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SAN FRANCISCO MEDICINE

JOURNAL OF THE SAN FRANCISCO MEDICAL SOCIETY

Addiction and Recovery

From Neurons to National Policy



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SAN FRANCISCO MEDICINE June 2010
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A SAMPLING OF ACTIVITIES AND ACTIONS OF INTEREST TO SFMS MEMBERS

SFMS Provides Online Classified Ads to the Medical Community!

The SFMS now offers online classified ads for health care-related postings, such as medical office space for rent, job openings, and more. They're affordable, and SFMS members receive a great discount!

Contact Jonathan Kyle at jkyle@sfms.org or (415) 561-0850 extension 240, or see www.sfms.org/classifieds, for more information.

California Physicians Will Be Required to Notify Patients of License

A new regulation, effective June 27, 2010, will require physicians in California to inform their patients that they are licensed by the Medical Board of California, and to include the board's contact information. The information must read as follows:

NOTICE TO CONSUMERS

Medical doctors are licensed and regulated by the Medical Board of California (800) 633-2322
www.mbc.ca.gov

The purpose of this new requirement is to inform consumers where to get information or go with a complaint about California medical doctors.

Physicians may provide this notice through one of three methods:

Prominently post a sign in an area of their offices conspicuous to patients, in at least 48-point type in Arial font.

Include the notice in a written statement, signed and dated by the patient or patient's representative, and kept in that patient's file, stating that the patient understands the physician is licensed and regulated by the Medical Board.

Include the notice in a statement on letterhead, discharge instructions, or another document given to a patient or the patient's representative, with the

notice set in at least 14-point type and placed immediately above the patient's signature line.

The SFMS will provide its members with signage; you can also obtain printable signage directly from the Medical Board. If you are interested in receiving a sign, contact Therese Porter in the Membership Department at (415) 561-0850 extension 268 or tporter@sfms.org.

FTC Again Delays Implementation of Red Flag Rule

AMA has filed a lawsuit to stop the Federal Trade Commission from extending its "Red Flag Rule" to physicians. The rule, after yet another delay, is now scheduled to take effect on December 31, 2010.

As you know, the Red Flag Rules require financial institutions and "creditors" to implement identity theft detection and prevention programs. Despite objections from CMA, AMA, and others in organized medicine, the FTC insists that physicians who regularly bill their patients for services (including copayments and coinsurance) are considered "creditors" and must develop and implement written identity theft prevention programs for their practices.

AMA's lawsuit asks for a declaratory judgment finding the rule is unlawful and void as applied to physician members of medical associations and state medical societies. The lawsuit does not, however, suspend the December 31 deadline.

See the CMA members-only section at www.cmanet.org for a free Red Flag tool kit and a webinar detailing the regulations.

Clinic by the Bay Medical Director: Part-Time Position

Clinic by the Bay (www.clinicbythebay.org) is a free, volunteer-powered health care clinic in San Francisco. Slated to open in late summer 2010 in the Excelsior, the clinic is based on the successful national model Volunteers in Medicine

(www.volunteersinmedicine.org), which engages retired and practicing doctors, nurses, and nonmedical volunteers to provide compassionate care free of charge to the working uninsured in their communities. We have secured a facility and have a volunteer Medical Advisory Board that is planning clinic services and protocols. We plan to open on Tuesdays and Thursdays. We seek a seasoned and dedicated primary care physician to lead the final phase of clinic development and oversee ongoing quality assurance and clinical care of patients. This salaried position is part-time (16 hours per week). Competitive salary based on experience. For more information, please contact Eliza Gibson at eliza@clinicbythebay.org.

Former SFMS President, Steve Walsh, MD, Wins Royer Award!

Congratulations to former SFMS president Dr. Steven Walsh for winning the Royer Award for outstanding contributions to the field of psychiatry.

Oakland physician J. Elliott Royer established the award in 1962 with a

generous endowment to UCSF upon his death. The award, which includes a substantial cash prize, goes every other year to two Bay Area psychiatrists, one a community-based practitioner and the other an academic psychiatrist.

The Royer Award for excellence in academic psychiatry will be awarded to Dr. Kristine Yaffe, who has made extraordinary contributions to the field of geriatric psychiatry. The Royer Award for excellence in community psychiatry goes to Dr. Steven Walsh. Dr. Walsh has devoted his career to public service. He is an outstanding clinician and teacher who has served in multiple leadership roles, including the presidencies of the San Francisco Medical Society, Northern California Psychiatric Society, and UCSF Association of Clinical Faculty; and delegate to the California Medical Association, the California Psychiatric Association, and the American Psychiatric Association. He has authored many successful policy initiatives related to increasing privacy protections for our patients and increasing funding for uninsured patients.

A Public Health and Safety Approach To Drug Policy

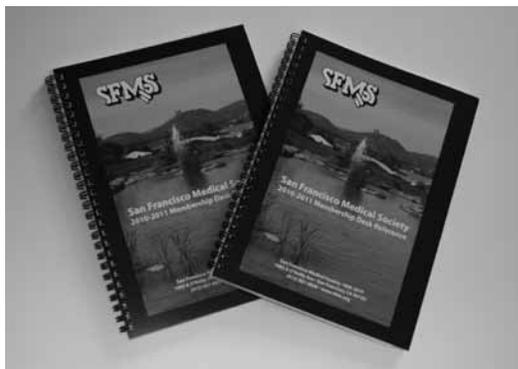
July 8, 2010 9:30 a.m. to 4:30 p.m.

The Center for Healthy Communities
The California Endowment
Los Angeles, CA

With 30,000 people locked up for a nonviolent drug offense in California, prisons are bursting at the seams and busting our budget. And yet drug prevention and treatment funding is suffering devastating cutbacks, making treatment harder to find than ever. California is overdue for a new approach to drug policy. Co-hosted by the Drug Policy Alliance and the California Society of Addiction Medicine, New Directions California will convene a range of stakeholders and explore a comprehensive, balanced approach to drug policy, which recognizes that successful strategies include prevention, harm reduction, treatment, and public safety.

Join us to begin moving our state's drug policy in a new direction: www.csam-asam.org.

Get Your Copy of the 2010-11 Membership Directory and Desk Reference Today!



This new and improved health care resource contains a comprehensive listing of SFMS members with their specialties and contact information. It is also packed with helpful resources that no medical office should be without!

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In an effort to make this great resource accessible to everyone, we've reduced the price. Members can now purchase additional copies for only \$25 each and nonmembers now pay only \$50.

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Michael Rokeach, MD, and Steve Heilig, MPH



Attorneys for the Afflicted

Drug addiction—and let's be clear from the start that we are talking about drugs both legal and illegal—has been likened to a form of slavery. A strong choice of words, yes, but not too strong for the impact severe addiction can have on a person's life: helplessness, destruction, and despair are all common. To all that, add denial, both in the addicted person and among friends, colleagues, and our broader culture as a whole, and it's not so surprising that the AMA years ago identified drug abuse, including that of alcohol and tobacco, as our nation's biggest public health problem.

San Francisco has long been known as a hard-drinking, hard-drugging town. This has been true from the Gold Rush onward through Prohibition and the 1960s Haight-Ashbury "hippie" explosion. Our city's rates for abuse of substances from tobacco to heroin have historically been among the highest anywhere. Clearly there are many serious health and other consequences as a result.

Thus it's perhaps not surprising that San Francisco's medical and public health leaders have long been pioneers in addressing addiction issues. SFMS advocates were movers and shakers in getting the AMA to make the statement referred to above; in the initiation, growth, and acceptance of addiction medicine as a legitimate specialty; in recognizing addiction as a disease with identifiable etiology, symptoms, and treatment; in the banning of smoking in restaurants (before the rest of the state and nation); in the acceptance of needle-exchange programs as a means of both interrupting transmission of HIV and as a bridge to treatment; in recognizing and treating physicians who themselves experience problems with drugs or alcohol; in developing sound approaches to the ongoing "medical cannabis" controversies; in raising awareness about emerging new drugs such as MDMA or "ecstasy" and others; in removing tobacco products from pharmacies; in advocating for justifiable alcohol tax increases to help compensate for the real costs of drinking; and more. It's a long and, we feel justified in saying, impressive list of contributions.

Sometimes this work has been local; sometimes it has involved taking our approaches statewide and beyond via our representatives to the CMA and AMA, as well as undertaking advocacy efforts with our elected officials and other authorities. As in other arenas, we have learned that physicians can be the most effective advocates of all. As the evidence base increases

for the disease model of addiction and effective treatment and prevention, this becomes even more true.

Addiction can strike people of all walks of life. But we will note that when physicians argue for better approaches and resources on behalf of some of their most afflicted patients, many of whom have been left with nothing other than hope, those physicians truly take on the role the legendary nineteenth-century physician and "father of modern pathology" Rudolph Virchow defined as "the natural attorneys of the poor."

We have been pleased and proud to turn over this issue of our journal to two local guest editors who embody all that is impressive about the rise and success of addiction medicine. David E. Smith, MD, and David Pating, MD—"Big Dave and Little Dave," as they have referred to themselves during this editorial process—are beyond renown in their specialty and community. Smith we should all know as the founder of the landmark Haight-Ashbury Free Medical Clinic, which he started right out of UCSF medical school. Pating is head of addiction medicine at San Francisco's Kaiser Permanente. Both have been tireless advocates for their field, presidents of addiction medicine specialty societies, and holders of a dizzying array of positions wherever drug and alcohol policy, prevention, practice, and funding are debated. They exemplify the ideal role of the physician and clinician, researcher, and, yes, "natural attorney" for their own patients and those of others.

There is already an official David E. Smith, MD, Day in San Francisco, and someday there is likely to be a Pating Day as well. We all owe these two Daves a lot.

They've assembled for us here an impressive monograph of addiction medicine. The authors herein, from the SFMS and beyond, pull few punches in describing what has been accomplished to date and what still needs to be done. The challenges remain, and some are daunting. But many of those who have experienced addiction, and beaten it, have identified *hope* as the single most important element in their recoveries. And what do effective treatment and more humane approaches to any life-threatening malady offer, if not hope? 

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James Yoss, M.D.

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David Pating, MD, and David E. Smith, MD

The Revolution in Substance Abuse Treatment

There is a coming revolution in substance abuse and mental health treatment, and it's called health care reform. Building on two decades of brain research, we've reached a policy epiphany: The best evidence-based treatment does little good if people cannot access treatment. Health care reform might change all that. In the new paradigm, 31 million new patients nationally (3.7 million in California alone) will be newly insured, giving them access to effective substance abuse treatment. It's been called a new "culture of coverage," and physicians must be prepared; Here are just a few reasons:

- Nationally, up to 40% of hospital admissions are drug- or alcohol-related. Yet fewer than 20% of physicians routinely ask about alcohol and drug abuse. Many do not know how to refer patients once a problem is detected, and, worse, there is a shortage of programs to treat drug addiction and alcoholism.
- Pushed by patient demands for instant cures, many physicians prescribe large volumes of opioids for transient pain conditions and as sedatives for anxiety, creating the most rapidly growing drug epidemic: prescription drug abuse. OxyContin is everywhere.
- Unaware of the developmental risks of substance abuse, many physicians treat adolescents as "small adults," missing years of opportunity to prevent, delay, defer, or detect emerging drug, alcohol, or mental health illnesses. Meanwhile, through well-intentioned "zero-tolerance" policies, marijuana-abusing students are expelled from school, again missing key prevention moments while solidifying their academic and social failure.
- As a community, we continue to treat addiction as a moral disorder punishable by jail time, foster care, or stigmatization rather than seeking opportunities to promote recovery, resilience, and community health.

But that was before the revolution. As health care reform unfolds, opportunities will arise to bring the science of substance abuse treatment to mainstream medicine, with significant economic and public health benefits. We know what works in managing the social problem of substance abuse; we just need the political will. Fortunately, the Accessible Health Care Act of 2010 declares mental health and substance abuse treatment an "essential" benefit. As clinicians who have dedicated their careers to improving access to comprehensively

integrated evidence-based treatment for substance abuse within HMOs (DP) and free health clinics (DS), we have seen firsthand the achievable improvements in health care and quality of life and the reduction in total health care costs when addicts and alcoholics are properly treated.

At Northern California's Kaiser Permanente, we have demonstrated that medical savings associated with integrated substance abuse treatment pays for the cost of treatment within six months by reducing hospitalization and emergency room and medical office visits. More significantly, simple screening for substance abuse in high-risk conditions, such as pregnancy, reduces the odds of preterm delivery by 2:1, placental abruption by 7:1, and intrauterine fetal demise by 16:1. And we suspect that if individuals with addiction are properly treated, not only will their health costs decrease but so will the health costs for their families.

In the public sector, for every 1,000 Californians who are uninsured or receiving Medicaid, 118 will have an alcohol abuse (or dependence) disorder, 57 will abuse drugs, and 12 will abuse pain medications, totaling 152 persons having any addiction-related disorder. Annually, this costs the state \$1.29 billion in health care costs for the approximate 20% of Californians who are uninsured. If only 10% of this cohort were treated, the estimated health savings would be \$400 million alone, with additional reductions in psychiatric problems (greater than 40%), family and social problems (50–60%), other medical problems (15–20%), and employment problems (15–20%)—all stemming from proper substance abuse intervention.

Treatment works! We just need to make it accessible to a larger population. That's the beauty of health care reform. Treatment coverage will expand, costs will come down, capacity will grow. We need physicians willing to lead this revolution! 

David Pating, MD, is chief of addiction medicine at Kaiser Medical Center, San Francisco, and assistant clinical professor in the Department of Psychiatry at UCSF. Currently, Pating serves as an appointed Commissioner on California's Mental Health Services Oversight and Accountability Commission (Proposition 63), where he chairs the Services Committee.

David E. Smith, MD, is the Chair of Addiction Medicine at Newport Academy and serves as the medical director of Center Point. He was the founder of the Haight Ashbury Free Medical Clinic. He is also an adjunct professor at UCSF.

A full list of references is available online at www.sfms.org.

Physician Invictus

From Heroin Addict to Addiction Physician

Don Kurth, MD

April 5, 1969. The red and white ambulance races through the early morning hours of the dark North Jersey night. Sirens are screaming and red lights are flashing, casting revolving shadows against the trees and houses as the medics race through the darkened suburban neighborhoods. The rain has just stopped falling and a hazy mist rises from the black pavement.

In the back of the ambulance lies a young man, barely out of his teens. His lips are blue and his skin is pale gray, but the paramedics continue to pump on his chest and force oxygen in to his lungs with the plastic face mask and ambu bag. Bloody vomit drips out of the mask and down his cheek. There are no signs of life, no respirations, no pulse. His dark blood is filled with drugs and alcohol and his lungs are filled with vomit and beer. Behind the ambulance the young man's parents are following, trying to keep up with the racing van. Neither speaks. They are remembering all the hopes and dreams they had had for their firstborn, their only son. His mom thinks about when she dropped him off for his first day of kindergarten, when he cried and called for his mother not to leave him. His dad remembers the first time his boy caught a trout by himself and how proud he was of his son and the photos they took of the speckled fish before they slipped him back into the creek. They both remember their dreams of college and a profession for their son, and maybe grandchildren of their own someday. And another round of siren screams fills the night air as they race to follow the ambulance through the night.

Finally they arrive at the hospital and their son is whisked into the treatment

area, the paramedics still trying to pump life back into his dying body. The parents park to the side and are directed to the reception clerk to fill out the forms and paperwork. Then they are asked to take a seat and wait.

As they sit, silent in the empty waiting area, neither speaks; neither lifts their eyes to look at the other; each is lost in private thoughts. Quietly both pray to their own God, isolated in their grief over the loss of their son, wondering if they should have done something differently, wishing they could do something more now.

Finally, the young ER doctor walks through the swinging double doors from the treatment area, looks around the waiting room, and walks toward the grieving pair.

"I am so sorry," he says slowly, deliberately. "I don't think he is going to make it. He was dead by the time he arrived. There just wasn't anything more we could do. He didn't have oxygen to his brain. I am sorry."

The doctor feels the grip of both sets of eyes on his own. He feels the sorrow of their loss in his own heart. Then, after a quick moment, he turns on his heel and hurries back through the double doors into the treatment area of the emergency room. An agonizing twenty more minutes pass before he returns with a different look on his face.

"I think he is going to make it!" he exclaims. "We've got a pulse and he is starting to breathe on his own. I think he might be OK!"

That young man was me, and I did not die of that overdose in 1969. But I was not done yet, either. I still had more overdoses to survive and jails to visit. And I still had to stumble my way into drug rehab and have

a chance to turn my life around.

On August 12, 1969—three days before Woodstock—I slammed my last speedball just before the police surrounded my parent's home and a new phase of my life began. Later that year I entered drug treatment at Daytop Village in New York and started to get my life back on track.

I had already flunked out of college twice by the time I overdosed in 1969. In fact, I had actually achieved a perfect GPA at my first college—0.00. I had split for California to visit the Haight and neglected to inform my registrar that I might not be returning to complete my final exams. Apparently, my professors were not listening as intently as I was to the "Turn on, tune in, and drop out," call of Dr. Timothy Leary. They failed to recognize the value of my desire to join in the "Summer of Love" and manifested their misunderstanding by awarding me F's in every single class.

But by the summer of 1972, I had completed drug rehab and begged my way back into college. Without drugs in my bloodstream, my grades improved dramatically and by 1975 I had snagged an academic scholarship to Columbia University in New York City. I worked as a gardener to pay for my living expenses and scrimped every penny I could. I couldn't afford a car, so I bought a used Suzuki motorcycle to get around. I managed to save \$200 over my next month's rent, so I bought a chain saw and a hundred feet of rope and became a tree cutter. After each hurricane or blizzard, I would tie the chain saw and rope to the back of my motorcycle and ride around looking for fallen trees to cut. There was always somebody who needed my help, and eventually I found a partner

and bought a pickup truck to expand the business. It was hard work, but I enjoyed what I did and made enough money to get through school. I eventually graduated, Phi Beta Kappa and cum laude, and went on to medical school at Columbia.

I had to work hard to get good grades. I had a lot of remedial work to do just to catch up with the other students. And I had to make the sacrifices that we all have had to make to dedicate our lives to medicine and patient care.

I trained at Hopkins and UCLA and found myself seduced by the California sunshine. I opened an urgent care practice in Rancho Cucamonga, California. But I have always had a soft spot in my heart for those who suffer from addictive disease, and eventually I found myself on the faculty of Loma Linda University, where I have run the addiction treatment program since the mid-nineties.

I got involved with the Rancho Cucamonga Chamber of Commerce, really just to get to know people in my community and to build up my own practice. The more I got involved, though, the more I began to realize the importance of being involved on a political level. It became more and more clear to me that many of the challenges we face, not just in addiction medicine but throughout medicine, are challenges that can only be met on a public policy level.

Scope of practice, corporate bar, and MICRA are all issues that must be defended on a public policy level. But our political responsibility as physicians goes far beyond that. Who but physicians can better fight the battle to ensure greater access to care for our patients? Who but physicians can articulate the importance of our physician-patient relationship remaining unfettered by burdensome government interference and regulations? If we cannot or will not advocate for ourselves, who do we expect to speak for us? The questions we must ask ourselves are these: If not us, then who? If not now, then when? As in the poem "Invictus," by William Ernest Henley, we must be the masters of our fates; we must be the captains of our souls.

I suppose my career path has been one of unlikely twists and turns. But

believe me, I did not plan it this way. Following my chamber involvement I was elected to the local water district board. After eight years of elected office, I moved on to the city council in Rancho Cucamonga (population 180,000) and was then elected mayor in 2006. Concurrently though, as my skills have sharpened in this world of public policy, I have done my best to pull my physician colleagues along with me, and together we have achieved some degree of success. I helped create our Addiction Treatment Legislative Days, first in California and then in Washington, D.C. Working together, we greatly improved access to care and our Addiction Treatment Parity Bill was signed into law by then-President George Bush on October 5, 2008. Greater access to medical care for those suffering from addiction is now the law of the land in the United States of America. I was honored by my colleagues to be elected president of the California Society of Addiction Medicine and now serve as president-elect of the American Society of Addiction Medicine.

But my work has really just begun. The greatest frontiers of medicine are not in research or clinical skills, as important as both of these areas are. As physicians, our challenges for the future are the realm of public policy. And we must be a part of shaping that future, or somebody else will do it for us. If we do not make it our business to participate in the process, we may find that we do not like the final result. And remember, whatever happens at the federal level will still have to be implemented in each state. Toward the goal of sensible health care policy, I am currently running for the California State Assembly from the 63rd Assembly District. Come join me on the road to a better tomorrow for ourselves and for our patients. 

Donald J. Kurth, MD, MBA, MPA, FASAM, is an associate professor at Loma Linda University and president-elect of the American Society of Addiction Medicine. He is also mayor of the City of Rancho Cucamonga, California, and a candidate for the 63rd Assembly District in southern California. His website is at www.DonKurth.com.

California Has Wrong Rx for Addicted Doctors

Timmen Cermak, MD, and James Hay, MD

Nurses, doctors, psychologists, and therapists face the same illnesses as everybody else. The difference is that health professionals must take special care when we're sick so our illnesses don't harm our patients. That's true not only for communicable diseases, but also for the chronic disease of addiction.

California is developing regulations to punish health care providers who suffer from the disease of addiction—without offering any help to treat this illness among the same professionals who keep California families healthy. This effort threatens to revoke the professional license of any health professional who exhibits any sign of substance abuse.

Decades of research on addiction treatment—and other chronic diseases—show that the best way to protect the public from harm is to prevent, intervene, and treat these diseases at the earliest opportunity. This is an evidence-based strategy for substance use disorders. There's no evidence that punishment alone will be successful in protecting patients. An overly restrictive program will drive impaired health care professionals underground. Health care consumers will be endangered by impaired professionals doing everything they can to hide their addiction until it has gotten so out of control that someone does get hurt. Patients will be at greater, not less, risk.

The American Medical Association (AMA) recommends that all states provide medical treatment along with monitoring for health care providers with substance use problems. California is one of only a handful of states that does not have such a program.

A well-designed system based on assessment, early intervention, treatment, and monitoring will be the greatest benefit to all Californians. A simplistic system based on punishment will create a greater threat to the health and safety of California health care consumers.

This article first appeared in longer form in The Sacramento Bee.

A Time of Critical Change

Drug Addiction, Addiction Services, and Public Policy

Philip R. Lee, MD, and Dorothy Lee

The 2010 Patient Protection and Affordable Care Act has the potential to facilitate change. Promising to insure more than 30 million people who are uninsured now, with addiction and mental health services included as part of the essential benefits, it provides an excellent opportunity for the medical profession to collaborate with other stakeholders to take a leading role in the development of enlightened policies related to drug addiction. Attitudes about drug addiction and treatment have been slow to change, and public policy even slower, and the momentum built up by the medical profession in recent decades can ensure that the hope held out for the well-being of present and future generations is realized.

Punitive drug laws have been in place in the United States for about 100 years, at an exceedingly high cost, in dollars and in human terms. Significant progress has been made in research; addiction medicine has been established as a specialty; and a wide variety of preventions, interventions, treatments, and paths to recovery exist and are acknowledged to be cost-effective in comparison to law enforcement. Yet the nation keeps its blinders on, stigmatizing, ostracizing, and imprisoning drug addicts.

Production, sales, and use of drugs were initially unregulated in the U.S., and in the mid-nineteenth century opium, cocaine, ether, and chloral hydrate were not only medical mainstays but were used for pleasure, even in lieu of alcoholic beverages. To some extent the antialcohol Temperance Movement affected the habits of women: Drinking was considered immoral; taking commonly prescribed

opiates and anaesthetics, or discreetly self-medicating with patent medicines containing low dosages of opium, cannabis, or cocaine, was not. Late nineteenth-century surveys in U.S. cities found that more than half of opium and morphine users were women.

The 1909 Opium Exclusion Act prohibited importation of smoking opium into the U.S., and many addicts switched to heroin, morphine, and other yet-unregulated drugs. Revenue legislation, the Harrison Narcotic Act of 1914, categorized both opiates and cocaine as “narcotics” and was the initial step in federal control (marijuana would not be added to the category of illegal drugs until 1937). The law’s successful enforcement penalized and marginalized drug users and the doctors and pharmacists who supplied maintenance dosages of narcotics. Public health addiction treatment clinics existed for a short time—and only in some major U.S. cities—but afterward there were no options left and addicts were increasingly treated as criminals. Doctors changed their prescribing habits, legal opiates became unavailable, and fewer women than men were now addicts.

The prohibition of narcotics in concert with alcohol’s prohibition in 1919 (deemed unsuccessful and repealed in 1933) created unprecedented opportunities for organized crime; corruption, homicides, and violent crime increased. By the end of the 1920s, the nation’s prisons were overcrowded, and drug offenders comprised an estimated one-third of the inmates.

To relieve some of the burden on the prisons, Public Health Service “narcotic farms” for detoxification were established

in Lexington, Kentucky, in 1935 and in Fort Worth, Texas, in 1938. Federal inmates as well as voluntary patients were treated, and intensive research into many drugs and aspects of addiction was carried out in Lexington at the Addiction Research Center (later transferred to the National Institutes of Health).

The National Institute of Mental Health (NIMH), a major advance for the Public Health Service, was established in 1949. The Health Amendments Act of 1956 included funding for the new NIMH Psychopharmacology Service Center, the origin of the NIMH program for research on substance abuse.

Drug use was on the rise in America in the 1960s, and there were new drugs, new trends, and a new “drug culture”—fueled to some extent by media frenzy. The Drug Abuse Control Amendments of 1965 broadened enforcement to include the illegal use of depressants, stimulants, and hallucinogens. Heroin addiction was increasing among U.S. soldiers in Vietnam and among returning veterans. Mandatory minimum sentencing for drug offenses, which had been introduced by the Boggs Act in 1951, included two to ten years for first-time marijuana possession. Harsh punishment wasn’t an effective deterrent, and lucrative incentives for enforcement may have played a role in the swift rise in the number of marijuana arrests: from 169 in 1960 to more than 15,000 in 1966. Two decades later, according to federal data, marijuana use comprised about 60 percent of illegal drug abuse in the U.S. A 2008 international survey reported lifetime marijuana usage in the U.S. at more than 40 percent, more than twice that of the Netherlands, where it is

decriminalized.

The Narcotics Addict Rehabilitation Act of 1966 authorized programs and grants to private organizations as well as individual states for an alternative civil process of addiction treatment and for rehabilitation for some federal prisoners. The Office of Economic Opportunity funded multimodality, community-based drug and alcohol treatment, and methadone maintenance for heroin addicts gradually gained acceptance.

In 1970, federal drug law and police power were strengthened by passage of the Controlled Substance Act, a subtitle of the Comprehensive Drug Abuse Prevention and Control Act. The Act also, in a compromise with moderate views, authorized treatment and rehabilitation services, eliminated mandatory minimum sentencing, and raised levels of funding for research and for the prevention of abuse and dependence. At this time, treatment of drug abuse received more funding than did law enforcement. Federal assistance to states with prevention programs and interventions had a positive effect: The rate of the increase of drug abuse was slowed. The urgency surrounding these issues motivated Congress to establish the National Institute on Drug Abuse (NIDA), under the auspices of the NIMH, in 1972.

During the 1980s, military spending on the “War on Drugs” was substantially increased. Mandatory minimum sentencing was reinstated, ostensibly to punish major drug dealers. The policy actually resulted in heavy sentences for many impoverished addicts and people in the periphery of the drug trade, and it fostered the rapid growth of a privatized, for-profit prison system. Federal support for social programs diminished; most of the responsibility for funding prevention and treatment programs was transferred to the states; and various stakeholders, including university researchers, addiction specialists, treatment providers, state administrators, and community groups, found it vital to intensify their collaboration—with good results.

In 1992 the Substance Abuse Mental Health Services Administration (SAMH-

SA) was established, with Centers for Mental Health Services (CMHS), Substance Abuse Prevention (CSAP), and Substance Abuse Treatment (CSAT). Federal drug, alcohol, and mental health research institutes were integrated into NIH and separate authorization was made for the NIDA Medication Development Program and for the establishment of National Drug Abuse Research Centers. Subsequently, a major program of research was expanded at the NIDA Behavioral Therapies Development Program.

From 2001 to 2009 there was a 50 percent increase in federal funding for supply reduction (interdiction of drugs, source-country programs, and law enforcement). There also was increased collaboration between government and the private sector in the fields of education, prevention, and treatment; and significant progress was made in translating research into effective practice. As addiction expert Darryl Inaba unequivocally stated in 2008, “Treatment Works! Outcome studies like CALDATA, CalTOP, and DATOS document positive treatment outcomes for drug and alcohol addiction, including methamphetamines.” The recognition that it is important to engage with the community of addicts to design services that encompass a broad spectrum (including health, housing, vocational issues, transportation, and legal and social connections) and most effectively meet their needs has contributed to the implementation of integrated services and recovery-oriented programs that help sustain individual wellness and healthy communities.

When the Obama administration took office in 2009, it expressed support for giving priority to incorporating public health solutions in federal drug policy, including drug abuse treatment services in national health care reform, expanding programs for prevention and effective treatment (taking into account the disease model of addiction and considerations of chronic care), and continuing progress on providing recovery opportunities for addicts in the criminal justice system.

Insurance parity for mental health

and addiction is now law, and the controversial Patient Protection and Affordable Care Act has passed. Ahead lie ethical and practical challenges for the medical profession. A few of the many questions that come to mind:

Will the current relative scarcity of specialists affect the inclusion of appropriate addiction services?

Is there sufficient commitment to medical education in substance abuse?

Will administration and bureaucracy complicate rather than facilitate access to care?

Does the removal of barriers to reimbursement, created in the 1950s by state insurance laws, ensure that appropriate screening for substance abuse disorders in emergency departments will no longer be neglected, or are new guidelines needed?

How will resources be prioritized?

Preliminary findings from recent studies indicate that adolescence marks the onset of primary mental health disorders, with substance use disorders occurring some five to ten years later, during late adolescence and early adulthood. Now there is the opportunity to provide a full spectrum of health care for more young people. What do health reform and parity regulations offer *neglected populations*—those suffering the poorest health, including the homeless, prisoners, and war veterans?

The opportunity for medical leadership is clear. Will the profession rise to the occasion, or will the punitive policies of the past 100 years prevail? 

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San Francisco Roots

The Evolution of Addiction Medicine

David E. Smith, MD, FASAM, FAACT

On May 2, 2009, the American Board of Addiction Medicine (ABAM) and Nora Volkow, MD, director of the National Institute of Drug Abuse, conferred board certification on nearly 1,500 physicians (myself included) representing a wide range of specialties.

In her address at this ceremony, held during the annual meeting of the American Society of Addiction Medicine (ASAM), Dr. Volkow stated that “years of scientific research have proven drug addiction is a brain disease caused by biological, environmental, and development factors—a disease that can have far-reaching medical consequences. . . . Identifying drug use early, preventing its escalation to abuse and addiction, and referring patients in need of treatment are important medical skills” (Kunz and Gentilello 2009). With the passage of health care reform and parity in March 2010, addiction medicine has become a mainstream core benefit.

Forty and more years ago, this would have been barely imaginable. Addictions were stigmatized as moral failings and/or criminal activity. In reality, substance abuse in all its forms, including nicotine/cigarette addiction, alcoholism, and psychoactive dependence, represents our country’s number-one public health problem.

Complementing this is the rise in prescription opioid abuse, particularly in adolescents, where prescription drug overdose deaths in 2008 exceeded all the overdose deaths for heroin, methamphetamine, and cocaine combined. Substance abuse is now the leading cause of death in young people, exceeding even traffic fatalities (Knudsen 2009).

Alcoholism as a disease was clearly described as long ago as the late 1700s by Dr. Benjamin Rush, a physician and signer of the Declaration of Independence (Katcher 1993). However, it wasn’t until the formation of Alcoholics Anonymous (AA) in the 1930s by Bill Wilson and Dr. Bob Smith (no relation) that this concept of alcoholism as disease spread throughout the United States and subsequently the world. Dr. William Duncan Silkworth, in the *Big Book of AA*, described alcoholism as a disease caused by “an allergic reaction of the body to alcohol” and a compulsion of the mind (Silkworth, 1937).

Addiction to other drugs, however, was specifically excluded from the scope of AA. AA emphasized that drug use other than alcohol was not to be disclosed at AA meetings. This prompted the formation of Narcotics Anonymous in California in the 1950s, which was based on similar twelve-step principles but included recovery from all drugs of addiction, particularly opiates such as heroin, using the catchphrase “clean and sober.”

Initiatives put forth by physicians in the New York Society of Alcoholism, a forerunner of ASAM, prompted the American Medical Association (AMA) to declare in the 1950s that alcoholism was a disease and to reaffirm this position in 1966.

In the late 1960s, the movement to recognize addiction as a disease escalated in California, particularly in San Francisco. Based on the principle that “health care is a right, not a privilege,” the Haight Ashbury Free Medical Clinic (HAFMC) was founded in response to the large number of drug-using youth who flocked to San Francisco’s Haight Ashbury district

in 1967 for the “Summer of Love.” The Clinic’s experience with this population led to the philosophy that “addiction is a disease—the addict has a right to be treated” and prompted the almost immediate expansion of clinic services to drug crisis intervention and detoxification. The San Francisco Medical Society and the California Medical Society provided early support for these endeavors, despite the City’s refusal to address a major public health catastrophe (Heilig 2009).

Dr. David Breithaupt of the University of California, San Francisco, Ambulatory and Community Medicine program, trained medical students at HAFMC. At a recent CSAM-sponsored event in the Haight, Dr. Breithaupt described battling a system that at the time viewed community physicians who treated addiction disease as “outlaws caring for sinners and criminals” rather than “physicians treating a chronic disease.”

It was then illegal to detoxify addicts on an outpatient basis. Nonetheless, when Dr. Donald Wesson and I determined that a phenobarbital withdrawal protocol we had developed at San Francisco General Hospital could be used to detox addicts, we instituted its use at HAFMC’s outpatient Drug Detoxification, Rehabilitation, and Aftercare program, combining medical intervention with psychological counseling and recovery groups. After the Detox program received a substantial federal grant initiated in 1971 by Dr. George “Skip” Gay of HAFMC—a grant that came from the White House Office of Drug Abuse Policy (SAODAP, predecessor of the ONDCP), then headed by methadone maintenance pioneer Dr. Jerry Jaffe—the concept of addiction as a disease was

further acknowledged. Supported by the new Nixon White House philosophy that “no addict should have to commit a crime because he can’t get treatment,” due to the increase in the numbers of addicted Vietnam veterans returning to the United States, addiction treatment services in San Francisco increased significantly.

Despite these philosophical trends, physicians were still the targets of punitive action. After the arrest of two Southern California physicians for detoxifying heroin addicts with Valium in an outpatient medical setting, Dr. Jess Bromley recommended that we start a California professional society. By aligning with the California Medical Association (CMA), we could associate nationally with the AMA, an essential step toward overcoming the organized medical establishment’s resistance to efforts to get nonalcohol addictions accepted as diseases.

One of the key organizers of the California Society of Addiction Medicine (CSAM) was Dr. Max Schneider, a Southern California gastroenterologist. Treating cirrhosis of the liver with associated GI bleeds, he became concerned that the existing medical system offered little to treat the causative disease of alcoholism. In fact, all of the founders of CSAM were motivated by the principle that it makes no medical sense to treat the complications of a disease and not treat the underlying chronic medical illness, whether it is a disease of the brain—like addiction—or a disease of the pancreas—like diabetes.

As an appointee to the AMA committee on alcoholism, I introduced the disease model of addiction to the AMA committee in 1976. I coined the term “addiction medicine,” and after much debate it was accepted. Also at that time, Dr. Douglas Talbott, who pioneered the treatment of addicted physicians, introduced the term “addictionology.”

In 1983, individuals in the addiction field met at the Kroc Ranch in California and agreed that a single organization, what has evolved into the American Society of Addiction Medicine, would represent the field. Five years later, ASAM gained acceptance in the AMA House of Delegates as a specialty society with Dr.

Bromley as the ASAM delegate and me as alternate delegate (ASAM, 2006).

The AMA accepted the motion introduced by ASAM that all drug dependencies, including alcoholism, are diseases and that medical practitioners should base their medical practice on the disease model of addiction. When ASAM expanded its focus to include cigarette/nicotine addiction, with its associated morbidity and mortality, the AMA granted specialty status with the code of “ADM” after introduction of a resolution by the California Medical Association in 1990 (ASAM 2006).

We had hoped primarily to gain acceptance by organized medicine in the U.S. for addiction medicine (the study and treatment of addictive disease). The specialty now is recognized throughout the world; the International Society of Addiction Medicine (ISAM) has been meeting regularly since its formation in Palm Springs in 1999. The significance of the disease model of addiction is now fully acknowledged by mainstream medicine, to the extent of gaining parity with other medical issues in health care reform.

A 2000 CalData study showed that every dollar spent on treatment saved an estimated seven dollars in health and social costs (CalData study, *CSAM News* 2000). Kaiser Permanente researchers have also found strong evidence of cost savings (Parthasarathy et al 2001). Meanwhile, the criminal justice system and community and school-based prevention programs have not proved sufficient to turn the tide of substance abuse. Addiction medicine has encouraged medicine to become a major force in dealing with this public health issue: 100 percent of alcoholics and addicts will at some time interface with the medical system.

However, despite compelling evidence for a decade demonstrating excellent cost-benefit outcomes for addiction as a brain disease emphasizing prevention, intervention, and treatment, the battle to implement parity by the sociological and political structure of the U.S. remains to be won. As President Obama stated in his book, *The Audacity of Hope*, “past history is not dead and buried, it

is not even dead.” Addiction medicine’s history demonstrates to the next medical generation that it can both continue the battle to help the suffering alcoholic and addict and further the integration of addiction medicine with mainstream medicine. 

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References

- ASAM. 2006. Turning points in establishing the medical specialty of addiction medicine. <http://www.asam.org/CMS/images/PDF/Certification/TurningPoints.pdf>.
- CalData study. *CSAM News*. 2000.
- Heilig S. 2009. David Smith: Pioneering community-based health care. *San Francisco Medicine*. 2009; 15.
- Katcher BS. 1993. Benjamin Rush’s educational campaign against hard drinking. *Amer J Public Health*. 83(2):273-281.
- Knudsen HK. 2009. Barriers to treating alcohol and drug problems among adolescents. Robert Wood Johnson Foundation/Substance Abuse Policy Research Program. www.saprp.org/KnowledgeAssets/Knowledge_Detail.cfm?KAID=20.
- Kunz KB and Gentilello LM. 2009. Landmark recognition for addiction medicine. *Addiction Professional*. 2009; 12-17.
- Obama B. 2006. *The Audacity of Hope*. New York: Crown Publishers
- Parthasarathy S, Weisner C, Hu TW, and Moore C. 2001. Association of outpatient alcohol and drug treatment with health care utilization and cost: Revisiting the offset hypothesis. *Journal of Studies on Alcohol*. 2001; 62(1):89-97.
- Silkworth W. 1937. Alcoholism as a manifestation of allergy. *Medical Record*. 1937; 145:249-251.

Mainstreaming Mental Health

Integrating Substance Abuse and Mental Health Treatment into Primary Care

Robert M. McCarron, DO; Sergio Aguilar-Gaxiola, MD; and Caitlyn Meltvedt

The primary care setting has been the de facto mental health care system in the United States for several decades. Up to 60% of all mental health care services, including substance abuse treatment, are delivered by primary care practitioners (PCPs). Nonpsychiatrists—mostly PCPs—prescribe more than 80% of antidepressants, now the most widely prescribed class of medications.¹ Primary care settings are also the first point of contact and the treatment site of choice for minority, low-income patients. Primary care is more available and easier to access than specialty care, and many patients view substance abuse and mental health treatment in primary care settings as less stigmatizing than care received in specialty behavioral health settings.

Although this is the case, PCPs often do not have time to address complex mental health and substance abuse-related issues. Moreover, even though depression, bipolar, anxiety, and substance abuse disorders are so prevalent in the primary care setting, PCPs generally have disproportionate and suboptimal residency and postresidency psychiatric training. Unfortunately, the end result for many who suffer from mental illness is either ineffective treatment or, in many cases, no treatment at all.

Meanwhile, the delivery of preventive and primary care medicine to those who have severe mental illness (SMI) is also sorely lacking. In fact, those with SMI live, on average, twenty-five years less than those without SMI.² Although the main cause for this dramatic disparity is cardiovascular disease, people with mental illness are much more likely to suffer from chronic pulmonary disease, diabetes, sexually transmitted infections, certain common

cancers, and sequelae related to substance dependence.³

In the eve of health care reform implementation, there has recently been a strong push by policy makers and clinic directors to redesign the primary care setting and more effectively integrate primary care and mental health care. This is a logical move, given the extraordinarily high prevalence of mental and substance abuse disorders and physical-mental comorbidities encountered in the primary care setting. The following is a brief summary of some statewide initiatives designed to improve the health of individuals with SMI and co-occurring chronic medical disorders through more effective partnerships between mental health and primary care providers.

CalMEND Pilot-Collaborative to Integrate Primary Care and Mental Health Services (CPCI)

This county-based program is sponsored by the State of California Departments of Health Care Services (DHCS) and Mental Health (DMH), and it is structured around the Institute for Health Care Improvement Breakthrough Series Collaborative model. The primary goal is to effectively bring together mental health and primary care practitioners and organizations that share a commitment to making major changes that produce significant and sustainable breakthrough results.

CPCI will involve four to six county behavioral health authorities and their partner primary care organizations. Each pilot site will have direct access to faculty support and regularly scheduled CPCI sponsored “learning sessions” that are specifically designed to develop and

expand integrative care models. During the eighteen-month project, various outcomes will be measured, including an assessment of how often standard-of-care primary preventive strategies are used (such as screening for diabetes and lipid abnormalities). In mid-2011, each CPCI pilot site will share its findings and achievements at a CalMEND Learning Forum, with the goal of improving medical and psychiatric care for those who have SMI.

UC Davis: Integrated Medicine/ Psychiatry Ambulatory Residency Training (IMPART)

Recent research has shown that chronic physical conditions, including both common chronic physical diseases (diabetes, asthma, hypertension, heart disease, and so on) and chronic pain conditions (arthritis, back pain, headaches) are often accompanied by common psychiatric disorders such as major depression, anxiety disorders, and substance abuse. The fact that these psychiatric disorders often occur within the context of comorbid chronic physical conditions emphasizes the central role that providers of primary health care play in efforts to improve overall health outcomes of both physical and psychiatric disorders. Much of this co-occurring illness, however, is *not* diagnosed or treated. With Mental Health Services Act (MHSA) funding, the University of California, Davis, has developed and expanded two residency programs—internal medicine/psychiatry (IMP) and family medicine and psychiatry (FMP)—that specifically train physicians to better understand the mind-body connection and physical-mental comorbidities and to address this important health care disparity.^{4,5}

In November 2004, Proposition 63 (the Mental Health Services Act, or MHSA) passed in the state of California, allowing the California Department of Mental Health the opportunity to provide funding, personnel, and other resources to public mental health programs. MHSA funds are also used to reduce barriers to access and address stigma associated with mental illness, while promoting prevention, early intervention, and the development of integrated educational programs that support wellness and recovery.

In 2008, with MHSA grant funding, the U.C. Davis Center for Reducing Health Disparities partnered with the U.C. Davis Departments of Psychiatry and Behavioral Sciences, Internal Medicine, and Family and Community Medicine to develop the Integrated Medicine Psychiatry and Residency Training (IMPART) initiative. The primary objective for IMPART is to provide IMP and FMP residents with sixty months of integrated, culturally and linguistically competent training in psychiatry and either family medicine or internal medicine. The core principles of MHSA (which include reducing health disparities with a focus on patient- and family-centered, culturally tailored, and targeted treatment that is largely dependant on one's sense of personal recovery) are incorporated into the IMPART curriculum and recruitment process. Each graduate from these five-year programs will be board eligible in either family medicine or internal medicine and psychiatry. Many of the residents have a strong interest in working with underserved populations and in teaching students the importance integrating medicine and psychiatry, particularly in the primary care setting.

Waiver 1115

Section 1115 of the Social Security Act allows the Secretary of Health and Human Services to authorize pilot or demonstration projects that can help promote the existing objectives of statewide Medicaid programs. Section 1115 waivers are generally used to allow states to institute demonstration projects and provide federal funding that would not normally be eligible under federal law.

The California Department of Health

Care Services (DHCS) is now in the process of significantly revising its 1115 waiver for hospital financing and uninsured care to change the manner in which Medi-Cal provides services to some of its most medically vulnerable beneficiaries. This restructuring includes the development or realignment of organized delivery systems of care for specific high-risk populations, including those with SMI. Various technical work groups have been established to focus on specific populations that have been identified as at high risk for poor health outcomes in the current service delivery system. One such group is comprised of adults with SMI and/or substance abuse disorders.

As outlined previously, those with SMI have a much shorter life span when compared to those without SMI. There is clear evidence that improving the integration of primary care, mental health, and substance abuse services also improves the overall health status for this vulnerable population.⁶ Before the end of August 2010, the collective input from several work-group sessions will be used to develop clinical and educational strategies that will advance medical and psychiatric care for Medi-Cal recipients with SMI.

The CPCI, IMPART, and Waiver 1115 programs are just a few examples of how models of integration and statewide innovation can affect positive change in individuals and families. While the issue of better coordination and integration of mental health and physical health care in persons with mental and substance abuse disorders is relevant to the overall redesign of health care systems, the integration of effort on the part of the public agencies responsible for child, family, adult, and elderly mental health—child welfare, special education, primary health care, mental health, juvenile or criminal justice, and substance abuse—is of particular relevance to vulnerable populations, including the poor, uninsured, children and the elderly, and immigrants. Although we are still in the early stages of developing, implementing, and evaluating widespread primary care, mental health collaborative care, and educational models, we are on the right path to building better care models that are responsive to the needs of diverse populations. 

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References

¹ Whooley MA, Simon GE. Managing depression in medical outpatients. *N Engl J Med.* 2000; 343(26):1942-1950.

² Colton CW, Manderscheid RW. Congruencies in increased mortality rates, years of potential life lost, and causes of death among public mental health clients in eight states. *Prev Chronic Dis.* 2006. 3(2):A42.

³ Jones DR, Macias C, Barreira PJ, Fisher WH, Hargreaves WA, Harding CM. Prevalence, severity, and co-occurrence of chronic physical health problems of persons with serious mental illness. *Psychiatric Serv.* 2004. 55(11):1250-1257.

⁴ Servis M. Combined family practice and psychiatry residency training: A 10-year appraisal. *Acad Psychiatry.* 2005. 29(5):416-418.

⁵ Servis ME, Hilty DM. Psychiatry and primary care: New directions in education. *Harv Rev Psychiatry.* 2000. 8(4):206-209.

⁶ Aguilar-Gaxiola S. Policy implications. In M. Von Korff, K. Scott, and O. Gureje (eds.), *Global Perspectives on Mental Disorders and Physical Illness in the WHO World Mental Health Surveys.* 2009. New York: Cambridge University Press.

Treating a Disease as a Disease

Health Care Reform and Substance-Use Disorder Parity

Thomas J. Brady, MD, MBA

For years, public health experts, a majority of the public, and even many politicians have understood the importance of expanding treatment for alcoholics and drug addicts. The problem has been how to pay for it. Government support for treatment is continually cut whenever budgets get tight, as they are presently. Funding for treatment in California has been slashed in recent years, and waiting lists for treatment slots are expanding as a result.

U.S. health care reform promises critically important change for the millions of Americans who suffer from the disease of addiction. The Patient Protection and Affordable Care Act of 2010 (HR 3590) will require all health plans to cover substance use disorder services, and nearly all Americans, including many of the uninsured in most need of addiction treatment, will finally have coverage. Substance abuse and mental health treatment are to achieve true parity.

Substance use disorder parity means that health insurance coverage for substance use disorders is equal to coverage for other medical disorders. Why is parity important? The answer is both economic and medical. U.S. health care expenditures in 2009 accounted for almost 16% of the total gross domestic product (GDP, or all dollars spent) and by 2020 will account for 20% of GDP. Disparities are great, and overall U.S. healthcare is suffering—infant mortality ranks twenty-ninth and life expectancy ranks forty-second among countries of the world. Substance abuse and addiction account for approximately one quarter of total U.S. health care costs, including indirect costs of medical, surgical, and psychiatric complications of substance

abuse (e.g., alcohol-related pancreatitis, substance-related motor vehicle accidents, etc.). To these expenses we should add nonmedical economic costs—school dropout rates, poverty and lowered earnings, absenteeism and presenteeism (showing up but not producing), domestic violence and child abuse, and crime. And yet only about 1% of the U.S. health care dollar is spent on direct substance abuse treatment.

Consider the 80/20 rule regarding health care reimbursements; that is, that medical/surgical treatment in the U.S. is funded 80% by private third-party payers and 20% by the government. Why is the opposite true for substance abuse treatment, where 20% is funded by private health insurance and 80% by government sources? The reasons are many: a cultural view that substance abuse is a moral failing and should thus be a criminal matter; treatment is ineffective, and treatment is not cost-effective, among others. None of these rationalizations is true, and yet mistaken ideas, biases, and discrimination continue.

Critics opposing parity for substance abuse and mental health treatment most often argue that it would be too costly. But analysis has consistently shown otherwise. While substance abuse and mental health disorders are among leading causes of disability, numerous studies have indicated that substance abuse treatment is as effective or more so than treatment for other chronic medical diseases such as asthma, diabetes, and hypertension. Substance abuse treatment also reduces overall health care costs. A California study reported that after an outpatient chemical dependency recovery program, medical costs for the study group declined by 26%, inpatient health care costs declined by 35%, and

emergency department costs declined by 39%. In another study, total medical costs decreased by more than one-half, from \$431.12 to \$200.03 per patient per month. Thus, while parity may lead to greater use of substance abuse and mental health services, that treatment remains our best strategy to increase recovery from addiction and improvements in mental health, leading to greater productivity, increased quality of life, and improved overall health—precisely what we physicians would like to see—and to lower costs for insurers, employers, and government health programs.

A study of parity in the Federal Employee Health Benefit Program found that two-thirds of the plans incurred no added administrative costs, and none reported major problems with implementation. Another study of a comprehensive substance abuse and mental health parity law in Vermont found that, relative to spending for all services, the amount spent by Blue Cross/Blue Shield of Vermont on substance abuse and mental health treatment increased only from 2.30 percent to 2.47 percent.

According to an analysis by the Legal Action Center, a Washington, D.C., non-profit public interest law firm and policy organization that specializes in fighting discrimination against, and protecting the rights of, people with alcohol or drug problems, HIV/AIDS, or criminal records, HR 3590 includes many particular and general provisions that support treatment for substance use disorders. Specifically, HR 3590 requires:

1. A basic benefit package for all health plans in the individual market and small-group markets, such plans being required to cover mental health and substance use

disorder treatments.

2. All plans in the health insurance exchange to adhere to the provisions of the Wellstone/Domenici Parity Act.

3. Medicaid (California's MediCal) enrollees, including newly eligible childless adults, to receive adequate health coverage, including mental health and substance use disorder benefits. MediCal eligibility expands to 133% of federal poverty (2009 figures: \$14,404 for an adult and \$29,327 for a family of four).

4. No denials for preexisting conditions, charging higher premiums based on gender or health status, or placing annual or lifetime caps on insurance coverage.

5. Allowing adult children to remain on their parents' insurance until their twenty-seventh birthday.

6. Providing sliding scale subsidies for individuals and families up to 400% of the federal poverty level to purchase health coverage.

7. Individuals to carry health insurance or pay a financial penalty.

8. \$15 billion over ten years to support home, school, and workplace prevention services, including substance abuse prevention.*

What can we expect from HR 3590 on the state of California level? Health coverage will be extended to 3.8 million uninsured Californians and improve coverage for 21 million Californians with employer-based or individual health insurance, together covering 94% of legal state residents, while 3.2 million young adult Californians and 800,000 Californians with preexisting conditions can obtain coverage. Over the next ten years, the state and its residents will receive new federal support for health care worth approximately \$124 billion, of which \$106 billion will be in the form of tax credits. More important here is that all health plans must cover substance use disorders the same way as all other medical and surgical benefits are provided. And because the legislation prohibits health plans from denying coverage based on preexisting conditions, people with substance use disorders must be accepted for care.

While the addiction treatment community is universally excited about this prospect, the details of implementation

must still be developed. And, as trite as it sounds, the devil is in the details. Even with federal health care reform, there are many ways that parity could still be thwarted. People with substance use disorders have never been treated like other medical patients. Consistent treatment until recovery is achieved has never been considered a medical necessity. Instead, arbitrary limits on treatment have been the rule, reinforced by stringent medical necessity utilization review guidelines. Will these guidelines become even tighter?

California is getting the jump on the rest of the country by offering its own parity legislation, AB 1600, introduced by Assembly Member Jim Beall, Jr. AB 1600 would mandate that all health plans and insurers cover all mental health benefits at parity for patients with any disorder defined in the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV-TR), excluding V codes. That includes the diagnosis and treatment of substance use disorders. Coverage would be mandated for all disorders included in subsequent updates of the DSM; an update to DSM-5 is underway.

Why do we need a California law mandating parity when a mandate already appears in HR 3590, as well as in the Mental Health Parity and Addiction Equity Act of 2008? As with most federal legislation that mandates state administration and implementation, the states serve as laboratories for best practices. Parity will be no exception. With the requirement in AB 1600 that parity include all disorders in the DSM, California would begin providing specific guidelines for parity in practice.

Further legislation and regulation will likely be needed as new problems crop up in this immense change in how substance abuse and mental health treatment is funded. Behavioral health carve-outs may become obsolete as we integrate substance abuse treatment into primary health care. Requirements for increased quality assurance may lead to improved standards and training for the substance abuse treatment workforce. Such standards will have to be developed, and development will likely fall to the states.

Another important reason for AB

1600 is that the timetable for basic standards to be in place under national health care reform is 2014. The passage of AB 1600 would mandate parity in California by January 1, 2011. California's legislation could help define what parity will really mean for millions of people with mental health and substance use disorders. AB 1600 and subsequent legislation and regulation would set the basic standards for mental health and substance use treatment under national health care.

Federal substance abuse parity legislation, the Paul Wellstone and Pete Domenici Mental Health Parity and Addiction Equity Act of 2008, and HR 3590, along with the dogged efforts of California legislators such as Assembly Member Jim Beall, Jr., should give substance abuse patients and providers cautious optimism regarding increased access to substance abuse treatment. The next few years will likely be both a realization of hope and promise in that regard, mixed with increased need for scrutiny to ensure that needed changes occur as planned. *sfm*

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A full list of references is available online at www.sfms.org.

* The legislation also creates new initiatives specifically designed for treatment and prevention of substance use disorders. A national prevention council will be established with the Office of National Drug Control Policy Director (ONDCP) as a member and the Substance Abuse and Mental Health Services Administration (SAMHSA) one of the main supporting agencies. The legislation's National Workforce Strategy section includes the capacity of the treatment workforce as a high-priority topic. Substance use disorder treatment providers will be eligible for new community health team grants aimed at supporting various types of residential treatment centers.

Adolescent Substance Abuse

A Blueprint for California

Timmen L. Cermak, MD

Addiction medicine has long labored with a flaw at its very core—a flaw that arose from the fact that adult professionals treating adult patients originally developed the field decades ago. As a result, substance abuse has been seen as an adult disease.

In his seminal paper, “Drug Dependence, a Chronic Medical Illness” (*Journal of the American Medical Association*, 2000), Thomas McLellan (current deputy director of the Office of National Drug Control Policy) presented a coherent rationale for comparing treatment strategies and outcomes for addiction to those used for other chronic medical illnesses such as hypertension and diabetes. Addiction medicine primarily resonated with McLellan’s conclusion that, “like other chronic illnesses, the effects of drug dependence treatment are optimized when patients remain in continuing care. . . .” In other words, substance abuse must be *managed* for the long term, not treated once like an acute illness.

There is, however, another conclusion embedded in the concept of drug dependence as a chronic medical illness that has not yet received adequate attention. As with any chronic disease process, the treatment of drug dependence would likely be improved with early diagnosis. In fact, with substance abuse, early diagnosis may eventually be one of the essential keys to better outcomes.

A review of the data relevant to the onset of substance abuse today is enlightening. There are currently at least 250,000 adolescents (twelve to seventeen years of age) in need of substance abuse treatment in California. Only one in ten receives any treatment, and only 25%

of those receive adequate treatment. The juvenile justice system provides the greatest access to treatment, and except for twelve-step meetings (such as AA and NA), there is virtually no aftercare for adolescents in California.

CSAM views substance abuse (SA) as a disorder of the brain, with hereditary and social/experiential components placing a subset of the population at increased risk. With sufficient exposure to drugs of addiction, however, brain changes that promote dependence occur in susceptible individuals. Of all age groups throughout the life cycle, adolescents are at highest risk of experiencing brain alterations as a result of alcohol and drug use. For example, the percentage of an alcohol use disorder (AUD) within the first two years of initiating drinking is 3.7% in ages twenty-two through twenty-six; but 9.5% of 16 year-olds will demonstrate an AUD if they have initiated drinking in the previous two years. Of those adults who started drinking at 21 or older, only 2.6% demonstrated an AUD in the previous years, while 15% of those who began drinking between 12 and 14 years of age will demonstrated an AUD in the past year.

Greater than 47% of adults with alcohol use before age 14 later meet criteria for alcohol dependence, versus 9% for those who first used at age 21 or older. And more than 90% of adults with current substance use disorders started using before 18; half of those began before 15. But the high susceptibility to addiction is not restricted to alcohol in adolescents. Among 22 to 26-year-olds who initiated marijuana smoking in the past two years, only 3% exhibit cannabis dependence;

while more than 16% of 15-year-olds who started smoking in the past two years satisfy the diagnostic criteria for dependence.

Why are adolescents at higher risk of substance dependence than any other age group? The answer is clearly multifactorial, but heading the list is the fact that the human brain experiences a burst of dendritic growth and an explosion of new synapses at puberty with a gradual pruning process that lasts until at least 24 years of age. The last areas of the brain to fully mature are the frontal and prefrontal areas, regions that underlie our higher-order mental capacities—the executive functions and conceptual frameworks that modulate and inhibit impulses arising primarily in the limbic system. Without these higher-order functions, adolescents have fewer resources with which to respond to the ultimately destructive demands of a reward system that has been hijacked by psychoactive drugs.

The data show that at least 50% of the cases of addiction we treat in adults had their onset during adolescence—when individuals’ primary care physician was a pediatrician! Addiction is a chronic medical illness of pediatric onset, and this fundamental fact still needs to be integrated into the core of addiction medicine. The fundamental fact of addiction being a childhood disease needs to become central to the thinking of every physician who comes in contact with our youth. As with all chronic medical conditions, early diagnosis is the key to more effective treatment.

And we already know that early intervention and treatment saves lives.

Adolescent treatment produces a 48% reduction in primary drug use, a 53% reduction in alcohol and drug-related medical visits, and an 80% reduction in criminal activity. While increasing the availability of treatment for substance abuse for adolescents would require an economic investment, the Little Hoover Commission estimates that treatment saves \$7 for every dollar spent. This figure does not take into consideration the savings beyond direct medical costs (i.e., savings to the juvenile justice system, social welfare programs, reduced crime, etc.). Neither does it take into consideration the increased productivity that accrues to society when fewer youth drop out of school and fail to contribute to an educated and skilled workforce. The investment in developing a treatment system for youth would pay dividends both financially and in terms of reducing human suffering for countless families.

Treatment for youth will be more costly than for adults for two primary reasons: (1) The level of professional training required of workers in adolescent treatment is higher than in adult treatment, and (2) the intensive phase of treatment must often last longer with adolescents than with adults. Youth treatment must address both mental health and substance abuse issues. Co-morbidity is the norm for adolescent substance abusers. Psychiatric conditions complicating the substance abuse frequently include depression, anxiety, ADHD, and conduct disorders. Family dysfunction is very common and must also be addressed. Normal developmental issues, often delayed and distorted by the substance abuse, need to be addressed during treatment. As a result, the level of professional training required of workers in adolescent treatment is higher than in adult treatment. However, while youth treatment is more costly, the benefits (both psychologically and economically) last far longer when sobriety is established early in life.

Currently in California, the juvenile justice system is the main portal for entry into treatment. This is inefficient. Student Assistance Programs are a far more effective way to intervene in youth

substance abuse before legal difficulties become too severe. CSAM believes that we should strive to keep youth in school and out of jail. Substance abuse is an illness, not a crime. School achievement lowers risk of substance abuse. Bringing treatment to where youth are—in the schools—rather than waiting until they have to be removed and incarcerated would facilitate early intervention and normalize recovery.

The bottom line is that parity is essential for effective treatment. Health insurance is a strong predictor of whether or not an adolescent will receive needed health care services. Currently 64% of adolescents 12 to 17 are covered by private health insurance; mandated parity would provide substance abuse and mental health treatment to all of them. Federal law only states that *if* a medical insurance plan provides coverage for substance abuse and mental health problems, it must provide benefits that are on a par with other medical benefits. Offering full parity to all ages for substance abuse and mental health treatment would increase insurance premiums by only 0.2%, about \$5 per year. Mandating parity only for adolescents, at a minimum, would be a relatively inexpensive method for providing a consistent source of revenue to begin building a treatment system in California designed to meet adolescents' needs.

A statewide treatment network for adolescents is required. Treating youth and their families within their environment is preferable; but sometimes individuals need to be removed from their immediate environment in order to interrupt destructive patterns of substance use and/or ongoing traumatization. Currently, only the wealthy can afford expensive out of state wilderness programs designed to remove youth from toxic environments, circumstances, and behaviors. With a statewide treatment system, similar opportunities could exist for individuals to receive residential care within California, at some safe remove from their dysfunctional environment but still close enough that family work could proceed.

In summary, the Honorable Judge

Peggy Hora of Alameda County enunciated the direction CSAM believes should be taken in California when she wrote the following:

“Once an adolescent finds he or she is unable to stop using without help, then treatment should be provided on demand and in a safe environment. The stigma on seeking help must be erased so that teenagers can get the treatment they need. We need to identify children who are at risk for addiction at a much earlier age and provide the interventions they will need to avoid alcohol and other drugs.” 

Timmen Cermak, MD, is president of the California Society of Addiction Medicine. He is currently in private practice in psychiatry in Mill Valley.

Secondhand Smoke Ordinance Victory in San Francisco

The San Francisco Board of Supervisors adopted San Francisco's comprehensive secondhand smoke ordinance on its second reading.

The new policy, introduced by Supervisor Eric Mar and approved unanimously, tightens up existing rules and helps San Francisco catch up with some other municipalities. It will restrict smoking in many public places, including dining areas where food is served outdoors, waiting lines, building entrances, hotels, most bars, farmer's markets, taxicabs, and common areas in multiunit buildings. The policy is the result of great effort by a broad coalition of health advocates, including the San Francisco Medical Society.

SFMS Past-President Steve Fugaro, MD, who testified in favor of the policy, reports, “This is a big victory for the antitobacco forces, and I am very pleased!”

A one-page summary of the policy is available from the SFMS's Steve Heilig at heilig@sfms.org.

Marijuana Facts

The Risk of Addiction

Timmen L. Cermak, MD

Marijuana is a marvelous story. I mean that scientifically; more specifically, *neuroscientifically*.

It was not until 1960 that Raphael Mechoulam, an Israeli researcher, was able to work out the molecular structure of THC, delta-9-tetrahydrocannabinol—the main psychoactive ingredient extracted from the oily resin produced by the cannabis plant. However, for almost more than three decades, the mechanism by which THC interacted with the brain remained a mystery.

Dr. Allyn Howlett paved the way out of this mystery in 1988 when she first demonstrated the existence of cannabinoid receptors in the brain. After that, the new field of cannabinoid neuroscience took flight. Two years later, Dr. Miles Herkenham used a labeled cannabinoid agonist to map the concentration of what was soon to be called CB1 receptors (CB2 receptors, discovered in 1993, are located primarily outside the CNS) in several species. Then Dr. William Devane, working in Mechoulam's lab after leaving Howlett's, announced discovery in 1992 of the first endogenous cannabinoid—anandamide.

The basic research blueprint—extract the psychoactive substance from a plant's oily residue, label it, discover and map receptor sites within the brain, and then find the endogenous ligand for those receptors—replicates the path earlier paved by opiate researchers. Except the endocannabinoid system is at least tenfold the size of the endorphin system. In fact, according to Mechoulam, "The cannabinoid receptors are found in higher concentrations than any other receptor in the brain . . . and the endocannabinoid system acts essentially in just about every physiological system that people have looked into. . ."

For researchers, the "cannabinoid story" has shifted radically from marijuana to the brain, from the question of why marijuana makes people "high" to the question of what functions this massive neurochemical system underlies.

To begin, our endocannabinoids (at least four different endogenous ligands have been identified) are neuromodulators, not neurotransmitters. Rather than transmit detailed information, endocannabinoids act in a retrograde fashion at synapses, reaching back to enhance or dampen input from incoming neurons. Rather than being stored in vesicles, like most neurotransmitters, the endocannabinoids reside within the neuronal membrane itself (remember, THC is fat soluble) and become available as needed to modulate efferent input.

The endocannabinoid system is tonically active, meaning that it exhibits a constant level of ongoing activity that can be either increased or decreased in order to modulate a function—appetite, for example. Anyone who has been in the thrall of increased cannabinoid stimulation knows what the "munchies" are—an increased appetite for comfort food. On the other hand, decreasing endocannabinoid activity below its usual tonic level by administering a cannabinoid antagonist (for example, SR141716A, or Rimonabant) leads to a loss of appetite. More strikingly, administering SR141716A to newborn rat pups in the first twenty-four hours of life (when the concentration of endocannabinoids in the brain is at the highest) leads to a failure to suckle, and death.

An intriguing window into the overall value of our endocannabinoid system is provided by CB1 knockouts—mice geneti-

cally engineered to have no CB1 receptors, and thus no functioning endocannabinoid system in the CNS. A variety of interesting differences exist between CB1 knockouts and their normal brethren. CB1 knockouts display hypomotility when put into a maze. They explore their environment less. They have better memories. Anyone who has run a personal experiment with increasing cannabinoid stimulation might remember the decline in short-term memory that ensued. One downside of better memories is that CB1 knockouts also show decreased forgetting of aversive memories. For example, classical conditioning using punishment is highly resistant to extinction. One might speculate that veterans with posttraumatic stress disorder who have an inclination to use marijuana might be reacting to the temporary balm it provides for their aversive memories. Animal studies indicate that AM404 (an inhibitor of eCB breakdown and reuptake) may be a more effective enhancer of extinction.

Perhaps most significant is the increased mortality that CB1 knockouts show, not from any single cause but from a wide variety of normal illnesses. The speculation is that the endocannabinoid system continuously modulates a wide array of physiologic functions, thereby increasing the flexibility an organism's responses to the changing environment. Without this ongoing capacity to modulate such functions as memory, pain threshold, appetites, attention, motor activity, fear/anxiety, and novelty/familiarity (to name a few), an animal is restricted to a more narrow range of physiological and behavioral responses. Such rigidity leads to a wearing down of the various organ systems more quickly, and hence to early mortality.

To summarize up to this point: Every cell in our body contains the DNA to produce cannabinoid molecules and complex protein receptors. The CNS produces large quantities of both, relative to other neurochemicals, to create a pervasive modulatory system that enhances the brain's flexibility and adaptability to a changing environment. Maintaining the endocannabinoid system in good tonic balance is presumably a good strategy for staving off mortality.

This brings us to the topic of addiction. Is there evidence for marijuana (i.e., THC) addiction? And, if so, what is the clinical significance of marijuana addiction?

There are four lines of evidence of physical addiction and withdrawal caused by THC. First, administering THC for seven days, followed by SR141716A (a cannabinoid antagonist that leads to sudden displacement of THC from cannabinoid receptors), produces similar symptoms across several species—snout rubbing, difficulty sleeping with characteristic EEG disturbances, “wet-dog shakes,” and so on. Second, clinical reports by humans seeking treatment for marijuana dependence include similar symptoms of irritability, anxiety, insomnia with characteristic EEG disturbances, restlessness, etc. Third, epidemiologic studies reveal that approximately 9% of people who begin smoking marijuana at twenty-one years old or older eventually satisfy the criteria for cannabis dependence.

The fourth line of evidence is the *sine qua non* for any addictive substance: THC causes a rise in dopamine levels in the nucleus accumbens (often called the reward center). While this is often equated to producing pleasure, complicated research on the distinction between “liking” and “wanting” is forcing addiction medicine to generate a more sophisticated picture of the neural mechanisms involved in the development of dependence.

Liking is related to opioid, cannabinoid, and GABA manipulation in parts of the pallidum, and in only a small portion of the nucleus accumbens. There are plenty of experiences stimulated by THC that people like: relaxation, a sense of novelty (especially as concerns sensory stimuli), an altered attentional focus, reduced pain,

timelessness, and so on. While marijuana stimulates these experiences, it also can leave the brain altered when used too consistently, because it can so excessively stimulate cannabinoid receptors that they begin to down-regulate, by as much as 60% in some areas of the brain. As a result, any cessation of exogenous stimulation (stopping smoking marijuana, for instance) leads to a relative cannabinoid deficiency state, generally considered to be unpleasant.

Wanting, on the other hand, is a motivational force rather than a hedonic experience. Wanting is related to dopamine manipulation in the ventral tegmental area (VTA) and large parts of the nucleus accumbens. While the mechanisms underlying liking develop tolerance (through receptor down-regulation), the mechanisms underlying wanting become sensitized by continuous or large uses of a drug of addiction. Over time it takes less exposure to the drug, and fewer cues from the environment, to stimulate wanting and the deep motivation to obtain and use a drug, even when the pleasure value of the drug may have waned considerably.

There is no doubt that many Californians *like* marijuana. The more penetrating question lies in why so many *want* it with such passion. Is this simply a matter of libertarian fervor? In some cases, yes. But why would such fervor be attached to the issue of access to marijuana? Many would argue that devotion to the issue stems from the need to protect vital supplies of a medicine that has become essential to their well-being. Perhaps. But addiction medicine practitioners confront such fervent attachment to a variety of psychoactive drugs on a daily basis.

While no one writhes in uncontrollable agony from marijuana withdrawal, as some opiate addicts do in the absence of their drug, researchers do find a significant connection between pot's subtle symptoms of abstinence and relapse behavior. Many people “prove” that they are not dependent on marijuana by abstaining for weeks, then find themselves “wanting” to smoke it again to calm the irritability they attribute to life's stresses rather than to ongoing withdrawal.

Discerning when patients are truly

treating an underlying medical condition with “medical” marijuana from when they have smoked heavily enough to down-regulate cannabinoid receptors (thus requiring exogenous cannabinoid stimulation in order to feel “normal”) is complex. It is also imprecise. This discernment can be accomplished only within the context of a good therapeutic alliance with a patient who is willing to explore the conundrum honestly.

Patients need to be viewed in a similar manner whether they are using marijuana or Vicodin. While either might be a useful medication, getting high every day through excessive use is still getting high every day. And relying solely on a patient's judgment of what is the best medication for a given symptom is to abandon the scientific principles at the core of our medical training. **Sim**

Timmen Cermak, MD, is president of the California Society of Addiction Medicine. He is currently in private practice in psychiatry in Mill Valley.

A full list of references is available online at www.sfms.org.

Health Care Reform Law Gives Big Boost to Addiction Treatment and Prevention

Bob Curley, www.jointogether.org

Don't count addiction recovery advocates among those who see health care reform as the next Armageddon: The bill signed into law by President Obama includes addiction and mental health services in its basic benefits package and is being broadly praised by treatment, prevention, and recovery leaders. The new law requires that addiction and mental health benefits be provided in the same way as all other covered medical and surgical benefits.

“Including addiction treatment in the basic benefit for all medical insurance is a major public health achievement,” said David Rosenbloom, PhD, of Join Together at Boston University School of Public Health. “Now we must turn our attention and advocacy to ensure that the promise is actually delivered in every community.”

Not the Right Prescription

“Medical” Cannabis and Adolescents

Lynn Ponton, MD, and Sam Judice, MD

Physicians who work with young people need to understand the multiple and often insidious roles that marijuana may be playing in the lives of their young patients. The following two cases represent patients treated by the authors, who are practicing child and adolescent psychiatrists. These cases illustrate current challenges faced by physicians working with adolescents in the Bay Area—currently a unique culture with its own challenges.

Case 1

Eighteen-year-old Jonathan had been in psychiatric treatment for depression, anxiety, and lack of initiative in high school for approximately one-and-a-half years when he finally shared with his psychiatrist that he was taking prescribed marijuana in addition to the antidepressant that she was prescribing. With Jonathan’s permission, and because he was experiencing more severe difficulties, the psychiatrist called the physician who had prescribed Jonathan’s marijuana, letting her know that Jonathan’s lack of initiative and impaired school performance worsened after Jonathan began using medical marijuana. The prescribing doctor did not know this information because she had planned no follow-up visits to check on her young patient. Following this exchange, the psychiatrist spent months working with Jonathan and his family, gradually helping him understand that marijuana was not the right medicine for him and to address the initial problem.

Case 2

David is a nineteen-year-old male who was referred for treatment of depression, anxiety, and failing grades in his first col-

lege semester. Upon first interview, David denied any marijuana or drug use. When asked, his parents, both professionals, were certain that David did not use drugs but that he had inherited the family curse of severe mood disorder. The psychiatrist was hesitant to order a urine toxicology screen because all parties involved seemed highly credible and David’s initial symptom picture suggested the proposed severe mood and anxiety disorder.

However, his eventual urine toxicology screen revealed a different story and measured a level of THC over 350 ng/ml. When asked if he was surprised that his urine toxicology screen indicated that he was a heavy, chronic marijuana user, David snickered, “No,” and then asked the psychiatrist if he would be willing to help him get a medical marijuana card, adding that marijuana was the only thing that helped him sleep.

Since David was nineteen years old, the psychiatrist needed David’s consent to speak to his parents about these difficulties. At this point in the treatment David adamantly refused to give written consent, not allowing the psychiatrist to speak with his parents. Several months later, when the psychiatrist finally began to confront these issues with permission, he discovered that David’s father was also smoking marijuana. At this point David’s father pulled his son out of treatment. Father and son both left, saying that marijuana smoking was harmless and that any treatment that focused on abstaining from marijuana was “bad treatment.” They felt supported by the culture and beliefs in the Bay Area and were sure that they could find another physician who would give them what they wanted.

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Guidelines for Teenagers and Parents

- All teenagers take risks as a normal part of growing up as a way to define and develop their identities.
- Most adolescents try marijuana with their friends (over 40%). They are often unaware of the dangers that this drug poses.
- Brain growth and development continues throughout life, but there is a period of rapid growth in adolescence that continues through the mid-twenties. Many substances, including marijuana, negatively affect brain development.
- Serious negative side effects of marijuana use affecting adolescents are diminished passion and motivation for life. Outgoing teens can become withdrawn. Grades in school can fall. Teenagers can lose interest in most activities.
- Adolescents who have serious psychological problems, such as depression, anxiety, bipolar disorder, or other mental health issues, are extremely vulnerable to marijuana use, which frequently results in a worsening of their symptoms.
- Marijuana is psychologically addictive. Marijuana symptoms include withdrawal and a compulsive craving for the drug. Both psychological and substance abuse treatments aid in stopping it.
- Teenagers and their parents can contact the National Institute of Drug Abuse (NIDA) for information about marijuana abuse and treatment.
- During the last two decades, marijuana grown in the United States has increased its percentage of THC—tetrahydrocannabinol—more than tenfold.
- Marijuana use is frequently found clustered with other unhealthy risks and other symptoms.

New Frontiers

Treatment for Homeless Substance Abusers under the Mental Health Services Act

Barry Zevin, MD, and David Pating, MD

“**D**octor, I think I’m losing my mind.” This has become a familiar declaration from Alan M, a sixty-three-year-old man I have treated for the past four years. When he initially presented with this exact complaint, he had been homeless for several years, had been drinking heavily, and had several admissions at our sobering center after numerous emergency room visits. Over several months of visits in our open-access, multidisciplinary primary care Tenderloin-based satellite clinic, we were able to piece together that Mr. M had had a history of severe depression alternating with periods of grandiosity, paranoia, and poor judgment since his early twenties. He had been diagnosed with bipolar disorder but had never stayed on medications. He had succeeded in getting a master’s degree in chemical engineering but used his skills in the illicit drug trade and had extensive criminal justice trouble. For the past ten years he had been living marginally in San Francisco.

With extensive engagement and trust building, we were able to engage him in care with an intensive case management team focused on older adults. The team was able to get him permanent housing, albeit in an SRO with minimal amenities and no onsite services. Initially his use of health services increased with several psychiatric and medical hospitalizations, but after about one year in this model of care his use of services has decreased. His alcohol use has perhaps moderated but he still drinks heavily daily. He has not been able to consistently take medications, primarily due to paranoid ideas about the effects they may have on him. His verbal and interpersonal cognitive skills are

maintained but he clearly does have deficits affecting his memory and judgment.

However, he is also now strongly motivated to stop and feels more hopeful about his future. When Mr. M. first presented, he was isolated and had only emergency services available to him, and he was at very high risk of death. With our current multidisciplinary approach, he has strong community support and knows how to access it. His health, both physical and mental, has improved and he is at lower risk of death. There is no Hollywood ending to this case, but in fact this is the kind of everyday success that we accomplish with resources from the Mental Health Services Act funding full-service partnerships.

In November 2004, landmark legislation rocked mental health care with the passage of the Mental Health Services Act (MHSA or Proposition 63) by 53.4% of voters and reaffirmed by a two-thirds vote in May of 2009. MHSA placed a 1% tax on the adjusted gross income of Californians earning \$1 million or more and committed these revenues to transform mental health care for Californians who are unserved and underserved by our county-operated mental health system. To date, \$7.3 billion has been collected with more than \$1 billion allocated to counties for approximately 378,000 individuals (unduplicated count FY 07/08) to receive community supports and services and approximately 542,000 individuals estimated to receive prevention and early intervention services in FY 08/09. Other MHSA component programs include capital facilities and technology, workforce education, and training and innovation.

For California’s most burdened cohort—those individuals with co-occurring

substance abuse and mental illness who are homeless or at risk for homelessness—MHSA dedicated 51% of Community Support and Services funds to provide comprehensive “wrap-around” services through full-service partnership (FSP) programs. Individuals with co-occurring substance abuse and mental illness are common. Community surveys indicate that at least 50% of individuals with substance abuse or mental illness also have the other. These individuals are two to four times more likely to use emergency services and have greater medical needs, greater hospitalization rates, higher suicide potential, and poorer treatment response (cite, Drake).

Due of the paucity of integrated substance abuse and mental health treatment services, individuals with co-occurring disorders are among our most underserved. Often these individuals end up arrested and jailed for drug possession charges, rather than enrolled in treatment programs designed to meet their needs. By current (national) estimates, 17% of those incarcerated have a mental disorder, most of which are co-occurring with substance abuse (cite).

MHSA’s full-service programs, modeled after California’s AB2034 programs, are designed to provide the comprehensively integrated mental health care, substance abuse treatment, housing, education, and employment training to do “whatever it takes” to meet needs of these clients. According to Rusty Selix, director of Mental Health America and coauthor of the MHSA, doing ““whatever it takes”” means that counties provide flexible funding and flexible services” to keep people

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off the street, out of the hospital, out of jail, and on the job. And we know these programs work.

From previous experience of the 4,763 individuals enrolled in California's comprehensive AB2034 programs from November 1999 through January 2004, "whatever it takes" programming resulted in 60.8% reduced hospitalization days, 75.4% reduced incarceration days, and 71.5% less homeless days, and an increase of 55.9% days fully employed or 91.8% more days employed part-time in the twelve months following enrollment compared to the twelve months prior. Preliminary data (forthcoming) collected by U.C. Berkeley's Department of Public Health-Nicholas C. Petris Center demonstrates successes of MHSA full-service partnerships that are equally amazing.

The point is this, when public policy follows evidence—directing funds where it matters most—human suffering is reduced at reduced costs. As an example, under MHSA, as of August 2009, \$159.7 million MHSA dollars have been leveraged nearly \$1.1 billion additional dollars for affordable housing units in California through housing bonds. Providing housing as a first step toward reducing homelessness reduces annual costs from \$61,000 annually to \$16,000 and greatly improves acceptance and retention in services.

San Francisco has been a state and national leader in developing successful services and programs to serve homeless clients with co-occurring substance abuse and mental illness. Based upon a truly inclusive community planning process, San Francisco has developed a system of programs that identify and link the highest risk (and most expensive to care for) individuals to multidisciplinary case management programs, supportive housing, residential treatment, and vocational rehabilitation. All the programs funded by the Community Programs division of the San Francisco Department of Public Health have received extensive training to increase the capacity to care for patients with co-occurring disorders, and all work under a harm reduction and recovery-

based model of care.

This system is complex, involves numerous public and nonprofit organizations, and operates under difficult and politicized budget conditions. The intensity and extent of the needs in the most severely affected populations continues to surprise and confound us. The most recent challenge is how to truly bring primary medical care to those severely affected with co-occurring disorders and how to bring behavioral health services into primary care, both to serve those with less complex behavioral health conditions and to prevent at-risk individuals from progressing to severe disability and risk of death. *sfm*

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References

Drake, R., Mueser, K., "Co-occurring Alcohol Use Disorders and Schizophrenia," *Alcohol Research & Health*, Vol 26, No. 2, 2002

Bureau of Justice Statistics Special Report, Mental Health Treatment of Inmates and Probationers (NCJ174463).

Gleghorn, A., Deputy Director Community Behavioral Health Services, San Francisco County, MHSOAC testimony (2009) on MHSA Housing.

Drake, R., Mueser, K., "Co-occurring Alcohol Use Disorders and Schizophrenia," *Alcohol Research & Health*, Vol 26, No. 2, 2002

Bureau of Justice Statistics Special Report, Mental Health Treatment of Inmates and Probationers (NCJ174463).

Gleghorn, A., Deputy Director Community Behavioral Health Services, San Francisco County, MHSOAC testimony (2009) on MHSA Housing.

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California and Colorado are both considering further legalization of marijuana use. Cases like those of Jonathan and David are frequently seen in the practices of physicians working with adolescents and young adults in the Bay Area. Physicians working with adolescents in this culture need to develop an educated awareness that marijuana use is an accepted part of the Northern California milieu for many adolescents and their parents. Marijuana use may not be admitted, however, so treating physicians should be prepared to confront it as a hidden issue and to conduct a full history, often repeating questions about substance use. In addition, they should consider ordering urine toxicology screens.

Written consents to talk with parents and other treating physicians should be obtained at the onset of treatment. In most cases, they are difficult to obtain later in treatment. It is also essential to be prepared to confront angry maneuvers, including labeling marijuana as good and the psychiatrist's treatment as bad.

Prescribing physicians must also be questioned. They have responsibility for the treatment they are recommending even if they plan no follow-up. It is key to understand that the culture in the Bay Area, which includes many parents, teenagers, and a small group of prescribing physicians, are naively accepting and promoting marijuana use among young people without the medically necessary evaluation and the all-important follow-up. *sfm*

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Opioid Analgesics: Optimal Use

Addressing Risks and Benefits in Clinical Practice for Treatment of Chronic, Nonmalignant Pain

Elinore F. McCance-Katz, MD, PhD

As noted elsewhere in this issue, there is an ongoing and growing epidemic of prescription opioid addiction in the United States, in large part related to the rapid increases in prescribing of opioid analgesics for treatment of chronic, nonmalignant pain. Until the mid-1990s, there had been, historically, underprescribing of opioid pain medicines based on fear, in many cases, of creating addiction. More recently, there has been increased emphasis on relief of painful conditions with medication management and, with it, an explosion in the prescribing of opioid analgesics even for what some might consider to be mild-to-moderate pain conditions. What needs to occur is a balance in which those in real need of opioid analgesics for painful conditions are not denied access, but misuse, abuse, addiction, and diversion are minimized. The best way to meet these goals is for physicians to become familiar with the many interventions available for pain management other than opioid medications and when to appropriately use these alternative therapies. It is also important, if opioid therapy is to be used for chronic pain, that physicians and clinicians institute practices and procedures to minimize abuse and diversion of these medications. This brief article will focus on practices that can be easily put in place in office-based practices to avoid opioid misuse by patients.

It bears mentioning that there is limited evidence of the efficacy of chronic opioid therapy in chronic, nonmalignant pain, particularly with use of high doses of opioid medications (Ballantyne 2003). Further, lack of a satisfactory response to opioid therapy may be due to the develop-

ment of hyperalgesic states induced by the opioids, which can also be associated with rebound pain or opioid withdrawal symptoms masquerading as unrelieved chronic pain. Consideration of the institution of a few practices are suggested to help to avoid misuse of prescribed opioids:

- Evaluation of the medical condition—If chronic opioid therapy is being considered, there should be a complete evaluation of the patient's condition to include physical examination, diagnostic testing, and releases of information obtained so that family members and previous providers can be contacted for additional information. There should be written documentation of these findings as well as discussion of alternative treatments and risks/benefits of opioid therapy.

- Urine toxicology screen—A urine toxicology screen should be obtained on every patient prior to prescribing opioids. The use of illicit substances by patients can be a predictor of misuse of opioid medications. Chronic alcohol use can also be a risk for those prescribed opioid medications and it is now possible to test urine for the presence of ethyl glucuronide, an alcohol metabolite that is present in the urine for several days. Endorsement of alcohol use or presence of ethyl glucuronide should prompt obtaining more detailed history of alcohol use.

- Register with the CURES system—CURES is California's prescription monitoring program. By registration online at <http://ag.ca.gov/bne/cures.php>, followed by submission of documentation of medical license and DEA registration, the prescription history of any patient

can be accessed. This can be a valuable tool in determining what controlled substances a patient requesting treatment is receiving concomitantly from others, and it becomes increasingly important as we learn more about toxicities and deaths associated with opioid therapies and drug-drug interactions (Maxwell and McCance-Katz 2009). Of particular importance are drug-drug interactions between opioids and benzodiazepines.

- Use of treatment agreements—Treatment agreements specifying the expectations of the patient who is to be prescribed opioids chronically as well as delineating what the patient can expect from the clinician and staff provide a concrete set of parameters that define the treatment, goals, and a means of making clinical decisions in an expeditious manner. Treatment agreements should define the limits of opioid therapy. Suggested content of treatment agreements:

- The patient is required to use only one physician/one pharmacy.
- Urine drug screens will be given when requested.
- The patient agrees to return for pill count when asked to do so.
- The patient agrees to have body fluid testing for medication levels, if requested by the physician.
- The number/frequency of all refills that will be allowed is stated, including language stating that lost/stolen prescriptions will not be replaced (if this is to be your practice; another option is to specify that stolen prescriptions will not be replaced without a police report documenting the theft).

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Reasons must be given for discontinuation (violation of agreement, misuse of medication, abuse of other substances). Patients who violate treatment agreements can have an opioid taper initiated and can be given a referral to another provider.

Once chronic opioid therapy is initiated, there should be ongoing, regular medical assessment. These assessments should include urine drug screening to determine that the drug being prescribed is present in the patient. There should also be the determination that illicit substances are not being used, because such use predicts a poor outcome for the opioid therapy. If there is regular illicit drug use (or chronic alcohol use), patients often need referrals to drug abuse treatment programs, since they may have co-occurring substance use disorders.

Random callbacks for pill counts should and can be done by office staff. Urine drug screening can be done by point-of-service testing in the office or it may be done by sending the specimen to a clinical laboratory. Every provider will need to decide how this can best be done given the practice in which they work. If point-of-service testing is the option, a urine specimen with a disputed result can always be sent to a clinical laboratory, where the results will be confirmed using accepted standards.

There should also be frequent review of whether there is evidence of analgesia with the prescribed regimen, whether side effects should be treated, whether there is enhanced social/employment functioning, whether the treatment has improved overall quality of life, whether family members agree that the treatment is beneficial (through a family assessment), whether results are unsatisfactory and other options must be reviewed, and whether consults can be obtained when needed (are pain specialists, addiction medicine specialists, and/or psychiatrists available).

In overseeing the treatment of patients receiving chronic opioid therapy, there are some warning signs of possible prescription opioid abuse (see Table 1).

Table 1: Identification of Prescription Opioid Abusers

Deterioration in home/work performance	Prescription forgery
Resistance to changes in therapy	Abuse of other substances
Use of drug by injection or nasal route	Frequent emergency department visits
Early refills	Unauthorized dose increases
Lost/stolen prescriptions	Nonmedical use
Doctor shopping	Refusal to provide urine drug screen or see a specialist

If a patient being treated with opioid therapy for chronic pain does become addicted to the opioid medications, there are several treatment options available. The treating physician should have a discussion with the patient about the concerns and treatment options for opioid addiction treatment. Options include referral to a substance abuse program that can provide medical withdrawal, referral to methadone maintenance (this could be especially helpful if the individual is expected to need opioid pain medications in the future) or a trial of buprenorphine treatment. Buprenorphine is an FDA-approved treatment for opioid addiction that can be offered through office-based practice by physicians who have met certain requirements that, for most, includes eight hours of specialized training that can be obtained in a variety of learning settings (office-based treatment of opioid dependence is reviewed in McCance-Katz 2004). Additional information about this practice is available at <http://www.buprenorphine.samhsa.gov>.

There are many aspects to consider in the treatment of chronic, nonmalignant pain with opioid therapies. This article is meant to provide a brief overview of these considerations that may be helpful to office-based physicians and clinicians who work on a daily basis with patients having these issues. 

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state medical director of the California Department of Alcohol and Drug Programs.

References

Balantyne JC, Mao J. Opioid therapy for chronic pain. *N Engl J Med.* 2003; 349:1943-53.

McCance-Katz EF. Office-based treatment of opioid dependence with buprenorphine. *Harvard Review of Psychiatry.* 2004; 12:321-338.

Maxwell J, McCance-Katz EF. Indicators of methadone and buprenorphine use and abuse: What do we know? *Am J Addict.* 2009; 19:73-88.

Need Assistance with Alcoholism, Drug Dependence, or Mental Illness? Call the CMA Confidential Assistance Line at (650)756-7787

California Medical Association Physicians' and Dentists' Confidential Assistance Line is a service for physicians, dentists, and their family members who request help with problems of alcoholism, drug dependence, or mental illness within their families. When you call the Confidential Assistance Line, you reach an answering service that relays the message to the on-call physician, who then returns the call. Physicians and dentists staffing the line are selected because of their experience with alcoholism, drug dependence, and mental health and their ability to work with doctors as patients.

Proposition 36, Ten Years Later

Can We Learn from Experience?

Margaret Dooley-Sammuli and Peter Banys, MD, MSc

When 61% of California voters approved Proposition 36 in 2000, California led the nation, indeed most of the world, in criminal justice interventions for people arrested for low-level drug violations. Prop 36 permanently changed state law to require probation and treatment rather than incarceration for most people convicted of a first or second low-level drug offense. California became the first state to offer treatment instead of incarceration in every courtroom, not just in special drug courts. This heralded a major shift from three decades of a punishment model to a public health model.

Ten years later, even as the state defunds Prop 36 drug treatment to cope with a budget crisis, new federal health care legislation gives California an opportunity to move to a more comprehensive public health-oriented drug policy.

First, the bad news: Funding for drug treatment both in the community and in the criminal justice system has plummeted. When Prop 36 passed, it doubled state funding for drug treatment (and helped establish nearly 700 new program sites). But in just three years, state funding for Prop 36 drug treatment has been slashed by a whopping 90%—from \$145 million in 2007/2008 to just \$18 million this year—and the governor has proposed eliminating funding entirely in 2011.

Prop 36 was initially funded at \$120 million a year, and 36,000 people were enrolled annually¹ (nearly ten times the number in all of California's drug courts²), completion rates were comparable to those of other criminal justice programs,³ and the number of people in California prisons for drug possession dropped by

more than 27%.⁴ An estimated \$2,861 was saved per participant, or \$2.50 for every dollar invested in Prop 36,⁵ and there was *no* adverse effect on crime trends (despite catastrophic predictions from law enforcement lobbies).⁶

As elimination of Prop 36 funding threatens to wipe out a significant portion of the state's public treatment capacity, Prop 36 will become another unfunded mandate. Tens of thousands of people will find themselves in legal limbo each year, entitled to treatment but unable to access it. We are likely to see "indefinite waiting lists" in courts and renewed enforcement opportunities for rearrest or probation violations.

Now some promising news: Despite the real and immediate pain that a 90% funding cut has already wrought, it *might* also represent a step in the right direction. Proponents of a public health approach cannot be satisfied with diversion, which, by its very nature, depends on the criminalization of drug use. Admission to Prop 36, as in drug courts, follows conviction, and failure to maintain abstinence guarantees eventual imprisonment and a criminal record. Prop 36 included important protections for participants: it universalized access; prohibited incarceration (including jail sanctions); funded drug testing for treatment purposes only; and empowered health providers, not judges, to make treatment decisions.⁷ Despite its protections, Prop 36 still reflects the prevailing ideologies of the criminal justice system, which are rooted in principles of deterrence, incapacitation, and retribution,⁸ bound to the single benchmark of abstinence, which equates any drug relapse with criminal recidivism

It has been ten years since California recognized that incarceration wasn't the answer to our families' and communities' drug problems. In 2000, 61% of voters approved Proposition 36, which permanently changed state law to allow people convicted of a first- or second-time nonviolent, low-level drug possession offense to opt for probation and drug treatment instead of incarceration. Decades of research show that addiction treatment is successful—at reducing drug use and arrests and at increasing family stability and employment.

and punishes it as such.

A true public health approach will look very different—and it's closer than ever. The federal health care legislation that President Obama signed in late March represents an unprecedented political acknowledgment that drug use is fundamentally a health issue. (The expansive parity requirement did not appear in a vacuum but builds on the passage of the federal Paul Wellstone and Pete Domenici Mental Health Parity and Addiction Equity Act of 2008 and on the passage of similar bills at the state level.)

The health care legislation holds the potential to broadly expand access to alcohol and drug treatment here in California and across the country. Not only will more people (be required to) have insurance or be eligible for Medi-Cal; insurers will be required to cover alcohol and drug treatment as they do any other chronic health condition. Drug treatment—which now exists largely outside

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Starving System

After guaranteed funding for the program sunsetted in 2006, the legislature has set annual funding levels—first increasing, then slashing them.

2001/2002–2005/2006	\$120 million per year, as guaranteed by statute
2006/2007	\$145 million (\$120 million in the Prop 36 trust fund and \$25 million in new Offender Treatment Program, a program for Prop 36 participants)
2007/2008	\$120 million (\$100 million in Prop 36 fund; \$20 million in OTP)
2008/2009	\$108 million (\$90 million in Prop 36 trust fund; \$18 million in OTP)
2009/2010	\$63 million (\$0 in Prop 36 fund; \$18 million for OTP from General Fund and \$45 million in OTP from federal stimulus funds to OTP)
2010/2011	The Governor has proposed \$0 for both Prop 36 and OTP.

Source: California Department of Finance

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the mainstream health care and insurance systems—*may* finally be allowed to come in from the cold.

The California Legislature has already formally acknowledged that drug use is a health issue, having passed parity legislation (vetoed by the governor). Similarly, the California electorate is on record as supporting expanded access to treatment—and reduced incarceration—for both alcohol and drugs problems (Prop 36 in 2000) and mental health issues (Prop 63 in 2004).

On the public and personal levels, Californians understand that drug use is fundamentally a health matter. And yet our criminal code continues to require arrest, prosecution, and punishment. More than 270,000 people were arrested for a drug offense in California in 2008 (more than 78,500 for marijuana), accounting for one-quarter of all felony arrests in the state that year.⁹ About 30,000 people were in prison for a nonviolent drug offense that year;¹⁰ they made up more than 15% of the prison population and cost \$1.5 billion per year to incarcerate

(or \$49,000 each¹¹). A shocking 28.4% of new felony admissions to prison and 32.7% of parolees returning to prison with a new term were for drug offenses in 2008.¹² This does not include drug-related technical parole revocations. The vast majority of these commitments are for drug possession, not sale, manufacture, or transport.

Most European countries and Canada have long ago embraced a public health posture about drug use and simple possession. The combination of a California budget disaster and the manifest failure of three decades of the war on drugs may yet turn out to be a crisis too good to waste. We can think afresh about addictions and their treatment in the context of health care reform. 

Margaret Dooley-Sammuli is deputy state director in Southern California for the Drug Policy Alliance, the nation's leading organization working to end the war on drugs and a proponent of Proposition 36 in 2000.

Peter Banys, MD, is health sciences clinical professor of psychiatry at UCSF.

Since its passage, Proposition 36 has

- **Provided treatment to 30,000+ people a year.** Almost 300,000 people have entered community-based treatment under Prop 36, half of whom had never received treatment before. About one-third of participants complete treatment and probation; about half stay for at least 90 days, “the minimum threshold for beneficial treatment.”¹³

- **Sharply reduced the number of people in state prison for simple drug possession.** In the twelve years prior to Prop 36, the number of people in state prison for drug possession quadrupled, peaking at 20,116 in June 2000. That number dropped by one-third shortly after Prop 36 took effect and remained lower by 8,000 (40%) as of December 2008.¹⁴

- **Reduced state costs by more than \$2 billion.** For every \$1 invested in Prop 36, the state saves a net \$2.50–4.00¹⁵ Average per-person treatment costs are about \$3,300 per year, while incarceration costs \$49,000 per year. UCLA calculated that the program cut costs by \$173 million its first year; the Legislative Analyst's Office calculated annual savings for later years at \$200–300 million.

- **Achieved expected rates of “progress” and “completion.”** According to UCLA, Prop 36 completion rates are “fairly typical” of drug users referred to treatment by the criminal justice system.¹⁶ The statewide completion rate reached 40% in 2007. At the county level, Prop 36 completion rates range from 26% to more than 50%.

He is the director of the Substance Abuse Programs and the Substance Abuse Physician Fellowship Program at the V.A. Medical Center, San Francisco. He is past president of the California Society of Addiction Medicine.

A full list of references is available online at www.sfms.org.

Big Alcohol's New Products

New Media for Youth

Sarah Mart, MS, MPH

Big Alcohol (the global beer, wine, and spirits conglomerates that own most of the alcohol industry) uses several tactics to achieve its goals of ever-increasing profits. It targets vulnerable populations such as youth with products specifically geared to their demographic. It spends billions on advertising campaigns with celebrity icons and trendy media. It spends millions more to block efforts to enact effective, evidence-based public health policies such as restricting alcohol advertising and limiting access to youth-friendly drinks through increased prices and product bans. Now more than ever, physicians need to shine a spotlight on the harm caused by Big Alcohol in our communities.

It is not surprising that alcohol remains the drug of choice for American youth (U.S. Health and Human Services, 2007). Advertisements promoting alcoholic beverages are insidious, and oversight is left to ineffective self-regulation by the alcohol industry (Gomes 2008). Exposure to alcohol advertising increases positive expectancies and attitudes about alcoholic beverages and drinking behaviors in youth populations (Austin 2000). Exposure to alcohol advertising contributes to higher levels of risky drinking behaviors in youth: earlier initiation of drinking and higher consumption among underage youth who drink (Anderson, de Brujin et al 2009). Youth in markets with greater alcohol advertising expenditures drink more; each additional dollar spent on alcohol advertising raises the number of drinks consumed by three percent (Snyder 2006).

In 2005, the alcohol industry spent approximately \$6 billion or more on

advertising and promotion (Center on Alcohol Marketing and Youth 2007). In addition to traditional media channels such as television, print, and outdoor ads, Big Alcohol also offers text messages, cell- and smart-phone applications, downloadable ringtones, and wallpaper backgrounds from their product websites.

Social networking platforms have emerged in the last five years as major players in alcohol marketing campaigns. The frontrunner, Facebook, has more than 400 million active user accounts (Facebook 2010). Facebook offers both paid and free advertising functions for companies to promote their alcohol products, sponsored events, and brand-related content. Many of the thousands of alcohol-related Facebook pages, events, and applications are accessible by underage users (Mart 2009). These new media can increase product exposure to specific target audiences—especially youth—exponentially. Social networks are widely used to promote alcopops and alcoholic energy drinks, alcoholic beverages that are popular with youth audiences.

Alcopops and Alcoholic Energy Drinks: Youth-Friendly Products

Alcopops are ready-to-drink, sweet alcoholic beverages, usually carbonated and/or fruit-flavored, and sold in single-serving bottles or cans. Alcopops resemble soft drinks in both their liquid form and their packaging. They contain roughly the same amount of alcohol as traditional beer (5% alcohol by volume), although some alcopops contain as much as 12% alcohol by volume. The alcohol industry calls these drinks “flavored malt beverages,” “malternatives,” and “flavored

alcoholic beverages” (Marin Institute 2009). They are a go-to alcoholic beverage choice marketed to youth, particularly young girls.

An American Medical Association survey conducted in 2004 found that about one-third of teenage girls responded that they had tried alcopops. More than 60% of teen girls who saw TV, print, or in-store ads for alcopops had tried the beverages (American Medical Association 2004). Alcopop ads tended to be the only way that teen girls became aware of the products, as more than 50% of the teens who saw the ads did not report seeing alcopop products anywhere else, such as at parties or with friends.

Leading alcopops brands and their producers include Mike's Hard Lemonade (Mike's Hard Beverage), Smirnoff Twisted V and Smirnoff Ice (Diageo), and Bacardi Silver (Anheuser-Busch InBev/Bacardi) (Beverage Information Group, 2009). The producers use traditional and social media, contests, and sponsorships to push alcopop messages to youth. The Mike's Hard Lemonade Facebook page, with nearly 12,000 fans, showcases the “Mike's Hard Punch Sweepstakes.” Clicking on the sweepstakes link takes the user to the related website with no age-gating mechanism to deter underage Internet users. Both the company's Facebook page and its product website offer prizes of free music downloads from Warner Brothers Music, with all entries automatically submitted for big prizes such as a trip to London, a Les Paul guitar, a Warner Brothers Rock Gift Package, and Mike's “Hard Punch Rocks” t-shirts.

With the addition of caffeine and
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other stimulants such as guarana to alcohol products, Big Alcohol created another new product: alcoholic energy drinks (AEDs). With names such as Four Loko, JOOSE, Liquid Charge, Max Vibe, Torque, Hard Wired, Evil Eye, Vicious Vodka, Slingshot Party Gel, and 3 A.M. Vodka, AEDs communicate a clear message to youth: Drink caffeine plus alcohol, stay awake, and drink longer/more. Recent research has found that a quarter of college student drinkers mix energy drinks with alcohol, and that students who do so are at higher risk of alcohol-related harm, including physical injuries, injuries requiring medical treatment, being the victim or perpetrator of sexual violence, and riding with an intoxicated driver (O'Brien 2008).

Additional research has found that youth drinkers ages fourteen to twenty who mixed alcohol with energy drinks did so in order to hide the flavor of alcohol, drink more, not look as drunk, and stay awake longer (Song 2008). These youth were at higher risk for heavy drinking and alcohol-related harm, such as violence and driving while intoxicated, than youth who drank alcohol only (Song 2008).

Despite the serious health risks and problems posed by AEDs, producers continue to target young people directly with both the products and their ad campaigns. AED producers follow the alcopops model with sugary-sweet flavors such as Four Loko's fruit punch, blue raspberry, orange, watermelon, and grape. The added flavors easily mask the high alcohol levels of AEDs, many of which contain as much as 12% alcohol. The volume of AEDs is nearly twice as much as noncaffeinated alcoholic beverages (23.5 or 24 ounces versus a 12- or 16-ounce bottle of beer), thus putting the equivalent of four or five standard alcoholic drinks into one can. AED cans and bottles are also brightly colored and look just like energy drinks that don't contain alcohol.

AED produces inexpensive social media to develop loyal youth drinkers: social networks including Facebook, Twitter, YouTube, and MySpace; "consumer educators" (young, beautiful women giving

away free product-related merchandise or free samples of the product at bars, sponsored parties, or on campus); contests with big prizes such as trips, sports or music equipment, or cash; and branded merchandise such as t-shirts, caps, and jackets. Social networks list hundreds of posts that mix product promotion with bragging about harmful consequences. One Four Loko fan encouraged others to "share the love of four loko and spread the word . . . AND GET DRUNK" (Four Loko Page 2010). A JOOSE user wrote, "Just discovered joose . . . amazing, our vomiting and breaking of furniture rates at parties have skyrocketed" (JOOSE Page 2010).

Over the last two years, state and federal officials have challenged producers of AEDs about the safety of their products. As a result of investigations by state attorneys general, Anheuser-Busch InBev and MillerCoors agreed to remove stimulants from their respective caffeinated alcohol products. In November 2009, the FDA called for nearly thirty manufacturers of AEDs to provide scientific evidence that adding caffeine or other stimulants to alcoholic beverages is GRAS, or generally recognized as safe. Meanwhile California, Washington, and New York introduced legislation in early 2010 to ban alcoholic energy drinks from being produced, distributed, or sold in those states.

What We Can Do

In order to stop Big Alcohol from harming youth in our communities, we need three major policy changes: Increase the price of alcohol, stop youth-oriented alcoholic beverages, and restrict alcohol advertising. These are some of the most cost-effective policies available to affect significant reductions in alcohol consumption and incidence of alcohol-related harm (Anderson, Chisholm et al 2009). Big Alcohol spends large amounts of money to influence policy makers, however. In 2009, the alcohol industry spent more than \$1.5 million to lobby California legislators. The top lobbyist clients in this list included Diageo (\$220,697), Anheuser-Busch InBev (\$166,068), MillerCoors (\$165,000), Wine and Spirits Wholesalers of California (\$150,000), and the Wine

Institute (\$130,500) (California Secretary of State 2010).

Physicians play an important role in supporting evidence-based policies and illuminating the harm Big Alcohol causes, from providing testimony at legislative hearings to sharing their expertise on alcohol-related public health issues with the press. Mary Claire O'Brien, a physician researcher at Wake Forest University, is an excellent example of such advocacy: She has published and presented research regarding the increased negative consequences, excessive drinking behaviors, and other risks associated with youth consumption of alcohol mixed with energy drinks. O'Brien has discussed the issues and available research extensively with national and local media outlets. She has also communicated with and made in-depth reviews of the literature on this topic available to the Food and Drug Administration and groups of attorneys general (Arria, O'Brien et al 2008).

This kind of physician leadership in the public health arena is crucial in the fight against Big Alcohol and its harmful products. Together, physicians, researchers, advocates, and youth can stand against alcohol-related harm. The future of our youth and their communities depends on it. 

Sarah Mart is research and policy manager at Marin Institute, an alcohol-industry watchdog (<http://www.marininstitute.org>). Her recent research includes alcohol promotion on Facebook and Big Alcohol's political contributions and lobbying to influence public health legislation.

A full list of references is available online at www.sfms.org.

San Francisco Influenza and Infectious Disease Forum 2010

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Lessons in Urban Survival

A Hustler Tells All

Eisha Zaid

“**Y**ou can tell a lot by a person’s shoes. One look tells me if they are worth my efforts,” he said.

My patient, a forty-something gentleman, was educating me about what he called “urban survival.”

As a native of the Tenderloin, he relied on certain tactics to make ends meet. He was an expert-level street hustler. He was one of the successful ones and was capable of making a small fortune, probably enough to pay rent and live comfortably in a nice apartment somewhere outside the Tenderloin.

Sadly, he burned through his earnings, spending massive amounts on one thing—crack cocaine.

“Sometimes it feels like I am drowning just thinking about how much money I owe. But I want it [crack]. I need it. And I have to get it.”

Cocaine is derived from the leaves of *Erythroxylon coca*, a plant endemic to the Andes. In historical records, cocaine chewing was documented in South America as far back as 4,000 years ago, and for the last hundred years the plant has had medicinal uses because of its vasoconstricting effects.^{1,2} Cocaine has multiple actions, including that of local anesthetic, CNS stimulant, appetite depressant, and vasoconstrictor. The effects are largely mediated through the inhibition of norepinephrine, dopamine, and serotonin uptake.³

Cocaine has become a popular street drug that can be sniffed, smoked, or injected intravenously. As a recreational agent, cocaine has variable purity. The purest forms are white powder, while less pure forms are more yellow and have been

cut with other drugs, such as lidocaine, caffeine, methamphetamine, ephedrine, and phencyclidine.³ When cocaine is heated in an alkaline solution, it transforms into “crack,” which is sold in 100–150 mg “rocks” that can be smoked, while a “line” weighs 20–30 mg and is snorted.³

When I first met him, he was completely suicidal and was brought into the SFGH Psychiatric Emergency Services after being placed on a 5150 hold for being a danger to himself. After the initial evaluation, he was transferred to the inpatient psychiatric unit. At the time, he had no home and was completely out of money.

He was a tall, thin, middle-aged man with a pinkish complexion. His hair was combed and slicked back. He wore a lime green collar shirt over blue hospital gown pants. His two front teeth protruded outward and had been eaten away and were stained brown.

During our first meeting, it was as though everything was in slow motion. He moved aimlessly and spoke slowly when recounting the details of his suicide attempt. He had a flat affect, showing little facial expression. He appeared remorseful but remained deeply depressed. At times he would become teary-eyed when talking about being abused as a child and about his life in the Tenderloin. He was diagnosed with bipolar and polysubstance dependence.

“When I get low, I get really low and go into these dark bouts of depression. There is no reason to live for me. No one gives a shit about me,” he said.

His past addiction was alcohol; his current substance was cocaine. His heavy drug use required excessive amounts of

money, which he often did not have. Thus he borrowed from street lenders and still had to pay back his debt.

The chronic use had left his life in shambles. He went from having it all—a condo, a girlfriend, and a stable job—to having nothing. He was living on the streets, had made many enemies, and relied on hustling to get his daily fix.

He had been admitted to our inpatient unit numerous times before for suicide attempts and was in and out of residential treatment programs. He was followed by a case manager and was plugged into an extensive network of social support services, but he had difficulty committing to appointments and taking his medications. The hospital had become his security net, a revolving door for him.

Addiction to drugs results from alterations in neurochemical processes, which ultimately lead to increased drug-seeking behavior. Cocaine, like many other drugs of abuse, is highly addictive because it blocks dopamine uptake and results in increased dopamine levels in the nucleus accumbens.⁴ With respect to behavior, dopamine promotes reward-seeking behavior.⁵

Interestingly, with increased cocaine use, dopamine release results from exposure to certain stimuli, such as drug paraphernalia or environmental cues, findings that have been demonstrated in animal models.⁶ This conditioned response explains the drug-seeking behavior observed in chronic users, who are driven to do whatever it takes to get their neurochemical fix.

Over his two-week hospitalization, I
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came to know him well. Although initially reserved, he opened up and enjoyed talking about himself and his urban life; he was always seeking an audience. He became animated when he described the subculture of street hustlers.

He was vague when describing exactly what he did when he stood on the streets of the financial district wearing an expensive European blazer and pair of polished Italian shoes. He had mastered the art of “talk” and was able to assume an entirely different persona when he worked in the shadows of the black suits, where he desperately desired to be.

Like him, many of his colleagues were substance abusers who generated funds in a similar fashion. He admitted that his tactics were aimed at getting money from the “sharks,” the men in business suits. Unlike other hustlers, he felt his tactics were less seedy; he did not pursue women and was not overly aggressive.

“I just have a way of getting what I want,” he said.

Despite his skills, he was consumed by what he called “self-destructive behavior.” He had made many street enemies and there was no escape living in the Tenderloin district, where every street corner harbors a dealer and the environment reinforces his addiction-forming habit. He felt weak, completely disabled and powerless to break the habit.

“I am spiraling and digging myself deeper and deeper into an early grave,” he said.

With an expanding drug economy, a subculture of hustlers has emerged as a powerful force with a unique social identity. In a study that examines the social identity formation of street hustlers in a group of twenty-eight criminals prosecuted for violent street crimes, the authors cite how hustlers involved in the drug economy make every effort to differentiate themselves from the crackheads, who are of lower social status.⁷

The following qualities were identified as central components of the hustler identity:

Being clean. The hustler has morals

and pays close attention to hygiene and dress.

Having things. The hustler seeks to acquire material wealth.

Being cool. The hustler is characterized by a detached persona and calm demeanor.

Being criminally able. The hustler has the knowledge to accomplish the necessary acts to sustain a living.

Having heart. The hustler can protect oneself from victimization or danger.

The authors conclude, “The self-described hustlers in our research succeeded, at least in their own minds, in establishing an identity whose status is at the top of the crack economy rather than at the bottom”—much like my patient, who prides himself on being successful at his line of work.⁷

Closer to the end of his hospitalization, my patient laid out his requests: He wanted to be admitted into one particular residential treatment program in San Francisco, and after he completed the program he wanted a new apartment outside the Tenderloin. These were his stipulations for recovery.

At times it felt like we were negotiating the terms of an agreement. And when we could deliver, his attitude changed. He instantly became invested in recovery and the treatment program, seeking immediate discharge even before the bed was made available. When we had trouble securing the bed, he drifted into a depressed mood and pleaded with us.

He intrigued me. A part of me was drawn to him, sympathizing with him, completely consumed by his story. I could not even fathom how he survived years of childhood abuse, living in the streets, and relying on urban survival. I wanted to see him recover and get back the life he once had.

At the same time, the skeptic in me awakened. At times, I wondered how much of his story was true and how much of it was concocted. He was well versed in the art of talk. He knew exactly what to say to get what he wanted. After all, he was an expert hustler. I often wondered whether I was being hustled, like everyone else who

had entered his life.

When he left the unit, I wished him well. I never knew what became of him. One can only hope he was successful this time in his residential treatment program. A part of me fears he might have tried to kill himself again, while another part of me thinks he may have ended up back on the streets, hustling his way to bricks of crack.

Whatever the outcome, his story makes me think about the intersections of substance abuse, addiction, and psychiatric illness, a sad reality in our urban neighborhoods. Although it is easy to blame the patient for his addiction, we must remember that addiction is an illness, which, like many other medical diseases, requires an interdisciplinary approach to treat its neurochemical and psychological bases. 

Eisha Zaid is entering her fourth year of medical school at UCSF this fall.

References

Nunes E. A brief history of cocaine: From Inca monarchs to Cali cartels: 500 years of cocaine dealing. *NEJM*. 2006. 355;11.

Murphy NG, Benowitz NL. Cocaine (chapter). In Olson KR: *Poisoning and Drug Overdose*. <http://www.accessmedicine.com/content.aspx?aID=2683517>.

Luscher C. Chapter 32. Drugs of Abuse. In Katzung BG: *Basic and Clinical Pharmacology*. <http://www.accessmedicine.com/content.aspx?aID=4519820>.

Volkow N, Wang G et al. Cocaine cues and dopamine in dorsal striatum: Mechanism of craving in cocaine addiction. *Journal of Neuroscience*. 2006. 26(24):6583-6588; doi:10.1523/JNEUROSCI.1544-06.2006.

Schultz W, Dayan P, Montague PR. A neural substrate of prediction and reward. *Science*. 1997. 275:1593-1599.

Di Ciano P, Everitt BJ. Direct interactions between the basolateral amygdala and nucleus accumbens core underlie cocaine-seeking behavior by rats. *J Neurosci*. 2004. 24:7167-7173.

Copes H, Hochstetler A, Williams JP. We weren't like no regular dope fiends: Negotiating hustler and crackhead identities. *Social Problems*. 2008. 55:254-270.

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One in Three Elderly Drinkers Face High Risk of Harm, Study Finds

One-third of American drinkers over age sixty consume excessive amounts of alcohol, are at risk of dangerous interactions between alcohol and medications, or have illnesses that can be exacerbated by drinking, according to researchers at the David Geffen School of Medicine at UCLA.

A study of 3,308 clinic patients in California found that 34.7% of drinkers were considered high risk, with more than half falling into at least two of the three risk categories. Patients ages sixty to sixty-four were twice as likely to be at-risk drinkers than those over age eighty, and risk was also higher among drinkers who were more affluent and less educated.

Researchers said the findings could help physicians identify at-risk patients, noting that doctors may be less aware of the problems of drug interactions and comorbidity than they are of heavy drinking among older patients.

The findings were published in the May edition of the *Journal of General Internal Medicine*. The full text is available at <http://www.jointogether.org/news/research/summaries/2010/one-in-three-elderly-drinkers.html>.

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Steve Heilig, MPH

The Pain Behind Addiction—and a Miracle Cure?

America Anonymous: Eight Addicts in Search of a Life
By Benoit Denizet-Lewis (Simon & Schuster)

The End of My Addiction
By Olivier Ameisen, MD (Farrar, Straus & Giroux)

Addiction to drugs, especially legal ones such as nicotine and alcohol, results in incalculable costs and suffering in America. The cumulative medical expense, accidents, lost productivity, and legal and jail expenses have resulted in the American Medical Association identifying substance abuse as our worst public health problem.

"Today, nearly 23 million Americans—9.2% of the population twelve or older—are hooked on alcohol or drugs, another 61 million smoke cigarettes, and millions more are slaves to gambling, compulsive overeating, and sex and pornography," writes Benoit Denizet-Lewis in *America Anonymous*. That opening statement hints at both some of the strengths and perils of his heartfelt book.

Behind every health statistic is a personal story, and here are eight men and women from all walks of life who are addicted to alcohol, heroin, methamphetamine, crack, prescription drugs, steroids, tobacco, gambling, food, sex, pornography, and shoplifting, or some combination thereof. Their stories are diverse and moving in their commonness and tragedy.

Direct exposure to addiction doesn't always help us understand and sympathize, as Denizet-Lewis notes. "Even the family members of addicts seem conflicted. In a *USA Today*/HBO drug addiction poll of adults with an addicted family member, 76% called addiction a 'disease' but a majority of those same respondents identified 'lacking willpower' as the main impediment facing addicts."

The personal stories here—with names and locations altered for privacy—share a common dynamic. As "Bobby," addicted to OxyContin, succinctly recalls, "It started as a weekend thing, but then before I knew it I was craving it, and then I needed it to function." But "function" here is a relative term, and that bar is lowered as the addiction takes hold. Beyond the progressive dependence lies varying levels of conflict with others, self-debasement, denial, crime, even violence and incarceration.

Denizet-Lewis discloses that for himself, it was compulsive, anonymous sex that took control of his life. His own experience

of loss of self-control colors the book, and early on he addresses the tension caused by an ever-broadening definition of addiction.

"I believe that gambling, sex, food, spending, and work (to name a few) can, for some people, be as addictive and debilitating as an addiction to drugs," he writes. But calling every such behavior "addiction" can water down the "disease model" now widely accepted for drug addiction. By calling most troubling behaviors addictions, we risk eliciting more denial of those who actually are addicted.

So what to do when true addiction is undeniably present? As with other diseases, many have longed for a "magic bullet," such as antibiotics were hoped to be for infections. French cardiologist Olivier Ameisen, MD, thinks he found one such weapon. Utterly derailed by his alcoholism, he'd tried all manner of treatments but had all but given up until he came upon a generic prescription muscle relaxant called baclofen. "Freed by baclofen not only from the biological prison of addiction but also from the crippling anxiety that preceded it, I was finally at ease with myself and others," he exults.

The End of My Addiction is Ameisen's moving story of his decline, fall, and redemption, and his crusade to get baclofen widely recognized and used. He's understandably evangelistic: "I ask all physicians who treat addiction to consider prescribing baclofen," he says. He also urges more research, while noting that the lack of a patent for the drug is a huge financial disincentive and that his own brave published report met "a deafening silence." Research is indeed underway, but the jury is still out.

History is replete with "miracle" cures for diseases, including addiction, but few have stood the test of time. Denizet-Lewis quotes renowned addiction researcher Dr. Walter Ling's caution: "I would distrust anyone who says they can cure addiction." But another truism in this arena is that whatever works is good.

On a broader scale, though, as recovering polydrug addict "Jody" acutely observes in *America Anonymous*, "Treatment works. Maybe not the first time, but it works if you do it right, if you give it the time it needs. For that, you need to . . . fund it. But we don't do that. We'd rather build jails and spend millions of dollars cleaning up the messes of addicts, when we could spend much less and help them stop making messes!"

And therein lies yet another tragic story. 

An earlier version of this review appeared in the San Francisco Chronicle.

Robert P. Cabaj, MD, and David Hersh, MD

SFDPH Public Sector Services for Substance Use Disorders

San Francisco citizens have a wide array of services to help with substance use-related problems and disorders. Primarily targeted for people with little or no insurance or who are covered by Medi-Cal, Medicare, or a combination of the two, services range from substance use assessments, treatment planning, and brief interventions at the extensive Department of Public Health (DPH) Community Oriented Primary Care Clinics (COPC) to the network of specialized substance abuse treatment modalities for serious and persistent substance abusers offered through DPH Community Behavioral Health Services (CBHS).

The specialty substance abuse services are provided mainly by community-based organizations, under contracts with CBHS. Since 2000, San Francisco has had an official Harm Reduction Policy that applies to the health department and all contractors who deliver substance use, mental health, sexually transmitted diseases, and HIV/AIDS treatment and prevention services, and/or who serve drug and alcohol users in their programs. In addition, since 2003, when CBHS was organized by combining mental health and substance abuse administrations, the vision of the Department has been, "Any door is the right door"—meaning that any client or family seeking services can be seen and assessed at any site operated by or contracted to CBHS. If a particular program does not offer the level of care needed, that program will make sure the client or family is referred to the proper site and engaged. An open-access policy means all people seeking help will be seen in forty-eight hours or less, so there are no waiting lists except at some residential care programs. If a client has to wait for a residential program, he or she will still be engaged by the referring provider with support services.

People can seek services by walking into any community clinic or by going to the Behavioral Health Access Center at 1380 Howard Street (at 10th Street), which houses the Treatment Access Program (which serves as the gatekeeper for residential services) and the Access Team (which screens for mental health and substance abuse concerns). People can also get information or be screened for referrals by telephoning the central access line at (415) 255-3737. Other ways of accessing care are through any of the COPC sites and through programs such as the Homeless Outreach Team and Project Homeless Connect, which target homeless clients who often need substance-abuse services.

To better coordinate patient assessment and placement into the City's wide array of funded substance use, dual diagnosis, and mental health services, the Behavioral Health Access Center (BHAC) was created in 2008. The BHAC represents the collocation and integration of several formally separate City substance use and mental health evaluation, stabilization, and treatment-linkage services, including the Treatment Access Program (general substance use and dual diagnosis), Centralized Opiate Program Evaluation (COPE) Service (methadone and buprenorphine), Mental Health Access Program, and the Buprenorphine Induction Clinic. The CBHS Pharmacy, also housed at BHAC, provides psychotropic medications to patients seen at City mental health clinics and BHAC, as well as Suboxone to patients enrolled in the City's buprenorphine program.

Patients presenting to BHAC receive a thorough biopsychosocial assessment that guides the determination of the level of care and treatment modality most likely to meet the patients' needs. In addition, staff give consideration to which specific programs would best meet each patient's particular needs, taking into account such factors as gender, language capacity, ethnicity, race, sexual orientation, housing needs, family connections, and other relevant factors.

DPH provides funding for primary and secondary prevention, detoxification (social model and residential medically assisted), outpatient (intensive and low-intensity, including medication management and smoking cessation treatment), opiate agonist treatment (methadone and buprenorphine), drop-in, drug court and other criminal justice follow-up, and residential (substance-use, dual diagnosis, mental health) services. Patients are referred to BHAC from programs and services across the City, including primary care, mental health, case-management, substance-use, and homeless outreach.

DPH funds thousands of treatment slots and beds across the City, including more than 2,200 methadone and 200 buprenorphine maintenance slots. To expand and enhance access to these opiate-agonist treatment services, DPH has implemented several extremely innovative programs, including a Mobile Methadone Van, an Office-Based Methadone Pilot Program (also known as office-based opiate treatment or OBOT), a centralized opiate agonist treatment assessment/linkage service (COPE), and the Integrated Buprenorphine Intervention Service (IBIS). The methadone vans

are for stable methadone clients that operate in neighborhoods that are not close to narcotic treatment program sites (NTP). Services from these vans are now covered by Drug Medi-Cal.

The IBIS program, a city-wide buprenorphine treatment program, integrates buprenorphine (Suboxone) treatment with patients' primary care, mental health, or "drug-free" substance-use treatment. More than fifteen DPH community-based sites participate in IBIS. To support IBIS providers, the City created the first buprenorphine induction clinic in the country. OBOT allows physicians at COPC clinics to order methadone for selected, stable methadone clients who can get their methadone at specially licensed pharmacies. OBOT clients no longer need to go to their regular NTP, allowing that treatment site to open methadone slots to new clients who would not have been served otherwise. Again, use of buprenorphine has allowed clients in regular COPC and mental health outpatient programs to receive opiate replacement care and operate their lives in ways that might be difficult to do when tied to a traditional methadone program (given work schedules and the need to access primary care and so on).

To better meet the needs of alcohol-dependent individuals, DPH has collaborated with community providers to create several innovative services, including the City's residential medication-assisted detoxification program and Sobering Center. The detoxification program provides 24/7 medical coverage to patients who are likely to develop significant alcohol withdrawal symptoms if unmedicated. Sites and programs across the City, including emergency departments, primary care and mental health clinics, and BHAC, have access to these beds. The Sobering Center provides a respite for alcohol-dependent individuals who are acutely intoxicated and serves as a launching pad for access to ongoing treatment.

As dual diagnosis is the rule and not the exception, the integration of substance-use and mental health services has become a primary DPH focus. All substance-use and mental health programs are expected to provide dual-treatment services to their patients. Several outpatient and residential treatment programs are specifically set up to provide intensive dual-diagnosis treatment. Further integration with COPC over the coming year will expand treatment access.

CBHS monitors outcomes with data collected on all clients through the CalOHMS state system as well as other outcomes data. An evaluation of all the substance abuse services is currently underway to help determine what works best for San Francisco residents and what service needs might still need to be addressed. Since the majority of funding for public substance-abuse programs is dependent on City general funding, the current financial crisis facing the City of San Francisco could impact services in the coming years. 

Dr. Robert Cabaj is director of San Francisco Community Behavioral Health Services, and Dr. David Hersh is medical director of CBHS Opiate Replacement Services in the San Francisco Department of Public Health.

Nancy Thomson, MD

Byron Cone Pevehouse, MD

Byron Cone Pevehouse was born in Lubbock, Texas, on April 5, 1927. He died at age 83 on April 16 in Bellevue, Washington.

After serving for twenty-two months in the U.S. Naval Hospital Corps during World War II, he received his MD from Baylor Medical School in 1952. He took his neurosurgery residency at UCSF from 1954 to 1958.

Dr. Pevehouse was an honorary member of the SFMS—an honor given to him for his contribution to the fields of neuroscience and neurosurgery. He served as the chief of neurosurgical services for UCSF at San Francisco General Hospital and as chief of pediatric neurosurgery at the U.C. Medical Center for many years, being promoted to clinical professor in 1978. In 1967, he was appointed chairman of the Department of Neurological Surgery at University of the Pacific-Presbyterian Medical Center, serving in this position for twenty-three years. He also served in many professional organizations including the San Francisco Neurological Society (president, 1973), American Association of Neurological Surgeons (president, 1984), and the Society of Neurological Surgeons (president, 1987), as well as the SFMS.

He retired from active practice in 1990 and was appointed by President George Bush as a senior consultant and member of the National Committee of Vital and Health Statistics, advisory to the Department of Health and Human Services (1991–1995). He received the Harvey Cushing Medal in 1994 from the American Association of Neurological Surgeons (AANS), the Distinguished Service Award from the California Association of Neurological Surgeons in 1991, and the same award from the AANS in 1998. In 1997 he was elected a distinguished alumnus by Baylor College of Medicine.

Dr. Pevehouse married Maxine Elizabeth Smith in 1951, and they had three daughters. Maxine died in an accident in 1978. He married Lucy Seguin Beck, a Houston attorney, in 1981.

He is survived by his sister, Nona Burgamy of Lubbock, Texas; his second wife, Lucy Beck Pevehouse; his daughters De Ann Freitag (Erik) of Alameda, California, Carol Palato (Paul) of Lake Balboa, California, and Lesa Howell (Rick) of Vancouver, Washington; nine grandchildren, and one great-granddaughter. Beloved husband, father, and grandfather, he enjoyed photography, fishing, skiing, and tennis. Honoring his request, only a family memorial ceremony was held.

Classified Ad

Bay Area Pain Management Group seeking opportunity to SUB-LEASE day-rate space in San Francisco medical office. One day/week, negotiable rate; Four exam rooms preferred, on clinic "off" days. Group would bring own staff/computers. Call Mari Cyphers, CAO, (510) 590-3518 or email mcyphers@prcmg.com.

Addiction: “Nothing is Enough”

In the Realm of Hungry Ghosts

By Gabor Maté, MD (Random House)

A new book by Gabor Maté, MD, *In the Realm of Hungry Ghosts*, provides essential reading for anyone who has ever been a parent, fetus, young child, child care worker, teacher, or physician. This testament to Dr. Maté’s own addiction—to classical music CDs, of all things—and his work with street addicts in British Columbia, where he practices general medicine and psychiatry, is compelling for many reasons.

His thesis (backed by hundreds of studies exploring brain function, neurochemistry, and early childhood growth and development) is that one must look primarily to the paucity of societal supports for close, loving, intimate family relationships to explain much of what we view as addiction.

Starting with industrialization and loss of a quieter, safer life for families, neighborhoods, and wider communities of the world, we begin to see more of the fragmentation of bonds between family members. The people who get lost, with each generation seeming more beleaguered than the previous one, are the children. Infants’ and toddlers’ brains are burgeoning with new synaptic connections, and if these aren’t satisfied with strong doses of love and time with parents and families who will cherish, read, sing, dance, and play with them during those early months or years, a yawning void can develop, which proves difficult to replenish.

In the Buddhist circle of life, the Hungry Ghosts are the addicts, with gaunt bodies, pot bellies, a vacant stare, and huge, open mouths. Nothing is enough. No item, collection, pile of money ever satisfies the personal, inner void, the afflicted resort to drugs, alcohol, tobacco, food (bingeing, with purging or extreme obesity), compulsive shopping, sex addiction, acquisition of all manner of power or things—in a vain attempt to have “enough.”

Maté describes his personal compulsion of *having* to acquire the next Beethoven collection du jour, or whatever it might be. When this feeling comes, he finds himself powerless to act otherwise. He once left his eight-year-old son alone in a store, another time abandoned a woman in late-stage labor (the RN delivered the infant), as another cycle of his addiction surged. His worst

week lead to an outlay of \$8,000 in CDs. These regular buying cycles were later enhanced by a righteous rage, as his wife and family called him on these conflicted, unproductive behaviors.

His empathy toward the addicts he treats is compelling, as he links degrees of neglect and trauma described by these hapless, unloved patients to his early upbringing. He has scrutinized his own issues by entering the realm of twelve-step, cognitive treatments that have allowed critical shifts in his own behavior. Maté is Jewish; as a one-year-old, his adoring mother felt she had to hand him off to distant relatives while she was in a relocation camp in Budapest, living in bleak conditions with almost no food. This separation, while devastating, was less traumatic than the stories told by addicts—each with a parent or other powerful adult(s) who, as an addict, alcoholic, or abuser, impacted the infant or child in physically or sexually damaging ways. In many cases of orphaned or foster children, they are simply neglected or ignored; this too provides a hollow precursor to addiction.

As Dr. Maté nears the end of this assessment of the roots and hopefully the amelioration of addiction, he notes, “A broken vessel can be mended, but the cracks remain.”

The essential trick for us as physicians is to determine, every day, whether the advice we provide is something we could feed to ourselves. Did we choose to seek power, the exhilaration of emergencies, the thrill of accolades, as essentials for our lives as physicians? Or can we step back, care for ourselves, our families, our planet, without needing the unattainable sense of wholeness from these externalities? Each adult, to evolve toward the higher levels of that Buddhist circle of life, must weigh his or her motives, and to do this, we need to recall those earliest memories, and put them to rest as best we can.

Olivier Ameisen, MD, the alcoholic chief of cardiology at Cornell (whose own book is reviewed on page 36 of this issue), recalls being driven to excel to ward off overwhelming anxiety, starting at the age of three. His ultimate solution is baclofen; and indeed, I have found this to provide surcease for compulsive eating and insomnia in some of my patients. But, as always, a pill alone can never fully fix a damaged human spirit. It can sometimes settle the chatter of discomfort enough to provide a pathway toward understanding the need to keep going, on an illuminated trajectory. 

CPMC

Michael Rokeach, MD



Bay Area House Call Dentists, a division of the Blende Dental Group, was featured in the March 29, 2010, issue of the *San Francisco Chronicle*. The group, run by Dr. David Blende, chief of the Dental Division at CPMC, specializes in working with seniors and people with disabilities or other special needs. The latter can include phobic, obese, or immobile people, people with dementia, the homebound, and people who can't control their movements.

A dentist and registered dental assistant will make a house call for an initial screening and X-rays using a portable unit. Performed while the person sits in a favorite chair or wheelchair or lies in bed, this process takes about an hour. House calls are available within 50 miles of San Francisco on weekdays between 8:00 a.m. and 6:00 p.m. Emergency care is available around the clock.

Procedures that can be done at home include cleaning, extracting, and making or repairing dentures. The coordinator also schedules appointments, arranges transportation, and facilitates communication between the dentists and the patient or caregiver.

CPMC nurses Joanne Davantes and Laura Euphrat were recently featured in the April 2010 issue of the international magazine *Parade*. They are the cofounders of "Little Wishes", a program that helps grant small wishes for pediatric patients.

In the seven years since they started the group, they've helped grant more than 4,000 wishes. A branch of Little Wishes was also launched at Sutter Medical Center in Sacramento in 2006 and at Sacred Heart Children's Hospital in Spokane, Washington, last year. Volunteers in each place have put their own stamp on the program. In Sacramento, two therapy dogs help carry the gifts while the staff recites a special poem. In Spokane, the nurses sing, accompanied by a strolling guitarist.

Saint Francis

Patricia Galamba, MD



As I prepared to tackle the topic of addiction and recovery, I realized that I needed to tap into some of our local experts. My first contact was with our Behavioral Health Partial Day Program (BHPDP). This is one of few adult outpatient rehab day programs in the City. Although the program is not a primary destination for persons with addictions, it seems to be a secondary stop for a fair percent of our outpatient clients who have issues related to depression, anxiety, and mania. To assist our clients, we have started a weekly support group to address addictive personality. In addition, the hospital hosts Smart Recovery programs and Depression and Bipolar Support Alliance meetings.

Of note, John Mendelson, MD, has been a colleague here at Saint Francis for more than twenty years and is a nationally recognized authority in pharmacotherapies for addiction. He conducted clinical trials (at CPMC Research Institute) that led to approval of Suboxone (a combination of buprenorphine and naloxone), a new medication for the treatment of opiate addiction that was approved by the FDA in 2000. His clinical practice is closely associated with Saint Francis Memorial Hospital.

Mel Blaustein, MD, medical director of psychiatry, reports that substance abuse is a major problem in San Francisco. In our twenty-four-bed inpatient unit, frequently as many as two-thirds of our patients test positive for cocaine, methamphetamine, heroin, and/or marijuana, not to mention the ongoing use of alcohol. This dramatically impacts our mental health system. Except for treatments for alcohol and heroin addiction, there is little at present to treat substance disorder. To make matters worse, people who abuse drugs tend to be impulsive, depressed, and therefore at risk for suicide. On a positive note, our inpatient unit becomes a haven for many of these patients to get through recurring crises and, we hope, not act on their impulses. We are deeply committed to the eradication of this serious health issue in our society.

Kaiser

Robert Mithun, MD



Overcoming addictions is tough work. So when patients are willing, we must be ready to provide comprehensive and integrated treatment. Addiction treatment on demand has long been considered a goal of addiction and recovery health care. When providers have the ability to treat patients when they are most receptive to intervention, it increases their rate of success dramatically. The goal of Kaiser Permanente San Francisco's addiction treatment clinic, known as the Chemical Dependency Recovery Program (CDRP), is to capture patients in the change mindset quickly and get them on the road to recovery as soon as possible. This is best accomplished by consulting on inpatients who are hospitalized with a drug and alcohol dependence comorbidity, accepting referrals from primary care, and taking calls from patients directly.

CDRP offers an integrated, "one-stop shopping" approach to treatment. Therapists and medical providers, in partnership with support staff, provide an environment for safely detoxifying from drugs and provide a framework for staying sober. Because CDRP embraces evidence-based medicine, patients are offered therapy groups that are both educational and process driven. Physicians and staff also strongly encourage the use of community resources, which increases the likelihood of success for clients.

With an eye to the future, the CDRP program provides training for the next generation of physicians, psychologists, and marriage and family therapists. Training programs include a two-year addiction medicine and addiction psychiatry fellowship, taught in collaboration with the University of California, San Francisco, and Veterans Administration; and a postdoctoral psychology fellowship. Additionally, training is offered in the internal medicine residency program at Kaiser Foundation Hospital in San Francisco. Our mission is to provide state-of-the-art addiction treatment quickly and effectively by providing patients the tools for lifelong recovery in a multitude of settings.

St. Mary's

Richard Podolin, MD



St. Mary's Medical Center is home to the only dedicated adolescent inpatient mental health program in San Francisco. The McAuley Institute was opened in 1954, offering the most comprehensive and diversified psychiatric program for children and adults in Northern California. Today, we focus on the needs of San Francisco youth. We are a multidisciplinary institute with nurses, psychologists, psychiatrists, social workers, and even teachers on staff to treat up to twelve inpatients and eighteen patients in day treatment.

Sadly, drug addiction is something our patients know all too well. Nearly every patient has been affected by drug addiction, either directly or indirectly. Many of our youth come from households where their parents or guardians have chemical dependencies, and some patients have dependencies of their own. We offer Narcotics Anonymous sessions onsite to treat drug problems, although our main goal is to focus on treating mental health issues. Our staff understands these adolescents are vulnerable and in crisis, so we strive to offer compassionate care.

Students from the San Francisco Unified School District come to McAuley's Day Treatment Program when they have mental health challenges, and this June we will see two seniors graduate. We are proud of these students and the progress they have made.

The McAuley institute was named after Catherine McAuley, one of the Sisters of Mercy from Ireland whose work led to the founding of St. Mary's Medical Center. Today we think Catherine would be proud of the center that bears her name. We keep her mission alive by serving those youth in psychiatric crisis, as well as those with long-term mental health challenges. We strive to educate, provide alternative coping strategies, and assist patients in reaching their potential by helping them regain a sense of stability and self-sufficiency in their lives.

Veterans

Diana Nicoll, MD, PhD, MPA



Recently sixteen mice were sent aboard the space shuttle Discovery to spend thirteen days aboard the International Space Station (ISS) as part of an experiment designed by a San Francisco V.A. Medical Center researcher. The experiment will investigate why T cells stop working in the absence of gravity, which has implications for disease on earth as well. The experiment is meant to shed light on the genetic mechanisms behind T-cell shutdown, according to principal investigator Millie Hughes-Fulford, PhD, director of the Laboratory for Cell Growth at SFVAMC and an astronaut who flew aboard the space shuttle in 1991.

"From the beginning of the U.S. Apollo moon program, we've known that about half of our astronauts develop suppressed immune systems either during flight or shortly afterward, and we have since learned that nonfunctioning T cells are at least partly responsible," says Hughes-Fulford. "If we can get to the root cause, we can potentially help older people, people with HIV/AIDS, and anyone else who is immunocompromised. We will also overcome a serious obstacle to long-term space exploration."

In previous experiments with human cell cultures aboard the ISS, Hughes-Fulford found that a group of forty-seven genes associated with T-cell activation are not expressed in the absence of gravity. "Now we're taking this research one step further by investigating this phenomenon in live mice on the space station," she says. "Hopefully, this will allow us to pare down our list of nonexpressing genes to a much smaller number and give us a better handle on what's happening."

Hughes-Fulford, who was a payload specialist aboard shuttle flight STS-40 in 1991, says the ultimate goal of her experiment is to point the way toward gene therapy for people with nonfunctioning immune systems.

UCSF

Elena Gates, MD



The Ernest Gallo Clinic and Research Center, affiliated with the Department of Neurology at UCSF, is a preeminent academic center for the study of the biological basis of alcohol and substance use disorders. Gallo Center discoveries of potential molecular targets for the development of therapeutic medications are extended through preclinical and proof-of-concept clinical studies. The Gallo Center focuses on translating their research into treatments for diseases with devastating personal and socioeconomic impacts.

In the United States, for example, approximately one in 12 adults abuses alcohol or is alcohol-dependent, according to the National Institutes of Health. In a recent Gallo Center finding, a drug prescribed for hormonal disorders could hold the key to more effective treatment for alcoholism. Alcohol binge-drinking rodents, when treated with the drug cabergoline—an FDA-approved drug marketed as Dostinex—decreased excessive alcohol consumption and alcohol craving and were less likely to relapse.

"Alcohol use and abuse disorders are widespread yet very few effective medications exist. Our results are encouraging, since unlike other medications, cabergoline is specific for alcohol and does not affect general reward. Some existing drugs used to treat alcoholism also decrease pleasure, which can make compliance an obstacle to sobriety," said Dorit Ron, PhD, professor of neurology at UCSF and the study's principal investigator. The research builds on earlier work by Ron and her colleagues in which the protein GDNF (glial cell line-derived neurotrophic factor), administered into the rats' brains, reduced the rodents' alcohol cravings and prevented relapses after a period of abstinence. However, GDNF is too large to cross the human blood-brain barrier, so the researchers next turned to cabergoline, which the investigators found to increase GDNF levels in the brain. Human clinical trials still are needed. "We hope that cabergoline eventually will be prescribed for alcohol addiction," said Ron.

Carol A. Lee, Esq.

Diabetes and Cardiovascular Disease

A Comprehensive Guide for Physicians

The California Medical Association (CMA) Foundation will soon release the *2009/2010 Diabetes and Cardiovascular Disease Reference Guide*. The guide aims to support clinicians' management of diabetes-related complications.

Diabetes and Cardiovascular Disease Prevalence: Nationally and Locally

Nearly half of all adults in the United States have one chronic condition associated with an increased risk of cardiovascular disease. According to the Centers for Disease Control and Prevention, 45% of individuals twenty years of age and older have hypercholesterolemia, hypertension, or diabetes. In fact, the major complication of diabetes and the leading cause of death among patients with diabetes is cardiovascular disease. Adults with diabetes are also two to four times more likely to have heart disease or suffer a stroke than those without diabetes. And approximately 65% of patients with diabetes die from heart disease or stroke. Individuals with type II diabetes also experience high rates of elevated blood pressure, lipid problems, and obesity, all contributing factors to cardiovascular disease.

San Francisco County ranks thirtieth out of fifty-eight counties for the percent of county residents eighteen and older with diabetes, as reported by the California Diabetes Program. This translates to 6.2% of residents diagnosed with diabetes compared to 7% of statewide. In the county, 24.2% of residents have been diagnosed with hypercholesterolemia, compared to 37.8% of statewide residents; 65.1% have been diagnosed with high blood pressure, slightly worse than the state average of 61.5%.

The impact of diabetes is especially visible among San Francisco County's African American population. Compared to the county's overall population, 21.8% of African Americans eighteen and over have been diagnosed with diabetes, with more than a third reporting to be either overweight (39.9%) or obese (35.5%). In San Francisco County, among those diagnosed with diabetes, 85.0% of whites and 41.2% of African Americans were reported to have high blood pressure, and 27.8% of whites and 17.3% of African Americans reported having high cholesterol.

Developing the Guide

In late 2009, several participating physicians in the CMA Foundation's Quality Collaborative expressed the need for resources that better linked diabetes with cardiovascular disease. They shared with Foundation staff that during visits with their diabetic patients, they actively discussed hypertension, high cholesterol, and other issues related to cardiovascular disease. Many felt overwhelmed by the daunting task of addressing diabetes and its cardiovascular complications.

The CMA Foundation took action and convened an expert panel of physicians and other health care professionals to develop this comprehensive guide. More than thirty experts engaged in its development, including representatives from the American College of Cardiology, American Association of Clinical Endocrinologists, National Medical Association, American College of Physicians, California Department of Health Care Services, California Diabetes Program, California Diabetes Coalition, and representatives from a number of health plans and other provider organizations.

Guide Contents

The 2009/2010 guide, which will be updated annually, includes guidelines supporting the screening and diagnosis of type II diabetes, dyslipidemia, and hypertension; approaches to the clinical management of type II diabetes and its related cardiovascular complications; strategies for preventing and more effectively managing type II diabetes complications; effective communications with patients; and education resources for physicians, other health care professionals, and patients with diabetes.

The CMA Foundation's Diabetes and Cardiovascular Disease Reference Guide will soon be available on the Advancing Practice Excellence in Diabetes Project section of www.thecmafoundation.org. For more information, please contact Senely Navarrete, MPH, Project Director, at (916) 779-6638 or snavarrete@thecmafoundation.org. 

Carol A. Lee, Esq., is president and CEO of the CMA Foundation.

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¹Statistic attributed to Insurance Information Institute, for Loeb, Marshall. "Excessive or Necessity: Is Disability Insurance Worth the Price?" MarketWatch, Viewed 4/20/2010

²National Association of Insurance Commissioners (NAIC). Article found at <http://articles.moneycentral.msn.com/Insurance/InsureYourHealth/DisabilityInsuranceCanSaveYourLife.aspx>. "Disability Insurance Can Save Your Life" Viewed 4/20/2010.

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