1. Angantyr, K., Rimner, A., Norden, T. & Norlander, T. (2015). Primary Care Behavioral Health model: Perspectives of outcome, client satisfaction, and gender. *Social Behavior and Personality, 43(2),* 287-302.

    a. **Summary:** We examined clients' satisfaction and gender differences in relation to the outcome parameters of the Primary Care Behavioral Health model of integrated care. The model has been shown to be effective in minimizing symptoms and increasing levels of functioning with regard to different mental health concerns. Participants were 54 clients (22 men and 32 women) who received a psychology consultation in accordance with the model, at 1 of 3 primary care centers located in southwest Sweden. Results indicated minimized symptoms and increased levels of functioning and clients felt a high degree of satisfaction with the consultations with the psychologists. There were no gender differences found regarding treatment results or satisfaction with the treatment.

2. Klein, S., & Hostetter, M. (2014). In focus: *Integrating behavioral health and primary care.* Quality Matters.

    a. **Summary:** New payment models that reward providers for simultaneously improving health outcomes and reducing health care spending may provide an impetus for integrating behavioral health and primary care services. Such integration has long been recommended but has been difficult to achieve because restrictive payment methods and practice patterns have impeded collaboration.

3. Burt, J. D., Garbacz, S. A., Kupzyk, K. A., Frerichs, L., & Gathje, R. (2012). Examining the utility of behavioral health integration in well-child visits: Implications for rural settings. *Families, Systems, & Health*, *32*(1), 20-30.

    a. **Summary:** The purpose of this study was to assess the effect of integrating behavioral health services into well-child visits in underserved, remote, and/or fringe areas. Specifically, the following were examined: the structure of the well-child visit for standard care in comparison to when a behavioral health provider was integrated into the visit and the effect of integrating a behavioral health provider on behavioral health topics covered and parent satisfaction. Participants were 94 caregivers of children attending well-child visits. Group differences were examined for participants in well-child visits with a behavioral health provider and participants in a standard well-child visit. Findings suggest a statistically significant increase in caregiver-rated perception for the number of topics covered with the integration of a behavioral health provider in the well-child visits. No significant effects of caregiver-rated helpfulness or satisfaction were observed. Implications for the findings and future research directions are discussed.

4. Torrence, N.D., Mueller, A.E., Ilem, A.A., Renn, B.N., DeSantis, B., & Segal, D.L. (2014). Medical provider attitudes about behavioral health consultants in integrated primary care: A preliminary study. *Families, Systems & Health,* 32(4), 426-432.

    a. **Summary:** Integrated behavioral health increases service utilization and treatment success, particularly with high-risk populations. This study assessed medical personnel's attitudes and perceptions of behavioral health clinicians (BHCs) in primary care using a brief self-report measure. A 6-item survey was given to medical providers (n = 45) from a health care system that includes integrated behavioral health services. Survey items assessed providers' attitudes and perceptions about BHCs. Attitudes about behavioral health were largely favorable. For all items, 73.3% to 100% of participants endorsed strongly agree or agree. Chi-square analyses revealed that those who interacted more frequently with BHCs were more comfortable discussing behavioral health issues with their patients, $\chi^2(6, n = 45) = 13.43$, $p < .05$, and that physicians believe that BHCs help patients effectively address their behavioral health problems, $\chi^2(2, n = 45) = 6.36$, $p < .05$. Age, gender, and health center in which the providers worked were not significantly related to any survey items. Medical providers surveyed believe that BHCs are valuable members of integrated health care, improving their abilities to provide care and to address their patients' physical and behavioral health problems. Although these preliminary results are promising, the setting surveyed has well-integrated behavioral health care services and thus might not be representative of other settings without such integration. Future studies should address medical providers' opinions of BHCs in a variety of settings with larger samples.

5. Funderburk, J.S., Dobmeyer, A.C., Hunter, C.L., Walsh, C.O. & Maisto, S.A. (2013). Provider practices in the Primary Care Behavioral Health (PCBH) model: An initial examination in the Veterans Health Administration and United States Air Force. *Families, Systems & Health*, 31(4), 341-353.

    a. The goals of this study were to identify characteristics of both behavioral health providers (BHPs) and the patients seen in a primary care behavioral health (PCBH) model of service delivery using prospective data obtained from BHPs. A secondary objective was to explore similarities and differences between these variables within the Veterans Health Administration (VHA) and United States Air Force (USAF) primary care clinics. A total of 159 VHA and 23 USAF BHPs, representing almost every state in the United States, completed the study, yielding data from 403 patient appointments. BHPs completed a web-based questionnaire that assessed BHP and setting characteristics, and a separate questionnaire after each patient seen on one day of clinical service. Data demonstrated that there are many similarities between the VHA and USAF BHPs and practices. Both systems tend to use well-trained psychologists as BHPs, had systems that support the BHP being in close proximity to the primary care providers, and have seamless

operational elements (i.e., shared record, one waiting room, same-day appointments, and administrative support for BHPs). Comorbid anxiety and depression was the most common presenting problem in both systems, but overall rates were higher in VHA clinics, and patients were significantly more likely to meet diagnostic criteria for mental health conditions. This study provides the first systematic, prospective examination of BHPs and practices within a PCBH model of service delivery in two large health systems with well over 5 years of experience with behavioral health integration. Many elements of the PCBH model were implemented in a manner consistent with the model, although some variability exists within both settings. These data can help guide future implementation and training efforts.

6. Bryan, C. J., Corso, M. L., Corso, K. A., Morrow, C. E., Kanzler, K. E., & Ray-Sannerud, B. (2012). Severity of mental health impairment and trajectories of improvement in an integrated primary care clinic. *Journal of Consulting and Clinical Psychology*, *80*(3), 396-403.

    a. **Summary**: ***Objective:*** To model typical trajectories for improvement among patients treated in an integrated primary care behavioral health service, multilevel models were used to explore the relationship between baseline mental health impairment level and eventual mental health functioning across follow-up appointments. ***Method:*** Data from 495 primary care patients (61.1% female, 60.7% Caucasian, 37.141 _ 12.21 years of age) who completed the Behavioral Health Measure (Kopta & Lowry, 2002) at each primary care appointment were used for the analysis. Three separate models were constructed to identify clinical improvement in terms of number of appointments attended, baseline impairment severity level, and the interaction of these 2 variables. ***Results:*** The data showed that 71.5% of patients improved across appointments, 56.8% of which (40.5% of the entire sample) was clinically meaningful and reliable. Number of appointments and baseline severity of impairment significantly accounted for variability in clinical outcome, with trajectories of change varying across appointments as a function of baseline severity. Patients with more severe impairment at baseline improved faster than patients with less severe baseline impairment. ***Conclusions:*** Patients treated within an integrated primary care behavioral health service demonstrate significant improvements in clinical status, even those with the most severe levels of distress at baseline.

7. Corso, K. A., Bryan, C. J., Corso, M. L., Kanzler, K. E., Houghton, D. C., Ray-Sannerud, B., & Morrow, C. E. (2012). Therapeutic alliance and treatment outcomes in the primary care behavioral health model. *Families, Systems & Health, 30*(2), 87-100.

    a. **Summary**: The current study investigated therapeutic alliance and clinical improvement within an integrated primary care behavioral health model. Participants included 542 primary care patients seen in two large family medicine clinics. Mental health symptoms and functioning were assessed using the 20-item

Behavioral Health Measure (Kopta & Lowery, 2002) at the beginning of each patient appointment. Therapeutic alliance was measured with the Therapeutic Bond Scale (CelestHealth Solutions, 2008) following an initial appointment with one of 22 behavioral health consultants (BHCs). Primary care patients rated their therapeutic alliance following a first appointment with a BHC as statistically stronger than alliance ratings from a previously reported sample of outpatient psychotherapy patients after the second, third, and fourth psychotherapy sessions (Kopta, Saunders, Lutz, Kadison, & Hirsch, 2009). Results of a bootstrapped linear regression analysis indicated that therapeutic alliance assessed after the first primary care behavioral health appointment was not associated with eventual clinical change in mental health symptoms and functioning. A strong therapeutic alliance was able to be formed in a primary care behavioral health modality. This exceeded the magnitude found in outpatient psychotherapy alliance ratings. Early therapeutic alliance was unrelated to overall clinical improvement in primary care.

8. Ray-Sannerud, B. N., Dolan, D. C., Morrow, C. E., Corso, K. A., Kanzler, K. E., Corso, M. L., & Bryan, C. J. (2012). Longitudinal outcomes after brief behavioral health intervention in an integrated primary care clinic. *Families, Systems & Health*, *30*(1), 60-71.

    a. **Summary**: The primary aim of the current study was to obtain information about the longitudinal clinical functioning of primary care patients who had received care from behavioral health consultants (BHCs) integrated into a large family medicine clinic. Global mental health functioning was measured with the 20-item self-report Behavioral Health Measure (BHM), which was completed by patients at all appointments with the BHC. The BHM was then mailed to 664 patients 1.5 to 3 years after receipt of intervention from BHCs in primary care, of which 70 (10.5%) were completed and returned (62.9% female; mean age 43.1 _ 12.7 years; 48.6% Caucasian, 12.9% African American, 21.4% Hispanic/ Latino, 2.9% Asian/Pacific Islander, 10.0% Other, 4.3% no response). Mixed effects modeling revealed that patients improved from their first to last BHC appointment, with gains being maintained an average of 2 years after intervention. Patterns of results remained significant even when accounting for the receipt of additional mental health treatment subsequent to BHC intervention. Findings suggest that clinical gains achieved by this subset of primary care patients that were associated with brief BHC intervention were maintained approximately 2 years after the final appointment.

9. Cigrang, J.A., Rauch, S.A., Avila, L.L., Bryan, C.J., Goodie, J.L., Hryshko-Mullen, A., Peterson, A.L., & STRONG STAR Consortium (2011). Treatment of Active-Duty Military with PTSD in Primary Care: Early Findings. *Psychological Services*, 8 (2), 104-113.

a. **Summary**: The study presents early findings from an ongoing pilot study of a cognitive–behavioral treatment for assisting active-duty military members with deployment-related posttraumatic stress disorder (PTSD) designed for use by psychologists working in an integrated primary care clinic. Treatment protocol is based primarily on Prolonged Exposure but also includes elements of Cognitive Processing Therapy that were adapted for use in primary care. Individuals were recruited from the population of patients consulted to the psychologist by primary care providers during routine clinical care. The 15 participants include active-duty or activated reserve Operation Iraqi Freedom and Operation Enduring Freedom veterans seeking help for deployment-related PTSD symptoms, with a PTSD Checklist-Military Version score 32, and interest in treatment for PTSD in primary care. Baseline and 1-month posttreatment follow-up evaluations were conducted by an independent evaluator. Five participants (33%) dropped out of the intervention after one or two appointments. Using the last observation carried forward for intent-to-treat analyses, the results showed that PTSD severity, depression, and global mental health functioning all significantly improved with the intervention. Fifty percent of treatment completers no longer met criteria for PTSD.

10. McFeature, B. & Pierce, T.W. (2011). Primary Care Behavioral Health consultation reduces depression levels among mood-disordered patients. *Journal of Health Disparities Research and Practice*, 5(2), 36-44.

    a. The purpose of this study was to examine the effects of behavioral health consultative services on levels of depressive symptoms in patients diagnosed with a mood disorder. Two hundred fifty-one patients with a form of mood disorder completed the PHQ-9 screening tool for depression both before and after a treatment period lasting an average of three months, during which patients received behavioral health consultation services. Results showed that 49.8% of patients participating in this integrated behavioral health care program experienced improvements of at least 50% in PHQ-9 scores from pre- to post-test. Improvements in PHQ- 9 scores of at least a five points from pre-to post-test were experienced by 80.5% of participants. At least some improvement in PHQ-9 scores from pre- to post-test was observed in 94.8% of patients with a mood disorder. Improvement in PHQ-9 scores was not significantly correlated with the number of behavioral or medical visits made during the intervention period. The degree of improvement in PHQ-9 scores seen in persons receiving psychotropic medication during the program period did not differ significantly from that of persons not receiving psychotropic medication. The number of medical visits decreased significantly during receipt of behavioral health consultation services.

11. Serrano, N. & Monden, K. (2011). The effect of behavioral health consultation on the care of depression by primary care clinicians. *Wisconsin Medical Journal*, 110 (3), 113-118.

a. **Summary: Purpose:** The aim of this study is to assess the impact of an integrated care model, called the Behavioral Health Consultation model, in the delivery of care for depression in an urban Federally Qualified Health Center, and to gauge the receptiveness of primary care clinicians to increasing their responsibility for the mental health care of their patients. **METHODS:** We reviewed electronic medical records to measure referral rates to mental health specialty care, patient engagement in care, management of psychotropic medications, and initiation of antidepressant medication, comparing data from the year prior to program implementation to that from the third year post-implementation. Clinician attitudes were assessed using an online anonymous questionnaire. **RESULTS:** Statistically significant findings included post-implementation increases in the use of standardized measures of depression, documentation of behavioral goals and patient visits to the primary care clinician (increased engagement), decreases in initiation rates of antidepressant medications, and decreases in referrals to mental health specialty care. No significant difference was found in rates of dosage changes or change to new medications among patients who were already on psychiatric medications. Clinicians reported near universal acceptance of the behavioral health consultation program and willingness to increase their role in managing patient mental health issues. **CONCLUSIONS:** This study demonstrates that a behavioral health consultation program in an urban community health center can improve adherence to evidence-based indicators in the care of depression, making it possible to manage the majority of patients presenting with depression in the primary care setting.

12. Brawer, P.A., Martielli, R., Pye, P.L., Manwaring, J. & Tierney, A. (2010). St. Louis Initiative for Integrated Care Excellence (SLICE): Integrated-Collaborative care on a large scale model. *Families, Systems & Health,* 28(2), 175-187.

    a. **Summary**: The primary care health setting is in crisis. Increasing demand for services, with dwindling numbers of providers, has resulted in decreased access and decreased satisfaction for both patients and providers. Moreover, the overwhelming majority of primary care visits are for behavioral and mental health concerns rather than issues of a purely medical etiology. Integrated-collaborative models of health care delivery offer possible solutions to this crisis. The purpose of this article is to review the existing data available after 2 years of the St. Louis Initiative for Integrated Care Excellence; an example of integrated-collaborative care on a large scale model within a regional Veterans Affairs Health Care System. There is clear evidence that the SLI(2)CE initiative rather dramatically increased access to health care, and modified primary care practitioners' willingness to address mental health issues within the primary care setting. In addition, data suggests strong fidelity to a model of integrated-collaborative care which has been successful in the past. Integrated-collaborative care offers unique advantages to the traditional view and practice of medical care. Through careful implementation and practice, success is possible on a large scale model.

13. Collins, C., Hewson, D. L., Munger, R., & Wade, T. (2010). *Evolving models of behavioral health integration in primary care*. New York, NY: Milbank Memorial Fund.

    a. **Summary:** The U.S. mental health system fails to reach and/or adequately treat the millions of Americans suffering from mental illness and substance abuse. This report offers an approach to meeting these unmet needs: the integration of primary care and behavioral health care. The report summarizes the available evidence and states' experiences around integration as a means for delivering quality, effective physical and mental health care. For those interested in integrating care, it provides eight models that represent qualitatively different ways of integrating/coordinating care across a continuum—from minimal collaboration to partial integration to full integration—according to stakeholder needs, resources, and practice patterns.

14. Hunter, C. L., & Goodie, J. L. (2010). Operational and clinical components for integrated-collaborative behavioral healthcare in the patient-centered medical home. *Families, Systems & Health*, 28(4), 308-321. doi:10.1037/a0021761

    a. **Summary:** Behavioral healthcare will be an essential piece of meeting the patient-centered medical home (PCMH) principles of easy access and whole person, coordinated, and integrated care as primary care clinics transform themselves into PCMHs. As this transformation occurs, PCMH clinic staff and behavioral health providers must carefully consider how to adapt their operations to include the provision of integrated-collaborative behavioral health services within the PCMH. Without this careful consideration, integrated-collaborative behavioral healthcare will likely fail to reach its full potential. We discuss the operational and clinical components that appear to be important for success when integrating behavioral healthcare into the PCMH.

15. Byran, C. J., Morrow, C., & Appolonio, K. K. (2009). Impact of behavioral health consultant interventions on patient symptoms and functioning in an integrated family medicine clinic. *Journal of Clinical Psychology*, 65(3), 281-293. doi:10.1002/jclp.20539

    a. **Summary**: Patterns of symptomatic and functional change associated with behavioral health consultant (BHC) intervention in an integrated family medicine clinic were investigated among 338 primary care patients under routine conditions without exclusion. Patients were referred to the BHC by primary care providers (PCPs) and participated in one to four brief, behaviorally oriented appointments in primary care. The Behavioral Health Measure-20 (BHM) was completed at each appointment. Results indicated that higher levels of distress at baseline were associated with more follow-up appointments, and that patients demonstrated simultaneous, clinically meaningful improvement in well-being, symptoms, and functioning in as few as two to three BHC appointments. Patterns of clinical

improvement support the effectiveness of BHC interventions, but contradict the phase model of psychotherapy

16. Corso, K. A., Bryan, C. J., Morrow, C. E., Appolonio, K. K., Dodendorf, D. M., & Baker, M. T. (2009). Managing posttraumatic stress disorder symptoms in active-duty military personnel in primary care settings. *Journal of Mental Health Counseling, 31*(2), 119-136.

    a. **Summary:** Active-duty military personnel face deterrents to seeking outpatient mental health treatment despite the high prevalence of posttraumatic stress disorder (PTSD) in this population. The Behavioral Health Consultation (BHC) model may be the answer for those presenting subthreshold PTSD symptoms, at high risk for PTSD due to their occupation, not interested in outpatient mental health treatment, or unable to seek such treatment due to occupational limitations. Three empirically based interventions that have been effective in managing symptoms of PTSD are summarized and then integrated into the established BHC model as suggested treatments for managing PTSD symptoms in an integrated primary care setting. Pilot data and recommendations for future research and practice are provided.

17. Goodie, J., Isler, W., Hunter, C., & Peterson, A. (2009). Using behavioral health consultants to treat insomnia in primary care: A clinical case series. *Journal of Clinical Psychology*, 65, 294-304

    a. Cognitive-behavioral treatments for insomnia are as effective as medications and have longer lasting effects. The current study used a clinical case series design to evaluate the effectiveness of a brief behavioral intervention for insomnia delivered in a nonresearch, real-world family medicine clinical setting. Participants included 29 sleep-impaired patients who were seen regardless of their comorbid conditions. The treatment included three brief visits with a behavioral health consultant (BHC), plus the provision of a self-help insomnia-treatment book. At posttreatment 83% of participants achieved a mean sleep efficiency >85%, as compared to only 14% at baseline. Limited-contact behavioral treatment of insomnia delivered by BHCs within a collaborative care family medicine clinic effectively reduced symptoms of insomnia, regardless of comorbid medical diagnoses.

18. Davis, D., Corrin-Pendry, S., & Savill, M. (2008). A follow-up study of the long-term effects of counselling in a primary care counselling psychology service. *Counseling and Psychotherapy Research*, 8(2), 80-84.

    a. **Summary:** Despite much recent work examining the short-term effect of counselling in primary healthcare settings, to date relatively little research has examined the effectiveness of such treatment programmes over the longer term. In this study, 58 participants underwent brief, time-limited integrative counselling

sessions, with symptoms being measured using the CORE-OM immediately before, immediately after, and 30 months after counselling. It was found that in addition to participants reporting significantly lower levels of psychological distress immediately post-counselling, a further significant improvement at 30-month follow-up was also apparent, indicating that the benefit from counselling was maintained. In addition to this reduction in symptoms post-counselling, a significant reduction in GP visits was also detected in the 12 months following counselling when compared with the 12 months prior to counselling, indicating a lower reliance on the primary healthcare team after counselling.

19. Butler, M., Kane, R. L., McAlpine, D., Kanthol, R. G., Fu, S. S., Hagedorn, H., & Wilt, T. J. (2003). *Integration of mental/substance abuse and primary care*. Rockville, MD: Agency for Healthcare Research and Quality Publication.

    a. **Summary:** The Agency for Healthcare Research and Quality (AHRQ), through its Evidence-based Practice Centers (EPCs), sponsors the development of evidence reports and technology assessments to assist public- and private-sector organizations in their efforts to improve the quality of health care in the United States. This report was requested and funded by AHRQ; the Health Resources and Services Administration; Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, Center for Substance Abuse Treatment; as well as the Office of Women's Health and the Office of Minority Health at the Department of Health and Human Services. The reports and assessments provide organizations with comprehensive, science-based information on common, costly medical conditions, and new health care technologies. The EPCs systematically review the relevant scientific literature on topics assigned to them by AHRQ and conduct additional analyses when appropriate prior to developing their reports and assessments. To bring the broadest range of experts into the development of evidence reports and health technology assessments, AHRQ encourages the EPCs to form partnerships and enter into collaborations with other medical and research organizations. The EPCs work with these partner organizations to ensure that the evidence reports and technology assessments they produce will become building blocks or health care quality improvement projects throughout the Nation. The reports undergo peer review prior to their release. AHRQ expects that the EPC evidence reports and technology assessments will inform individual health plans, providers, and purchasers as well as the health care system as a whole by providing important information to help improve health care quality.