# Task Force Recommendations

Mental Health, Substance Abuse and Domestic Violence in Oklahoma



#### Task Force Members

Tom Adelson, Tulsa; Mike Anderson, PhD, Oklahoma City; Governor Bill Anoatubby, Chickasaw Nation, Ada; Judge Candace Blalock, Pauls Valley; Sue Buck, Hugo; Terry Cline, PhD (Ex-Officio), Secretary of Health, Oklahoma City; Joe Hight, (Ex-Officio), Oklahoma City; Frank Merrick, Oklahoma City; Saundra Naifeh, Edmond; Robin Parrish, Governor's Office, Oklahoma City; Bob Spinks, EdD, Oklahoma City; Jeff Tallent, Oklahoma City; Jack Turner, Oklahoma City, and Reverend Dick Virtue, Norman

Mental Health, Substance Abuse and Domestic Violence Oklahoma Governor's and Attorney General's Blue Ribbon Task Force

### Preamble

Oklahoma is facing an escalating health and public policy crisis which, if not dealt with soon-, will deepen in both intensity and gravity. It will continue to adversely and directly impact the state's economy and, most importantly, the lives of thousands of Oklahomans. The Governor's and Attorney General's Task Force on Mental Health, Substance Abuse and Domestic Violence recommends immediate action.

A monumental study recently completed by this body details the threat and its significance. Studying the impact of untreated, under-treated and unserved mental illness, substance abuse and domestic violence, Task Force researchers determined that the fiscal and economic impacts on Oklahoma are staggering. Conservative estimates place the cost at more than \$8 billion annually.

These overwhelming figures are difficult for us, as task members, to fully comprehend. However, we do understand the tragic impact this crisis has on those in need, their families and communities, and ultimately, on Oklahoma's overall health, safety and quality of life.

As Task Force members, we have met, studied and deliberated for almost 12 months. We interviewed many subject experts; each represented different pieces of the overall puzzle. Each pleaded with us to either continue or expand vital services to help those in need.

We examined issues involving the criminal justice system and heard about Oklahomans who are incarcerated for nonviolent offenses, in an overcrowded jail and prison system, when treatment for an existing mental illness or substance abuse was a viable alternative.

We were enlightened to the struggles of so many who are without access to treatment, or to the services needed to maintain their health and safety.

We came to realize that victims of domestic violence and sexual assault need more support and care to be safe, and to begin the difficult recovery from their physical and emotional injuries.

Despite the efforts of many dedicated people in corrections, mental health, substance abuse, domestic violence and sexual assault, and the private sector, we found that the present system is overwhelmed, less than fully efficient and not optimally organized to address growing demands. Without more focused and effective support from the Executive and Legislative branches of our state government, this crisis will progressively worsen. The results of failure to act are unacceptable.

Therefore, the Governor's and Attorney General's Task Force on Mental Health, Substance Abuse and Domestic Violence has identified five overarching recommendations, to be followed by specific actions, that would impact how we as a state can begin to resolve the problems identified by this task force. These are as follows:

### Recommendations

- 1. Prevention and early intervention programs, along with appropriate treatment and recovery support services must be made available to those in need.
- 2. Non-violent persons who suffer from major mental illness or addiction should be identified and targeted as early as possible upon entry into the criminal justice system for referral to more cost effective systems that are better able to treat, monitor, rehabilitate, and appropriately supervise these citizens.
- 3. The State of Oklahoma should establish minimum standards of mandated training for all who provide services to Oklahomans impacted by mental health, substance abuse, or domestic violence and sexual assault issues. The establishment of a Training and Coordination Council responsible for oversight, coordination and evaluation is recommended.
- 4. Oklahoma's leadership should work to increase, to the highest possible level, the number of trained and educated professionals and paraprofessionals equipped with the knowledge and expertise to address these issues.
- 5. The task force recommends that further study is needed in 2005-2006 to evaluate the needs of offenders and other custody populations who have mental illness and/or substance abuse issues, data collection systems on sexual assault and other related actions as identified by the task force.

This submittal concludes the work of the task force that was formed by Executive Order Number 2004-2 submitted on Jan. 21, 2004. It is our intent that these recommendations will have a positive impact on our state's economy as well as the many thousands of Oklahomans who suffer daily and are in need of our help in order to become functioning and/or productive members of society.

These recommendations become our plea for action, our hope that Oklahoma will respond as constructively as it has with other crises, and our desire that we become the national leaders in tackling the problems of mental illness, substance abuse and domestic violence.

### **Discussion of Recommendations**

## 1. PREVENTION, EARLY INTERVENTION, TREATMENT, AND RECOVERY SUPPORT SERVICES

**Primary Identified Problem** – Untreated and under-treated people with mental illness, substance abuse or addictions, and survivors and perpetrators of domestic violence and sexual assault, represent a significant portion of those entering the state's criminal justice system. The resulting direct cost to the state is in excess of \$3 billion annually. In fact, these issues account for half of all criminal justice system expense; more than 11% of health care system expense; and are major contributors to the need for extensive social services. Oklahoma will also lose more than \$5 billion of human productivity annually as a result of these issues.

**Task Force Recommendation** – Prevention and early intervention programs, along with appropriate treatment and recovery support services must be made available to those in need.

**Rationale** – Availability of these programs will significantly reduce the number of people with mental illness, substance abuse or addiction, and domestic violence victims and perpetrators, and consequently will reduce the number of these individuals being incarcerated, saving direct cost to the state.

- a. Identifying groups that are at risk of developing mental illness or substance abuse problems or becoming victims or perpetrators of domestic violence and sexual assault and provide targeted prevention efforts, including education, to those populations.
- b. Early identification of a possible mental illness, substance abuse problem or propensity to be a domestic abuser, confirmed by professional assessment and followed by proper treatment or services, will result in a greatly reduced ultimate financial cost to the state and of human pain and suffering that accompanies these problems.
- c. Intervention should be performed by trained educators in public schools and institutions of higher education, personnel involved in the criminal justice system and other state agencies providing services to the public.
- d. Mobile mental health, substance abuse and domestic abuse assessment services are needed.
- e. Expanded availability of domestic violence shelters, related assistance and transportation services, intervention and treatment of batterers in the criminal justice system, and mental health services for children and adolescents exposed to domestic violence are immediately needed to address existing demand.

- f. Alcohol and drug treatment capacity must be expanded. Services are needed to address specialized treatment needs for pregnant and parenting mothers. At least 100-200 additional adolescent residential substance abuse treatment beds are needed to address current demand, along with the provision of more outpatient mental health and substance abuse programs for adolescents and their families.
- g. Addiction is a family disease. To ensure the best possible treatment results, services should be available locally so family members can participate.
- h. Treatment services for families that do not qualify for state services should be addressed by the Oklahoma Legislature by enacting legislation requiring insurance parity for mental health and substance abuse full coverage by insurance plans sold in Oklahoma for the comparable diseases of mental health and addiction.
- i. Funding for the services essential to reduce the ever increasing cost of substance abuse and addiction should come from an increased tax on beer and alcohol. Consumers of these products should pay for the consequences of their use as have tobacco users.
- j. CASA's Safe Haven program in Oklahoma is a promising model for statewide application. Providing inclusive services to many state clients served through collaboration by the DHS, DMHSAS, the court system and others should be expanded.
- k. A pilot program between DMHSAS and the Oklahoma County Jail providing for mental health screening and services should be initiated.
- 1. Aftercare services should be made available throughout the state to people exiting intensive treatment for mental illness or addiction.
- m. The availability of Oxford House facilities for sober living needs to be increased.

#### 2. COST EFFECTIVE ALTERNATIVES TO INCARCERATION

**Primary Identified Problem** – Oklahoma's Criminal Justice System spends 63% of its annual budget (over \$1 billion) to address the needs of people with mental illness or substance abuse/addiction. Our study found that almost 18% of prison inmates are being treated for a diagnosable mental illness and that 50 percent of all criminal justice system expense is attributable to substance abuse issues. Incarceration should be reserved to address societal problems involving violent or otherwise true criminal behavior and as a last resort for nonviolent offenses. It is the least cost effective governmental function.

**Task Force Recommendation** – Non-violent persons who suffer from major mental illness or addiction should be identified and targeted as early as possible upon entry into the criminal justice system for referral to more cost effective systems that are better able to treat, monitor, rehabilitate, and appropriately supervise these citizens.

Special priority should be given to the female inmate population. According to the Task Force on the Incarceration of Women, chaired by Lieutenant Governor Mary Fallin, and a report generated from their work entitled "Women Incarcerated in Oklahoma: Report from the Special Task Force for Women Incarcerated in Oklahoma," incarcerated women are statistically more prone to suffer from mental illness or addiction and are likely to be custodial parents whose children are in the costly foster care system.

Rationale – The cost savings, both in tax dollars and human capital, would be enormous.

- a. Expand and appropriately staff therapeutic-model courts and pre-trial conditional jail diversion programs. All counties should have regional access to therapeutic-model programs, including drug courts, mental health courts, and crisis centers, with oversight by the Department of Mental Health and Substance Abuse Services.
- b. Enact legislation permitting court referral hearings at initial entry into criminal court proceedings for people with mental illness or drug/alcohol addiction who are status offenders in order to consider whether they could qualify for community supervision programs if local resources are available. If successfully completed, a case would be resolved upon payment of assessed costs or restitution. Upon failure to complete rehabilitation within a reasonable time, the case would proceed to prosecution.
- c. Enact legislation to permit the Oklahoma Pardon and Parole Board to consider release of qualified offenders with mental illness or substance abuse addictions. These special docket settings would require participation in mandatory treatment programs supervised by established local community sentencing councils or drug/mental health courts.

#### 3. TRAINING AND EDUCATION

**Primary Identified Problem** – Oklahoma tax payers fund numerous education and training programs, seminars, and conferences in order to prepare governmental and other workers for job responsibilities that require knowledge of mental health, substance abuse and domestic violence issues. Because the consequences of uninformed actions or choices can be so dire, it is paramount that professionals and lay workers, in every discipline connected with these areas, receive comprehensive and on-going training that stress best practices.

**Task Force Recommendation** – The State of Oklahoma should establish minimum standards of mandated training for all who provide services to Oklahomans impacted by mental health, substance abuse, or domestic violence and sexual assault issues. The establishment of a Training and Coordination Council responsible for oversight, coordination and evaluation is recommended.

**Rationale** – Minimum standards allow for uniformity of services and overall cost effectiveness. These standards will address continuum of care issues and coordination of services.

- a. The Training and Coordinating Council should establish formal standards for Crisis Intervention Training for both mental health and law enforcement professionals. Adequate state funds must be provided for all public safety officers to receive training and education related to mental illness and domestic abuse cases.
- b. All criminal and civil justice system workers in the domestic violence area should be required to receive training and continuing education concerning the dynamics of domestic violence (intimate partner and family abuse issues).
- c. Training should also be provided to marriage counselors as a condition of licensure. Faith based counselors should be encouraged to participate.
- d. The Oklahoma Department of Labor in conjunction with the Training and Coordination Council should develop comprehensive educational and training programs addressing mental health, substance abuse, and domestic violence issues in the workplace. Programs shall educate the work force on emergencies/people in crisis, safety issues and drug testing, and provide example policies for employers. Certification awards for businesses who offer this training and Employee Assistance Programs (EAPs) should be created as an incentive.
- e. The Sexual Assault Nurse Examiners (SANE) program should be expanded to include a Sexual Assault Nurse Examiners Coordinator in major population areas and other key locations. The federal standard of Sexual Assault Nurse Examiners should be adopted and practiced by these professions. Adequate funding for equipment necessary for victim medical examinations must be provided for all sexual assault cases.

#### 4. WORKFORCE DEVELOPMENT

**Primary Identified Problem** – The presence of a proficient workforce, educated to recognize and serve the mental health, substance abuse and domestic violence needs of all Oklahomans, is needed. Efforts in this area are currently underdeveloped.

**Task Force Recommendation** – Oklahoma's leadership should work to increase, to the highest possible level, the number of trained and educated professionals and paraprofessionals equipped with the knowledge and expertise to address these issues.

**Rationale** – Development in this area is integral to mitigation of the growing challenges associated with these conditions in our state.

- a. Encourage the development of substance abuse degree curriculum in colleges and universities.
- b. State scholarships must be offered to recruit professionals in the areas of mental health, substance abuse and domestic violence. Scholarship recipients would repay a scholarship by working in Oklahoma where professionals are needed. Additionally the State Regents for Higher Education should evaluate the need for social service professions to have more graduates trained in these areas, and recommend actions that will encourage colleges and universities to increase capacity in programs where there is a high demand for these trained graduates.
- c. Loan repayment options and other programs that already exist, such as Physician Manpower Training, should be examined to see if those programs could be expanded.
- d. The fee-for-service rate paid by DMHSAS to substance abuse providers should be increased from the existing rate to a rate commensurate with mental health and Medicaid fee-for-service rates.
- e. The certification program currently being developed for mental health peer support specialists should be expanded to include substance abuse peer support specialists.
- f. DMHSAS should have a plan to provide performance incentive payments to providers based on the outcomes of the consumers they serve.

#### 5. FURTHER STUDY OR CONSIDERATION

Primary Identified Problem – Insufficient data exists related to some key populations.

**Task Force Recommendation** – The task force recommends that further study is needed in 2005-2006 to evaluate the needs of offenders and other custody populations who have mental illness and/or substance abuse issues, data collection systems on sexual assault and other related actions as identified by the task force.

**Rationale** – These studies could be used to determine whether further recommendations are warranted.

**Suggested Actions** – The task force recommends further study to address the following issues:

- a. Programming, services, transportation and housing issues involving people who have mental illness and/or substance abuse, and who have been or will be released from the corrections system. This should involve the Department of Corrections and the Department of Mental Health and Substance Abuse Services.
- b. The need and feasibility of separate and secured nursing home facilities for people who are incarcerated, diagnosed as being incapacitated and having mental illness, and in need of nursing home level care.
- c. Services or linkage to needed services, including discharge planning for those with substance abuse issues, for juveniles released from the custody of the Department of Human Services and the Office of Juvenile Affairs.
- d. The availability of psychotropic medications for mental illness, and specifically how medications and follow-up care can be made available for the indigent.
- e. Conditions that now exist to care for and treat incarcerated individuals in the Oklahoma and Tulsa county jails, which both house a large number of inmates with diagnosed mental illness. The study should determine whether these individuals receive proper care and should be housed in facilities separate from more violent offenders.
- f. Data collection processes to provide more meaningful data on sexual assault. Currently, data collection for domestic violence is better and more accurate than on sexual assault due to handling of cases by appropriate personnel. Data collection should provide better information on which to make decisions and secure funding for sexual assault education programs.

## **Executive Summary**

Costs of Mental Health, Substance Abuse and Domestic Violence



RESEARCH TEAM Michael Lapolla and Kent Olson, PhD Kelly Damphousse, PhD; Laura Dempsey-Polan, PhD; Craig Knutson; Tabitha Doescher, PhD; Anthony Lo Sasso, PhD; Mark Snead, PhD; and Peter Budetti, MD, JD

Mental Health, Substance Abuse and Domestic Violence Oklahoma Governor's and Attorney General's Blue Ribbon Task Force

### **Cost Finding Limitations**

Costs of Mental Health, Substance Abuse, and Domestic Violence/Sexual Assault in Oklahoma

It is critical to understand the process for developing the identified costs in this report; the breadth and depth of the analysis; and the natural limitations of this cost finding and estimation analysis.

This analysis reports two types of cost (1) direct cost that is defined as a cash expenditure directly or indirectly caused by behaviors related to mental illness, substance abuse and/or domestic violence and (2) economic impact that is defined as foregone productivity due to premature death, incarceration and other reduced productivity through failure to complete education and training programs. The cost findings will have natural limitations.

The cost categories, and the methods of computation were selected to insure that costs represented fiscal year 2003; that the expenditures had a logical and reproducible relationship with annual records and reports; and that the costs could be reproduced in succeeding years by following a similar methodology. The cost identification methodology developed for this study is specific to Oklahoma. The development of the methodology was driven by two primary factors (1) the model must use source data that can be replicated in future years to the extent feasible and (2) Oklahoma-specific data must be used whenever possible. Should Oklahoma specific data not be available, the researchers defaulted to national data and projected for Oklahoma as the literature suggests.

Given the nature of the behaviors studied, one may create a host of assumptions and linkages to increase costs. That has not been done here – therefore these presented costs are presumed to be relatively conservative. For example:

Most analyses will ascribe higher justice system costs associated with substance abuse. This analysis estimates a factor of 50% or so. All other nationally published studies will assume more because they will use a much more liberal definition of cause and effect.

There was no effort made to find costs that likely exist but that are either elusive or require too much cost to obtain. An example is the related social security disability and survivor costs associated with either substance abuse and/or domestic violence.

It is intuitive that significant costs may be incurred by educational systems (K-Gray). Our research indicated that little could be proven beyond special education costs in common education and some alcohol-related costs in higher education.

Native American tribal government expenditures were elusive. Each tribal government will maintain a freestanding accounting system. The data is not public information and tribal governments will be reluctant to share cost data.

For similar reasons, the impacts upon the private workplace are intuitively known but, for the most part, not calculable.

Social service agencies claim to know that the linkages between substance abuse and social service needs are much stronger than their data systems (and legal concerns) will be able to prove.

### direct costs of \$3.4 billion



Mental Health \$1.8 billion



\$1.4 billion



Substance Abuse Domestic Violence \$244million

### economic impact of \$4.2 - \$5.5 billion



Mental Health \$750-860 million





Substance Abuse \$3.2-4.4 billion

Domestic Violence \$200-220 million

	Lower	Upper
Mental Illness	\$0.75	\$0.86
Substance Abuse	\$3.21	\$4.38
Domestic Violence	\$0.20	\$0.22
Total Economic Impact	\$4.16	\$5.46

#### Table of Contents

**Executive Summary** Costs of Mental Health, Substance Abuse, and Domestic Violence/Sexual Assault in Oklahoma



Directs Costs	. 6
Economic Impacts	. 7
Significant Findings	
Health Care	. 8
Social Services	. 8
Education	. 8
Non Profit Community Agencies	. 8
Oklahoma Workplace	. 9
Criminal Justice	. 9
Economic Impacts	. 9
Master Data Tables         FY 2003 Direct Costs in Oklahoma         FY 2003 Economic Impacts in Oklahoma	
National Perspective	1.0
Mental Health 1	
Substance Abuse       1         Domestic Violence/Sexual Assault       1	
Domestic violence/sexual Assault	14
Terms, Sources and Methods 1	15
Key Personnel	
Task Force Members	19
Research Team Members	20
End Notes	22

#### **Executive Summary**

Mental Health, Substance Abuse, and Domestic Violence/Sexual Assault

#### DIRECT COSTS

Over \$3.4 billion will be expended annually in Oklahoma to deal with the issues and problems related to mental health (\$1.77 billion), substance abuse (\$1.41 billion) and domestic violence/sexual assault (\$244 million). The data tables that follow indicate the breadth and depth of this expense across state agencies and the private sector; across federal, state and local revenue sources; and ultimately to the individual taxpayer and consumer.

There are 3.5 million residents of Oklahoma. These issues cause an expense of at almost \$3.4 billion. That is an annual direct cost of almost \$1,000+ per man, woman and child in the state. These costs are embedded into the tax system, insurance and health care costs, charitable giving objectives and many other arteries of our economic system. These costs are cash costs. These expenses are purchasing services, employing people and buying products. They are dollars not spent for schools, roads, bridges or the Oklahoma family. Some are the "costs of doing business in a free society" – many are not. Indirect costs such as lost productivity are not included in this summary; they are included in a separate report.

<u>Mental Health</u>: An estimated \$1.8 billion annual expense is related to mental health, predominantly because of the influence of mental disability payments afforded by the Social Security Administration – and the associated treatment costs of health care services.

<u>Substance Abuse</u>: Substance abuse, including both alcohol and illicit drugs, also causes over \$1.4 billion of expense. The majority of the costs are related to safety and security issues (prisons, jails, prosecution, etc), and the contribution of substance abuse to domestic violence/sexual assault and resulting child abuse and neglect.

<u>Domestic Violence/Sexual Assault</u>: Although domestic violence/sexual assault only accounts for a fraction of the expense (\$244 million) compared with the mental illness and substance abuse, it is almost totally attributable to the consequences of child abuse and neglect, which is closely associated with substance abuse.

<u>Criminal Justice System</u>: Substance abuse is the major expense in the Justice System; and mental illness dominates both Health System and Social Services expense. But if one factored out mental cash payments for disability due to mental illness, domestic violence/sexual assault has the greatest expense for Social Services agencies.

<u>Other Expense</u>: In addition, there is another \$100 million expended by United Way Partner Organizations in Oklahoma communities; almost \$30 million in K-12 public education; and almost \$62 million in property losses (thefts and motor vehicle accidents) attributed to substance abuse alone.

The importance of the aggregate cost is not simply the total amount. After all, very few can relate to \$3.4 billion in any context. The real importance is how these costs are embedded into every nook and cranny of our public systems and private way of life. It is the insidiousness of these costs that should cause the most concern. This project has been carefully crafted to provide both a detailed and aggregated look at these costs. The heart and anchor of this project is a detailed, and fully cited cost identification worksheet. It must be used to complement and enrich the text.

#### **ECONOMIC IMPACTS**

The bottom line is that the economic impact of substance abuse, domestic violence, and mental illness ranged from nearly \$4.2 billion to over \$5.4 billion in 2003. Of this amount, substance abuse accounts for almost all (\$3.2 - \$4.4 billion) of the foregone productivity. This is almost wholly due to academic underachievement and related criminal activity leading to incarceration.

This part of the study provides summary estimates of two types of economic impacts, (1) the costs of premature death and (2) reductions in productivity, which can be attributed to substance abuse, domestic violence, and mental illness. The costs reported here should be added to the costs reported in the direct cost portion of this study to determine the total cost attributable to substance abuse, domestic violence, and mental illness.

The costs of premature deaths are estimated as the present value of lifetime earnings foregone, based on the number of years of potential life lost (YPLL). Reductions in productivity are estimated as

- (1) the present value of earnings foregone by students who drop out of school or fail to enroll in college because of substance abuse,
- (2) the present value of earnings foregone by criminals while incarcerated for crimes attributable to substance abuse, domestic violence, and mental illness,
- (3) legitimate earnings foregone by individuals who choose criminal careers attributable to substance abuse, and
- (4) earnings foregone and impaired productivity of workers and their co-workers whose attendance and performance are adversely affected by substance abuse, domestic violence, and mental illness.

These estimates constitute a "cost of illness" study. They are made from the perspective of the individual victims of substance abuse, domestic violence, and mental illness. No attempt is made to determine what these individuals might be willing to pay to avoid some of the adverse consequences of their behavior, nor is any attempt made to determine any indirect impacts on government agency budgets because of earnings lost.

The preceding summary table provides a summary of the impacts, by source and duration. The impacts classified as one-year impacts may actually last longer than a year, but available and reliable data would not support multi-year estimates. Impacts lasting longer than a year are reported as the sum of the discounted annual estimates, or present values. Two discount rates are used: 3 percent and 6 percent. Higher discount rates produce smaller present value estimates, as illustrated in the table.

#### SIGNIFICANT FINDINGS

This analysis examined many costs concurrently. The process required gathering cost data, then categorizing and aggregating them. Once the cost data were totaled, the project team encountered some unexpected observations that are noteworthy here. They are:

#### **Health Care**

Community hospitals (not including freestanding psychiatric facilities) provide over \$600 million in health care services to mentally ill, substance abusers and victims of domestic violence/sexual assault.

Over \$200 million is expended for mental health related pharmaceuticals in Oklahoma; the Oklahoma Health Care Authority (Medicaid) expended \$90 million.

It is estimated that 16% (one in 6) nursing home residents will have a diagnosable mental illness, but little is expended on treatment. The taxpayer, through the Medicaid program, provides a significant amount of total nursing home revenue.

There are a host costs related to special injuries and conditions related to alcohol and substance abuse. They include spinal cord injury, traumatic brain injury, domestic violence injury, fetal-alcohol syndrome, liver transplants and vehicular crashes. The total expense is an estimated \$109 million.

#### **Social Services**

The expense of Social Security disability payments due to mental illness is substantial. It is estimated that \$337 million will be paid annually to Oklahomans with qualifying conditions.

The Oklahoma Department of Human Services will expend almost \$200 million, or 14.5% (one dollar in seven) of the budget of Oklahoma's largest state agency on mental illness, substance abuse and domestic violence/sexual assault.

#### Education

Each year, 6,530 students in Oklahoma's colleges and universities will drop out of school because of problems related to alcohol. This will cost the institutions over \$11 million in tuition revenue. And that likely will be the "tip of the iceberg" costs for those campuses and the surrounding communities. This number of alcohol related dropouts is the total population – every man, woman and child – of Seminole, Oklahoma. It is a large number.

#### Non Profit Community Agencies

It is estimated that United Way Partner Organizations in Oklahoma will expend almost \$100 million annually to support services for those with mental illnesses, substance abuse problems or needs arising from domestic violence. This amount represents a third of all spending by United Way affiliated non-profit agencies.

#### **Oklahoma Workplace**

It is estimated that Oklahoma employers will expend over \$600 million annually in additional medical costs for those 200,000 Oklahoma workers abusing alcohol or dealing with the effects of depression. It is of note that government employers will expend almost \$130 million dealing with the employment effects of alcohol and depression encountered by 35,000 employees.

#### **Criminal Justice**

The FY 2003 cost attributed to mental health conditions within the Oklahoma criminal justice system was \$214 million. This cost included expenditures related to judicial, corrections and law enforcement services required by individuals with mental illnesses. By synthesizing several sources, the research team established that approximately 13% of the Oklahoma justice system expense is related to inmates with serious mental illness.

The FY 2003 cost attributed to substance abuse within the Oklahoma criminal justice system was \$788 million. This cost included expenditures related to judicial, corrections and enforcement services required by individuals with trafficking and/or using illegal substances or abusing alcohol. Our calculations of the impact of substance abuse (including drugs and alcohol) established that 50% of justice system expense is attributable to substance abuse.

The FY 2003 cost attributed to domestic violence within the Oklahoma criminal justice system was \$93 million. This cost included expenditures related to judicial, corrections and enforcement services required by individuals who were either perpetrators or victims of domestic violence. Our calculations of the impact of domestic violence (including child abuse, neglect, and rape) established that approximately 6% of the cost of the Oklahoma justice system might be attributed to domestic violence.

#### **Economic Impacts**

The bottom line is that the economic impact of substance abuse, domestic violence, and mental illness ranged from nearly \$4.2 billion to over \$5.4 billion in 2003.

Of this amount, substance abuse accounts for almost all (\$3.2 - \$4.4 billion) of the foregone productivity. This is almost wholly due to academic underachievement and related criminal activity leading to incarceration.

#### FY 2003 Direct Costs in Oklahoma Mental Health, Substance Abuse and Domestic Violence/Sexual Assault

	Mental Health	Substance Abuse	Domestic Violence	Totals SFY 2003
OKLAHOMA	\$1,765,411,954	\$1,408,129,407	\$244,319,308	\$3,417,860,670
CRIMINAL JUSTICE SYSTEM	213,508,640	787,923,409	92,893,939	1,094,325,987
Attorney General	0	0	473,000	473,000
Corrections Department	74,051,090	206,968,419	45,653,853	326,673,362
District Attorney's Council	10,712,768	44,579,320	9,134,348	64,426,436
Indigent Defense System	2,667,808	7,594,158	1,682,538	11,944,504
State Bureau of Investigation	4,070,704	11,587,629	2,567,319	18,225,652
Narcotics and Dangerous Drugs	0	6,715,000	0	6,715,000
Pardon and Parole Board	395,472	1,125,747	249,417	1,770,636
Public Safety Department	0	51,359,514	0	51,359,514
Office of Juvenile Affairs	8,149,355	29,360,005	1,116,350	38,625,710
State Legal and Judiciary	11,461,648	32,626,623	7,228,653	51,316,924
Federal Government	9,445,236	73,268,048	1,349,319	84,062,604
County/Municipal Government	92,554,558	322,738,946	23,439,141	438,732,646
HEALTH CARE SERVICES	1,057,617,172	398,369,618	74,797,096	1,530,783,886
Oklahoma DMHSAS	143,989,491	50,439,962	5,553,680	199,983,133
Community Mental Health Centers	70,340,782	4,205,556	0	74,546,339
Child Abuse Programs	0	0	2,638,773	2,638,773
Domestic Violence Programs	204,183	1,812,845	16,930,460	18,947,488
Substance Abuse Treatment	0	48,871,865	0	48,871,865
Residential Care	3,296,764	0	0	3,296,764
State Health Department	3,170,738	2,976,765	20,846,312	26,993,815
Native American Health Care	36,077,470	24,081,969	2,550,000	62,709,439
Hospitals	337,424,716	142,285,569	1,029,162	480,739,447
Special Injuries and Conditions	0	109,080,923	25,248,709	134,329,631
Physicians	67,438,982	0	0	67,438,982
Other Health Care Professionals	31,129,655	0	0	31,129,655
Home Health	0	0	0	0
Nursing Homes	126,066,340	0	0	126,066,340
Prescription Drugs	200,097,541	0	0	200,097,541
Workforce Development	37,880,934	12,626,978	0	50,507,912
Federally Sponsored Research	499,575	1,987,186	0	2,486,761
SOCIAL AND HUMAN SERVICES	428,930,881	83,443,669	54,345,544	566,720,094
Commission on Children and Youth	724,090	472,900	77,734	1,274,724
JD McCarty Center	5,195,400	0	0	5,195,400
Department of Human Services	86,351,909	61,904,363	47,789,233	196,045,506
Federal OASDI Payments	200,252,856	11,199,257	0	211,452,113
Federal SSI Payments	124,200,300	1,229,471	0	125,429,771
County Government	723,038	461,157	323,380	1,507,575
Municipal Government	11,309,502	8,078,216	4,846,930	24,234,648
Native American Services	173,786	98,304	1,308,268	1,580,357
EDUCATION	19,517,951	19,693,900	1,683,154	40,895,006
Elementary and Secondary	18,551,001	5,509,575	1,036,579	25,097,156
Higher Education	0	11,266,000	0	11,266,000
CareerTech	966,950	2,918,325	646,575	4,531,850
	45 007 040	04 500 000	20 500 575	00 007 50 5
NON-PROFIT SERVICES	45,837,310	31,590,699 87 108 112	20,599,575	98,027,584
SPECIAL INTEREST ISSUES	<b>0</b>	87,108,112	<b>0</b> 0	87,108,112
Property Loss - Crime	0	31,648,030		31,648,030
Property Loss-Accidents Direct DUI Expense	0	30,314,581	<u> </u>	30,314,581
Direct DOI Experise	0	15,512,250	0	15,512,250

### FY 2003 Economic Impacts in Oklahoma Mental Health, Substance Abuse, and Domestic Violence/Sexual Assault

	L	DURATION OF IMPAC	τ	
	One Year			
SOURCE OF IMPACT		PV <sup>ª</sup> at 6 Percent	PV <sup>ª</sup> at 3 Percent	Total Impact
Substance Abuse				
Premature Death		\$761,093,557	\$1.060.110.091	
Reduced Productivity		· · )····	, , , . ,	
College Dropouts		\$891,353,926	\$1,485,695,699	
High School "Dropouts" <sup>b</sup>		\$425,306,199	\$688,164,376	
Incarceration		\$795,655,637	\$810,405,634	
Crime Careers	\$186,199,324	· · ·	· · ·	
Institutionalization	\$20,201,126			
Workforce	\$125,907,910			
Total Substance Abuse	\$332,308,360	\$2,873,409,320	\$4,044,375,801	
Domestic Violence				
Premature Death		\$30.255.661	\$52,691,868	
Reduced Productivity		···/··	¥ - ) )	
Incarceration		\$163,731,005	\$166,742,995	
Workforce	\$4,535,228			
Total Domestic Violence	\$4,535,228	\$193,986,666	\$219,434,863	
Mental Illness				
Premature Death		\$229,230,050	\$335,343,116	
Reduced Productivity				
Incarceration		\$266,597,273	\$271,498,687	
Institutionalization	\$24,355,754			
Workforce	\$231,671,636			
Total Mental Illness	\$256,027,390	\$495,827,322	\$606,841,803	
Subtotal	\$592,870,978	\$3,563,223,308	\$4,870,652,467	
Minimum Total Impact	\$592,870,978	\$3,563,223,308	/	\$4,156,094,286
Maximum Total Impact	\$592,870,978		\$4,870,652,467	\$5,463,523,445

a: Present Value b: "Dropouts" include students who fail to graduate (dropouts) and graduates who fail to enroll in college (college non-enrollees)

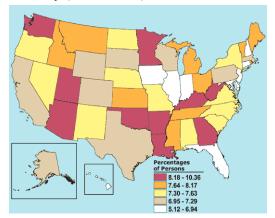
### **A National Perspective**

Mental Health, Substance Abuse, and Domestic Violence/Sexual Assault

Oklahoma was judged to have the highest rate of severe mental illness in the nation.<sup>1</sup> Relative to other states, Oklahoma has a "lower public burden" expended – and a better balance of spending for substance abuse services – than many other states.<sup>2</sup> And it appears that drug use is at or below national averages.<sup>3</sup> Our state also ranks within the worst five states for "intimate partner" homicide, a worthwhile proxy for domestic violence and sexual assault – and, in turn, child abuse and neglect.

#### **Mental Health**

"Serious mental illness (SMI) was first measured by the National Household Survey on Drug Abuse (NHSDA) in 2001 for all persons age 18 or older. SMI was present in 7.3 percent of the population age 18 or older (Office of Applied Studies [OAS], 2002c). At the individual level, SMI has been associated with use of illicit drugs and smoking cigarettes. Rates of SMI also have been associated with other characteristics, such as educational status, unemployment, and urbanicity (OAS, 2002c). Because the State estimates for SMI are only based on a single year of



NHSDA data, the national model has a larger impact on State sample-based estimates that are either very high or very low relative to other States, especially for States based on samples of 600 persons or fewer."<sup>4</sup>

Percentages Reporting Past Year Serious Mental Illness among Persons Aged 18 or Older, by State: 2001

The States with the highest SMI for persons age 18 or older in 2001 were mostly in the South: Oklahoma, Kentucky, Georgia, West Virginia, Arkansas, and Louisiana. There also were three

Western States (Utah, Washington, and Arizona) and one Midwestern State (Minnesota).

States with the lowest SMI percentages included one Western State (Hawaii), three Northeastern States (Connecticut, New Jersey, and New Hampshire), three Southern States (Delaware, Maryland, and Florida), and three Midwestern States (Indiana, Iowa, and Illinois).

**Oklahoma had the highest rate overall (10.4%), and Hawaii had the lowest rate (5.1%).** By age groups, Oklahoma was the second ranked state for ages 18-25 (14.1% compared to national average of 11.8%; and the worst state for adults 26 years and older (9.7% compared to national average of 6.7%).

<u>Rank</u>	<u>State</u>	<u>Pct</u>
1	Oklahoma	10.4
2	Kentucky	9
3	Georgia	8.7
	U.S. Average	7.4
49	New Jersey	6.4
50	Connecticut	5.9
51	Hawaii	5.1

#### Severe Mental Illness Rank, FY 2001

Some may view these data with skepticism. The implication that over 10% of Oklahomans have experienced Severe Mental Illness is hard to believe. But the national average is 7.4%, and regardless of the percentage, Oklahoma still reports the highest rate in the land - 30% above the national average and double that of Hawaii. The concern should be that Oklahoma seems to be in the top (worst) five or ten states. It is a statistical reality and cannot be dismissed.

#### **Substance Abuse**

The most complete study comparing the efforts of states is "Shoveling Up: The Impact of Substance Abuse on State Budgets," produced by the National Center on Addiction and Substance Abuse at Columbia University [CASA]. The study is restricted to state funds only, but is instructive when assessing our relative position and focus of our spending. Some of the findings may be surprising. A concept used to compare states in this report is the "burden" of substance abuse on public programs, or how much state money is expended coping with the consequences of substance abuse. Such expenditures would include corrections, law enforcement and social services. Other spending goes to try to prevent substance abuse.

Comparing spending on the consequences of substance abuse with funds for prevention, Oklahoma is one of the better "balanced" states. Of the state expenditures reported, Oklahoma will devote 94.6% to the "burden" and 4.9% on prevention, treatment and research. The national average is 95.8% and 3.7%. Oklahoma has the 7<sup>th</sup> most favorable ratio in the nation.

Oklahoma will expend 10% of the state budget on the "burden" of substance abuse; the national average is 12.6%. Oklahoma ranks 24<sup>th</sup> in the nation. This is below the national average but right at the national mode.

The Oklahoma expenditure per capita was 210 while the national average was 287. This is the  $10^{\text{th}}$  lowest per capita burden in the nation.

Oklahoma will expend .512% of the state budget on substance abuse prevention, treatment and research. This is the  $9^{th}$  highest percentage in the nation. The per capita spending for substance abuse prevention, treatment and research is \$10.37, or  $11^{th}$  highest in the nation.

Another comparative concept is the total spending for substance abuse issues – or the total of the "burden" plus prevention, treatment and research.

Oklahoma will expend 10.5% of the state budget on the overall substance abuse problem; the national average is 13.1%. Oklahoma ranks  $20^{th}$  in the nation; below the national average and right at the national mode.

The Oklahoma total expenditure per capita was 213 while the national average was 287. This is the  $12^{\text{th}}$  lowest per capita burden in the nation.

Rank	State	Burden To Public	Prevention and Research
1	North Dakota	\$89.71	\$10.22
2	Oregon	91.21	8.61
3	Delaware	93.72	6.27
4	Arizona	93.60	6.02
5	New York	93.96	5.81
6	Alaska	95.02	4.98
7	Oklahoma	94.61	4.87
8	California	95.30	4.32
9	DC	95.70	4.30
10	Washington	91.91	3.79

**For Every \$100 States Spend on Substance Abuse** [ranked by spending on prevention, treatment and research]

Overall, then, Oklahoma has relatively low substance abuse-related spending, but a favorable ratio of prevention to "burden." One may argue whether a "low burden" means there is a lower prevalence of the problem – or not enough is being spent – or the dollars being spent are being spent wisely. It is likely that Oklahoma does not spend enough of its resources towards this problem; but of the resources expended, the state does so in a more balanced manner than many.

The use of illegal drugs and alcohol seems to be at or below the national average.

#### Reported Percentage Use

	U.S.	ОК
Marijuana	5.09	3.55
Marijuana (first use)	1.59	1.68
Any Illicit Drug	6.69	5.40
Illicit Drug (not marijuana)	2.85	2.97
Cocaine	1.70	1.28
Alcohol (binge drinking)	20.58	18.33

#### **Domestic Violence/Sexual Assault**

The Centers for Disease Control (CDC) ranks Oklahoma 4<sup>th</sup> in the nation for rate of intimate partner homicide per 100,000 population for white females and 3<sup>rd</sup> in the nation for black females in 2002. Such high rankings in intimate partner homicide strongly portend a similar relative rank for sexual assaults and other forms of domestic violence, abuse and neglect.

#### **Terms, Sources and Methods**

Mental Health, Substance Abuse and Domestic Violence/Sexual Assault



#### Purpose

The purpose of this study is to develop a cost identification methodology specific to Oklahoma and to use the methodology to:

(1) Estimate the financial impact of mental illness, substance abuse and domestic violence/sexual assault on the Oklahoma economy (referred to as economic cost); and

(2) Estimate total public and private dollars spent on prevention, treatment, education and other services related to mental illness, substance abuse and domestic violence/sexual assault in Oklahoma (referred to as direct cost).

#### **Terms and Definitions**

For the purposes of this study, the following definitions apply.

#### Mental Illness

Mental illness is defined as Major Mental Illness (MMI) for adults and Serious Emotional Disturbance (SED) for children. MMI includes the following disorders among adults 18 years of age and older: Bipolar Disorder, Major Depression, Depression, Antisocial Personality Disorder, Borderline Personality Disorder, Dissociative Identity Disorder, Obsessive-Compulsive Disorder, Panic Disorder, Paranoid Personality Disorder, Posttraumatic Stress Disorder, Psychotic Disorder, Schizoaffective Disorder, and Schizophrenia. SED pertains to individuals from birth to 18 years of age who meet a specific Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) criteria with diagnoses such as Pervasive Developmental Disorder, Schizophrenia, Conduct Disorder, Affective Disorder, other disruptive behaviors, or other disorders with serious medical implications such as eating disorders.

#### Substance Abuse

Substance abuse refers to the abuse of alcohol and other drugs including over-the-counter and prescription medication. The abuse of tobacco will not be included in this study. Abuse is defined as recurrent use of the substance resulting in (1) a failure to fulfill a major role obligation, (2) a situation which is physically hazardous, (3) recurrent legal problems, or (4) continued use despite having persistent or recurrent social or interpersonal problems caused by the effects of the substance.

#### Domestic Violence/Sexual Assault

Domestic violence/sexual assault includes physical assault, psychological abuse and stalking perpetrated by a current or former dating partner, boyfriend/girlfriend, husband/wife, or cohabitating partner. Both same-sex and opposite-sex cohabitants are included in the definition. All abuse of adults and children that can be attributed to mental illness will be; abuse that can be attributed to substance abuse will be; abuse that can be attributed to domestic violence will be; any remaining child abuse or elder abuse that is not directly attributable to these three issues will be included in domestic violence. All neglect of adults and children that can be attributed to mental illness will be; neglect that can be attributed to substance abuse will be; neglect that can be attributed to domestic violence will be; any remaining neglect that cannot be attributed to one of these three issues will not be included. Sexual assault includes any act (verbal and/or physical) that breaks a person's trust and/or safety and is sexual in nature and includes: rape, incest, ritual abuse, date and acquaintance rape, marital or partner rape.

#### **Project Scope**

This analysis ...

Identifies direct costs (expenditures). Provides a structure and methodology that allows consistent replication. Provides a comprehensive reference document for policy makers.

For the sake of clarity, this analysis does not ...

Evaluate if too much or too little is being expended. Suggest the promotion of one approach over another. Make judgments concerning appropriateness of expenditures.

#### **Unique Project Characteristics**

This analysis is different in both breadth and depth from any similar analysis that could be found. Prevailing studies are limited in scope. Some include only public [state] funds; some concentrate only upon certain segments of society, such as the criminal justice system; and all are performed without the inter-related context of mental illness and substance abuse and domestic violence.

This may be the only comparable study that:

Includes Native American expense, Identifies the costs related to both the non-profit and private sectors, and Includes costs to local governments (county and municipal).

It is clear that the outcomes of existing relevant studies vary widely depending upon many factors. Some studies simply find more cost categories than others; some include federal dollars spent at the state level while others do not; and different investigators group cost categories under different headings. Such differences make comparisons of one study vs. another problematical.

This analysis creates a structured methodology that is based upon available and annually recurring data sources. This structure will allow Oklahoma to accurately measure changes in succeeding years and could be applied to compare one state to others.

#### Methods

The cost identification methodology developed for this study is specific to Oklahoma. The development of the methodology was driven by two factors (1) the model must use source data that can be replicated in future years to the extent feasible and (2) Oklahoma-specific data must be used whenever possible. Should Oklahoma specific data not be available, the researchers defaulted to national data and projected for Oklahoma as the literature suggests.

The core of the methodology is a sophisticated and extensive Excel worksheet. The worksheet has five columns (1) a specific category of expenditure (2) the total FY 2003 annual expenditure for the first column and (3-5) the portion of that annual expense attributed to mental illness, substance abuse and/or domestic violence/sexual assault.

#### **Data Sources**

Care was observed to select data sources that are reputable, annually consistent and reproducible in succeeding years. They are fully cited in the accompanying worksheets. In some cases reproducibility was preferred over more proprietary data that may (or may not) be slightly more accurate this year.

#### State Agencies

The primary source for SFY 2003 state agency expenditure data is the Governor's FY 2005 Budget Book. In the cases of the Department of Human Services and the Department of Mental Health and Substance Abuse Services, the expenses were derived from the departmental annual reports because they provided more specificity.

#### Native American Governments

There is no central source of expense data for Oklahoma tribal governments. Securing similar data from each tribe is neither practical, nor likely to be consistent across tribes. Therefore, the primary source of FY 2003 health care expense data is the Oklahoma City Area office of the Indian Health Service. That office provided the mental health and substance abuse contracts operational with each tribe and tribal operation. Although the tribes may supplement these funds with others, it is likely that the contract funds provide the vast majority of expenses. Bureau of Indian Affairs and federal DHHS contracts with tribes are used to describe social services expenditures.

#### County and Municipal Government

County and Municipal expense will account for a significant portion of total expense. They are never reported as such in similar analyses. Securing similar data from each unit of government is neither practical, nor likely to be consistent. This analysis largely relies on the U.S. Census Bureau sponsored Census of Governments. A Census of Governments is taken at 5-year intervals as required by law under Title 13, United States Code, Section 161. The government finance phase of the census includes statistics on the revenue, expenditure, debt and assets of state and local governments. The statistics are aggregated nationally, by state area, and by type of government. Separate reports are available for county, municipal and township governments, and special district governments, as well as public school systems and public-employee retirement systems. Individual unit statistics are available for all governments.

#### Federal Payments

Federal payments cannot be isolated from state and local expenditures across programs because of the degree to which they are marbled into state/federal programs. A major infusion of federal dollars is in the form of Supplemental Security Income (SSI) and Old Age, Survivors and Disability Insurance (OASDI) programs. The primary source of 2002 Oklahoma data is the

Security Administration Annual Statistical Supplement 2003 (released March 2004). The report indicates the numbers of disabled recipients, total payments and diagnostic categories of disabilities.

#### **Hospitals**

The preferred source for hospital expenditures should be the Oklahoma Public Use Data Set of Hospital Discharges. This data set reports all hospital discharges by three types of diagnostic category as well as associated charges. An operational difficulty is that the most current data is for 2001, and only half of Oklahoma's hospitals are in that data set. Nevertheless, the incomplete 2001 data is the only available source as the 2003 data were not scheduled to be available until near the end of this project.

#### United Way Partners

Non-profit agencies will not likely respond to ad hoc surveys with any degree of accuracy, enthusiasm or uniformity. Therefore, different methods of approaching these groups have been pursued. Almost every non-profit group dealing with mental illness, substance abuse or domestic violence/sexual assault will be funded either with a public contract or United Way allocation. This analysis requested that United Way directors directly poll their recipient organizations to maximize responsiveness and accuracy. These particular data may or may not be replicable in the future.

#### **Task Force Members**

Governor's and Attorney General's Blue Ribbon Task Force Mental Health, Substance Abuse and Domestic Violence

Tom Adelson, Tulsa; Mike Anderson, PhD, Oklahoma City; Governor Bill Anoatubby, Chickasaw Nation, Ada; Judge Candace Blalock, Pauls Valley; Sue Buck, Hugo; Terry Cline, PhD (Ex-Officio), Secretary of Health, Oklahoma City; Joe Hight, (Ex-Officio), Oklahoma City; Frank Merrick, Oklahoma City; Saundra Naifeh, Edmond; Robin Parrish, Governor's Office, Oklahoma City; Bob Spinks, EdD, Oklahoma City; Jeff Tallent, Oklahoma City; Jack Turner, Oklahoma City, and Reverend Dick Virtue, Norman

#### **Research Team**

Governor's and Attorney General's Blue Ribbon Task Force Mental Health, Substance Abuse and Domestic Violence

#### Michael Lapolla, MHA (Principal Investigator)

Mr. Lapolla is a lecturer and Co-Director of the Center for Health Policy in the College of Public Health of the University of Oklahoma Health Sciences. He has been a full-time health policy researcher in Oklahoma since 1987. His experiences germane to this engagement include being the Principal Investigator for the only other similar effort in Oklahoma. That was the study commissioned by the Governor's Task Force on Substance Abuse in 1998. The study entitled "Everyone Pays" was the basis of public policy recommendations at that time. Mr. Lapolla's policy research was also instrumental in the eventual passage of the Oklahoma Mental Health Parity Act. His research and academic article "Economic Impact of Family Physicians in Oklahoma" will be published in an upcoming issue of the Journal of the Oklahoma State Medical Association.

#### Kent Olson, PhD (Co-Principal Investigator)

Dr. Olson will provide the overall economic impact study structure and will critically review all economic impact data and findings. Dr. Olson is a Professor of Economics at the Oklahoma State University College of Business Administration, and has been a faculty member of the College since 1974. Dr. Olson holds a B.S. (Economics) from Arizona State University; and an M.S. (Economics) and Ph.D. (Economics) from the University of Oregon. He is the coauthor of two textbooks, 45 articles and 16 monographs; has authored or co-authored several studies of Oklahoma's tax system; has chaired the Oklahoma Task Force on Taxation in late 80s; and has been a principal investigator on 35 research projects. His specialty interests include tax and policy analysis, cost-benefit analysis, and issues related to state economic development. Dr. Olson is President of Oklahoma 21st Century, Inc. (formerly OK 2000), a research affiliate of the Oklahoma State Chamber of Commerce.

#### Kelly Damphousse, PhD

Dr. Damphousse received his PhD from Texas A&M University. He is an Associate Professor of Sociology at the University of Oklahoma with extensive experience studying criminal justice systems in Oklahoma. He is a social scientist who will provide the team with the proper direction and insight to the complexities and inter-relationships of the study issues. He directs several research projects, most notably the American Terrorism Study and the Oklahoma City and Tulsa Arrestee Drug Abuse Monitoring (ADAM) project.

#### Laura Dempsey-Polan, Ph.D

Dr. Dempsey-Polan received her Doctor of Philosophy (Major: Health and Human Service Administration/Policy; Minors: Industrial/Labor Relations and Program Evaluation from Cornell University in 1990. She also earned certification by the Sloan Certification Program in Health Administration/Health Policy.

Laura received three awards from the Tulsa Mental Health Association. They were: Community Collaborator Award (2000); Executive Director's Commendation (1998); and Outstanding Volunteer in Public Policy (1995). She was one of the charter board members founding the Tulsa Domestic Violence Intervention Service (DVIS) and received the Board of Director's Service Award of Appreciation (1994). She is the Commissioner's appointment to the Oklahoma Department of Mental Health, Substance Abuse, and Domestic Violence Regional Advisory Board (1997); and has been a Mental Health Association of Tulsa Policy Committee Member (1995-present). She was also an active member of the Tulsa Domestic Violence Intervention Services (DVIS) Executive Board member (1981-1993).

Laura has authored or co-authored 21 publications and coordinated 11 grant awards. From 1978 to 1985, Laura was a Mental Health practitioner and administrator in Oklahoma, Minnesota and California. She is a licensed Marriage and Family Therapist and Registered Clinical Art Therapist (ATR).

#### Tabitha Doescher, PhD

Dr. Doescher is a public policy economist and consultant. Her clients include federal and state government agencies and professional associations with interests in non-partisan policy analysis. She is a co-author of Advising Clients on Retirement Plans, a contributing author to Pension Policy for a Mobile Labor Force, and has published articles appearing in the American Economic Review, the Journal of Marketing, and the Journal of Public Policy and Marketing. In addition, she has conducted numerous studies in the area of state economic development, including an evaluation of ODVTE's business development programs and an analysis of Oklahoma's high tech sector. She received her B.A. from Vanderbilt University, her M.P.A. from Syracuse University, and her Ph.D. from the University of North Carolina at Chapel Hill.

#### Anthony Lo Sasso, PhD

Dr. Lo Sasso is Associate Professor of Economics, University of Illinois Chicago, where he has just recently moved from Northwestern University. His professional activities include being the Principal Investigator for numerous relevant research projects, such as "Workplace Mental Health Benefits & Selective Contracting," funded by the National Institute of Mental Health; "The Sensitivity of Drug Abuse Treatment Demand to Copayment Levels," funded by the Robert Wood Johnson Foundation, and "The Effect of State Policies on the Market for Private Non-Group Health Insurance," supported by the Searle Fund. He has also been a designated reviewer for the National Institute of Mental Health, the National Institute of Alcohol Abuse and Alcoholism, and the Robert Wood Johnson Foundation, Substance Abuse and Policy Research Program. He is a referee for American Economic Review, Journal of Health Economics, Health Services and Outcomes Research Methodology Journal, The Gerontologist, Health Affairs, and Health Care Financing Review. Dr. Lo Sasso is a member of the American Economic Association, AcademyHealth, Association for Public Policy and Management, and International Health Economics Association.

#### Craig Knutson, M.A.

Mr. Knutson is President, E-conographics Consulting Services of Oklahoma, LLC. His organization specializes in the development and delivery of economic and demographic analysis through presentations, reports, and media interviews. He is a member of USA Today's nationwide forecasting panel, National Association for Business Economics, and the Oklahoma League of Economists. He was the CEO, Central Oklahoma Workforce Investment Board and the Director, Economic Development & Education for Southwestern Bell Telephone. Among many other professional activities, Mr. Knutson was the co-developer of the General Business Index, a computer model simulating economic activity in Oklahoma, OKC, and Tulsa. He also has had experience as the Senior Economic Planner, Office of Research and Economic Development, City of Oklahoma City.

#### Mark Snead, PhD

Dr. Snead is Research Economist with the Oklahoma State Econometric Model at Oklahoma State University in Stillwater. He holds a Ph.D. in Economics from Oklahoma State University and an M.S.M. in Finance from Georgia Tech and is a graduate of the University of Georgia with a B.B.A. in Economics. Dr. Snead has experience with Oklahoma workforce and labor issues.

#### Peter Budetti, MD, JD

Dr. Peter Budetti is the Edward E. and Helen T. Bartlett Foundation Professor of Public Health and Chair, Department of Health Administration and Policy, College of Public Health, University of Oklahoma, Oklahoma City and Tulsa. Dr. Budetti is a pediatrician and lawyer. He founded and directed health policy research centers at Northwestern University and The George Washington University, and has extensive experience in health services and policy research projects.

#### End Notes

<sup>1</sup> 2001 State Estimates of Substance Use and Serious Mental Illness. Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse, 2001.

NOTE: Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the DSM-IV criteria and resulted in functional impairment that substantially interfered with, or limited one or more life activities. Data for Serious Mental Illness (SMI) are not defined for 12 to 17 year olds; therefore, "Total" estimate reflects ages 18 or older.

The 2001 NHSDA was the first in which the survey was capable of providing estimates of SMI for all persons age 18 or older. States with the lowest rates of SMI were a mixture of one Western State, three from the Northeast, three from the South, and three from the Midwest. The State with the lowest rate was Hawaii (5.1 percent). States in the highest fifth seemed more clustered geographically with six Southern States, three Western States, and one State from the Midwest. Oklahoma, the State with the highest rate of SMI, had a rate that was double that of Hawaii. Estimates of SMI among the States with larger samples fell into a narrower range: from Florida at 6.8 percent to Michigan with 8.2 percent. Persons age 18 to 25 had higher rates of SMI than did the 26 or older age group. In the 18 to 25 age group, California had the lowest rate (9.7 percent) and Maine had the highest rate (14.4 percent).

Although SMI is somewhat correlated at the individual level with past month use of an illicit drug, the correlation at the State level was fairly low and negative (-0.18). The highest correlation at the State level was between SMI and past month use of cigarettes, 0.31. This result is supported somewhat by substance use literature that shows a relationship between SMI and past month use of cigarettes at the individual level (Arday et al., 1995; Kessler et al., 2003; Romans et al., 1993; Woolf et al., 1999). The correlations with dependence on or abuse of drugs or the need for treatment were generally quite low. The highest correlation with demographic information was with the 1999 per capita income obtained from the Bureau of Health Professions' 2002 Area Resource File, where the correlation was -0.53: the lower the income, the higher the percentage with SMI.

In general, the State estimates derived from the NHSDA data correlated only moderately, 0.259, with the synthetic State estimates generated from the Epidemiologic Catchment Area (ECA) study and the National Comorbidity Study (NCS) and published in the *Federal Register* by the Center for Mental Health Services (CMHS, 1999). The data used from the ECA were limited to Baltimore and were collected during the 1980s. The NCS data were from a national probability sample of approximately 8,000 households and included data for only 34 States. The method used was essentially based on synthetic estimation in which the NCS data were used to make estimates for persons 15 to 54 years old, and the ECA data were used to make estimates for persons 15 to 54 years old, and the ECA data were used to make estimates for persons for the estimation used a fixed-effect logistic regression model based on data at either the county or Census tract level consisting of demographic information, such as age, race/ethnicity and gender. By contrast, the State-level SMI estimates in this report are based on representative State samples of about 2,400 persons for the eight largest States and 600 persons for the 42 smaller States and the District of Columbia surveyed throughout the 2001 calendar year. The NHSDA model includes random effects at the State and field interview region group levels in order to reflect differences among States and region groups that are not captured by the fixed-effect national model.

<sup>2</sup> "Shoveling Up: The Impact of Substance Abuse on State Budgets". The National Center on Addiction and Substance Abuse at Columbia University (www.casacolumbia.org). January 2001. Funded by: The Starr Foundation; The Robert Wood Johnson Foundation; Carnegie Corporation of New York; Primerica Financial Services; National Institute on Drug Abuse; National Institute on Alcohol Abuse and Alcoholism; and The Abercrombie Foundation.

<sup>3</sup> 2001 State Estimates of Substance Use and Serious Mental Illness. Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse, 2001.

<sup>4</sup> www.oas.samhsa.gov/nhsda/2k1State/vol1/ch6.htm.