Workforce Issues: Integrating Substance Use Services into Primary Care Conference

Workforce Issues Related to: Physical and Behavioral Healthcare Integration

Specifically Substance Use Disorders and Primary Care

A Framework

Joan Dilonardo, Ph.D., R.N.

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Executive Summary

The integration of substance abuse treatment into primary care and other medical settings is of critical importance.

- A large group of persons who or at risk for substance use disorders can be identified and assisted to modify their substance use in primary and other medical care settings.
- Substance use conditions are associated with substantial increased risks for a variety of mental and physical conditions and often complicate the management of other conditions.
- Substance use conditions are costly to the health care system and receipt of substance abuse treatment has been shown to reduce costs.

The adoption of evidence based practices for the treatment of persons with substance use conditions is an essential component of quality and efficient care.

- The US Preventive Services Taskforce has ranked screening and brief intervention for alcohol use as a high priority and cost effective intervention.
- Medications are available that may assist patients to reduce drinking, avoid relapse and support abstinence as well as treat opiate addiction; their use in primary care is feasible and cost effective.
- Treatment of persons with substance use conditions in primary and other medical care settings provides also increases patient choice for being treated in the most comfortable setting.

Integrating substance abuse treatment into primary care and other medical settings is feasible and a variety of integration models can be successfully implemented with diverse patient populations.

- Models may vary along a continuum of integration from increased coordination, physical co-location to full integration.
- Type of services provided may also vary according to the relative intensity of the need of patients for behavioral health and physical health services, as reflected in the four quadrant model.
- Integration can also be described by processes such as the Five A's (Assess, Advise, Agree, Assist and Arrange), needed to identify and assist persons with substance use conditions in primary care and other medical settings.
- The person centered health home in which a team provides continuous and comprehensive care across all elements of the complex health system reflects highly integrated care and is an appropriate model for patients with complex needs.

Successful integration of the treatment of substance use conditions within primary care and other medical settings may require new or refashioned types of workers, including:

- Health educators
- Primary care behavioral health specialists

•Expanded role care managers
•Consultation-liaison clinicians

The current substance abuse treatment workforce may not be sufficient in number or have all of the skills necessary to function in an integrated environment.

•Counselor licensure/certification requirements are less for substance abuse counselors in comparison to mental health counselors.
•Requirements for substance abuse counselor licensure/certification vary substantially across states and likely do not include preparation related to physical health conditions or working in settings other than substance abuse specialty treatment. National competencies and certification has not been adopted.
•The majority of members of the core disciplines (physicians, nurses, social workers, psychologists, physician's assistants and others) are also likely to have insufficient training in addiction.
•Physicians report barriers to the use of medication assisted treatment and screening and brief intervention, including not feeling comfortable in managing all components of either type of intervention.
•It is essential that the availability of peer support be maintained as treatment for substance use conditions is integrated into primary and other medical care settings.
•The ongoing differences in the demographics of the workforce and patient population suggest that training in cultural competence will be important.
•Curricula which treat substance use conditions similarly to other chronic disorders and provide more adequate basic preparation across all disciplines need to be implemented.

Continuing education and an organizational commitment to change is needed to overcome barriers to the adoption of evidence based practices for the treatment of substance use condition and to work in an integrated environment.

•Continuing education and training which includes post training evaluation, mentoring or supervision is more likely to be effective; training best practices should be adopted.
•Specific programs to support the broad adoption of both medication assisted treatment and screening, brief intervention and referral to treatment need to be identified and implemented.
•Effective training is accompanied by ongoing monitoring, supervision, mentoring, and other quality improvement activities, if innovations are to be adopted with fidelity.
•Training to work in teams will be essential for integration; such programs can be adapted from other fields, but will need some tailoring specific to healthcare and substance abuse treatment.

Integration must be supported by appropriate financing.

•There is no clear evidence that one type of financing is optimal for integrated care.
•A number of financing approaches may be workable, including capitated arrangements, ambulatory care groups, monthly payments for care management, as well as fee for service arrangements.
•Barriers to appropriate financing such as prohibition of billing for both a behavioral health and physical health visit on the same day need to be remedied and reimbursement for efficient delivery of services by a variety of clinicians embraced.
•Universal acceptance of integrated services for persons with substance use disorders by both public and private insurance will facilitate billing and reimbursement within a fee for service environment.

In the near term, a number of components will be key to successful integration of the treatment of substance use disorders in primary care and other medical settings:

•All health care disciplines need to have adequate basic training in the disease of addiction, the nature of substance abuse treatment and how to work in complex team settings.
•Counselors who are the backbone of the substance abuse treatment workforce need a certification/licensure process which is more standardized and reflects the appropriate competencies.
•The adoption of two specific evidence based practices appropriate for primary care and other medical settings, screening, brief intervention and referral to treatment and medication assisted treatment is critical to the future of integration. Support will be required to ensure adoption.
•A substantial investment will be required in training the existing and new workforce to work in complex teams; evidence based training will be necessary to ensure positive outcomes.

Introduction:

This paper builds on a number of recent papers and reports about the integration of substance abuse treatment into primary care and other health care settings. In one report, Collins and others described in some detail a number of existing mental health and substance abuse integration models along a continuum of integration.[1] Another recent paper on issues related to substance use disorders and the person centered health care home; the paper organizes integrated provider activities within the four quadrant patient model[2]. Resulting from a series of policy forum supported by the Substance Abuse and Mental Health Services Administration (SAMHSA), two reports more specifically targeting the integration of substance abuse treatment into primary and other medical care settings were developed. These forums explored the current status and models of integration of substance abuse, and identified what states and counties saw as facilitators and barriers to successful integration efforts.[3,4]

Each of these reports recognized the workforce challenges associated with behavioral health integration. Collins and others often listed workforce issues as barriers to implementation. For example, challenges listed for a simple coordinated care model of integration, included the lack of providers to whom a primary care clinician can refer and the lack of necessary skills for screening for behavioral health among medical providers.[5] Alternatively, Mauer identified the need for increased skills for screening for and support of appropriate primary care substance abuse services as well as the need for additional training in evidence based practices for substance use conditions and health conditions within the specialty substance abuse treatment workforce. Expansion of screening, brief intervention, referral and treatment services within primary care is seen as one way that the Affordable Care Act can improve access to care for substance abuse disorders.[6]

The second policy forum report cited workforce development as critical to the integration of substance abuse into primary care and other medical settings.[7] One major theme was the need to provide whatever supports necessary to primary care and other medical settings in providing appropriate screening and intervention for substance use conditions, including the development, credentialing, and continuing education of new types of professionals as well as the availability of consultation and liaison from specialty providers. The need for continuing education of existing specialty staff for treatment of substance use disorders shifted to practice in other health care settings was cited; training in team skills, medical conditions, and competencies in care coordination, assessment and brief treatment and medication assisted treatment will be required. Another major theme was the need for standardized curricula regarding substance abuse and addiction, including the use of medications and medication management for substance use conditions for each of the core professions, including medicine, social work, nursing, psychology and counseling. Further, the need to develop and retain recovery support and peer to peer services within the treatment system was seen as crucial, along with reimbursement strategies to support the full range of the workforce and settings.

The purpose of this report is to provide a context and expanded discussion of the workforce issues related to the integration of substance abuse into primary care and other health care settings. This paper provides a review of the critical importance of integration and outlines a number of schemes for conceptually organizing integrated models, including the person centered health care home and associated challenges. The author goes on to estimate the size and characterize the background of the current substance abuse treatment workforce and briefly describe new types of workers or expanded roles of current workers. The paper closes with a discussion of major existing workforce needs and ways in which these might be addressed.

The Critical Importance of Integration:

As health care reform moves forward, it is critically important there be greater integration of substance use condition screening and treatment/intervention in general health care. First and foremost, a large group of persons do not qualify for a diagnosis of a substance use disorder but are at risk for such a disorder. Almost one in five adults in an HMO primary care sample met the criteria for risky drinking promulgated by the National

Institute of Alcohol Abuse and Alcoholism of the National Institutes of Health.[8] More recently, McClellan suggested the group with unhealthy use may represent tens of millions of people.[9] Since this large group of persons at risk does not come to and are not appropriate for SA specialty care settings, they must be identified and assisted to modify their use and reduce their substance use elsewhere in the health care system (i.e. primary care and other medical care settings).

> Primary care is the setting that offers the health care system access to the most people, and behavioral health is the area in which most impact on morbidity and mortality can be achieved.[10]

The fact that a large majority of persons with substance use disorders do not seek or receive treatment in the specialty care substance abuse treatment system is well known. According to the 2009 National Survey on Drug Use and Health, of the almost 21 million people who needed treatment for illicit drug or alcohol use but did not receive it, 94% did not feel they needed treatment.[11] Persons who needed but did not receive treatment reported their lack of treatment receipt was related to 1) not being ready to stop using or thinking that they could handle the problem on their own (51%), 2) having no health coverage and unable to afford the cost (34%), 3) possible negative effect on job or neighbors/ community (24%) and/ or 4) not knowing where to get treatment (11%). McLellan has recently suggested that part of this denial has to do with the stigmatization and segregation of the substance abuse treatment system from the rest of medical care.

Substance use conditions are associated with a higher risk for a variety of other medical disorders. This increased risk ranges from doubling the risk for hypertension and lower back pain, to a 9 times greater risk of congestive heart failure and a 12 times greater risk of liver cirrhosis. The risks for acid related peptic disorder, arthritis, chronic obstructive, pulmonary disease, headache, hepatitis C, and injuries and overdoses also increase. In addition, patients with narcotic addiction have more than 12 times the risk of developing pneumonia.[12] Substance use conditions are not infrequent among those with disabilities[13]; disabled non-elderly Medicare beneficiaries were more likely (17%) than elderly Medicare claimants (6%) to receive detoxification services, a reflection of the severity of their substance use problems.[14] Injection drug users are almost ten times more likely and crack smokers more than twice as likely to become positive for HIV in comparison to non-drug using controls.[15]

Although absolute estimates may vary depending on the definitions, methods and populations involved, mental and substance use disorders also co-occur, complicating the treatment of each. SAMHSA's National Survey on Drug use and Health estimated that of 17.5 million adults who had a serious mental illness in the past year, 4 million were also dependent on or abused alcohol or an illicit drug.[16] A more recent report from the same survey highlights the relationship between inhalant use and episodes of major depression among youths, aged 12-17.[17] Using claims data , others have estimated that about 20% of patients with schizophrenia also have a co-occurring substance use disorder.[18] When the prevalence of mental disorders in a sample of patients in chemical dependency treatment in an HMO were compared to matched controls, patients with substance use disorders

were more than 18 times more likely to have a major psychosis, almost 15 times more likely to have depression, and almost nine times more likely to have an anxiety disorder.[19] Poorer outcomes and higher costs are associated with co-occurring mental and substance use disorders.[20]

Substance use disorders can complicate the management of other chronic disorders, such as HIV/AIDS, diabetes, hypertension, and others. A number of researchers have reported that that persons with HIV/AIDS who reported drug and alcohol use were more likely to be non-adherent to antiretroviral treatment .[21,22,23] Others have reported that poorer adherence to medications for Type 2 diabetes are related to substance use disorder, depression and medical co-morbidities.[24] Persons with substance use conditions are also more likely to receive inadequate care for their physical health problems. Only half of the patients in substance abuse treatment reported having a usual source of medical care [25] and the quality of care they receive may be low.[26] While linkages between substance abuse treatment organizations and primary care and/or mental health organizations are a possible pathway to improving the integration of substance abuse treatment, one study of 62 outpatient substance abuse treatment units showed that these linkages were limited. [27] Barriers cited included client's financial problems, managed care restrictions and limited organizational capacity.

Moreover, there is general agreement that new types of patients with a broad range of substance use conditions will be identified as a result of changes in health insurance coverage as part of the Affordable Care Act and that patients are likely to need services not currently available in either the specialty or primary care systems. For example, Washington State has proposed expanding the use of brief intervention strategies for substance abusing clients who are not yet dependent, as a way to deal with the Medicaid expansion that will result from health care reform, so that the substance abuse treatment system is not overwhelmed.[28]

Substance use conditions, especially when untreated, are costly to the health care system. One study of Medicaid beneficiaries readmitted within 30 days of discharge found that substance use disorders were among the top five diagnoses associated with readmission, accounting for almost 10% of readmissions.[29] For the elderly, the rate of alcohol related admissions are similar to the admission rate for heart attacks.[30] Receipt of substance abuse treatment has been shown to decrease medical care costs significantly,[31] to more than pay for itself in savings,[32] and investments in expanding access to treatment for persons with substance use disorders may be one effective way of reducing the trend toward increased health care costs.[33]

Adopting Evidence Based Practices: Improving access to and the quality of substance abuse treatment in primary care settings

The use of evidence based practices, including the use of appropriate medication is an essential component of efficient and high quality care. New medications have been developed to treat substance use disorders along with the expectation that substance abuse treatment availability can be expanded thru the application of these practices in

primary care and other medical settings. In addition to expanding the availability of substance abuse services, their movement into primary care and other medical settings provides patients with a choice of treatment setting; some patients may be much more comfortable receiving treatment for a substance use condition within a medical setting. Three medications are currently approved and available for the treatment of alcohol dependence in primary care and other medical care settings: naltrexone, acamprosate and disulfram. They can help patients reduce drinking, avoid relapse to heavy drinking and support the maintenance of abstinence[34,35] and their use in primary care is feasible.[36] A recent report indicated that patients treated with alcoholism medications had fewer inpatient detoxification days, other alcoholism related inpatient days and alcoholism-related emergency room visits and lower costs over a six month period when compared to those who did not receive medication.[37] However, these medications are significantly under-utilized.[38]

In addition, burprenorphine for the treatment of opiate addiction became available in 2002. Because the regulations governing the use of buprenorphine for the treatment of opiate addiction allow for specially certified primary care and other physicians to provide office based treatment for opiate addiction, buprenorphine is seen as both an opportunity to significantly expand the availability of treatment for opioid addiction; it also offers patients a choice of a less stigmatized setting (in comparison to methadone programs). Primary care physicians have cited a need to develop confidence in its' use, especially during the more complex and demanding induction phase, and identified payment and reimbursement barriers. However, one study reported that primary care practitioners were the most frequent source of prescriptions for buprenorphine.[39] Primary care practitioners may need a variety of supports to appropriately care for patients with opioid addiction, whether specialized induction centers that begin treatment, stabilize patients and provide ongoing consultation to primary care physicians who follow these stabilized patients, or a nurse care manager to assist in monitoring patients and consulting with the physician. While these models slowly evolve, buprenorphine diffusion has also been slower to diffuse into practice than many had hoped.[40]

Beyond medication-assisted treatment, the adoption of other evidence based substance abuse services appropriate to primary care and other medical settings have also lagged. The US Preventive Services Task Force has ranked screening and brief intervention for alcohol use as a high priority cost effective intervention.[41] Yet, primary care physicians do not routinely screen for alcohol use conditions and offer treatment as appropriate.[42] Neither specific screening and intervention for alcohol use[43] nor broad screening and intervention to deal with a wider range of behaviors (tobacco use, unhealthy diet, physical inactivity, and risky alcohol use) are consistently provided in primary care practices[44] One study estimated that only about 10% of patients with alcohol dependence were assessed and referred to appropriate care[45]; another reported that only 20% of primary care physicians thought that treatment resources were adequate for early problem drinkers, and 72% preferred not to counsel these patients themselves.[46] Another found that even when physicians were aware of an illicit drug use condition in a patient, up to 15% did not intervene and only 55% offered a treatment referral.[47] Some have reported that for pediatricians, reimbursement is a primary barrier to behavioral counseling[48];

others found that physicians' perceptions of the importance of the topic, their own self-efficacy, and likely effectiveness of the counseling were more powerful influences than either the time required or reimbursement. A number of alternative models for screening, brief intervention and behavioral counseling have evolved, many of which rely on others than the physician to perform these tasks.

Substance Abuse Treatment Integration into Primary Care and Other Medical Settings: What does it look like?

While integration of medication assisted treatment and screening and brief intervention into primary care are critical to patients with substance use disorders, there are many varied and successful models of integration of substance use and physical health care. This section provides a brief overview of integration efforts and processes including the integration continuum, the four quadrant model, the five A's, and the person centered medical or health care home. Integration efforts can run the gamut from early steps such as improved communication between practitioners in primary care and specialty substance abuse treatment to collocation or to full integration, where the patient experiences a health care team which includes both mental health and substance use treatment services. Early evidence suggests that integrated care improve outcomes and in some instances can lower costs for specific patient populations.[49,50] Comprehensive descriptions of specific model programs in which substance abuse treatment is coordinated or integrated with primary and other medical care are largely not included in this paper; readers interested in that information should consult the two reports from the Policy Forums on Integration, sponsored by SAMHSA.[51] Collins and others describe eight different models of integration across the integration continuum (listed here in a progression from least to most integrated- not all of these may be appropriate to substance abuse treatment):

- improved collaboration,
- medical provided behavioral health care (consultative support from BH specialist),
- co-location (separate entities, but in same location/facility),
- disease management (close collaboration, some shared systems, regular contact between providers),
- reverse co-location (some medical care professional added to BH team)
- unified primary care and behavioral health (on same team),
- primary care behavioral health with close collaboration in a fully integrated system,
- collaborative systems of care with full or partial integration.[52]

It is important to note that in real world implementation, attributes of one or another model are often combined. The choice of model will be influence by a number of factors including, the existing array and capacity of services available in a community, the population that is targeted for services, patient preferences (which setting are they more likely to accept care in), the skills of the workforce as well as reimbursement factors and others.[53]

Another view of the possible organization of integrated services is the four quadrant model.[54] (See Appendix A). The four quadrant model was originally developed to facilitate discussion of care needs of patients with co-occurring mental health and substance use disorders. Mauer proposed that the four quadrant model could also be used to describe the types of needs patients had for care for mental and substance use conditions, and physical health conditions, as well as some integrated care practices appropriate to each quadrant of patients. For example, even patients with low needs for care for both substance use and other health conditions (Quadrant I) may require screening and brief intervention delivered in a primary care setting. On the other end of the spectrum, patients with high needs for care for both substance use and other health conditions (Quadrant IV) may require specialty care, including hospitalization, detoxification or residential care, for their substance use condition, which will need to be coordinated with their other medical care for optimal outcomes to be achieved. In some settings, such as residential care or social detoxification, it might make sense to bring medical care into the specialty setting, but in the main bringing behavioral health expertise into medical settings is more common. Consistent with the notion of "stepped care", patients initially seen in Quadrant IV could be expected to transition to outpatient specialty care and continue to require some care coordination or management for their medical needs (Quadrant II). But it is possible those with other significant chronic medical problems, could also be managed within a primary care practice with a strong behavioral health component. Patients with high needs for care for a substance use condition, but low needs for care for other types of health conditions) may also initially need specialty care, but may be able to transition back to a primary care setting with behavioral support as their clinical status changes.

The Five A's is an organizational construct endorsed by the US Preventive Services Task Force for behavioral counseling interventions in medical care. The Five A's describe the processes that must take place: Assess, Advise, Agree, Assist, and Arrange; and imply that these process tasks may be performed by either the primary physician or shared with other healthcare staff.[55] One full integration model with special significance within the context of health reform and incorporates substance use conditions as well as other health conditions is the person centered health care home. The concept of a person centered health care home (PCHC) reflects a shift from intermittent, acute care focused health interventions which are likely to be uncoordinated or poorly articulated to management of the broad healthcare of specific patient populations, with an emphasis on those with chronic health conditions.[56] The promise of health care homes is in improving health care outcomes while containing costs. While some have proposed health homes for all types of patients with mental health and substance use disorders, others have suggested that it is important to target patients with multiple chronic disorders and related high costs.[57] Thus, patients in quadrant IV with their chronic high behavioral and physical health needs are also likely to have lower medication adherence, a substantial incidence of co-occurring alcohol and drug abuse problems, complex medical plans and lack a stable medical home[58] should be high priority candidates for person centered health homes, as described within the Accountable Care Act. While it might be appropriate that some patients with serious mental disorders have a primary care home within a mental health setting with integrated medical and health care services, it is expected that the majority of health care

homes will have strong behavioral health components that will allow for the treatment of patients with multiple behavioral and physical health conditions within a primary care or other medical care setting.

The American Academy of Family Physicians, American Academy of Pediatrics, American College of Physicians and the American Osteopathic Association have agreed on seven principles to describe the characteristics of the PCHC. These reflect that each patient has an ongoing relationship with a personal physician, who along with the patient and the health care team, advocates for patients, and is responsible for addressing all the patient's health care needs using evidence based practices, either directly or by coordinating care with other qualified professionals. Care is coordinated and or integrated across the complex health care system; such coordination is facilitated by registries, information technology and health information exchange while other technologies such as clinical support systems may be used to facilitate quality care. Physician directed teams are accountable for continuous quality improvement; and involve patients and families in quality improvement activities.[59]

Many of the reports have pointed out that primary care and other medical care settings have a different culture and language than the substance abuse treatment system. Primary care is characterized by a fast pace of brief interactions with patients, a high volume of patients, a setting where interruptions are okay, and constant balancing of needs and priorities is essential. The specialty substance abuse treatment system however, focuses on the 50 minute hour, a slower pace with few emergencies (at least in most outpatient settings). Bridges of understanding will no doubt need to be built, as well as appreciation for the differences.

New workers focusing on substance use disorders in integrated care

A number of specific kinds of new workers[a] may be needed to successfully integrate substance abuse treatment services into primary care and other medical settings. A number of attendees at the SAMHSA sponsored Policy Forum on Integration commented that they were experimenting with the use of different types of workers to deliver behavior change services and support primary care practitioners including, health educators, behavioral health specialists, behavioral health interventionists, health coaches, patient navigator and case managers. The importance of the availability of substance abuse treatment expertise is also recognized through a variety of systems of consultation-liaison. The health educator, behavioral health specialist, and expanded role care manager positions are briefly described, and consultation-liaison functions and systems discussed.

[a] Health educators may be a relatively new introduction into the substance abuse treatment system but more than 250 academic programs in colleges and universities prepare health educators at the baccalaureate, masters and doctoral levels. National competencies for health educators exist and they are counted by the Bureau of Labor Statistics. (Source: National Commission for Health Education Credentialing, Inc., http://www.nchec.org/credentialing/profession/)

Several models for implementing universal screening for risky substance use in busy primary care practices and other medical settings have been tried, often encompassing the use of a specific worker, such as a health educator, with a designated responsibility for the provision of screening, and brief intervention. The health educator role is still evolving and may vary somewhat across different models of integration, targeted populations, and types of health care setting; in general, health educators may screen patients for risky health behaviors, such as overuse of alcohol, nicotine use and/or depression using a standardized instrument, score the screening instrument, and provide feedback and or brief intervention for appropriate patients. One example of the use of health educators is Wisconsin's Screening, Brief Intervention and Referral to Treatment Project focusing on risky substance use and tobacco use.[60] In some Wisconsin primary care sites, health educators are also used to provide monitoring and support for patients receiving medication assisted treatment for substance abuse within primary care settings; primary care practitioners reinforce the health educator interventions and provide pharmacotherapy for patients as appropriate. Health educators use the same tools and interventions but the exact tasks and processes may differ across settings.

Wisconsin's health educators have a bachelor's degree, 2 years of experience in human services work and 60 hours of specific training on the use of screening instruments, motivational interviewing and cultural competence. A hallmark of Wisconsin's program is the intensive clinical supervision and feedback. Beyond providing screening and brief intervention, health educators can be trained to help with other types of patients who need motivational interviewing and/ or referral or case management; they also need competencies in quality improvement, and evaluation. Wisconsin is considering additions to curricula to stretch the competencies of health educators to a broader focus on screening and intervention for on multiple chronic health issues while also grappling with how the health educator model fits with professional licensing and certification in Wisconsin. Requirements for health educators are not identical across the country. For example, California used "peer health educators" to provide screening and brief intervention in a busy emergency room serving a high proportion of Spanish speaking patients.[61] Requirements for these health educators included a high school diploma, bi-lingual in English and Spanish, several years of work experience, preferably with public contact, but they must also be:

> engaging, confident self-starters because they are going to be dealing not just with patients but with the doctors and other hospital staff.[62]

Another type of new worker needed is the primary care behavioral health specialist.[2, 3] Working as part of the primary care team, the primary care behavioral health specialist would work with patients who not only have mental or substance use conditions, but also assist other patients who are having difficulty making or maintaining the behavior changes necessary to their improved health. This primary care based specialist needs to be competent in the assessment, treatment (especially brief cognitive behavioral intervention and motivational interviewing skills) and service planning for persons with mental and substance use disorders as well as consultation, communication, care management, team collaboration and orientation and an understanding of chronic disease

and self-care requirements Successful behavioral health specialists in primary care should also be as flexible, independent and oriented to action and solution rather than process, along with having strong organizational and computer competencies. While it is likely that only large primary care practices could incorporate such a worker, sharing a worker across smaller practices or co-locating such services is another feasible approach. One study of behavioral health providers within integrated care settings showed that the types of interventions employed included medical management, psycho-education, elements of cognitive behavioral therapy and supportive psychotherapy.[63]

A third type of worker with a role in integrated substance abuse treatment services is an expanded care manager. Care management has been defined as:

> A set of activities designed to assist patients and their support system in managing medical conditions and related psychological problems more effectively.[64]

Care managers may not be appropriate for all patients, but patients with multiple chronic conditions, certain types of chronic conditions, or patients who use a significant amount of high cost (and not necessarily appropriate care) are high priority patients for care management. Massachusetts used state funds to deploy nurse care mangers in 19 community health centers, each of which is partnered with a substance abuse specialty treatment provider. Because of their expertise in managing a specific population, such as persons with opiate addiction being treated with buprenorphine, these care managers also provide significant physician support for opiate treatment within primary care. Care mangers may serve a range of functions for a specific population of patients, including patient management care coordination, increasing self-efficacy in patients, tracking patients on a registry, linking patients with needed resources, consultation with health professionals and others.

Additionally, one old professional role is in the process of being resurrected in new ways: the consultation-liaison clinician. The consultation liaison role is concerned with the diagnosis, and treatment of the physically ill and generally involved contact with a patient for a problem, along with collaborative and educational work with the primary caregivers, including physicians, nurses and others.[65] With its origins in acute care inpatient settings and psychiatrists, consultation liaison work has been broadened to that practiced by teams or clinicians, who may include psychologists, nurses, social workers and substance abuse treatment counselors. In some settings, substance abuse consultation teams are used to evaluate and intervene with patients, such as trauma victims.[66]

The role of the consultation-liaison clinician also encompasses specific mentoring of other clinicians as they build confidence in the application of new practices; treating patients with buprenorphine is an example of one such process. A number of approaches have been taken to providing individualized expert advice to primary care physicians in relation to substance abuse treatment. The American Academy of Addiction Psychiatry and its partners, the American Osteopathic Academy of Addiction Medicine, and the

American Psychiatric Association jointly sponsor an on line physician clinical support system supported by the Substance Abuse and Mental Health Administration; in addition to notices about trainings and easily accessible on--line resources, the site offers to link primary care physicians with mentors at no cost to assist with the appropriate use of buprenorphine.[67] A similar site exists for primary care physicians who want help with how to address alcohol, tobacco and drug screening and brief intervention and treatment referral in primary care settings.[68]

San Francisco County, California significantly expanded the availability of treatment for opiate addiction through the use of buprenorphine in primary care and other medical settings by stretching the consultation-liaison model even further. In order to provide support to physicians and clinics, San Francisco County initiated a public health buprenorphine induction center, which includes consultation-liaison services with specialty physicians and a county behavioral health pharmacy. The opiate buprenorphine induction center trains practicing physicians as well as residents, hoping to create a new group of physicians knowledgeable about substance use disorders. With the reduction of the burdens related to buprenorphine induction, and the availability of ongoing consultation, San Francisco County has significantly increased access to treatment.[69]

Wherever a medical care home for a patient is located in the health care system, it should be clear that the health care team must have the capacity to serve the needs of persons with substance use conditions and to work within that setting; ensuring that the workforce has the appropriate competencies is a key challenge to success. As all of these new types of practitioners and roles evolve, it will be important to come to some national consensus on titles, requirements and curricula for basic training, licensure, certification and continuing education.

Creative retooling and repurposing of the existing specialty workforce for treatment of substance use disorders will be required to support integration, with some workers in significantly expanded and changed roles and broader competencies. Leaps will need to be made in the adoption of evidence based practices, team work skills and collaboration. New or expanded roles and types of workers are also likely to be needed to facilitate integration, including health educators, behavioral health specialists, and care managers.

The substance abuse treatment workforce will not be singly affected by this sea change. For example, the American Academy of Pediatrics has identified a goal of pediatricians having the competencies to provide both mental health and substance abuse services in pediatric primary care settings.[70] However, Van Hook and others identified a number of barriers to screening teens for substance abuse in primary care; which included insufficient time, lack of training in how to manage a positive screen, need to triage competing problems, lack of sufficient treatment resources, parents who would not leave the room for the confidential discussion, and unfamiliarity with screening tools.[71] These are not significantly different than what has been reported for adult primary care.

The Current Substance Abuse Treatment Workforce: Implications for Integrated Care

A number of recent reports have been issued which focus on the behavioral health workforce. One addressed the development of a national action plan to remedy the insufficient behavioral health workforce, difficulties in recruiting and retaining staff, limited access to appropriate and effective training, the erosion of supervision and critical leadership and broken and inadequate reimbursement systems.[72] A second report, *Strengthening Professional Identity: Challenges of the Addictions Treatment Workforce* limited its scope to only the substance abuse treatment workforce.[73] Both reports contain somewhat similar recommendations in areas particularly germane to this report; among other areas, both identified the need to expand recruitment and retention to address worker shortages, as well as to improve access to and the quality of training available, especially in relation to implementation of evidence based practices.

The substance abuse treatment workforce includes physicians (including psychiatrists), social workers, nurses, psychologists, counselors, providers of recovery support services and others. Providers of substance abuse treatment are varied in terms of their formal training and degrees as well as certification specific to substance abuse treatment. One key aspect of working collaboratively is to have some understanding about the background and skills of those on your team.

One assessment of the size and professional characteristics of the workforce was published in a 1997 Institute of Medicine report and is presented in Table 1.[74] Table 1 also reflects the relative small number of "addiction specialists" across all disciplines. Another national estimate of the workforce based on outpatient, residential and methadone treatment sites and data collected in 2000, found 67,400 workers directly involved in psychosocial treatment services, an additional 80-90,000 medical and administrative staff, and 17,000 other behavioral health professionals.[75] Others, also

Table 1. Number of Practitioners and Certified Addictions Specialists, by Health Care Discipline.

Discipline	Workforce size	Certified Addiction Specialist
Primary Care MD	700,000	2,790 ASAM certified
Psychiatry	30,000	1.067 addictions psychiatrists
Clinical Psychology	69,800	950 APA certified
Social Work	300,000	29,400 (self-described SA specialist)
Nursing	2,200,000	4,100 (self -described SA specialist)
Physician assistant	27,500	185 (self-described specialist)
Marriage/Family Counselors	50,000	2500 (self-described specialist)

Source: Institute of Medicine (IOM), *Managing Managed Care: Quality Improvements in Behavioral Health*, (Washington, DC: National Academy Press, 1997).

using data from 2000, have estimated that the national total of substance abuse treatment direct services staff is likely to be greater than 130,000 swelling to approximately 200,000 individuals if medical and administrative staff numbers are added.[76]

Many individual states have compiled basic workforce statistics thru the regional Addiction technology transfer centers (ATTC's). Established in 1993 and funded by SAMHSA, the Addiction Technology Transfer Centers are a network of regional centers that focus on raising awareness of evidence based treatment practices and building skills in the workforce to improve practice in the addictions treatment and recovery services field. Using the New England States as a convenience sample, Maine[77], Vermont[78], New Hampshire[79], Connecticut[80] and Massachusetts[81], reported that the largest proportion of direct substance abuse treatment service providers were addiction counselors, accounting for at least two thirds of the workforce. Most recently the Bureau of Labor Statistics estimated that in 2008, there were 86,100 individuals employed as counselors (employed in all types of settings- not just substance abuse treatment settings) in 2008. They also projected growth of 18% in the ten years between 2008 and 2018 and suggested that the number of jobs would exceed the number of graduates from counseling programs.[82]

- *Substance Abuse Treatment Counselors*

Because counselors are the backbone of the SA treatment workforce, their training and background is important. While combined into one occupational code by the Bureau of Labor Statistics, many have identified that mental health and substance abuse counselors often have quite different approaches to the problems they encounter. Training for mental health treatment has largely taken place within mainstream educational pathways while at least initially, persons recovering from addictions, often became the providers of addiction treatment and developed substantial clinical knowledge through their experience.[83] However, one national study of the substance abuse treatment workforce found that almost 3 of 4 counselors in substance abuse treatment programs had a bachelor's degree and 72% were certified or licensed as substance abuse/mental health professionals.[84] These researchers hypothesized that increased managed care and a focus on supporting evidence based practices has resulted in an increase in "formal education" for addiction counselors. Libretto and others also estimated that about 71% of counselors had at least a college education.[85] However, at least for some states in the one region assessed, between 12% (Vermont) and 49% (Connecticut) of direct care staff reported less than a bachelor's degree; it appears that in some states, associate degree preparation is likely (for example 28% of Connecticut's workforce reported an associate degree as their highest degree).

Sixty six organizations are involved in the licensing and credentialing of substance abuse treatment counselors across the United States.[86] Findings from a study of requirements for counselor certification or licensure for substance abuse counselors in comparison to mental health counselors show that on almost every level, generally more was required of mental health counselors than counselors in substance abuse. For example, only about ½ of the states required a specific credential for a substance abuse in comparison to 85% for

a mental health counselor; almost all states (98%) required a master's degree to qualify as a mental health counselor; 45% of states did not require any college degree to qualify as a substance abuse counselor. Substantial differences in the same direction were also observed for minimum degree requirements, hours of coursework, practicum or training hours; the requirements for substance abuse counselors only exceeded that of mental health counselors in the amount of supervised work experience required prior to credentialing. While a consensus model for national core competencies for addictions counselors exists[87], these standards have not been universally adopted. Included in this consensus model are knowledge and attitudes needed by all disciplines working in the addiction field and specific competencies for addictions counselors in clinical evaluation, treatment planning, referral, service coordination, counseling, client, family and community education, documentation, and professional and ethical responsibilities.

With a specific view towards integration, it is important to note that only nine states had a minimum requirement for courses related to health and disease for substance abuse counselors and only two states for mental health counselors. No minimum requirements were observed that focused specifically on teamwork or communication with other professionals, but twenty-two states did include minimum course requirements in professional ethics, responsibilities and preparation. Some have called for more uniformity in state credentialing for both mental health and substance abuse counselors.[88]

Licensing and credentialing is an important state function. It ensures a minimum level of quality, encourages consumer confidence, and provides safeguards against poor practices that could harm clients. Beyond the development and adoption of national accreditation standards for counselors, it is important to note that at least among the New England states, a significant proportion (ranging from a high of 55% to a low of 17%) of direct substance abuse care workforce (across all disciplines) did not report having current or pending licensure or certification.

Most states (90%) require continuing education for recertification for substance abuse counselors but the majority does not have very specific requirements about its content. Only one state required continuing education in health issues for mental health counselors; two states had this requirement for substance abuse counselors.[89] In one study of regional training needs, the following were identified as high priority: 1) co-occurring mental health and substance use conditions; 2) treating special populations; 3) treatment models; 4) relationship between substance abuse and other medical problems; 5) treatment methods and 6) substance abuse and addiction models. Interestingly, respondents thought they were highly proficient and (therefore) had low interest in training included interpersonal communication skills, and referral skills.[90] Across all disciplines, lack of time was seen as the most frequent barrier to continuing education, but both counselors and social workers also reported client needs, poor resources, policies and procedures and the need for more training as barriers.

- *Social Workers: Mental Health and Substance Abuse Practice*

The Bureau of Labor Statistics estimated that in 2009, there were 137,300 mental health and substance abuse social workers and employment opportunities for this type of social worker were expected to grow twenty percent, from 2008 to 2018 (separate statistics for substance abuse were not available).[91] The New England states reported some part of the direct service providers were social workers, but the range varied from eleven percent of the workforce in Vermont to a high of 25% in two states, Maine and Massachusetts. One national study of social workers[92] found that only 2% of social workers responded that addiction was their primary practice area; an additional 14% said that it was their secondary or tertiary practice area. Nine of ten social workers indicated they had experience in providing mental health services; 55% reported current involvement with mental health; 39% reported mental health as their primary practice area. Yet almost three fourths (71%) reported taking one of more actions relating to substance abuse in the preceding year. Social workers who worked in mental health settings reported that they frequently worked as part of a team (results not reported separately for substance abuse treatment settings). A core skill among social workers is assisting clients to identify needed community services and so these competencies may place social workers in prime positions to be used as care mangers.

With regard to training in substance use disorders, 81% of social workers reported that they had received some kind of education/training at some point in their lifetime; 68% indicated that they received that training as continuing education. Slightly more than 1/3 said they received substance abuse training as part of their academic program and the majority of those through clinical supervision.[77] In one an assessment of substance abuse training needs in social workers employed in substance abuse treatment agencies in New England, Hall and others found that respondents reported considerable need for additional training, especially in assessment, advanced clinical techniques and dual diagnoses. [93] Only 1% reported completing a specific substance abuse certification program.

- *Psychologists*

According to the Bureau of Labor Statistics, in 2008, 170,200 psychologists were employed across the nation. Of these 21% worked in health care settings, including substance abuse treatment settings and 34% were self-employed.[94] Psychology as a professional discipline was reported in the convenience sample of all the New England States but Connecticut, and ranged from fourteen to twenty percent of the state's SA workforce. BLS estimated average growth in demand for psychologists, noting that doctoral preparation with an applied specialty, such as healthcare will be in most demand and opportunities for persons with bachelor's or master's degrees in psychology will have less opportunity. While some have suggested that psychologists play a major role in integration of behavioral health into primary care, we need to better understand their role related to substance use conditions.

- *Registered Nurses and Advanced Practice Nurses*

It is difficult to estimate both the number and types registered nurses specifically prepared for practice in the addictions treatment field. Registered nurses are most often prepared at the associate and bachelor's degree. The Bureau of Labor Statistics recently estimated that about 2.6 million registered nurses were employed and that the majority of these are employed in hospitals. However, employment in outpatient settings, such as physician offices, is expected to be one of the fastest growing settings for opportunities for nurses over the ten year period, 2008 to 2018.[95] In the New England regional study of the SA workforce, nursing was reported as a professional discipline in direct service within a substance abuse treatment agency in only two (Maine and Massachusetts) of the five states and in each of these States was about 12% of the direct service workforce. Compilation of all the Addiction Technology Transfer Center (ATTC) workforce statistics are beyond the scope of this report, but these data from one region suggest that beyond counselors, there may be significant state to state variation in the types and proportions of different practitioners in the existing SA treatment workforce.

Advanced practice nurses (APRN's), who are prepared at the master's level, may be certified as psychiatric mental health nurses and may practice either as clinical nurse specialists, or psychiatric mental health nurse practitioners. While the number of either registered nurses or advanced practice nurses working specifically in substance abuse treatment are not known, 79,638 advance practice nurses with a psychiatric/mental health clinical specialty were reported as working in hospitals, and 53,130 in non-hospital settings in 2008.[96]

> Advanced practice nurses are highly qualified clinicians who provide cost-effective, accessible , patient centered care and have the education to provide the range of services at the heart of the health reform movement, including care coordination, chronic care management, and wellness and preventive care.[97]

APRN's integrate substance abuse and medical conditions into their critical activities; one recent study found that performance of a risk assessment including substance use behaviors and life threatening physical conditions was endorsed as the second most critical work activity for such advanced practice nurses.[98] Some have suggested that the most appropriate model for advanced practice is the psychiatric-primary care nurse practitioner, who is prepared to provide comprehensive health services in either psychiatric or primary care settings.[99] Nurses at both the basic and advanced practice level may also apply for certification specific to addictions nursing, sponsored by the Addictions Nursing Certification Board.[100] In addition, a consensus model for APRN regulations, licensure, accreditation, certification and education has recently been endorsed by multiple specialty nursing organizations[101] and a blueprint for the development of the psychiatric mental health advanced practice nurse workforce to support the development of an integrated model of behavioral health care has been created.[102]

- *Physicians*

In 2008, the Bureau of Labor Statistics estimated that physicians and surgeons held about 661,400 jobs[103], while the Health Resources Services Administration (HRSA) estimated about 817,000 active physicians under the age of 75.[104] In 2007, the American Medical Association estimated that 32% of physicians were in primary care and another 10% in pediatrics. Over the period, 2008 to 2018, the Bureau of Labor Statistics estimated that physician employment would grow 22 percent, much faster than for most other occupations. HRSA noted a modest shortfall in the supply of physicians which could accentuate the existing geographic variations in supply. Physicians have been found to be poorly trained and oriented towards the detection and treatment of substance abuse conditions. Only about twenty percent of physicians reported that they were very prepared to discuss drug and alcohol issues with their patients.[105]

One national study estimated that only about 56 percent of residency programs require training in substance use disorder, and that when required, the median hours of training ranged from 3 to 12 hours.[106] Despite the expanding awareness of the importance of substance abuse as a chronic health condition, education about substance abuse remains disproportionately low, when compared to other chronic conditions.[107]

In 2010, the Bureau of Labor Statistics estimated that there were 22,600 jobs held by psychiatrists. (Data are not reported separately for addiction specialists). Psychiatry has been reported to be the fifth largest medical specialty; the supply of child psychiatrists has grown more than general psychiatrists over the years.[108] Although the IOM reported slightly less than 3000, physicians certified in addiction medicine in 1997, this number is currently estimated to be about 5000 addiction specialist physicians.[109] Soyka and Gorelik however, observed that 1/3 of those with specialized certification in addiction medicine are not practicing in the field and that there have been fewer applicants for training and certification in addiction psychiatry.[110] Psychiatrists can also benefit from specialized training in addiction. General psychiatry residents who attended a one day seminar had d improved attitudes about being able to help a patient with substance abuse, though the extent to which these positive results translate into different practices was unknown.[111]

- *Physician Assistants*

The extent to which physician's assistants are specifically involved in the provision of substance abuse treatment services is unknown; none of the respondents in the New England region identified themselves as a physician's assistant. The BLS estimated that in 2008, physician assistants held about 74,800 jobs in 2008 and projected that by 2018 employment would grow by 39%.[112] In 2000, about 42% of the accredited physician assistant programs were at the master's degree level[113]; in 2007 another study reported that this trend has accelerated, with 79% of the accredited programs offering a master's degree curriculum.[114]

Other professional disciplines that specialty treatment workers across the New England area identified as their primary discipline include marriage and family therapists, adolescent treatment, criminal justice and other counseling disciplines.

- *Recovery Support Specialists*

Recovery support is also an important service for persons with substance use disorders. Recovery peer support workers are involved in advocating for the needs of the patient, assisting the patient to navigate the treatment system, and serving as a mentor for the patient in achieving sobriety. Specific estimates for the number of recovery support specialists working in the substance abuse field could not be located. However, these workers could be considered as included in broader job classification in the Bureau of Labor Statistics of Social and Human Service Assistants; BLS estimated that in 2008 there were 352,000 workers employed as social and human service assistants. BLS forecasted the need for an additional 23% of workers in this occupation by 2018.[115]

The Health Services Resource Administration has also defined a similar but non-equivalent group, community health workers, who provide a wide range of supportive services including interpretation and translation services, provision of health information and education, informal culturally appropriate counseling on health, assistance with access to care, and advocacy related to health. A 2000 survey of these workers, estimated that there were about 86,000 community health workers with a variable supply state to state. Five predominant models of care involving community health workers were identified: 1) member of health care team performing tasks delegated by a lead provider; 2) navigator of the health care system; 3) screening and health education provider; 4) outreach-enrolling-informing agent and 5) organizer. Employers of these workers had a variety of different educational requirements: 21% had a minimum of a high school education or GED while 32% expected a bachelor's degree. Most employers provided post-hire training.[116] The majority of these workers, however, were not specifically focused on substance abuse issues; however, more than 1/3 worked with patients with HIV/AIDS.

Recovery peer support workers in substance abuse can apply for certification in some states; Florida[117] is one example. Certification requirements in Florida require a minimum of a high school diploma or general equivalency degree (GED), 1000 hours of volunteer or paid work in the addiction field, 75 hours of training, with detailed specification of what that training needs to include, passing a written examination, and submitting references.

Beyond the challenge of inadequate size, uneven preparation, and varying requirements for licensure or certification, especially for counselors and peer support specialists, the demographics of the workforce also suggest some challenges. A number of studies have found that a substantial portion of the workforce is Caucasian middle aged women, while the patients are predominantly younger and minority males.[118,119] In comparison to other behavioral health professionals, and licensed substance abuse counselors, unlicensed

substance abuse counselors were more likely to be African-American; unlicensed substance abuse counselors were also more likely to work in a residential rather than an outpatient setting. The disconnect between the racial and ethnic identity of providers and clients in substance abuse treatment is not news; it was reported as a workforce challenge in a 2006 report about challenges facing the addiction treatment workforce.[120] Some report the same difficulties in primary care, suggesting that cultural competence competencies will be key for both substance abuse and primary care staff.

Continuing Education/Training and Evidence-Based Practices

Some have suggested that "there are significant concerns about the capability of the workforce to provide quality care".[121] Lack of training and other characteristics of the current SA workforce may present barriers to the diffusion of evidence based practices. For example, many in the current substance abuse treatment workforce have not embraced medication assisted treatment. Thomas and others found that a lack of counselor's knowledge about naltrexone was a key barrier to its use.[122] Knudsen and others documented that substance abuse counselors were more likely to endorse buprenorphine as an effective treatment if they had received training about buprenorphine or if they reported less endorsement of a 12 step orientation.[123] In one study of community treatment providers, providers frequently reported that they used treatment innovations, but reported having no or minimal workshop training and only infrequent use of manuals for manualized approaches.[124] Herbek and others found that counselors were not alone in the underutilization of effective treatment approaches but that all levels of substance abuse treatment staff need more exposure to information about evidence based approaches.[125] Others have also reported that only half of the providers they surveyed knew the effectiveness of pharmacologic treatments. Understanding treatment providers' opinions about the relative effectiveness of any potential treatment is important because these opinions are likely to influence the extent to which interventions are used.[126] Even more importantly, these researchers found that training when it was ongoing and adequately funded, supported the use of evidence based practices.

In a national survey of social workers, less than half of the social workers (43%) reported they screened clients for substance use disorders while 26% endorsed assessing clients with these disorders, and 19% reported providing treatment.[127] When the substance abuse training needs of social workers employed in substance abuse treatment agencies in New England were assessed, Hall and others found that respondents reported considerable need for additional training, especially in assessment, advanced clinical techniques and dual diagnoses.[128]

Another focus of innovation diffusion in substance abuse treatment has been the extent to which innovations are transferred from research models to normal clinical practice with fidelity. The robustness with which innovations are implemented can be reflected in patient outcomes and costs.[129] Fidelity to specific models of interaction can be measured and individual competence in delivery assessed.[130,131] Some recent work has focused on identifying methods to improve this transfer, especially in regards to manualized treatments of interpersonal interaction. Martino and others found that within the context

of a National Institute on Drug Abuse Clinical Trial Network, therapists were able to deliver motivational enhancement therapy or drug counseling as usual, with fidelity following a combination of intensive expert-led workshops and program based clinical supervision and suggested that this model could improve dissemination in community treatment programs.[132] Miller and others suggest that manuals and one time workshops are by themselves ineffective, if not coupled with performance feedback and coaching to improve clinical skills.[133] The New England Addiction Technology Transfer Center has reported positive outcomes in adoption of a specific evidence based practice (contingency management) by community treatment agencies through the use of an organizational change strategy, called Science to Service Laboratory.[134] A number of workforce issues emerged during the policy forums on integration sponsored by SAMHSA and are summarized in the report, *Purchasing Integrated Services for Substance Use Conditions in Health Care Settings*. The following themes emerged: training needed by counselors and other professionals to work in health care settings, fidelity in the application of evidence based practices, especially screening, brief intervention and motivational interviewing for substance use conditions, and for primary care workers in relation to screening and brief intervention and the use of medications for substance use disorders, and the need for cross training for some parts of each workforce. Another key workforce theme was the need to provide specialty substance abuse consultation in a framework that could make it easily usable to the primary care workforce.

Schoenwald and others have suggested that there are critical gaps not only in the knowledge, skills and competencies of the behavioral health workforce, but how work is organized and in the lack of proven strategies for workforce training and support to sustain effective services.[135] Without dramatic action being taken to change the trajectory, the substance abuse treatment workforce is likely to continue to be undermanned, to have uneven preparation and evidence based competencies to meet the demands of future patients and healthcare systems, to be culturally challenged in relating to some types of patients, to be perhaps likely to be perceived as less skilled than their mental health counterparts and with questionable team skills. Moreover counselors specifically are likely to be handicapped by their lack of acceptance of evidence based practices especially related to medication assisted treatment, training about health and disease and familiarity with processes in other health care settings.

Financing Integrated Care: Barriers and Solutions

The current methods of health care financing can be at best cumbersome or at worst a barrier to the provision of integrated care is well documented. [136,137] It is clear that this care and system integration cannot be initiated or sustained without aligned financial incentives; however, evidence about the most effective financing strategies for integration is lacking.[138] While a full review of financing methodologies for integrated care is beyond the scope of this document, some issues and solutions which have been proffered or implemented are highlighted.

Organizations that receive capitated payments such as managed care organizations may have the least barriers to integrated care, as long as no carve out are included. Some

health care organizations such as health maintenance organizations may already be integrated, and fewer reimbursement barriers to integrated care may exist. Organizations who receive a bundled rate may also be less constrained in the delivery of integrated care. Others have identified some purchasing options for increasing the design and rigor of contracting relationships with managed care organizations that could support integrated care. One is to contract with an existing managed care organization to develop and implement care management and coordination programs; incorporating behavioral health expertise such programs could be targeted to persons with specific types of disorders, such as persons with co-occurring mental health and substance use disorders. Going further, some have developed a public-private partnership entity which serve as the at risk care organization; this type of model allows for retention of public control of the care system for the most vulnerable, which facilitating integration.[139]

Clearly, reimbursement must be available for collaboration and consultations, if integrated care is to occur. Some have suggested that reimbursement models for some behavioral health management, within the primary care setting can be developed and in a sense layered on top of existing fee for service or other payment mechanisms. While these models have been predominantly developed for depression,[140] a per member per month payment, with adaptation, arrangement could cover screening and brief intervention activities or care management for persons with substance use disorders. The primary care physician's fee for medical services could remain the same. Medicaid payment innovations, notably in North Carolina and Vermont include paying networks or teams affiliated with patient centered health care homes that help connect patients to needed services and primary care providers to specialists, pharmacists and care providers. Performance based payments are also being used along with other payments to patient centered medical homes. For example, in Pennsylvania, provider practices that meet certain criteria can share in any savings generated.[141] Missouri has changed the definition of rehabilitation services to include care coordination.

Reforming fee-for-service payments may also prove to be a viable approach. For example, in an attempt to provide more standardized payments and incentives for behavioral health services, especially outpatient services, New York adopted a payment system for Ambulatory Payment Groups. This system provides for consistent provider reimbursement and incorporates risk adjustment and intensity of services received. It also requires and pays for better collection of clinical data that can be used for care management activities and care management costs.[142]

In the short term, to the extent the fee-for-service system remains, States will want to review the recommendations of a number of groups regarding same day prohibitions on Medicare and some Medicaid payments for behavioral health and physical health problems, and work with Centers for Medicaid and Medicare (CMS) to change these rules or identify possible valid "work-arounds." Because these regulations initially were related to fraud prevention, providers are extremely reluctant to bill in a way that may place them at risk, so significant outreach to provider and provider billing systems is likely to be required to enhance uptake. Beyond official policy, billing for same day claims may be rejected due to the interpretations of various Medicaid managed

companies or intermediaries who may have their own policies or interpretations. For example, Tennessee is one of 29 states that reimburse providers for separate primary care and behavioral health visit on the same day.[143] This will facilitate coordinated care, while ensuring appropriate payment.

Another barrier to reimbursement relates to the provider of the service. Within the fee for service construct, only certain members of the health care team are able to be reimbursed for certain services in certain settings. Within integrated care, it is the team that is caring for the patient. If health care is to be efficient, i.e. providing the best outcome at the lowest cost, then payment structures need to be evaluated and revised to reflect that desired result. Many have suggested that to become more efficient, all health care workers will have to function at "the top of their license" or competencies for efficiency to be realized. Similarly, as the workforce essential to efficient care coordination evolves and may include recovery coaches, health educators and others, States and other payers will want to ensure that the most efficient workforce models are able to be recognized within payment structures, while maintaining appropriate minimum standards. It is important to recognize that this can be done; while limited to mental health peer support specialists, Tennessee succeeded in having Medicaid reimburse peer support specialists.[144] Connecticut Medicaid will also reimburse certified recovery support specialists, supervised by a licensed clinician for services delivered in two specific programs serving persons with serious mental illness being discharged from nursing homes.[145]

Notably, while CPT and HCPCS reimbursement codes are available for Screening, Brief Intervention, and Referral to Treatment (SBIRT), reimbursement barriers remain. Not all States have authorized Medicaid coverage of SBIRT. As part of its 2010 National Drug Control Strategy, the White House Office of Drug Control policy seeks to expand the adoption and reimbursement through the SBIRT billing codes. As SAMHSA works with the National Governor's Association, the National Association of State Medicaid Directors and the National Association of State Alcohol and Drug Abuse Directors, the fact that reimbursement is allowable only when certain types of clinicians deliver the screening and brief intervention should be addressed. While it is no doubt important that knowledgeable workers provide these services, efficient health care can only be delivered by ensuring that the level of person performing the function is not more qualified (and expensive) than what is needed to ensure quality care.

In addition, even with appropriate codes, settings, and staff, reimbursement is challenged by the lack of universal coverage by major insurers within a region, and the related consequences for medical and hospital billing systems. For example, SBIRT sites even where "codes have been turned on" have not found getting reimbursement to be straightforward or easy. Leadership and collaboration with major industry benefits groups and their consultants and fiscal intermediaries for Medicaid and Medicare, could lead to a national recognition that SBIRT is essential for health and containment of health care costs; universal acceptance would be likely to bring about change in medical billing systems.

Another focus of care integration are Federally Qualified Health Centers (FQHCs). [146] Along with other safety net providers in order to meet the needs of their patients, many FQHCs have evolved to provide a broad array of services. A number of SBIRT demonstration states include FQHCs, and a number of creative projects integrating physical health care and substance abuse treatment within FQHC's have also been identified. Because FQHCs to some extent receive cost reimbursement funding from HRSA, some have suggested that they are one of the best initial targets for fully integrated physical and behavioral health care.

KEY ELEMENTS FOR SUCCESS IN INTEGRATED CARE FOR SUBSTANCE USE CONDITIONS

Ensure that the core behavioral health disciplines have adequate training in the disease of addiction, the nature of substance use conditions and treatment, and how to work in a complex team as part of their basic educational program.

A recent study of mental health professionals in core disciplines (marriage and family therapist, psychiatrists, psychologists, professional counselors, substance abuse counselors, social workers) sought to assess the extent to which mental health professionals were caring for patients with primary or secondary substance abuse and to assess the need for training in substance abuse by mental health professionals.[147] Excluding substance abuse counselors, mental health professionals had a substantial portion of patients who had either a primary or secondary addiction problem. Psychiatrist and psychologists reported the smallest percentages of patients with primary substance use disorders, especially in private practice. Excluding psychiatrists, no more than half of any discipline reported receiving any formal graduate coursework or internship in substance abuse. Almost one third of the substance abuse counselors also reported no formal course work in addiction treatment and it appears that for almost all disciplines, continuing education is the primary mechanism for training about substance abuse.

While certification and continuing education may be able to address some of these needs as a stopgap measure for patients to receive adequate care, these results also support the need for the implementation of a standardized competencies for substance abuse in the basic preparation of the health care workforce. The core knowledge, skills and attitudes necessary have already been developed through a modified consensus process,[148] but the extent to which they have been implemented is unclear. The skills and competencies for working in a team also need to be identified and standardized curricula for all core disciplines need to be developed and articulated with one another to be effective. At the same time these curricula are being enhanced to appropriately encompass patient health conditions and teamwork in a complex system, the potential for expanded roles and new roles to be filled needs to be considered.

Ensure that counselors who are the backbone of the substance abuse treatment workforce have the necessary competencies and are certified to provide high quality care in an integrated health care system

The degree of variation across States in requirements for counselor licensure and certification reinforces the variability seen in basic educational programs. The degree of variation and the frequency of limited or no preparation specific to caring for persons with substance use conditions is such that it is difficult for the public and other health team members to develop clear expectations about the knowledge, skill and competencies of such a worker. While consensus exists on the counselor competencies Embodied in SAMHSA's Technical Assistance Protocol (TAP) No. 21*: Addiction Counseling Competencies: The Knowledge, Skills and Attitudes of Professional Practice,* these competencies have not been universally adopted.

TAP 21 should be reviewed to ensure it contains the necessary counselor competencies to practice in an integrated care setting, including training on teamwork and some basic understanding of substance abuse related medical condition and work undertaken to adopt this set of uniform competencies. In addition, national standards for accreditation of formal addictions education programs and counselor licensure and/or certification consistent with the identified competencies should be implemented. While it is clear that requirements for certification need to be balanced against the need for an adequate workforce, the fact that almost half of the workforce, is not certified, speaks for itself.

Ensure the full adoption and integration of, at minimum, two specific evidenced based practices: 1) screening, brief intervention and referral to treatment in primary care and other health care settings and 2) medication-assisted treatment in both primary care and specialty care settings.

To foster the integration of substance abuse treatment into primary care, in addition to team training, it will be critical that continuing education for those in primary care and the substance abuse treatment field and primary care focus on building competence in two evidence based practices: screening and brief intervention and medication assisted treatment for physicians and other clinicians in primary care settings

Weber has identified four factors that affect the US physician practices regarding buprenorphine and other medications for addiction: these included context, competence, comfort and compensation.[149] But how these will be countered remains yet to be seen. While many studies focus on barriers, we need to better understand what leads to adoption; adaptation of some concepts from implementation research may be useful.[150] Full adoption may only be possible through the use of multiple methods of dissemination including commercial marketing, targeting patients and practitioners, health care settings and systems, communities and the general population.[151] For example, within the context of paying for quality, SBIRT could be marketed to some hospitals as a way to avoid unnecessary readmissions or complications related to unrecognized substance abuse.

Participants in the SAMHSA Policy Forums on Integration endorsed the need for additional training of both primary care and other physicians on both screening and brief interventions and referral and the use of medication assisted treatment for substance abuse. The need for additional training and identification of methods to overcome the resistance of some substance abuse treatment workers to the appropriate role of

medications in treatment cannot be overemphasized. Given that for some patients, medication may make a critical difference in recovery, it is imperative that effective action be taken. Such an undertaking is broad, and the window of opportunity presented as health reform will not last forever. This suggests that both State and Federal governments, as well as health plans and professional organization, need to work collaboratively to develop and implement a plan to insure that patients with substance use conditions are appropriately identified and offered evidence based interventions, include medication assisted treatment.

Substantial training in team competencies will be essential for success in integrated care.

Working in health care teams, is new to most of the existing substance abuse treatment workforce as well as to many practitioners in the current primary care workforce and requires an understanding of what people do across broader teams with a broader mandate of improved health. Within the context of health care teams, teams with better performance include those with good leadership, a clear division of labor, training of team members in their personal roles and in team functioning, and team –supporting policies within the organization. Teams require considerable and ongoing investment, including the development of protocols that define the tasks and those who will perform them, the adoption of team rules for decision-making and communication and some time for non-patient care team meetings.[152]

McCallin warns that it is faulty to assume that health professionals already possess the skills or attributes required for collaborative practice[153]. For current members of the substance abuse treatment workforce, training to work in broader health care team will be a necessity. In complex organizations, teamwork has been identified as an essential component of high-reliability organizations (an organization where the likelihood of error is small but the consequences of error are serious); some argue that health care organizations are high reliability organizations[154]. Knowledge, skills, and attitudes essential for teamwork include: skill in monitoring each other's performance, knowledge of your own and team members task responsibilities, and a positive disposition towards working on a team[155]. One study of health care team effectiveness found that collaboration, conflict resolution, team participation and cohesion are likely to influence staff satisfaction and perceived team effectiveness, while the clinical expertise involved in team decision-making results in improvements in patient care.[156] Effective teamwork among existing health care teams has been shown to improve the quality of care, especially patient safety.[157]

Inter-professional collaboration needs to be represented in the key competencies focused on in the basic training of all types of disciplines, including physicians, nurses, psychologists, social workers, counselors, recovery support specialists and others in the future substance abuse treatment workforce. Attention is beginning to be paid to teaching teamwork in medical and allied health education. Training models which have been tried included joint clinical rotations for advanced nurse practitioner primary care and mental health students,[158] family medicine residents trained using multiple forms of

collaborative practice with specific feedback to residents about their psychosocial skills (Blount), a 45-hour undergraduate curriculum implemented through inter-professional education for the training family medicine, nursing, and social work students and continuing education for professionals through coaching,[159] and integrated training of pediatric residents and psychology fellows[160] to highlight just a few.

While it may be possible to support team-based competencies through changes in the curricula of basic professional education programs, it will be challenging to provide sufficient continuing education for those already practicing to develop the competencies required. Baker, Day and Salas state that "team training must be institutionalized throughout health care and professional training" and perhaps specific adaptations made for health care teams.[161]

At this juncture it should be clear that training the workforce to work in teams will be an important priority for some time to come. Team training outcomes are likely also to be effected by organizational characteristics such as "leadership support, learning climate, and commitment to data-driven change".[162] That also embodies the challenge to health services for patients: how to provide leadership for the improvement of services to patients without stigmatization, how to create in both primary care and substance abuse treatment settings, a climate which uses science to facilitate growth and maturation, and how to create work environments for health professionals, where change is driven by data about patient outcomes rather than what is convenient, comfortable or status quo, for health professionals and the systems in which they work.

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The Four Quadrant Clinical Integration Model for Substance Use Disorders

Quadrant II **High SU Low PH**	**Quadrant IV** **High SU High PH**
Out-stationed medical nurse practitioner/physician with standard screening tools and guidelines or Community PCP SU clinician/case manager w/ responsibility for Coordination w/PCP Specialty outpatient SU treatment including medication assisted therapy Residential SU treatment Crisis/ED based SU interventions Detox/sobering Wellness programming Other community supports	Out-stationed medical nurse practitioner/physician with standard screening tools and guidelines or Community PCP Nurse care manager at SU site SU clinician case manager External care manager Specialty medical surgical Specialty outpatient SU treatment including medication assisted therapy Residential SU treatment Crisis/ED based SU interventions Detox/sobering Medical/surgical inpatient Nursing home/home based care Wellness programming Other community supports
Quadrant I **Low SU Low PH**	**Quadrant III** **Low SU High PH**
PCP with standard screening tools and MH/Su practice guidelines for medications and medication assisted therapy. PCP based BH/Care manager competence in both MH/SU Specialty prescribing consultation Crisis/ED based SU interventions Wellness programming Other community supports	PCP with standard screening tools and MH/Su practice guidelines for medications and medication assisted therapy. PCP based BH/Care manager competence in both MH/SU Specialty medical-surgical based BHC/care manager competent in both MH/SU Specialty prescribing consultation Crisis/ED based SU interventions Medical/surgical inpatient Nursing home/home based care Wellness programming Other community supports

Source: Mauer, B. Substance Use Disorders and the Person Centered Healthcare Home, 2010, Washington, DC: National Council for Community Behavioral Healthcare.