

Integration of Substance Use Services in Medical Settings

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To understand dilemmas revealed by a transformative integration of substance use services into primary care, we must first look back at some precipitating circumstances.

Why was integration thought to be necessary?

Buck¹ outlines a state of affairs preceding legislative efforts to integrate substance use services in other health settings. In 2009, 1 in 10 U.S. citizens over age 12 used illicit drugs and nearly 1 in 4 engaged in binge drinking in the prior month². Substance misuse had been identified as causes or contributing factors to health conditions including diseases of the heart, liver, or infection like HIV/AIDS or Hepatitis C. Historically, substance use services were segregated to a specialty care context, with mainly abstinence-based counseling offered in nonprofit stand-alone or government-operated facilities. Availability of empirically-supported addiction medications and behavior therapies was the exception rather than rule, with service delivery by lesser educated, trained, and supervised personnel in settings lacking the infrastructure and clinical information systems commonly found elsewhere³⁻⁵. Compounding these structural challenges was an absence of contracts with managed care plans or other patient insurance options, which prompted greater reliance on public funding from state and local governments⁶.

What were the legislative solutions?

Buck¹ describes federal legislation since passed to address this state of affairs. First, a Medicare Improvements for Patients and Providers Act of 2008 phased out required patient co-pays for outpatient substance use services. Second, a Mental Health Parity and Addiction Equity Act of 2008 established parity so health plan benefits for substance use were no more restrictive than for medical illness. Third, a Children's Health Insurance Program Reauthorization Act of 2009 extended these provisions to state-level child health plans. Finally, the Patient Protection and Affordable Care Act of 2010 or ACA, for which Table 1 lists core elements⁷, promoted integration of substance use services in primary care. Implications noted by Croft and Parish⁸ were that patient access to substance use services was to increase, financing/reimbursement for services was to be restructured, and the health system infrastructure was to be greatly enhanced.

Table 1. ACA Core Elements⁷

1	Requirement that all U.S. citizens purchase health insurance, central to the goal of increasing reach of healthcare benefits.
2	State-level opportunity to expand Medicare/Medicaid for medically underserved populations, which occurred in WA.
3	Financial incentives for primary prevention, eliminating co-pays and state-matching requirement for Medicare/Medicaid.
4	Team-based care for chronic illness, reliant on electronic health records, patient registries, and outcome monitoring.
5	Insurance coverage of services for 10 "essential health benefits," which included those for substance use disorders.
6	Outlawing prior insurance company practice to withdraw or deny coverage for persons with or acquiring a chronic illness.
7	Assurance of health insurance portability so plans are maintained when moving or changing employment.
8	Family capability to maintain insurance coverage on all children through college, up to the age of 26.

What impacts did this have for provision of substance use services?

McLellan and Woodworth⁷ note several relevant consequences of the ACA:

Of 25 million adults meeting criteria for a substance use disorder, expanded Medicaid benefits was estimated to extend coverage to 12% more of this population, and to a much higher proportion of those who engage in subthreshold yet still medically harmful substance use.

Specialty care settings faced new market forces, with some effectively adapting to assimilate modern information/billing systems, adopt evidence-based therapeutic practices, and embrace a chronic care perspective. Many of those failing to adapt have since closed their doors.

An influx of persons newly-eligible for services exceeded capacity of the specialty care system, prompting efforts to implement screening and brief intervention procedures in primary care. These efforts, not without logistical and philosophical challenges, are continuing.

Owing to increased recognition of substance use disorders as chronic illnesses, evidence-based strategies for disease management and outcomes monitoring were extended to substance use services. This, too, is an evolving effort for health systems and their personnel.

Mainstreaming of substance use services sought to reduce stigmatization and marginalization. These processes will need to persist to counteract future legislative efforts that may seek to undermine progress in how those seeking substance use services are treated.

Has integration of behavioral health services in medical settings improved patient outcomes?

Systematic reviews suggest that those who receive mental health and substance use services in integrated care settings do show clinical improvement^{9,10} and report treatment satisfaction¹¹. Some note a greater degree of clinical utility in the integration of mental health services than for substance use services, with the strongest empirical support among the latter suggested for screening and brief intervention for alcohol misuse and tobacco cessation interventions^{12,13}. These, as well as other substance use services, have been predominantly integrated in primary care settings, including clinics affiliated with Veteran's Affairs medical centers and federally-qualified health centers. Encouraging evidence is offered by a series of RCTs¹⁴⁻¹⁶ that document clinical effectiveness of substance use services integrated in primary care in terms of patients' initial rates of substance abstinence as well as their longer-term health and well-being¹⁷.

What do integrative models for substance use services look like in primary care?

Primary care is long espoused to comprehensively care for the 'whole person'¹⁸. Accordingly, the prospect of integrating behavioral health services in primary care settings is supported by the World Health Organization, American Psychiatric Association, American Psychological Association, American Academy of Family Physicians, and American Society for Addiction Medicine. This has been defined as "a practice team of primary care and behavioral health clinicians, working together with patients and families, using a systematic and cost-effective approach to provide patient-centered care for a defined population"¹⁹. As concerns substance use, this introduced patient screening, diagnosis, brief intervention, and referral services.

A 2009 review by Armitage and colleagues²⁰ notes 175 different definitions of care integration, which suggests that efforts to integrate behavioral health services into primary care is likely to be uniquely influenced by setting aims, structure, and resources. Nevertheless, classification of such efforts does offer heuristic value. Blount²¹ distinguishes three types of care integration, with examples of the application of substance use services in primary care outlined in Table 2.

Table 2. Models of Care Integration for Substance Use Disorders in Primary Care ²¹	
Coordinated care	Behavioral health and medical professionals practice separately and often in distinct locations, albeit with an integrated patient records system and common underlying sources of funding. Medical staff screen, diagnose and oversee medication-assisted treatments for substance use disorders, with an established referral system to behavioral health staff for brief intervention, case management involving a range of social services, and links to community-based peer recovery resources.
Co-located care	Behavioral health and medical professionals practice together , with service delineation according to their expertise. Medical staff screen, diagnose, and oversee medication-assisted treatments for substance use disorders, whereas behavioral health staff offer brief intervention, case management involving a range of social services, and links to community-based peer recovery resources. Co-location facilitates formal and informal communication augments linkage to other services.
Integrated care	Behavioral health and medical professionals collaboratively design and implement unified care plans, with close and continuing cohesion. Both medical and behavioral health staff are core members of primary care teams that perform screening and triage, conduct behavioral assessment and diagnosis, provide brief intervention and oversee medication-assisted treatments, offer case management involving a range of social services, and refer to community-based peer recovery resources.

Which integrative models have been successful?

Despite promising outcomes of efforts to integrate behavioral health services in primary care, extant literature highlights challenges that health systems must still overcome. In coordinated care among California-based primary care organizations²², insufficient initial system investment required later modifications for same-day billing/reimbursement for substance use services and greater number of referral options for detoxification and residential treatment. In community health centers, the co-location of substance use services increased screening and referral to behavioral health staff²³, though also revealed workload challenges and a lack of space wherein the work was to occur. In fully integrated VA care clinics, staff perceived training in methods of screening and intervening with substance use disorders to be inadequate, which contributed to ‘missed opportunities’ with veterans in need^{24,25}. Korthuis and colleagues²⁶ note integrative models specific to medication-assisted treatment for opioids, though the issues of financing, inter-agency networking, and inadequacy of staff training also emerged in this specialist arena. Collectively, this range of setting-specific challenges suggests that less emphasis be placed on identifying a singular integrative model to be broadly applied, and instead that such models be flexibly considered alongside a given treatment organization’s needs, capacity, and resources.

What about Screening, Brief Intervention, and Referral to Treatment (SBIRT)?

As defined by Babor and colleagues²⁷, SBIRT is a comprehensive, integrated public health approach to deliver of early intervention and treatment services for persons experiencing substance use-related harms, at risk of experiencing such harms, not seeking, or unlikely to seek treatment. Inclusivity for patients along a spectrum of substance-related difficulties is one reason SBIRT has been widely-disseminated in primary care and other medical settings.

The SBIRT approach typically employs evidence-based screening techniques and instruments (i.e., the Alcohol, Smoking and Substance Involvement Screening Test or ASSIST²⁸ and Alcohol Use Disorders Identification Test or AUDIT²⁹). In general low-risk patients receive screening only, those with moderate- to high-risk substance use, receive brief interventions often modeled after motivational enhancement therapy³⁰, and those who meet defined criteria for substance use disorders are referred to specialty care. Long the focus of treatment research, the SBIRT approach is now entering its 6th decade of scientific evaluation³¹.

Early evaluation of SBIRT suggested promise as its delivery in a trauma center demonstrated significant reductions in drinking and risk of subsequent injury relative to controls³². Despite broad subsequent dissemination, empirical support for SBIRT is increasingly recognized to be scant. For instance, a recent review concluded there is no evidence for SBIRT effectiveness in prompting subsequent utilization of substance use services^{33,34}. It is suggested elsewhere that the utility of the 'referral to treatment' component of SBIRT in primary care rests on adequate training of medical providers to perform screening and referral for substance use disorders and inter-agency networking so available referral options are known^{24,25,35}. Data from a local demonstration project (WASBIRT; <http://www.wasbirt.com/content/sbirt-washington>) highlight the value of having these key components in place, as Figure 1 depicts pre/post abstinence rate among patients from nine participating medical centers.

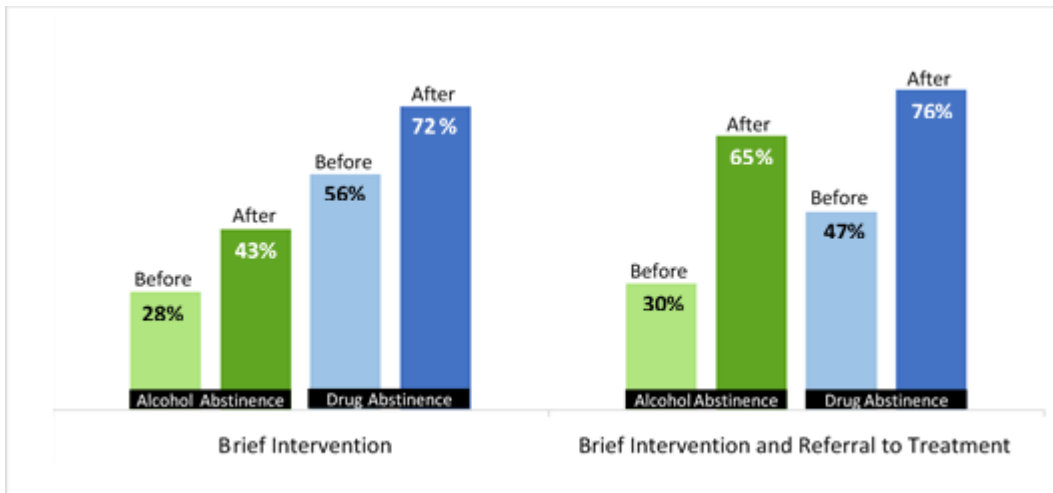


Fig. 1. Alcohol and Drug Abstinence Rates from 9 Participating WASBIRT Medical Centers

Continuance of this local research effort may inform to what extent such preliminary and promising WASBIRT findings are sustained. Similarly, the generalizability of these promising WASBIRT findings awaits further study. Irrespective of particular metrics computed regarding its clinical effectiveness, Pepin³⁶ suggests implementation of SBIRT holds a set of clinical benefits for both providers and patients when implemented in a range of medical settings.

Table 3. Clinical Benefits of SBIRT³⁶

1	Its simplicity enables it to become a familiar visit component for patients and a consistent check-in conducted by provider
2	It is a conversational process between patient and provide that enhances engagement
3	For patients with unhealthy use or addiction, it creates over time a confidential connection with their healthcare provider
4	It reduces stigma about substance use, educating patients of potential health consequences of drug and alcohol misuse

What organizational factors facilitate integration of substance use services in primary care?

In a multi-year examination of California primary care organizations, Padwa and colleagues³⁷ highlight *integrated behavioral care capacity* as a measurable construct comprised of 'inner' and 'outer' context factors. Outer context includes the sociopolitical context (i.e., legislative policy), funding (i.e., continuity), patient advocacy (i.e., partnered consumer agencies), and networking (i.e., linkage to other facilities/professional groups). Inner context includes setting attributes (i.e., size, absorptive capacity), personnel (e.g. values, openness to change), style of leadership (i.e., active), mission (i.e., ideology), and resources (i.e., capacity for staff oversight). In Figure 2, mean integrated behavioral care capacity ratings from independent site evaluators are depicted over this three-year care integration effort.

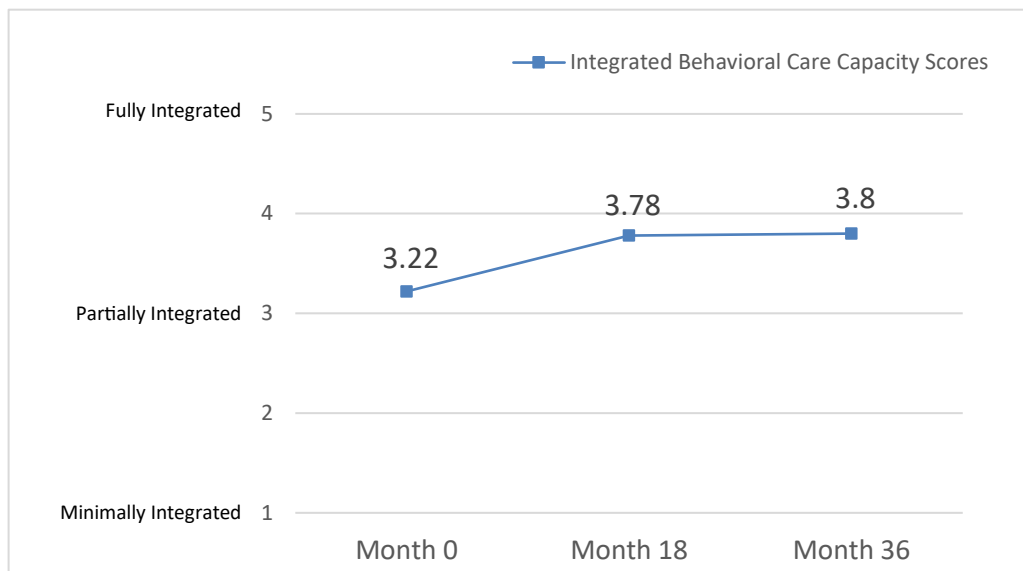
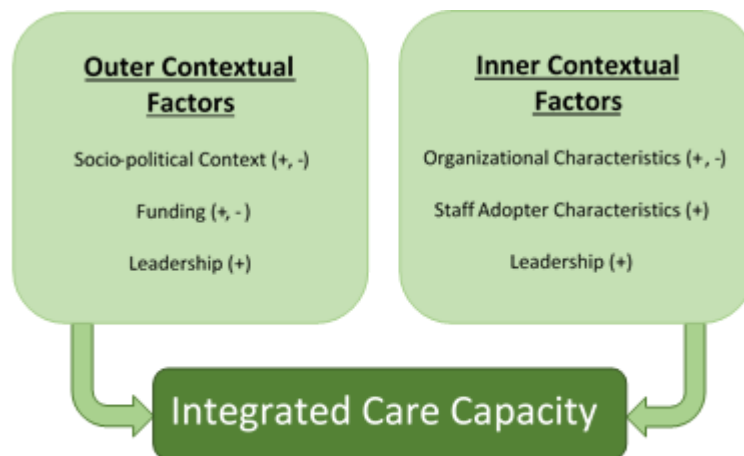


Fig. 2. Integrative Capacity During a Multi-year Integration Process by Primary Care Organizations³⁷.

The pattern is encouraging insofar as, on average, organizations' partial capacity: 1) was evident at the outset, and 2) increased during the initial 18 months, and was then sustained. Of course, these data also suggest there is room for integrated behavioral care capacity to still improve, and other evidence suggested that in these primary care organizations service integration for mental health exceeded that for substance use. The authors also noted as specific integrative challenges: insufficient training or inability to prescribe addiction medications, lack of staff training/certification in substance use services, inconsistent monitoring of medications with abuse potential, and difficulty in accessing local specialty care.



As for factors that promoted or detracted from settings' integrated behavioral care capacity, Padwa et.al³⁷ note those in Figure 3. The sociopolitical context included state provision of new reimbursement mechanisms to bill for behavioral health services, yet was marked by uncertainty for funding continuity. Funding enabled hiring of dedicated behavioral health staff, but was insufficient to meet patient demand, resulting in waitlists. Active leadership was important, with leader-involved planning, dedication of resources, and consultation with external change agents all facilitating integration of behavioral care services in these primary care organizations.

Figure 3. Facilitators (+) and barriers(-) to integrated care capacity³⁷.

time. As an example, initial screening and referral processes were often not well-defined, but in time became better specified and consequently increased utilization. Staff openness to new services enhanced capacity for integration, with training exposure prompting service adoption. Innovation-values fit was also salient, with greater observed integration of services compatible in focus and structure with existing services. Notably, two substance use services were seen as less compatible, for different reasons. Peer-based recovery support groups were problematic due to their timing and space demands, whereas some staff physicians at these organizations voiced philosophical objections to the prospect of prescribing addiction medications.

What is recommended for health settings to increase integrative behavioral care capacity?

Chaple and colleagues^{38,39} outline recommendations for increasing integrative behavioral care capacity, based on an empirically-supported technical assistance approach utilized to enhance capacity of a set of federally qualified health centers to support integration of behavioral health services. These procedural recommendations are listed in Table 4.

Table 4. Recommendation for Increasing Integrative Behavioral Care Capacity ^{38,39}	
1	Obtain top-down support so setting leadership demonstrates buy-in to positive influence setting culture to embrace and institutionalize substance use services in routine practice.
2	Elicit input from and involve key clinical staff in sculpting new services to enhance the investment and commitment of those staff for those services.
3	Facilitate a change process, with program leadership and clinical staff comprising implementation teams or informal partnerships that guide implementation of new services.
4	Promote peer-to-peer learning about implementing new services so inter-agency collaboration enables sharing and learning among staff from multiple treatment organizations.
5	Employ measurement and feedback processes to enable real-time feedback at iterative points that fosters rapid cycle improvement in the implementation of new services.
6	Build staff readiness and competencies via training and tools for clinical staff including initial workshops and subsequent technical assistance processes to assist navigation of barriers.

Additional Resources

- APA-APM Report: Dissemination of Integrated Care within Adult Primary Care Settings. <https://www.psychiatry.org/FileLibrary/Psychiatrists/Practice/Professional-Topics/Integrated-Care/APA-APM-Dissemination-Integrated-Care-Report.pdf>
- Scattergood Foundation Series on Behavioral Health Policy. <http://www.scattergoodfoundation.org/spring-2017-paper-series>
- Washington State. DSHS/DBHR. "Why SBIRT." <https://www.dshs.wa.gov/bha/division-behavioral-health-and-recovery/why-sbirt>
- Bree Collaborative. Behavioral Health Integration Report and Recommendations. <http://www.breecollaborative.org/wp-content/uploads/Behavioral-Health-Integration-Final-Recommendations-2017-03.pdf>
- Washington State. SBIRT Primary Care Integration. <http://www.wasbirt.com/content/sbirt-washington>
- Washington State. Research and Data Analysis. RDA Report 4.60.WA.2009.2 <https://www.dshs.wa.gov/sites/default/files/SESA/rda/documents/research-4.60-WA.2009.2.pdf>
- SAMHSA-HRSA Center for Integrated Health Solutions (CIHS). <http://www.integration.samhsa.gov/>

References

1. Buck JA. The looming expansion and transformation of public substance abuse treatment under the Affordable Care Act. *Health Affairs*. 2011;30:1402-1410.
2. SAMHSA. *Results from the 2009 National Survey on Drug Use and Health*. Rockville, MD: SAMHSA;2010.
3. McLellan AT, Carise D, Kleber HD. Can the national addiction treatment infrastructure support the public's demand for quality care? *Journal of Substance Abuse Treatment*. 2003;25(2):117-121.
4. McLellan AT, Meyers K. Contemporary addiction treatment: A review of systems problems for adults and adolescents. *Biological Psychiatry*. 2004;56(10):764-770.
5. Roman PM, Ducharme LJ, Knudsen HK. Patterns of organization and management in private and public substance abuse treatment programs. *Journal of Substance Abuse Treatment*. 2006;31(3):235-243.
6. Levit KR, Kassed CA, Coffey RM, et al. *Projections of national expenditures for mental health services and substance abuse treatment, 2004-2014*. Rockville, MD2008.
7. McLellan AT, Woodworth AM. The affordable care act and treatment for 'substance use disorders': Implications of ending segregated behavioral healthcare. *Journal of Substance Abuse Treatment*. 2014;46:541-545.
8. Croft B, Parish SL. Care integration in the Patient Protection and Affordable Care Act: Implications for behavioral health. *Administration and Policy in Mental Health and Mental Health Services*. 2013;40(4):258-263.

9. Drake RE, O'Neal, E.L., Wallach MA. A systematic review of psychosocial research on psychosocial interventions for people with co-occurring severe mental and substance use disorders. *Journal of Substance Abuse Treatment*. 2008;34:123-128.
10. Donald M, Dower J, Kavanagh D. Integrated versus non-integrated management and care for clients with co-occurring mental health and substance use disorders: A qualitative systematic review of randomised controlled trials. *Social Science & Medicine*. 2005;60:1371-1383.
11. Schulte SJ, Meier PS, Stirling J. Dual diagnosis clients' treatment satisfaction - a systematic review. *BMC Psychiatry*. 2011;11:1.
12. Agency for Healthcare Research and Quality. *Integration of mental health/substance abuse and primary care*. Rockville, MD: Agency for Healthcare Research and Quality;2008.
13. Archer J, Bower P, Gilbody S, et al. Collaborative care for depression and anxiety problems. *Cochrane Database Systematic Review*. 2012;10:CD006525.
14. Weisner C, Mertens J, Parthasarathy S, Et.al. Integrating primary medical care with addiction treatment: A randomized controlled trial. *JAMA*. 2001;286:1715-1723.
15. Willenbring ML, Olson DH. A randomized trial of integrated outpatient treatment for medically ill alcoholic men. *Archives of Internal Medicine*. 1999;159:1946-1952.
16. Saxon A, Malte CA, Slone KL, et al. Randomized trial of onsite versus referral primary medical care for veterans in addictions treatment. *Medical Care*. 2006;44:334-342.
17. Chi FW, Parthasarathy S, Mertens J, Weisner C. Continuing care and long-term substance use outcomes in managed care: Early evidence for a primary care-based model. *Psychiatric Services*. 2011;62:1194-1200.
18. Starfield B. *Primary care: Concept, evaluation, and policy*. New York: Oxford University Press; 1992.
19. Agency for Healthcare Research and Quality. *Lexicon for behavioral health and primary care integration: Concepts and definitions developed by expert consensus*. Rockville, MD: AHRQ;2013.
20. Armitage GD, Suter E, Oelke ND, Adair CE. Health systems integration: State of the evidence. *International Journal of Integrated Care*. 2009;9:2.
21. Blount A. Integrated primary care: Organizing the evidence. *Families, Systems, & Health*. 2003;21:121-133.
22. Urada D, Teruya C, Gelberg L, Rawson R. Integration of substance use disorder services with primary care: Health center surveys and qualitative interviews. *Substance Abuse Treatment, Prevention, and Policy*. 2014;9:15.
23. Gurewicz D, Prottas J, Sirkin JT. Managing care for patients with substance abuse disorders at community health centers. *Journal of Substance Abuse Treatment*. 2014;46:227-231.
24. Zubkoff L, Shiner B, Watts BV. Staff perceptions of substance use disorder treatment in VA primary care-mental health integrated clinics. *Journal of Substance Abuse Treatment*. 2016;70:44-49.
25. Maust DT, Mavandadi S, Klaus J, Oslin DW. Missed opportunities: Fewer service referrals after positive alcohol misuse screens in VA primary care. *Psychiatric Services*. 2011;62(3):310-312.
26. Korthuis PT, McCarty D, Weimer M, et al. Primary care-based models for the treatment of opioid use disorder: A scoping review. *Annals of Internal Medicine*. 2017;166:268-278.
27. Babor TF, McRee BG, Kassebaum PA, Grimaldi PL, Ahmed K, Bray J. Screening, Brief Intervention, and Referral to Treatment (SBIRT): Toward a public health approach to the management of substance abuse. *Substance Abuse*. 2007;28(3):7-30.
28. Humeniuk R, Ali R, Babor TF, et al. Validation of the alcohol, smoking, and substance involvement screening test (ASSIST). *Addiction*. 2008;103(6):1039-1047.
29. Bohn MJ, Babor TF, Kranzler HR. The Alcohol Use Disorders Identification Test (AUDIT): Validation of a screening instrument for use in medical settings. *Journal of Studies on Alcohol*. 1995;56(4):423-432.
30. Miller WR. *Motivational enhancement therapy with drug abusers*. Albuquerque, NM: University of New Mexico;1995.
31. Saitz R. Screening and brief intervention enter their 5th decade. *Substance Abuse*. 2007;28:3-6.
32. Gentilello LM, Rivara FP, Donovan DM, et al. Alcohol interventions in a trauma center as a means of reducing the risk of injury recurrence. *Annals of Surgery*. 1999;230:473-483.
33. Glass JE, Hamilton AM, Powell BJ, Perron BE, Brown RT, Ilgen MA. Specialty substance use disorder services following brief alcohol intervention: A meta-analysis of randomized controlled trials. *Addiction*. 2015;110:1404-1415.
34. Saitz R. 'SBIRT' is the answer? Probably not. *Addiction*. 2015;110:1416-1420.
35. Rahm AK, Boggs JM, Martin CA, et al. Facilitators and barriers to implementing Screening, Brief Intervention, and Referral to Treatment (SBIRT) in primary care in integrated health care settings. *Substance Abuse*. 2015;36(3):281-288.
36. Pepin A. A comment on efficacy and effectiveness. *Screen & Intervene: A NH youth SBIRT initiative* 2014; <http://sbirthnh.org/a-comment-on-efficacy-and-effectiveness>. Accessed June 18, 2017.
37. Padwa H, Teruya C, Tran E, et al. The implementation of integrated behavioral health protocols in primary care settings in Project Care. *Journal of Substance Abuse Treatment*. 2016;62:74-83.
38. Chaple M, Sacks S, Randall J, Kang B. A technical assistance framework to facilitate the delivery of integrated behavioral health services in federally qualified health centers (FQHCs). *Journal of Substance Abuse Treatment*. 2016;60:62-69.
39. Chaple M, Sacks S. The impact of technical assistance and implementation support on program capacity to deliver integrated services. *Journal of Behavioral Health Services & Research*. 2016;43(1):3-17.

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