Integrated Primary Care:

Organizing the Evidence

By

Alexander Blount, Ed.D.

Department of Family Medicine and Community Health
UMass Memorial Health Care
55 Lake Ave North
Worcester, MA 01655

This article was first published in *Families, Systems & Health: 21*, 121-134, 2003.

http://www.apa.org/journals/fsh.html

Abstract: The evidence for bringing behavioral health services into primary care can be confusing. Studies are quite varied in the types of programs assessed, what impacts are assessed, what kind of therapy is offered, for what populations and on how broad a scale. By organizing the evidence into categories: whether the program is *coordinated, co-located* or *integrated,* whether for a *targeted* or *non-targeted* patient population, offering *specified* or *unspecified* behavioral health services, in a *small scale* or *extensive* implementation, programs can be compared more easily. By noting what sorts of impacts are reported: improved *access* to services, *clinical outcome, maintained improvement,* improved *adherence* to treatment regimens, *patient satisfaction, provider satisfaction, cost effectiveness* or *medical cost offset,* the most comprehensive overall assessment of this important approach to patients needs can be encouraged.

The evidence for bringing behavioral health services into primary care is scattered and can be confusing. A recent summary of the evidence (Hemmings, 2000) seems to offer as many studies in which the process made no difference as it cites studies in which it was effective. Studies are quite varied in types of programs assessed, what impacts are assessed, what kind of therapy is offered, for what populations and on how broad a scale. The purpose of this paper is to offer a conceptual system for assessing the evidence about impacts of integrating behavioral health services into primary care. It will be successful if it contributes to clarifying the discussion about this process, if it allows readers with different concerns to locate the literature that addresses their concerns and if it encourages future researchers to assess a broader array of the impacts of behavioral health in primary care.

Incorporating behavioral health services into primary medical care would seem so logical as to be almost inevitable. The complaints that patients bring to primary care are predominantly not symptoms of biological disease (Kroenke & Mangelsdorff, 1989). They are symptoms such as chest pain, fatigue, dizziness, headache, edema, back pain, shortness of breath, insomnia, abdominal pain, and numbness (the ten most common) which patients experience as physical but for which a biological cause is found about 25 percent of the time. In addition, there is a substantial rate of psychiatric disorders that present in primary care. Many of these patients will not accept a referral to a mental health provider in another location, making primary medical care the most common venue for treatment of mental health problems (Regier, et. al., 1993). Finally, more than

half of the patients in primary care could benefit from some health behavior change that most do not make on their physician's advice alone. Randomized controlled trials have shown certain behavioral treatments to be effective in treating depression, anxiety, child behavior problems, insomnia, headache, fibromyalgia, irritable bowel syndrome, hypertension, coronary artery disease, even cancer and to contribute to greater success in smoking cessation and weight loss. So, primary care is the site of enormous need that cannot be addressed in other settings for which there are effective behavioral treatments that keep more expensive medical services from being needed when these behavioral treatments are targeted to the patients who need them most (Cummings, Dorken, Pallak, & Henke, 1990). Integrating behavioral health services into primary care is an idea whose time should have already come.

A number of authors have contributed to the discussion of why bringing behavioral health into primary care has not become more common. Some have pointed out that the way our systems of care are organized into different health and mental health infrastructures impedes integration (Blount & Bayona, 1994; Blount, 1998; Coleman & Patrick, 1976). Others have noted that the way mental health providers have been trained to practice needs substantial modification to be a fit in the primary care situation (Blount, 1998; Strosahl, 1998). Several have said that both medical and behavioral health providers have little training or experience in collaboration or teamwork in delivering care. (Glenn, 1987; Banta & Fox, 1972) Finally, the evidence for the integration of behavioral health into primary care that seems so compelling when presented in a

piecemeal fashion, has not been compelling enough to induce a broad implementation in health systems generally.

The terms, “collaborative care” and “integrated care” are growing in usage but not in specificity or agreed meaning. Several authors have tried to define integrated care (Blount, 1998; Doherty, McDaniel, & Baird, 1996; Strosahl, 1998). Initially, the reason for such a definition was to help people who were not familiar with integrated care in their efforts to understand the different forms or levels of integration that are possible. In the present discussion, the categories are generated to show that distinguishing different aspects of the relationship between behavioral health and medical services in collaborative settings allows one to make a much more coherent picture out of the available research findings.

Relationship of Behavioral Health and Medical Providers:

The first set of categories that I would like to offer defines the relationship between the medical and behavioral health services in primary care. The categories distinguish between services that are **coordinated**, but exist in different settings, services that are **co-located**, both being provided within the same practice location, and services that are **integrated**. Integrated services have medical and behavioral health (and possibly other) components within one treatment plan for a specific patient or population of patients. Technically, it is possible for services to be *co-located* but not *coordinated* or to be *integrated* but not *co-located*, so the most precise definition of these descriptions would be that they are dimensions of collaborative care, not mutually exclusive categories. In

practice, however, there is a hierarchy of levels of integration (Doherty, McDaniel & Baird, 1996). I think it is legitimate to use them as categories in our attempt to give some order to the research in the field.

When services are **coordinated**, some work has been done so that information is exchanged on a routine basis when patients are in treatment in both settings. The referral from one agency or provider to another is the usual trigger for such an exchange. The process of making programmatic links for information exchange involves some attempt to bridge the differences of culture between a primary care medical service setting and a mental health service setting. Different approaches to confidentiality, to returning phone calls and being interrupted, and different expectations about how actively to intervene in problems make ongoing coordination very difficult and time consuming. It is a process that inevitably stresses and, if it is successful, changes both agencies.

Because coordination takes so much effort when the people with whom a provider is coordinating are not a part of their day to day practice, the success or failure of the endeavor depends on the personal commitment to the process of providers. For this reason large-scale efforts to promote coordination have tended to be unsuccessful. A notable exception is the Hawaii project of Cummings and his colleagues. (Cummings, Dorken, Pallak, & Henke, 1990). In this extensive project, targeted populations of primary care patients were referred to specially trained mental health providers who

conducted specified treatments. Impacts, mostly measured in utilization and health care cost reductions were very impressive.

Co-location is what its name implies. Behavioral health and medical services are located in the same suite of offices sharing office staff and waiting facilities. Typically, in a co-located setting, there is still a referral process for those cases that begin as medical cases which are later referred for behavioral health services. Co-location fosters communication between behavioral health and medical providers. While one could imagine co-located services that do not involve regular collaboration, the initial anecdotal descriptions of these settings were uniform in describing collaboration as much easier and more common than in separate settings. Medical providers can be better attuned to what behavioral health providers can provide. Behavioral health providers become acculturated to the language and treatment assumptions of primary care. The first full scale HMO implementation of co-located care (Coleman, Patrick, Eagle & Hermalin, 1979) found that after behavioral health providers were part of the primary care teams for more than a year, 92% of consultations between behavioral health and medical providers were unscheduled and most were less than five minutes in length. Almost all of this richness in information exchange would not occur if people were not bumping into each other in the halls.

Consultation between behavioral health and medical providers can increase the skill and effectiveness of medical providers in addressing behavioral health issues. Reports have always indicated that medical providers do not provide any fewer behavioral services in co-located settings (Coleman, Patrick, Eagle & Hermalin, 1979; Katon, 1995), they just

enjoy providing these services more. The level of behavioral services overall is raised in terms of number of patients served and the quality of care offered. Medical providers can be more adventurous when engaging in conversations about psychosocial issues, knowing that if they discover a situation that seems beyond their expertise, there is someone down the hall who could be involved within a reasonable period of time.

The fact that behavioral health services are accessed by referral from the primary care physician means that the problems of patients failing to keep behavioral health appointments is improved but not eliminated in co-located settings. In a Family Medicine residency practice in Fitchburg, MA, in which behavioral health providers are regularly present and available in the practice, an introduction of the behavioral health provider (BHP) to the patient made by the primary care provider (PCP) proved to make a significant difference in patients keeping a first appointment with the BHP. For the first 100 patients tracked, if the PCP introduced the patient to the BHP at the time a visit to the BHP was recommended, 76% kept the first behavioral health appointment. If the PCP scheduled the appointment for the patient with the BHP but did not make the introduction, 44% kept the first appointment (Apostoleris, 2000).

Integrated Care describes care in which there is one treatment plan with behavioral and medical elements, rather than two treatment plans. Sometimes this is done because the treatment plan is delivered by a team that works very closely together, and sometimes it

is done by pre-arranged protocol. When a team works together regularly in delivering care, it usually is serving a particular population in which psychosocial needs are almost universal. When a pre-arranged protocol is used, it is usually treatment for a particular disease or condition in which the behavioral health part of care is crucial to delivering the highest quality care.

An example of the first form of integrated care is a team serving homeless and formerly homeless mothers and children in Worcester, Massachusetts. The team is led by a family physician and includes a psychologist who specializes in children and families, and two "family advocates", one of whom is also the team coordinator. The team meets two and a half days weekly at a federally funded health center serving a very diverse population in an underserved area of town. The psychosocial aspects of the patients' lives take up most of the visits they make to the team. While over 90% meet criteria for a DSM-IV diagnosis, very few would ever go to a mental health center for services. They come to see their doctor for all their problems, though they will work with whomever is on the doctor's team. The team approaches every patient visit as an opportunity for some sort of psychosocial therapy. Often the physician brings the psychologist in to join in addressing a problem that a patient brought. They can interview family members separately or together, depending on the situation. The family advocates play multiple roles. In addition to serving as translators, they facilitate the connections between the patients and the team by helping patients understand the practices of the team and helping the providers understand the life experience of patients. They also make connections between patients and the resources in the community.

An example of integrated care by prearranged protocol is seen in the "disease management" or "chronic illness" approach to depression. With support from federal and large foundation sources, programs are springing up around the country. Programs are characterized by regular use of screening and outcome assessment for the illness being addressed, a standard set of protocols for addressing the illness, a database to track the care of patients screened into the program, and a staff member designated as managing the program under the direction of a cooperating group of providers. While in some settings the disease management program is a coordinated program between a primary care practice and a separate mental health agency, the studies on which the effort is modeled (Katon, 1995; Katon, et al, 1995) were fully integrated and the overall effort is in the direction of integration.

By distinguishing between coordinated, co-located and integrated care, it is possible to be much clearer about what clinical practices are represented when collaborative programs are discussed. This also helps us know what sort of advantages to expect of particular programs. We will see below that efficacy research favors integrated programs, but this is partially because the advantages of coordinated and co-located programs tend not to be valued as outcomes in randomized controlled trials.

Relationship of Services to Populations:

The next set of categories that can be useful in sorting the results of efforts at integrated care is the distinction between **targeted** and **non-targeted** programs. Targeted programs

are aimed at specific populations, whereas non-targeted programs are aimed at any patient identified as needing behavioral health services within a practice. Most randomized controlled trials are targeted for specific populations. That gives us a body of evidence for targeted services. Targeted services also have the advantage of increased patient acceptance because they can be presented as fitting the patient's specific needs, as opposed to being a general service that should be added because the patient is psychologically troubled in some way.

Specificity of Services Provided:

We might further distinguish between **specified** and **unspecified** treatment modalities. Specified treatment is a particular approach or set of procedures that is offered to all the patients under consideration in a study. Unspecified treatment means that the treatment offered depends on the particular skills and judgment of each providing clinician. To know that a patient received therapy does not give any information about what was done. In randomized controlled trials, the treatment that is offered is usually carefully specified. In more general evaluations of coordinated or co-located care, the treatment that is delivered is likely to be unspecified. When the treatment is unspecified, it is very difficult to compare what is offered in one setting with what is offered in another.

Finally, I believe it is useful to distinguish between **extensive** and **small scale** implementations. Isolated implementations are programs developed in one or a very few settings. They are usually offered in the literature as potential models for other similar settings. Extensive implementations are similar across settings and usually centrally

designed. They are much more difficult to manage, because contingencies and personnel in different settings are variable. They are more difficult to replicate, but more appropriate models for consideration in health system design. They are also better at producing large numbers of patient interactions for evaluation and research.

Reconsidering "Outcomes":

I want to suggest that there is an array of possible impacts of behavioral health treatment in primary care, and that authors tend to report those impacts that are most valued by their intended audience, sometimes giving observed impacts that are not as valued brief mention or no mention at all. The array of impacts includes improved **access** to mental health services, increased **patient satisfaction** with medical services, improved medical **provider satisfaction**, improved **patient adherence** (often called "compliance") to treatment regimens, improved **clinical outcome** for patients, **maintained improvement** in clinical outcome, increased **cost effectiveness** in service delivery and actual **offset of medical costs** by the addition of behavioral health services.

Wayne Katon and his colleagues (Katon, et. al., 1995) conducted a much-cited study of integrated care for depression that was reported in JAMA. They reported that for patients with major depression in the integrated program, 74% later met criteria for clinical improvement while only 44% of similar patients in the usual care group met the criteria. There was no significant difference for "minor depression" patients between groups, with a high rate of about 60% meeting criteria for improvement in both groups. They further reported that both major depression and minor depression patients in the study were more likely to comply with medication regimes and both were more likely to rate the

medication as helping than usual care patients. In a different paper on the same data, Katon mentions that the study patients had slightly lower total medical costs during the time that the study assessed compared to the usual care patients ($1750 vs. $2000) (Katon, 1995). He also mentioned that 80% of the providers involved in the study reported that they enjoyed treating depressed patients more after the experience of the study program. Finally, in a talk in 1995, Katon mentioned that over 90% of the patients who were offered the integrated program accepted and completed the program. This is significantly better access to care than any setting in which patients were referred for mental health therapy that was separate from their medical care. Katon's treatment of the impacts of the study is more complete than most, and certainly much more complete than the "bottom line" summaries that are abstracted for reviews of the literature. Even he, however, does not include all of the impacts of the program in the major paper on the study.

Mental health referral is not part of accepted care-seeking for important populations.

Access is one impact that is easiest to achieve by co-locating services, but one that is rarely mentioned in reports. Dr. David Satcher, the former Surgeon General of the United States, in his recent report on mental health, highlighted access as a major concern. The report noted that referral to mental health services is not an effective way to engage certain groups. Some groups culturally do not define their psychosocial difficulties as reasons to go to a "mental health" service. For the first time, the report defines the fact that these groups get less mental health service as a problem of the

delivery of services rather than a problem of the groups themselves. For "difficult to engage" groups, locating behavioral health services as part of primary care has proved to be a way of significantly increasing access. Any discussion of equity in the provision of health care should include co-location of behavioral health services in primary care when access to care is considered.

Organizing the Evidence:

Perhaps we should start our re-examination of the evidence by being clear about what literatures we are not discussing. There are a number of types of papers that are relevant to this field but are not under consideration here. These include: papers identifying and quantifying the behavioral health needs of primary care populations, papers describing behavioral health treatment in primary care in which only medical providers are involved, papers describing the efficacy of various types of behavioral health treatments in specialty mental health settings, papers studying the impact of psychosocial treatments on physical illness when these treatments were not delivered in primary care, papers comparing the efficacy of psychopharmacological treatments to psychosocial treatments unless both treatments are conducted in primary care, papers in which the behavioral health intervention involves only consultation to the medical provider, and cost offset studies in which there is no coordination between behavioral health and medical treatments. An excellent account of these literatures can be found in Simon and VonKorff's well-organized summary (1997).

No review of the evidence can claim to be truly comprehensive. This is a particularly difficult area to review because there are so many possible types of studies that might be relevant. The present discussion can only claim to offer a system for categorizing much of the available evidence. The categories can be useful, even if I have failed to locate many studies. The studies collected here were collected by Medline search and by reviewing the following summary articles: Blount, 1998; Klinkman & Okkes, 1998; Strosahl, 1998; Evers-Szostak, 2000; Hemmings, 2000; Maruish, 2000; Peek & Heinrich, 2000.

We can now return to the evidence with tools that can help us understand what set of practices the evidence endorses and where the evidence is poorly focused in relation to the needs and practice of collaborative care in the "real world". The studies in the table below are cited with the types of impacts that they report prominently. Closer study of some might uncover other impacts and most do not assess some impacts such as access that are commonly present. It is also important to point out that others have sorted the evidence differently. For good orientations to the field and to the larger context around the evidence see Blount, 1998; Strosahl, 1998; Peek & Heinrich, 2000.

See table on the next page

There have been few studies of **coordinated** care. It is hard to maintain care that is coordinated across any population using any form of behavioral health treatment, and the

Table 1

Impacts of Behavioral Health Services in Primary Care

A = improved clinical outcome.
B = maintained improvement
C = improved patient satisfaction
D = improved provider satisfaction
E = improved adherence
F = improved access to treatment
G = improved cost effectiveness
H = medical cost offset

Letter followed by "-" indicates reported failure to demonstrate that impact.

	Coordinated				**Co-located**				**Integrated**			
	Medical and behavioral providers working in separate settings				Medical and behavioral providers sharing offices, staff and wait area.				One care plan with medical and behavioral providers participating			
	Non-targeted		***Targeted***		***Non-targeted***		***Targeted***		***Non-targeted***		***Targeted***	
	Unspec.	Specified	Unspec.	Specified	Unspecified	Specified	Unspec.	Specified	Unspec.	Specified	Unspec.	Specified
Small Scale				41:A,H	9:A-	28:C,D	21:A,B-	45:A,G	1:A				21:A,C,E
					10:A-	30:C,F,G	26:A	61:A,C,D	2:A,B-				42:A,B,E
					11:A-	31:C,G		E	3:A,B				47:A,C,D,H
					12:A	32:A			4:A				51:A,C,D,E,
					13:A-	33:D			5:A,C				F,G
					14:A-,G	36:C			6:A,B,E				56:A,B,E
					15:A-	43:A-,G			7:A				57:A,G
					16:A	44:D			8:A-				59:A,C,D,E
					18:A-	46:A,C,D			17:A,G				F,G,
					19:A-	48:A-,G			50:A				60:A,B,C,
					20:A,B-	52:H							E,F
					22:A-	54:A							
					23:A	56:A,C,D							
					24:A-	62:C							
					27:A,E	63:A,C,H							
				55:A,E,F,	49:A,B-,C,G				25:A,E,F				
				G,H	53:A								
					58:A,F,G								
Exten-sive													

Targeted: Treatment aimed at specific population(s).
Non-targeted: Treatment offered to any patient needing behavioral care

Specified: The study specified the treatment that was offered.
Unspecified: The study did not specify what behavioral treatment was offered.

impact of such a program would be very difficult to assess. The studies that have been attempted have been assessing the impact of **targeted** care for particular populations when the type of care is **specified** as problem oriented brief therapy.

The practice of adding a mental health clinician to a practice and treating whomever is referred by the physicians in the practice constitutes behavioral health care that is **co-located**, **non-targeted** and **unspecified**. Hemmings cites eleven studies in which this was assessed as making no difference in clinical outcome, as well as studies in which there was significant outcome. His survey includes several studies in which the counselors in the primary care practice would be considered paraprofessionals. Within this decidedly mixed picture studies have commonly found improved patient and provider satisfaction and general improvement the cost effectiveness of care. This is usually demonstrated by the lowering of what is considered inappropriate care such as non-emergent ER visits.

There are only two studies that assess behavioral health services that were **co-located** in primary care, served a **non-targeted** population but gave everyone a **specified** treatment such as cognitive behavioral therapy. In these non-targeted programs, there is an assumption of some homogeneity among the primary care patients referred. Even the most enthusiastic proponents of a form of therapy tend to refrain from claiming that it is right for every person with any sort of problem.

It is also uncommon for a program **co-located** in primary care to offer a **targeted** population of patients an **unspecified** form of behavioral health treatment. In one study listed the program was helping women cope with the impact of mastectomy, a behavioral health service, but not really a type of therapy. Another study of the process of introducing behavioral health into primary care offered co-located services for a screened and targeted group provided by a small staff of behavioral health providers who were trained to work in primary care, but who provided the therapy they thought appropriate to each patient (Beck & Nimmer, 2000). Because it is assessing a program as a whole rather than a therapy, the article looks at a wider array of impacts than the usual RCT.

When a program is **co-located**, providing a **specified** behavioral health treatment to a **targeted** group of patients, clinical effectiveness tends to be almost universal, across a variety of patient groups. Many of these are the psychopharmacology vs. psychosocial therapies studies done in primary care. In almost all, the psychotherapy is specified and is as efficacious as drug treatment, though taking longer to achieve its impact. In some of the studies, combined therapies are best.

Randomized controlled trials tend to study programs that are **integrated**, **targeted** and **specified**. Some of these studies are focused on mental health services integrated into primary care, but many are focused on developing treatment protocols for specific illnesses. These may be “psychiatric” illness, such as anxiety or depression, psychological problems presenting physically (somatizing) or other conditions with an important psychosocial component, such as chronic pain, irritable bowel syndrome,

asthma or hypertension. Many of the "mental health" interventions are specific to the etiology of illness as understood by the researcher. These studies focus on what is done by the medical/behavioral health team rather than focusing on the discipline of the behavioral health provider. It is more important that the person delivering the interventions be skilled in caring for the specific illness than that they be trained in any specific discipline.

The cell for **integrated** programs that are **non-targeted** is empty. It is hard to imagine creating a program that is truly integrated that is useful for any patient referred. There can be regular clinical routines, however, such as introducing the patient to the BHP by the PCP, joint interviews between BHP, PCP and patient, and joint record keeping regularly reviewed by both providers, that make a program feel integrated to a patient even when the providers experience co-located, parallel treatments. It is hard to assess the efficacy of clinical interventions such as matching the ostensible definition of the patient's treatment by the BHP to the patient's understanding of the etiology of his or her illness. On the other hand, if the patient believes s/he has a "medical" problem, treatment probably will be more effective if the BHP's involvement is defined as part of a medical regimen designed and monitored by the PCP.

There are programs that are **integrated**, **targeted** and **non-specified**, though they tend to be represented in the literature in program descriptions rather than in outcome studies. The program for the homeless in Worcester described above is an example. It is targeted to homeless women and their children. It is fully integrated. Each patient gets

psychosocial treatment based on an assessment of their need, not on a protocol. Another example is the program for obese children described by Davis and Biltz (1998).

Programs that can legitimately be termed **extensive** implementations are still rare. In addition to the Hawaii program of Cummings, et al, there is a study of many sites in the U.K., a multi-site QI program, and an implementation from a large HMO. A meta-analysis from the Cochrane Database provides evidence from what might be considered an extensive array of implementations, though it is not really an extensive implementation in itself. This is the cell that has the largest implications for health policy makers and one that could use greater attention by authors, even if their programs do not meet the criteria of the RCT. (Note)

Conclusion:

Collaborative care has been shown to be predictably efficacious and effective if the type relationship between mental health and medical providers, the population served and the type of service provided are adequately specified. The types of outcomes that can be demonstrated are predictable. The tendency to privilege certain types of outcomes over others misses the fact that different constituencies will be interested in different sorts of outcome. Advocates for equity in health care should be interested in access. Health plan marketers could be interested in patient satisfaction. Administrators interested in provider retention could be interested in provider satisfaction. Everyone interested in the cost of health care should be interested in cost effectiveness and cost offset. This is in

addition to the universal interest in clinical outcome, both demonstrated efficacy and effectiveness in practice.

We need to make our descriptions of collaborative or integrated care more precise to avoid confusion and to make comparison of programs more reliable. In addition, we need to broaden the array of outcomes reported in any literature about collaborative care. This will make it easier to discuss the utility of this sort of care with the varied constituencies that have an interest in it.

Note:

There are a number of descriptions of extensive implementations available on the Internet. Because these are descriptions rather than studies of programs, they are not included here. Efforts by the Bureau of Primary Health Care directed at Federally Qualified Community Health Centers and the implementation by Kaiser Permanente in Northern California are just two of a number of examples that can be found through www.IntegratedPrimaryCare.com.

REFERENCES

Apostoleris, N.H. (2000). "Integrating psychological services into primary care in an underserved community: Examining the referral process for on-site mental health services." Presented at the Northeast Regional Conference of the Society of Teachers of Family Medicine, Philadelphia.

Banta H. D. & Fox, R. C. (1972). Role strains of a health care team in a poverty community. *Social Science and Medicine, 6*, 698-722.

Blount, A. (1998). An introduction to integrated primary care. In Blount, A. (Ed.). *Integrated Primary Care: The Future of Medical and Mental Health Collaboration.* New York: W. W. Norton.

Blount, A., & Bayona, J. (1994). Toward a system of integrated primary care. *Family Systems Medicine, 12*, 171-182.

Bower, P., Rowland, N., Mellor, C., Heywood, P., Godfrey, C., and Hardy, R. (2002). Effectiveness and cost effectiveness of counseling in primary care. *Cochrane Database of Systemic Reviews, 1*, CD001025.

Budman, S. H., Demby, A.B., & Feldstein, M. L. (1984). A controlled study of the impact of mental health treatment on medical care utilization. *Medical Care, 22*, 216-222.

Coleman, J. V. & Patrick, D. L. (1976). Integrating mental health services into primary medical care. *Medical Care, 14*, 654-661.

Coleman, J. V., Patrick, D. L., Eagle, J. & Hermalin, J. A. (1979). Collaboration, consultation and referral in an integrated health-mental health program at an HMO. *Social Work in Health Care, 5*, 833-896.

Cummings, N. A., Dorken, H., Pallak, M. S., & Henke, C. (1990). *The impact of pshchological intervention on healthcare utilization and costs*. South San Francisco: The Biodyne Institute.

Davis, T.F. & Biltz, G.R. (1998). Forming a multidisciplinary team. In Blount, A. (Ed.). *Integrated Primary Care: The Future of Medical and Mental Health Collaboration.* New York: W.W. Norton.

Doherty, W. J., McDaniel, S. H., Baird, M. A. (1996). Five levels of primary care/behavioral healthcare collaboration. *Behavioral Healthcare Tomorrow*, October, 25-28.

Dym, B. & Berman, S. (1986). The primary health care team: Family physician and family therapist in joint practice. *Family Systems Medicine, 4*, 9-21.

Evers-Szostak, M. (2000). Integration of Behavioral Health Care Services in Pediatric Primary Care Settings. In Maruish, M.E. (Ed). *Handbook of Psychological Assessment in Primary Care Settings*. Mawah, NJ: Earlbaum.

Glenn, M. L. (1987). *Collaborative health care: A family oriented approach*. New York: Praeger.

Glenn, M. L., Atkins, L., & Singer, R. (1884). Integrating a family therapist into a family medical practice. *Family Systems Medicine, 2*, 137-145.

Hemmings, A. (2000). A systematic review of brief psychological therapies in primary health care. *Families, Systems & Health 18*: 279-314.

Katon, W. (1995). Collaborative care: Patient satisfaction, outcomes and medical cost-offset. *Family Systems Medicine, 13*, 351-365.

Katon, W., von Korff, M., Lin, E., Walker, E., Simon, G., Bush, T., Robinson, P., Russo, J. (1995). Collaborative management to achieve treatment guidelines: Impact on depression in primary care. *JAMA, 273,* 1026-1031.

Katzelnick DJ. Simon GE. Pearson SD. Manning WG. Helstad CP. Henk HJ. Cole SM. Lin EH. Taylor LH. Kobak KA. (2000). Randomized trial of a depression management program in high utilizers of medical care. *Archives of Family Medicine. 9(4):345-51.*
Klinkman, M.S. & Okkes, I. (1998). Mental health problems in primary care: a research agenda. *Journal of Family Practice, 47,* 379-384.

Kroenke, K. & Mangelsdorff, A. D. (1989). Common symptoms in ambulatory care: Incidence, evaluation, therapy and outcome. *American Journal of Medicine, 86,* 262-266.

Maruish, M.E., (2000). Introduction. In Maruish, M.E. (Ed). *Handbook of Psychological Assessment in Primary Care Settings*. Mawah, NJ: Earlbaum.

Matalon, A., Nahmani, T., Rabin, S., Maoz, B., Hart, J. (2002). A short-term intervention in a multidiscplinary referral clinic for primary care frequent attenders: description of the model, patient characteristics and their use of medical resources. Family Practice, 19, 215-256.

Mauksch, L. B., & Leahy, D. (1993). Collaboration between primary care medicine and mental health in an HMO. *Family Systems Medicine, 11,* 121-135.

McLeod, C.C., Budd, M.A. and McClelland, D.A. (1997). Treatment of somatization in primary care. *General Hospital Psychiatry, 19,* 251-258.

McDaniel, S. H., Campbell, T. L. & Seaburn, D. B. (1995). Principles for collaboration between health and mental health providers in primary care. *Family Systems Medicine, 13,* 283-298.

Peek, C.J., & Heinrich, R.L. (1995). Building a collaborative healthcare organization: From idea to invention to innovation. *Family Systems Medicine, 13,* 327-342.

Peek, C.J. & Heinrich, R.L. (2000). Integrating Behavioral Health and Primary Care. In M.E. Maruish, (Ed). *Handbook of Psychological Assessment in Primary Care Settings*. Mawah, NJ: Earlbaum.

Regier, D., Narrow, W., Rae, D., Manderscheid, R., Locke, B., & Goodwin, F. (1993). The de facto mental health and addictive disorders service system. *Archives of General Psychiatry, 50,* 85-94.

Scott, C., Tacchi, M.J., Jones, R. (1997). Acute and one-year outcome of a randomized controlled trial of brief cognitive therapy for major depressive disorder in primary care. *British Journal of Psychiatry, 171,* 131-134.

Seaburn, D. B., Lorenz, A. D., Gunn, W. B., Gawinski, B. A., & Mauksch, L. B. (1996). *Models of collaboration: A guide for mental health professionals working with health care practitioners*. New York: Basic Books.

Simon, G.E. & VonKorff, M. (1997). Is the integration of behavioral health into primary care worth the effort? A review of the evidence. In N.A. Cummings, J.L. Cummings, & J.N. Johnson (Eds.) *Behavioral Health in Primary Care: A Guide for Clinical Integration*. Madison, CT: Psychosocial Press.

Strosahl, K. (1998). Integrating behavioral health and primary care services: the primary mental health care model. In A. Blount, (Ed.). *Integrated Primary Care: The Future of Medical and Mental Health Collaboration.* New York: W.W. Norton.

Numbered References

1. Blackburn, I.M., Bishop S., Glen A.I.M. et al. (1981) The efficacy of cognitive therapy in depression: A treatment trial using cognitive therapy and pharmacotherapy, each alone and in combination. *British Journal of Psychiatry, 139*, 181-189.
2. Teasdale, J.D. Fennell, M.J.V., Hibbert, G.A. (1984). Cognitive therapy for major depressive disorder in primary care. *British Journal of Psychiatry, 144*, 400-406.
3. Ross, M. & Scott, S. (1985). An evaluation of the effectiveness of individual and group cognitive therapy for the treatment of depressed patients in an inner city health centre. *Journal of the Royal College of General Practitioners, 35*, 239-242.
4. Holdern, J.M., Sagoustu, R. & Cox, J.L. (1989). Counseling in a general practice setting. A controlled study of health visitor intervention in the treatment of post-natal depression. *British Medical Journal, 98*, 223-236.
5. Scott, A.I.F. & Freeman, C.P.L. (1992). Edinburgh primary care depression study – treatment outcome, patient satisfaction, and cost after 16 weeks. *British Medical Journal, 304*, 883-887.
6. Miranda, J. & Munoz, R. (1994). Intervention for minor depression in primary care patients. *Psychosomatic Medicine, 56*, 136-141.
7. Mynors-Wallis, L.M., Gath, D.H., Lloyd-Thomas, A.R. (1995). Randomized controlled trial comparing problem solving treatment with amitriptyline and placebo for major depression in primray care. *British Medical Journal, 310*, 441-445.
8. Power, K.G., Jerrom, D.W., Simpson, R.J. (1989). A controlled comparison of cognitive behavior therapy, diazapam and placebo in the management of generalized anxiety. *Behavioral Psychotherapy, 17*, 1-14.
9. Ashurst, P.M. & Ward, D.F., (1983). An evaluation of counseling in general practice. *Final Report of the Leverhulme Counseling Project.* London: Mental Health Foundation.
10. Martin, E. & Mitchell H. (1983). A counselor in general practice: a one-year survey. *Journal of the Royal College of General Practitioners, 33*, 366-367.
11. Brodaty, H. & Andrews, G. (1983). Brief psychotherapy in family practice. A controlled prospective intervention trial. *British Journal of Psychiatry, 14*, 11-19.
12. Boot, D., Gillies, P., Fenelon, J., Rewbin, R., Wilkins, M. & Gray, P. (1994). Evaluation of the short-term impact on counseling in general practice. *Patient Education and Counseling, 24*, 78-79.
13. King M., Broster, G., Lloyd, M. & Horder, M. (1994). Controlled trial in the evaluation of counseling in general practice. *British Journal of General Practice, 44*, 229-232.
14. Hemmings, A.J. (1997). Counseling in Primary Care: A randomized controlled trial. *Patient Education and Counseling, 32, 219*-230.
15. Ginsberg, G., Marks, I. & Waters, H. (1984). Cost-benefit analysis of a controlled trial of nurse therapy for neuroses in primary care. *Psychological Medicine, 14*, 683-690.
16. Marks, I. (1985). Controlled trial of psychiatric nurse therapists in primary care. *British Medical Journal, 290*, 1181-1184.
17. Hellman, C.J., Budd, M., Borysenko, J., McClelland, D.C., and Benson, H.A. (1990). A study of the effectiveness of two group behavioral medicine interventions for patients with psychosomatic complaints. *Behavioral Medicine, 16*, 165-173.
18. Wilkinson, G., Allen P., Marshall E., Walker J., Browne, W. & Mann, A.H. (1993). The Role of the Practice Nurse in the Management of Depression in General Practice: treatment adherence to antidepressant medication. *Psychological Medicine, 23*(I):229-237.
19. Gourney, K. & Brooking J. (1992). An Evaluation of the Effectiveness of Community Psychiatric Nurses in Treating Patients with Minor Mental Disorders in Primary Care: Final Report to the Department of Health, London.
20. Robson, M., France, R. & Bland, M. (1984). Clinical psychologist in primary care: controlled clinical and economic evaluation. *British Medical Journal, 288*, 1805-1808.

21. Katon W. Von Korff M. Lin E. Simon G. Walker E. Unutzer J. Bush T. Russo J. Ludman E. (1999). Stepped collaborative care for primary care patients with persistent symptoms of depression: a randomized trial. *Archives of General Psychiatry. 56(12):1109-15.*
22. Earl, L. & Kincey, J. (1982). Clinical psychology in general practice: a controlled trial evaluation. *Journal of the Royal College of General Practitioners, 32,* 32-37.
23. Cooper, B., Harwin, B.J., Delpa, C. & Shepherd, M. (1975). Mental health care in the community: an evaluative study. Psychological Medicine. 14, (monograph supl. 6), 47.
24. Corney, R. (1984). The effectiveness of attached social workers in the management of depressed female patients in general practice. *Psychological Medicine, 14* (monograph suppl. 6), 47.
25. Wells KB. Sherbourne C. Schoenbaum M. Duan N. Meredith L. Unutzer J. Miranda J. Carney MF. Rubenstein LV. (2000). Impact of disseminating quality improvement programs for depression in managed primary care: a randomized controlled trial. *JAMA. 283(2):212-20.*
26. Catalan, J., Garth, D., Anastasiades, P., Bond, S.A., Day, A. & Hall, L. (1991). Evaluation of a brief psychological treatment for emotional disorders in primary care. *Psychological Medicine, 21,* 1013-1018.
27. Druss, B.G., Rohrbaugh, R.M., Levinson, C.M. and Rosenheck, R.A. (2001). Integrated medical care for patients with serious psychiatric illness: a randomized trial. Archives of General Psychiatry, 58, 861-868.
28. Marsh, G.N. & Barr, J. (1975). Marriage guidance counseling in a group practice. *Journal of the Royal College of General Practitioners, 25,* 73-75.
29. Cohen J, Halpern A. (1978). A practice counsellor. *Journal of the Royal College of General Practitioners, 28,* 481-484.
30. Anderson, S. & Hassler, J., (1979). Counseling in general practice. *Journal of the Royal College of General Practitioners, 29,* 352-356.
31. Waydenfeld, D. & Waydenfeld, S.W. (1980). Counselling in General Practice. *Journal of the Royal Collage of General Practitioners, 30,* 671-677.
32. Bower, P., Garralda, E., Kramer, T., Harrington, R. & Sibbald, B. (2002). The treatment of child and adolescent mental health problems in primary care: a systematic review. *Family Practice, 18,* 373-382.
33. Corney, R.H.. (1986). Marriage guidance counseling in general practice. *Journal of the Royal College of General Practitioners, 36,* 424-426.
34. McLeod, J. (1988). The Work of Counselors in General Practice. Occasional Paper N. 37 London: The Royal College of General Practitioners.
35. Sibbald, B., Addington-Hall, J., Brenneman, D. & Freeling, P. (1996). Investigation of whether on-site general practice counselors have an impact of psychotropic drug prescribing rates and costs. *British Journal of General Practice, 46,* 63-67.
36. Thomas, P. (1993). An exploration of patients' perceptions of counseling with particular reference to counseling within general practice. *Counseling,* February: 24-30.
37. Webber, V., Davies, P. & Pietroni, P. (1994). Counseling in an inner city general practice: analysis of its use and uptake. *British Journal of General Practice, 44*(381), 175-8.
38. Spiers, R. & Jewel, J.A. (1995). One counselor, two practices: report of a pilot scheme in Cambridgeshire. *British Journal of Medical Practice, 45,* 31-33.
39. Burton, M., Sadgrove, J. & Selwyn, E. (1995). Do counselors in general practice surgeries and clinical psychologists in the National Health Service see the same patients? *Journal of the Royal Society of Medicine, 88,* 97-102.
40. Fletcher, J., Fahey, T. & McWilliam J. (1995). Relationship between the provision of counseling and the prescribing of antidepressants, hypnotics and anxiolytics in general practice. *The British Journal of General Practice, 45,* 467-469.
41. Kashner TM. Rost K. Cohen B. Anderson M. Smith GR Jr. Enhancing the health of somatization disorder patients. Effectiveness of short-term group therapy. [Clinical Trial. Journal Article. Randomized Controlled Trial] *Psychosomatics. 36(5):462-70, 1995 Sep-Oct.*
42. Roy-Byrne, P.P., Katon, W., Cowley, D.S., and Russo, J. (2002). A randomized effectiveness trial of collaborative care for patients with panic disorder in primary care. *Archives of General Psychiatry, 58,* 869-876.
43. Gournay, K. & Brooking, J. (1995). The community psychiatric nurse in primary care: an economic aalysis. *Journal of Advanced Nursing, 22,* 769-778.
44. Farrar, S., Kates, N., Crustolo, A.M., Nikolaou, L. (2001). Integrated model for mental health care: are providers satisfied with it? *Canadian Family Physician, 47,* 2483-2488.
45. Maguire, P., Pentol, A., Allen, D., Tait, A., Brooke, M. & Sellwood, R. (1982). Cost of counseling women who undergo mastectomy. *British Medical Journal, 284,* 1933-1935.
46. Nettleton, B., Cooksey, E., Mordue, A., Dorward, I., Ferguson, J., Johnston, J., and Jones. L. (2000). Counselling: filling a gap in general practice. *Patient Education and Counseling, 41,* 197-207.
47. Matalon, A., Nahmani, T., Rabin, S., Maoz, B., Hart, J. (2002). A short-term intervention in a multidisciplinary referral clinic for primary care frequent attenders: description of the model, patient characteristics and their medical resources. *Family Practice, 19,* 251-256.
48. Blakey. (1986). Psychological treatment in general practice: It's effect on patients and their families. *Journal of the Royal College of General Practitioners, 36,* 299-311.
49. Bower, P., Rowland, N., Mellor, C., Heywood, P., Godfrey, C., & Hardy, R. (2001). Effectiveness and cost effectiveness of counseling in primary care. *Cochrane Database of Systematic Reviews,* (1):CD001025.

50. McLeod, C.C., Budd, M.A., & McClelland, D.C. (1997). Treatment of somatization in primary care. *General Hospital Psychiatry, 19*, 251-258.
51. Katon, W., von Korff, M., Lin, E., Walker, E., Simon, G., Bush, T., Robinson, P., Russo, J. (1995). Collaborative management to achieve treatment guidelines: Impact on depression in primary care. *JAMA, 273*, 1026-1031.
52. Harvard, J. (1996). Reducing the cost with a practice-based CPN. *Fundholding, 5*(8), 25-26.
53. Koch, H.C. (1979). Evaluation of behavior therapy treatment in general practice. *Journal of the Royal College of General Practitioners, 29*, 337-340.
54. Oliver, M. & Zarb, G. (1993). Now you're talking. Health Service Journal, 103, 26-27.
55. Cummings, N. A., Dorken, H., Pallak, M. S., & Henke, C. (1990). *The impact of pshchological intervention on healthcare utilization and costs.* South San Francisco: The Biodyne Institute.
56. Schulberg, H.C., Block, M.R., Madonia, M.J., Scott, C., Rodriguez, E., Imber, S., Perel, J., Lave, J., Houck, P., & Coulehan, J.L. (1996). Treating major depression in primary care practice: eight month clinical outcomes. *Archives of General Psychiatry, 53*, 913-919.
57. VonKorff, M., Katon, W., Lin, E., Saunders, K., Simon, G., Walker, E., Robinson, P., & Bush, P. (1994). Evaluation of cost and cost offset of collaborative management of depressed patient in primary care. Presented at Eighth annual NIMH Research Conference on Mental Health Problems in the General Health Care Sector.
58. Peek, C.J., & Heinrich, R.L. (1998). Integrating care in a health care organization. In A. Blount, (Ed.) *Integrated Primary Care: The Future of Medical and Mental Health Collaboration*. New York: W.W. Norton.
59. Robinson, P., Del Vento, A., & Wischman, C. (1998). In Blount, A. (Ed.) *Integrated Primary Care: The Future of Medical and Mental Health Collaboration.* New York: W.W. Norton.
60. Morisky, D.E., Levine, D.M., Green, LW,. Shapiro, S., Russell, R.P. Smith, C.R. (1983). Five-year blood pressure control and mortality following health education for hypertensive patients. *American Journal of Public Health. 73*:153-62.
61. Beck, A. & Nimmer, C. (2000). A case study: the Kaiser Permanente integrated care project. In Maruish, M.E. (Ed). *Handbook of Psychological Assessment in Primary Care Settings*. Mawah, NJ: Earlbaum.
62. Hurley, L.K., McIntire, D.D. & Evers-Szostak, M. (1994). Parent perceptions of pediatric psychology in primary care. Poster presented at the Gulf Coast Regional Pediatric Psychology Conference, New Orleans.
63. Finney, J.W., Riley, A.W. & Cotaldo, M.R. (1991). Psychology in primary care: Effects of brief target therapy on children's medical utilization. *Journal of Pediatric Psychology, 16*, 447-462.