

**Anticipated Return on Investment for the
Inclusion of Substance Use Disorder Services in New Hampshire Medicaid
September 2013**

BACKGROUND

The purpose of this memorandum is to demonstrate that ensuring access to substance use disorder services for New Hampshire's current Medicaid and expansion populations is an investment that will reap critical benefits for the health of New Hampshire citizens and economy, and will bend the Medicaid cost curve. Addiction was first recognized as a disease in 1956 by the American Medical Association although, until recently, little progress had been made in understanding and managing addiction as a chronic health condition. Addiction affects millions of individuals and families every year, yet it is often undiagnosed or ignored. The annual combined costs incurred by health care, lost productivity, and crime related to untreated addiction in the United States have been estimated at \$467 billion.ⁱ A December 2012 study by PolEcon Research found that excessive alcohol consumption in New Hampshire cost the state \$1.15 billion per year in the areas of lost worker productivity, health care, criminal justice and public safety.ⁱⁱ Add the abuse of other drugs such as marijuana, heroin and prescription medications to the equation and the costs significantly increase.

New Hampshire annually ranks in the top five of the 50 states in drug and alcohol abuse and dependence, but ranks at the bottom in access to treatment.ⁱⁱⁱ

- Among 12-20 year olds
 - **1st highest (33.52%) past month alcohol use**
 - 3rd highest (21.56%) past month binge drinking
- Among 18-25 year olds
 - 3rd highest (73.22%) past month alcohol use
 - 5th highest (49.32%) past month binge drinking
 - 5th highest (27.03%) past month marijuana use
 - 9th highest (**21.26%**) **past year alcohol or drug dependence**
- **New Hampshire is 49th of the 50 states in those not able to access needed treatment**
- Of the 113,000 New Hampshire residents estimated to need treatment for alcohol and other drug disorders only 6,000 per year are currently able to get needed treatment through state contractors.

In 2009, the rate of drug-induced deaths in New Hampshire was higher than the national average. As a direct consequence of drug use, 172 persons died in New Hampshire in 2009. This is compared to the number of persons in New Hampshire who died from motor vehicle accidents (114) and firearms (89) in the same year. New Hampshire drug-induced deaths (13.0 per 100,000 population) exceeded the national rate (12.8 per 100,000).^{iv}

It is also important to note that for people living in poverty prevalence rates for substance use disorders may be higher. In one study the prevalence of treatment need ranged from 8.4 percent for persons with a family income greater than \$50,000 to 12.5 percent for persons with a family income of less than \$20,000.^v The prevalence of substance use disorders in New Hampshire generally is 8.7%; the prevalence of substance use disorders among New Hampshire adults ages 18-64 who are part of the Medicaid expansion population is 18% (compared to 14.2% nationally).^{vi} Ensuring access to substance use disorder services for New Hampshire's current Medicaid and expansion populations will improve the overall health of this population, and will reduce the costs associated with untreated substance misuse.

Unprevented and untreated substance misuse translates to heavy burdens on the New Hampshire economy and on state and local systems, including health care, justice, public safety, children and families, and labor. New Hampshire can take steps to mitigate the burden of alcohol and drug related costs. One study suggests that for every public dollar spent on prevention and treatment 7 dollars are saved.^{vii} Numerous studies have shown substance abuse treatment results in good outcomes and is cost effective.^{viii}

COST OFFSET BY SECTOR

Substance use disorder services at parity with medical services are required for the potential expansion population.^{ix} New Hampshire Medicaid does not currently reimburse for such services or providers. The following outlines, by sector, the cost offset research that overwhelmingly supports the inclusion of substance use services in New Hampshire Medicaid in order to improve beneficiary health and reduce the costs of untreated substance misuse.

➤ **HEALTHCARE**

National studies also conclude that investing in substance use disorder services will assist in bending the Medicaid cost curve because the treatment of substance use disorders addresses a major driver of healthcare costs.^x

- Medicaid beneficiaries have a higher rate of substance use disorders than Medicare or privately insured populations. There are significantly higher healthcare costs among those Medicaid beneficiaries with untreated addictions.^{xi}
- The costs associated with addiction in Medicaid populations are greater than the direct cost of mental health and substance use disorders treatment.^{xii}
- Treating more people with substance use disorders has been shown to actually reduce Medicaid costs by over 10%.^{xiii}
- In states such as Washington, cost offsets per adult disabled beneficiary have continued to grow each year that comprehensive substance use disorder services have been available through Medicaid.^{xiv}

A 2012 study by New Hampshire Hospital^{xv} showed that the majority of patients admitted over a six month period had co-occurring mental illness and substance use disorders. The study found:

- 64% of patients have a history of alcohol or drug abuse, and
- 55% of patients are actively using alcohol or drugs.

Patients with co-occurring substance use are also more likely to be readmitted. New Hampshire Hospital and the Community Mental Health Centers have identified this as a problem exacerbated by the lack of substance use disorder services reimbursement in New Hampshire Medicaid and therefore the difficulty in effectively addressing co-occurring mental health and substance use disorders.^{xvi}

Even more compelling are the findings for male patients aged 21-35, a population that will be highly impacted by potential Medicaid expansion:

- 83% of male patients age 21-35 have a history of substance abuse
- 75% of male patients age 21-35 were actively using at the time of admission.^{xvii}

The cost per day at New Hampshire Hospital is \$1,346.^{xviii} Treating substance use disorders in the community would reduce the need for these expensive hospitalizations.

In September 2013, the New Hampshire Department of Health and Human Services released a report, the *NH Medicaid Expansion Study Phase III: An Analysis of Health Benefit Design Options for Current and Newly Eligible Medicaid Beneficiaries*^{xix}. The report discusses options for health benefits New Hampshire Medicaid should cover in its existing program, as well as in a potentially expanded Medicaid through the Affordable Care Act.

In comparing New Hampshire's current Medicaid benefit package to the Affordable Care Act's Essential Health Benefits, required for the expansion population, the report finds that adding substance use disorder benefits at parity with physical health benefits is required.

The cost benefit conclusions of the inclusion of substance use disorder services in Lewin III utilize the most conservative actuarial assumptions and depend on which of four benefit design options New Hampshire embraces. All have positive return on investment. The New Hampshire Department of Health and Human Services publicly presented option 1 in which the newly eligible will get current Medicaid benefits with substance use disorder coverage and current beneficiaries will get current benefits only.^{xx} This design saves New Hampshire \$2.1 million in general funds over the first 7 years of the expansion directly due to the treatment of substance use disorders of beneficiaries and it does not require any additional investment of state funds. Those savings are of Medicaid dollars only and do not account for the other anticipated savings such as those outlined in this document.

➤ CRIMINAL JUSTICE AND PUBLIC SAFETY

If New Hampshire elects to expand Medicaid, eligible adults on probation and parole will have coverage that will include mental health and substance use disorder treatment. Currently, untreated substance use disorders among this population accrue direct and indirect public and private costs. The proposed Medicaid expansion is an opportunity to begin to reduce this societal burden through federally funded access to effective treatment for substance use disorders.

- The New Hampshire Department of Corrections estimates that 70% of this population has a diagnosable substance use disorder that requires treatment.^{xxi}
- 90+% of revocations of parole in New Hampshire are due to condition violations involving parolees who used drugs or alcohol.^{xxii}
- Currently, these potential beneficiaries are largely uninsured, without access to a payer for treatment, and must wait for state contracted providers to have an opening for indigent care. Wait time often exceeds 6 weeks, during which parolees remain incarcerated while waiting for an opening. Also, it is not unusual for an individual in the community to reoffend while waiting for treatment.^{xxiii}
- The vast majority of the substance use disorder care provided to probationers and parolees is uncompensated; therefore, providers have been impeded in their ability to expand to meet demand.^{xxiv}

Treatment in the community has been shown to dramatically reduce revocation and recidivism.^{xxv} Medicaid expansion would provide access to that treatment. To be clear, this would include treatment overseen through New Hampshire Drug Courts and the New Hampshire Department of Corrections Division of Community Corrections, which have difficulty accessing substance use disorder treatment in many communities due to the lack of available treatment resources.

- When Washington state expanded its Medicaid coverage to low-income childless adults, the state saw a reduction of up to 33% in rates of re-arrest for those who were treated for substance use disorders, as compared to those in need of but not receiving that treatment. This resulted in saving estimated at \$5,000 - \$10,000 for each person treated inclusive of state, county and local dollars.^{xxvi}
- In 2001, California mandated probation or continued parole with substance abuse treatment in lieu of incarceration for adult nonviolent drug offenders and probation and parole violators. The additional costs of treatment were more than offset by savings in other state and county domains, primarily in the costs of incarceration, saving over \$2,000 per offender.^{xxvii}

➤ CHILDREN AND FAMILIES

According to a recent report from the New Hampshire Department of Health and Human Services Maternal and Child Health Prenatal Program, maternal drug use has increased significantly leading to a rise in the number of newborns diagnosed with Neonatal Abstinence Syndrome.^{xxviii} These babies experience signs of withdrawal and require special treatment prior to leaving the hospital. The average hospital stay for newborns with Neonatal Abstinence Syndrome is 16 days as opposed to 3 days for all other US births. Medicaid enrolled patients are disproportionately affected, representing over three quarters of the infants diagnosed with Neonatal Abstinence Syndrome in New Hampshire. These patients are often identified as using drugs during their pregnancy but, the services that they require for treatment are not currently reimbursed by Medicaid and are therefore difficult to access.

There is a prevalence of alcohol and drug problems among families in the child abuse and neglect and juvenile justice systems.^{xxix} Providing substance abusing mothers Medicaid coverage that includes access to substance use disorder services has been shown to reduce delinquency and stabilize families.^{xxx}

➤ LABOR

Employers have been shown to reap economic benefit from access to substance use disorder treatment for their employees.^{xxxi} Studies have shown reduced absenteeism, reduced tardiness, lowered on-the-job-injuries, fewer mistakes, less conflict with co-workers and supervisors, and reduced tardiness among employees who participated in treatment.^{xxxii}

According to the PolEcon report, in New Hampshire:

- Alcohol dependency resulted in over 9,000 fewer male workers in the labor force in 2011, with an associated loss to our economy of \$403.9 million.
- More than 54,000 workers who use alcohol excessively by binge drinking are employed.
- Alcohol dependent male workers earnings are significantly lower than workers without alcohol problems.
- Alcohol dependency resulted in an overall reduction in the state's labor force of 1.2%.
- The value of goods and services of industries was reduced by more than \$71 million because of alcohol-attributable absenteeism in 2011.^{xxxiii}

Outlined above are the costs to businesses related to alcohol. These costs do not account for drug use and dependence problems in the workforce. Arts and entertainment, recreation, wholesale and trade retail, and construction industries have among the highest rates of alcohol problems and the related greatest loss of industry output. These are all industries from which employees would qualify for Medicaid under expansion and would therefore benefit from the increased access to substance use disorder services.

CONCLUSION

The net benefit to the New Hampshire economy that accrues from increased access to treatment makes a compelling benefit-to-cost rationale for expanding access to treatment programs and increasing New Hampshire's low treatment rates. By expanding Medicaid, New Hampshire will, among other significant benefits:

- Provide substance use disorder treatment services to approximately 8,000 eligible recipients
- Significantly address New Hampshire's lack of access to substance use disorder treatment for those in need of it
- Reduce healthcare costs associated with untreated substance misuse
- Reduce overall Medicaid costs
- Reduce costly recidivism for individuals on probation and parole
- Reduce costly recidivism for New Hampshire Hospital patients
- Increase worker productivity by providing access to treatment for lower paid workers currently without health insurance coverage

The 2012 PolEcon Report concludes that "alcohol treatment and prevention is likely to have a greater long-term economic impact than nearly all other strategies to improve the performance of the New Hampshire economy."^{xxxiv} Providing access to substance use disorder treatment for New Hampshire Medicaid beneficiaries would not only improve the performance of New Hampshire's economy, it would significantly improve the health of New Hampshire citizens, and substantially bend the healthcare cost curve. Ensuring access to substance use disorder services for New Hampshire's current Medicaid and expansion populations is an investment that New Hampshire cannot afford to pass up.

ⁱ CASA national Center on Addiction and Substance Abuse at Columbia University (May 2009). *Shoveling Up II: The Impact of Substance Abuse on Federal, State and Local Budgets*.

ⁱⁱ Gottlob, B., Polecon Research (December 2012). *The High Cost of Excessive Alcohol Consumption in New Hampshire*. <http://new-futures.org/sites/default/files/PolEcon%20Executive%20SummaryFINAL.pdf>

ⁱⁱⁱ National Survey on Drug Use and Health (2011). Released by SAMHSA January 8, 2013.

^{iv} Center for Disease Control, CDC WONDER online databases: <http://wonder.cdc.gov/cmfi-icd10.html>

^v CBHSQ Data Review: State and Socio-demographic Variations in Substance Use Treatment Need and Receipt in the United States. http://www.samhsa.gov/data/2k11/DataReview/DR004_State_VariationsDataReview.pdf

^{vi} Substance Abuse and Mental Health Services Administration. Enrollment under the Medicaid Expansion and Health Insurance Exchanges: A focus on Those with Behavioral Health Conditions in New Hampshire. http://store.samhsa.gov/shin/content//PEP13-BHPREV-ACA/NSDUH_state_profile_New_Hampshire_508_final_extra.pdf

^{vii} Cost offset of treatment services. (2009, April). *Substance Abuse and Mental Health Administration*. http://www.samhsa.gov/grants/CSAT-GPRA/general/SAIS_GPRA_CostOffsetSubstanceAbuse.pdf

^{viii} Prendergast M.L., Podus D., Chang E., Urada D. *Drug Alcohol Dependency* (2002, June)67(1); Cost offset of treatment services. (2009, April). *Substance Abuse and Mental Health Administration*. http://www.samhsa.gov/grants/CSAT-GPRA/general/SAIS_GPRA_CostOffsetSubstanceAbuse.pdf; DASA treatment expansion: Spring 2009 update. (2009, June). *Washington State Department of Social and Health Services*. <http://www.dshs.wa.gov/pdf/ms/rda/research/4/75.pdf>; and, Medicaid managed

care cost savings - A synthesis of 24 studies. (2009, March). *The Lewin Group*. <http://www.lewin.com/publications/publication/395/>

^x Department of Health and Human Services Centers for Medicare & Medicaid Services, Dear State Medicaid Director letter RE: Essential Health Benefits in the Medicaid Program, (2012, November 20). <http://www.medicaid.gov/Federal-Policy-Guidance/downloads/SMD-12-003.pdf>

^x DASA treatment expansion: Spring 2009 update. (2009, June). *Washington State Department of Social and Health Services*. <http://www.dshs.wa.gov/pdf/ms/rda/research/4/75.pdf>

^{xi} Clark, Robin, and Mihail Samnaliev and Mark McGovern. Impact of Substance Disorders on Medical Expenditures for Medicaid Beneficiaries With Behavioral Health Disorders. *Psychiatric Services* 60(1).

^{xii} Ibid.

^{xiii} Ibid.

^{xiv} NH Department of Corrections, Reasons for Return to Prison (2012, June). http://www.nh.gov/nhd/doc/divisions/publicinformation/documents/recidivism2012_reasons.pdf

^{xv} Shagoury, P., Study of New Hampshire Hospital Patient Substance Use Patterns. (January – July 2012).

^{xvi} Ibid.

^{xvii} Ibid.

^{xviii} McLoed, R., New Hampshire Hospital, email to A. Pepin, New Futures, (2013, August 22).

^{xix} The Lewin Group and DMA Health Strategies. NH Medicaid Expansion Study Phase III: An Analysis of Health Benefit Design Options for Current and Newly Eligible Medicaid Beneficiaries September 2013.

<http://www.dhhs.nh.gov/sme/documents/lewin-nh-med-expansion-phase-iii-report.pdf>

^{xx} September 17, 2013 presentation documented in the Report of the Commission to Study Expansion of Medicaid Eligibility, (2013, October 15) pp 75-80. <http://www.dhhs.nh.gov/sme/documents/report-commission-10152013.pdf>

^{xxi} H. Hanks, Director of Medical & Forensic Services, NH Department of Corrections. Mental Health and Substance Use Disorder Roundtable presentation before NH House of Representatives, (2013, April 17).

^{xxii} Justice Center Council for State Governments. Justice Reinvestment in New Hampshire, (2010, January).

^{xxiii} A. Escalante, President of the NH Alcohol and other Drug Service Providers Association. Mental Health and Substance Use Disorder Roundtable presentation before NH House of Representatives, (2013, April 17).

^{xxiv} Ibid.

^{xxv} Justice Center Council for State Governments. Justice Reinvestment in New Hampshire, (2010, January).

^{xxvi} DuBose, Michael. Medicaid expansion and the local criminal justice system. *American Jails*, (2011, November/December).

^{xxvii} Anglin, M., et al. Offender Diversion into Substance use Disorder Treatment: The Economic Impact of California's Proposition 36. *American Journal of Public Health*: (2013, June) Vol 103(6).

^{xxviii} Neonatal Abstinence Syndrome, NH DHHS Maternal and Child Health, (2013, May). <http://www.dhhs.nh.gov/sphs/bchs/mch/index.htm>

^{xxix} Douglas-Siegal, J., and J. Ryan. The effect of recovery coaches for substance-involved mothers in child welfare: Impact of juvenile delinquency. *Journal of Substance Abuse Treatment*, 45(4).

^{xxx} Ibid.

^{xxxi} Jordan, N., G. Grissom, et al. (2008). Economic benefit of chemical dependency treatment to employers. *Journal of Substance Abuse Treatment*, 34(30).

^{xxxii} Jordan, N., G. Grissom, et al. (2008). Economic benefit of chemical dependency treatment to employers. *Journal of Substance Abuse Treatment*, 34(30); and NIDA, Principles of Addiction Treatment. 1999.

^{xxxiii} Gottlob, B., Polecon Research (December 2012). The High Cost of Excessive Alcohol Consumption in New Hampshire.

^{xxxiv} Ibid. at p.