Attachment 4: List of Secondary Data Sets

- **Census 2000 Datasets**

The Decennial Census occurs every 10 years, in years ending in zero, to count the population and housing units for the entire United States. Its primary purpose is to provide the population counts that determine how seats in the U.S. House of Representatives are apportioned. Besides providing the basis for congressional redistricting, Census data are used in many other ways. Since 1975, the Census Bureau has had responsibility to produce small-area population data needed to redraw state legislative and congressional districts. Other important uses of Census data include the distribution of funds for government programs such as Medicaid; planning the right locations for schools, roads, and other public facilities; helping real estate agents and potential residents learn about a neighborhood; and identifying trends over time that can help predict future needs. Most Census data are available for many levels of geography, including states, counties, cities and towns, ZIP codes, census tracts and blocks, and much more.

http://factfinder.census.gov/jsp/saff/SAFFInfo.jsp?geo_id=01000US&_geoContext=01000US&_street=&_county=&_cityTown=&_state=&_zip=&_pageId=sp4_decennial&_submenuId=&_ci_nbr=null

- **NSSATS**

The National Survey of Substance Abuse Treatment Services (N-SSATS) is designed to collect information from all facilities in the United States, both public and private, that provide substance abuse treatment. N-SSATS provides the mechanism for quantifying the dynamic character and composition of the United States substance abuse treatment delivery system. The objectives of N-SSATS are to collect multipurpose data that can be used to assist the Substance Abuse and Mental Health Services Administration (SAMHSA) and state and local governments in assessing the nature and extent of services provided and in forecasting treatment resource requirements, to update SAMHSA's Inventory of Substance Abuse Treatment Services (I-SATS), to analyze general treatment services trends, and to generate the National Directory of Drug and Alcohol Abuse Treatment Programs and its online equivalent, the Substance Abuse Treatment Facility Locator. Data are collected on topics including ownership, services offered (assessment and pre-treatment, pharmacotherapies, testing, transitional, ancillary), detoxification, primary focus (substance abuse, mental health, both, general health, and other), hotline operation, methadone/buprenorphine dispensing, counseling and therapeutic approaches, languages in which treatment is provided, type of treatment provided, number of clients (total and under age 18), number of beds, types of payment accepted, sliding fee scale, special programs offered, facility accreditation and licensure/certification, and managed care agreements.

http://www.icpsr.umich.edu/icpsrweb/SAMHDA/studies/26221/detail

- **SAMSHA Treatment Gap Projection Analysis**

  National Survey on Drug Use and Health (NSDUH), an annual survey of the civilian, is the primary source of statistical information on the use of illegal drugs by the U.S. population. Conducted by the Federal Government since 1971, the survey collects data by administering questionnaires to a representative sample of the population through face-to-face interviews at the respondent's place of residence. The survey is sponsored by the Substance Abuse and Mental Health Services Administration (SAMHSA), U.S. Department of Health and Human Services, and is planned and managed by SAMHSA's Office of Applied Studies (OAS). Data collection and analysis are conducted under contract with RTI International, Research Triangle Park, North Carolina.

  http://www.oas.samhsa.gov/NSDUH/2k7NSDUH/2k7results.cfm#1.1

- **Treatment Episode Data**

  The Treatment Episode Data Set (TEDS) is an administrative data system providing descriptive information about the national flow of admissions to providers of substance abuse treatment. The TEDS is a continuation of the former Client Data System (CDS) that was originally developed by the Alcohol, Drug Abuse, and Mental Health Services Administration (predecessor to SAMHSA) in consultation with representatives of the state substance abuse agencies and appropriate national organizations.

  http://www.icpsr.umich.edu/icpsrweb/SAMHDA/series/56#summary

- **Bureau of Labor datasets such as Current Employment Statistics**

  The Bureau of Labor Statistics (BLS) is a unit of the United States Department of Labor. It is the principal fact-finding agency for the U.S. government in the broad field of labor economics and statistics. The BLS is a governmental statistical agency that collects, processes, analyzes, and disseminates essential statistical data to the American public, the U.S. Congress, other Federal agencies, State and local governments, business, and labor representatives. The BLS also serves as a statistical resource to the Department of Labor. The BLS data must satisfy a number of criteria, including relevance to current social and economic issues, timeliness in reflecting today's rapidly changing economic conditions, accuracy and consistently high statistical quality, and impartiality in both subject matter and presentation. To avoid the appearance of partiality, the dates of major data releases are scheduled more than a year in advance, in coordination with the Office of Management and Budget.

http://www.bls.gov/data/

- **Annapolis Coalition Data**

The Annapolis Coalition, comprised of a broad constituency of stakeholders, was charged by SAMHSA to develop a comprehensive plan addressing the workforce development crisis and issues surrounding recruitment, retention, and training of a prevention and treatment workforce in the mental health and addiction field.

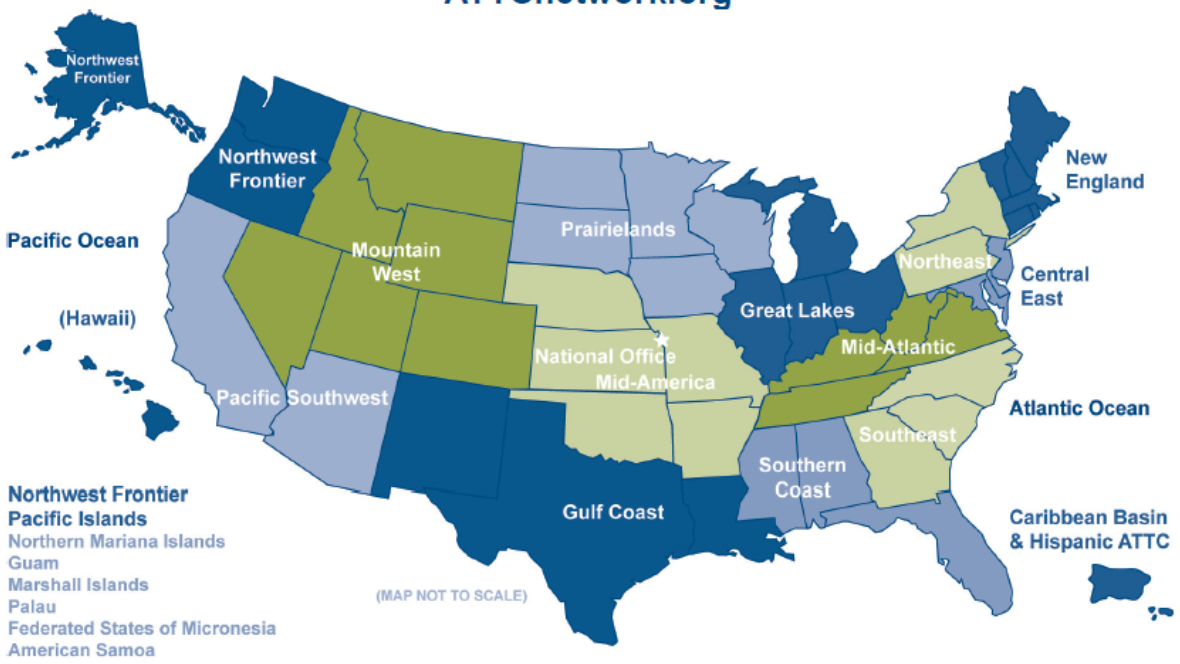
The final plan, *An Action Plan for Behavioral Health Workforce Development*, reviews the current workforce and its environment; outlines a set of general findings; identifies seven core strategic goals; and outlines the objectives and actions necessary to achieve each goal. Now the Coalition is launching a major initiative to disseminate the Action Plan and promote the adoption and adaptation of the recommendations by individuals, organizations, and government agencies across all sectors of this field

http://attcnetwork.org/find/respubs/docs/WorkforceActionPlan.pdf

Attachment 5: List of ATTC Network Regional Centers

The ATTC Network Regional Centers

ATTCnetwork.org



Caribbean Basin & Hispanic ATTC
Puerto Rico, U.S. Virgin Islands
caribbeanbasin@ATTCnetwork.org
(787) 785-4211

Central East ATTC
DE, DC, MD, NJ
centraleast@ATTCnetwork.org
(240) 645-1145

Great Lakes ATTC
IL, IN, MI, OH
greatlakes@ATTCnetwork.org
(312) 996-5574

Gulf Coast ATTC
LA, NM, TX
gulfcoast@ATTCnetwork.org
(512) 232-0616

Mid-America ATTC
AR, KS, MO, NE, OK
midamerica@ATTCnetwork.org
(816) 482-1100

Mid-Atlantic ATTC
KY, TN, VA, WV
midatlantic@ATTCnetwork.org
(804) 828-9910

Mountain West ATTC
CO, ID, MT, NV, UT, WY
mountainwest@ATTCnetwork.org
(775) 784-6265

ATTC of New England
CT, ME, MA, NH, RI, VT
newengland@ATTCnetwork.org
(401) 863-6486

Northeast ATTC
NY, PA
northeast@ATTCnetwork.org
(866) 246.5344
(412) 258-8565

Northwest Frontier ATTC
AK, HI, OR, WA, the Pacific Islands
northwestfrontier@ATTCnetwork.org
(503) 373-1322

Pacific Southwest ATTC
AZ, CA
pacificsouthwest@ATTCnetwork.org
(602) 942-2247 AZ
(310) 267-5408 CA

Prairielands ATTC
IA, MN, ND, SD, WI
prairielands@ATTCnetwork.org
(319) 335-5368

Southeast ATTC
GA, NC, SC
southeast@ATTCnetwork.org
(404) 752-1016

Southern Coast ATTC
AL, FL, MS
southerncoast@ATTCnetwork.org
(850) 222-6731

ATTC National Office
no@ATTCnetwork.org
(816) 235-6888

Attachment 6: ATTC Literature review: Understanding America's Substance Use Disorders Treatment Workforce: A Summary Report

ATTC Unifying science, education and services to transform lives.

Understanding America's Substance Use Disorders Treatment Workforce: A Summary Report

Prepared for:
Addiction Technology Transfer Center (ATTC) National Office

Prepared by:
Deena M. Murphy and Robert L. Hubbard Institute for Community-Based Research, National Development and Research Institutes, Inc.

This report was produced by the Addiction Technology Transfer Center (ATTC) National Office with support from a grant (# TI-013592) from the Substance Abuse and Mental Health Services Administration (SAMHSA) Center for Substance Abuse Treatment (CSAT).

At the time of publication, Eric Broderick, DDS, MPH, served as the Acting SAMHSA Administrator. H. Westley Clark, MD, JD, MPH, served as CSAT Director; Jack B. Stein, LCSW, PhD, served as Director of CSAT's Division of Services Improvement; and Catherine D. Nugent, LCPC, served as the CSAT Project Officer.

Acknowledgements

This report is the first task of a subcontract from the Addiction Technology Transfer Center (ATTC) National Office, funded by the Substance Abuse & Mental Health Administration's (SAMHSA) Center for Substance Abuse Treatment (CSAT), to the Institute for Community-Based Research, National Development and Research Institutes, Inc. (NDRI). The next step will be a set of targeted stakeholder discussions, followed by the development of a national survey instrument that will aid in the systematic collection of data on the substance use disorders treatment workforce. Robert Hubbard, Director of the Institute for Community -Based Research, and Deena Murphy, Principal Research Associate, were the lead staff on this project.

Prior to the writing of the report, a panel of experts in the substance use disorders treatment field met in April, 2008 at the SAMHSA Building in Rockville, MD. The expert panel offered insight and wisdom on how to move the National Survey forward. Their suggestions helped spark the idea for the development of this report. The members of the expert panel were as follows:

Dr. Anthony Floyd, University of Washington/Alcohol & Drug Abuse Institute Dr. Thomas Hilton, National Institute on Drug Abuse Dr. Robert Hubbard, National Development & Research Institutes, Inc. Deann Jepson, ATTC National Office Mary Beth Johnson, ATTC National Office Dr. Hannah Knudsen, University of Kentucky Laurie Krom, ATTC National Office Cathy Nugent, Center for Substance Abuse Treatment Nancy Roget, Mountain West ATTC Dr. Michael Shafer, Pacific Southwest ATTC Dr. Anne Helene Skinstad, Prairielands ATTC Flo Stein, Department of Health and Human Services Dr. Jack Stein, Center for Substance Abuse Treatment
Aaron Williams, Central East ATTC

In addition, Dr. Robert Atanda, Center for Substance Abuse Treatment, facilitated the meeting.

Introduction

Purpose of report

The purpose of this summary report is to gain a current perspective on the substance use disorders treatment field's workforce. This report will identify key resources which provide information relevant to three strategic research questions:

1 What are the basic demographics of the workforce?
2 What are the anticipated workforce development needs for 2010-2015?
3 What are the common strategies & methodologies to prepare, retain and maintain the workforce?

A review of these key resources should highlight gaps in current knowledge related to the three research questions in order to inform the agenda and content of the targeted stakeholder discussions in addition to aiding the development of the survey instrument. Consequently the review is focused primarily on those issues that affect decisions on the content of the proposed director survey.

Methodology

This report utilized all the workforce materials from a variety of sources with a focus on 2003-2008. This included surveys and reports from the Addiction Technology Transfer Center (ATTC) Network in addition to government-funded reports, studies, and white papers from myriad professional groups and coalitions.

A recent literature review (2003-2008) relevant to workforce issues in the substance use disorders treatment field was also conducted. Initially, this included a computerized bibliographic search of databases including EBSCO, LexisNexis Academic, MEDLINE, Web of Science (Social Sciences Citation Index), PubMed and PsycINFO.

While the workforce literature is clearly growing due to a renewed focus by SAMHSA/CSAT, there is still a dearth of standardized studies on substance use disorders treatment agencies. The workforce materials currently in existence demonstrate inconsistent methodologies, poor response rates, and lack the scope necessary to draw conclusions and/or comparisons. Consequently, this report will make every attempt to reflect the current information available with the caveat that this information has limitations which should be addressed in future workforce studies.

Report layout

Based on a review of the literature and feedback from the ATTC National Office, this report is divided into three sub-sections relevant to the three key research questions. Each sub-section will emphasize the findings (what is known), the limitations (gaps in our current knowledge), and recommendations or issues for further discussion.

What are the basic demographics of the workforce?

What is known?

The substance use disorders workforce is diverse in discipline and setting

There is great variation in the numbers of substance use disorders treatment staff. Conservative data estimates suggest that the substance use disorders treatment workforce is comprised of more than 67,000 individuals from myriad disciplines including health, criminal justice, substance use disorders treatment, mental health, social services, and recovery support advocates (Harwood, 2002). Data presented by Dr. H. Westley Clark at the Northeast ATTC Summit on workforce development revealed that the substance use disorders treatment workforce is comprised of 135,000 full -time employees, 45,000 part-time employees, and 22,000 contract employees (Northeast ATTC, 2004). According to the 2003 Center for Substance Abuse Treatment (CSAT) Environmental Scan, the substance use disorders treatment workforce was estimated at 135,000 full-time staff; 45,000 part-time staff; and 22,300 contracted staff. Seventeen percent of medical staff at substance use disorders treatment facilities worked full time, 31% part time, and 47% contracted (the status of 5% was unknown). In 2003, 47% of administrative/nonclinical substance use disorders staff were full time, 43% part time, and 10% contracted. These individuals work in a variety of settings including outpatient, residential, medical, detoxification, correctional, and a variety of specialty service and community settings.

The workforce is older, white, and predominantly female

Data from an environmental scan conducted by Kaplan (2003) describes the substance use disorders workforce as averaging 45 -50 years old, 70-90 percent non-Hispanic whites, and over 50 percent female. A 2003 CSAT study (Mulvey, Hubbard, & Hayashi, 2003) surveyed 3,267 Single State Agency (SSA) Directors, facility directors, clinical supervisors, and program counselors and found that most of the substance use disorders workforce are white (85%), 40 -55 years old (60%), and slightly more are female (50.5%). Two studies focused on one region (Northwest) or one state (Kentucky) found differences between management and direct service staff, with directors being more frequently male, but more information is needed nationally to obtain an accurate picture (RMC 2003a; RMC 2003b).

The workforce demographics do not reflect the treatment population

The majority of treatment professionals are white, female, and 45-50 years old. These workforce demographics are in contrast to the treatment population, who are predominantly between the ages of 25-44, are 60 percent non-Hispanic whites, and over 70 percent male (TEDS, 2007).

The workforce is well-educated, but exact data is unclear

There are significant variations in the reported education levels of the workforce. What is agreed upon is that most substance use disorders programs do not have full -time staff with medical degrees or other advanced graduate degrees.

Previous research indicated that 60 to 80% of direct -service staff have at least a bachelor 's degree, and almost 50% have a master's degree. Multiple studies support that approximately 80 percent of the workforce hold a bachelor's degree (Johnson et al., 2002; Knudsen et al., 2003; Mulvey et al., 2003; RMC 2003a). In contrast, two ATTC Regional Centers, the ATTC of New England and the Northwest Frontier ATTC, reported only 60 percent of staff having bachelor's degrees (ATTC of New England; RMC 2003a; Gallon et al., 2003). In terms of graduate degrees, Harwood (2002) reports that 53 percent of direct service staff holds master's degrees, Gallon et al. (2003) finds 57 percent of directors have graduate degrees, and Mulvey et al. (2003) found that 49 percent of staff possessed master's degrees, and 7.4 percent held doctoral degrees.

The 2003 Center for Substance Abuse Treatment Environmental Scan (Kaplan, 2003), disaggregates this into full -time and part-time staff. Among the overall staff, 17% of full-time staff, 17% of part -time staff, and 32% of contracted staff had graduate degrees. Among the administrative/nonclinical staff, 68% had bachelor 's degrees and 77% had master's degrees. Twenty-nine percent of full-time staff had bachelor's degrees or no degrees, 22% of part-time staff, and 11% of contracted staff.

The CSAT scan found that most academic education occurred at the community college level, with course and program quality highly variable. No accreditation standards exist for training in the substance use disorders field. Most training was didactic with little to no management or leadership development programs available. Whereas most staff (90%) attends training annually, little is known about the quality of in -service education, clinical supervision, or academic courses in substance use disorders

Turnover rates are high, but professionals seem to stay in the substance use disorders field
In terms of retention of substance use disorders treatment staff, Harwood (2002) notes that 70 percent of substance use disorders professionals have worked with their current employer for five years or less. Mulvey et al. (2003) found that 62 percent of the substance use disorders treatment professionals had worked in the field for more than 10 years, but that 51 percent had worked in their current position for less than five years. McLellan, Carise, & Kleber (2003) found that 54 percent of treatment program directors had been in their position for less than one year and estimated the counselor turnover rate at 50 percent. In contrast, research using the University of Georgia National Treatment Center Study data indicates an average turnover rate of 18.5 percent among counselors (Knudsen, Johnson, & Roman, 2003) and 25 percent across all staff at substance use disorders agencies (Gallon, Gabriel, & Knudsen, 2003). While varying from 20-50 percent, this rate is significantly higher than the national average of 11 percent across all occupations and exceeds the annual turnover rates for both teachers (13%) and nurses (12%), occupations traditionally known to have high turnover rates (Knudsen et al., 2003; US DHHS, 2007).

Salaries for substance use disorders professionals are low and impact retention rates

Studies of substance use disorders treatment professionals' income indicate that median salaries for substance use disorders staff are low and that increasing salary is a prevalent recommendation for retaining staff (Knudsen & Gabriel, 2003; U.S. Department of Labor, 2000). According to statistics from the U.S. Department of Labor in 2000, the median income for addictions treatment counselors was $28,510 and the mean income was $30,100. A survey of counselors further found that 30 percent had no medical coverage, 40 percent had no dental coverage, and 55 percent were not covered for substance use or mental health services (Galfano, 2004; US DHHS, 2007).

In the CSAT scan (Kaplan, 2003), average starting salaries in the substance use disorders field are in the low $30,000s. The majority of new counselors' salaries range from $15,000 to $34,000. The majority of agency directors 'salaries range from $40,000 to $75,000. Higher salaries are associated with having a graduate degree.

In a number of studies that looked at retention, a major factor contributing to retention problems was low salary (RMC 2003a; RMC 2003a; Gallon et al 2003; Lewin -VHI 1994; NAADAC 2003; Knudsen, Johnson & Roman 2003). In focus groups conducted throughout New York State, salary was identified by the eleven workforce development focus groups as the single most important issue for staff recruitment and retention (OASAS, 2002).

Limitations of current data available: Further questions

How accurately do the findings reflect the state of the field?

As the workforce survey study table shows (Appendix), there is significant variability and major discrepancies in the response rates for various surveys. If those programs and staff more likely to respond surveys are not representative of the true population, the demographic statements may be misleading. A further concern is the lack of data that differentiates key differences in treatment modalities, urban versus rural areas and key organizational characteristics such as community based versus national, private versus public and fee for service versus case rate reimbursement. It would appear likely that many of the demographic results may vary greatly across these key domains.

How does turnover in an agency correlate with turnover in the field?

While we understand that there is a high turnover among substance use disorders professionals, it is unclear whether they are leaving the field or simply transferring between agencies to secure better positions, salaries, professional development opportunities, or benefits. A report by Light (2003) suggested that 28 percent of the workforce report that their best-qualified co-workers leave within two years or less. What is unknown is whether they are drawn to substance use disorders agencies with better professional development opportunities or better benefits packages or are leaving the field entirely.

How do turnover rates differ by age and what are the implications of this?
One area to pay particular attention to are the turnover rates by age category, especially given the "graying" of the substance use disorders treatment workforce. An Annie E. Casey Foundation report (2002) found that 30 percent of 18-35 year olds working in the human services field five years or less planned to leave within two years. This implies there is a national need to address or understand the reasons why younger staff may be leaving the workforce.

Recommendations

Standardize organizational definitions and improve response rates
Future survey research needs to ensure a standardized framework is provided for identifying organizations and ensuring response rates are adequate to provide empirical support for any findings. Some of the earlier ATTC surveys have had response rates of 17% (Florida, 2004), while others ranged upwards to 94% (Puerto Rico, 2002), and others did not disclose response rates (see the Appendix for brief information about the workforce surveys). Obtaining a representative sample of substance use disorders treatment organizations across the U.S. is essential if we are to present a complete and accurate picture of the substance use disorders treatment workforce. One issue which could be raised in the focus groups could revolve around the appropriate survey length. What is a reasonable amount of time to expect a substance use disorder treatment organization director to spend completing this survey? The previous survey was 25 pages and it would be important to assess whether this factor impacted response rates.

Include standardized individual and organizational demographics in addition to retention indicators
Demographic questions should include sex, race/ethnicity, organizational role, years of experience, years with current organization, education level, formal education in substance use disorders (certification), percentage in recovery, and certification with accredited board. Salary, work satisfaction, and intention to remain in the field could be included as indicators of retention. It is also critical to develop these demographic indicators in ways that provide practical administrative utility. We think estimates should be presented at a minimum by treatment modality, by geographic location (such as urban/rural), and major organizational characteristics (such as size). Including these distinctions (treatment modality, geographic location, and major organizational characteristics) will allow the ATTC Network to identify differential impacts of such issues as staff turnover, workforce aging, and salaries.

What are the anticipated workforce development needs for 2010-2015?

What is known?

There is insufficient treatment capacity or workforce to meet current and future demands
Data presented at the Northeast ATTC Summit on workforce development (Northeast ATTC, 2004) suggested that the mental and behavioral health workforce needs will increase by 27 percent by 2010 with 5,000 new counselors needed annually to compensate for net replacement and growth. A 2003 report by NASADAD indicates that by 2010 there will be a 35 percent increase in the need for addictions professions and licensed treatment staff with graduate-level degrees. Statistics from the Bureau of Labor estimate that there will be 3,000 unfilled positions for addictions counselors by 2010 (Landis et al., 2002). Demographic changes, especially in relation to the aging of the current workforce, suggest that this staffing shortage will worsen from 2010 to 2015.

Myriad trends will impact future recruitment and retention of the workforce
Key trends impacting the workforce identified by the U.S. DHHS report to Congress (2007) include:

- Insufficient workforce/treatment capacity to meet demand;
- The changing profile of those needing services;
- A shift to increased public financing of treatment;
- Challenges related to the adoption of best practices;
- Increased utilization of medications in treatment;
- A movement toward a recovery management model of care;
- Provision of services in generalist and medical settings;
- Use of performance and patient outcome measures; and
- Discrimination associated with addictions.

Individuals entering treatment are increasingly presenting more complex and severe substance use disorders (and mental health) issues. The National Survey of Substance Abuse Treatment Services (N-SSATS, 2004) data shows an increasing number of injecting drug users, narcotic prescription, and methamphetamine users. From 1991 to 2001, private insurance declined from 24 to 13 percent of substance use disorders expenditure (Mark et al., 2005). Private health plan coverage for substance use disorders treatment continues to decline in terms of fixed dollars and as a percentage of the overall health plan coverage, resulting in increased burdens on publicly funded treatment systems. Consequently, clinicians and programs are dealing with a more severely impaired population, being referred earlier in the progression of their disorder, with less financial compensation. Addressing these challenges and the key trends outlined by the DHHS requires a workforce with a more diverse skill set at the executive, management, and practitioner levels. This further emphasizes the need for stronger alliances between substance use disorders and other allied professionals to ensure there is sufficient experience in areas such

as brief treatment, medication assisted therapies, and co-occurring disorders.

Limitations of current data available: Further questions

What are annual staff turnover rates and staffing needs?

It is clear that substance use disorders treatment programs are struggling with recruiting and retaining staff, but we have limited insights into turnover rates within each substance use disorder treatment organization. If we had access to previous year's turnover rates, it would allow the ATTC Network to look closer at the organizational factors that may be impacting annual turnover. In addition, it is critical to understand how many staff members are needed or how many staff positions are currently vacant within each organization. Data could then be aggregated by modality, by urban/rural, and major organizational characteristics to assess if these factors impact turnover and recruitment needs.

How are client demographics changing?

The N-SSATS (2004) and DHHS (2007) data and reports show that client demographics are changing and more complex and severe substance use disorder and mental health issues are being presented. What is not known is how these demographics differ by treatment modality or by geographic location. If it is critical for more severe clients to be engaged in a network of allied professionals, are there differences in urban and rural responses to this based on the existing program infrastructure and resources?

What is the relationship between education, training, and treatment outcomes?

The current research provides some descriptive demographic information surrounding the education and training of substance use disorders treatment staff, but previous workforce surveys have included no data on treatment outcomes. Depending on modality, treatment outcomes data could include items such as percentage of clients retained in treatment over 90 days or percentage completing treatment. While there is some research that suggests there is a relationship between higher levels of education and increased turnover, it is unclear whether this impacts treatment outcomes.

Recommendations

Include annual turnover rates and current staffing needs

To ensure the ATTC Network can assess what factors are impacting turnover and recruitment issues, it will be critical to have an accurate assessment of annual turnover rates and staffing needs within each organization. The Director's survey should include items related to previous year's turnover in addition to current staffing needs and open positions. This will allow the national study to disaggregate data by treatment modality, by geographic location (rural/urban), or by other major organizational factors (such as size) to determine whether there are specific staffing issues related to these groupings. This will provide baseline data to help plan future interventions related to recruitment and retention.

Include questions related to changing client demographics

To understand how client demographics are changing, any interviews or focus groups conducted should also ensure that open-ended questions related to client treatment needs are included to assess the need to include them in the future survey. It would be useful to assess whether there are regional as well as urban/rural differences in client demographics and how this relates to provision of services in addition to utilization of medications.

Assess the possibility of including treatment outcomes

While treatment outcomes will differ in definition across various treatment modalities, focus groups and interviews could assess the potential of including some treatment outcome items in the survey. For outpatient programs, this could include the percentage of clients retained in treatment. For short-term residential, this could include the percentage of clients completing treatment. These treatment outcome measures will be useful in allowing the ATTC Network to look at the impact of factors such as staff turnover, organizational characteristics, and client demographics.

What are the common strategies & methodologies to prepare, retain and maintain the workforce?

What is known?

There is a general national consensus around workforce development recommendations
Recommendations for preparing, retaining and maintaining the workforce come from three main sources: the SAMHSA/CSAT 2006 Strengthening Professional Identity report (Abt Associates, 2006), the 2003 CSAT Workforce Environmental Scan (Kaplan, 2003), and the 2007 Annapolis Coalition deliberations. The Strengthening Professional Identity Report was built upon the Environmental Scan Report (Kaplan, 2003) and involves a set of recommendations developed through nine stakeholder meetings involving 128 individuals. SAMHSA and the Annapolis Coalition facilitated a strategic planning process with eighteen national experts to develop "An Action Plan for Behavioral Health Workforce Development," which included a set of recommendations specific to substance use disorders treatment that incorporated strategies related to preparing, retaining, and maintaining the workforce (Annapolis Coalition, 2007). While there are differences between each report, there is an overall consensus around recommendations for workforce development, but limited specifics on strategies and methodologies to prepare, recruit, retain, and professionally maintain the substance use disorders treatment workforce. Strategies and methodologies that are referenced include those relevant to professional development, infrastructure development, leadership and management practices, recruitment and retention processes, and an improved research and evaluation focus.

Professional development strategies are key to retaining and maintaining a strong workforce
All three reports emphasized that professional development strategies are key to retaining and maintaining a strong workforce. One key focus highlighted in the Annapolis Coalition/SAMHSA report was the importance of *expanding peer recovery support services to meet increasing education and credentialing requirements*. More than 50 percent of people providing direct treatment services are in recovery (CSAT National Treatment Plan Initiative, DHHS 2000). Recent and ongoing changes in education and credentialing requirements are creating challenges to maintain the role of people in recovery in the behavioral health workforce. In addition, there is limited evaluation of peer recovery support services to assess the most effective approaches. Consequently, one important strategy is to ensure there is a professional development system in place to retain the peer recovery system and increase the effectiveness of these peer recovery support service programs.

There is a need to develop infrastructure around substance use disorder treatment
Improving infrastructure development around substance use disorders led to a number of different recommendations. CSAT infrastructure development priorities revolved around four key recommendations: to create career paths and core competencies, establish a national program for service and loan repayment, foster network development and provide technical assistance to improve the use of information technology. In addition, CSAT placed great

emphasis on addictions education and accreditation priorities offering six recommendations which included: training on addiction in educational curricula, using national core competencies, developing national accreditation standards, encouraging licensing boards to include 10 percent addiction content in exams, and supporting academic programs in minority serving institutions including Historically Black Colleges and Universities. SAMHSA and the Annapolis Coalition further emphasized the importance of buildin*g* th*e* capacit*y* o*f* communities t*o* mor*e* effectivel*y* identif*y* substanc*e* us*e* disorder*s* treatmen*t* need*s* an*d* understan*d* substanc*e* us*e* disorders.

Substance use disorders indicators cut across multiple data sets and public records, including arrest records, domestic violence, child abuse, hospitalizations, and household surveys, yet most professionals in the health field are insufficiently trained to recognize or assess key substance use disorders indicators. This lack of understanding of both the disease of addiction and treatment options leaves the substance use disorders treatment workforce in a very isolated position in the community, which could be one further reason for the high rates of turnover and difficulties in recruitment of qualified, direct service providers. The suggested strategy for dealing with this is for the substance use disorders workforce to network and build partnerships with other systems and professions, though there is limited information as to how this could be achieved.

Leadership and management practices can reduce turnover

The Strengthening Professional Identity report (2006) focused on two key recommendations related to leadership and management priorities: to develop, deliver and sustain training for supervisors and to develop, deliver and sustain management development initiatives. According to the CSAT scan (Kaplan, 2003), management practices that can reduce turnover include: improved, ongoing clinical supervision, greater job autonomy, better communication between management and staff, improved recognition and reward systems for performance, paperwork assistance and improved training programs. This stress on clinical supervision is supported by Culbreth (1999), who found that counselors want to be supervised by a clinical supervisor who is certified as an alcohol and drug counselor, has at least a master's degree or has a national counselor certification, and considers him/herself a substance use disorders counselor. Counselors preferred proactive supervision that included goal -setting and specific interventions.

The initial CSAT scan offered a number of recommendations based on the findings of the scan, including the following: (1) develop career paths for all staff levels to encourage personnel to see substance use disorders counseling as a profession, (2) develop executive management curricula to train the next generation of supervisors, managers, and leaders (3) focus on clinical supervisors, using curricula that include clinical as well as management/supervision training, (4) conduct a study on staff turnover's costs to agencies and the substance use disorders treatment system (5) establish an accreditation process for substance use disorders training and academic programs (6) establish standards for in -service training and (7) develop standard guidelines for internships.

The current substance use disorders workforce showed some consensus around the top four things that an agency could do to promote retention: more frequent salary increases, more individual recognition and appreciation, reduction of or assistance with the amount of paperwork, and more and improved ongoing training (RMC 2003a). Other studies pointed to enhancing career growth opportunities, providing better benefits, automatic COLA increases, and tiered compensation levels and bonuses for staff when they become credentialed (RMC 2003b; OASAS, 2002). The current substance use disorders workforce further indicated the most frequently cited sources of satisfaction, which included: having a role as a change agent, client commitment to treatment, one-on-one interactions with clients and agency coworkers, and personal growth opportunities (RMC 2003a, RMC 2003b).

There needs to be a renewed focus on recruitment and retention processes

The Strengthening Professional Identity report (2006) advocated for a multi-level systematic approach to recruitment and retention strategies at the federal, state, and local levels. Retirement, career advancement, administrative burden, low compensation, and job dissatisfaction contribute to high levels of turnover. There are insufficient substance use disorders professionals graduating to keep up with annual turnover, *especially in rural areas*. In addition, the workforce is not racially and ethically representative of the treatment population. As salary and benefits for substance use disorders treatment work are lower than mental health and nursing (U.S. Department of Labor, 2000), salary strategies such as loan forgiveness, tuition assistance, salary and compensation research, and career advancement options could be promoted. Strategies specific to recruiting racially and ethnically diverse staff in addition to strategies that relate to the needs of rural communities are needed to recruit, train, and support substance use disorders professionals.

The Strengthening Professional Identity report (2006) offered four key recruitment priorities: to expand recruitment for addictions medicine, improve recruitment in educational institutions particularly for under-represented groups, employ marketing strategies to recruit staff, and reduce the stigma of the field. These priorities were supported by the Annapolis Coalition/SAMHSA (2007) report, which stipulated the importance of leadership development, with the understanding that the "graying" of the substance use disorders leadership emphasizes the need for training stipend and leadership development initiatives that will support new entry into the field and sustain professional development. Annapolis Coalition/SAMHSA advocated for an improv*e*d trainin*g* an*d* educatio*n* proces*s* t*o* ensur*e* i*t* i*s* relevant, effective, an*d* accessible. It is critical to establish a standardized education and training process that will reflect current best educational practices for preparing and updating addiction professionals and advocates. These model competency -based addiction standards should be developed with input from clinicians, researchers, educators, and advocates and become the guide for the development of accreditation standards. In addition, loan-forgiveness and recruitment programs should be targeted to much -needed rural and race/ethnicity populations. All three reports focus on the need to prioritize the identification and dissemination of best

practices that address retention within the workforce.

Factors impacting retention include salary, tenure, education, and workload

Knudsen, Johnson & Roman (2003) examined the relationships between management practices, organizational commitment, and turnover intention among substance use disorders treatment counselors in privately funded agencies. The survey sampled 1,074 counselors from 345 randomly selected privately funded treatment centers. They found that older counselors and those with longer tenure had significantly higher commitment than younger and less tenured staff. Increased education was negatively associated with commitment, meaning that counselors with greater human capital resources (educated and certified) reported greater turnover intention. Salary was negatively associated with intention to quit; that is, higher salary resulted in less intention to quit.

In a number of studies, low salaries have repeatedly been cited as the major cause of staff turnover and the biggest issue in staff recruitment and retention (RMC 2003a; RMC 2003b; Gallon et al 2003; Lewin-VHI 1994; NAADAC 2003; Knudsen, Johnson & Roman 2003). In focus groups conducted throughout New York State, salary was identified by the eleven workforce development focus groups as the single most important issue for staff recruitment and retention (OASAS, 2002). In addition to salaries, staff reported that documentation and paperwork took them away from working with clients (McLellan et al 2003; OASAS 2002; RMC 2003a; RMC 2003b). Other barriers cited were long hours and large caseloads (RMC 2003b.)

Early substance use disorders treatment staff show lower levels of job satisfaction

Early career members indicated the greatest dissatisfaction with salary, workload and the amount of time they have for their clients (NAADAC 2003). Regardless of dissatisfaction with salary or workload and the finding that only about half of early career members see opportunities for career advancement in the substance use disorders field, more than 86 percent overall indicated that it is likely or very likely that they will pursue a long-term career in the field. This finding is consistent across all age categories. However, 21 percent of those with less than two years experience indicated that it was unlikely or very unlikely that they will continue in this career choice, indicating that *there is a need to enhance job satisfaction and retention for very new addiction counselors* (NAADAC 2003).

There is a dearth of research and evaluation data to inform workforce development efforts

Both the SAMHSA/CSAT (CSAT, 2003; Abt Associates, 2006) and the Annapolis Coalition/SAMHSA (2007) reports denoted the importance of an improved research and evaluation focus that will enhance the infrastructure for workforce development efforts. These reports stipulated the lack of reliable data to inform workforce practices. There is no coordinated national resource center to provide leadership in infrastructure development. The recommendation is that SAMHSA establish a national Workforce Development Office to oversee ongoing infrastructure development. A key component of this process would be the need to upgrade reimbursement rates for addiction treatment and recovery services, which are currently not based on research-based provider costs and do not cover the actual costs of these

services. This situation results in treatment services being underfunded, staff being poorly compensated, a lack of career advancement opportunities, and ultimately, barriers to the ongoing development of a professional workforce that produces improved outcomes for clients.

Both the Annapolis Coalition/SAMHSA (2007) and The Strengthening Professional Identity report (2006) reports critiqued the lack of data to inform workforce practices and initiatives and concluded it is imperative to build a strong workforce research and evaluation base, especially in relation to the effectiveness of practices that enable recruitment, retention, education, and training of qualified professionals. This research agenda should recognize that co -occurring mental and substance use disorders are common and place emphasis on the adoption of empirically tested cost -effective practices. The Strengthening Professional Identity report (2006) recommended three general areas of study: to examine relationships among education, training and treatment outcomes; investigate clinician and patient/client characteristics related to outcomes; and assess clinician characteristics that enhance therapeutic alliance. The Annapolis Coalition/SAMHSA report (2007) identified some key research questions that could be included as research priorities:

a. What is the importance of supervisory observation, feedback, and coaching to the successful adoption of empirically supported treatment interventions?
b. What is the relationship between level and type of service, provider education and training and behavioral health treatment outcomes?
c. How do clinician and patient cultural and demographic characteristics affect treatment outcomes?
d. What clinician characteristics enhance the therapeutic alliance and lead to improved outcomes?
e. What is the impact of reimbursement rates, salary levels, and working conditions on treatment providers and how do those conditions affect client care?

Limitations of current data available: Further questions

What are the best practices related to workforce development and how can these be implemented effectively?

One key gap in our understanding of preparation, recruitment, retention, and maintenance of the workforce relates to the limited knowledge around identifying and disseminating best practices. While much of the literature makes recommendations and offers strategies to improve preparation, recruitment, retention, and maintenance, more information is needed

related to evidence-based initiatives that have positively impacted workforce development. A number of researchers have started to identify some key strategies related to workforce retention including the importance of professional development, direct supervision, performance recognition, in -service training, and organizational development (Gallon et al., 2003; Knudsen et al., 2003; Knudsen et al., 2006; Knudsen et al., 2008), yet little is known about the practical implementation of these strategies and what is most impactful. Consequently, there is no list of "best practices" related to preparation, recruitment, retention, and maintenance of the workforce. Strategies and methodologies referenced include those relevant to professional development, infrastructure development, leadership and management practices, recruitment and retention processes, and an improved research and evaluation focus, yet there is limited consensus surrounding how these are being or could be implemented. It should be noted that ongoing work from The Annapolis Coalition may be moving some of this work forward.

What are states currently doing to prepare, recruit, retain, and maintain the workforce?
While there are sporadic references to ongoing workforce development efforts across the U.S., it is unclear whether states are following a clear workforce development plan based on previous research or how their approach is being informed. As this will have a significant impact on substance use disorder treatment organizations, it would be useful to have a clear roadmap of what approaches states are taking in regards to workforce development issues. This would further be informed by understanding the relationship between state reimbursement rates and workforce development issues.

Recommendations

Include questions related to ongoing professional development efforts
Professional development questions should include questions relative to managers and supervisors expectations for staff education and training, concerns over recruitment and retention, salary and benefits, job security, and opportunities for advancement. Financial support for professional development should be identified.

Include questions related to ongoing leadership and management efforts
To understand how organizations are implementing leadership and management practices to improve workforce development, questions in the survey should include approaches toward clinical supervision, job autonomy, training, standards, communication channels between management and staff, performance and reward systems, and paperwork. Specific questions should also be included related to approaches to retention of entry -level or early career professionals.

Use the SAMHSA/CSAT recommendations to create survey items

To address the preparation, recruitment, retention, and maintenance of the workforce, we believe it is essential to follow the mandates of the CSAT Strengthening Professional Identity and the SAMHSA/Annapolis Coalition recommendations. In general, both appear to have major consistencies. The recommendations suggest specific topics that might be addressed in the survey. The remaining task for the survey development is the creation of useful items that provide information on these important areas. Through the discussions with experts and stakeholders a major effort will be given to developing, prioritizing and refining questions that could be included in the survey.

Assess the state responses to substance use disorder treatment workforce development

Targeted stakeholder discussions should include questions related to how states are approaching substance use disorder treatment workforce development to assess which states are following a comprehensive action plan and how effective their methods have been to date. This could include questions related to ongoing data collection and understanding of current workforce needs in relation to substance use disorder treatment staff. The assumption is that there may be fragmented, uncoordinated efforts to improve workforce development both within and across states. While states and organizations need to follow workforce development plans that meet their needs, it is incumbent on the field to catalog these efforts and ensure effective approaches can be replicated.

Summary

The objectives of the national substance use disorders treatment workforce survey are to understand the demographics of the current workforce and how this differs across regions, in addition to exploring issues related to workforce development: 1. Staff training, recruitment and retention; 2. Professional development; and 3. Support for strategies and methodologies to prepare, recruit, retain, and sustain the workforce. This proposed survey will be used to address some of the limitations highlighted and to gather data to guide the formation of effective policies and strategies aimed at successfully recruiting and retaining a sufficient number of adequately prepared providers who are able to respond to the growing needs of those affected by substance use problems and disorders.

Summary of the basic demographics of the workforce

What is known?

- The substance use disorders workforce is diverse in discipline and setting
- The workforce is older, white, and predominantly female
- The workforce demographics do not reflect the treatment population
- The workforce is well-educated, though exact data is unclear
- Turnover rates are high, but professionals seem to stay in the substance use disorders field
- Salaries for substance use disorders professionals are low and impact retention rates

Further questions?

- How accurately do the findings reflect the state of the field?
- How does turnover in an agency correlate with turnover in the field?
- How do turnover rates differ by age and what are the implications of this?

Recommendations

- Standardize organizational definitions and improve response rates
- Include standardized individual and organizational demographics in addition to retention indicators

Summary of the anticipated workforce development needs for 2010-2015

What is known?

- There is insufficient treatment capacity to workforce to meet current and future demands
- Myriad trends will impact future recruitment and retention of the workforce

Further questions?

- What are annual staff turnover rates and staffing needs?
- How are client demographics changing?
- What is the relationship between education, training, and treatment outcomes?

Recommendations

- Include annual turnover rates and current staffing needs
- Include questions related to changing client demographics
- Assess the possibility of including treatment outcomes

Summary of the common strategies and methodologies to prepare, retain, and maintain the workforce

What is known?

- There is a general national consensus around workforce development recommendations
- Professional development strategies are key to retaining and maintaining a strong workforce
- There is a need to develop infrastructure around substance use disorder treatment
- Leadership and management practices can reduce turnover
- There needs to be a renewed focus on recruitment and retention processes
- Factors impacting retention include salary, tenure, education, and workload
- Early substance use disorders treatment staff show lower levels of job satisfaction
- There is a dearth of research and evaluation data to inform workforce development efforts

Further questions?

- What are the best practices related to workforce development and how can these be implemented effectively?
- What are states currently doing to prepare, recruit, retain, and maintain the workforce?

Recommendations

- Include questions related to ongoing professional development efforts
- Include questions related to ongoing leadership and management efforts
- Use the SAMHSA/CSAT recommendations to create survey items
- Assess the state responses to substance use disorder treatment workforce development

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Appendix

Work force survey methods

In preparation of the review, we examined the workforce surveys that have been completed. Table 1 shows the year in which the survey was conducted. We also checked the sampling frame reported in the survey against the National Survey of Substance Abuse Treatment Services for the same year. We also attempted to determine if the data was based on a random probability sample (R) or a census of agencies (C). The size of the sample was based on the reported number of agencies included. The response number was the number of agency director reports included in the data base. The rate was a simple calculation of the number of agency directors responding divided by the total number of agencies in the sample. Some studies also included staff surveys. In the final column we recorded the number of agencies with either a staff or a director survey. Question marks (???) indicate it was not possible to discern this information from the survey results published.

Noting that many of these surveys were conducted in order to obtain a general sense of workforce development needs within a given region so as to inform ATTC program planning, an examination of each survey is helpful in determining how reliable the data is for use in other settings and for other purposes. Examining the nature of the sample, the consistency of the sampling and N-SSATS frames, and the proportion of agencies reporting suggests the academic rigor of the survey and the confidence one can have in the results reported. Bias in any of the indicators suggests the extent to which the results may differ from the actual profile of the workforce in the state agencies. For example, if a low response rate is reported, a disproportionate percentage of older Caucasian women may have responded to the survey leading to the erroneous conclusions that the workforce is predominantly older Caucasian women.

ATTC

Table 1. Brief Overview of Completed Workforce Survey Studies

WORKFORCE SURVEY Studies								
STATE	***Year***	***N-SSATS***	***Agencies***	***Sam/Cen***	***Size***	***Responses***	***Rate***	***W/Staff***
Alaska	2005	65	64	C	63	41	65%	41
Hawaii	2005	88	31	C	30	21	70%	22
Idaho	2005	67	88	C	56	33	59%	34
Oregon	2005	221	250	C	148	101	68%	143
Wash	2005	355	503	C	377	263	70%	302
Arizona	2002	202	???	C	???	???	???	
California	2002	1753	???	R	190	???	19%	
New Mexico	2002	114	???	C	???	???	???	
Colorado	???	382	???	???	???	???	???	
Arkansas	2004	64	34	C	34	16	47%	24
Missouri	2004	216	190	R	76	24	32%	63
Oklahoma	2004	156	125	R	75	34	45%	49
Louisiana	2004	179	???	???	???	???	???	
Texas	2005	498	???	???	75	60	80%	
Alabama	2006	126	???	C	???	72	???	
Florida	2004	573	400	C	400	67	17%	
Delaware	2003	40	44	C	42	17	40%	
Kentucky	2002	306	27	C	27	20	74%	
Maryland	2005	352	275	R	138	58	42%	
Tennessee	2004	182	???	C/R	123	52	42%	
New Jersey	2004	327	192	R	66	???	???	42
Puerto Rico	2002	110	77	C	77	72	94%	
Connecticut	2003	244	???	R	11	???	???	10
Maine	2003	173	???	R	28	???	???	23
Massachusetts	2003	345	???	R	28	???	???	23
New Hampshire	2003	83	???	R	24	???	???	21
Rhode Island	2003	54	???	R	19	???	???	18
Vermont	2003	37	???	R	12	???	???	10

Attachment 7: Estimated Hourly Wages for Clinical Directors and Thought Leaders

BROWSE OES

- OES HOME
- OES OVERVIEW
- OES NEWS RELEASES
- OES DATABASES
- OES TABLES
- OES PUBLICATIONS
- OES FAQS
- CONTACT OES

SEARCH OES

Go

OES TOPICS

- ARCHIVED DATA
- CHARTS & MAPS
- INFORMATION FOR RESPONDENTS
- TECHNICAL DOCUMENTATION

Occupational Employment and Wages, May 2009

21-1011 Substance Abuse and Behavioral Disorder Counselors

Counsel and advise individuals with alcohol, tobacco, drug, or other problems, such as gambling and eating disorders. May counsel individuals, families, or groups or engage in prevention programs. Exclude "Social Workers" (21-1021 through 21-1029), "Psychologists" (19-3031 through 19-3039), and "Mental Health Counselors" (21-1014) providing these services.

National estimates for this occupation
Industry profile for this occupation
State profile for this occupation
Metropolitan area profile for this occupation

National estimates for this occupation: Top

Employment estimate and mean wage estimates for this occupation:

Employment (1)	Employment RSE (3)	Mean hourly wage	Mean annual wage (2)	Wage RSE (3)
78,470	2.1 %	$19.43	$40,420	1.2 %

Percentile wage estimates for this occupation:

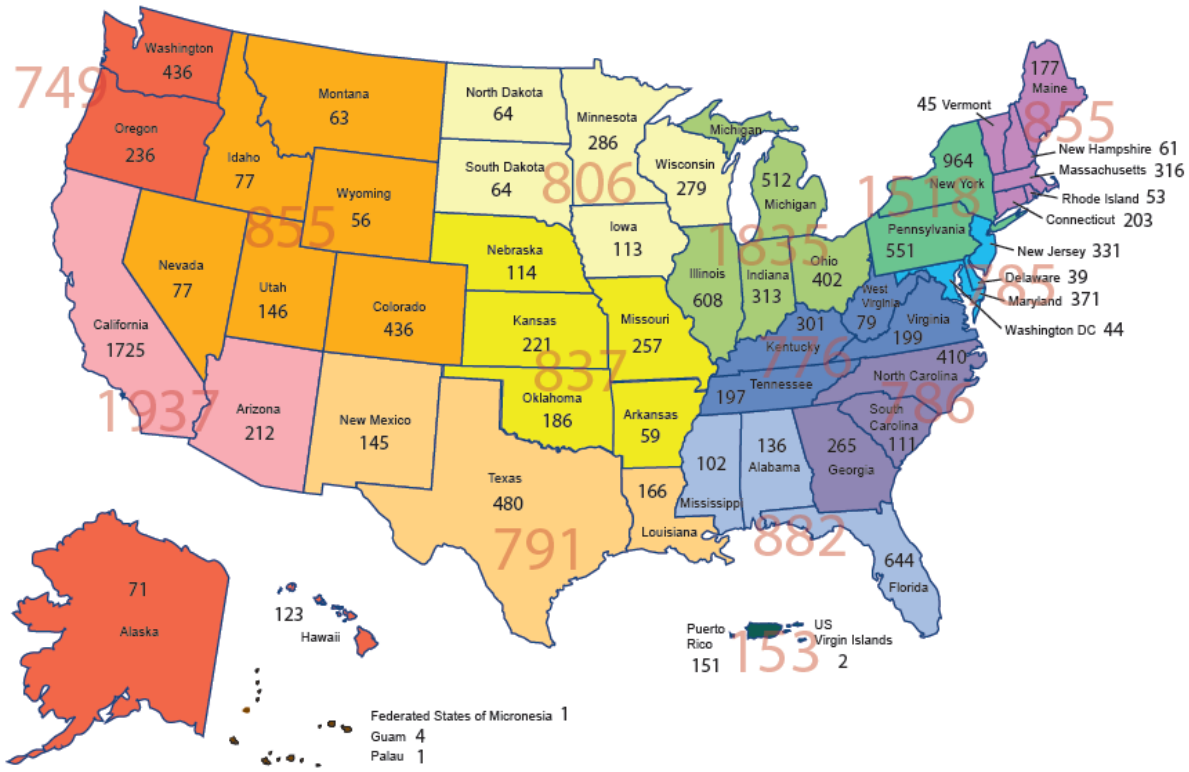
Percentile	10%	25%	50% (Median)	75%	90%
Hourly Wage	$11.82	$14.36	$18.13	$23.11	$28.87
Annual Wage (2)	$24,580	$29,860	$37,700	$48,060	$60,060

Industry profile for this occupation: Top

Industries with the highest published employment and wages for this occupation are provided. For a list of all industries with employment in this occupation, see the Create Customized Tables function.

Attachment 8: Map of N-SSATS Facilities by ATTC Region

Number of Substance Abuse Facilities which Responded to the 2008 N-SSATS Survey By State/Territory



Attachment 9: Table of Substance Use Disorder Facilities by ATTC Region

REGION	STATE	NO. OF NSSATS FACILITIES	REGION TOTAL	REGION WEIGHT	STATE WEIGHT
Pacific Southwest	Arizona	212	2082	0.15	0.10
	New Mexico	145			0.07
	California	1725			0.83
Northwest Frontier	Alaska	71	949	0.07	0.07
	Washington	436			0.46
	Oregon	236			0.25
	Idaho	77			0.08
	Hawaii	123			0.13
	Pacific Islands	6			0.01
Mountain West	Nevada	77	778	0.06	0.10
	Montana	63			0.08
	Wyoming	56			0.07
	Utah	146			0.19
	Colorado	436			0.56
Mid America	Missouri	257	723	0.05	0.36
	Kansas	221			0.31
	Oklahoma	186			0.26
	Arkansas	59			0.08
Northeast	New York	964	1846	0.13	0.52
	New Jersey	331			0.18
	Pennsylvania	551			0.30
Prairielands	Iowa	113	641	0.05	0.18
	North Dakota	64			0.10
	South Dakota	64			0.10
	Minnesota	286			0.45
	Nebraska	114			0.18
New England	Connecticut	203	855	0.06	0.24
	Rhode Island	53			0.06
	Maine	177			0.21
	New Hampshire	61			0.07
	Vermont	45			0.05
	Massachusetts	316			0.37
Central East	District of Columbia	44	952	0.07	0.05
	Delaware	39			0.04
	Maryland	371			0.39

	Kentucky	301			0.32
	Tennessee	197			0.21
Gulf Coast	Texas	480	748	0.05	0.64
	Louisiana	166			0.22
	Mississipi	102			0.14
Great Lakes	Illinois	608	2114	0.15	0.29
	Ohio	402			0.19
	Wisconsin	279			0.13
	Indiana	313			0.15
	Michigan	512			0.24
Southeast	Georgia	265	376	0.03	0.70
	South Carolina	111			0.30
Southern Coast	Alabama	136	780	0.06	0.17
	Florida	644			0.83
Mid Atlantic	Virginia	199	1059	0.08	0.19
	Maryland	371			0.35
	North Carolina	410			0.39
	West Virginia	79			0.07
Carribean Basin	Virgin Islands	2	153	0.01	0.01
	Puerto Rico	151			0.99
TOTAL (US)		14056	14056	1.00	14.00

Attachment 10: Estimated Costs for National and Regional Sample

Attachment 10

Estimated costs for national and regional sample

Costs for national sample

While there may be some variation in costs, the following information was used to derive approximate labor costs for the national sample: each survey would equate to 1 hour per I-SATS facility plus 1 hour at ATTC regional center based on a salary of $23.11 per hour for clinical supervisors (May 2008 Occupational Employment Statistics, Bureau of Labor Statistics); one month of statistical consultation based on salary of $65 per hour for 160 hours ($10,400). These data were included with Table 5 data to provide estimated costs for the national sample.

Estimates of Costs Relative to the Sample Size Needed for Nationally Representative Sample

	Sample size for the 95% confidence level with maximum variance (50/50 split)		
Population size	*± 10% sampling error*	*± 5% sampling error*	*± 3% sampling error*
14,056	96	374	989
Cost estimate	$14,837	$27,686	$56,112

Costs for regional sample

While there may be some variation in costs, the following information was used to derive approximate labor costs for the national sample: each survey would equate to 1 hour per I-SATS facility and collating data would result in approximately 10 hours at each ATTC regional center based on a salary of $23.11 per hour for clinical supervisors (May 2008 Occupational Employment Statistics, Bureau of Labor Statistics); one month of statistical consultation based on salary of $65 per hour for 160 hours ($10,400). These data were included with Table 7 data to provide estimated costs for the regional sample. The lower costs associated with the labor of the ATTC regions are due to the collating of data needed (after initial data training related to the national sample is conducted). What these costs do not take into account are the anticipated overlaps between samples, which will reduce costs significantly.

Estimates of Costs Relative to the Sample Size Needed for Regionally Representative Sample (regional costs included in overall figure)

	Sample size for the 95% confidence level with maximum variance (50/50 split)		
Effect size	*± 10%* *sampling error*	*± 5%* *sampling error*	*± 3%* *sampling error*
0.25	316 (23)	437 (31)	523 (37)
Costs overall (region)	$20,938 ($10,538)	$23,734 ($13,334)	$25,722 ($15,322)
0.15	858 (61)	1192 (85)	1430 (102)
Costs overall (region)	$33,464 ($23,064)	$41,183 ($30,783)	$46,683 ($36,283)

Notes of caution

The extra costs for including the phase 2 regional data will be a minimum of $13,635 due to the fixed costs of 140 hours of ATTC regional work (10 hours per region for collating data), plus the

statistical consulting needed for analysis. The costs associated with this study cannot simply be assessed by adding the costs for the national sample with the costs for the regional sample. It is anticipated that there will be significant overlap between the two samples, but as phase 1 (the national data) will be random, it is unlikely it will provide the individual regional sample numbers needed for phase 2 data. Looking at Attachment 9, one example for this is that the Pacific SouthWest region has approximately 2082 substance use disorder organizations (15% of the total population) whereas the Southeast has 376 substance use disorder organizations (3% of the total population). If a random national sample of 989 selects 148 organizations (or 15%) from the Pacific Southwest region and only 30 (3%) from the Southeast region, the Southeast region may need to be supplemented in the Phase 2 data collection effort. A fair and conservative estimate of extra costs associated with a regional data collection effort could then approximate a range of $13,635 (for fixed costs) to a conservative estimate of $31,777 (based on the small effect size of 0.15, the 3% margin of error, and the conservative assumption that at least half of the national sample would fulfill the sampling needs of the regional sample).