to be trained in counseling for delivering diagnoses or prognoses and finally 4) family systems medicine as an application of Behavioral Medicine expanded to the family level.

*Referral*

Table 6 presents the results for scale “referral.

**TABLE 6.** Referral.

<i>Item Content</i>	<i>% Agreement</i>	<i>% Disagreement</i>	<i>Mean</i>
Physicians refer patients to therapy after they have found nothing medically wrong with the patient. (8)	<b>68.6</b>	18.9	4.89
When patients are referred to therapists/physicians, they should at least provide a summary of the session to the referring professional. (34)	<b>71.7</b>	15.1	5.30
Patients feel abandoned by their physicians when they are referred to therapists. (15)	23.4	<b>54.6</b>	3.20

Respondents perceive physicians to refer patients to therapy after finding no medical causes for the problem, they also expect a summary of the referring professional and do not perceive patients to feel abandoned after being referred to therapy.

*Training*

Table 7 presents the results for scale “training”. Most respondents (62%) perceived physicians not knowledgeable of family systems to understand the psychosocial aspects of illness. Respondents (61%) also perceived training in Collaborative Health Care to be primarily informal for physicians and limited, in terms of biomedicine, for family therapists (78%). As a result, it is understandable why respondents appeared divided in their answers (38% agreeing versus 33% disagreeing) regarding family therapists’ comfort with physicians in discussions of the biochemical aspects of disease.

**TABLE 7.** Training.

<i>Item Content</i>	<i>% Agreement</i>	<i>% Disagreement</i>	<i>Mean</i>
Family therapists do not know enough about common diseases to truly collaborate with physicians. (16)	24.3	<b>62.6</b>	3.09
Family Therapists’ training in Biomedicine is very limited. (19)	<b>78.4</b>	8.1	5.54
Family therapists feel intimidated when they go on rounds with family physicians and have to relate to the biochemical aspects of disease. (20)	<b>38.3</b>	33.2	3.98
Physicians’ training in Family Systems Medicine is primarily informal. (18)	<b>61.1</b>	18.0	4.81

### Roles

Table 8 presents the results for scale “roles”. As said before, for this scale, the quantitative study did not confirm the qualitative study. On the average, respondents’ answers in this scale did not agree with the items depicted in scale five. 43% of the respondents perceived a difference in roles between family health psychologists and medical family therapists. However, almost 50% remained neutral in this item. Respondents (77%) also perceived a difference in roles between medical family therapists and medical social workers. The majority of respondents (67%) perceived the collaboration between family physicians and family therapists as teamwork in which the physician addressed the patient’s disease and the therapist treated the psychosocial impact of illness. Respondents (57%) also perceived physicians’ role as one of screening for medical causes, when patients present psychosomatic concerns, before referring them to therapy.

Respondents (75%) also perceived the field of Collaborative Health Care to be an area of specialization within family therapy but only slightly more than half (52%) perceived family therapists to be mental health professionals best qualified to practice the biopsychosocial model in collaboration with medical providers.

**TABLE 8.** Roles.

<i>Item Content</i>	<i>% Agreement</i>	<i>% Disagreement</i>	<i>Mean</i>
Physicians only get involved in patient’s psychotherapy when the patient is not improving medically. (10)	36.3	<b>43.2</b>	3.85
When physicians and therapists collaborate, the physician addresses the patient disease and the therapist addresses the psychosocial impact of the illness on the patient and family. (27)	<b>66.6</b>	23.2	4.84
When patients have emotional concerns, physicians first screen for medical causes and only when they find no apparent medical cause, they refer patients to therapy. (28)	<b>56.6</b>	31.5	4.36
Family therapists are mental health professionals who are better qualified to practice the biopsychosocial model. (22)	<b>52.3</b>	12.8	4.79
There is no difference between a family health psychologist and a medical family therapist in terms of how they practice Family Systems Medicine. (32)	7.5	<b>42.9</b>	3.17
In the practice of Family Systems Medicine, the contribution of the medical social worker. (41)	13.7	<b>77.1</b>	2.60
Family Systems Medicine can be practiced by any medical provider and any non-medical mental health professional as long as there is collaboration between both parties. (42)	29.2	<b>57.5</b>	3.31

Research question two was concerned with the way medical and psychosocial providers perceived the five domains of collaborative family health care. The two

groups tested were respondents that identified themselves as medical providers (family physicians, nurses, specialized physicians and psychiatrists) and psychosocial providers (social workers, family therapists, psychologists, and psychotherapists). Since the training and culture of these two groups of providers are different, and only recent have family therapists entered the medical settings, it was expected that that the two groups' perceptions would differ. The Manova performed on the five scales for the two groups revealed no significant results between these two types of providers.

Research question three analyzed the perceptions of medical and psychosocial providers who work in private versus not-for profit settings. Private settings included private practice, or family practice clinics. Not-for-profit settings included residency programs, health care organizations, and hospital or university/ medical schools. Results were significant only for scale four "Training" regarding their setting of work. The interaction between setting and type of provider was not significant. Table 9 shows the results of the two way Anova.

**TABLE 9.** Two Way Anova for scale "Training" by Provider (medical versus psychosocial) and Setting (private versus not-for profit).

Type of setting	Type of provider	N	Mean	Std. Deviation	
Non-private	Psychosocial	30	4.089	.912	
	Medical	106	4.197	1.06	
	Total	136	4.172	1.02	
Private	Psychosocial	34	4.632	.759	
	Medical	98	4.389	.991	
	Total	132	4.452	.994	
<i>Source of Variation</i>	<i>Sum of squares</i>	<i>DF</i>	<i>Mean Squares</i>	<i>F</i>	<i>p</i>
Main Effects	7.950	2	3.975	3.988	.020*
Setting	7.604	1	7.604	7.629	.006*
ProviderGr	2.829	1	2.829	2.838	.093
2 way Interaction	.319	1	3.19	3.20	.572
Provider/ Setting	.319	1	3.19	3.20	.572
Explained	8.975	3	2.992	3.001	.031
Residual	271.1066	272	.977		
Total	280.081	275	1.018		

\*  $P \leq .05$

In private settings, psychosocial providers had a higher mean score, on scale four, than medical providers. In not-for-profit settings, psychosocial providers had a lower mean score than psychosocial providers indicating that they agree more with the content of scale four.

### Discussion

Almost half of the respondents (41%) perceived the field of Collaborative Health Care as being the application of Behavioral Medicine expanded to the “family level”. Behavioral Medicine is an interdisciplinary field concerned with the development and integration of behavioral and biomedical medicine (Schwartz and Weiss, 1978). As a division of Health Psychology, the focus of Behavioral Medicine is on mind-body issues centered on the promotion of health in the individual (Jeffery, 1989; Pomerleau and Brady, 1979). If Collaborative Health Care is an extension of Behavioral Medicine, then differences in roles between family health psychologists and medical family therapists may not be evident. This situation may explain why almost 50% of the respondents remained neutral regarding the distinction in roles between medical family therapists and family health psychologists. The results also suggest that respondents perceive a distinction in roles between medical family therapists and medical social workers that is not as apparent as the distinction between medical family therapists and health psychologists. Does this mean that the health psychologist and the medical family therapist have similar practices? If such similarities exist it signifies that the desire of medical family therapists for a unique identity in the mental health field is still nascent. The fact that respondents perceive physicians to screen for medical causes before referring patients to therapy, support the assumptions of the split-biopsychosocial model (Doherty, Baird and Becker, 1987) in which “soma” and “psyche” are both taken in consideration but remain separated (i.e., only when physicians find nothing medically wrong with patients do they refer them for therapy).

The majority of respondents also perceive family therapists as being the mental health practitioners more suitable to practice collaborative family health care. Such perceptions support the founder of the journal of Family Systems Medicine (Bloch, 1983) who defined the field as being at the interface of family medicine and family therapy. However, recent developments among family therapists working in medical settings suggest that the field opened its range to include any “biological and psychological oriented professionals who work in concert, sharing a frame of reference, a working space, and an on-going conversation” (Collaborative Family Health Care Coalition Newsletter, 1995). Dymn (1983) also described Collaborative Health Care as a network drawing its technological base from different practices of knowledge: medicine, nursing, social work, family therapy, public health, rehabilitation counseling and many others. Because the sample in this study was overwhelmingly composed of family therapists, this study’s findings may simply reflect their biases and opinions. The majority of respondents also perceive physicians’ continued involvement with patients after referring

them to therapy. Support for these results indicate a balanced collaborative relationship between the two types of professionals. Such collaborative relationships reinforce the models of collaboration described in the literature in collaborative family health care (Campbell and McDaniel, 1987; Crane, 1986; Dymn and Berman, 1986; Hepworth, Gavazzi, Adlin, and Miller, 1988).

The results also suggest that different forms and additional training seems also to be an area of concern for both physicians and therapists who are practicing a collaborative health care. The results reveal that in private settings providers perceive the training in family systems medicine to be more informal for physicians and more limited in biomedicine for therapists, and family therapist to be more intimidated with the biochemical aspects of disease than those in not-for profit settings. These results are not surprising since in not-for-profit settings medical and psychosocial providers share central locations more often and have more opportunities to learn from each other while those in private practice tend to collaborate more by traditional relationships i.e. "Limited referral" (Crane, 1986; Hepworth *et al.*, 1988). In fact the results of the Anova suggest that setting is the important variable that accounts for the way training in family systems medicine is perceived. The type of provider or the interaction between this variable and setting being not significant suggest that attention should be put in the setting providers work and more training should be available for those who work in private settings. The integration between the biomedical and the systemic models in the practice of collaborative family health care seems to be still problematic. Respondents were ambivalent regarding the use of DSM-IV diagnoses in collaborative practice. The role of family systems theory and constructivism in the practice of collaborative family health care has not been fully integrated. As a result, it is understandable why respondents were divided regarding these issues.

Finally, it would be important to replicate this study with a broader sample that included more medical providers and a higher variety of psychosocial providers since in our sample family therapists were by far the group best represented.

We would also like to acknowledge this study's limitations:

- The random sample of those practitioners who endorse a collaborative approach to health care was selected from the database of those who receive the journal "Family Systems and Health". Therefore generalization of this study is limited to that population.
- The return sample may not be representative of those who do not return the questionnaire.
- The parameters of Collaborative Family Health Care being tested are the ones revealed by a previous qualitative analysis of ethnographic interviews. Therefore, the quantitative analysis only tests the five parameters that emerged a previous qualitative analysis.

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