

NIH Public Access

Author Manuscript

J Health Care Poor Underserved. Author manuscript; available in PMC 2014 April 13

Published in final edited form as:

J Health Care Poor Underserved. 2014 February ; 25(1 0): 36-45. doi:10.1353/hpu.2014.0067.

Challenges and Opportunities for Integrating Preventive Substance-Use-Care Services in Primary Care through the Affordable Care Act

Udi E. Ghitza, PhD and Betty Tai, PhD

Center for the Clinical Trials Network, National Institute on Drug Abuse, National Institutes of Health, United States Department of Health and Human Services, Bethesda, MD, USA

Abstract

Undertreated or untreated substance use disorders (SUD) remain a pervasive, medically-harmful public health problem in the United States, particularly in medically underserved and low-income populations lacking access to appropriate treatment. The need for greater access to SUD treatment was expressed as policy in the Final Rule on standards related to essential health benefits, required to be covered through the 2010 Affordable Care Act (ACA) health insurance exchanges. SUD treatment services have been included as an essential health benefit, in a manner that complies with the Mental Health Parity and Addiction Equity Act (MHPAEA) of 2008. Consequently, with the ACA, a vast expansion of SUD-care services in primary care is looming. This commentary discusses challenges and opportunities under the ACA for equipping health care professionals with appropriate workforce training, infrastructure, and resources to support and guide science-based Screening, Brief Intervention, and Referral to Treatment (SBIRT) for SUD in primary care.

Keywords

Substance use disorders; Affordable Care Act; addiction treatment; drug abuse treatment; primary care; medical settings; electronic health record; health information technology; prevention; medical home; implementation science; health care reform; health services research; patient-centered medical home; electronic medical record

Undertreated or untreated substance use disorders (SUD) remain a pervasive, medicallyharmful public health problem in the United States (U.S.), especially in medically underserved and low-income populations lacking access to appropriate treatment. In 2012, nearly 90% of the 23 million people aged 12 or older in the U.S. who needed treatment for an illicit drug or alcohol use problem did not receive treatment at a specialty facility in the past year.¹ Individuals with untreated SUD are at a significantly greater risk for health problems from chronic co-occurring conditions such as type 2 diabetes mellitus, chronic obstructive pulmonary disease, hypertension, depression, anxiety disorders, various cancers, and major psychosis.^{2,3} Health care professionals in primary care settings are in a unique position to perform Screening, Brief Intervention, and Referral to Treatment (SBIRT) for SUD to detect early and to prevent alcohol and other drug use problems and adverse medical consequences of tobacco use, unhealthy alcohol use, and the nonmedical use of prescription and illicit drugs. A science-based, preventive care approach, SBIRT is used to identify people at high risk for unhealthy alcohol use, tobacco use, and nonmedical or illicit drug

[©] Meharry Medical College

Please address correspondence to: Udi E. Ghitza, PhD; Center for the Clinical Trials Network, National Institute on Drug Abuse, National Institutes of Health, 6001 Executive Boulevard, Bethesda, MD 20892, USA; (301) 443–6697; ghitzau@nida.nih.gov.

use; to offer them counseling as needed to address medically-harmful use; and to get them or to link them—as appropriate—with the care they need for their alcohol or other drug use problem. Integrating SBIRT with primary care in medical settings effectively reduces tobacco and unhealthy alcohol use in adults 18 years or older, and data are accumulating for its role in reducing drug abuse and improving overall health as well.^{4,5} Integrating SBIRT with primary care services in general medical settings aims to provide appropriate preventive care to the many people in the U.S. at risk for SUD who do not receive the treatment they need for their alcohol or other drug problems.

The 2010 Affordable Care Act (ACA) provides unprecedented opportunities for expanded insurance coverage and increased funding for science-based SUD treatment services in medical settings, such as SBIRT integrated within primary care.⁶ The public health need for greater access to SUD treatment in primary care was expressed as policy in the Final Rule on standards related to essential health benefits (EHBs) required to be covered through the ACA health insurance exchanges. Services for SUD have been included as an EHB, in a manner that complies with the Mental Health Parity and Addiction Equity Act (MHPAEA) of 2008.⁷ That law applies to large group health plans and mandates insurance-plan coverage for SUD treatment services to provide those benefits in no more a restrictive manner than all other medical and surgical benefits covered by the plan.⁷ The MHPAEA applies to both inpatient and outpatient settings. In this manner, the ACA is designed to greatly increase access to SUD treatment services for the approximately 21 million people in the U.S. in need of care for an alcohol or other drug use problem who do not receive appropriate treatment.^{1,7} In the context of health care reform through the ACA, this commentary reviews challenges and opportunities for providing health care professionals in primary care suitable workforce training, infrastructure, and resources to support and guide SBIRT for SUD.

Workforce Training Needs for Integrating SBIRT in Primary Care under the ACA

Under the ACA, both Medicaid and private insurance coverage is likely to increase for medically underserved and low-income populations with multiple chronic co-occurring behavioral health disorders like SUD.^{6,7} This presents important opportunities for state Medicaid agencies to coordinate services with SUD treatment agencies to more closely integrate continuity of care and funding streams for treating low-income and medically underserved individuals with SUD and other chronic co-morbid conditions.⁸ However, recent data suggest many SUD treatment agencies are poorly prepared to do so.9 Additionally, many are not well prepared for the impending ACA provisions related to workforce training.⁹ This training is needed to leverage meaningful use of health information technology systems to deliver and monitor evidence-based treatments in a patient-centered medical home manner, in support of a continuum of integrated SUD and primary care services.⁹ There are also vast shortages of health care professionals trained in addiction medicine.⁹ Several ACA workforce provisions are designed to identify and address barriers to and shortages in workforce training in behavioral health medicine and broader health care services in medical settings. For example, the ACA establishes a National Health Care Work Force Commission. This Commission is an advisory panel composed of expert leaders in the health care labor force field whose duties are to serve as a resource for the U.S. Congress, the President, and state and local governments to assess whether workforce education and training capacity is being met for effectively implementing the ACA, and how to address identified barriers. This Commission's responsibilities include evaluating whether education and training capacity exists for integrating mainstream health care delivery systems with the behavioral health care workforce needed to offer behavioral health care services under the ACA.¹⁰ The ACA

charges the National Center for Health Care Workforce Analysis to work in cooperation with this Commission to develop performance measures for analyzing the health care workforce and performance of workforce training programs under the ACA.¹⁰ In addition, the National Health Care Work Force Commission is charged with collaborating with the U.S. Department of Health and Human Services (DHHS) to help the federal government plan, solicit, review, and monitor the progress of State Health Care Workforce Development Grants. ¹⁰ The purpose of these grants is to provide funding to states to develop comprehensive workforce expansion education, planning, and implementation strategies to execute those plans effectively in support of state and local level workforce development under the ACA.¹⁰ Therefore, this Commission is critical to helping the U.S. federal government oversee health care workforce training. This oversight is informed by expert understanding of current needs to meet the demand for having the necessary workforce capacity to cover behavioral health care and broader medical services effectively under the ACA health insurance exchanges.¹⁰ However, it remains to be determined whether the U.S. Congress will appropriate the necessary funding to allow this Commission to carry out these responsibilities, and whether it will continue funding for State Health Care Workforce Development Grants to support the ACA implementation.¹¹

Scarcity of health care professional education and training in SBIRT is another substantial barrier to expanding the necessary medical capacity under the ACA to increase access to evidence-based treatment for SUD in low-income and medically under-served populations. Nationwide efforts are needed to enhance health care professionals' skills and training in science-based SUD screening and brief intervention.^{12,13} Establishing a strong foundation of well-trained health care professionals in addiction medicine requires that organizations setting health care curriculum and medical school accreditation standards work together with state authorities who receive State Health Care Workforce Development Grants, members of the National Health Care Work Force Commission, professional societies/associations, educational institutions, and/or federal and state government policymakers to institute policy changes ensuring that standardized evidence-based SBIRT curricula and training are delivered to students in health care profession disciplines pertinent to SUD care in medical settings.

Several provisions in Title V of the ACA boost financial resources for training an expanded health care workforce on treating SUD and other behavioral health conditions in general medical settings.⁷ For example, these provisions award grants from the U.S. federal government to eligible graduate psychology and social work schools and programs to recruit students and provide clinical training in treating mental health conditions, including SUD, in medical settings. These programs address a need for federal-government financial support to train non-physician clinicians such as social workers, psychologists, and child and adolescent mental health care providers to deliver science-based SUD and mental health preventive care in primary care settings. However, more nationwide resources are needed to support SUD-treatment workforce training in medical settings, and to provide strong technical assistance to integrate this behavioral-health care workforce with primary-care services, in order to expand the capacity for implementing effective SUD preventive-care and treatment services under the ACA within a chronic care model of disease management.¹³

Electronic Health Record-based Needs for Integrating SBIRT in Primary Care under the ACA

Another key step toward better integration of SBIRT with other health care system services in U.S. medical settings is to promote the adoption and meaningful use of brief and validated screening and brief assessment tools for SUD in interoperable electronic health record

systems (EHRs).¹⁴ Toward this end in the context of the ACA and MHPAEA pay-forperformance incentive policies, it is also essential to develop EHRs-based validated clinical quality measures/performance measures to evaluate performance of SBIRT's implementation to improve clinical practice and quality of care. In primary care settings, ^{14–18} this can be supported through development and implementation of a sciencebased clinical quality measure (CQM)/performance measure reporting on the utilization of systematic SUD screening, intervention/brief counseling procedures and delivery of appropriate follow up, as needed.¹⁹ Standardization of this performance measure for its wide adoption and meaningful use in EHRs using Common Data Elements (CDEs) and common data standards would provide a standardized terminology for the uniform collection and exchange of health information across multiple EHRs platforms. These CDEs are data elements that have been identified and defined for common use across different EHRs and other data sources. Performance-measure standardization using CDEs is an important means to enable data integration from multiple EHRs, which would allow for broader and more effective coordinated care management of SUD as a chronic disease under the ACA. Indeed, SUD is a chronic relapsing brain disease which must be managed in a patient-centered manner with other co-occurring diseases. Integration of evidence-based SBIRT in primary care is critical for implementing SUD services in patient-centered medical homes and other medical settings under the ACA. Integration of SBIRT with primary care can be facilitated through the meaningful utilization of such EHR-based CDEs and performance measures together with pragmatic point-of-care decision support tools which could easily be incorporated in busy medical-setting workflows.^{14–18} Meaningful use of EHRs-based tools also helps health care professionals in developing appropriate holistic treatment plans based upon the patients' complete medical histories taking into account medications and other treatments furnished by other providers.¹²

To promote safe and effective patient care for SUD within medical settings in this manner, the National Institute on Drug Abuse Center for the Clinical Trials Network (NIDA CCTN) and National Cancer Institute (NCI), in collaboration with the Substance Abuse and Mental Health Services Administration (SAMHSA), is supporting the development, validity and reliability testing, and electronic specification of a standardized and science-based composite CQM/performance measure. This CQM would be for combined screening and intervention for substance use (including tobacco use, unhealthy alcohol use, illicit drug use, and nonmedical prescription drug use) to support validated and standardized substance use screening, assessment of level of risk for SUD, and intervention/brief counseling or referral to specialty care (as needed) by primary care providers.¹⁹ This performance measure, designed for primary care settings, reports on the percentage of patients aged 18 years and older who were screened at least once within the last 24 months for tobacco use, unhealthy alcohol use, nonmedical prescription drug use, and illicit drug use using a systematic screening method and who received an intervention (e.g., brief counseling) for all positive screening results. The NIDA CCTN has submitted to the U.S. Centers for Medicare and Medicaid Services (CMS) a description and draft of this measure for inclusion in CMS's list of candidate performance measures under consideration. The NIDA CCTN is supporting ongoing development as well as feasibility, validity, and reliability testing of this composite performance measure for final submission to CMS for consideration and possible inclusion in its performance-measure reporting programs, including in the core set of clinical quality measures on which eligible professionals are required to report performance in order to receive reimbursement incentives under the CMS Incentive Program for the Meaningful Use of EHRs. This measure is also currently being considered for inclusion among the CMS Physician Quality Reporting System (PQRS) performance measures and among the Medicare Shared Savings Program quality measures. Development and broad use of such a substance use screening and intervention performance measure in integrated health caresystem EHRs also would be an important means by which NIDA CCTN and other federal

and community stakeholders would promote in the context of the ACA the broad and systematic collection of standardized data on substance use screening, intervention and follow up in EHRs of primary care settings. This in turn would be an important means by which to accelerate translational implementation science research on how to most effectively improve integration of SUD preventive services within primary care. This translational research will also likely facilitate the creation of big data sets to inform the advancement of a science-based "learning health care system," as recently advocated by the U.S. Institute of Medicine (IOM).²⁰

Recommendations for Future Translational Research to Advance Sciencebased Implementation of SUD Treatment under the ACA

Implementation-science research is needed to identify and develop valid and reliable EHRsbased performance standards/metrics of effective coordinated or integrated chronic patient management (including SBIRT) and self-management of SUD with other co-occurring chronic diseases. Meaningful use of these performance metrics together with pragmatic point-of-care decision support tools relevant to SUD preventive care would help standardize the delivery of actionable goal-driven treatment plans in the ACA health care systems, such as patient-centered medical homes (PCMHs). It would be useful for these performance standards/ metrics to be compatible with the U.S. Department of Health and Human Services strategic plan on treatment of Multiple Chronic Conditions.²¹ In addition, in order to strengthen the links between behavioral medicine (for example, mental health and SUD treatment) and primary care in the context of the ACA, there is a need to further develop common data standards and Common Data Elements to facilitate the uniform systematic data collection and outcome and performance reporting in these integrated health care systems.

Importantly, embedded in these integrated health care systems, there is a need to create disorder/disease-specific patient registries. These patient registries are critical to better understand how patients with SUD and other chronic co-occurring conditions receive the care they need under the ACA. Patient registries are also needed to understand how patients best utilize treatment and self-management resources, most effectively respond to preventive care such as SBIRT, and how their co-occurring health problems are managed most effectively in medical settings. They are also needed to more fully characterize comorbidities with SUD and responses to treatment regimens in different patient subpopulations. Patient registries are also an important means to evaluate dose/response relationships of treatment implementation, as well as associations of treatment implementation with drug use outcomes and long-term morbidity and mortality outcomes. Furthermore, well-designed patient registries could facilitate identification of effective behavioral and pharmacological treatments in patient subgroups to steer the SUD treatment field toward practice-informed adaptive-research designs to advance chronic care management (CCM) in a "learning health care system."²⁰ In addition, expansion of behavioral health care under the ACA offer unprecedented opportunities to establish highquality patient registries which may be leveraged as a platform on which EHRs may be used for facilitating conduct of low-cost point-of-care randomized controlled trials (RCTs).²⁰ Point-of-care RCTs using registry EHRs that seek to translate evidence-based practices into routine clinical care could also capitalize on development of inexpensive mobiletechnologies to speed up patient recruitment, enrollment and collection of data from realworld settings remotely at a low cost.²⁰ Patient registries could also be leveraged for datamining and other big data analytical purposes to assist in developing evidence-based clinical decision support tools and clinical practice guidelines to implement practical science-based treatment plans within the context of the ACA health care systems.²⁰ Safeguards needed to ensure privacy and confidentiality protection for patients with substance use problems,

Ghitza and Tai

which need to be implemented in patient registries, have been discussed elsewhere.²² Other implementation science research is needed on how to design practical, actionable brief interventions tailored to best match risk categories produced by SUD screening and brief assessment. This health services research also needs to determine how such interventions can most easily be routinely delivered by trained health care professionals at medical settings in a brief/user-friendly manner by simplifying interventions to address busy workflow issues and the training needs of staff at these settings.

Furthermore, implementation science research is needed on how most effectively to leverage meaningful use of health information technology innovations, such as e-health, mobilehealth, and telemedicine technologies, not only to measure, monitor, and evaluate performance standards for quality improvement in clinical practice but also to enhance access and extend treatment resources to low-income and medically underserved populations. This is particularly important for low-income and medically underserved communities suffering disproportionately from ill health in which lack of access to properly trained SUD-treatment health professionals remains a major obstacle to receiving timely and effective SUD treatment.¹³ E-health, mobile-health, and telemedicine technologies are a means to extend the reach of properly trained health professionals knowledgeable in science-based SUD treatment by promoting communication independent of distance.²³ They also enable continuous monitoring and science-based intervention tools to be applied in a team-based, proactive approach to integrate preventive SUD care and CCM into primary care for patients with SUD and other chronic co-morbid diseases.²³ Thus, leveraging and meaningfully using mobile-health and telemedicine technologies as physician extenders offer opportunities for enhancing care efficiency in PCMHs and other primary care settings supported through the ACA.²³

An important impediment to providing effective SBIRT in primary care settings under the ACA is ensuring that temporary behavioral change motivated by primary-care brief interventions (BI) remains consistent over time. Methods delivered by mobile-health technologies to help sustain behavioral change would be very useful. Effective techniques for sustaining behavioral change over time are likely to share characteristics such as the ability of feedback delivered to be individualized as conditions change. In the ACA primary care settings, rigorous systematic research is needed to evaluate effectiveness of leveraging mobile-health technologies which function as physician aids and offer prompt individualized feedback to patients to help sustain health-promotion behavioral changes motivated by primary-care BIs. Mobile-health applications are needed which could be programmed by providers to ensure that patients follow through with their treatment plans, such as adherence to action plans agreed upon during primary-care brief interventions. The patients' answers should inform delivery of individualized feedback supporting self-management skills. The mobile-health applications would in this manner help patients comply with SBIRT brief intervention principles and track health care actions which have been completed, such as linkage to indicated follow-up treatment.

In summary, the ACA promotes SUD preventive care and CCM in the context of PCMHs and other primary care settings. The ACA's provisions support whole-person wellness by (1) embracing and funding eligible providers to adopt and implement coordinated chronic care models in the context of PCMHs; (2) training of a multidisciplinary PCMH workforce to implement such care; (3) the adoption and meaningful use of EHRs; and (4) leveraging telemedicine, mobile-health technologies, and patient registry infrastructures to increase treatment access, capacity, and reach in low-income and medically underserved populations. The ACA also eliminates the lifetime caps and restricts the annual caps on services/benefits instituted by many insurance plans.²³ Further discussion has been presented elsewhere in recently published papers on barriers and opportunities for leveraging meaningful use of

EHRs in coordinating patient-centered care, and integrating SUD preventive care and chronic care management in PCMHs and community health centers.^{3,13,14,16,23–25}

Advancing the important implementation-science research discussed above and effectively disseminating promising findings from them to policymakers and other key stakeholders in charge of implementing the ACA would be powerful drivers to increase the delivery of evidence-based SUD services such as SBIRT and CCM in tandem with broader health care services in primary care settings and patient-centered medical homes. Such health-services research would also promote a high-quality, integrated approach to behavioral health and whole-person wellness, according to a "learning health care system." Indeed, the U.S. Institute of Medicine (IOM) concluded that key "learning health system features are likely to include use of electronic health records (EHRs) to accumulate data about the results of specific treatments across different types of patients. Well-built electronic health records would enable health professionals to enter data about treatments into the patient record routinely. Systems technologists could then assemble treatment-specific files across all patients while purging the files of patient identifiers, and researchers could in turn mine these files to determine which treatments have worked."20 The vision and trend of transporting clinical research to health care-system (HCS) settings, and leveraging of HCSbased EHRs to advance big-data implementation science, could play a key role in closing the current gap between SUD clinical research and practice within the context of the ACA.²⁰ Furthermore, adoption and meaningful use in HCS EHRs of a science-based, standardized performance measure for combined screening and intervention for tobacco use, unhealthy alcohol use, illicit drug use, and nonmedical prescription drug misuse would provide an important means by which to facilitate systematic collection and integration of big data sets to bridge the knowledge divide between SUD-preventive-care (including SBIRT) research and clinical practice, thereby promoting quality improvement of patient-centered care. Advancing these critical implementation-science research directions and performance measures/metrics is likely to play a key role in promoting science-based integration of preventive care such as SBIRT for substance use disorders within general medical settings in the context of the ACA's health care reform.

Acknowledgments

Udi E. Ghitza and Betty Tai are employees of the Center for the Clinical Trials Network of the National Institute on Drug Abuse, National Institutes of Health, the funding agency for the National Drug Abuse Treatment Clinical Trials Network. The opinions in this manuscript are those of the authors and do not represent the official position of the U.S. government.

Notes

- Substance Abuse and Mental Health Services Administration (SAMHSA). Results from the 2012 National Survey on Drug Use and Health: summary of national findings. Rockville, MD: Substance Abuse and Mental Health Services Administration; 2013. Available at: http://www.samhsa.gov/ data/NSDUH/2012SummNatFindDetTables/NationalFindings/NSDUHresults2012.htm
- Mertens JR, Lu YW, Parthasarathy S, et al. Medical and psychiatric conditions of alcohol and drug treatment patients in an HMO: comparison with matched controls. Arch Intern Med. 2003 Nov 10; 163(20):2511–7. http://dx.doi.org/10.1001/archinte.163.20.2511. [PubMed: 14609789]
- Ghitza UE, Wu LT, Tai B. Integrating substance abuse care with community diabetes care: implications for research and clinical practice. Subst Abuse Rehabil. 2013 Jan 1.4:3–10. Epub 2013 Jan 11. http://dx.doi.org/10.2147/SAR.S39982. [PubMed: 23378792]
- 4. Pilowsky DJ, Wu LT. Screening for alcohol and drug use disorders among adults in primary care: a review. Subst Abuse Rehabil. 2012 Apr; 3(1):25–34. [PubMed: 22553426]

- Babor TF, McRee BG, Kassebaum PA, et al. Screening, Brief Intervention, and Referral to Treatment (SBIRT): toward a public health approach to the management of substance abuse. Subst Abus. 2007; 28(3):7–30. http://dx.doi.org/10.1300/J465v28n03_03. [PubMed: 18077300]
- Buck JA. The looming expansion and transformation of public substance abuse treatment under the Affordable Care Act. Health Aff (Millwood). 2011 Aug; 30(8):1402–10. http://dx.doi.org/10.1377/ hlthaff.2011.0480. [PubMed: 21821557]
- United States Department of Health and Human Services (DHHS). Federal Register, 2013. Vol. 78. Washington, DC: DHHS; Feb 25. 2013 Patient Protection and Affordable Care Act; standards related to essential health benefits, actuarial value, and accreditation; final rule; p. 12834-72.Available at: http://www.gpo.gov/fdsys/pkg/FR-2013-02-25/pdf/2013-04084.pdf
- Levit KR, Stranges E, Coffey RM, et al. Current and future funding sources for specialty mental health and substance abuse treatment providers. Psychiatr Serv. 2013 Jun; 64(6):512–9. http:// dx.doi.org/10.1176/appi.ps.201200298. [PubMed: 23450375]
- Molfenter T, Capoccia VA, Boyle MG, et al. The readiness of addiction treatment agencies for health care reform. Subst Abuse Treat Prev Policy. 2012 May 2.7:16. http://dx.doi.org/ 10.1186/1747-597X-7-16. [PubMed: 22551101]
- 10. HHS.gov/HealthCare, United States Department of Health and Human Services (DHHS). The Affordable Care Act, section by section. Washington, DC: DHHS; 2013. Read the law. Available at: http://www.hhs.gov/healthcare/rights/law/
- Pear, R. Panel on health care work force, lacking a budget, is left waiting. New York, NY: New York Times; 2013 Feb 25. Available at: http://www.nytimes.com/2013/02/25/health/health-care-panel-lacking-budget-is-left-waiting.html?_r=0
- 12. The White House Office of National Drug Control Policy. 2013 National drug control strategy. Washington, DC: Executive Office of the President of the United States; 2013. Available at: http:// www.whitehouse.gov/sites/default/files/ondcp/policy-and-research/ndcs_2013.pdf
- Hoge MA, Stuart GW, Morris J, et al. Mental health and addiction workforce development: federal leadership is needed to address the growing crisis. Health Aff (Millwood). 2013 Nov; 32(11): 2005–12. http://dx.doi.org/10.1377/hlthaff.2013.0541. [PubMed: 24191093]
- Tai B, Wu LT, Clark HW. Electronic health records: essential tools in integrating substance abuse treatment with primary care. Substance Abuse and Rehabilitation. 2012 Feb; 3(1):1–8. http:// dx.doi.org/10.2147/SAR.S22575. [PubMed: 24474861]
- Ghitza UE, Sparenborg S, Tai B. Improving drug abuse treatment delivery through adoption of harmonized electronic health record systems. Subst Abuse Rehabil. 2011 Jul 1; 2011(2):125–31. http://dx.doi.org/10.2147/SAR.S23030. [PubMed: 21822398]
- Ghitza UE, Gore-Langton RE, Lindblad R, et al. Common data elements for substance use disorders in electronic health records: the NIDA Clinical Trials Network experience. Addiction. 2013 Jan; 108(1):3–8. Epub 2012 May 8. http://dx.doi.org/10.1111/j.1360-0443.2012.03876.x. [PubMed: 22563741]
- 17. Tai B, Boyle M, Ghitza U, et al. Meaningful use of electronic behavioral health data in primary health care. Sci Transl Med. 2012 Feb 1.4(119):119mr3.
- Estabrooks PA, Boyle M, Emmons KM, et al. Harmonized patient-reported data elements in the electronic health record: supporting meaningful use by primary care action on health behaviors and key psychosocial factors. J Am Med Inform Assoc. 2012 Jul-Aug;19(4):575–82. Epub 2012 Apr 17. http://dx.doi.org/10.1136/amiajnl-2011-000576. [PubMed: 22511015]
- The MITRE Corporation. ONC-SAMHSA behavioral health clinical quality measure initiative: technical expert panel results for behavioral health domains—drug use. McLean, VA: MITRE; 2012 Sep 26. Available at: http://www.healthit.gov/sites/default/files/drug_use_-_bh_ecqm_tep_white_paper.pdf
- 20. Institute of Medicine. Envisioning a transformed clinical trials enterprise in the United States: establishing an agenda for 2020: workshop summary. Washington, DC: National Academies Press; 2012.
- 21. U.S. Department of Health and Human Services (DHHS). Multiple chronic conditions—a strategic framework: optimum health and quality of life for individuals with multiple chronic conditions.

Washington, DC: DHHS; 2010. Available at: http://www.hhs.gov/ash/initiatives/mcc/mcc_framework.pdf

- 22. Hu LL, Sparenborg S, Tai B. Privacy protection for patients with substance use problems. Substance Abuse and Rehabilitation. 2011 Dec; 2(1):227–33. [PubMed: 24474860]
- 23. Tai B, Volkow ND. Treatment for substance use disorders: opportunities and challenges under the affordable care act. Soc Work Public Health. 2013; 28(3–4):165–74. http://dx.doi.org/ 10.1080/19371918.2013.758975. [PubMed: 23731411]
- Pating DR, Miller MM, Goplerud E, et al. New systems of care for substance use disorders: treatment, finance, and technology under health care reform. Psychiatr Clin North Am. 2012 Jun; 35(2):327–56. http://dx.doi.org/10.1016/j.psc.2012.03.004. [PubMed: 22640759]
- Mechanic D. Seizing opportunities under the Affordable Care Act for transforming the mental and behavioral health system. Health Aff (Millwood). 2012 Feb; 31(2):376–82. http://dx.doi.org/ 10.1377/hlthaff.2011.0623. [PubMed: 22323168]