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*A partnership among Keystone College, King's College, Luzerne County Community College, Marywood University, Misericordia University, Penn State Wilkes-Barre, The Commonwealth Medical College, University of Scranton, & Wilkes University*

# **MENTAL HEALTH & SUBSTANCE ABUSE**

Mental health and substance abuse issues are two separate but interrelated health concerns in our communities. This paper studies the mental health and substance abuse challenges within Lackawanna and Luzerne County through secondary data gathering and an overview of scholarly research on this topic.

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## Introduction

The purpose of this paper is to provide a snapshot of our region's mental illness and substance abuse challenges. The issues that drive the health and well-being of our community are multidimensional and cannot be addressed by focusing on any one issue alone. The Institute will illustrate how interconnected efforts can help improve the health of our region and help us become a more healthy and productive community.

This project utilizes both quantitative and qualitative data, but is mostly rooted in qualitative correlation research that affirms the social and economic linkages between mental illness and substance abuse. The Institute collected data from recent indicator reports, the Community Health Needs Assessment, US Census Bureau, US Department of Health and Human Services, World Health Organization, US Department of Housing and Urban Development, and peer-reviewed scholarly journal articles.

First is a presentation of data on mental illness and substance abuse in the region, followed by the identification of assets and gaps in service through the evaluation of treatment options and available facilities. After recognizing the challenges and opportunities available in addressing the issues, the social and economic factors that contribute to incidence are addressed. Finally, The Institute presents recommendations and considerations for public policy development in our region by using a case study sample.

Mental illness and substance abuse have a large impact on individuals, families, and communities. Many Americans experience mental illness or substance use disorders at some point in their lifetimes, and co-occurrence of these disorders is common. (Levit et al., 2008)

There are roughly 450 million people worldwide suffering from mental disorders. Mental disorders represent not only an immense psychological, social, and economic burden to society, but also increase the risk of physical illnesses.<sup>1</sup> Below are the percentages of people diagnosed with a serious mental illness based on annual averages of 2009 and 2010, submitted by the Substance Abuse and Mental Health Services Administration.

## Serious Mental Illness in the Past Year

By Age Group and State: Percentages, Annual Averages Based on 2009 and 2010 NSDUHs

State	18+ (Estimate)	18+ (95% Confidence Interval)	18-25 (Estimate)	18-25 (95% Confidence Interval)	26+ (Estimate)	26+ (95% Confidence Interval)
<b>Total U.S.</b>	4.93	(4.72-5.15)	7.55	(7.23-7.89)	4.47	(4.23-4.73)
<b>Pennsylvania</b>	4.55	(3.94-5.25)	7.33	(6.38-8.42)	4.09	(3.42-4.89)

*Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2009 and 2010 (revised March 2012).*

*NOTE: Serious Mental Illness is defined as having a diagnosable mental, behavioral, or emotional disorder, other than a substance use disorder, that met the criteria found in the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) and resulted in serious functional impairment in carrying out major life activities.*

Many factors affect the mental health of individuals and to some extent the development of substance abuse; therefore, by evaluating the region’s current health status, strategies to increase services, improve access, and also deal with other socio-economic factors come into play. The region can move forward and work to build healthier communities by striving to improve on:

- Prevention and Education of Mental Health and Substance Abuse issues
- Access to affordable health insurance
- Access to affordable housing opportunities
- Access to education and training
- Employment opportunities
- Access to specialized health care services in the form of rehabilitation and mental health facilities

There is a strong relationship between mental health, health status, and income.<sup>2</sup> The World Health Organization notes that people with higher income and social status are linked to better health; additionally, the greater the income gap, the greater the differences will be in health.<sup>3</sup> Other factors include the physical environment they live in, education attainment, personal behavior, and the level of coping skills.<sup>4</sup>

## Background

Mental illness consists of a wide range of mental health conditions such as depression, anxiety disorders, schizophrenia, and a number of addictive behaviors that affect one’s mood, thinking, and behavior. An untreated mental illness can cause problems in a person’s daily life. The stress can cause physical health issues, general ability to function, and inability to maintain constant employment to name a few.<sup>5</sup> The World Health Organization states that the number of individuals with disorders is likely to increase due to factors such as an aging population, the

worsening social and economic challenges and other local and global issues. In addition, those suffering from mental illness often become victims of discrimination and social isolation.<sup>6</sup> Mental illnesses can be managed (with medication and/or counseling) and given the increase in incidences those with mental health issues should not be viewed as outcasts.<sup>7</sup> Patient compliance, however, could remain a challenge.

Mental illness and substance abuse can affect people's lives by inhibiting their performances at school, work, and home. Often, the harmful pattern in which they use substances such as alcohol, marijuana, heroin, and prescriptions drugs to alter their moods leads to serious problems and suffering in their personal relationships and employment.<sup>8</sup>

Stigma associated with mental health problems is a significant public health issue. It results in the social exclusion of people with mental health issues and inhibits help-seeking and recovery for those individuals. Stigma involves a combination of inaccurate knowledge and stigmatizing attitudes, leading to individuals being excluded from society and discriminated against. Different mental health problems attract particular forms of stigma including dangerousness, social distance and blame. Offering community development workshops involving dialogue and engagement between all segments of the population may reduce the significant levels of stigma that exist within communities.<sup>9</sup>

Research shows that mental and substance abuse conditions often co-occur. In other words, individuals with substance abuse conditions often have a mental health condition at the same time and vice versa.<sup>10</sup> According to the Mental Health and Substance Abuse Services Administration:

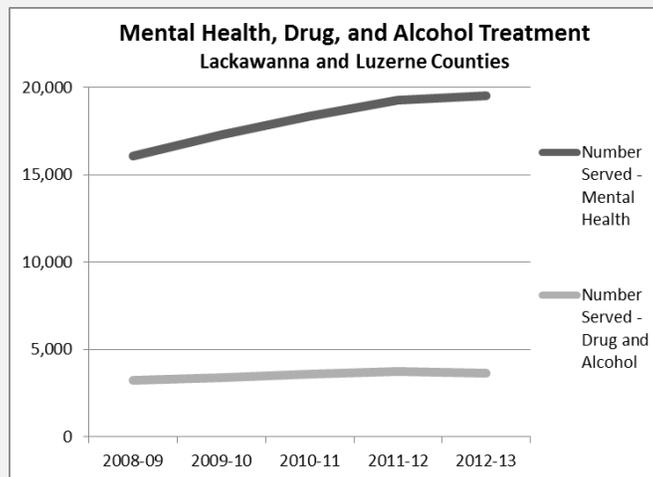
- Over 8.9 million persons in the United States have co-occurring disorders; that is, they have both a mental and substance use disorder.
- Among the 8.9 million adults with any mental illness and a substance use disorder, 44 percent received substance use treatment or mental health treatment in the past year, 13.5 percent received both mental health treatment and substance use treatment, and 37.6 percent did not receive any treatment.
- Poverty is also found to be correlated with the co-occurrence of medical and behavioral health conditions. Adults with mental illness/substance use disorders are twice as likely to have incomes less than 150% of poverty level as adults without either disorder.

Their research also shows that for the reasons above it is important to focus on treatments that target both mental and substance abuse concurrently. Studies show that this increases the likelihood of better outcomes such as:

- Reduced substance use
- Improved psychiatric symptoms and functioning
- Decreased hospitalization
- Increased housing stability
- Fewer arrests
- Improved quality of life

## Secondary Data

Anecdotal evidence and media reports on mental illness and addiction suggest the acute impacts of behavior health issues in our region’s communities. Furthermore, strong quantitative evidence supports the conclusion that mental health issues and drug and alcohol abuse are growing in the region. The following data on mental health and drug and alcohol diagnoses covers Lackawanna and Luzerne Counties Medical Assistance (MA) recipients. A full series of data tables can be found in the Appendix.



Source: Northeast Behavioral Health Care Consortium

In Lackawanna and Luzerne counties, the number of (MA) individuals diagnosed for mental health issues has risen significantly since 2008, with an average increase of 5 percent per year. The number of individuals receiving drug and alcohol treatment has trended upwards as well, gaining about 5 percent per year until falling back slightly in the last year measured.

Total Mental Health Diagnoses						Total Drug & Alcohol Diagnoses					
Number of Distinct Members						Number of Distinct Members					
	2008-09	2009-10	2010-11	2011-12	2012-13		2008-09	2009-10	2010-11	2011-12	2012-13
Lackawanna	7,155	7,561	8,149	8,541	8,548	Lackawanna	1,299	1,355	1,451	1,499	1,467
Luzerne	8,948	9,718	10,222	10,753	11,001	Luzerne	1,916	2,022	2,110	2,222	2,170
Amount Paid (in thousands of dollars)						Amount Paid (in thousands of dollars)					
	2008-09	2009-10	2010-11	2011-12	2012-13		2008-09	2009-10	2010-11	2011-12	2012-13
Lackawanna	\$34,372	\$36,457	\$34,285	\$32,482	\$29,825	Lackawanna	\$3,143	\$3,663	\$3,587	\$4,215	\$4,176
Luzerne	\$52,819	\$58,250	\$54,791	\$55,314	\$52,580	Luzerne	\$4,765	\$5,861	\$5,518	\$6,127	\$6,567

Source: Northeast Behavioral Health Care Consortium

Though the number of individuals receiving care for mental health has increased, the total amount paid for those services has not followed the same trend. The amount paid for mental health services in the both counties reach a low in the last year analyzed despite more diagnoses. Keeping mental health resources adequately funded is critical in maintaining access. For drug and alcohol treatment, payment amounts have increased, mirroring the upward trend of diagnoses. In fact, the amount paid for drug and alcohol services has grown at a faster pace than the total number of diagnoses for drugs and alcohol.

Trends have varied for different classes of drugs and mental health diagnoses. Among drugs and alcohol, opioid drugs, including heroin, have seen the steepest increase in recent years. This confirms anecdotal evidence that has been widely observed – that heroin and other “hard drug” addiction problems have reached many communities in Lackawanna and Luzerne counties. Drug and alcohol diagnoses classed as “other” have also increased significantly. Diagnoses for alcohol and cannabis have dropped somewhat, while cocaine diagnoses saw a more notable drop.

Drug & Alcohol Diagnoses	
Average Change per Year, 2008-2013	
Alcohol	- 4.6 %
Cannabis	- 1.2 %
Cocaine	- 7.9 %
Opioid	+ 13.3 %
Other	+ 6.6 %
Overall	+ 3.2 %

Source: Northeast Behavioral Health Care Consortium

Among the various classes of mental health diagnoses, nearly all diagnosis types saw an upward trend. Only conduct disorders defied this pattern. The largest increases were among adjustment disorders and autism spectrum disorders, with an average of 8.9 and 8.8 percent increase in diagnoses per year, respectively.

<b>Mental Health Diagnoses</b>	
Average Change per Year, 2008-2013	
Adjustment	+ 8.9 %
Anxiety	+ 6.5 %
Attention Deficit	+ 3.0 %
Autism Spectrum	+ 8.8 %
Bipolar	+ 2.8 %
Conduct	- 0.3 %
Depression	+ 6.0 %
Schizophrenia/Psychosis	+ 0.5 %
Other	+ 2.0 %
Overall	+ 5.0 %

Source: Northeast Behavioral Health Care Consortium

A consistently large share of individuals with mental health diagnoses are youth – this proportion hovers around 40 percent in both counties. The number of youth diagnoses varies widely between diagnosis classes. Individuals under 18 make up a significant majority of cases of adjustment disorders, attention deficit disorders, autism spectrum disorders, and conduct disorders. On the other hand, youth make up about a fifth of anxiety and depression diagnoses, about 15 percent of bipolar diagnoses, and only two to three percent of Schizophrenia/Psychosis cases.

<b>Total Mental Health Diagnoses - Under Age 18</b>					
Number of Distinct Members					
	2008-09	2009-10	2010-11	2011-12	2012-13
Lackawanna	2,882	2,920	3,132	3,347	3,341
Luzerne	3,881	4,146	4,374	4,500	4,780
As a Percentage of All Distinct Members					
	2008-09	2009-10	2010-11	2011-12	2012-13
Lackawanna	40.3%	38.6%	38.4%	39.2%	39.1%
Luzerne	43.4%	42.7%	42.8%	41.8%	43.5%
<b>Total Drug &amp; Alcohol Diagnoses - Under Age 18</b>					
Number of Distinct Members					
	2008-09	2009-10	2010-11	2011-12	2012-13
Lackawanna	141	165	148	159	108
Luzerne	208	202	194	220	190
As a Percentage of All Distinct Members					
	2008-09	2009-10	2010-11	2011-12	2012-13
Lackawanna	10.9%	12.2%	10.2%	10.6%	7.4%
Luzerne	10.9%	10.0%	9.2%	9.9%	8.8%

Source: Northeast Behavioral Health Care Consortium

Children and adolescents make up a much smaller percentage of those with drug and alcohol addiction, and this proportion has trended downward slightly. However, youth make up about one-third of Cannabis diagnoses. Opioid addiction diagnoses among youth have been more numerous in Lackawanna County than in Luzerne County. Lackawanna County has averaged about eighteen such diagnoses per year, while Luzerne County, which has a larger population, has averaged about eleven.

Among other indicators of mental health and drug abuse, the two counties also show challenges. The rate of excessive alcohol consumption is higher in both counties than the statewide average. Furthermore, 22 percent of adults lack social support, which is a potential contributor to mental illness and addiction issues. The average number of poor mental health days in the two counties was also a bit higher than the average for Pennsylvania.

<b>Behavioral Health Factors</b>			
	Lackawanna	Luzerne	Pennsylvania
Rate of Excessive Drinking	23 %	21 %	17 %
Rate of Inadequate Social Support	22 %	22 %	21 %
Poor Mental Health Days	3.8	4.0	3.6

Source: County Health Rankings

Locally, the admissions figures show wide deviations. There was a 31 percent increase in Lackawanna County from 2002 to 2012 in terms of admissions, while Luzerne and Pennsylvania noted large decreases. However, drug and alcohol abuse is perceived to be increasing. The number of admissions is likely more reflective of the level of resources available for those seeking treatment than the level of drug abuse occurring in Northeastern Pennsylvania.

	<b>2012</b>				<b>2002</b>			
	<b>Admissions</b>	<b>Alcohol</b>	<b>Drugs</b>	<b>Other</b>	<b>Admissions</b>	<b>Alcohol</b>	<b>Drugs</b>	<b>Other</b>
<b>Lackawanna</b>	2,293	1,186	1,068	39	1,753	780	961	12
<b>Luzerne</b>	612	353	233	26	1,741	765	965	11
<b>Pennsylvania</b>	50,781	30,168	20,125	488	70,673	38,780	30,805	1,088

Source: Pennsylvania County Profiles

The impact of mental health and addiction can also be seen indirectly through crime records. Recent crime statistics by Pennsylvania’s Uniform Crime Reporting System detail the number of drug and alcohol arrests in both Lackawanna and Luzerne Counties. These numbers show that in Lackawanna County there has been a sustained decline in drug arrests in the past several years, while Luzerne County saw a slight increase during the same time period. Both counties have seen a significant increase in alcohol violations since 2006. It is important to note that the

number of drug and alcohol arrests does not correlate perfectly with drug and alcohol abuse, as the level of enforcement by law enforcement agencies varies between times and places.

Type of Arrest	Lackawanna County			Luzerne County		
	2006	2011	2012	2006	2011	2012
<b>Drug Violations</b>	983	794	742	1,090	1,137	1,186
<b>Other Alcohol Crimes</b>	944	1,485	1,329	1,423	2,381	2,226
<b>Total</b>	<b>1,927</b>	<b>2,279</b>	<b>2,071</b>	<b>2,513</b>	<b>3,518</b>	<b>3,412</b>

Source: Pennsylvania Uniform Crime Reporting System, Focus Report, 2006-2012

Overall, the secondary data analysis confirms that mental health and addiction are a major public health concern in Lackawanna and Luzerne counties. The two counties lag behind the state in several key behavioral health factors including the rate of excessive drinking, the average number of poor mental health days, and the number of adults without adequate social support. Even the relatively high unemployment rate and relatively low median income seen in Northeastern Pennsylvania are relevant to the problem, because economic and social context are prime factors in mental health and drug and alcohol abuse. As indicated by the growth in diagnoses of several drug classes and most categories of mental health disorders, these problems are growing at a rapid pace and the region must fully understand the nature and scope of the issue.

## Contributing Factors

Although it is accepted that the general health of a population is largely determined by the social and environmental conditions of the community, that same realization about mental health has been slower to be acknowledged. Mental health and substance abuse are extremely sensitive to many societal stressors such as unemployment, poverty, homelessness and violence. These risk factors can foster mental illness and addictions, conditions that often cause major disruption in education, employment and social relationships. This results in further isolation, poverty, unemployment, and homelessness, ensuring that the illness cycle continues.<sup>11</sup>

### Genetic Predisposition

Mounting evidence suggests that genetic factors may predispose an individual to both mental disorders and addiction.<sup>12</sup> There seem to be inherited traits that make mental illness more common in people whose blood relatives also have a mental illness. A family history of addiction and mental illness or exposure to toxins, alcohol, or drugs while in the womb can, at times, be attributed to current mental illness.<sup>13</sup> However, even for those genetically disposed, environmental factors plays a significant role in whether a person will develop a disorder.<sup>14</sup>

## Economic Factors

Studies suggest that economic insecurity produces an increase in mental health problems such as depression, suicide and substance abuse. Job loss is often experienced as a stressful life event, challenging an individual's ability to cope, both through financial strain and through the loss of the psychosocial benefits of work, which in some cases may induce negative changes in mental health. For example, a husband's job loss may increase psychological distress in his wife as severely as do adverse events that she experiences directly. Economic downturn and job loss often leads to increased substance use at the individual level but can also have an effect on the population as a whole.<sup>15</sup>

Public programs such as Medicaid and other state funding are responsible for the greater part of mental and substance abuse treatment programs.<sup>16</sup> In 2003, 77 percent of expenditures came from public funding; it is predicted that by 2014 this number will reach 83 percent. In light of this information, mending the mental illness and substance abuse predicament is critical for the health status and the future of the economic development of our region.

Current social and economic circumstances can cause a myriad of physical and mental issues. Under these circumstances, an increase of problems such as depression, anxiety and substance abuse can arise. The link between poverty and mental health is well known: people using mental health services identified money problems as the leading cause of their stress and anxiety.<sup>17</sup> Furthermore, the lack of job growth and health care coverage, poverty, unemployment and homelessness has contributed to the prevalence of substance abuse and mental illness in our region.

Job growth to population growth in Lackawanna and Luzerne County was a negative ratio, suggesting that the region's population is growing faster than the number of available jobs.<sup>18</sup>

<b>Job Growth-to-Population Growth Ratio</b>					
	Ratio	Total Employment 2001	Total Employment 2011	Total Population 2001	Total Population 2011
<b>Lackawanna County</b>	-0.796	98,551	96,811	211,980	214,166
<b>Luzerne County</b>	-0.713	141,944	138,423	315,711	320,651
<b>Pennsylvania</b>	0.005	5,685,000	5,687,000	12,298,940	12,742,886
<b>U.S.</b>	-0.016	131,919,000	131,497,000	284,796,887	311,591,517

*Source: 2013 Indicators Report Lackawanna and Luzerne County*

Poverty in Lackawanna and Luzerne counties has risen since 2010. The reported data shows a significant increase in the percentage of families with children under 18 living below the poverty level in both counties as well as the state.<sup>19</sup>

<b>Poverty Level- Families with Children Under 18</b>		
	<b>2010</b>	<b>2011</b>
<b>Lackawanna</b>	<b>11.4%</b>	<b>15.3%</b>
<b>Luzerne</b>	<b>10.5%</b>	<b>22.2%</b>
<b>Pennsylvania</b>	<b>11.3%</b>	<b>16.3%</b>

*Source: 2013 Indicators Report Lackawanna and Luzerne County*

The region includes a large population of low income residents. Given the region’s economic history, along with the recent recession, the number of low income residents has grown dramatically. Wages have not kept pace with the rising cost of living. Because of fiscal and human resource constraints, health care and social service resources have not kept pace with growing demand.<sup>20</sup>

The 2010 US Census reported that 14.1% of Luzerne County residents lived below the poverty level, compared to 13.1% in 2009, showing an increase in one year. Meanwhile, in Lackawanna County 13.3 % of residents lived below the poverty level in 2010, showing a decrease from 2009 when 14.4% of its residents were living below the poverty level.<sup>21</sup>

Unemployment showed significant increases from 2008-2010. After a peak in 2010, both counties as well as the state, reported slight unemployment decreases.

<b>Annual Unemployment Rate</b>			
	<b>Lackawanna</b>	<b>Luzerne</b>	<b>Pennsylvania</b>
<b>2008</b>	5.9	6.3	5.4
<b>2009</b>	8.1	8.9	8.0
<b>2010</b>	9.1	9.9	8.5
<b>2011</b>	9.1	9.4	7.9
<b>2012</b>	8.8	9.5	7.8

*Source: 2013 Indicators Report Lackawanna and Luzerne County*

Adequate health coverage is necessary to achieve the best possible outcomes. Medical Assistance coverage for individuals suffering from mental illness and substance abuse is vital

because studies have shown that individuals without health insurance coverage are less likely to receive the much-needed routine checkups where early detection and treatment could lower the incidence of illness.<sup>22</sup> Evidence shows that delays in treatment can lead to the development of various psychiatric and physical co-morbidities and the adoption of life-threatening self-treatments.<sup>23</sup>

The number of people enrolled in Medical Assistance has risen since 2011 in both counties, while the amount of residents with no health insurance has declined slightly since 2010. The majority of our region’s population has private health insurance.<sup>24</sup> Since there are few doctors, specialists and dentists accepting medical assistance in our area today, it is essential to educate primary care physicians and patients about the region’s availability of specialists that are accepting medical assistance coverage.<sup>25</sup>

Medical Assistance Enrollment						
	Lackawanna		Luzerne		Pennsylvania	
	# of individuals	% of population	# of individuals	% of population	# of Individuals	% of population
<b>2010</b>	39,788	19.10%	62,628	20.00%	2,255,181	17.90%
<b>2011</b>	38,523	18.00%	61,569	19.20%	2,181,399	17.20%
<b>2012</b>	38,886	18.10%	61,899	19.30%	2,190,397	17.32%

Source: 2013 Indicators Report Lackawanna and Luzerne County, The Institute.

Health Insurance Coverage									
	Lackawanna			Luzerne			Pennsylvania		
	2009	2010	2011	2009	2010	2011	2009	2010	2011
<b>Private Health Insurance</b>	73.7%	71.4%	72.8%	74.3%	69.2%	70.1%	74.4%	72.9%	72.0%
<b>No Health Insurance</b>	8.5%	10.4%	9.3%	9.0%	11.0%	9.3%	9.9%	10.2%	10.1%

Source: 2013 Indicators Report Lackawanna and Luzerne County, The Institute.

### Homelessness

For many homeless people, substance abuse and mental illness are co-occurring. Often times, people with untreated mental illness use street drugs as a form of self-medication. Homeless people with both a mental illness and substance abuse problem experience obstacles to recovery such as violence, victimization and a cycle between jails, the streets and emergency rooms. From many, survival is most important, and finding food and shelter is a higher priority than seeking help for substance abuse or mental illness.<sup>26</sup>

HUD's 2012 Continuum of Care reported that in Pennsylvania there were roughly 2,730 severely mentally ill homeless people and 3,143 chronic substance abuse users that were homeless.<sup>27</sup> People with serious mental illness are unable to sustain a level of independent living; if they have been living on the streets or in shelters for long periods of time, services to help them with a psychiatric or substance abuse problem are necessary in order to offer housing stability.<sup>28</sup>

### **Comorbidity**

Adults with co-occurring serious mental health conditions and substance use problems are underserved by current mental health systems.<sup>29</sup> Fragmented and uncoordinated services create a service gap for persons with co-occurring disorders. Effective treatment should consist of:

- Same health professional working in one setting providing appropriate treatment for issues in a coordinated fashion
- Viewing recovery as a long-term, community based process
- Comprehensive program taking into account the individual's life aspects: stress management, social networks, jobs, and housing.<sup>30</sup>

The program should view substance abuse as intertwined with mental illness, not a separate issue, and therefore provide solutions to both illnesses at the same time. Dual diagnosis services require assertive outreach, family counseling, and even money and relationship management.<sup>31</sup>

### **Opportunities**

Although mental health and substance abuse problems bring challenges, these can be turned into opportunities to address the issues that are plaguing our communities. Building a strong foundation through social support can teach healthy coping skills and strategies to minimize substance abuse, cope with upset, and strengthen community as well as personal relationships. Stress management skills, community support groups and basic education about disorders and substance abuse can empower people to share in the decision-making process and be actively involved in setting goals and developing strategies for changing their circumstances.<sup>32</sup>

### **Social Support**

There has been an international movement to promote mental health in light of the increased understanding of the toll that mental illness and addictions take on individuals, families, and communities. The World Health Organization (WHO) has been instrumental in bringing attention to the need for more intensive prevention efforts, even in cases of psychoses in the

form of national mental health plans. These plans are similar in that they focus on improving the mental health status within communities and ensuring responsive mental health and addiction systems that involve the patients themselves and their families.<sup>33</sup>

As one example, the Community Resource Base Model part of Canada's Provincial Policy Framework is designed to complement and work in harmony with the other elements. It provides the framework to support the well-being of any person with mental health needs by linking the individual to community and informal resources such as family caregivers, self-help support groups and generic community activities (ex. churches, social and recreation groups), as well as income, housing, education and work.<sup>34</sup>

### **Public Awareness and Prevention**

Our current economic conditions dictate where resources should be allocated so that utilization is successful while at the same time guarding against misuse. For this reason, an awareness of available resources in a region is necessary to avoid the mismanagement of both public and private funds. In the same way, prevention can have an impact on a community's economy and health status. It is important to ask if investing in prevention programs is a good use of available resources.

Preventive interventions work by focusing on reducing risk factors and enhancing protective factors associated with mental ill health and substance abuse. For example, poor people often live without the basic freedoms of security, action and choice; they often lack adequate food, shelter, education and health, hardships that keep them from leading a sound quality of life. Populations living in poor socioeconomic circumstances are at increased risk of poor mental health and depression. There is strong evidence that the same aforementioned determinants of mental health have led not only to a range of mental health problems but also to substance abuse.<sup>35</sup>

### **Advocacy and Community Resources**

Advocacy is the process of influencing the public's attitude toward a specific issue or group. Since unfairness, exclusion, and general misunderstanding can still be found within the community. Advocacy can change community attitudes and misconception by assisting people in gaining access to resources, funding, and information. It can help make service providers and organizations accountable, ensuring there is transparency in their actions and decisions. Most importantly, advocacy ensures that those suffering from a disability have a legitimate voice so they are represented.<sup>36</sup>

Community resources provide people and communities with information and opportunities they would not normally come across. These resources at times have the ability to enable those living in communities to accomplish the goals they have set out in life. Resources are able to provide information and emotional support to the community's residents by enabling self-sufficiency as well as alternatives for a better lifestyle. Making these resources available is beneficial to a community's health and well-being. It has the potential to remove stigmas as well as strengthen a person's ties to the community.<sup>37</sup>

## **Regional Resource Assessment**

Many individuals in our region suffer from mental illness and substance abuse; however, there are many organizations that these individuals may use to assist them throughout the recovery process. This section is not meant to be a complete list of all providers for mental health and addiction in Lackawanna and Luzerne counties. Rather, it represents the best possible listing of resources in our area based on the data available to The Institute at the time of the study.

Northeast Behavioral Health Care Consortium is a non-profit organization which was created by Lackawanna, Luzerne, Susquehanna, and Wyoming Counties to manage the HealthChoices behavioral health program in these four counties. HealthChoices is a statewide, mandatory, managed care program serving individuals who receive Medical Assistance. The program started in our counties on July 1, 2006 and currently serves over 90,000 members in these four counties. NBHCC makes it a mission to provide enhanced access to high quality, fiscally responsible, recovery oriented Behavioral Health Services. NBHCC helps the individuals by providing information about health plans and benefits, referrals to health and social services that are not covered through one's health plan, as well as self-help and support groups, treatment for mental health or drug and alcohol related problems, transportation to appointments or meetings, etc. These services are also available for non-adults who are not yet 18 years old. The services that HBHCC has provided for individuals of this region have made a tremendous impact on the lives of many.

The mission of Advocacy Alliance is to promote mental well-being, and support recovery for adults who have a mental illness; resiliency for children and adolescents who have emotional/behavioral disorders; everyday Lives for individuals who have developmental disabilities; and independence for older adults and individuals with physical disabilities, by providing advocacy and services. There are a vast amount of services provided through Advocacy Alliance including mental health advocacy, community developmental disabilities services, community mental health services, court appointed special advocate, consumer/family satisfaction teams, consumer financial management services, early

intervention evaluation teams, and WARM LINES. Advocacy Alliance has multiple locations throughout Pennsylvania, but in particular, there are two locations in Scranton and Wilkes-Barre which are easily accessible for the individuals of northeastern Pennsylvania who require their resources.

Friendship House is an establishment that is dedicated to providing programs and services designed to enhance the emotional, behavioral and social well-being of children and families in the Pennsylvania communities we serve. Their services include a wide range of programs and services for children experiencing emotional and behavioral difficulties and/or mental health issues, those who have been traumatized by loss, abuse and neglect, children who have witnessed violence, and children with autism spectrum disorders. The four broad categories of assistance that Friendship House provides are Autism Services, Center-Based Services, Community and Family-Based Programs, and Out-of-Home Services. The Center-Based Services that are offered at Friendship Home assist children to effectively transition back into the daily routine of home, school, and community, behave appropriately and manage emotions. Partial hospitalization services are offered to children who need more intensive and comprehensive treatment services than outpatient therapy alone. The community service programs within Friendship House cover a wide range of outpatient and learning programs for children and adults. The outpatient services include trauma and loss, children and family counseling services, parent-child interaction therapy, and trauma counseling for military families. The other programs that it provides are School-Based Behavioral Health, East Mountain Center for Early Learning (Community Daycare/Pre-K), and Growing by Leaps and Bounds Center for Early Learning (Community Daycare/Pre-K). Lastly, the Out-of-Home Placement Services of the Friendship House include foster care, kinship care, adoptions, and group homes. The needs of the children which include a sense of safety, security, and overall well-being are a paramount in the delivery of services. Friendship House is truly dedicated to providing the programs and services designed to enhance the emotional, behavioral, and social well-being of the children and families in Pennsylvania.

The Scranton Counseling Center is a private, nonprofit organization incorporated in 1947. Through the years, the Center has become a comprehensive behavioral healthcare program which provides a complete range of evaluative and treatment services. These services are provided with direct at the facilities in Scranton or through affiliations with other qualified providers and programs. Its mission is to promote wellness and recovery by providing an environment which is considerate of and sensitive to the unique, personal, and cultural attributes of those that they serve, and which empowers them to make choices about their lives, pursue their personal goals, and maximize their quality of life while respecting their individual dignity and confidentiality. The staff at the Scranton Counseling Center is able to

provide a variety of treatment services as the staff includes psychiatrists, licensed psychologists, masters level behavioral specialists, licensed social workers, art therapists, nurses, caseworkers, behavioral analysts as well as other mental health and intellectual disability specialists. The services that are provided also cover a wide range of coverage including adult programs, Autism programs for children, child and adolescent services, Children's Behavioral Health Rehabilitation Services (BHRS), Critical Incident Stress Management (CISM), Dual Diagnosis Residential Program, Early Intervention Program, emergency/crisis Intervention, Employee Assistance Program, family based mental health services program, intensive case management & resource coordination case management, intellectual disabilities department, partial hospitalization program, psychiatric rehabilitation program, psychiatric rehabilitation program, and school-based case management. The Scranton Counseling Center has helped many individuals cope with their problems and has proven to be successful for the individuals who made use of their resources.

Step by Step, Inc. is a private, non-profit corporation devoted to providing community support services to children and adults in Pennsylvania with mental illness, intellectual disabilities and autism. Step by Step serves fourteen counties in Pennsylvania including Lackawanna and Luzerne Counties. Step by Step has maintained a progressive view of the potential of individuals with disabilities by providing safe, supervised, home-like settings for countless individuals. The homes are designed for each individual to experience and learn skills necessary for living independently within a community setting. Today, Step by Step fulfills its mission by also providing an array of services allowing for people with intellectual disabilities, mental illness, and autism in their own home or with family. Their mission is committing to enhancing the quality of life and personal growth of those they serve through support for individual choice and independence. Step by Step has received CARF Accreditation. CARF is an internationally recognized accreditation agency who assists organizations improve the quality and value of their services through the implementation of standards promoting "state of the art" organizational and program practices. The services that Step by Step has received accreditation is the following: Community Services- Family Services, Host Family Services, Supported Living; Employment Services- Job Supports, Job-Site Training, Employment Planning Services; Case Management/Service Coordination: Psychosocial Rehabilitation, Outpatient Treatment: Alcohol and Other Drugs/Addictions, Supported Living: Psychosocial Rehabilitation, and Behavioral Consultation: Children and Adolescents. Step by Step offers a broad spectrum of programs administered by a multi-disciplined staff of professionals with a singular focus on improving the quality of life for people with disabilities.

The Community Counseling Services of Northeastern, Pennsylvania of Behavioral Health Services of Wyoming Valley provides the expert assistance many people need to get through

the difficult times such anxiety, marital problems, or adjustments to changing life circumstances. The services that CCS offers include outpatient services for people facing the hard times, partial hospitalization programs where patients participate in group, individual, and family therapy, a 24-hour mobile crisis intervention team to help patients in need of emergency psychiatric care, case management services to provide patients assistance in obtaining community resources or to provide additional support to patients in order to prevent hospitalization, services to seniors, and mental health residential home. The Day Development Program is a program which provides activity and guidance to improve overall functioning for developmentally challenged clients. This program includes training in academic, social, and vocational skills. The Community Counseling Services of NEPA has professional and licensed counseling and rehabilitation programs for more than 5,000 individuals annually. Individuals can make use of outpatient services, partial hospitalization, and Type 50 Services including Therapeutic Staff Support (TSS), Behavioral Specialist Consultation (BSC), Mobile Therapy (MT), and Autism Program. Children and adolescents 21-years old or younger who have a psychiatric diagnosis are eligible for Type 50 program.

The Advanced Psychology and Counseling Services of Behavioral Health Services of Wyoming Valley also provide Advanced Psychological and Counseling Services which provide counseling for adults, children, and families. The patients experience the individual attention of a small, confidential private practice, combined with the expanded benefits of the region's comprehensive behavioral health care system. They provide comprehensive outpatient services including psychiatric evaluations and medication management; individual and family therapy for adults, children, and adolescents; and confidential, professional counseling to individual with substance abuse, psychological, marital, family, financial or legal problems. In addition, APCS provides Custody Mediation Services to help parents experiencing a divorce reach agreement on custody issues. The Employee Assistance Programs offer confidential and professional counseling to employees experiencing problems that may affect work performance. The experts at APSC always help when specialized support is necessary.

In Lackawanna County, Northwestern Human Services (NHS), Inc. is a community-based, nonprofit, human services provider with 40 years of experience dealing with the special needs of children and adults. It is an organization which provides innovative solutions to support the unique needs of the individuals we serve by striving to create a caring and responsive environment that promotes the highest standards of integrity and quality. Each person at NHS actively accepts the responsibility to behave in a manner consistent with the mission and values. NHS continuously seeks to understand its customer's expectations and then exceeds them. The organization leads the industry by seeking, developing and empowering the best people while encouraging a collaborative environment to foster innovation in human services.

The services that are provided by the NHS focus on addictive diseases, autism, education, juvenile justice, mental health, and specialized services. The individuals that go to NHS receive assistance through outpatient services, help groups, case management, referrals, consultations, and residential services and programs.

The Community Health Needs Assessment (CHNA), prepared in 2012, was designed to assess health status, accessibility, and patient perception in Lackawanna and Luzerne Counties. The goal was to identify collaborative community-based recommendations to mitigate some of the issues and challenges the region faces.<sup>38</sup> Despite the various resources listed above, the public participation process of the CHNA indicated that there may be some inadequacies in the services available regionally. In general, respondents felt that there are a limited amount of specialty and rehabilitation services in our area. Furthermore, it was found that the resources available to address mental health and drug and alcohol abuse are insufficient to meet the growing demand. People's perception of services is critical, and changing these perceptions through public education has the ability to affect their concerns of available resources in our region, especially since mental health and behavioral problems are on the rise.<sup>39</sup> Access to mental health and addiction resources can be enhanced both by increasing the number and type of services offered locally and better informing the general public about the existing resources available.

Participants reported that, in their experience, non-mental health care professionals do not have the training to detect problems. Further, there is a stigma attached for those diagnosed with mental illnesses that tends to reduce the likelihood that they will seek treatment.<sup>40</sup> The CHNA made the following suggestions, but it seems as though none have been implemented as of yet:

- Create mental health awareness programs with treatment options to reduce the stigma of mental health issues. Mental Health Awareness Programs continue to be developed through the local advocacy organizations. The Advocacy Alliance works closely with the Lackawanna-Susquehanna BH/ID/EI Program in a Garret Lee Smith (GLS) suicide prevention / education initiative. Scranton NAMI has worked to develop a Crisis Intervention Team (CIT) used to educate law enforcement officials and the community at large about mental illness and crisis response efforts involving persons with mental illness. In Lackawanna and Luzerne Counties, new service options have developed for children, youth and families which include; School based outpatient clinics, School Based Behavioral Health Programs (clinical homes (7 staff including two (2) MH Licensed staff, master level clinicians and bachelor level positions) established within specific schools, Parent Child Interactive Therapy (PCIT), an evidence based practice targeted at children

3-7 and their parents, Multi-Systemic Therapy (MST), another evidence based practice. On the adult service side, both Lackawanna and Luzerne counties have experienced growth in Psychiatric Rehabilitation Programs, Assertive Community Treatment Teams (ACT) and Decision Support Centers located within mental health centers that engage persons who are in treatment to take an active role in their treatment and recovery.

- Develop programs for health care workers to receive sensitivity, mental health and cultural training.
- Work to increase the number of mental health specialists.

The long-term benefits of expanding resources include improved productivity at work, home and school, less crime and violence, and an improved quality of life. <sup>41</sup>

Along the same lines, the primary care physicians that responded to the CHNA survey pointed out that:

- Quality of care and treatment by local specialty physicians is an issue/ lack of respect for patients was cited
- Psychiatric care is very limited
- Patients are in need of advocates due to the complexity of new systems.

Currently there are various resources available in our region for treatment of substance abuse and mental illness. There is a need for this information to be more accessible to members of the community since some of the respondents above felt that there was a limited amount of rehabilitation services in our area. There are facilities in our region that treat substance abuse and mental illness simultaneously. Listed below are some of the facilities and programs in our region with a brief description of the types of services offered.

In Lackawanna County:

Facilities	Types of Treatment Offered
<b>Geisinger CMC</b>	Inpatient behavioral health unit and emergency services. Triage of psychosocial problems. Intervention includes recognition and proper diagnosis and management of acute mental. Collaborates with Pinnacle Health Toxicology Center, Scranton Counseling Center for mental health emergencies, local and state police, and appropriate agencies, such as Bureau of Children’s Services, Women’s Resource Center, and Area Agency on Aging.
<b>Moses Taylor Hospital</b>	22 Bed unit offering evaluation with medical and psychiatric intervention; a comprehensive system of behavioral health services for individuals and families living with psychiatric or substance abuse disorders

<b>Marworth</b>	Inpatient/Outpatient services for alcohol and chemical dependency.
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In Luzerne County:

<b>Facilities</b>	<b>Types of Treatment Offered</b>
<b>Choices – Recovery</b>	<ul style="list-style-type: none"> <li>• Methadone to abstinence treatment facility for patients addicted to opiates.</li> <li>• Group &amp; individual counseling</li> <li>• Family involvement</li> <li>• Career Counseling</li> </ul>
<b>Clear Brook Rehabilitation Facility</b>	Adults and adolescents treatment program for alcoholism or chemical dependency.
<b>Community Counseling Services- through Wilkes-Barre General Hospital</b>	Several programs including The Greenhouse, geared at helping patients return to being productive members of the community. Treatments range from substance abuse problems to mental health disorders and intellectual disabilities.
<b>First Hospital - Kingston</b>	<ul style="list-style-type: none"> <li>• Private psychiatric hospital, offering services to children, adolescents and adults.</li> </ul>
<b>Choices</b>	<ul style="list-style-type: none"> <li>• A Children's Unit prepared to meet the individual treatment needs of children from ages 4 through 13.</li> </ul>
<b>Children's Behavioral Rehabilitation Services</b>	<ul style="list-style-type: none"> <li>• An Adolescent Unit for those ages 14 through 18 offering such services as a Licensed School, a Substance Abuse Track, a Survivors Track (for adolescents who have survived sexual abuse), group therapies and social, emotional and psychiatric evaluation.</li> </ul>
<b>Community Counseling Services</b>	<ul style="list-style-type: none"> <li>• Inpatient psychiatric services for adults. Services include an Adult I Program which specializes in treatment for high functioning patients with episodic psychiatric issues; an Adult II Program which is specially designed for patients with concomitant substance abuse and psychiatric issues; an Adult III Program which meets the needs of individuals with chronic mental health problems; and a Short Term Assessment and Treatment Program which combines the benefits of rapid stabilization with an intensive and interactive treatment approach designed for highly motivated patients who can fully participate in a wide range of therapeutic experiences.</li> </ul>
<b>Day Development Program</b>	<ul style="list-style-type: none"> <li>• Developmental opportunities in the areas of academics, socialization and adult daily living skills, as well as personalized development for adults with intellectual disabilities.</li> </ul>

	<ul style="list-style-type: none"> <li>•Outpatient and partial hospitalization substance abuse services for adults and adolescents</li> <li>•Dual diagnosis intensive outpatient program</li> <li>•Medical-based and sub-acute detoxification programs</li> <li>•Relapse counseling</li> <li>•Family education and counseling</li> </ul>
<b>Wilkes-Barre General Crisis Response Recovery Center</b>	Rapid stabilization for people experiencing mental health or substance abuse crisis. Provides: crisis walk-in service, crisis triage, short-term residential services for stabilization, family and group meeting space, onsite case management services, peer support, and easy access to full medical services.

## Case Study

The Co-morbid Mental Health and Substance Misuse in Scotland study was commissioned by the Scottish Executive in 2004 to expand current knowledge regarding co-morbidity and perceived gaps in information on the quality of care, and to help inform the development of the co-morbidity agenda in Scotland.<sup>42</sup> The study revealed that patients who suffered from psychiatric conditions also had substance abuse problems and that their daily struggle with this reality, coupled with inappropriate and inadequate support services, may undermine their fragile self-esteem and coping strategies. Their lives are already characterized by a loss of a routine life, loss of family and friends, a loss or inability to obtain a job as well as a loss in financial security.<sup>43</sup>

Created by The Department of Health, the Scottish model for co-morbidity treatment framework is based on five principles to combat the issue:

- Community and social support, including mental health and first aid,
- Generic services by general practitioners in order to enhance the joint working of primary care settings,
- Services with some specialized functions, such as the community mental health team within the mental health services and the community drug and alcohol team,
- Specialist services, such as the co-morbidity-led nursing services through outreach teams; and
- Highly specialized treatment resources, such as co-morbidity units.<sup>44</sup>

The Scottish model noted this model has significantly improved the joint workings between primary medical care and specialty medical services. This is an important factor since a new

health model – the medical home concept is gaining ground locally.<sup>45</sup> The medical home concept is patient centric with all providers and support personnel working together for the benefit of the patient. Mental health education and training is increasing as a component of medical school curriculum and graduate medical education.

The constituent Departments of The Scottish Office task is to ensure the coordination of policies and guidance that have a bearing on people with mental health and substance use problems and represent their interests in the wider development of government policy.<sup>46</sup> The current policy on the organization of mental health services is set out in *A Framework for Mental Health Services* in Scotland, and the following five principles are recommended:

- Raise awareness of mental health issues,
- Promote positive mental health and well-being,
- Promote effective prevention of mental health problems,
- Early identification of mental illness and effective interventions, and
- Support effective recovery from mental illness.<sup>47</sup>

These principles, when implemented together will improve the well being, support, and general outlook of people with co-occurring substance abuse and mental health issues.

Other policy initiatives include the *Health and Homelessness Guidance*, aimed at improving the health of homeless people; and *Joint Future Agenda*, aimed at getting better outcomes through an integrated approach.<sup>48</sup>

Some government officials remained undecided whether following these national guidelines to implement services was ideal. Together with service providers, they unanimously agreed that specialist staff should be based within mainstream mental health and/or substance misuse services and not necessarily reside in stand-alone specialist co-morbidity teams.<sup>49</sup> The implementers soon learned that training, information and raising awareness are required for service users, service providers, commissioners and the general public in order to contribute to a greater understanding of combined mental health and substance misuse issues and to give rise to attitude change.

## **Public Policy Considerations**

### **Co-Morbidity Education**

Public policies should be based on the assessments of public mental health and the substance abuse needs of the region. To be more effective, the implementation of programs should combine multiple interventions in order to address the needs of target populations and the

specific segments within them. The Scottish government has implemented several policies that have shown improvement in the planning, delivery and quality of mental health services; these policies include the promotion of effective prevention and early intervention of mental health problems, as well as raising awareness of these issues.<sup>50</sup>

Educated people make healthy people; there is a substantial need to educate the general public and children in particular so they may understand co-morbidity. Using this type of education can significantly reduce the stigma and discrimination that those with mental health challenges struggle with every day. Their lives are usually characterized by a loss of routine life, loss of family members and friends, loss of financial security and employment. These issues affect their self-esteem and coping mechanisms, which in turn hinders their ability to seek treatment.<sup>51</sup>

### **Social and Community Support Education**

The groups of people who struggle daily with the realities of living with both mental health and substance abuse problems often have inappropriate or inadequate support services available to them. Community and social support is very important and should include highly specialized treatment resources in the form of co-morbidity centers. The involvement of families and the community as a whole is also fundamental in empowering the individual to work through his or her problems. We can work to bridge the gap between those suffering from addiction and mental health issues and the rest of society. We can build a much stronger community because more people would be willing to get help if they had both personal and community support.<sup>52</sup> This also includes working to improve the access and use of substance abuse facilities and mental disorder clinics in the region.

### **Modeling Scotland**

Scotland has implemented programs to achieve their mental illness prevention goals and improve their mental health services. They have supported change on the ground and worked with a wide range of partners to develop a strategic approach to promote mental well-being and tackle areas where improved services and outcomes are needed.<sup>53</sup>

They published *Standards for Integrated Care Pathways*, a guideline for children and adolescent mental health services, ensuring that the needs and opinions of parents, families, and caregivers are sought.<sup>54</sup>

The Scottish Government's Quality and Efficiency Support Team is a support program aimed at effectively managing psychological therapies' demand and capacity, in order to deliver quicker access within current resources while striving for the same or better outcomes.<sup>55</sup>

Through the work of the Mental Health Collaborative, they have trained over 1000 front line staff on redesign processes and implementing change focused on better-quality care. The Scottish Government has also supported the roll out of Releasing Time to Care, a program also focusing on improving hospital processes and environment to deliver safer, person-centered, more-effective care.<sup>56</sup>

NHS Health Scotland has delivered a Mental Health and Race Equality Program, geared toward learning how to improve services for people from ethnic minority groups.<sup>57</sup>

They have set up a sub-group of the Psychological Therapies Group to look at mental health services for people with substance misuse problems, and to increase access to effective psychological interventions.<sup>58</sup>

The See Me campaign has been implemented to improve the public's attitude and stigma towards people with mental illness and substance abuse problems, and to encourage local anti-stigma initiatives.<sup>59</sup>

They support the funding of programs such as Breathing Space, the Scotland-wide free and confidential phone line aimed at supporting people experiencing low mood or depression, and have piloted a similar program called NHS Living Life, which offers Cognitive Behavioral Therapy services over the phone. They also provide resources via education and informational pamphlets for stress reduction among the general public.<sup>60</sup>

What does all this mean for the region? Due to the relationship between social and economic factors as well as mental health and substance abuse, success in promoting well-being can only be achieved and continued by the involvement and support of the entire community, with the partnerships of agencies in the public, private and non- profit sectors.<sup>61</sup> It gives us the ability to work together to contribute to the improvement of the human, social and economic condition of both Luzerne and Lackawanna Counties.

## Appendix

### Mental Health Diagnosis Data

Source: Northeast Behavioral Health Care Consortium

<b>Total Mental Health Diagnoses</b>					
Number of Distinct Members					
	2008-09	2009-10	2010-11	2011-12	2012-13
Lackawanna	7,155	7,561	8,149	8,541	8,548
Luzerne	8,948	9,718	10,222	10,753	11,001
Amount Paid (in thousands of dollars)					
	2008-09	2009-10	2010-11	2011-12	2012-13
Lackawanna	\$34,372	\$36,457	\$34,285	\$32,482	\$29,825
Luzerne	\$52,819	\$58,250	\$54,791	\$55,314	\$52,580

<b>Mental Health Diagnosis: Adjustment</b>					
Number of Distinct Members					
	2008-09	2009-10	2010-11	2011-12	2012-13
Lackawanna	1,280	1,438	1,683	1,645	1,471
Luzerne	1,106	1,320	1,411	1,586	1,870
Amount Paid (in thousands of dollars)					
	2008-09	2009-10	2010-11	2011-12	2012-13
Lackawanna	\$2,572	\$3,045	\$2,593	\$2,253	\$2,091
Luzerne	\$2,714	\$3,145	\$2,798	\$2,909	\$2,895

<b>Mental Health Diagnosis: Anxiety</b>					
Number of Distinct Members					
	2008-09	2009-10	2010-11	2011-12	2012-13
Lackawanna	576	597	674	746	844
Luzerne	835	917	1,007	942	968
Amount Paid (in thousands of dollars)					
	2008-09	2009-10	2010-11	2011-12	2012-13
Lackawanna	\$709	\$694	\$606	\$634	\$837
Luzerne	\$1,001	\$1,151	\$926	\$1,212	\$1,033

<b>Mental Health Diagnosis: Attention Deficit</b>					
Number of Distinct Members					
	2008-09	2009-10	2010-11	2011-12	2012-13
Lackawanna	1,069	1,038	1,218	1,288	1,293
Luzerne	1,822	1,862	1,902	1,947	1,961
Amount Paid (in thousands of dollars)					
	2008-09	2009-10	2010-11	2011-12	2012-13
Lackawanna	\$5,769	\$4,313	\$4,333	\$3,899	\$2,870
Luzerne	\$10,500	\$10,538	\$8,976	\$8,230	\$7,218

<b>Mental Health Diagnosis: Autism Spectrum</b>					
Number of Distinct Members					
	2008-09	2009-10	2010-11	2011-12	2012-13
Lackawanna	470	458	540	585	586
Luzerne	580	637	726	809	878
Amount Paid (in thousands of dollars)					
	2008-09	2009-10	2010-11	2011-12	2012-13
Lackawanna	\$6,962	\$8,149	\$7,555	\$7,819	\$7,400
Luzerne	\$11,874	\$12,022	\$11,716	\$11,757	\$11,325

<b>Mental Health Diagnosis: Bipolar</b>					
Number of Distinct Members					
	2008-09	2009-10	2010-11	2011-12	2012-13
Lackawanna	1,549	1,495	1,579	1,762	1,773
Luzerne	1,453	1,667	1,663	1,730	1,570
Amount Paid (in thousands of dollars)					
	2008-09	2009-10	2010-11	2011-12	2012-13
Lackawanna	\$4,872	\$4,964	\$4,738	\$4,009	\$3,941
Luzerne	\$5,423	\$6,500	\$6,065	\$5,676	\$5,969

<b>Mental Health Diagnosis: Conduct</b>					
Number of Distinct Members					
	2008-09	2009-10	2010-11	2011-12	2012-13
Lackawanna	718	712	738	678	633
Luzerne	1,196	1,300	1,325	1,351	1,250
Amount Paid (in thousands of dollars)					
	2008-09	2009-10	2010-11	2011-12	2012-13
Lackawanna	\$4,582	\$5,570	\$4,416	\$4,039	\$3,412
Luzerne	\$7,538	\$7,997	\$7,247	\$8,095	\$7,780

<b>Mental Health Diagnosis: Depression</b>					
Number of Distinct Members					
	2008-09	2009-10	2010-11	2011-12	2012-13
Lackawanna	2,762	2,936	3,172	3,300	3,277
Luzerne	3,064	3,367	3,765	4,019	4,050
Amount Paid (in thousands of dollars)					
	2008-09	2009-10	2010-11	2011-12	2012-13
Lackawanna	\$5,350	\$6,110	\$7,004	\$7,121	\$6,318
Luzerne	\$8,308	\$10,612	\$10,182	\$10,394	\$10,285

<b>Mental Health Diagnosis: Schizophrenia/Psychosis</b>					
Number of Distinct Members					
	2008-09	2009-10	2010-11	2011-12	2012-13
Lackawanna	739	705	711	702	736
Luzerne	824	871	916	904	856
Amount Paid (in thousands of dollars)					
	2008-09	2009-10	2010-11	2011-12	2012-13
Lackawanna	\$3,044	\$3,154	\$2,759	\$2,404	\$2,673
Luzerne	\$4,631	\$5,516	\$6,039	\$5,579	\$4,836

<b>Mental Health Diagnosis: Other MH</b>					
Number of Distinct Members					
	2008-09	2009-10	2010-11	2011-12	2012-13
Lackawanna	427	456	493	443	424
Luzerne	386	351	388	471	451
Amount Paid (in thousands of dollars)					
	2008-09	2009-10	2010-11	2011-12	2012-13
Lackawanna	\$512	\$455	\$280	\$305	\$283
Luzerne	\$831	\$768	\$842	\$1,459	\$1,240

<b>Mental Health Diagnoses</b>	
Average Change per Year, 2008-2013	
Adjustment	+ 8.9 %
Anxiety	+ 6.5 %
Attention Deficit	+ 3.0 %
Autism Spectrum	+ 8.8 %
Bipolar	+ 2.8 %
Conduct	- 0.3 %
Depression	+ 6.0 %
Schizophrenia/Psychosis	+ 0.5 %
Other	+ 2.0 %
Overall	+ 5.0 %

## Drug and Alcohol Diagnosis Data

Source: Northeast Behavioral Health Care Consortium

<b>Total Drug &amp; Alcohol Diagnoses</b>					
Number of Distinct Members					
	2008-09	2009-10	2010-11	2011-12	2012-13
Lackawanna	1,299	1,355	1,451	1,499	1,467
Luzerne	1,916	2,022	2,110	2,222	2,170
Amount Paid (in thousands of dollars)					
	2008-09	2009-10	2010-11	2011-12	2012-13
Lackawanna	\$3,143	\$3,663	\$3,587	\$4,215	\$4,176
Luzerne	\$4,765	\$5,861	\$5,518	\$6,127	\$6,567

<b>Drug &amp; Alcohol Diagnoses: Alcohol</b>					
Number of Distinct Members					
	2008-09	2009-10	2010-11	2011-12	2012-13
Lackawanna	575	541	574	591	520
Luzerne	757	669	654	634	575
Amount Paid (in thousands of dollars)					
	2008-09	2009-10	2010-11	2011-12	2012-13
Lackawanna	\$1,367	\$1,338	\$1,256	\$1,429	\$1,340
Luzerne	\$1,975	\$1,661	\$1,311	\$1,316	\$1,370

<b>Drug &amp; Alcohol Diagnoses: Cannabis</b>					
Number of Distinct Members					
	2008-09	2009-10	2010-11	2011-12	2012-13
Lackawanna	207	262	269	264	182
Luzerne	364	388	351	375	348
Amount Paid (in thousands of dollars)					
	2008-09	2009-10	2010-11	2011-12	2012-13
Lackawanna	\$132	\$204	\$192	\$169	\$159
Luzerne	\$211	\$345	\$313	\$336	\$367

<b>Drug &amp; Alcohol Diagnoses: Cocaine</b>					
Number of Distinct Members					
	2008-09	2009-10	2010-11	2011-12	2012-13
Lackawanna	117	89	90	97	63
Luzerne	155	171	160	135	132
Amount Paid (in thousands of dollars)					
	2008-09	2009-10	2010-11	2011-12	2012-13
Lackawanna	\$118	\$121	\$146	\$108	\$60
Luzerne	\$255	\$242	\$223	\$222	\$192

<b>Drug &amp; Alcohol Diagnoses: Opioid</b>					
Number of Distinct Members					
	2008-09	2009-10	2010-11	2011-12	2012-13
Lackawanna	498	532	570	726	804
Luzerne	728	858	999	1,126	1,215
Amount Paid (in thousands of dollars)					
	2008-09	2009-10	2010-11	2011-12	2012-13
Lackawanna	\$1,204	\$1,453	\$1,482	\$1,911	\$1,954
Luzerne	\$1,868	\$2,744	\$2,736	\$3,319	\$3,876

<b>Drug &amp; Alcohol Diagnoses: Other DA</b>					
Number of Distinct Members					
	2008-09	2009-10	2010-11	2011-12	2012-13
Lackawanna	167	198	211	295	225
Luzerne	264	355	417	386	293
Amount Paid (in thousands of dollars)					
	2008-09	2009-10	2010-11	2011-12	2012-13
Lackawanna	\$322	\$547	\$512	\$597	\$663
Luzerne	\$456	\$870	\$937	\$935	\$763

<b>Drug &amp; Alcohol Diagnoses</b>	
Average Change per Year, 2008-2013	
Alcohol	- 4.6 %
Cannabis	- 1.2 %
Cocaine	- 7.9 %
Opioid	+ 13.3 %
Other	+ 6.6 %
Overall	+ 3.2 %

## Endnotes

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- <sup>1</sup> Hosman et al., 2005
- <sup>2</sup> The Community Health Needs Assessment. Dec 2012. The Institute
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- <sup>4</sup> Ibid.
- <sup>5</sup> Mental Illness, Mayo Clinic, September 2012
- <sup>6</sup> Investing in Mental Health, World Health Organization, 2003.
- <sup>7</sup> Mayo Clinic, September 2012, op cit.
- <sup>8</sup> Consumer Fact Sheet on Substance Abuse, NC Department of Health and Human Services
- <sup>9</sup> Knifton, et al. 2009.
- <sup>10</sup> Substance Abuse and Mental Health Services Administration.
- <sup>11</sup> [health.gov.nl.ca/health](http://health.gov.nl.ca/health)
- <sup>12</sup> Genetics: the blueprint of health and disease, Drugabuse.gov, April 2008.
- <sup>13</sup> Mayo Clinic, Mental Illness Causes, Sept. 2012
- <sup>14</sup> Ibid.
- <sup>15</sup> Goldman-Mellor, et al. 2010.
- <sup>16</sup> Levit et al., 2008.
- <sup>17</sup> National Alliance on Mental Illness, Op. cit, Sept. 2003
- <sup>18</sup> 2013 Indicators Report, Op, cit, pg. 17
- <sup>19</sup> 2013 Indicators Report, Op, cit, pg. 15
- <sup>20</sup> The Institute, Dec 2012, op. cit., pg. 7
- <sup>21</sup> US Census Bureau, 2009-2010.
- <sup>22</sup> McLaughlin, C., 2004
- <sup>23</sup> Ibid.
- <sup>24</sup> 2013 Indicators Report Lackawanna and Luzerne County, The Institute for Public Policy & Economic Development.
- <sup>25</sup> Ibid.
- <sup>26</sup> National Coalition for the Homeless, Substance Abuse and Homelessness, 2009.
- <sup>27</sup> U.S. Dept of Housing and Urban Development, 2012 Continuum of Care Homeless Assistance Programs
- <sup>28</sup> Pearson, et. al, 2009
- <sup>29</sup> Sheidow, et. al., 2012.
- <sup>30</sup> Ibid.
- <sup>31</sup> Ibid.
- <sup>32</sup> National Alliance on Mental Illness, Op. cit, Sept. 2003
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- <sup>34</sup> Ibid.
- <sup>35</sup> Prevention of Mental Disorders Effective Interventions and Policy Options, World Health Organization, 2004.
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- <sup>37</sup> Ibid.
- <sup>38</sup> Community Health Needs Assessment, The Institute for Public Policy & Economic Development, December 2012.
- <sup>39</sup> Ibid.
- <sup>40</sup> Ibid.
- <sup>41</sup> Herman, et. al., 2004.
- <sup>42</sup> Baldacchino, A., 2007
- <sup>43</sup> Ibid.
- <sup>44</sup> Ibid.
- <sup>45</sup> Ibid.
- <sup>46</sup> Ibid.

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<sup>47</sup> Ibid.

<sup>48</sup> Ibid.

<sup>49</sup> Ibid.

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