1. Jonk, Y., Lawson, K., O'Connor, H., Riise, K. S., Eisenberg, D., Dowd, B., & Kreitzer, M. J. (2015). How effective is health coaching in reducing health services expenditures? *Medical Care*, 53(2), 133-140.

    a. **Summary:** Background: Health coaching interventions aim to identify high-risk enrollees and encourage them to play a more proactive role in improving their health, improve their ability to navigate the health care system, and reduce costs. Objectives: Evaluate the effect of health coaching on impatient, emergency room, outpatient, and prescription drug expenditures. Research design: Quasi-experimental pre-post design. Health coaching participants were identified over the 2-year period, 2009-10. Propensity scores facilitated matching eligible participants and nonparticipants controls on a one-to-one basis using nearest kernel techniques. Difference in differences logistic and generalized linear models addressed the impact of health coaching on the probability of incurring costs and levels of inpatient, emergency room, outpatient, and prescription drug expenditures, respectively. Measures: Administrative claims data were used to analyze health services expenditures pre-participation and post health coaching participation time periods. Results: Of the 6940 health coaching participants, 1161 participated for at least 4 weeks and had a minimum for at least 4 weeks and had a minimum of 6 months of claims data pre-participation and post-participation. Although the probability of incurring costs and expenditure levels for emergency room services were not affected, the probability of incurring inpatient expenditures and levels of outpatient and total costs for health coaching participants fell significantly from pre-participation to post-participation relative to controls. Estimated outpatient and total cost savings were @286 and $412 per person per month, respectively. Conclusion: health coaching led to significant reductions in outpatient and total expenditures for high-risk plan enrollees. Future studies analyzing both health outcomes and claims data are needed to assess the cost-effectiveness of health coaching in specific populations.

2. Blackwell, D. L., Lucas, J. W., & Clarke, T. C. (2014). Summary health statistics for U.S. adults: National Health Interview Survey. *National Center for Health Statistics*, 10(260).

    a. **Summary:** This report presents detailed tables from the 2012 National Health Interview Survey (NHIS) for the civilian noninstitutionalized adult population, classified by sex, age, race and Hispanic origin, education, current employment status, family income, poverty status, health insurance coverage, marital status, and place and region of residence. Estimates (frequencies and percentages) are presented for selected chronic conditions and mental health characteristics, functional limitations, health status, health behaviors, health care access and utilization, and human immunodeficiency virus testing. Percentages and percent distributions are presented in both age-adjusted and unadjusted versions. Data Source NHIS is a household, multistage probability sample survey conducted annually by interviewers of the U.S. Census Bureau for the Centers for Disease

Control and Prevention's National Center for Health Statistics. In 2012, data were collected on 34,525 adults in the Sample Adult questionnaire. The conditional response rate was 79.7%, and the final response rate was 61.2%. The health information for adults in this report was obtained from one randomly selected adult per family. Highlights In 2012, 61% of adults aged 18 and over had excellent or very good health. Eleven percent of adults had been told by a doctor or other health professional that they had heart disease, 24% had been told on two or more visits that they had hypertension, 9% had been told that they had diabetes, and 21% had been told that they had some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia. Eighteen percent of adults were current smokers and 21% were former smokers. Based on estimates of body mass index, 35% of adults were overweight and 28% were obese.

3. Wilson, A. (2014). The ACA may aggravate the doc shortage. What's the ACA going to do about it? California HealthLine: The Daily Digest of News, Policy & Opinion.

    a. **Summary:**

4. Auerbach, D. I., Chen, P. G., Friedberg, M. W., Reid, R. O., Lau, C., & Mehrotta, A. (2013). Nurse-managed health centers and patient-centered medical homes could mitigate expected primary care physician shortage. *Health Affairs*, 32(11), 1933-1941.

    a. **Summary**: Numerous forecasts have predicted shortages of primary care providers, but these forecasts generally assume that no changes will occur in the way primary care is delivered. • Two innovations, the patient-centered medical home (PCMH) and the nurse-managed health center (NMHC), use different mixes of providers than traditional, physician-based primary care. • The RAND research team's projection model shows that, if the prevalence of PCMHs increases from the current 15 percent to 45 percent, and if the prevalence of NMHCs grows from around 0.5 percent to 5 percent, then physician shortages can be cut in half by 2025 without training a single additional physician. • If, in addition, the medical home can effectively handle 20 percent more patients, using technology, coordination, or other means, then the projected shortage can be nearly eliminated.

5. Bloom, B., Jones, L. I., & Freeman, G. (2013). Summary health statistics for U.S. children: National Health Interview Survey, 2012. *National Center for Health Statistics*, 10(258).

    a. **Summary:** Objectives This report presents both age-adjusted and unadjusted statistics from the 2012 National Health Interview Survey (NHIS) on selected health measures for children under age 18 years, classified by sex, age, race, Hispanic origin, family structure, parent's education, family income, poverty status, health insurance coverage, place of residence, region, and current health status. Topics included are asthma, allergies, learning disability, attention deficit hyperactivity disorder (ADHD), prescription medication use for at least 3 months,

respondent-assessed health status, school days missed due to illness or injury, usual place of health care, time since last contact with a health care professional, selected measures of health care access, emergency room (ER) visits, dental care, and special education or early intervention services. Data Source NHIS is a multistage probability sample survey conducted annually by interviewers of the U.S. Census Bureau for the Centers for Disease Control and Prevention's National Center for Health Statistics and is representative of the civilian noninstitutionalized population of the United States. This report analyzes data from two of the main components of NHIS: the Family Core, in which data are collected for all family members by interviewing an adult family respondent, and the Sample Child Core, in which additional health information is collected about a randomly selected child (the sample child) from an adult familiar with the child's health. Selected Highlights In 2012, most U.S. children under age 18 years had excellent or very good health (83%). However, 7% of children had no health insurance coverage, and 4% of children had no usual place of health care. Six percent of children had unmet dental need because their families could not afford dental care. Twelve percent of children had one ER visit and 6% had two or more visits. Ten percent of children aged 3–17 years had ADHD.

6. Calkins, L. E., Michelson, I. R., & Corso, A. S. (2013). Provider proximity as a predictor of referral rate and success. *Psychological Services,* 10(4), 395-400. doi:10.1037/a0029988

    a. **Summary**: The predictive utility of proximity of primary care providers (PCPs) to mental health providers (MHPs) in referral rate and referral success was examined. Referrals from all PCPs in three New Jersey primary care clinics with primary care mental health integration (PC-MHI) to MHPs for fiscal year 2009 (October 1, 2008 through September 30, 2009) were included. Regression analyses supported the hypotheses that proximity significantly predicts both rate of referral per visit and rate of referral per unique patient. The hypothesis that proximity predicts referral success was not supported. Further research might seek to determine if additional variables moderate the relationship between provider proximity and referral rate. Implications of the findings for colocated programs were discussed.

7. Petterson, S. M., Liaw, W. R., Phillips, R. L., Rabin, D. L., Meyers, D. S., & Bazemore, A. W. (2012). Projecting US primary care physician workforce needs: 2010-2025. *Annals of Family Medicine,* 10(6), 503-509.

    a. **Summary:** PURPOSE We sought to project the number of primary care physicians required to meet US health care utilization needs through 2025 after passage of the Affordable Care Act. METHODS In this projection of workforce needs, we used the Medical Expenditure Panel Survey to calculate the use of offi ce-based primary care in 2008. We used US Census Bureau projections to account for demographic changes and the American Medical Association's Masterfi le to

calculate the number of primary care physicians and determine the number of visits per physician. The main outcomes were the projected number of primary care visits through 2025 and the number of primary care physicians needed to conduct those visits. RESULTS Driven by population growth and aging, the total number of offi ce visits to primary care physicians is projected to increase from 462 million in 2008 to 565 million in 2025. After incorporating insurance expansion, the United States will require nearly 52,000 additional primary care physicians by 2025. Population growth will be the largest driver, accounting for 33,000 additional physicians, while 10,000 additional physicians will be needed to accommodate population aging. Insurance expansion will require more than 8,000 additional physicians, a 3% increase in the current workforce. CONCLUSIONS Population growth will be the greatest driver of expected increases in primary care utilization. Aging and insurance expansion will also contribute to utilization, but to a smaller extent.

8. West, C. P., & Dupras, D. M. (2012). General medicine vs subspecialty career plans among internal medicine residents. *Journal of American Medicine Association*, 308(21), 2241-2247. doi:10.1001/jama.2012.47535.

    a. **Summary**: Context Current medical training models in the United States are unlikely to produce sufficient numbers of general internists and primary care physicians. Differences in general internal medicine (GIM) career plans between internal medicine residency program types and across resident demographics are not well understood. Objective To evaluate the general medicine career plans of internal medicine residents and how career plans evolve during training. Design, Setting, and Participants A study of US internal medicine residents using an annual survey linked to the Internal Medicine In-Training Examination taken in October of 2009-2011 to evaluate career plans by training program, sex, and medical school location. Of 67 207 US eligible categorical and primary care internal medicine residents, 57 087 (84.9%) completed and returned the survey. Demographic data provided by the National Board of Medical Examiners were available for 52 035 (77.4%) of these residents, of whom 51 390 (76.5%) responded to all survey items and an additional 645 (1.0%) responded to at least 1 survey item. Data were analyzed from the 16 781 third-year residents (32.2%) in this sample. Main Outcome Measures Self-reported ultimate career plans of internal medicine residents. Results A GIM career plan was reported by 3605 graduating residents (21.5%). A total of 562 primary care program (39.6%) and 3043 categorical (19.9%) residents reported GIM as their ultimate career plan (adjusted odds ratio [AOR], 2.76; 99% CI, 2.35-3.23; P < .001). Conversely, 10 008 categorical (65.3%) and 745 primary care program (52.5%) residents reported a subspecialty career plan (AOR, 1.90; 99% CI, 1.62- 2.23; P < .001). GIM career plans were reported more frequently by women than men (26.7% vs 17.3%, respectively; AOR, 1.69; 99% CI, 1.53-1.87; P < .001). US medical graduates were slightly more likely to report GIM career plans than international medical graduates (22.0% vs 21.1%, respectively; AOR, 1.76; 99% CI, 1.50-2.06; P < .001). Within primary care programs, US medical graduates were much more

likely to report GIM career plans than international medical graduates (57.3% vs 27.3%, respectively; AOR, 3.48; 99% CI, 2.58-4.70; P < .001). Compared with their counterparts, maintaining a first-year GIM career plan over the course of their training was more likely among primary care program residents (68.2% vs 52.3%; AOR, 1.81; 99% CI, 1.25-2.64; P < .001), women (62.4% vs 47.2%; AOR, 1.75; 99% CI, 1.34-2.29; P < .001), and US medical graduates (60.9% vs 49.2%; AOR, 1.48; 99% CI, 1.13-1.93; P < .001). Conclusion Reported GIM career plans were markedly less common than subspecialty career plans among internal medicine residents, including those in primary care training programs, and differed according to resident sex, medical school location, and program type.

9. Meadows, T., Valleley, R., Haack, M. K., Thorson, R., & Evans, J. (2011). Physician "costs" in providing behavioral health in primary care. *Clinical Pediatrics*, 50(5), 447-455. doi:10.1177/0009922810390676

    a. **Summary**: Objective: To examine pediatricians time spent, and resulting reimbursement payments for, addressing behavioral health concerns in a rural primary care pediatric practice. Methods: Research assistants observed 228 patient visits in a rural pediatric primary care office. The length of the visit (in minutes), content of visit, number and type of codes billed, and related insurance reimbursement amounts were recorded. Interrater reliability, scored for 22% of patient visits, was 90%. Results: Medical only visits lasted, on average, 8 minutes as compared with behavioral only visits that required nearly 20 minutes of physician time. Pediatricians billed up to 10 different billing codes for medical only visits but only billed 1 code for behavioral only visits. Consequently, pediatricians were reimbursed significantly less, per minute, for behavioral only visits as compared with those sessions addressing medical only or a combination of medical and behavior concerns. Conclusion: Findings converge with previous research, demonstrating that behavioral health concerns dramatically affect the length of visit for primary care physicians. Moreover, this study is the first to document the specific impact of such concerns on pediatrician reimbursement for providing behavioral services. These results provide further support for integrating behavioral health services into pediatric primary care settings, thus allowing physicians to refer more difficult patients with behavioral issues to in-house collaborating behavioral health providers who can spend additional time necessary to address the behavioral health issue and who are licensed to receive mental health reimbursement.

10. Mojtabai, R., Olfson, M., Sampson, N. A., Druss, J. B., Wang, P. S., Wells, K. B., Pincus, H. A., & Kessler, R. C. (2011). Barriers to mental health treatment: results from National Comorbidity Survey Replication. *Psychological Medicine*, 41, 1751-1761. doi:10.1017/S0033291710002291

    a. **Summary:** Background. The aim was to examine barriers to initiation and continuation of treatment among individuals with common mental disorders in the US general population. Method. Respondents in the National Comorbidity Survey

Replication with common 12-month DSM-IV mood, anxiety, substance, impulse control and childhood disorders were asked about perceived need for treatment, structural barriers and attitudinal/evaluative barriers to initiation and continuation of treatment. Results. Low perceived need was reported by 44.8% of respondents with a disorder who did not seek treatment. Desire to handle the problem on one's own was the most common reason among respondents with perceived need both for not seeking treatment (72.6%) and for dropping out of treatment (42.2 %). Attitudinal/evaluative factors were much more important than structural barriers both to initiating (97.4% v. 22.2%) and to continuing (81.9% v. 31.8%) of treatment. Reasons for not seeking treatment varied with illness severity. Low perceived need was a more common reason for not seeking treatment among individuals with mild (57.0%) than moderate (39.3%) or severe (25.9%) disorders, whereas structural and attitudinal/evaluative barriers were more common among respondents with more severe conditions. Conclusions. Low perceived need and attitudinal/evaluative barriers are the major barriers to treatment seeking and staying in treatment among individuals with common mental disorders. Efforts to increase treatment seeking and reduce treatment drop-out need to take these barriers into consideration as well as to recognize that barriers differ as a function of sociodemographic and clinical characteristics.

11. Baron, R. J. (2010). What's keeping us so busy in primary care? A snapshot from one practice. *The New England Journal of Medicine,* 362(17), 1632-1635.

    a. **Summary:** Primary care practices typically measure productivity according to the number of visits, which also drives payment. Work that does not involve a visit from a patient is invisible to those who support and purchase primary care. Several studies have estimated the amount of time that primary care physicians devote to nonvisit work.1,2 To provide a more detailed description, my colleagues and I used our electronic health record to count units of primary care work during the course of a year.

12. Bray, J. H. (2010). The future of psychology practice and science. *American Psychologist*, 65(5), 355-369. doi:10.1037/a0020273

    a. **Summary:** This article reviews the 2009 APA President's initiatives and recommendations for the future of psychology practice and science. The future of psychology practice requires that we expand the focus of traditional practice; become health care providers, not just mental health providers; use evidence-based practice, assessment, and outcome measures; incorporate technology into our practices, including electronic health records; and change training and focus to meet the needs of our diverse society. The future of psychological science requires that we train and work in multidisciplinary teams, employ different methods and approaches, and shift our focus to translational science. The future of our profession requires substantial changes in graduate education to prepare our students for science and practice in the 21st century. In light of advances in

science and practice that reveal the critical importance of psychosocial and behavioral factors in health and disease, I call for the creation of a department of behavioral health within the federal government.

13. Cunningham, P. J. (2009). Beyond parity: Primary care physicians' perspectives on access to mental health care. *Health Affairs*, 28(3), 490-501. doi:10.1377/hlthaff.28.3.w490

    a. **Summary**: About two-thirds of primary care physicians (PCPs) reported in 2004-05 that they could not get outpatient mental health services for patients – a rate that was at least twice as high as that for other services. Shortages of mental health care providers, health plan barriers, and lack of coverage or inadequate coverage were all cited by PCPs as important barriers to mental health care access. The probability of having mental health access problems for patients varied by physician practice, health system, and policy factors. The results suggest that implementing mental health parity nationally will reduce some but not all of the barriers to mental health care.

14. Mark, T. L. (2009). Datapoints: Psychotropic drug prescriptions by medical specialty. *Psychiatric services*, 60(9). doi:10.1176/ps.2009.60.9.1167

    a. **Summary**:

15. Kirsch, I., Deacon, B. J., Huedo-Medina, T. B., Scoboria, A., Moore, T. J., & Johnson, B. T. (2008). Initial severity and antidepressant benefits: A meta-analysis of data submitted ot the food and drug administration. PLoS Med, 5(2), 260-267. doi:10.1371/journal.pmed.0050045

    a. **Summary**: Meta-analyses of antidepressant medications have reported only modest benefits over placebo treatment, and when unpublished trial data are included, the benefit falls below accepted criteria for clinical significance. Yet, the efficacy of the antidepressants may also depend on the severity of initial depression scores. The purpose of this analysis is to establish the relation of baseline severity and antidepressant efficacy using a relevant dataset of published and unpublished clinical trials. Methods and Findings We obtained data on all clinical trials submitted to the US Food and Drug Administration (FDA) for the licensing of the four new-generation antidepressants for which full datasets were available. We then used meta-analytic techniques to assess linear and quadratic effects of initial severity on improvement scores for drug and placebo groups and on drug–placebo difference scores. Drug–placebo differences increased as a function of initial severity, rising from virtually no difference at moderate levels of initial depression to a relatively small difference for patients with very severe depression, reaching conventional criteria for clinical significance only for patients at the upper end of the very severely depressed category. Meta-regression analyses indicated that the relation of baseline severity and improvement was curvilinear in drug groups and showed a strong, negative linear component in

placebo groups. Conclusions Drug–placebo differences in antidepressant efficacy increase as a function of baseline severity, but are relatively small even for severely depressed patients. The relationship between initial severity and antidepressant efficacy is attributable to decreased responsiveness to placebo among very severely depressed patients, rather than to increased responsiveness to medication.

16. Garcia-Shelton, L. (2006). Meeting U.S. health care needs: A challenge to psychology. Professional Psychology: *Research and Practice*, 37(6), 676-682. doi:10.1037/0735-7028.37.6.676

    a. **Summary:** Is there really a growing need for primary care psychologists? U.S population health statistics reveal a great deal of variability in the care Americans receive and in their associate health outcomes. Members of minority groups, the inner-city poor, and rural Americans bear a disproportionate burden of ill health. The decreasing pool of primary care physicians is documented as well as is the growing pool of nonphysician primary care providers. The need to expand the nature of psychological interventions in primary care is examined, and change in the training of professional psychologists is recommended.

17. American College of Physicians (2006). The impending collapse of primary care medicine and its implications for the state of the nation's health care. N.p.: American College of Physicians.

    a. **Summary**: Primary care, the backbone of the nation’s health care system, is at grave risk of collapse due to a dysfunctional financing and delivery system. Immediate and comprehensive reforms are required to replace systems that undermine and undervalue the relationship between patients and their personal physicians. If these reforms do not take place, within a few years there will not be enough primary care physicians to take care of an aging population with increasing incidences of chronic diseases. The consequences of failing to act will be higher costs, greater inefficiency, lower quality, more uninsured persons, and growing patient and physician dissatisfaction. The American College of Physicians (ACP) is the nation’s largest specialty society, representing 119,000 internal medicine physicians (internists) and medical students. Internists specialize in the prevention, detection and treatment of illness in adults. Our membership includes physicians who provide comprehensive primary and subspecialty care to tens of millions of patients, including taking care of more Medicare patients than any other physician specialty. Today, we are releasing sweeping policy proposals to avert a looming crisis in access to primary care medicine. Our proposals will fundamentally change the way that primary care is organized, delivered, financed, and valued.

18. Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the national comorbidity survey replication. *Archives of General Psychiatry*, 62, 593-602.

    a. **Summary**: Context: Little is known about lifetime prevalence or age of onset of DSM-IV disorders. Objective: To estimate lifetime prevalence and age-of onset distributions of DSM-IV disorders in the recently completed National Comorbidity Survey Replication. Design and Setting: Nationally representative face-to face household survey conducted between February 2001 and April 2003 using the fully structured World Health Organization World Mental Health Survey version of the Composite International Diagnostic Interview. Participants: Nine thousand two hundred eighty-two English-speaking respondents aged 18 years and older. Main Outcome Measures: Lifetime DSM-IV anxiety, mood, impulse-control, and substance use disorders. Results: Lifetime prevalence estimates are as follows: anxiety disorders, 28.8%; mood disorders, 20.8%; impulse control disorders, 24.8%; substance use disorders, 14.6%; any disorder, 46.4%. Median age of onset is much earlier for anxiety (11 years) and impulse-control (11 years) disorders than for substance use (20 years) and mood (30 years) disorders. Half of all lifetime cases start by age 14 years and three fourths by age 24 years. Later onsets are mostly of comorbid conditions, with estimated lifetime risk of any disorder at age 75 years (50.8%) only slightly higher than observed lifetime prevalence (46.4%). Lifetime prevalence estimates are higher in recent cohorts than in earlier cohorts and have fairly stable inter cohort differences across the life course that vary in substantively plausible ways among sociodemographic subgroups. Conclusions: About half of Americans will meet the criteria for a DSM-IV disorder sometime in their life, with first onset usually in childhood or adolescence. Interventions aimed at prevention or early treatment need to focus on youth

19. Kessler, R. C., Demler, O., Frank, R. G., Olfson, M., Pincus, H. A., Walters, E. A., Wang, P., Wells, K. B., & Zaslvasky, A. M. (2005). Prevalence and treatment of mental disorders, 1990 to 2003. *The New England Journal of Medicine*, 352, 2515-2523.

    a. **Summary**: background Although the 1990s saw enormous change in the mental health care system in the United States, little is known about changes in the prevalence or rate of treatment of mental disorders. Methods We examined trends in the prevalence and rate of treatment of mental disorders among people 18 to 54 years of age during roughly the past decade. Data from the National Comorbidity Survey (NCS) were obtained in 5388 face-to-face household interviews conducted between 1990 and 1992, and data from the NCS Replication were obtained in 4319 interviews conducted between 2001 and 2003. Anxiety disorders, mood disorders, and substance-abuse disorders that were present during the 12 months before the interview were diagnosed with the use of the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders, fourth edition (DSM-IV). Treatment for emotional disorders was categorized according to the sector of mental health services: psychiatry services, other mental

health services, general medical services, human services, and complementary–alternative medical services. Results The prevalence of mental disorders did not change during the decade (29.4 percent between 1990 and 1992 and 30.5 percent between 2001 and 2003, P=0.52), but the rate of treatment increased. Among patients with a disorder, 20.3 percent received treatment between 1990 and 1992 and 32.9 percent received treatment between 2001 and 2003 (P<0.001). Overall, 12.2 percent of the population 18 to 54 years of age received treatment for emotional disorders between 1990 and 1992 and 20.1 percent between 2001 and 2003 (P<0.001). Only about half those who received treatment had disorders that met diagnostic criteria for a mental disorder. Significant increases in the rate of treatment (49.0 percent between 1990 and 1992 and 49.9 percent between 2001 and 2003) were limited to the sectors of general medical services (2.59 times as high in 2001 to 2003 as in 1990 to 1992), psychiatry services (2.17 times as high), and other mental health services (1.59 times as high) and were independent of the severity of the disorder and of the sociodemographic characteristics of the respondents. Conclusions Despite an increase in the rate of treatment, most patients with a mental disorder did not receive treatment. Continued efforts are needed to obtain data on the effectiveness of treatment in order to increase the use of effective treatments.

20. Ostbye, T., Yarnall, K. S., Krause, K. M., Pollak, K. I., Gradison, M., & Michener, J. L. (2005). Is there time for management of patients with chronic diseases in primary care? *Annals of Family Medicine,* 3(3), 209-214.

    a. **Summary:** PURPOSE Despite the availability of national practice guidelines, many patients fail to receive recommended chronic disease care. Physician time constraints in primary care are likely one cause. METHODS We applied guideline recommendations for 10 common chronic diseases to a panel of 2,500 primary care patients with an age-sex distribution and chronic disease prevalences similar to those of the general population, and estimated the minimum physician time required to deliver high-quality care for these conditions. The result was compared with time available for patient care for the average primary care physician. RESULTS Eight hundred twenty-eight hours per year, or 3.5 hours a day, were required to provide care for the top 10 chronic diseases, provided the disease is stable and in good control. We recalculated this estimate based on increased time requirements for uncontrolled disease. Estimated time required increased by a factor of 3. Applying this factor to all 10 diseases, time demands increased to 2,484 hours, or 10.6 hours a day. CONCLUSIONS Current practice guidelines for only 10 chronic illnesses require more time than primary care physicians have available for patient care overall. Streamlined guidelines and alternative methods of service delivery are needed to meet recommended standards for quality health care.

21. Strosahl, K. D. (2005) Training behavioral health and primary care providers for integrated care. IN: W. O'Donohoe, N. Cummings, M. Byrd & D. Henderson (Eds.)

(2005). *Behavioral integrative care: Treatments that work in the primary care setting*. New York: Brunner-Routledge.

a. **Summary**: In this chapter, an attempt has been made to articulate the training issues associated with the integration of primary care and behavioral health services. As should be obvious, the integration of primary care and behavioral health services is better conceptualized as a system redesign. It is not merely adding a new service to the primary care milieu; it more accurately reflects a rethinking of the goals and process of general healthcare. This means primary care and behavioral health providers have a very basic role to play in determining the structure and function of the integrated systems of the future. In the world of everyday healthcare, it will be impossible escape the practical implications of rejoining the mind and the body. While behavioral health providers are often the initial targets of core competency development, there are equally fundamental changes in the skill sets required of health care providers. Perhaps the most important implication is that good intentions alone will not make integrated primary care successful. It is only by taking a systematic approach to identifying the skills required for success and developing cost effective training strategies that the potential benefits of integrated care can be realized.

22. Wang, P. S., Lane, M., Olfson, M., Pincus, H. A., Wells, K. B., & Kessler, R. C. (2005). Twelve-month use of mental health services in the United States. *Archives of General Psychiatry*, 62, 629-640.

a. **Summary**: Background: Dramatic changes have occurred in mental health treatments during the past decade. Data on recent treatment patterns are needed to estimate the unmet need for services. Objective: To provide data on patterns and predictors of 12-month mental health treatment in the United States from the recently completed National Comorbidity Survey Replication. Design and Setting: Nationally representative face to- face household survey using a fully structured diagnostic interview, the World Health Organization's World Mental Health Survey Initiative version of the Composite International Diagnostic Interview, carried out between February 5, 2001, and April 7, 2003. Participants: A total of 9282 English-speaking respondents 18 years and older. Main Outcome Measures: Proportions of respondents with 12-month DSM-IV anxiety, mood, impulse control, and substance disorders who received treatment in the 12 months before the interview in any of 4 service sectors (specialty mental health, general medical, human services, and complementary and alternative medicine).Number of visits and proportion of patients who received minimally adequate treatment were also assessed. Results: Of 12-month cases, 41.1% received some treatment in the past 12 months, including 12.3% treated by a psychiatrist, 16.0% treated by a nonpsychiatrist mental health specialist, 22.8% treated by a general medical provider, 8.1% treated by a human services provider, and 6.8% treated by a complementary and alternative medical provider (treatment could be received by !1 source). Overall,cases treated in the mental health specialty sector received more visits (median, 7.4) than those treated in the general medical sector (median,

1.7). More patients in specialty than general medical treatment also received treatment that exceeded a minimal threshold of adequacy (48.3% vs 12.7%). Unmet need for treatment is greatest in traditionally underserved groups, including elderly persons, racial-ethnic minorities, those with low incomes, those without insurance, and residents of rural areas. Conclusions: Most people with mental disorders in the United States remain either untreated or poorly treated. Interventions are needed to enhance treatment initiationand quality.

23. Van Voorhees, B. W., Cooper, L. A., Rost, K. M., Nutting, P., Rubenstein, L. V., Meredith, L., & Wang, N. (2003). Primary care patients with depression are less accepting treatment than those seen by mental health specialists. *Journal of General Intern Medicine*, 18, 991-1000.

    a. **Summary:** OBJECTIVE: This study examined whether depressed patients treated exclusively in primary care report less need for care and less acceptability of treatment options than those depressed patients treated in the specialty mental health setting after up to 6 months of treatment. DESIGN: Cross-sectional study. SETTING: Forty-five community primary care practices. PARTICIPANTS: A total of 881 persons with major depression who had received mental health services in the previous 6 months and who enrolled in 3 of the 4 Quality Improvement for Depression Collaboration Studies. MEASUREMENTS AND RESULTS: Patients were categorized into 1 of 2 groups: 1) having received mental health services exclusively from a primary care provider (45%), or 2) having received any services from a mental health specialist (55%) in the previous 6 months. Compared with patients who received care from mental health specialists, patients who received mental health services exclusively from primary care providers had 2.7-fold the odds (95% confidence interval [CI], 1.6 to 4.4) of reporting that no treatment was definitely acceptable and had 2.4-fold the odds (95% CI, 1.5 to 3.9) of reporting that evidence-based treatment options (antidepressant medication) were definitely not acceptable. These results were adjusted for demographic, social/behavioral, depression severity, and economic factors using multiple logistic regression analysis. CONCLUSIONS: Patients with depression treated exclusively by primary care providers have attitudes and beliefs more averse to care than those seen by mental health specialists. These differences in attitudes and beliefs may contribute to lower quality depression care observed in comparisons of primary care and specialty mental health providers.

24. Yarnall, K. S., Pollak, K. I., Ostbye, T., Krause, K. M., & Michener, J. L. (2003). Primary care: Is there enough time for prevention. *American Journal of Public Health*, 93(4), 635-641.

    a. **Summary:** Objectives. We sought to determine the amount of time required for a primary care physician to provide recommended preventive services to an average patient panel. Methods. We used published and estimated times per service to

determine the physician time required to provide all services recommended by the US Preventive Services Task Force (USPSTF), at the recommended frequency, to a patient panel of 2500 with an age and sex distribution similar to that of the US population. Results. To fully satisfy the USPSTF recommendations, 1773 hours of a physician's annual time, or 7.4 hours per working day, is needed for the provision of preventive services. Conclusions. Time constraints limit the ability of physicians to comply with preventive services recommendations. (Am J Public Health. 2003;93:635–641)

25. Peters, K. E., & Elster, A. B. (2002). *Roadmaps for clinical practice: A primer on population-based medicine*. Atlanta, GA: American Medical Association.

    a. **Summary:**

26. Robinson, P., Bush, T., Von Korff, M., Katon, W., Lin, E., Simon, G.E., Walker, E. (1995). Primary care physician use of cognitive behavioral techniques with depressed patients. *Journal of Family Practice, 40* (4), 352-357.

    a. **Summary:** Although researchers are paying more attention to the treatment of depression in the primary care setting, little is known about the nature of psychotherapeutic interactions that occur between primary care physicians and their patients in the context of a visit for depression. In recent years, brief cognitive behavioral therapy has been demonstrated to be efficacious, and the public has become more familiar with these techniques through media exposure and self-help books. METHODS: Depressed primary care patients were surveyed regarding the extent to which cognitive behavioral (CB) techniques were suggested during the primary care visit in which antidepressant medication was initially prescribed. One hundred fifty-five patients completed responses to phone surveys 1 month and 4 months after the visit. Patients were also surveyed regarding the recommendation of counseling by the primary care physician. RESULTS: The majority of patients (61%) reported that their physician advised them to identify activities they were already doing that helped them feel better. Physician recommendations regarding planning pleasurable activities, problem solving, challenging depressive thoughts, and planning activities that boost confidence were reported by 22% to 40% of study patients. Older patients reported fewer interactions about CB strategies. Primary care physicians' suggestion of CB strategies was associated with both patient use of CB strategies in the months following the visit and better adherence to recommended medication therapy during the first month of treatment. CONCLUSIONS: Many patients seem to recognize the occurrence of psychotherapeutic interactions during visits to their primary care physician in which an antidepressant medication was prescribed, and patients' recognition of these interactions is

associated with increased adherence to the recommended course of antidepressant prescriptions.

27. Simon, G., Ormel, J., VonKorff, M., & Barlow, W. (1995). Health care costs associated with depressive and anxiety disorders in primary care. *American Journal of Psychiatry*, 152, 352-357.

    a. **Summary**: Objective: The authors examined the overall health care costs associated with depression and anxiety among primary care patients. Method: I 1 0 consecutive primary care patients in a health maintenance organization, 1,962 were screened with the 12-item General Health Questionnaire. A stratified random sample of6l 5 patients were selected for further diagnostic assessment; 3 73 of these patients completed the Composite International Diagnostic Interview at baseline and 328 were reassessed 1 2 months later. Computerized cost records were used to calculate total health care costs for the 6-month period surrounding the baseline assessment and a similar period surrounding the follow-up assessment. Cost accounting data were available for 327 patients at baseline and for 206 patients at both assessments. Results: Primary care patients with DSM-III-R anxiety or depressive disorders at baseline had markedly higher baseline costs ($2,390) than patients with subthreshold disorders ($1,098) and those with no anxiety or depressive disorder ($ I ,3 97). Large cost differences persisted after adjustment for medical morbidity. Cost differences reflected higher utilization of general medical services rather than higher mental health treatment costs. Although most patients with baseline anxiety or depressive disorders showed significant improvement, longitudinal analyses did not show any clear relationship between change in psychiatric diagnosis and change in health care cost. Conclusions: Among primary care patients, anxiety and depressive disorders are associated with markedly higher health care costs even after adjustment for medical comorbidity. In this small sample, improvement in depression over 1 year was not clearly associated with decreasesin cost.

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

    a. **Summary:** PURPOSE AND PATIENT AND METIIODS: Many symptoms in outpatient practice are poorly understood. To determine the incidence, diagnostic findings, and outcome of 14 common symptoms, we reviewed the records of 1,000 patients followed by house staff in an internal medicine clinic over a three-year period. The following data were abstracted for each symptom: patient characteristics, symptom duration, evaluation, suspected etiology of the symptom, treatment prescribed, and outcome of the, symptom. Cost estimates for diagnostic evaluation were calculated by means of the schedule of prevailing rates for Texas employed by the Civilian Health and Medical Program of the Uniformed Services for physician reimbursement. RESULTS: A total of 567 new complaints of chest pain, fatigue, dizziness, headache, edema, back pain, dyspnea, insomnia,

abdominal pain, numbness, impotence, weight loss, cough, and constipation were noted, with 38 percent of the patients reporting at least one symptom. Although diagnostic testing was performed in more than two thirds of the cases, an organic etiology was demonstrated in only 16 percent. The cost of discovering an organic diagnosis was high, particularly for certain symptoms, such as headache ($7,778) and back pain ($7,263). Treatment was provided for only 55 percent of the symptoms and was often ineffective. Where outcome was documented, 164 (53 percent) of 307 symptoms improved. Three favorable prognostic factors were an organic etiology (p = O.OOS), a symptom duration of less than four months (p = 0.009), and a history of two or fewer symptoms (p = 0.001). CONCLUSION: The classification, evaluation, and management of common symptoms need to be refined. Diagnostic strategies emphasizing organic causes may be inadequate.