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Workforce Annotated Bibliography 2008

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1. (March 13, 2006). Higher salaries key to filling counselor workforce gap. *Alcoholism & Drug Abuse Weekly: News for Policy and Program Decision-Makers, 18*, 1-6.

This article describes issues to be raised at the Washington, D.C. March 22-25 conference sponsored by NAADAC surrounding the counselor workforce shortage. The article starts out discussing the major concerns in the addictions field – a shortage of counselors and low salaries. According to Mike Flaherty, Ph.D., the executive director of the Institute for Research Education, and Training in Addictions and co-chair of the Annapolis Coalition's substance use disorder panel, salaries and education are the two factors that will bring people into the addiction workforce. The Annapolis Coalition was started by SAMHSA to look at workforce development. They report that counselors enter the workforce in two ways – people choosing a second career or college students who want to enter the field. Individuals involved with this conference hope that the Access to Recovery (ATR) system will expand treatment capacity. Concerns, however, have been raised about the lack of standardized education required to be involved with this system; Flaherty reports that training and standards need to be a part of the ATR. In addition, Flaherty said that the Annapolis Coalition will recommend educational priorities for everyone in the counseling addiction field. Flaherty also notes that the educational credentialing issue is unique for addiction, because oftentimes the counselors are in recovery themselves.

2. (April 30, 2007). Addiction workforce report released without SAMHSA endorsement. *Alcoholism & Drug Abuse Weekly: News for Policy and Program Decision-Makers, 19*, 1-6.

This article explains that although the long-awaited report on the addiction treatment workforce – Strengthening Professional Identity (SPI) – is now available on the SAMHSA website, it is not an official SAMHSA report and therefore, is not officially endorsed by the agency. Instead, SAMHSA is using the Annapolis Coalition's Action Plan on Behavioral Workforce Development. One major portion of the Strengthening Professional Identity report focused on loan forgiveness programs. In addition, the report also addresses the definition of "workforce"; SAMSHA defines "workforce" as people working in treatment for mental illness, treatment for addiction, prevention of mental illness, and prevention of addiction. The SPI specifies that different core competencies are and need to continue to be established. The extent that the SPI will be incorporated into SAMSHA's new workforce development strategy is unclear.

3. (April 30, 2007). NAADAC survey highlights loan forgiveness, other issues for workforce. *Alcoholism & Drug Abuse Weekly: News for Policy and Program Decision-Makers, 19*, 1-6.

The NAADAC survey revealed many concerns that the addiction workforce has about the profession. The study found that counselors belong to a variety of professional organizations, including National Association of Social Workers and American Counseling Association. Additionally, many members of professional organizations have placed advocacy at the state level on the top of their list for the coming year. NAADAC reports that increasing college tuition is preventing many from joining the addiction field and thus, loan forgiveness should be heavily considered. Loan forgiveness programs, at the time of this article, were being developed in Ohio

and Montana. In addition, survey respondents also reported that members want to be able to transfer credentials from state to state. Very few respondents were interested in international growth, though as the article describes, there are many reasons why this would be good.

4. American Time Use Survey (ATUS). (2004). Time-use survey: First results announced by BLS. *Bureau of Labor Statistics: News.* Retrieved on April 2, 2008, from http://www.bls.gov/news.release/archives/atus_09142004.pdf.

The U.S. Census Bureau Time-Use Survey for 2003 sampled 21,000 individuals. Results indicated that men worked 8.0 hours for every 7.1 hours worked by women, and one in five employed persons completed some or all of their work from home. Conversely, employed women age 18 or older, worked about one hour more per day than men doing household activities and caring for household members. Adults in households without children spent 1.4 hours more per day engaged in leisure activities than did those with children. Further information about the American Time-Use Survey is available at http://www.bls.gov/tus/.

5. Amodeo, M., Fassler, I., & Griffin, M. (2002). MSWs with and without long-term substance abuse training: Agency, community, and personal outcomes. Substance Abuse, 23, 3-16.

Researchers utilized telephone interviews, 30-40 minutes in length, to gather self-report data from 81 social workers who completed a substance abuse training program and 78 social workers who had not completed the program. Questions focused on behavioral outcomes in their communities, agencies, and personal lives as a function of the postgraduate education. Results indicated that individuals with postgraduate education were more likely than those without postgraduate education to use their substance abuse training at an agency, community, and personal level. In addition, results predict positive outcomes associated with the current increases in graduate level substance abuse training.

6. Amodeo, M. (2006). Securing an equal role for substance abuse counselors: A commentary on Kerwin, Walker-Smith, and Kirby. *Journal of Substance Abuse Treatment, 30,* 169-170.

In this article Amodeo suggests three changes to current training and credentialing practices. These include: 1) All states should require credentialing for mental health and substance abuse counselors, 2) All states should require comparable education requirements for mental health and substance abuse counselors, and 3) States should incorporate the "allied health professional model" into substance abuse counselor training programs.

7. Appleby, L. (2002). What about the workforce? *Psychiatric Bulletin, 26(1),* 21.

This article briefly discusses psychiatric workforce plans in England regarding the number of consultants needed to deliver mental health care. The purpose of this article, specifically, is to show how workforce development models illustrate how recruitment and retention of psychiatrists translates into increases in the consultant workforce.

8. Arfken, C. L., Agius, E., Dickson, M. W., Anderson, H. L., & Hegedus, A. M. (2005). Clinician's beliefs and awareness of substance abuse treatments in research- and non-research-affiliated programs. ***Journal of Drug Issues, 35(3),*** **547-558.**

The purpose of this article was to determine if clinicians' beliefs differed when they were affiliated with substance abuse treatments in research- and non-research affiliated programs. Approximately 150 clinicians at 15 substance abuse treatment programs (five research-affiliated programs and 10 non-research-affiliated programs) were surveyed on addiction treatment belief and awareness of the Clinical Trials Network treatment innovations. Results indicated that beliefs and awareness toward addiction treatment of research-affiliated clinicians, when demographics and professional characteristics are controlled for, are similar to the beliefs of other clinicians. The researchers point out that innovations developed in a research setting can be widely disseminated to the workforce as a whole.

9. A tale of two reports: The 1st is killed, and the 2nd may be diluted. (2006, August 28). ***Alcoholism & Drug Abuse Weekly: News for Policy and Program Decision-makers, 18*****, 1-7.**

This article describes the fate of two reports that were developed addressing the condition of the addiction counselor workforce. Despite the creation of one particular study, "Strengthening Professional Identity" by CSAT, it will never be released. Instead, the SAMHSA former administrator, Charles Curie, decided that another report, "1,000 Voices: A National Action Plan on Behavioral Health Workforce Development" by the Annapolis Coalition on the Behavioral Health Workforce will replace CSAT's report to become a report to Congress. Despite this the official "status" of the report, there is a move within CSAT to release their report. One major component of these reports addresses the need to "develop guidance for dealing with relapse in the addictions workforce." The recovering workforce constitutes more than a third of counselors. In addition, these reports address other problems within the field, including low pay, stigma, new certification and licensure rules, a lack of clinical supervisors, and an aging workforce. A 10% increase in treatment capacity would require 6,800 additional clinicians above the number needed to replace those leaving the field.

10. Burke, L. A., & Baldwin, T. T. (1999). Workforce training transfer: A study of the effect of relapse prevention training and transfer climate. ***Human Resource Management, 38(3),*** **227-242.**

The purpose of the current study was to examine the efficacy of two different relapse prevention (RP) modules which were intended to supplement a training program on employee coaching skills using approximately 80 individuals in a large Midwestern firm. Evidence suggests that oftentimes, that investment in training is wasted because learning transfer does not take place or employees relapse into their own ways of doing things. Results indicated that RP modules only modestly influenced trainees' use of technology transfer strategies, and that the transfer climate significantly impacted the likelihood that this would occur.

11. Campbell, T. C., Catlin, L. A., & Melchert, T. P. (2003). Alcohol and other drug abuse counselors' attitudes and resources for integrating research and practice. ***Journal of Drug Education, 33(3),*** **307-323.**

As part of Wisconsin's Research-to-Practice Initiative, Wisconsin-Certified Alcohol and other Drug Abuse Counselors (CADCs) were surveyed 366 CADCs to assess reported practices, attitudes, and integration of research and practice resources. Females made up 62% of the respondent sample (n = 226) and males constituted 38% (n = 140). Ethnic/racial breakdown revealed the sample be 90% Caucasian, 4% African American, 2% Native American, 1% Hispanic, and 0.5% Asian American. The majority of respondents reported workplace access to the Internet, computers, and email. They also reported general satisfaction ("satisfied" or "very satisfied") with training and education and rated positively workplace efforts to integrate research and practice. Further discussion includes the barriers and incentives to integrate research and practice.

12. Caplehorn, J. R. M., Hartel, D. M., & Irwig. (1997). Measuring and comparing the attitudes and beliefs of staff working in New York methadone maintenance clinics. *Substance Use & Misuse, 32(4),* 399-413.

This article describes scale development of an instrument to measure addiction attitudes of staff working with methadone clients. The scale compared adherence to an abstinence orientation with general attitudes about substance abuse addiction and knowledge of methadone maintenance. Participants included substance abuse treatment counselors, medical and nursing staff, and senior administrative staff in 14 New York methadone maintenance programs. Confirmatory Factor Analysis resulted in a 9-item Abstinence Orientation subscale and a 6-item Disapproval of Drug Use subscale. Scores on knowledge-based questions were highly correlated to these two scales. Positive correlations were found between methadone treatment staffs' disapproval of illicit substance abuse, endorsement of punishment for users, and limitations in methadone treatment. Abstinence Orientation scores also differed significantly as a function of education and occupation. Counselors and nurses tended to support an abstinence orientation, while senior staff did not.

13. Caplehorn, J. R. M., Lumley, T. S., & Irwig, L. (1998). Staff attitudes and retention of patients in methadone maintenance programs. *Drug and Alcohol Dependence, 52,* 57-61.

In 1989 and 1992, clinicians in six methadone programs in Sydney, Australia, completed the Abstinence Orientation Scale. Using Cox regression, median results on this scale was compared to time in treatment/retention levels of a random sample of ex-prisoner clients, admitted from 1988-1989. Results indicated that patients' chance of discharge increased three units for every one unit increase in the median Abstinence Orientation score (RR 3.4, 95% CI 2.3-5.0). Programs with clinicians reporting an abstinence orientation are less likely to retain clients in treatment as long as those without an abstinence orientation.

14. Center for health workforce studies; School of public health and NASW center for workforce studies: National association of social workers. (2006, March). *Licensed social workers in the United States, 2004: Who are licensed social workers?* Retrieved on April 2, 2008, from http://workforce.socialworkers.org/studies/supplemental/supplement_ch2.pdf.

This document characterizes the social worker workforce in the United States in 2004. Numerically, social workers represent the largest social service profession in the U.S. with 840,000 practitioners. Of these, approximately 38% are licensed (310,000).
This study examines the following for this population: demographic characteristics, education, licensure and certification, age at entry and years of experience, and satisfaction and sources of continuing education. Results show that social workers are more likely to be middle-aged or older, disproportionately women (81%), primarily non-Hispanic white (86%), having an MSW (79%), licensed to practice in at least one state, and likely also to hold at least one certification (88%).The majority (53%) received their social work degree between 1990 and 2004, and those entering the field tend to be older than in those entering the field in the past. Average age of entry since 2000 is been between 34-35 years of age. Seventeen percent of social workers reported less than 5 years experience, while 32% reported more than 20 years experience. Male social workers reported being in the field longer (17 years) than did female social workers (14.6 years). Although the majority of social workers reported the satisfaction with their degree programs (61%) and post-degree continuing education (71%), 6-10% reported dissatisfaction with the education received. Social workers were most likely to obtain continuing education from short courses or workshops (82.5%) and conference CE programs (82%), although a third reported receiving continuing education during on-the-job training.

15. Crane, R.D. & Hafen, M. (2002). Meeting the needs of evidence-based practice in family therapy: Developing the scientist-practitioner model. *The Association for Family Therapy and Systemic Practice, 24*, 113-124.

This article examined the Scientist-Practitioner model of clinical training and practice for counselors in family therapy practice and educational settings. Historical and contemporary program issues are discussed, and model principals are compared to those of evidence-based practices. Finally, the authors offer suggestions for overcoming challenges facing the scientist-practitioner.

16. Ducharme, L. J., Knudsen, H. K., Roman, P. M. (2008). Emotional exhaustion and turnover intention in human service occupations: The protective role of coworker support. *Sociological Spectrum, 28,* 81-104.

Because of the high rates of burnout and turnover in human services occupations, it is important to find ways to keep people in these professions. The purpose of the current study is to examine the potentially protective role of coworker support. Structural equation modeling was used to assess data gathered from 1,800 substance abuse treatment counselors on a variety of job and job environment characteristics in order to predict turnover intention through emotional exhaustion. Results indicated that exhaustion significantly predicted intent to quit and coworker support was negatively associated with emotional exhaustion. The results suggest that the protective role of coworker support is important.

17. Education requirements, salary inequities compound providers' staffing shortages. (2002, April 15). *Alcoholism & Drug Abuse Weekly: News for Policy and Program Decision-makers, 14*, 1-6.

This article explains that because of staffing issues related to education requirements and salary in addiction services, service provision has risen very little from 2000 to 2001. More specifically, geography, treatment modality, type of employer, licensure and education requirements, and funding sources all contribute to staffing issues. The article details the breakdown of the addiction workforce – it is comprised of 20 percent nurses, 30 percent counselors, and everyone else (50 percent) including administrators, marketers, accountants, food service and maintenance personnel. Different educational requirements is one of the biggest challenges facing attracting addiction counselors. Specifically, insurance companies are now requiring addiction counselors with at least a masters degree in social work to be associated with treatment facilities to receive insurance benefits. As a result, non degreed employees are either being laid off or shifted into non-supervisory positions, which is producing substantial pay disparities. The increased requirements are creating a “widening gap” between the earnings of the biggest group of workers and the smaller group with the advanced degrees (an average difference between $23,000 and $31,000). In addition, staffing difficulties in jails and drug courts are affected by rules allowing who may and may not work in these settings. In general, the workforce challenges have not been extensively studied and are currently being examined by 14 ATTCs. One suggestion that has been made to correct this inequity is to create a graduated or tiered certification system, built around training, service hours, education, and other factors. In addition, the field needs to market itself as more attractive to new workers.

18. Evans, W. N., & Hohenshil, T. H. (1997). Job satisfaction of substance abuse counselors. *Alcoholism Treatment Quarterly, 15(2),* 1-13.

The purpose of this study was to describe and examine the levels and sources of job satisfaction and the relationship between job satisfaction and clinical supervision variables for certified substance abuse counselors engaged in full-time counseling practice. Approximately 200 addiction counselors were given a mail survey consisting of an Individual Information Form, which was a modified form of the Minnesota Satisfaction Questionnaire. Results indicated that in terms of their job, counselors were most satisfied with their ability to help others and least satisfied with advancement opportunities.

19. Forman, R. F., Bovasso, G., & Woody, G. (2001). Staff beliefs about addiction treatment. *Journal of Substance Abuse Treatment, 21,* 1-9.

NIDA, in 1999, developed a researcher/provider partnership with the intention of testing the effectiveness of research-based innovations in community-based treatment settings – the Clinical Trials Network. As a preliminary stage, the Delaware Valley node surveyed staff members on their addiction treatment beliefs. The majority of the sample wanted increased use of empirically-supported innovations, 12-step/traditional approaches, and the incorporation of spirituality into addiction treatment. Less than 50% supported the use of naltrexone and methadone maintenance. Implications for these results are discussed.

20. Freese, T. E., Shafer, M. E., & Rawson, R. A. (2006). Addiction treatment workforce characteristics for California, Arizona, and New Mexico: Implications for workforce development. Poster presentation for the *2006 College on Problems of Drug Dependence,* Scottsdale, Arizona.

This poster highlights characteristics of the addiction treatment workforce in California, Arizona, and Mexico and provides information regarding workforce educational and technical-assistance needs. Of the surveys mailed out in 2005, 361 surveys were returned representing 128 program directors and 216 program staff/clinicians. Respondents addressed questions about workforce demographics, professional background and experience, education, compensation and agency characteristics, and training needs, barriers, and preferences. Management workforce was primarily male, while the majority of program staff and directors were white females. The major of program directors (72%) have been employed in the addiction treatment field for at least eight years, while only the majority of program staff (57%) and 31% of the directors have been employed for four years or less. Identified technical assistance needs for program directors included: access to effective training programs (68%), and strategies for evaluating client performance (63%). Critical training needs identified were in problem solving skills, strategies for improving client participation, co-occurring services, and use of computerized tools for client assessment. Ninety percent of respondents reported receiving employer-contributed health benefits, while 69% receive employer-sponsored retirement benefits and the majority receives some fringe benefits.

21. Gallon, S. L., Gabriel, R. M., & Knudsen, J. R. W. (2003). The toughest job you'll ever love: A Pacific northwest treatment workforce survey. *Journal of Substance Abuse Treatment, 24,* 183-196.

In 2000, the Pacific Northwest ATTC conducted a substance abuse treatment workforce survey in Alaska, Idaho, Oregon, and Washington. Treatment agency directors and clinical staff were mailed a 28-item survey focused on training, recruitment and retention. Treatment staff averaged 25% turnover per year due to resignations (most commonly cited reason), layoffs and performance issues. The majority of respondents (71%) described significant barriers to recruitment including insufficient qualified applicants (53%), insufficient funding for open positions (34%), low salary (84%), stigma and lack of respect. Primary recruitment strategies were newspaper advertisements, human resource departments, and individual contacts, with few agencies utilizing available technology (e.g., Internet websites) or advertising in professional journals. Areas listed as beneficial for staff retention included increased salaries (68%), less paperwork (43%), ongoing trainings (40%), and individual recognition (35%). Finally, staff perception of agency retention efforts were 20% lower than those of agency administrators.

22. Garman, A. N., Corrigan, P. W., & Morris, S. (2002). Staff burnout and patient satisfaction: Evidence of relationships at the care unit level. *Journal of Occupational Health Psychology, 7(3),* 265-241.

The influence of group-level burnout on patient satisfaction was assessed using 333 staff from 31 Psychosocial Behavioral Health Rehabilitation teams and 405 clients. Treatment team participants completed Maslach's Burnout Inventory, while clients completed the Consumer Satisfaction Scale. Hierarchical linear modeling and Team-level analyses confirmed that team-level burnout to be a viable construct with revealed significant relationships between patient satisfaction and team-level burnout.

23. Greene, D., Halton, C., Hamburg, M., Rosenthfield, A., Cagan, E., VanWie, W., et al. (1999). Creating training opportunities for public health practitioners. *American Journal of Preventive Medicine, 16*(3S), 80-85.

Because of reports on the under-training of public health practitioners, the School of Public Health at Columbia University and the New York City Department of Health (NYC DOH) initiated the Public Health Scholars program (SPH-PHS) which attempts to make public health training available to NYC DOH employees. Tuition reduction programs are in place so that full-time NYC DOH employees can enroll. Over the past three years, sixteen individuals have enrolled. The purpose of the article is to provide the history of the collaboration between the agency and the program and provide a critical analysis of the program.

24. Hall, M. N., Amodeo, M., Howard, J. S., & Vander Bilt, J. (2000). Social workers employed in substance abuse treatment agencies: A training needs assessment. *Social Work, 45(2),* 141-154.

The purpose of the article is to provide assessment results on the substance abuse treatment training needs of social workers in New England. Clinical supervision was not available to the majority respondents throughout their career. Despite limited previous training experience and considerable barriers to current training, social workers surveyed in this study reported significantly higher levels of knowledge and skill than other substance abuse treatment providers in 10 of 12 substance abuse treatment areas investigated. Regardless of knowledge and skill level, respondents reported a strong need for extra substance abuse treatment training.

25. Harwood, H. J., Kowalski, J., & Ameen, A. (2004, November). The need for substance abuse training among mental health professionals. *Administration and Policy in Mental Health, 32(2),* 189-205.

The purpose of this study was to assess the needs of substance abuse practitioners in several major health professions, including psychiatrists, psychologists, professional counselors, and social workers. Results indicated that one in five clients in mental health settings had substance abuse disorders. It is important to note, however, that substance abuse was secondary to mental disorders for clients. Few of the mental health professionals reported having little or no training to address substance abuse.

26. Hatcher, A. S. (2005). Credentialing vs. education: Workforce development of addiction counselors. *Addiction Professional, 3(4),* 28-32.

Differences exist between addiction counselor education and training. In addition, although there has been an increase demand for counselor credentialing, states vary in credentialing requirements, credential preparation programs vary in format from training workshops to college-level baccalaureate and maters degree programs, and most states do not offer reciprocity. This lack of consistency, along with the rising demand for proof of training and certification has been accompanied by an increase in fraudulent diploma mills and a rise in counselor pursuit of the lowest-cost programs requiring the least effort and/or time. Agreement between the International Certification and Reciprocity Consortium (ICRC) and the National Association for

Addiction Professionals (NAADAC) would address these concerns and help to establish a consistent national certification process. Readers are encouraged to take responsibility for their certification, to examine state requirements for addiction counselors and mental health counselors, and to examine available credentialing programs to ensure compliance with state standards.

27. Herbeck, D. M., Hser, Y., & Teruya, C. (2008). Empirically supported substance abuse treatment approaches: A survey of treatment providers' perspectives and practices. ***Addictive Behaviors, 33,*** **699-712.**

In an effort to examine the dissemination of EBPs in community settings, program directors (*n*=30) and staff members (*n*=331) from a variety of community treatment programs participated in a self-administered questionnaire to assess the effectiveness of several pharmacological and psychosocial treatment interventions. Both populations rated as effective the majority of psychosocial interventions, and 55-80% reported using Supportive Expressive Psychotherapy, Motivational Enhancement Therapy, and the Community Reinforcement Approach. Use of programming appeared to be directly related to information resources and available training. Voucher programs and motivational incentives, were not rated as effective, and almost half of the respondents were unable to rate the effectiveness of buprenorphine or naltrexone.

28. Hoge, M. A., Huey, L. Y., & O'Connell, M. J. (2004). Best practices in behavioral health workforce education and training. ***Administration and Policy in Mental Health, 32(3),*** **91-106.**

This article outlines 16 "best practices" recommended by experts and stakeholders to improve behavioral health workforce education and training. These are:

1. Education and training is competency-based.
2. Students are taught to engage in lifelong learning.
3. Practice guidelines are used as teaching tools.
4. Students develop competency with manualized therapies.
5. Teaching methods are evidence-based.
6. Curricula are routinely updated to address the values, knowledge, and skills essential for practice in contemporary health systems.
7. Skill development includes clinical, clinical management, and administrative capabilities.
8. Professional training instills an understanding of the competing paradigms of service delivery and the diverse scientific, professional, economic, and social forces that shape healthcare.
9. Students train in treatment programs that are competitive in the healthcare marketplace and similar to the sites where they are likely to practice after the completion of training.
10. Training sites are diverse and interdisciplinary, and enable students to follow consumers throughout the continuum of care and the course of recovery.
11. The ''workforce'' is broadly defined and all segments of the workforce receive training.
12. Training is offered to culturally diverse groups.
13. Consumers and family members are engaged as teachers of the workforce.
14. Teachers and supervisors are experienced in providing treatment and currently involved in the delivery of healthcare.

15. *The faculty in training programs is interdisciplinary in composition and represents a diversity of approaches to the delivery of behavioral healthcare.*
16. *Training programs reward faculty for teaching excellence.*

29. Hoge, M. A., Morris, J. A., Daniels, A. S., Huey, L. Y., Stuart, G. W., Adams, N., Paris Jr., M., Goplerud, E., Horgan, C. M., Kaplan, L., Storti, S. A., & Dodge, J. M. (2005, May/July). Report of recommendations: The Annapolis coalition conference on behavioral health work force competencies. *Administration and Policy in Mental Health, 32(5/6),* 651-663.

During a national meeting on workforce competencies sponsored by the Annapolis Coalition on Behavior Health Workforce Education, experts in the areas of mental health and substance abuse disorders treatment, medicine, and business met with consumer advocates to development a consensus on the core workforce competencies essential to future development of behavioral health education and training. This article discusses the 10 recommendations that evolved out of this collaborative effort.

30. Hoge, M. A., Morris, J. A., Daniels, A. S., Stuart, G. W., Huey, L. Y., & Adams, N. (2007). An action plan for behavioral health workforce development: A framework for discussion. *U.S. Department of Health and Human Services (DHHS), Substance Abuse and Mental Health Services Administration (SAMHSA). The Annapolis Coalition on the Behavioral Health Workforce* (Contract no. 280-02-0302). 1-347. Retrieved on April 2, 2008, from http://www.samhsa.gov/workforce/annapolis/workforceactionplan.pdf.

This article outlines the Annapolis Coalition on Behavioral Health Workforce Education action plan on workforce development. Commissioned by SAMHSA and involving a multi-year process, the Coalition generated the plan to address critical shortages in the mental health and substance abuse workforces. The action plan provides a life-span perspective with a focus on relevant issues for culturally and linguistically diverse populations with mental health and substance abuse disorders, and co-occurring disorders. Seven strategic goals were generated encompassing three areas of need including 1) Broadening the concept of workforce, 2) Strengthening the workforce, 3) Structures to support the workforce. Objectives for each goal are discussed. The objectives include: 1) Significantly expand the role of individuals in recovery, and their families when appropriate, to participate in, ultimately direct, or accept responsibility for their own care; provide care and supports to others; and educate the workforce. 2) Expand the role and capacity of communities to effectively identify their needs and promote behavioral health and wellness. 3) Implement systematic recruitment and retention strategies at the federal, state, and local levels. 4) Increase the relevance, effectiveness, and accessibility of training and education. 5) Actively foster leadership development among all segments of the workforce. 6) Enhance the infrastructure available to support and coordinate workforce development efforts. 7) Implement a national research and evaluation agenda on behavioral health workforce development. Subsequent sections of the report discuss focused topics related to various areas such as children, families, older adults, rural issues, etc.

31. Hotham, E., Roche, A., Skinner, N., & Dollman, B. (2005). The general practitioner pharmacotherapy prescribing workforce: Examining sustainability from a system's perspective. *Drug and Alcohol Review, 24,* 393-400.

This article attempts to identify the sustainability of the Australian general practitioner workforce involved in opioid pharmacotherapy treatment services. Data was collected from South Australia, Queensland, Victoria, and New South Wales. Results indicated that there are few individuals who prescribe medication but each individual carries a heavy client load. In addition, there are many trained prescribers who are inactive and a large proportion of individuals who were trained to prescribe but do not. Very few prescribers served methadone clients. Implications and recommendations are discussed for these results, including ways to encourage workforce development.

32. Hser, Y. (1995, August). Drug treatment counselor practices and effectiveness: An examination of literature and relevant issues in a multilevel framework. *Evaluation Review, 19(4),* 389-408.

The purpose of this article was to discuss the effectiveness of counselor practices using a multilevel framework examining specific client, counselor, and program characteristics. Specifically, there is often overlap among the counselors clients see and the programs clients attend, but the majority of treatment outcomes are only assessed for clients individually. The researchers present a conceptual model for understanding counselor effects on client outcomes.

33. Hshieh, S. Y., & Srebalus, D. J. (1997). Alcohol treatment issues: Professional differences. *Alcoholism Treatment Quarterly, 15(4),* 63-73.

The purpose of the present study was to identify assumptions that counselors hold towards alcoholism and its treatment. Approximately 200 psychologists and addictions counselors were asked to fill out a questionnaire addressing demographic information, treatment philosophies and approaches, and information about collaboration with other treatment agencies and personnel. Statistical analysis revealed that the two groups of professionals, psychologists and counselors, did not differ significantly in referral use, accepting a disease analogy for alcoholism, use of a 12-step model of recovery, and strong spiritual and/or religious beliefs. Psychologists, however, were more willing to accept controlled drinking as an alternative goal to abstinence than counselors and counselors had more personal experience with problem drinking behavior.

34. Huang, L., Macbeth, G., Dodge, J., & Jacobstein, D. (2004). Transforming the workforce in children's mental health. *Administration and Policy in Mental Health, 32(2),* 167-187.

In 1999, the Surgeon General's Report on Mental Health (U.S. DHHS, 1999) identified critical workforce issues in children's mental health. In 2003, the President's New Freedom Commission on Mental Health offered a plan to address these issues as well as other issues within the mental health field. This article focuses on two specific issues in children's mental health: workforce shortages in child-serving disciplines and the need for training in evidence-based models of care

that match delivery of services. Specific challenges to workforce development are discussed, along with strategies and recommendations to assist in the resolution of the issues.

35. Humphreys, J., Noke, J. M., & Moos, R. H. (1996). Recovering substance abuse staff members' beliefs about addiction. ***Journal of Substance Abuse Treatment, 13(1),*** **75-78.**

A study of 329 treatment staff in 15 Veteran's Administration inpatient substance abuse facilities compared the attitudes and beliefs about addiction in treatment staff with a history of substance use disorder (n = 47) to those who were not in recovery. No significant differences were found recovering and non-recovering staff on factors such as age, education, race/ethnicity, amount of client contact, or years of experience. However, there were more males (68%) in recovery than females (40%). Recovering staff were more likely to work in programs consistent with a 12-step approach, were more likely than non-recovering staff to endorse an eclectic model of addiction. Recovery status was not associated with belief in the disease or psychosocial models of addiction. Factors significantly predictive of disease model endorsement included age, education, and 12-step goals and activities. Older staff, those with lower education, and those who endorsed 12-step goals were likely to endorse the disease model. Staff with higher education and less endorsement of 12-step goals were more likely to endorse the psychosocial orientation. Finally, older staff with lower endorsement of 12-step goals were more likely to endorse an eclectic orientation.

36. Issue Brief: Current and Future Addiction Workforce. (2008). ***NAADAC, The Association of Addiction Professionals.*** **Retrieved on April 2, 2008, from http://naadac.org/documents/display.php?DocumentID=98.**

This article is a summary of NAADAC's response to current and future addiction workforce issues found in the NAADAC Practitioner Services Network (PSN) surveys. Per SAMHSA, in 2002, it was estimated that 26 million people need alcohol and drug treatment and by 2020, the demand is expected to double. In 2002, only 11% of the projected numbers actually accessed treatment. A panel conducted by *Join Together* and Dr. Jerome Jaffe cited the following reasons for a weak workforce infrastructure: excessive caseloads, high staff turnover, low salaries, and inadequate training. These problems are predicted to undermine efforts to improve the quality of care necessary to meet the projected substance abuse treatment needs. NAADAC initiatives to address the workforce problem include: 1) New projects such as the Ohio Workforce Development Project and the NAADAC Trainer's Academy; 2) Key congressional initiatives such as the Paul Wellstone Mental Health and Addiction Equity Act, Adequate funding for treatment, loan forgiveness, and Congressional caucus; 3) Working with partners/Coalitions to support workforce funding; 4) Ongoing efforts such as conferences, training opportunities, and national certification; and, 5) Quality Improvement.

37. Johnson, J.A. & Roman, P.M. (2002). Predicting closure of private substance abuse treatment facilities. ***Journal of Behavioral Health Services & Research, 19*****, 115-125.**

In this study, researchers examined predictors of closure in a nationally representative sample of 450 private substance abuse treatment facilities. Data was collected via on-site visits and telephone contacts in a seven-wave (1995-96, 1997-98, telephone calls at 6-, 12-, 18-, 30-, 36-

month intervals during 1999), 3yr longitudinal study. During the study, 14.7% (66) of the facilities closed. Significant predictors of closure included: whether the facility was freestanding (as opposed to hospital-based), number of clients per provider (FTE), center capacity or size (smaller centers were more likely to close), and percentage of Medicaid patients (2% increase in closure when percentage of Medicaid clients was higher).

38. Kaplan, L. (2003, November). Substance abuse treatment workforce environmental scan. ***U.S. Department of Health and Human Services: Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Treatment,*** **1-26.**

The Center for Substance Abuse Treatment (CSAT) Workforce Census Panel examined all workforce development documents published between 1998 and 2003. Topic areas included workforce demographics, recruitment, retention, training, and credentialing. The environmental scan uncovered five critical areas: 1) the lack of quantitative data, 2) no universally recognized standards, 3) the acceleration in the development of evidence-based practices requires a continued focus on new learning, 4) stigma related difficulties in workforce recruitment and retention, and 5) demographic and economic factors including the aging of the workforce.

39. Keller, D. S., & Dermatis, H. (1999). Current status of professional training in the addictions. ***Substance Abuse, 20(3),*** **123-140.**

This study responds to assertions that in spite of the prevalence of EBPs and vast research in addiction, the translation from science to practice is still inadequate and often the result of limited addiction training workshops rather than fully developed educational courses. The authors provide a brief history of addictions training within the United States, a review of addiction education/credentialing within various health care professions, and seven recommendations for better dissemination of addiction information into the field. These include:

1. *Policy-making bodies must prioritize education and training needs.*
2. *Shortages in teaching faculty need to be addressed.*
3. *Methods of technology transfer to community providers must be evaluated.*
4. *As a corollary, more effective means for dissemination of research-based treatments must be devised and implemented.*
5. *Existing treatment personnel need adequate exposure to empirically validated treatments.*
6. *Addiction professionals require more extensive training in the treatment needs of special populations, dual-diagnosis, and culturally diverse patients in particular.*
7. *Substance abuse education and training must be upgraded significantly.*

40. Kerwin, M. E., Walker-Smith, K., & Kirby, K. C. (2006). Comparative analysis of state requirements for the training of substance abuse and mental health counselors. ***Journal of Substance Abuse Treatment, 30,*** **173-181.**

This article compares state minimum licensure and certification requirements for mental health and substance abuse counselors across the United States. Results indicate a significant discrepancy between requirements and opportunities for mental health credentialing and substance abuse credentialing. Significantly more states require credentialing for mental health

counselors than for substance abuse counselors. In addition, significantly more states offer a state credentialing process for mental health counselors while offering no credentialing opportunities for substance abuse counselors. Degree requirements differ with most states requiring at least a Master's degree for mental health counseling, yet accepting a Bachelor's degree or less for substance abuse counselor credentialing. Mental health credentials require more coursework hours and are more likely to require practicums or internships than the substance abuse credentialing process. The state credentialing processes for substance abuse counselors require significantly more hours of supervised work experience than for mental health counselors. Examination requirements were similar for both professions, although more states required oral examination and case presentation for substance abuse counselors than for mental health counselors. Lower educational and higher on-the-job training requirements for substance abuse counselors may reflect an apprentice model that is qualitatively different from the professional training models of mental health counselors, and these differences may influence translation of science to service.

41. Knudsen, H.K. (2008, Feb 4). Lost in Translation: the case of medications in substance abuse treatment. ***Power point presentation as part of the Center for Drug Abuse Translation Seminar Series at the University of Kentucky.***

This power point presentation highlights the translation of research into practice via three studies. Study 1 examined the translation of buprenorphine research into practice throughout the U.S., including the organizational structure of these programs. Findings suggest that translation is low with only 4.21% of publicly funded programs nationwide adopting buprenorphine into treatment. However, adoption has increased since 2004. Examination of the organizational structure of publicly funded programs using pharmacotherapy with emphasis on structure, culture, and informational resources revealed that 47% of programs are accredited by an outside organization (e.g., JCAH), 49.5% follow a 12-step model treatment philosophy with over 50% endorsement of the medical model, and 65% of the clients are funded by public funds other than Medicaid. Contact with informational resources such as pharmaceutical companies was low, even though such contact was significantly associated with the probability buprenorphine adoption. The average facility employed 12-13 counselors, <1 physician, and 1-2 nurses. Analysis suggested the presence of medical personnel was positively associated with the probability of pharmacotherapy endorsement. Study 2 examined the characteristics of programs that support any pharmacotherapy. Findings included that the majority of programs either do not use pharmacotherapy or use SSRIs. Government-owned agencies are significantly more likely to use pharmacotherapy, and there is a strong association between the presence of medical personnel (e.g., physicians and nurses) and medication availability. Reliance of public funding was negatively associated with pharmacotherapy while use of pharmaceutical agencies as informational sources was positively associated. Study 3 examined the racial and ethnic disparities in access to pharmacotherapy. Logistic regression analysis supported that increases the percentage of either African American or Hispanic/Latino populations within a program was associated with a significant decrease in the probability of endorsement of pharmacotherapy, but only if both racial/ethnic groups were entered into the model.

42. Knudsen, H.K., Ducharme, L.J., Roman, P.M., & Link, T. (2005). Buprenorphine diffusion: The attitudes of substance abuse treatment counselors. *Journal of Substance Abuse Treatment, 29(2),* 95-106.

This study examined the diffusion of buprenorphine as a pharmacotherapy for opioid dependence since FDA approval in 2002. Between 2002 and 2004, a survey was administered to 2,298 substance abuse counselors from public and private treatment programs. Factors associated with diffusion of the pharmacotherapy and counselor attitudes toward the therapy included awareness of the treatment effectiveness of buprenorphine, receipt of buprenorphine training, education level, experience, and 12-step orientation. Two-thirds of respondents answered "don't know" when questioned about the effectiveness of buprenorphine. Greater adherence to a 12-step orientation was negatively associated with perceived effectiveness and with attitudes toward buprenorphine as an acceptable pharmacotherapy. Increased education level was positively associated with the perception of buprenorphine as an acceptable therapy, but years of experience were not associated with attitudes toward buprenorphine.

43. Knudsen, H.K., Ducharme, L. J., & Roman, P. M. (2006). Counselor emotional exhaustion and turnover intention in therapeutic communities. *Journal of Substance Abuse Treatment, 31,* 173-180.

This study used structural equation modeling to examine factors associated with workforce turnover in community-based therapeutic communities offering substance abuse treatment. Data was collected from 817 substance abuse counselors in 253 therapeutic communities (TCs) in the form of personal interviews and mailed questionnaires. Factors showing high predictability for turnover (e.g., emotional exhaustion and turnover intention) were assessed against centralized decision making, and procedural and distributive justice, while controlling for variables such as counselor credentials, salary, and demographics. Centralized decision making was significantly positively associated with emotional exhaustion and turnover intention, while procedural and distributive justices were significantly negatively associated. Education (e.g., Master's degree or higher) was significantly positively associated with emotional exhaustion and turnover intention, while younger, white males were more likely to report emotional exhaustion. These results highlight the importance of the workplace organizational structure is important to employee satisfaction and turnover.

44. Knudsen, H.K., Ducharme, L.J., & Roman, P.M. (2007). Research network involvement and addiction treatment center staff: Counselor attitudes toward buprenorphine. *The American Journal on Addictions, 16(5),* 365-371.

This study compared ratings of buprenorphine acceptability in 561 counselors affiliated with the National Institute on Drug Abuse's (NIDA) Clinical Trials Network (CTN) and 1,745 non-affiliated counselors. Non-affiliated counselors rated buprenorphine with significantly lower rates of acceptability than did affiliated counselors. Further analysis revealed that buprenorphine training and exposure to the use of buprenorphine accounted for the attitudinal differences. This suggests that CTN's may influence attitudes toward buprenorphine through training and expose to new pharmacotherapies.

45. Knudsen, H.K., Ducharme, L.J., & Roman, P.M. (2007). Research participation and turnover intention: An exploratory analysis of substance abuse counselors. *Journal of Substance Abuse Treatment, 33(2),* 211-217.

This study examined counselor perception of NIDA's Clinical Treatment Network health services research, and the relationship between these perceptions and turnover intention. Results support that positive perceptions about the research projects are associated with lower turnover intention and that perception of research-related stress are associated with higher turnover intention. Findings suggest further examination of CTN research effects upon participating substance abuse counselors is warranted.

46. Knudsen, H.K., Ducharme, L.J., & Roman, P.M. (2008, in press). Clinical supervision, emotional exhaustion, and turnover intention: A study of substance abuse treatment counselors in the Clinical Trials Network of the National Institute on Drug Abuse. *Journal of Substance Abuse Treatment.* Epub ahead of print.

The purpose of the present study was to examine the relationship among clinical supervision, emotional exhaustion, and turnover intention using a sample taken from the population of substance abuse treatment counselors in the Clinical Trials Network. Results indicated that that clinical supervision was negatively associated with emotional Structural equation modeling revealed that job autonomy, procedural justice, and distributive justice mediated clinical supervision's associations with emotional exhaustion and turnover intention. Specifically, it was found that perceived quality of clinical supervision is strongly associated with counselors' perceptions of job autonomy, procedural justice, and distributive justice, which are associated with emotional exhaustion and turnover intention. The data indicates that clinical supervision has a protective role in substance abuse treatment counselors' turnover.

47. Knudsen, H. K., Johnson, J. A., & Roman, P. M. (2003). Retaining counseling staff at substance abuse treatment centers: Effects of management practices. *Journal of Substance Abuse Treatment, 24,* 129-135.

The purpose of this study was to examine the relationship among management practices, organizational commitment, and turnover intention for substance abuse treatment counselors. A survey addressing these issues was administered to counselors from private treatment centers. Structural equation modeling revealed that job autonomy directly affects turnover intention. The study then discussed how administrators can reduce turnover by addressing factors related to job autonomy.

48. Knudsen, J.R. & Gallon, W.L. (2005). *The current state of addiction treatment: Results from the 2005 NFATTC Substance Abuse Treatment Workforce Survey*: Oregon Executive Summary. Retrieved from http://www.nfattc.org/uploads/OR_Final.pdf.

The purpose of this study was to summarize the current state of the addiction treatment workforce for Oregon in 2005. Results indicated that a little over half of agency directors and clinicians are female and at least 75% are white. Approximately 60% of treatment staff got into the field because of a personal or family experience with addiction. Directors reported spending

about 80% on administrative tasks, while clinicians reported spending about 60% on client-centered tasks. Eighty percent of directors report earning $45,000 or more per year. Clinician salaries are less variable, with 86% of clinicians earning less than $45,000 per year. Oregon agencies employ 13 clinical staff on average. Over 50% of directors and less than 50% of clinicians indicate that their agency has difficulty filling open positions. Approximately 83% of directors and 71% of clinicians report their job satisfaction as above average.

49. Knudsen, J.R., Gallon, W.L., & Gabriel, R.M. (2005). ***The current state of addiction treatment: Results from the 2005 NFATTC Substance Abuse Treatment Workforce Survey*****: Washington Executive Summary. Retrieved from http://www.nfattc.org/uploads/WA_Final.pdf**

The purpose of this study was to summarize the current state of the addiction treatment workforce for Washington in 2005. Results indicated that 50% or more of agency directors and clinicians are female and approximately 80% are white. Over 60% of treatment staff got into the field because of a personal or family experience with addiction. Directors report spending 73% their time on administrative tasks, while clinicians report spending 69% their time on client-related tasks. Directors' salaries are extremely variable with 66% of directors earning $45,000 or more a year, while 88% of clinician salaries are less than $45,000 a year. Agencies, on average, employ 10 clinical staff.

50. Knudsen, J.R., Gallon, W.L., & Gabriel, R.M. (2005). ***The current state of addiction treatment: Results from the 2005 NFATTC Substance Abuse Treatment Workforce Survey*****: Hawaii Executive Summary. Retrieved from http://www.nfattc.org/uploads/HI_Final.pdf.**

The purpose of this study was to summarize the current state of the addiction treatment workforce for Hawaii in 2005. Less than 50% of agency directors and more than 60% of clinicians are female and about 60% of agency directors and 45% of clinicians are white. Like other states, the most widely cited reason for treatment staff to enter the field is because of a personal or family experience with addiction. Over 40% of agency directors make over $65,000 and approximately 80% of clinicians make less than $45,000. Hawaii agencies employ 20 clinical staff. Approximately 90% of directors and 74% of clinicians report their job satisfaction as above average. All directors and 97% of clinicians report having computer access in the workplace.

51. Knudsen, J. R., & Williams, A. M. (2006). ***Maryland workforce survey 2006: Results of a statewide needs assessment of behavioral health professionals.*** **Central East Addiction Technology Transfer Center, Silver Springs, MD.**

The purpose of this study was to summarize the statistics that characterize the workforce for Maryland in 2006. Results revealed that there was a significant portion of African American clinical staff (38%) as well as directors (23%). In funded agencies, approximately 40% of clinical staff and directors reported their job in the substance abuse field was a second career for them; the percentage jumps to approximately 60% for directors in non-funded agencies. The average experience of agency directors is 14 years or more, and the average experience of clinical staff ranged from 9 years in funded agencies to 11 years in non-funded agencies. The

average turnover rate in the past year ranged from 10% in non-funded agencies to 16% in funded agencies.

52. Knudsen, J.R., Gallon, W.L., & Gabriel, R.M. (2005). ***The current state of addiction treatment: Results from the 2005 NFATTC Substance Abuse Treatment Workforce Survey*****: Idaho Executive Summary. Retrieved from http://www.nfattc.org/uploads/ID_Final.pdf**

The purpose of this study was to summarize the current state of the addiction treatment workforce for Idaho in 2005. Results indicated that between 55% and 65% of agency directors and clinicians are female and at least 90% are white. Between 60% and 70% of treatment staff got into the field because of a personal or family experience with addiction. Directors reported spending about 70% on administrative tasks, while clinicians reported spending about 60% on client-centered tasks. Fifty percent of directors report earning $45,000 or more per year. Clinician salaries are less variable, with approximately 90% of clinicians earning less than $45,000 per year. At least 90% of directors and clinicians indicate that their agency has difficulty filling open positions. At least 95% of directors and clinicians report their job satisfaction as above average.

53. Kowalski, J. L., Ameen, A. Z., & Harwood, H. J. (2003, April). ***Year 2 final report: A survey of early career substance abuse counselors*****. NAADAC, The Association for Addiction Professionals Practitioner Services Network.**

The purpose of this study, which was conducted by the National Association for Addiction Professionals (NAADAC), was to identify the characteristics of individuals who had recently entered the substance abuse treatment field. Specifically, the study examined education, qualifications, training, practice settings, and client characteristics of new counselors. Results indicated that the majority of the workforce was white, in their early 40s, and had many years of prior work experience. In comparison to the rest of the NAADAC sample, professionals who had recently entered the field had less substance abuse certifications, less income and formal experience. These statistics, along with other characteristics, were discussed in detail in the article.

54. Kruse, S. J., & Canning, S. S. (2002). Practitioners' perceptions of the vocational rewards in work with underserved groups: Implications for 'rightsizing' the psychology workforce. ***Professional Psychology: Research and Practice, 33(1),*** **58-64.**

The purpose of this study was to survey American Psychological Association members on the rewards and barriers associated with working with underserved populations. Results indicated that members that worked with populations were not underserved were more satisfied, interested, and engaged in their work. In addition, they perceived fewer barriers associated with their work. The authors discuss the implications of these findings, specifically, the impact on recruiting and training professionals.

55. Lacoursiere, R. B. (2001). "Burnout" and substance user treatment: The phenomenon and the administrator-clinician's experience. ***Substance Use & Misuse, 36(13),*** **1839-1874.**

The purpose of this article is to explain the history and measurement of job burnout in the substance abuse treatment field. Specifically, the article addresses the consequences of burnout, which include increased work pressure and decreased coping ability, and prevention strategies, which include early detection by program administrators and employees themselves. In addition, ways that burnout can be addressed in the substance abuse treatment field are discussed.

56. Landrum, R. E., & Harrold, R. (2003). What employers want from psychology graduates. *Teaching of Psychology, 30(2),* 131-133.

The purpose of the present study was to determine what employers want from college graduates with degrees in psychology. Specifically, 87 employers from three regions of the United States were surveyed on what they feel is important in psychology majors in terms of qualities, skills, and abilities. The researchers determined that the most important skills to employers were the following: listening skills, desire and ability to learn, willingness to learn new and important skills, getting along with others, and ability to work with others as part of a work team. The implications of these results were discussed in the article.

57. Langer, D. (2006). Taking action to build a stronger addictions workforce: An update of accomplishments: Summit II. *Northeast Addiction Technology Transfer Center.* Pittsburgh, PA: IRETA. Retrieved on April 2, 2008, from http://www.annapoliscoalition.org/pages/images/iretaWFM062706.pdf.

The purpose of this article was to summarize and review what was discussed at the NeATTC Addiction Workforce Summit. The article specifically addresses the following four topics which were covered at the summit: "1) Defines the problems with which the SUD treatment profession is dealing, describes the current state of the national workforce, and details the events and circumstances leading to the national workforce crisis. 2) Outlines the history of the workforce development initiative in the NeATTC region, and describes results of the 2004 Workforce Survey conducted in New Jersey. 3) Describes the national strategies SAMHSA/CSAT and the Annapolis Coalition have used in the past and are currently using to complement state and local workforce development strategies. 4) Details the activities that national agencies and groups are planning to take and recommended actions for the NeATTC and its member states voiced by Summit participants in the break out sessions."

58. Leiter, M. P., & Maslach, C. (2001, Summer). Burnout and quality in a sped-up world. *The Journal for Quality & Participation,* www.aqp.org. 48-50.

The purpose of the article was to provide a step-by-step method to assess the level of employee burnout in an organization and ways in which to reduce it. The authors provide five steps in order to do this, which are the following: *1) Establish an information flow, 2) Involve people in the process, 3) Communicate constantly, 4) Use the community's problem-solving capacity, and 5) Track progress. The authors go into detail on each of these steps.*

59. Libretto, S.V., Weil, J. Nemes, S., Linder, N.C., & Johansson, A. (2004). Workforce in 2002: A synthesis of current literature. *Journal of Psychoactive Drugs* 36(4), 489-497.

The purpose of the current study was to review the literature on the addiction treatment workforce. The article first discusses the status of addiction treatment in the United States. Specifically, staff demographics, level of competency, training, recruitment, and retention are all summarized in the article. The article also addresses how there is a lack of information on the background, qualifications, and professional development needs of treatment staff.

60. McCarty, D., Fuller, B., Kaskutas, L. A., Wendt, W. W., Nunes, E. V., Miller, M., Forman, R., Magruder, K. M., Arfken, C., Copersino, M., Floyd, A., Sindelar, J., & Edmundson, E. (2008). Treatment programs in the national drug abuse treatment clinical trials network. *Drug and Alcohol Dependence, 92(1),* 200-207.

This article summarizes and reviews the treatment programs included in the national drug abuse treatment clinical trials network. Researchers used the Organizational Surveys (n = 106 of 112; 95% response rate) and Treatment Unit Surveys (n = 348 of 384; 91% response rate) that CTN organizations had to fill out to determine the following overall characteristics: the levels of care, ancillary services, patient demographics, patient drug use and co-occurring conditions. Researchers determined that programs located in medical settings are over-represented and centers that are mental health clinics are under-represented in comparison to National Survey of Substance Abuse Treatment Services (N-SSATS). Another interesting finding was that programs with higher social model scores were larger and more likely to offer self-help meetings, vocational services and specialized services for women.

61. McCary, D., Fuller, B. E., Arfken, C., Miller, M., Nunes, E. V., Edmundson, E., Copersino, M., Floyd, A., Forman, R., Laws, R., Magruder, K. M., Oyama, M., Prather, K., Sindelar, J., & Wendt, W. W. (2007, February). Direct care workers in the national drug abuse treatment clinical trials network: Characteristics, opinions, and beliefs. *Psychiatric Services, 58(2),* 181-190.

This study attempted to characterize the workforce in organizations which belonged to the Clinical Trials Network by surveying 112 organizations in the CTN. Researchers determined that women made up the majority of the workforce, and one-third had either master's or a doctoral degree. While support staff, as well as those with advanced graduate degrees were the least supportive of evidence-based practices, managers and supervisors were the most supportive. Researchers discuss the implications that these findings have on programming efforts at organizations within the CTN.

62. McGovern, M. P., Fox, T. S., Xie, H., & Drake, R. E. (2004). A survey of clinical practices and readiness to adopt evidence-based practices: Dissemination research in an addiction treatment system. *Journal of Substance Abuse Treatment, 26,* 305-312.

The purpose of the current study was to assess clinical practices and readiness to adopt certain evidence-based practices in addiction treatment programs. Researchers surveyed directors and clinicians from public addiction treatment programs in New Hampshire. Results indicated that clinicians were the most motivated to adopt evidence-based practices.

63. McLellan, A. T., Woody, G. E., Luborsky, L., & Goehl, L. (1988). Is the counselor an "active ingredient" in substance abuse rehabilitation?: An examination of treatment success among four counselors. *The Journal of Nervous and Mental Disease, 176(7),* 423-430.

The purpose of the current study was to examine the effect of counselors who begin work at a treatment facility while medication philosophy, program rules, and supplementary services were the same. Researchers analyzed data addressing urinalysis, methadone dose, and prescriptions for psychotropic drugs, employment, and arrest rates. Results indicated that the counseling session process and content are associated with differences in patient outcome, whereas background and education differences were not.

64. McLellan, A. T., Carise, D., & Kleber, H. D. (2003). Can the national addiction treatment infrastructure support the public's demand for quality care? *Journal of Substance Abuse Treatment, 25,* 117-121.

The purpose of this study was to assess the infrastructure of the national addiction treatment program. Results indicated that within the previous 16 months, 15% of facilities had closed or stopped addiction treatment and an additional 29% had been reorganized under a different agency. There was a 53% turnover among directors and a similar rate among counselors within the previous year. Less than half the programs had a full-time physician or nurse, and very few programs had a social worker or psychologist.

65. Melnick, G., Wexler, H. K., Chaple, M., & Banks, S. (2006). The contribution of consensus within staff and clients groups as well as concordance between staff and clients to treatment engagement. *Journal of Substance Abuse Treatment, 31,* 277-285.

The purpose of this study was to examine the effect of specific organizational factors, consensus and concordance, on client engagement in treatment. A national sample of staff and clients was selected and they completed a therapeutic community, cognitive behavioral therapy, and 12-step treatment scale. Regression analysis was then performed. Results indicated that staff that both consensus and concordance are predictive of client treatment engagement. The implications of these results are discussed by the authors.

66. Momentum builds on efforts to strengthen addiction workforce. (April 14, 2003). *Alcoholism & Drug Abuse Weekly: News for Policy and Program Decision-makers, 15*, 1-7.

This article addresses the problems associated with increasing the addiction workforce and the current attempts to increase the workforce. There are many challenges associated with attracting a strong addiction workforce – long hours, low pay, high stress, and the fact that salaries will not be raised. Despite this, initiatives are being developed to attract new addiction workforce employees. One initiative in particular is the Interdisciplinary Faculty Development Program administered by the Association for Medical Education and Research in Substance Abuse (AMERSA), funded by HRSA and CSAT. Additionally, the other component of the program was to develop a document on how to improve substance abuse education for health professionals – *Strategic Plan for Interdisciplinary Faculty Development: Arming the Nation's*

Health Professions Workforce for New Approach to Substance Abuse Disorders. According to CSAT Director H. Westley Clark, young people need to be brought into the field. In addition, NAADAC The Association for Addiction Professionals has established a Practitioner Research Network (PRN) which attempts to determine the attitudes and characteristics of their members. The NAADAC wants to bring regional conferences to different areas of the country and compile a report on ways people can enter the addiction treatment field.

67. Morgenstern, J., & McCrady, B. S. (1992). Curative factors in alcohol and drug treatment: Behavioral and disease model perspectives. *British Journal of Addiction, 87,* 901-912.

Researchers conducted a literature review on treatment processes, identifying 35 separate processes. They categorized these as either as either disease model, behavioral or general psychotherapy processes. A national survey was then conducted asking treatment experts to evaluate the processes in terms of importance relating to alcohol and drug treatment. Results indicate that it is possible to identify core disease model and behavioral treatment processes and that experts value certain processes differently. Researchers concluded that there is a trend toward integrating behavioral processes into a traditional disease model framework. They discuss the need for constructing an instrument to measure alcohol and drug treatment.

68. Mulvey, K.P., Hubbard, S., & Hayashi, S. (2003). A national study of the substance abuse treatment workforce. *Journal of Substance Abuse Treatment, 24*, 51-57.

The purpose of this study was to summarize the workforce in the substance abuse treatment field using data from the Retrospective Study of Treatment Professionals. This data set, which consisted of a cross-sectional survey and telephone follow-up, gathers information on how the Treatment Improvement Protocols have influenced the implementation of best practices. Results indicated that the majority of treatment professionals are White, female, possess a Bachelor's degree, and are between 40 and 55 years old. The implications of these results are then discussed.

69. Mulligan, D. H., McCarty, D., Potter, D., & Krakow, M. (1989). Counselors in public and private alcoholism and drug abuse treatment programs. *Alcoholism Treatment Quarterly, 6(3/4),* 75-89.

The purpose of this article was to summarize and characterize the addiction workforce composition in Massachusetts. A survey was administered to approximately 1,300 individuals from public and private alcoholism and drug abuse treatment. Results indicated that there were comparable rates of men and women in the workforce, which slightly more women (47% vs. 53%). More individuals had graduate degrees (55%) than did not have graduate degrees (45%). Researchers found that more women tended to be outpatient counselors and outpatient counselors were least likely to be recovering. The implications of these results are discussed.

70. Murdock, T. B., Wendler, A. M., & Hunt, S. C. (2005). *Substance abuse treatment workforce survey report 2004: Missouri*. Kansas City, MO: Mid-America Addiction

Technology Center in residence at University of Missouri-Kansas City. Retrieved from http://www.mattc.org/_media/publications/pdf/Workforce_MO.pdf.
The purpose of the present study was to characterize the substance abuse treatment workforce in Missouri. Researchers summarized the workforce based on many factors, including gender, race, age, work experience, employment type, education, salary distribution, certification status, professional experience, work tasks, treatment models, clients, and staff self-efficacy. Results indicated that the majority of staff are female, White, and work in a private non-profit setting. Evidence-based practices are in use including prevention relapse and cognitive behavior therapy. The majority of staff and directors are satisfied with their job. Staff reported that low pay, stigma, and competition from other fields are the major recruitment barriers for the addiction workforce. Overall, agency directors reported that the organizational climate was rated as strong.

71. Muskie School of Public Service. (October 2002). *State licensure laws and the mental health professions: Implications for the rural mental health workforce.* Retrieved on April 2, 2008, from http://muskie.usm.maine.edu/Publications/rural/wp29.pdf.

The purpose of this study was to examine licensure statutes and administrative rules regarding assessment, diagnosis, treatment planning, individual and group counseling, and psychotherapy for social workers, psychologists, professional counselors and marriage and family therapists in 40 states with at least ten percent of the population living in rural areas. Results were summarized in the following conclusions and implications were then discussed:
1. Many states do not explicitly grant the authority to social workers, MFTs or LPCs for diagnosis, however, none deny it.
2. The purpose of state licensure laws is to determine who is qualified to practice, not who is eligible for reimbursement.
3. In some states, laws exist which only permit a member of the profession to perform supervision, thus making it difficult for new graduates to qualify for independent practice.
4. Some states permit tele-health technologies or telephone supervision, as opposed to face-to-face supervision (Colorado, Kansas, and Wyoming).

72. Mustaine, B. L., West, P. L., & Wyrick, B. K. (2003, April). Substance abuse counselor certification requirements: Is it time for a change? *Journal of Addictions & Offender Counseling, 23,* 99-107.

The purpose of this article was to analyze state-level counselor certification requirements. Specifically, the minimum professional training requirements for several state certification agencies were assessed. Less than half of the certifying bodies incorporated core knowledge areas for Certified Addiction Counselors specified by the Council for the Accreditation of Counseling and Related Educational Programs and specific training in counseling was minimal as well. Implications are discussed.

73. Ogborne, A. C., Braun, K., & Schmidt, G. (1998). Working in addictions treatment services: Some views of a sample of service providers in Ontario. *Substance Use & Misuse, 33(12),* 2425-2440.

The purpose of this study was to identify attitudes and beliefs of approximately 900 specialized addiction treatment providers in Ontario. Results indicated that intention to stay in the field was positively associated with many variables, including age, involvement in addictions studies programs, and job satisfaction. In addition, intention to stay was negatively associated with education and working in a nonresidential setting. Implications are discussed.

74. Ogborne, A. C., Braun, K., & Schmidt, G. (2001). Who works in addictions treatment services? Some results from an Ontario survey. ***Substance Use & Misuse, 36(13),*** **1821-1837.**

The purpose of this study was to characterize the specialized addiction treatment agencies in Ontario. Results indicated that the majority of staff had post secondary training and qualifications and had taken professional development courses in the past year, while only 20% of staff had certifications relating to addiction counseling and/or human services. The implications relating to these demographics are discussed, as well as the generalizeability of results.

75 Osborn, C.J. & Thombs, D.L. (2002). Clinical orientation and sociodemographic characteristics of chemical dependency practitioners in Ohio. ***Journal of Teaching in the Addictions, 1*****, 5-18.**

The purpose of the current study was to characterize chemical dependency practitioners in Ohio in terms of clinical orientation and sociodemographic characteristics. Certain factors (salary, confidence in DSM-IV knowledge, experience in the field, race, education, and computer access at work) characterize specific types of practitioner (i.e., clinician, clinical supervisor, program administrator, case manager, and education/outreach/prevention specialist). No differences existed among types of practitioner and clinical orientation, recovery status, age, gender, and several other variables. Implications of these results are discussed.

76. Rodgers, J. H., & Barnett, P. G. (2000). Two separate tracks: A national multivariate analysis of differences between public and private substance abuse treatment programs. ***American Journal of Drug and Alcohol Abuse, 26(3),*** **429-442.**

The purpose of this study was to highlight differences between public and private substance abuse treatment programs using regression models with data from the National Drug and Alcoholism Treatment Unit Survey. Results indicated that local government and non-profit programs were larger and had more staff, and federal and for-profit programs were smaller and employed more psychologists and doctor. In addition, insurance provided more funding to for-profit programs and methadone maintenance programs were larger in for-profit programs. Implications of these results are discussed.

77. Roget, N. A., Storti, S. A., Albers, E., Horvatich, P. K., & Skinstad, A. H. (2005). ***Gender and the substance abuse treatment workforce: Implications for the field.*** **College on Problems of Drug Dependence, Orlando, Florida.**

According to several regional and national workforce study surveys and additional studies with substance abuse treatment professionals (Albers, et al, 2004; Campbell, et al, 2003; Gallon, et al, 2003; Mulvaney, et al, 2003; Osborn & Thombs, 2002; and Storti, et al, 2004) women are beginning to outnumber men as providers of substance abuse treatment services. In fact, almost two-thirds of the workforce is female according to the Mountain West Addiction Technology Transfer Center (MWATTC) 2004 workforce survey data (64.5%) and the ATTC of New England 2004 workforce survey data (63%). The workforce data from these two regional studies (representing 11 states or over 20% of the country) indicates a trend may be developing. Given this, it is important that researchers, policy-makers, educators, and providers understand the significance of the data and its potential implications for the state of substance abuse treatment. For example, males represented 70% of the individuals entering treatment between 1992 and 2000 (Office of Applied Studies, SAMHSA, TEDS Data Set). This presentation provides an analysis of the workforce data according to gender (e.g., educational levels, recovery status, age, experience, retirement plans, salary, etc.) and highlight the potential implications of this trend (e.g., educational and training needs, recruitment strategies, treatment service delivery).

78. Rosenberg, L. (2007). Quality as the cornerstone of behavioral health: Four critical issues. *Journal of Behavioral Health Services & Research, 34(4),* 353-356.

The purpose of this article was to outline four critical issues – focus on whole health, clinical excellence, workforce, and information technology - related to quality in mental health and addictions treatment. In relation to the first critical issue (focus on whole health), the author specifies that screening and evaluation for general health problems must be available in behavioral health settings. In addition, behavioral health settings must pursue clinical excellence by collecting and analyzing data relating to the job that they are doing. Also, individuals in the workforce must be offered salaries that are commensurate with the skilled staff necessary to implement effective interventions, have costs covered associated with ongoing education and clinical supervision, and must support organizational quality improvement efforts. Finally, the author outlines that the electronic health record (EHR) is slow among healthcare providers in general, which needs to occur. Implications are discussed.

79. Scully, J. H., & Wilk, J. E. (2003). Selected characteristics and data of psychiatrists in the United States, 2001-2002. *Academic Psychiatry, 27(4),* 247-231.

The purpose of the current article is to describe the physician workforce as a whole, and how psychiatrists fit into it. Specifically, the article described psychiatrists' work activities in routine practice through data obtained from the AMA Physician Characteristics and Distribution in the US 2002-2003 and the 2002 National Survey of Psychiatric Practice. Results indicated that psychiatrists are the fourth largest medical practice in the US and it has grown approximately 90% since the 1970s. In addition, psychiatrists are clustered in areas, and not distributed equally and working less hours than documented in the past. Implications are discussed.

80. Shoptaw, S., Stein, J.A., & Rawson, R.A. (2001). Burnout in substance abuse counselors: Impact of environment, attitudes, and clients with HIV. *Journal of Substance Abuse Treatment, 19*, 117-126.

The purpose of this article is to determine the level of burnout among substance abuse counselors working with clients with HIV/AIDS. Three burnout dimensions – emotional exhaustion, depersonalization, and personal accomplishment - were assessed for a sample of 134 counselors. Results indicated that emotional exhaustion was predicted by less support, less efficacy, and working in a methadone clinic. In addition, depersonalization was predicted by having a lower percentage of clients with HIV/AIDS, more efficacy, support, and education. Implications are discussed.

81. Smith, M. J. W., Whitaker, T., & Weismiller, T. (2006). Social workers in the substance abuse treatment field: A snapshot of service activities. *Health & Social Work, 31(2),* 109-115.

The purpose of this article is to describe social workers in the substance abuse field, using data from the first Practice Research Network (PRN) survey conducted by the National Association of Social Workers, which is a project funded by the Center for Substance Abuse Treatment. Specifically, the study found that the majority of social workers reported taking action related to substance abuse diagnosis and treatment and a majority reported having no substance abuse training. Over 25 percent of clients had a primary or secondary substance abuse disorder. Implications and recommendations are discussed.

82. Stoffelmayr, B. E., Mavis, B. E., & Kasim, R. M. (1998). Substance abuse treatment staff: Recovery status and approaches to treatment. *Journal of Drug Education, 28(2),* 135-145.

The purpose of the current study is to compare recovery status and approaches to treatment among three groups of staff members working within substance abuse treatment – recovering staff, non-recovering staff, and non-recovering staff with recovering or addicted family members. The sample completed surveys addressing background, roles within program, and approaches to treatment. Results indicated that there were more female than male non-addicted staff with addicted or recovering family members. In addition, non-recovering staff with addicted or recovering family members was similar to non-recovering staff in their approach to treatment. Recovering counselors reported to pursue a wider range of treatment goals and to use more varied treatment techniques than non-recovering counselors. Implications for the treatment field are discussed.

83. Storti, S. A., Roget, N. A., Albers, E. A., Clinkinbeard, S., & Skinstad, A. H. (2006). *The changing face of the substance abuse treatment workforce: Is a crisis imminent: Implications for researchers, providers, and educators.* College on Problems of Drug Dependence, Scottsdale, Arizona.

Daily in the United States, approximately 1,092,546 individuals receive substance abuse treatment services in approximately 13,623 treatment facilities (SAMHSA 2003). A majority (60%) of these treatment services are provided in private, non-profit settings (SAMHSA 2003). While there is excellent data regarding substance abuse treatment patients and facilities, there is an absence of a national data set for the substance abuse treatment workforce. Using the results of two regional workforce studies by the Addiction Technology Transfer Center of New England

and the Mountain West Addiction Technology Transfer Center, several important trends can be identified. Overall, the majority of substance abuse treatment services in these two regions (eleven states or over 20% of the United States) are provided by white women with masters degrees, not in recovery, over the age of 40. This workforce is providing treatment services to a predominantly non-white, male, client population between the ages of 25-40. In comparison, Mulligan et al., (1989) seventeen years ago described the substance abuse treatment workforce as predominately composed of males, in recovery, with little formal education. The substance abuse treatment workforce has changed dramatically in the past two decades, specifically, in relationship to gender, race/ethnicity, age, and educational levels. This presentation highlights recruitment and retention efforts needed to address current workforce needs. Specifically, recruitment efforts speak to the fact that only 5% of the workforce is between the age of 21-30. Discussion around retention efforts addresses sources of job dissatisfaction (e.g., low pay, paperwork, and relapsing clients). Finally, the shift from staff in recovery to staff not having a history of being in recovery will be discussed. This is a significant change for the substance abuse treatment workforce with important implications.

84. Sun, A. (2001). Systemic barriers to the employment of social workers in alcohol and drug treatment agencies: A statewide survey. *Journal of Social Work Practice in the Addictions, 1*, 11-25.

The purpose of this study is to examine the systemic barriers to employing social workers in alcohol and drug treatment agencies through a statewide survey. Results indicated that social workers with undergraduate degrees have higher rates of employment than other bachelor degree holders, whereas social workers with master's degrees have a much lower involvement than counterparts with counseling degrees. The authors implicate six factors – low education requirements, low pay, absence of "social worker" positions, competition among different disciplines, lack of MSW interns, and state certification requirement - to explain MSW's low involvement in the field.

85. Taleff, M. J., & Swisher, J. D. (2001). The seven core functions of a master's degree level alcohol and other drug counselor. *Journal of Alcohol and Drug Education, 42(3),* 1-17.

The purpose of the current article is to outline the seven core functions of a master's degree level alcohol and other drug counselor. Specifically, this article describes training needed to support the advanced roles called the Seven Core Functions for the Alcohol and Other Drug Counselor, which differentiates an entry level individual from an individual with extensive experience and an advanced degree. Implications are discussed.

86. Three states collaborating on shoring up addiction workforce (2004, April 19). *Alcoholism & Drug Abuse Weekly: News for Policy and Program Decision-makers*, 3-4.

This article addresses the summit where leaders from New York, New Jersey, and Pennsylvania met to address reasons and solutions for the declining addiction treatment workforce. The summit, which was funded by CSAT and coordinated by NEATTC, was held at the urging of New York officials, which as a state, is at the forefront of efforts to increase the capacity of the addiction workforce. The treatment workforce is estimated at 200,000, while an estimated 26

million people have a substance abuse problem. In addition to the problem of shortages of people, the current counselors in the field are "graying" – they are between the ages of 40 and 55. The summit focused on developing ways to increase job satisfaction and recruitment barriers and each state director pledged collaboration with other states. The article also focused on how New York has led the field in developing workforce initiatives. The state has made changes to the counselor credentialing process, as well as offered resources to colleges and universities interested in offering a 350-hour course that fulfills an education requirement and is planning more extensive prevention programming. They are also exploring the issue of loan forgiveness for graduates who enter the addiction workforce. New York has identified that one barrier is marketing the profession to diverse groups. In Pennsylvania, leaders are finding a funding stream in order to bring more people into the field and building a capacity for distance learning. In New Jersey, officials are looking at marketing strategies for the workforce and a mentoring system for entry-level positions.

87. Tinsley, J. A. (2004). Workforce information on addiction psychiatry graduates. *Academic Psychiatry, 28(1),* 56-59.

The purpose of this article is to identify workforce information on addiction psychiatry graduates from the perspective of the program directors. Over 70% of directors completed the workforce survey. Results indicated that over 40% of graduates work in academic settings and almost 65% of graduates work in clinical settings with substance abuse patients. More than half of the respondents reported that graduates are satisfied with their salary and compensation packages. Implications are discussed.

88. U.S. department of labor: Bureau of labor statistics. (2007). *National compensation survey: Occupational wages in the United States, June 2006*. Retrieved on April 2, 2008, from http://www.bls.gov/ncs/ocs/sp/ncbl0910.pdf.

The purpose of this article is to describe occupational wages in the United States using survey data from the National Compensation Survey (NCS), which was collected by the U.S. Bureau of Labor Statistics (BLS). A three-stage stratified design was used to acquire data from over 100 million workers between December 2005 and January 2007. Results indicated that people made an average of $19.29 per hour in June 2006 in the United States. Counselors in the substance abuse and behavioral disorder occupations made $18.13 on average, whereas social workers in mental health substance abuse occupations make $18.65 an hour. It is important to note that these salaries are below the average hourly wage for counselors, social workers in general.

89. Vander Bilt, J., Hall, M. N., Shaffer, H. J., & Higgins-Biddle, J. C. (1997). Assessing substance abuse treatment provider training needs: Screening skills. *Journal of Substance Abuse Treatment, 14(2),* 163-171.

The purpose of this article was to examine to identify the training needs of the substance abuse workforce in relation to substance abuse screening instruments. A sample was randomly selected from licensed facilities in New England. The adequacy of training, interest in training, clinical skill, and training need were assessed. Results indicated that the sample was not particularly skilled in using screening instruments and subsequently, have a high need for it. In addition,

social workers, nurses, those who have less experience in the field, and women in general have a higher need in screening. Implications and recommendations in relation to these results are discussed.

90. Vander Bilt, J., Hall, M. N., Shaffer, H. J., Sorti, S. & Church, O.M. (1997). An assessment of substance abuse treatment training needs among nurses (part 1): Evaluating skill, knowledge, and training characteristics. *Journal of Substance Misuse, 2*, 150-157.

The purpose of this article was to conduct a training needs assessment among nurses in New England treatment facilities. The data was collected as part of a larger training needs assessment among workers in New England substance abuse treatment facilities. Results indicated that nurses have the lowest levels of skill or knowledge one-third of substance abuse treatment areas in comparison to drug and alcohol counselors, social workers, and physicians. Nurses desired additional training and implications of these results are discussed.

91. Wallace, M. A., & Williams, R. L. (2003). Multiple-choice exams: Explanations for student choices. *Teaching of Psychology, 30(2),* 136-138.

The purpose of this study was to determine reasons that students select particular multiple choice answers. Specifically, the researchers examined the relationships among three variables – students' explanations for their answers, generic critical thinking, and performance on different types of exam items. Participants were asked to take a critical thinking test and five multiple-choice exams during a human development course and to explain for their answers in a written format. Though results indicated that critical thinking significantly predicted exam performance measures, the strongest predictor of exam measures was the number of exam options. Implications are discussed.

92. Watson, D.W., Rawson, R.R., Raetaemane, S., Shafer, M.S., Obert, J., Bisesi, L., et al. (2003). A distance education model for training substance abuse treatment providers in cognitive-behavioral therapy. *Journal of Teaching in the Addictions, 2*(2), 45-57.

The purpose of this article was to present a distance education approach for the clinical training of community substance abuse treatment providers. Specifically, the approach discussed combined cognitive-behavioral techniques and on-site coaching. Implications are discussed on the importance of developing new approaches to training.

93. Wendler, A. M., Hunt, S. C., & Murdock, T. B. (2004). *Substance abuse treatment workforce survey report 2004: Oklahoma*. Kansas City, MO: Mid-America Addiction Technology Transfer Center in residence at University of Missouri-Kansas City. Retrieved on April 14, 2008, from http://www.annapoliscoalition.org/pages/images/Workforce_OK.pdf.

The purpose of the current article is to report the results of the Substance Abuse Treatment Workforce Survey Report for Oklahoma in 2004, which was gathered by the Mid-Atlantic ATTC. The report addressed five guiding questions – 1. *What are the characteristics of the Oklahoma workforce? 2. What types of services are being provided and to whom? 3. How does*

the workforce perceive their skills and training needs? 4. How is the work environment perceived in terms of supports/constraints and job satisfaction? and 5. What are the future challenges to the workforce in Oklahoma? Results addressing these questions were reported, and some of the highlights included the following information: Women comprised approximately two-thirds of the workforce staff. In addition, staff and directors were mostly Caucasian, with an age range from 23 to 75 for staff and 33 to 65 for directors. Approximately two-thirds of staff and three-fourths of directors worked in a private non-profit setting. Almost half of the workforce staff and over half of the directors had a graduate degree. Staff spent most of their time in direct service activities such as individual or group counseling. Most staff reported some type of work (ex., screening or treatment) with clients who have co-occurring mental health and substance use disorders.

94. Whittier, M., Bell, E.L., Gaumond, P., Gwaltney, M., Magana, C.A., & Moreaux, M. (December 2006). *Strengthening professional identity: Challenges of the addictions treatment workforce.* Retrieved from http://www.samhsa.gov/Workforce/WorkforceReportFinal.pdf.

The purpose of the current study was to summarize the trends and challenges that are associated with the addictions treatment workforce. In addition, a series of recommendations aimed at strengthening the field's professional identity were presented. The beginning of the report discusses long-term and newly-emerging issues that impact the addictions treatment workforce. Following this, a list of stakeholder priority recommendations for key focus areas and an in-depth discussion of the focus areas were discussed. The key focus areas included infrastructure development priorities, leadership and management priorities, recruitment priorities, addictions education and accreditation priorities, retention priorities, and study priorities.

95. Northeast Addiction Technology Transfer Center. (2004, January 27). *Workforce development summit: Taking action to build a stronger addiction workforce.* Pittsburgh, PA. Retrieved on April 2, 2008, from http://www.ireta.org/wfmono.pdf.

This monograph summarizes the first NeATTC Summit on workforce development. Dr. H. Westley Clark underscored many of the workforce development issues by presenting national data from CSAT's archive of subcommittee findings and related documents. The mental and behavioral health occupations workforce is projected to increase 27% by 2010, and estimates suggest that close to 5,000 new counselors are needed annually to compensate for net replacement and growth. Annual turnover rates range from 17-50%, and recruitment remains a top issue. The article reported that most individuals enter the addiction treatment profession in their mid-thirties and as a second career. Salaries typically range from $15,000 to $34,000, and will need to be increased to attract those with higher degree status. Ten recommendations were developed based on workgroup discussions from New York, New Jersey, and Pennsylvania substance abuse experts. These included the following: 1) Enhance the ethnic composition/diversity of the workforce with market campaigns targeting diverse groups, and particularly non-English speaking populations. 2) Close the gap between the science-based prevention information and application. 3) Reduce administrative burden/paperwork. 4) Establish distance-learning opportunities for on-line training of drug and alcohol counselors to increase training access. 5) Enhance the use of data, including performance measurement systems. 6) Access federal funds for workforce development by qualifying addiction counselors

as an “at risk” career field. 7) Market the collective successes of the addiction field by developing a state-wide awards event that provides scholarship and awards to honored employees donated by private industry. 8) Enhance the job entry and mentoring process through a step system and guidance along a progressive career development path. 9) Increase access to the field by creating an accelerated entry path for people entering the field as a career change. 10) Implement healthy workplace strategies to reduce stress levels.