



U.S. PHYSICIAN HEALTH PROGRAMS

A MODEL OF SUCCESSFUL TREATMENT OF ADDICTIONS

By Gregory E. Skipper, MD and Robert L. DuPont, MD

Among physicians, there is a lifetime prevalence of substance use disorders (SUDs) of approximately 10 to 12 percent, similar to the general population rate (Flaherty et al., 1993; SAMHSA, 2006). Specialty care and supervision for addicted physicians was initially proposed and initiated in 1973 by the American Medical Association (AMA) to help physicians and to protect the public with the publication of *“The Sick Physician: Impairment by Psychiatric Disorders, Including Alcoholism and Drug Dependence,”* which encouraged the growth of specialized, state Physician Health Programs (PHPs) in 49 states, managed via authority typically granted under charter from the state Licensing Boards, “... to provide advocacy for physicians and . . . to protect the public” (www.ama-assn.org/go/fsphp; White et al., in press). The AMA has been active in support of PHP care management since that time.

Given the potential public health and safety concerns—as well as public trust issues—associated with addiction among physicians, it is surprising that despite the numerous studies of single state PHPs (e.g. Selander & Epstein, 1983; Reading, 1992; Fletcher, 2001; Bohigan et al., 2002; Domino et al., 2005) there has been no independent study describing the national program of PHPs or the distinctive treatment and monitoring they provided. In this regard, it might be expected that physicians with SUDs would receive essentially the same type and duration of treatment that other addicted individuals receive. This is generally the case in all other areas of healthcare (i.e. doctors generally receive the same care as other patients for medical problems); however, it appears that the care and management of addicted physicians, as coordinated by PHPs, is qualitatively and quantitatively different from the care received by the public (See

Skipper, 1997; Gold et al., 2002; Domino et al., 2005).

The available outcome studies of PHP-managed addicted physicians have reported remarkable results—much superior to those found in other populations of addicted patients receiving other forms of addiction treatment. Specifically, one outcome study reported abstinence rates of 78 percent over 11 years (Domino et al., 2002); while another reported a 90+ percent success rate over five years (Shore, 1987), far superior to results from typical addiction treatment, with 40 to 60 percent relapse rates following treatment (Project MATCH, 1997; Simpson et al., 1997; McLellan et al., 2000; Finney et al., 2001; Institute of Medicine, 2006).

Indications of qualitative differences in the way care is provided, coupled with indications of substantially better results, led us to several evaluation questions. How do these programs operate; what is their structure; are the programs similar across states; and what are the factors potentially responsible for the widely reported better outcomes? With these questions in mind, we asked the Federation of State Physician Health Programs (FSPHP) to support a comprehensive, nationally representative study of the structure and outcomes of PHPs. Here we characterize the legal, financial, administrative and clinical structure of 42 PHPs nationwide, with a description of the course of care, support and monitoring provided by these programs. We report some of the more salient five year results here, but a second paper (McLellan, DuPont & Skipper, 2008) is devoted to a full report of the five-year outcomes on a consecutive sample of over 900

addicted physicians from 16 state PHPs. A separate paper sets the PHP results in the context of other treatment (DuPont, et. al., in press).

Methods

Involvement of the Federation of State Physician Health Programs (FSPHP). The FSPHP agreed to provide assistance in completing a descriptive survey of all state PHPs. A steering committee of the FSPHP involving members of seven PHPs held frequent teleconferences to advise us on the content of the questionnaire and on the data collection procedures. That steering committee also encouraged all PHPs to participate in this independent evaluation.

Questionnaire Development. Following Institutional Review Board approval, a 38-item questionnaire was sent to the Medical Directors of all 49 active PHPs in April, 2005. The questionnaire, pre-tested by a small group of PHPs, was organized into three content areas: financial and legislative aspects of the organization; physician

participant profiles; and types of services provided.

Survey Procedures. Questionnaire submission was followed by telephone contact and participation of all sites in a web-based listserve to promote participation, clarify questions and assure understanding of responses. Complete questionnaires were received from 39 of 49 PHPs and an additional three partially completed questionnaires were obtained from three others for an 86 percent response rate. All returned questionnaires were examined by independent research staff for completeness and consistency. Blank or confusing responses were resolved by calls from the authors to verify understanding of the question and to validate the responses.

Results

PHP Goals. All responding PHPs shared the common goals of early detection of substance use disorders; rapid intervention, thorough assessment and evaluation of potential cases; referral to abstinence-based treatment; long-term

Quantum
Units Education
CEUs Everyone Can Afford!

Online and Home Study Continuing Education Courses

\$3 Per CEU - Lowest CEU Courses Online
Discount Plans as low as \$1 per CEU
Mental Health, Substance Abuse, Ethics & More
Instant Certificate Download
Free Shipping on All Homestudy Orders

Free CEUs 2 Hours of HIV

<http://www.QuantumUnitsEd.com>

877.665.3311
email: support@quantumunitsed.com

contingency monitoring; and reporting monitoring results to credentialing agencies (i.e. medical groups, hospitals, malpractice companies, health insurance companies, etc.) concerned with assuring that physicians are able to practice with reasonable skill and safety. There was essentially complete uniformity of these goals across all surveyed programs.

Organization. Most PHPs were independent non-profit foundations (54 percent), and the others were components of the state medical association (35 percent), or the licensing board itself (13 percent). Regardless of the organizational charter, all PHPs had written operating agreements with their state licensing boards to act on their behalf in the management of addicted physicians; and 59 percent of these PHPs had independent legal authority based on specific state laws.

Personnel. On average, there were five paid, full-time equivalent employees per PHP (range from one to 19; median = three) including medical directors, clerical support, administrators, counselors and case managers.

Budget. The average annual operating budget for a PHP was approximately \$538,000, though this varied substantially (range \$21,250—\$1.5 million; median \$270,000). The sources for these operating funds included licensing boards (50 percent), participant fees (16 percent), state medical associations, (10 percent), hospital contributions (9 percent), malpractice companies (6 percent) and other (9 percent). These PHP budgets did *not* include most treatment or drug testing, which were borne by the participants themselves. About half of the programs received at least part of their funding

from participants, but the other half charged nothing to participants.

General Services. All PHPs provided general addiction education programs for all physicians in their state, as well as consultation with hospitals and clinics, informal investigations, careful evaluation of addiction treatment programs as referral sites, and most importantly, long-term monitoring. As part of their general services (both to the state licensing boards as well as to the physician participants), all PHPs maintained records documenting participant abstinence (drug testing and work-site surveillance) and participation in the various therapeutic and monitoring aspects of the program. These records were regularly provided to the licensing boards, hospitals and malpractice carriers who required this evidence as a condition of participants' continued ability to practice medicine.

Description of Addicted Physicians. PHPs reported admitting an average of 34 new physicians with SUDs per year, per program (range zero to 150 cases; median = 21). PHPs reported an average active caseload of 138 physicians under monitoring contracts (range nine to 541; median = 86). While all PHPs dealt with substance use disorders, only 12 percent focused exclusively on those problems. Most also worked with physicians suffering from mental illness (85 percent), physical illness (62 percent), and other potentially impairing conditions (for example, cognitive deterioration). About one-third (36 percent) handled only physicians, while the remainder also dealt with other healthcare professionals such as dentists (51 percent), veterinarians (33 percent) and pharmacists (21 percent).

Referral Sources and Conditions. The four major sources of referrals to PHPs in 2005 were self-referrals (26 percent), clinical colleagues (20 percent), the state licensing board (21 percent), and the hospital medical staff (14 percent). Other referral sources (17 percent) included treatment providers, medical schools, law enforcement officials, family members, attorneys and other PHPs. Regarding levels of coercion, it was interesting that only 31 percent entered care through a formal stipulation or mandate from a regulatory or licensing authority. It is safe to say that all were coerced, with the remainder entering care due to some combination of informal pressures by colleagues or family. Regardless of referral source or condition, all physician participants were required to sign a contract specifying the nature and duration of their treatment and monitoring, as well as the consequences for failing to abide by the contract (see below).

Problems at Admission. The most common primary drugs of abuse were alcohol (50 percent) and opioids (35 percent). The other 15 percent of cases reported stimulants, sedatives, marijuana and other drugs. Across PHPs, an average of 31 percent of these physicians had problems with both drugs and alcohol. Programs reported that about one-half (48 percent) also had co-occurring psychiatric disorders and/or pain problems. However, the range was large (one to 75 percent), possibly reflecting the diversity of attention paid to these issues by the various PHPs.

Description of Addiction Care. The typical course of care for an addicted physician involved a progression through three stages: initial intervention and evaluation (i.e. convincing a

Transform lives as an addiction counselor

There's never been a better time— or a better way.

Earn your graduate degree or certification from the Hazelden Graduate School of Addiction Studies

- program blends rigorous academics with clinical practice
- course work taught by leading experts
- clinical work supervised by experienced professionals
- classes held on Hazelden's campus in Center City, Minnesota
- master's degree can be earned in as little as one year

Visit our Web site to learn more about...

- academic programs
 - Master of Arts in Addiction Counseling
 - Certification Program
- financial aid and grants available
- student life

Visit the Hazelden Graduate School of Addiction Studies at hazelden.edu, or contact us by phone at 651-213-4617, or by email at nkaminski@hazelden.org.



An unparalleled program that integrates academics with clinical practice

HAZELDEN

© 2010 Hazelden Foundation
2640-2 (3/10)

physician to enter evaluation); to formal treatment (at an authorized carefully selected specialty treatment program); and finally, long-term support and monitoring.

Evaluation and Intervention. The first phase of PHP involvement took place prior to any treatment and generally involved discussions with colleagues, family or employers who were considering referring a physician with suspected substance use disorder. An intervention with the identified physician followed. In these “professional” interventions, the Medical Director or other senior person from the PHP discussed the issues raised with the identified physician, and strongly suggested immediate formal evaluation. These formal evaluations generally included a full diagnostic interview

and questioning of all pertinent sources of collateral information, for substance use and other psychiatric and medical conditions. The results of that evaluation guide the next steps included a discussion of the options, referral for treatment as indicated, eventually followed by a formal PHP monitoring contract.

The Contract. A specific and important feature of these PHPs was the development of a formal, signed contract that specified in detail the care, support and monitoring activities that the participant would have to participate in over the five years of the program. In addition, this contract specified the consequences that would occur upon failure to comply with the plan and/or return to alcohol or drug use. These consequences were different depend-

ing upon the conditions of the referral and the severity of the addiction problem, but at the minimum, failure to comply resulted in: further evaluation and/or treatment; and/or reporting to the state licensing board; and more serious consequences that would be determined by that board based upon the nature of the noncompliance.

An important additional part of this contract was the “safe harbor” provision that most contracts held. Most physicians were referred to the PHP because of some serious alcohol or drug related incident or infraction that might result in immediate censure or even loss of license. Thus, as an additional incentive to enter care and monitoring, entering treatment and signing the contract under the auspices of the PHP generally led to

postponement or deferral of pending legal, employment or family sanctions—as long as the conditions of the treatment and monitoring plan were adhered to—thereby providing the accountability and oversight necessary for public safety. PHPs stressed that they provide a supportive, collegial approach, but with firm boundaries based on program policies throughout the period of PHP care.

Formal Treatment. Working through the FSPHPs, the PHPs network to identify the most appropriate and effective treatment centers around the country for these physicians. Most state PHPs refer to the same 12 to 15 treatment programs. This arrangement brings these treatment centers into long-term relationships with the PHPs and creates accountability. All PHPs require total abstinence from alcohol use and from nonmedical drug use. Opioid agonist therapy is not utilized except in extremely rare cases.

The first phase of formal addiction treatment for two-thirds of these physicians (69 percent) was residential care, often for 90 days, intensive outpatient treatment was utilized for 22 percent, and the remaining 19 percent received intensive day treatment. Treatment included multiple intensive sessions of group, individual and family counseling as well as an introduction to an abstinence-oriented lifestyle through required attendance at Alcoholics Anonymous (AA), Narcotics Anonymous (NA) and Caduceus meetings (a collegial support association for recovering health professionals) and other mutual-aid community groups. Frequent status reports on treatment progress were required by most PHPs.

Pharmacotherapy. Use of pharmacotherapy as a component of treatment of physicians with substance use disorders was rare. Very few of the treatment programs or the medical directors of the PHPs used any of the available maintenance or antagonist medications. On the other hand, PHPs indicated that as many as one-third of participating physicians received antidepressant and non-benzodiazepine anti-anxiety medications during their care.

Long-Term Support and Monitoring. After completion of initial formal addiction treatment, all PHPs developed a continuing care contract with the identified physician consisting of support, counseling and monitoring for five years or more. Most PHPs (95 percent) also required frequent participation in AA, NA or other self-help groups and verification of attendance at personal counseling and/or Caduceus meetings. Most PHPs (70 percent) also required worksite monitors (a neutral, non-subordinate party in proximity to the physicians' worksite) to provide regular reports to the PHP (Talbot & Wright, 1987).

Drug Testing. Physicians were tested randomly throughout the course of their PHP care, typically being subject to testing five out of seven days a week. Procedurally, most physician participants were required to call a phone number each workday which informed them whether to report for testing that day, based on a random selection. Even if they were tested the day before a call they could be retested again that day. Most PHPs subcontracted with third party administrators to conduct notification, organize and supply collection sites, collect payment and supply test

reports. Physicians were typically tested an average of four times per month in the first year of their contracts for a total of about 48 tests in the year. By the fifth year, the average frequency of testing was about 20 tests per year but throughout their PHP care management they were subject to testing at any time.

The great majority of PHPs (95 percent) reported using urine as the primary substance for drug testing; however, hair (50 percent of PHPs), breath (21 percent), saliva (18 percent) and blood (3 percent) were also used. Drug test panels varied, with about half (52 percent) using a 20+ "health professional drug panel" for each of their tests; 30 percent reported fewer drugs tested, and about 5 percent of PHPs tested only for the physician's specific drug(s) of choice. Two-thirds of the PHPs (68 percent) routinely utilized ethyl glucuronide (EtG) a new test to better detect alcohol exposure over the prior one to five days.

Other Monitoring Activities. In addition to the drug testing, participating physicians were expected to attend appointments with the PHP for ongoing clinical care and evaluation. Unannounced visits to the work site were also included in monitoring plans. Depending upon the specifics of each individual contract it was possible for PHPs to also receive regular reports from colleagues and family members.

Dealing with relapse

PHPs were uniformly aggressive in the management of relapse. Relapse was defined broadly beyond re-use of alcohol or drugs, to include noncompliance with program requirements or poor reports from worksite monitors.

Any relapse was serious and was dealt with using a variety of responses tailored to the specifics of the case. For example, a Level I relapse consisted of missing therapy meetings, dishonesty or other behavioral concerns. Level II relapses involved re-use of drugs or alcohol, but outside the context of medical practice. Level III relapses involved substance re-use within the context of practice.

Level I relapses (generally failure to attend appointments or lying) were usually addressed by a combination of increased intensity of care and monitoring and by immediately informing family and colleagues of the physician to enlist their support in promoting compliance with the contracted behavioral changes. The most common response (88 percent) to a Level II relapse (detected alcohol or drug use) was to recommend discontinuation of work to undergo a re-evaluation. For physicians whose care was formally stipulated, 65 percent of PHPs said they were required to report even the first relapse to the medical board or licensing agency.

Relapse Rates. As part of a separate outcome study of these programs and patients we performed a retrospective five-year follow-up on a 100 percent, intent-to-treat sample of 904 physicians admitted to 16 of these programs in 2001 (McLellan, DuPont & Skipper, 2008). That study examined all urine testing records of those physicians throughout their five-year period of monitoring to determine the prevalence of Level II relapses (detected drug or alcohol use).

Over the five-year period, 22 percent of physicians had at least one detected instance of alcohol or drug use. As

indicated, the initial detection of substance use usually resulted in more intensive treatment and monitoring, and among those whose substance use was detected, only 26 percent had a repeat positive test during the five years. At the five-year follow-up, 71 percent of this sample were working and licensed; 18 percent had retired or had their licenses revoked, had retired or died; and 5 percent had an unknown status (See McLellan, DuPont & Skipper, 2008).

PHPs were uniformly aggressive in the management of relapse.

Discussion

PHPs exist in 48 states and the District of Columbia to prevent substance abuse problems among physicians. The PHPs also promote and carry out early detection, intervention and referral to treatment, as well as manage continuous ongoing monitoring of physicians with substance use disorders. These PHPs do not provide formal addiction treatment themselves, but instead function as active, long-term case managers and monitors for physician participants. The significant public health and safety issues associated with physician addiction have been the subject of intense public and professional interest (See Hassemeyer, 2007; Wohlsen, 2007) making the understanding of the structure, function and effectiveness of PHPs a high priority for the medical commu-

nity, for regulatory agencies and for the public at large.

Despite the public health importance and the uniqueness of this model of treatment, published studies of recovering physicians have only been performed by single state PHPs (e.g. Selander & Epstein, 1983; Reading, 1992; Fletcher, 2001; Bohigan et al., 2002; Domino et al., 2005). With the cooperation and consent of the FSPHPs, we undertook the first nationally representative study of PHP administrative, treatment, monitoring, support and sanctioning procedures, collecting data from 42 of the then 49 active PHPs in the country.

An important part of our original intent in undertaking this study was to examine different organizational or procedural subgroups of programs to see if these differences accounted for outcome differences. However, the first—and in some ways the most interesting—finding was that despite some differences in their operating and reporting structures, virtually all of the PHPs examined reported common goals, treatment philosophies and referral strategies and very similar monitoring and reporting procedures.

Virtually all PHPs work directly with referring professional societies, medical centers, colleagues and families to assess and intervene with affected physicians to obtain thorough evaluation at an approved facility. Evaluation then often leads to recommendations for appropriate treatment followed by long-term care. Refusal to participate in evaluation risks referral to the regulatory board, a foreboding prospect for most physicians. A second important and common feature of all PHPs is the development of a signed contract

between the PHP and the physician participant, specifying the detailed elements of care and monitoring, as well as the reporting requirements of the PHP with potential consequences for non-compliance. A third common feature is referral to formal, abstinence-oriented treatment, usually to carefully selected treatment programs. Competition among treatment providers for these referrals likely leads to improved quality of care. Following formal treatment, all PHPs continue individualized care, support services and particularly monitoring (through drug and alcohol testing and work site monitoring) for five years or more. Recovering physicians in all the PHPs studied were encouraged to continue attendance at AA, NA and Caduceus meetings. Return to the use of alcohol or other drugs leads to swift clinical re-evaluation, usually intensification of treatment and monitoring and sometimes required reporting to state licensing boards.

Virtually all these physicians were gently coerced into signing a PHP contract and entering treatment. However, only about one-third were formally stipulated by a licensing board. The remaining physicians participated due to significant but less formal pressures from colleagues, medical centers or family and the ominous risk of regulatory board involvement. The power of this initial coercion coupled with the temporary safe harbor provided by the PHP from potential legal, family or employment actions appeared to be effective in convincing physicians to comply with initial recommendations for evaluation, treatment and monitoring. There was also continuing involvement of the physician's family, close colleagues and employers during

the course of the physician's treatment and monitoring, receiving regular reports on progress and treatment expectations. It is likely that the combination of formal and informal social supports and pressures over the extended period of the PHP contract were significant contributors to the remarkable results seen (See McLellan, DuPont & Skipper, 2008).

This type of care and these results are not typically found in studies of public addiction treatment. To illustrate, a recent national study by the Department of Veterans Affairs found that over 90 percent of care offered is provided in outpatient programs with patient participation ranging from three to 20 hours per week, for an average duration of only 14 days. There was little systematic use of drug testing (Finney et al., 2001; Finney, Willenbring & Moos, 2000). Similarly, a study of insured, employed, addicted patients treated within the Kaiser system, indicated little use of residential care or urine testing and average outpatient treatment durations generally of less than 60 days. While these Kaiser patients were encouraged to attend AA, there was essentially no continuing care or monitoring linked to significant consequences for non compliance (Weisner et al., 2000).

Even court mandated treatments for addicted individuals typically do not include the intensity or duration of supports and monitoring typically seen in PHPs. For example, over 5,000 drug court programs for drug-affected, non-violent offenders with SUDs offer the opportunity to complete a year of addiction treatment and monitoring in lieu of incarceration for their drug-related crimes. That treatment occurs in outpatient settings, mostly employ-

ing group counseling and referral to AA/NA but also regular urine monitoring. At bi-weekly to monthly hearings, the presiding judge reviews the offender's attendance and urine test results, with graduated sanctions meted out in cases of poor response. While individual and national evaluations of drug court programs have reported favorable results during participation (i.e. no arrests or incarcerations, few positive urine test results), greater than 48 percent of these clients relapse and 31 percent are re-arrested in the one year following the end of supervision (Belenko et al., 2007). In contrast, our evaluation of outcomes among 904 addicted physicians treated in a subset of 16 of these PHPs, found 78 percent had completely negative urine test results for any use of alcohol or any other drug throughout five years and only 4 percent had their medical license revoked.

Conclusion

These findings show that affected physicians, the medical community, and the public at large are well served by these PHPs. These findings lead to many questions about the most effective components of this unique care management system in achieving these remarkable results. Addicted physicians enjoy educational, employment, financial and social benefits that are not typical of the population at large or of the population of addicted individuals in treatment. Some of these advantages are characteristic of the physicians themselves but an additional advantage is health insurance and personal resources which make high quality care possible for extended duration. These benefits alone may offer a better prognosis than seen in

other treated populations. Physicians also have characteristics that raise their risk of addiction and relapse including having easy access to controlled substances and being able to manage their work lives to cover up drug and alcohol-related deficits.

While the treatment services received by addicted physicians are carefully managed by the PHPs to insure that they are of high quality, the most striking aspect of the PHP care management system is not the treatment that is provided but the overall environment in which the treatment takes place. All of the treatment provided to physicians is widely available to other patients who have insurance or other resources to pay for it. Physicians in PHP care management—unlike almost any other SUD population—face a zero tolerance for any use of a drug nonmedically and any use of alcohol. Not only is this standard stricter than virtually any other clinical population, but it is enforced with a sophisticated, intensive, prolonged and random monitoring that is unequalled in any other population. It is this combination of a high standard strictly enforced and excellence in treatment services that appears to result in the outstanding outcomes of physicians with SUDs. It is likely that high standards and strict monitoring without excellent treatment or excellent treatment without strict monitoring would NOT produce these impressive results. However, it is up to future studies to clarify the relative value of various components of PHP care management. What this data prove is that together these two elements produce dramatically improved outcomes. This is an important finding because it sets a far higher standard for

the biological disease of addiction. That standard becomes a goal for all treatment. The task for the future, now that this higher standard has established the potential for recovery from substance use disorders is how can other patients with this progressive and potentially fatal disease be helped to achieve similar excellent results. This study has opened the door to a rethinking of how good outcomes can be and offered some hints about the elements that are needed to achieve these outcomes.

Acknowledgments: The authors gratefully acknowledge the valuable input and assistance of representatives of the Federation of State Physician Health Programs who actively participated in the design of questionnaires for this study; and the Robert Wood Johnson Foundation for support of the data collection and evaluation activities.

Dr. Robert DuPont, MD is the founding Director of the National Institute on Drug Abuse and President of the Institute for Behavior and Health Inc.

Dr. Gregory Skipper, MD is head of the Alabama State Physician Health Program.

References

- Belenko, S. B., & DeMatteo, D. S., Patapis, N. S. (2007). Drug courts. In A. R. Roberts & D. W. Springer (Eds.), *Forensic social work in juvenile and criminal justice: An evidence-based handbook*. Springfield, IL: Charles C. Thomas Pub., Ltd.
- Bohigan, G., Croughan, J. & Bondurant, R. (2002). Substance abuse and dependence in physicians: the Missouri Physicians Health Program—an update (1995—2001). *Missouri Medicine*, 99(4); 161-165.
- Domino, K.B., Hornbein, T.F., Polissar, N.L., Renner, G., Johnson, J., Alberti, S. & Hankes, L. (2005). Risk Factors for Relapse in Health Care Professionals With Substance Use Disorders. *JAMA*, 23/30; 293: 1453-1460.
- Finney, J.W., Ouimette, P.C., Humphreys, K. & Moos, R.H. (2001). A comparative, process-effectiveness evaluation of VA substance abuse treatment. *Recent Dev Alcohol*. 15:373-91.
- Finney, J.W., Willenbring, M.L., Moos, R.H. (2000). Improving the quality of VA care for patients with substance-use disorders: the Quality Enhancement Research Initiative (QUERI) substance abuse module. *Med Care*. 38(6 Suppl 1):1105-13. Review.

Flaherty, J.A. & Richman, J.A. (1993). Substance Use and Addiction Among Medical Students, Residents, and Physicians: Recent Advances in the Treatment of Addictive Disorders. *Psychiatric Clinics of North America*.16: (1), 189-195.

Fletcher, C. (2001). Michigan's unique approach to treating impaired health care professionals. *J. Add. Dis.* 20(4); 97-111.

Gold, M.S., Pomm, R., Kennedy, Y., Jacobs, W. & Frost-Pineda, K. (2002). 5-Year state-wide study of physician addiction treatment outcomes confirmed by urine testing. *Presentation at the Society for Neuroscience*, Orlando, FL.

Hasemyer, D. (2007) State Drops Aid for Addicted Doctors. *San Diego Union—Tribune*, August 5, <http://www.signonsandiego.com/news/state/20070805-9999-1m5sack.html>.

Institute of Medicine (2006). *Improving the Quality of Health Care for Mental and Substance-Use Conditions*. Washington, D.C.: National Academy Press.

McLellan A.T., O'Brien, C.P., Lewis D. L. & Kleber, H.D. (2000). Drug addiction as a chronic medical illness: Implications for treatment, insurance and evaluation. *JAMA* 284: 1689-1695.

McLellan, A.T., DuPont, R.L. & Skipper G.E. (In Submission). Long-term outcomes in a national sample of physicians treated for addiction.

Project Match (1997). "Matching alcoholism treatments to client heterogeneity: Project MATCH Posttreatment drinking outcomes." *Journal of Studies on Alcohol* 58(1): 7-29.

Reading, E. (1992). Nine years experience with chemically dependent physicians: the New Jersey experience. *MD Medical Journal* 41(4); 325-329.

Selander, G. & Epstein, B. (1983). The FMA-FMF Impaired Physicians Program: the first 25 months. *J Fla Med Assoc*. 70(10):907-111983.

Shore, J.H. (1987). The Oregon Experience With Impaired Physicians on Probation. *JAMA*. 257(21), 2931-34.

Simpson, D.D., Joe, G.W & Brown B.S. (1997). Treatment retention and follow-up outcomes in the Drug Abuse Treatment Outcome Study (DATOS). *Psychology of Addictive Behaviors*. 11(4); 294-301.

Skipper, G.E. (1997). Treating the Chemically Dependent Health Professional. *J. Add. Dis.*16(3); 67-74.

SAMHSA (2006). *Results from the 2005 National Household Survey of Drug Use and Health*. <http://oas.samhsa.gov/nsduh/2k5nsduh/2k5Results.pdf>.

Talbott, G. & Wright C. (1987). Chemical dependency in healthcare professionals. *Occupational Medicine* 2:581-91.

Weisner, C., Mertens, J., Parthasarathy, S., Moore, C., Hunkeler, E., Hu, T. & Selby, J. (2000). The outcome and cost of alcohol and drug treatment in an HMO: day hospital versus traditional outpatient regimens. *Health Serv Res*. 35(4): 791-812.

White, W.L., DuPont, R.L. & Skipper, G.E. (in press). Physicians health programs: What counselors can learn from these remarkable programs. *Counselor Magazine*.

Wohlsen, M. (2007). Addicted doctors are allowed to practice. *Associated Press*. Dec. 19, 2007.