

Crafting an Effective Response to the Increasing Number of Opioid Overdose Deaths

Prepared by Joe Gay and Orman Hall

1. The opioids (also called opiates) are a class of drug that is very important, even essential, in medical treatment, but also very addictive. Included among the opioids are pain medications such as Oxycotin, Percoset, Vicodan, Demerol, Morphine, and the illegal drug, heroin.
2. The opioids mimic the action of naturally occurring brain chemicals called neurotransmitters and work in brain systems that control pleasure and motivation.
3. The increase in overdose deaths are probably the most dramatic consequence of increased opioid problems; the proliferation of unscrupulous pain clinics has obviously played a part in causing the problem, but the problem extends beyond the pain clinics and the overdoses.
4. The problem really centers on addiction. Many more people are addicted to opioids than was the case 10 years ago and the patterns of who uses have changed. Users are much more likely than before to be younger, to be from rural or suburban rather than urban counties, and to be female.
5. Treatment programs struggle to meet the volume of new referrals. Funding for has been reduced by 30% in the last 2 years. In a number of areas of the State, little treatment is available except for those with Medicaid.
6. Clearly something must be done about unscrupulous pain clinics. However, that alone will not solve the problem and may in fact cause other problems. Addicts will shift to other sources, flooding the practices of legitimate physicians, going to out-of-state sources, switching to heroin.
7. Neglect of the opioid problems has enormous costs, in addition to the tragic deaths, that have already been noticed. Included are increased costs in the criminal justice system, healthcare system, and child welfare system.
8. There clearly needs to be a treatment component with access to those approaches recognized as evidence based practices for opioid related problems.
9. Changes in policy could be helpful. Expanding Medicaid codes to include screenings in the primary care setting will aid early detection and is consistent with Federal priorities. Changes in the band rate to incorporate Suboxone expands the use of an important EBP. Considering the urgency of the issue, creative approaches should be considered including the use of stimulus (A.R.R.A.) funds for various essential elements of a comprehensive response: law enforcement, treatment, and education/ prevention.

Crafting an Effective Response to the Increasing Number of Opioid Overdose Deaths in Ohio:

Context of the Problem, Pathways to a Solution

The Governor is to be commended for recognizing the magnitude and urgency of the overdose death problem in Ohio and his willingness to take action.

Provider agencies and local mental health and recovery boards have been near the center of the storm, and within this document, we will attempt to communicate their perspective. The trajectory of deaths has been steadily upward. While individual overdose deaths are unintentional, the behaviors and situations that lead to these deaths are intentional and highly motivated. The pattern is not likely to change unless the causes are fully understood and directly targeted. If efforts are not effective, deaths will continue to rise. The credibility of any efforts to intervene in drug related problems will be damaged as will the Governor's credibility.

At the heart of this problem is Opioid addiction. At least twice as many people in Ohio are addicted to Opioids than was the case ten years. It is addicts who are dying. For example, it was recently noted that in one group 65% of those who died of Opioid overdoses did not have their own prescription for the drug that killed them. With these individuals there was not even a pretense of a pain problem.

The Opioids

The class of drug referred to as Opioids or opiates included pain medications such as Oxycotin, Percoset, Vicodan, Demerol, Morphine, and also the illegal drug, heroin. This category of drugs presents a great paradox. Their appropriate and effective use for pain relief has reduced human suffering immeasurably and the use of Opioids would be considered essential in contemporary medical practice. However, used as drugs of abuse to produce euphoria, the Opioids have ravaged many lives and imposed substantial costs on society. The contradictory powers of this group of drugs has been recognized and documented for several thousand years.

Opioid drugs mimic the action of naturally occurring brain chemicals called neurotransmitters and work in brain systems that suppress pain and control pleasure and motivation, systems sometimes referred to in the scientific literature as the "brain reward pathways." The brain's internal response to Opioids gives rise to several important phenomena: tolerance, withdrawal symptoms if the drug is not taken, and persistent craving for the drug if it is not available. All of these contribute to the compulsive pattern of use that is typical of Opioid addiction. Tolerance, the need for greater amounts of the drug to achieve the same effect, develops relatively quickly and increases in tolerance may be very dramatic. For example, the tolerance of an alcoholic may be four to eight times the tolerance of a person who drinks excessively but is not an alcoholic. Some physicians familiar with Opioids have observed addicts using 70 times the dose of Opioids that would be effective in a non-addicted person. High levels of tolerance fuels the high demand for larger quantities of the drug in seriously addicted persons. Tolerance also motivates shifts to more potent and less expensive drugs (at present heroin meets those specifications) and for more efficient means of use, which would be by injection. Another complication is that tolerance drops rapidly after discontinued use but the physical and psychological craving for opiates is intense, resulting in extremely high levels of relapse. Some

national studies report relapse rates as high as 95%. Persons whose use is interrupted, by treatment or involuntarily by jail, who then resume use at previous levels are in danger of fatal overdose, due to the decline in tolerance.

A person using Opioids on a regular basis – that would be a daily or near daily schedule – will be prone to withdrawal symptoms if the drug is withdrawn suddenly. Discontinued use of conventional doses after a period of only three weeks can produce physical withdrawal symptoms. Opioid withdrawal is often considered to be not medically dangerous but that assumes the person is not using other substances such as alcohol or sedatives (Valium, Xanax) with withdrawal symptoms that are medically dangerous. Opioid withdrawal is intensely uncomfortable, often accompanied by pain and diarrhea, and usually accompanied by intense craving for the drug.

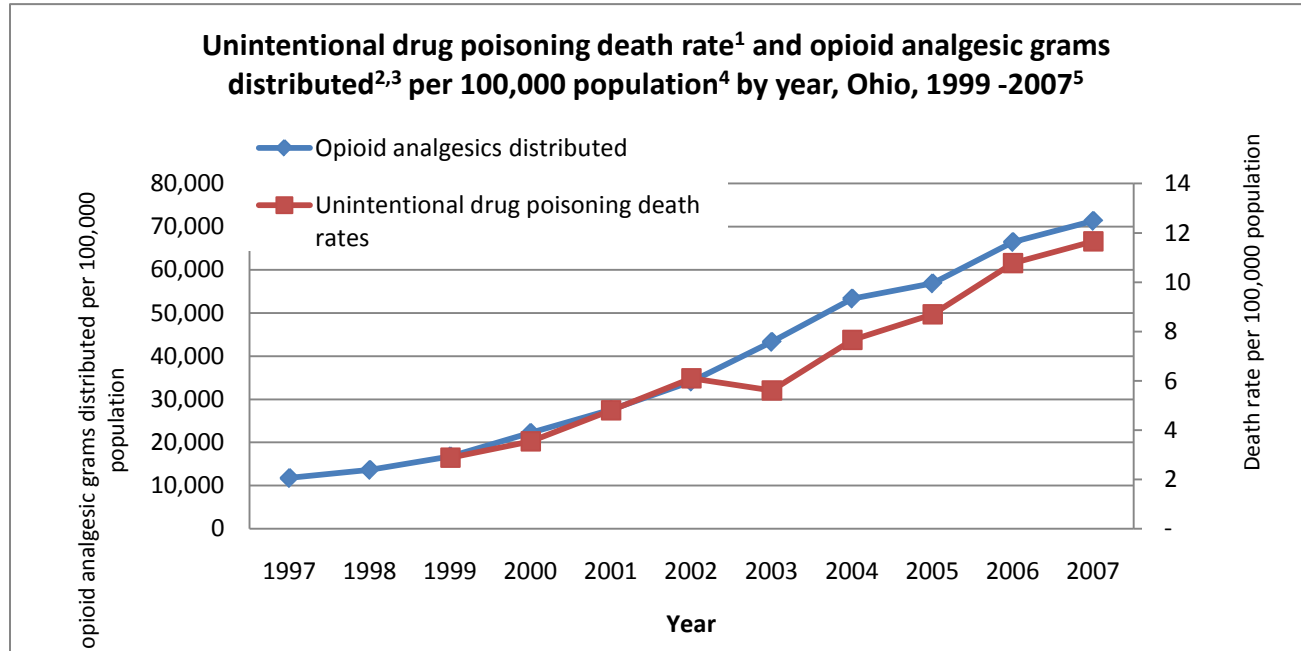
The Opioids impact that part of the brain that mediates subjective feelings of pleasure and mediates the motivation of behavior. Opioid use produces its own very powerful reward in the brain. In addition is the discomfort of withdrawal, the absence of Opioids in the dependent person produces the strong desire to use Opioids that are described as “craving.” It is believed that Opioids produce changes in the brain that produce these cravings. In addition, the intensity of the craving and reward cycle associated with Opioid use diminishes interest and motivation for other things in life. For example, active addicts lose interest in sex or no longer consider as important the respect or affection of their families. Children’s Services workers are often taken aback by Opioid addicts’ apathy about retaining custody of their children, attachment to one’s children normally being one of the strongest of human motivations. Although there are obvious individual differences, the reduction of cravings and restoration of normal attachments and motivations may take six months to a year.

Opioid use in Ohio

The tragic increase in overdose deaths in Ohio is the most visible and dramatic result of a more complex, troubling, and damaging trend, a marked increase of Opioid addiction in the state. The substantial increase in the availability of prescription Opioids plays a major role with illegitimate pain clinics clearly contributing to the problem (see Chart 1). Unfortunately, it has not been determined the degree to which pain clinics “fuel” the problem so it can not be predicted to what extent tighter regulation of such clinics can reduce the problem.

One of our major concerns is that the focus on interdiction at the level of illegitimate pain clinics will allow the underlying problem of addiction to be overlooked. Those relying on these pill mills for their drug supplies are drug addicts. They will seek other sources of supply. Some may go out-of-state to seek their drugs. Others will go to legitimate physicians in Ohio, seeking to deceive them and greatly complicate the work of these conscientious physicians who will then have to sort out the patients with legitimate pain problems from those who are “scamming.” Recently, an entirely legitimate pain clinic found that 70% of the clients receiving Opioids at the clinic had not revealed that they were obtaining additional Opioid prescriptions from other physicians. With reduced supplies, black market prices for Opioids will increase, leading to increased crime. A ready alternative to prescription Opioids is heroin. Heroin presents additional

Chart 1



complications with its links to cross border drug syndicates. In addition those using heroin are extremely prone to a shift to injecting drug use (often referred to as I.V. use) (See Chart 8) and with injecting use comes a host of very serious medical complications and attendant costs. Already in Ohio, injecting use has driven up the rates of Hepatitis C from 2 to 2 ½ times over a period of 5 to 6 years (See Chart 2). The average lifetime health cost for a case of Hepatitis C is about \$100,000, assuming a liver transplant is not required. Hepatitis C is responsible for about 1/3 of all liver transplants and within the first year adds \$280,000 of costs.

Opioid problems in Ohio represent the interaction of two components: prescription Opioid use which has caused the most deaths and received the most attention, and heroin use with the potential for catastrophic long term impacts. Heroin use among younger people has risen steadily, closely paralleling the increases in the non-medical use of prescription Opioids.

Changes in patterns of Opioid misuse can be tracked through a data system known as TEDS. The Treatment Episode Data Set (TEDS) is a database maintained by the U.S. Substance Abuse Mental Health Services Administration (SAMHSA) reflecting the number of persons admitted for drug treatment, with data available by state and for various demographic characteristics. TEDS data documents the substantial rise in Opioid use in Ohio and also reflects important changes with regards to patterns of use. Chart 3 reflects the proportion of admissions to the public addiction treatment system that are due to Opioid related causes. There is also a shift in age related patterns that is striking. In the year 2000, the largest group of Opioid admissions occurred in those over the age of 40; by 2009 persons age 21 to 30 accounted for the largest number of admissions and the proportion of admissions under the age of 21 also increased (see Chart 4).

Chart 2

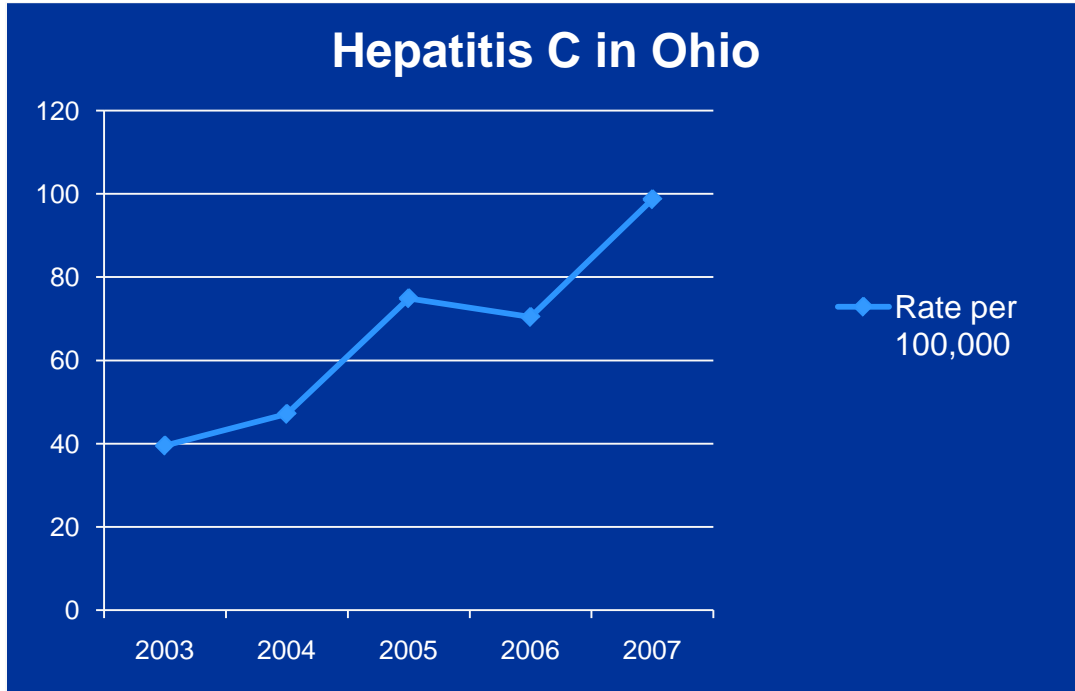


Chart 3

Percent of Those Receiving Alcohol or Drug Treatment in Ohio Being Treated for Opioid Related Disorders (from TEDS)

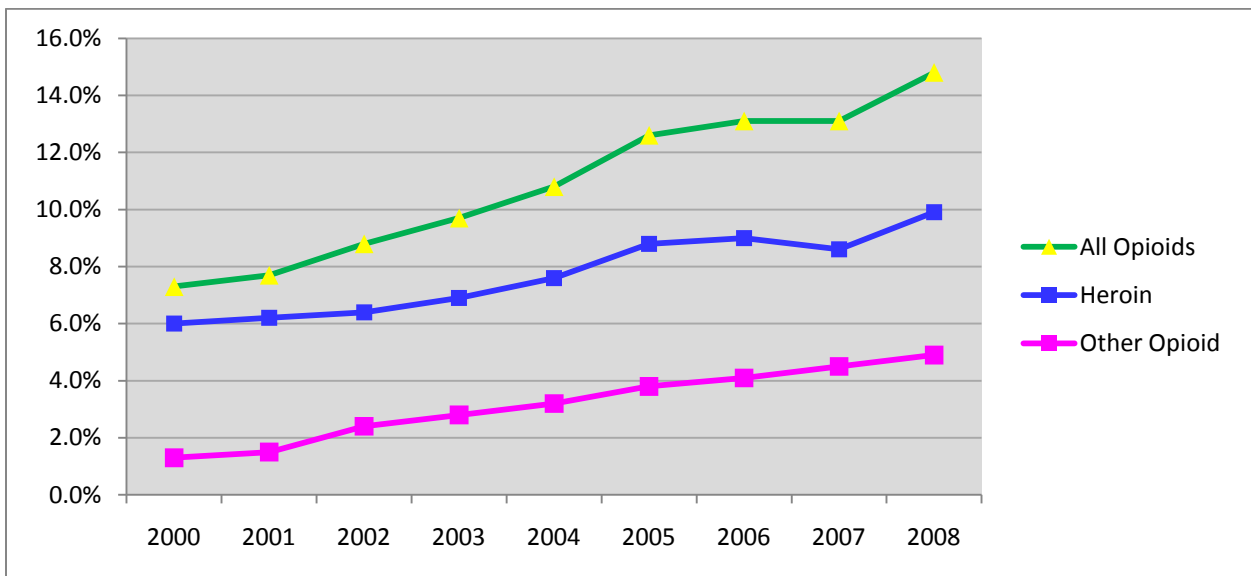
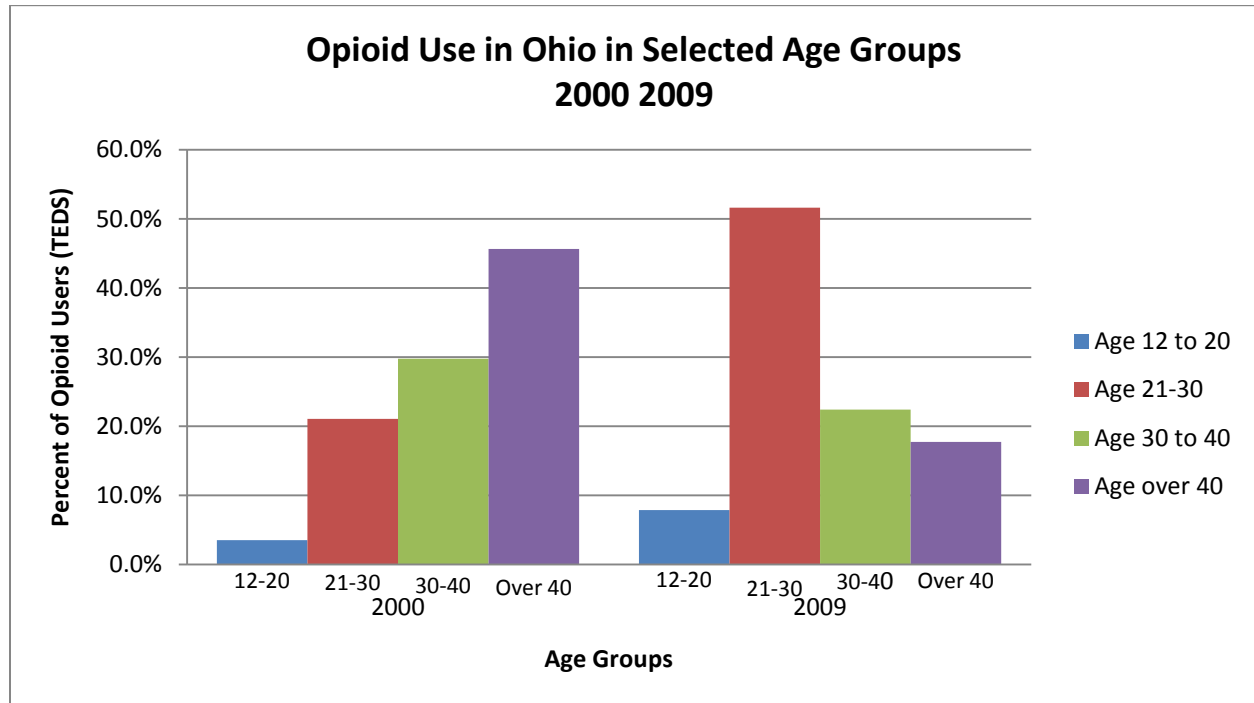


Chart 4



The data for non-medical use of prescription Opioids is straight forward. The proportion of persons being treated for problems related to the non-medical use of prescription Opioids remained fairly constant at just over 1% of all treatment episodes from 1992 through 2000, but has trended steadily upward since then and in 2009 represented 6.3% of all drug treatment admissions in Ohio. Increases in younger age groups were particularly striking with the proportion of persons aged 21 to 30 increasing from 20% to 50%. The proportion over the age of 30 declined from 65% to 41%, but the actual number of people within this age group receiving treatment did increase.

TEDS data indicates that of all persons receiving AoD treatment in Ohio, the percentage who are receiving treatment specifically for heroin doubled from 6% in 2000 to 12.2% in 2009. The percentage of persons in treatment who are age 36 and older declined substantially from 65.3% to 26.2% while the number of clients between ages 12 and 35 increased from 34.7% to 73.4%.

Local data illustrates how dramatic the impact has been in some communities. Health Recovery Services operates outpatient clinics in four economically challenged Appalachian counties in southeast Ohio. Opioid admissions to these outpatient sites have increased from around 3% to 40%. Opioid Dependence, once rare, now constitutes the most frequent diagnosis for adults in outpatient treatment, occurring even more frequently than alcohol dependence (alcoholism). See Chart 5. H.R.S. also operates a residential facility for adolescents, ages 13 to 18. Again, Opioid related admissions have increased from roughly 3% to 40% of all admissions

Chart 5

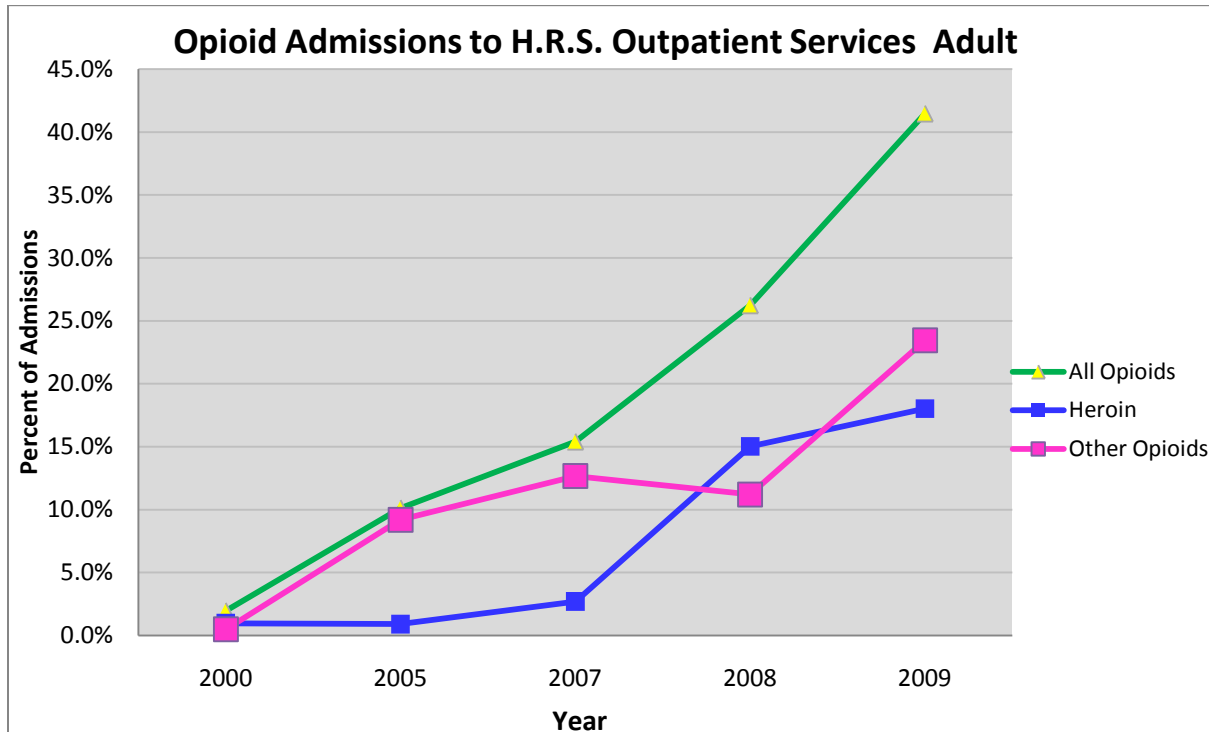
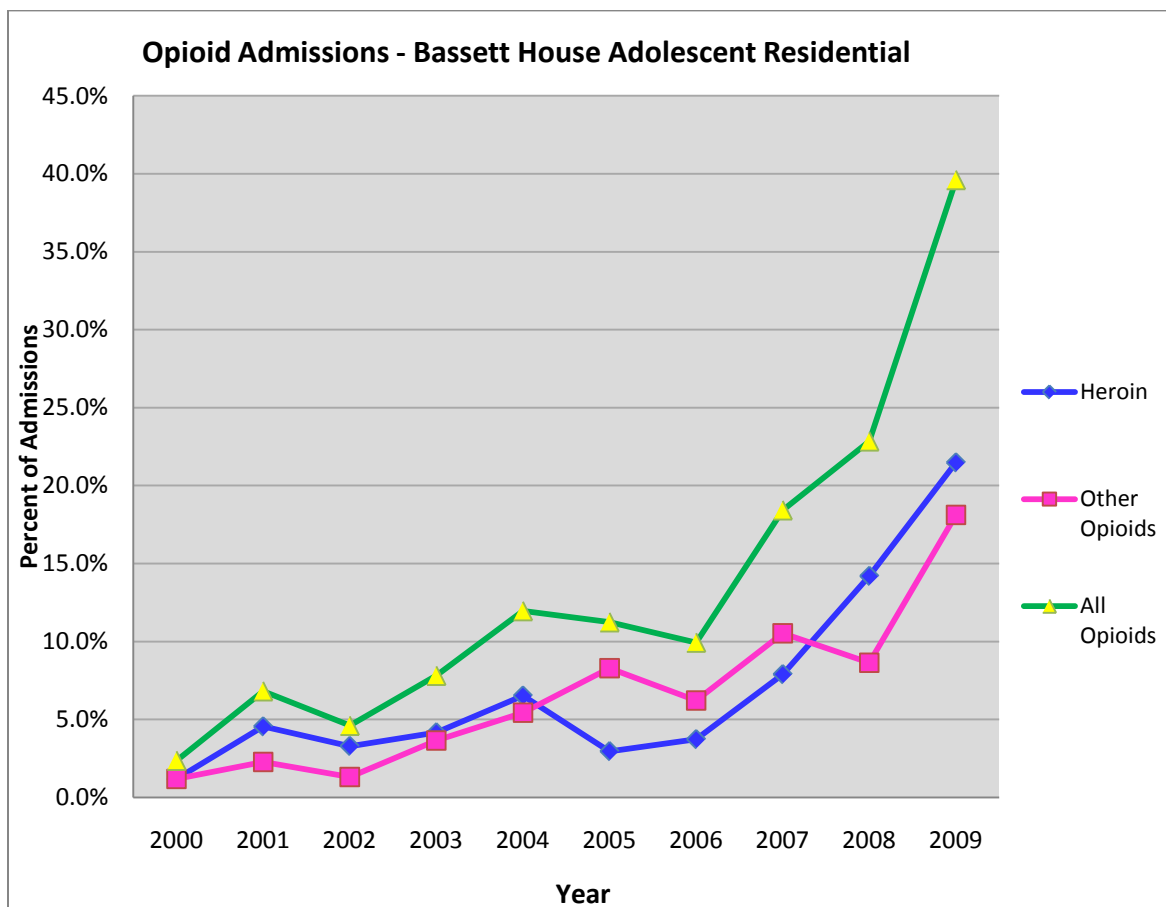
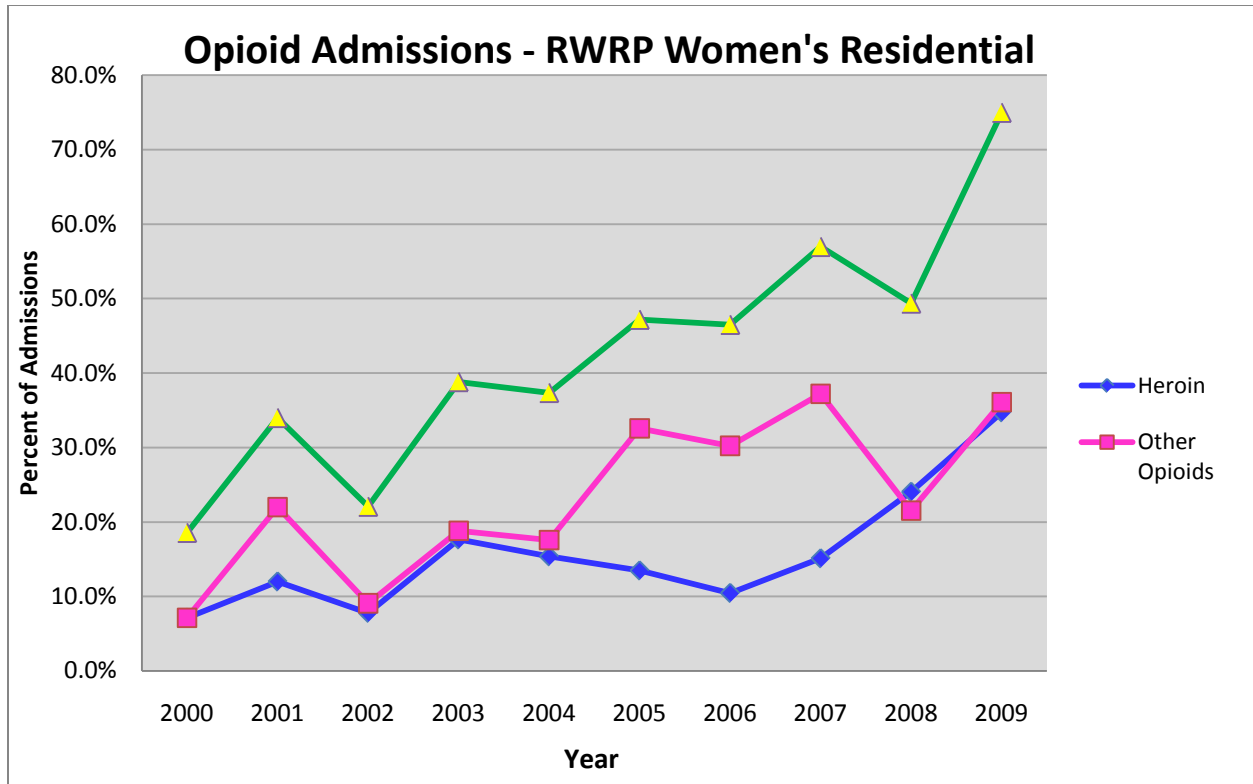


Chart 6



(see Chart 6). Although the numbers are similar, the outpatient data and adolescent residential data (Bassett House) reflect very different referral bases. Outpatient data reflects patterns in our four local counties. Bassett House received referrals from roughly ½ of Ohio’s counties in a year so reflects a statewide pattern among adolescents rather than a local pattern. Likewise, admissions to the women’s residential program reflect broad area trends. Opioid related admissions to Women’s Residential (“RWRP”) increased from 20% to 70% and represent by far the most common admissions to the program (Chart 7).

Chart 7



The H.R.S. data clearly reflects that the transition from pharmaceutical Opioids to heroin is often accompanied by a transition to injecting drug use (see Chart 8). Across all three H.R.S. operated programs, heroin related admissions are roughly as common as admissions related to misuse of prescription Opioids.

At several provider group meetings, one of us (J. Gay) has made inquiries among directors of other programs regarding Opioid use in their areas. Roughly one-third of the agencies report very large increases of the magnitude of those seen by H.R.S. A few report even larger increases, for example, the agency in the Portsmouth area serving Lawrence and Scioto counties with nearly 80% of their admissions being Opioid related, as reflected in Chart 9. Use in that area largely involves non-medical use of pharmaceutical Opioids and the area is one with a very high concentration of “pill-mill” type pain clinics. It is also an area with a very high level of overdose deaths.

Chart 8
Route of Administration

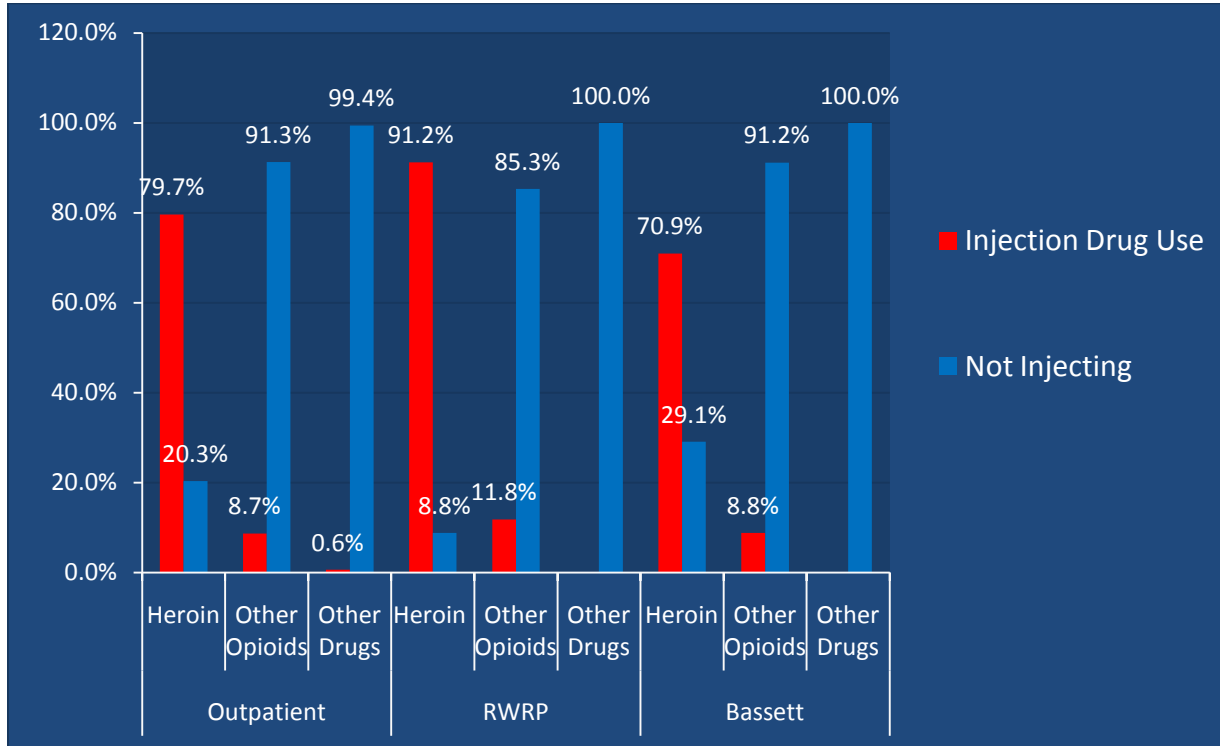
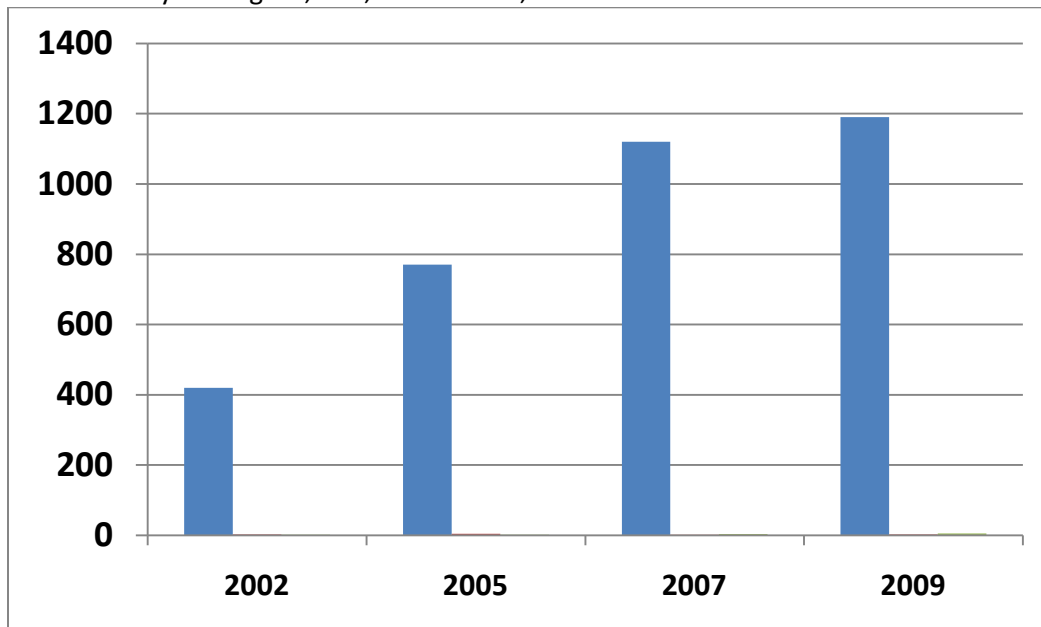
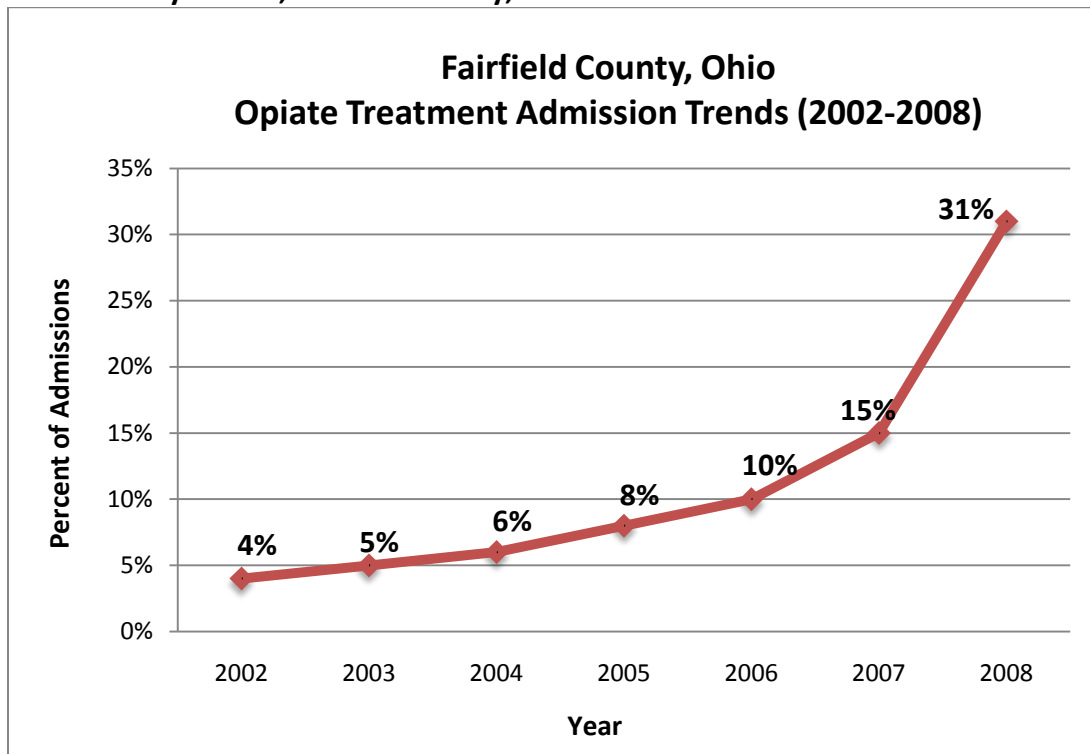


Chart 9
The Counseling Center, Portsmouth, Ohio: Admissions for Opioid Addiction
 Data Courtesy Ed Hughes, TCC, Portsmouth, Ohio



Fairfield County, less Appalachian, more suburban, and more affluent than the aforementioned southeastern and southern Ohio counties, also has a very significant Opioid problem. Treatment admission data is available for the years 2002-2008 (see Chart 10). Recently, the Director of the treatment program in that area shared that their admissions are now running close to 70% Opioid related. They are seeing both pharmaceuticals and heroin and that the problem has clearly extended into the adolescent population.

Chart 10
Opioid Related Admissions as a Percent of Total Admissions
The Recovery Center, Fairfield County, Ohio



The Fairfield County ADAMHS Board has clearly documented the impact of increased Opioid use on the criminal justice system. A doubling in the number of jail bed days has been almost entirely a product of increased Opioid related crime (see Charts 11A and 11 B). The costs associated directly with the incarceration of Opioid related offenders increased from \$350,000 in 2003 to \$2.5 million in 2008. In both the Fairfield and Lawrence-Scioto areas, state and local funding has been exhausted for this fiscal year and admissions are Medicaid only. Many clients are being turned away. H.R.S. has avoided that only because the agency applied for and received an A.R.R.A. (“Stimulus”) grant that provided significant funding for non-Medicaid referrals from the criminal justice system.

Returning to the overall pattern in the State, about 1/3 of the agencies report significant but moderate increases in Opioid use, with Opioid admissions increasing from 50% to 100% in the

Chart 11A

Fairfield County Ohio, Jail Bed Days per Year

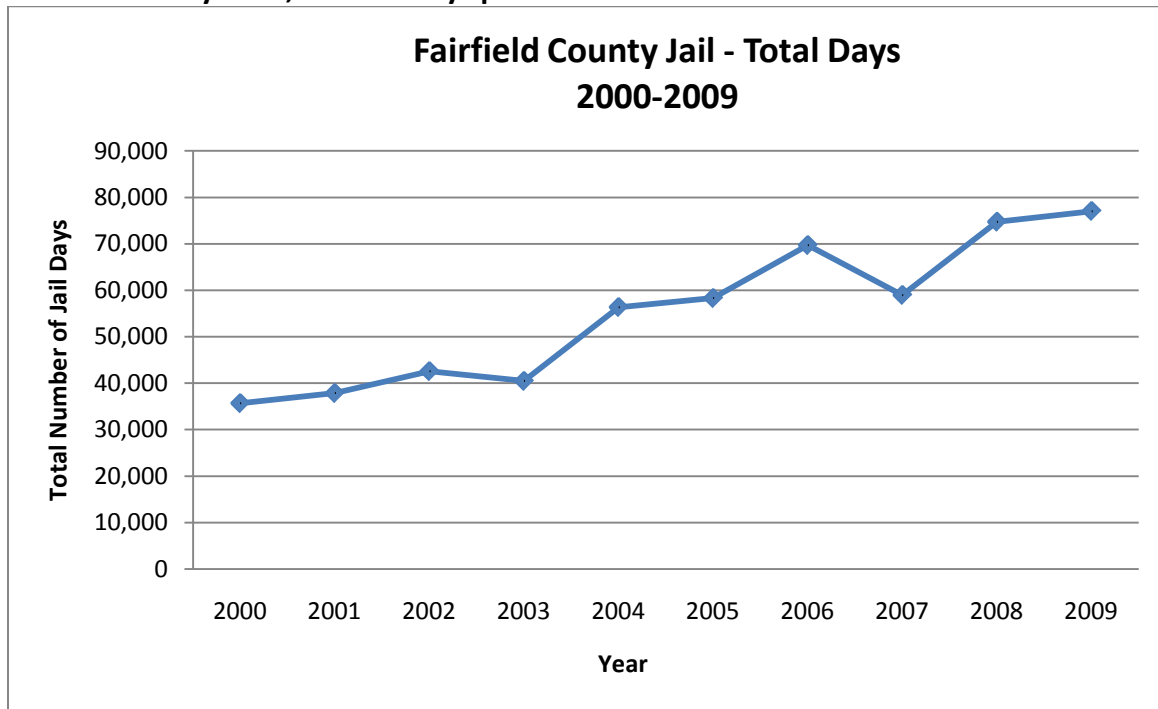
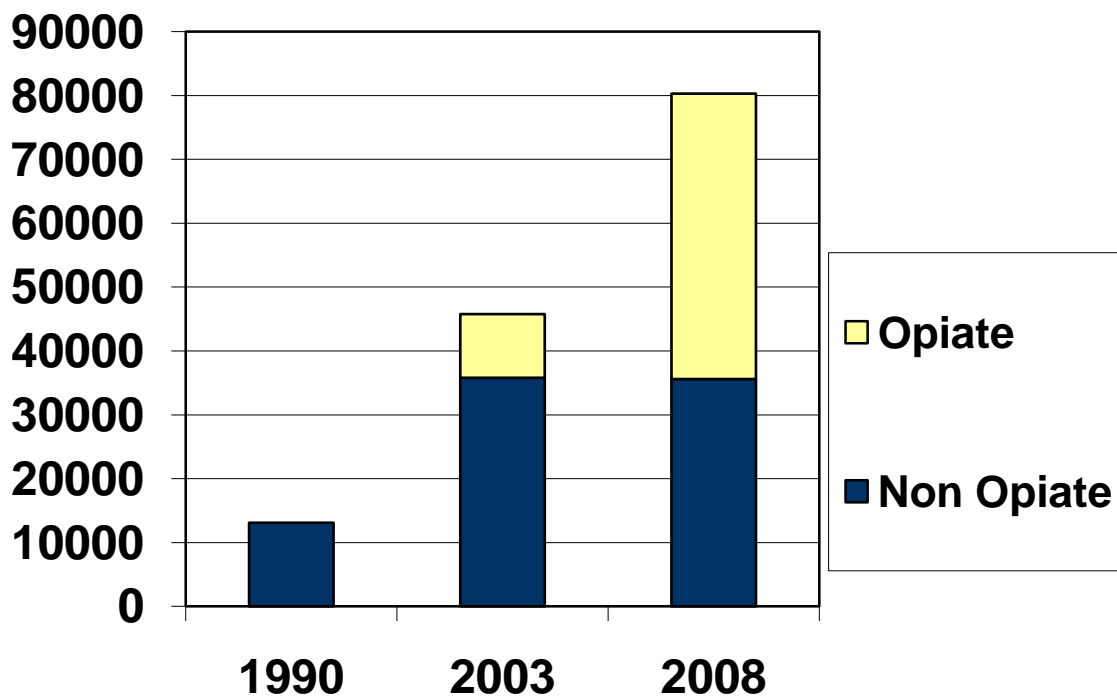


Chart 11B

Opiates as a proportion of total Fairfield County jail days (2003 and 2008)⁵



last five years. These reflect increases to significant levels, not merely increases from say 2% to 4%. Thus far not a single agency director has indicated that they have seen no increase in Opioid use; although in some areas the increases have not been nearly as dramatic as observed in the counties discussed above. Many of the agencies are in urban areas that have had long standing heroin problems, so increases in those areas, although not dramatic in terms of percentage increase, still involve significant number of individuals.

To summarize, in many rural suburban counties, where Opioid problems were essentially non-existent five to ten years ago, Opioid Dependence has become the most frequent diagnosis. In a number of other counties, it has become a frequent diagnosis, approaching levels of alcohol problems in adult clients and marijuana problems among adolescents. In the remaining counties, Opioid use has increased. The statewide nature of the problem was reflected in an interesting way in a meeting of one of our provider groups that was attended by an aide to Senator Sherrod Brown. As provider representatives talked, almost in sequence, the four corners of the State were covered: Ashtabula County, Toledo, Cincinnati, and Athens, Hocking, Vinton and Meigs, in southeast Ohio. The provider organization's recommendations to Senator Brown are included as Appendix A.

Where adequate resources are available, the Opioid problems can be successfully impacted, SAMHSA and the National Institute for Drug Abuse (NIDA) strongly encourage the use of medicated assisted treatment (MAT). The scientific literature contains a number of published studies in support of such an approach involving buprenorphine (Suboxone) and Methadone. Several Ohio programs, including Maryhaven in Columbus, have participated in controlled clinical trials demonstrating the effectiveness of Suboxone. Fairfield County has documented their successes (see Chart 12) and H.R.S., in a small pilot project, is finding higher levels of retention using Suboxone.

Crafting an effective response represents a real challenge. We have focused primarily on treatment issues, that being our area of expertise. It is evident from our data and our experience that there are other considerations. Supply and availability have played a major role. With regard to pharmaceutical opioids, increased legal (if not always prudent) distribution of these drugs is strongly correlated to the increased death rate. The issues are complicated and we have been advised also quite challenging to law enforcement, particularly smaller agencies in rural areas. An excellent series of stories in the *Los Angeles Times* discussed the dynamics of the increased supply of heroin (see Appendix B).

Changes in policy could be helpful. Expanding Medicaid codes to include SBIRT (Screening Brief Intervention Treatment) would be useful as would a banded rate that incorporated the cost of Suboxone for Opioid Treatment Programs (OTP's) and for other (non-OTP) providers could have significant impact. Providers and provider organizations are willing to work with the State in finding the most cost effective approaches to the problem. The outreach to Senator Brown mentioned above is one example. Several provide organizations have put considerable effort into finding ways to reduce administrative costs. Considering the urgency of the issue, creative approaches that could be considered include the use of stimulus (A.R.R.A.) funds for various essential elements of a comprehensive response: law enforcement, treatment, and education/prevention.

Appendix A

Correspondence from The Ohio Council of Behavioral Health & Family Services Providers to U.S. Senator Sherrod Brown

April 28, 2010

Sherrod Brown
U.S. Senate
713 Hart Senate
Office Bldg.
Washington, DC 20510

Dear Senator Brown,

I write to you on behalf of the Ohio Council of Behavioral Health and Family Services Providers, a full service trade association that represent the interests of 170 non-profit addiction treatment, mental health and family service provider organizations.

We would like to thank your staff member, David Hodapp, for attending our recent Alcohol and Drug Addiction Services Committee to join us in a discussion on the growing prevalence of prescription drug abuse and addiction – specifically oxycontin and other prescription opiate pain pills. We would like to thank David and you for your dedication to this epidemic problem and we are aware of the letter that you sent to President Obama about the growing problem in Ohio and its impact on criminal justice, health care and economic systems in local communities.

Our members are all too aware of the increasing numbers of people who are addicted to prescription pain killers. In a few of our provider member organizations, the number of people who identify opiates as their primary drug of choice has gone from 5% to more than 50 % in the past three years. Prescription pain medication addiction is not just an Appalachian problem – it impacts urban and suburban communities as well.

As we consider policy changes that need to be made to combat this growing trend we would like to suggest the following recommendations that we believe would make a difference in Ohio:

- **Develop a universal strategy that balances the need for interdiction with appropriate treatment.** Supply reduction alone will simply shift this problem from people being addicted to prescription pain medications to people being addicted to heroin. Too often the demand reduction strategies of prevention and treatment get lost in the more politically correct supply reduction activities.
- **Double the federal allocation for SAMHSA's Substance Abuse Block Grant.** Special federal funding (such as the Center for Substance Abuse Treatment funding for pilot projects and specialized grants) may be useful to a few areas of the country but

these grants rarely get used in a systemic way that pays for treatment services at the local level. If we want to be serious about developing treatment strategies that work, there needs to be a fortified approach to getting treatment funding out to all communities for all populations and the Block grant is the best way to do that. Because of the recent gutting of state dollars for treatment and prevention services in Ohio, Medicaid has become the default payer for many of the services. Unfortunately, there are plenty of prescription pain addicts needing treatment who are not Medicaid eligible.

- **Develop better federal policy specific to physicians in office settings who are permitted to prescribe buprenorphine for opiate addiction that strengthens the link between this in-office prescribing and addiction treatment/counseling.** Currently, physicians prescribing Suboxone must attest that they have the capacity to refer addiction treatment patients for appropriate counseling and other non-pharmacologic therapies but there is little enforcement.
- **Federal policy that creates incentives for primary care/ behavioral health integration should recognize the existing system of qualified addiction treatment and mental health providers.** Incentives need to be developed that encourages Federally Qualified Healthcare Centers and other primary care providers to work with programs that have a true expertise in community-based behavioral healthcare rather than building a separate infrastructure which will then compete with our system.

These four recommendations would be a great beginning of a federal platform that addresses the epidemic problem of prescription drug abuse and addiction that many communities are facing today. Our members would like to be part of the solution but quite frankly, the funding cuts that have occurred in our system makes it difficult for addiction treatment providers to adequately address the treatment needs of this population.

Thanks again for your leadership on this issue. Please let us know if you have any questions or if we can be a resource on this issue in any way. It is great to have a few champions in Washington D.C..

Sincerely,

Pat Bridgman, MA, LICDC

Associate Director

Appendix B

Perspectives on the Increased Availability of Heroin in Ohio

Articles by Sam Quinones

From the *Los Angeles Times*

February 14, 15, 16, 2010

Day One:

<http://www.latimes.com/news/nation-and-world/la-me-blacktar14-2010feb14,0,1400572,full.story>

Day Two:

<http://www.latimes.com/news/local/la-me-blacktar15-2010feb15,0,6094973,full.story>

Day Three:

<http://www.latimes.com/news/nation-and-world/la-me-blacktar16-2010feb16,0,4022016,full.story>