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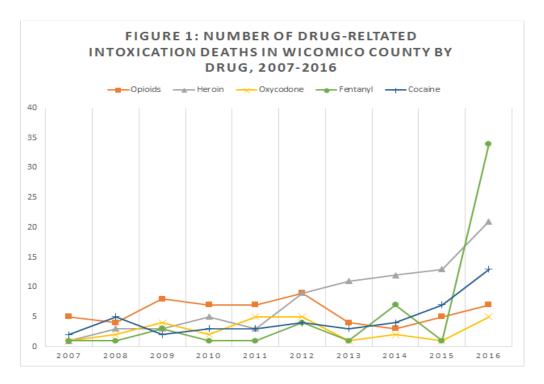
Executive Summary

Maryland Governor Larry Hogan has recently declared a state of emergency for the opioid-addiction crisis. The severity of the opioid epidemic impact on Wicomico County is highlighted by the Maryland Department of Health's annual report on intoxication deaths. The report found that the number of drug and alcohol-related intoxication deaths occurring in Maryland has tripled since 2010. With 2,089 deaths in 2016, Maryland has reached an all-time high. 89% of these deaths were opioid related. In 2015, the Wicomico County Health Department realized that opioid-addiction was a huge problem in their community. To combat this problem, the health department wanted to help citizens who are addicted receive treatment. As a solution, the Community Outreach Addictions Team (COAT) was created. COAT uses an increasingly popular method of a peer approach, where law enforcement, hospitals, and peer support specialists partner to offer treatment to overdose victims.

COAT's first full year of operation was in 2016. During that year, they received 267 calls, with 239 people being served. Of the 239, 183 are Wicomico County residents. The number of addicts enrolled in treatment through COAT was a total of 137 with 101 from Wicomico County. To gauge the success of the program, we calculated COAT's conversion rate (percentage of callers being served that successfully enrolled in treatment) and a return on investment. The purpose of calculating the return of COAT is to evaluate the impact of COAT on the total costs of illicit drug use in Wicomico County. Among Wicomico County residents, COAT's conversion rate is slightly over 55%. Their total conversion rate for the entire program is just above 53%. Assuming 100% of individuals remain sober the program experienced a return of 666% in their first year of operation. Assuming 50% of individuals remain sober, the program experienced a return of 283% in their first year of operation.

Introduction

The severity of the opioid epidemic impact on Wicomico County is highlighted by the Maryland Department of Health's annual report on intoxication deaths. The report found that the number of drug and alcohol-related intoxication deaths occurring in Maryland has tripled since 2010. With 2089 deaths in 2016, Maryland has reached an all-time high. 89% of these deaths were opioid related. Opioids are defined as "heroin and prescription opioid drugs such as oxycodone, hydrocodone, hydromorphone, methadone, tramadol and codeine, and prescribed and illicit fentanyl" (Maryland, 3). These increases are attributed mostly to large increases in heroin and fentanyl-related deaths while prescription opioid-related deaths have remained consistent since 2007.



The Department of Health and Mental Hygiene's annual report highlights the lethality of these drugs. The report uses a count of deaths attributed to drug use, highlighting the danger of the relatively new use of illicit fentanyl. Fentanyl is 50 to 100 times more potent than morphine, and often times drug users are unaware that their drug may be laced with the significantly more potent synthetic drug ("Fentanyl vs. Heroin"). Fentanyl-related deaths have increased 38-fold since 2007. Non-pharmaceutical fentanyl can be produced illicitly in laboratories and mixed with other drugs. Figure 1 shows how the epidemic has increased intoxication deaths in Wicomico County.

Drug abuse inflicts costs on the criminal justice system and society. The Wicomico County Health Department is employing an increasingly popular method of solving the drug epidemic in the form of the Community Outreach Addictions Team, here on referred to as "COAT". COAT uses a "peer approach" in which police, hospitals, and peer support specialists partner to offer

treatment to overdose victims. It is an alternative to criminalizing addicts and realizes a higher success rate of weaning addicts off opioid abuse.

Using drug-attributed crime costs and hospitalization costs, this study attempts to quantify these burdens and inform about the economic impact of the COAT program on Wicomico County. It is modeled after a previous study conducted by BEACON based on a national-level study conducted by the United States Department of Justice, National Drug Intelligence Center in 2011. This study looks at the attribution of drug use to crime and quantifies the costs to Wicomico County through societal damages and the burden on the criminal justice system. Costs are examined on an annual basis, but future costs are not included in the annual estimates. Intangible costs (such as the quality of life) are not included in these estimates. Whenever possible the local data utilized in this study is from 2016. Where 2016 data is not available, data from the prior study is utilized and inflated to 2016 dollars as noted in the study where applicable.

Overview of the Program

COAT Initiative

COAT was created in June 2016. Its mission is to create an effort to combat overdoses and provide a smooth transition to treatment services. COAT outreach staff are comprised of "Peer Support Specialists", individuals who have 1) grown in their own recovery of alcohol or drug abuse and/or mental health, 2) are willing to self-identify as a "peer", and 3) work to assist in the recovery process with a current addict.

COAT serves as a hotline for helping people who want treatment. They receive calls from individuals who would like help as well as organizations looking for help for individuals. COAT works with the hospital and law enforcement who respond to drug related incidents. They also provide follow-up assistance to identify overdose victims in the community.

The Data

Wicomico County Health Department provided data on drug overdose cases over the past 4 years, as well as the number of people they have interacted with this past year. The number of calls that COAT received in their first year of operation was 267 calls. The number of addicts served was a total of 239 with 183 people served from Wicomico County. The number of addicts enrolled in treatment through COAT was a total of 137 with 101 from Wicomico County. The number of contact attempts (whether it be for initial contact or follow-ups) was 854 calls.

Wicomico County has seen a total overdose count of 550 people over the last four years. Before the program was initiated a year ago, there was a three year total overdose count of 369 people, an annual average of approximately 128 overdoses. The number of overdose cases involving the hospital rose from 70 people in June 2013 – May 2014 to 92 people in June 2014 – May 2015. This is approximately a 31% increase in overdose victims. From June 2014-15 to June 2015-16, there was an increase of approximately 142% in overdose victims. From June 2015-16 to June

2016-17, we see a decrease in overdose victims of 19% from the previous year to a total of 181, the same year of COAT's initiation. A graphic display of these figures are available in Appendix B. While there may not be a direct correlation between the initiation of COAT and the decrease in overdoses, there is a way of testing to see how effective COAT is at meeting their goals and achieving success.

Comparison to Similar Programs

Numerous programs exist to which COAT can be compared. All of the compared programs utilize "peer specialists", sometimes referred to as "recovery coaches". In addition, most involve the local police department to ensure

| Among Wicomico County Residents | | | | | | | | | |
|--|--------|--|--|--|--|--|--|--|--|
| COAT's conversion rate | 55.19% | | | | | | | | |
| COAT's participants | 183 | | | | | | | | |

that overdose victims are connected to the program and offered treatment instead of being arrested. To compare these programs, we looked at the number of participants of COAT, and the success rate of getting participants into treatment. Additional data for some of the programs are included in this study. Data from other studies show that, comparatively speaking, COAT has a lot of room to improve. However it is important to note that it is the youngest program mentioned in this study. COAT had 239 total participants with a success rate of getting those participants into treatment of 53.14%. Among strictly Wicomico County residents, the program had 183 participants with a conversion rate of 55.19%.

| Totals | |
|------------------------|--------|
| COAT's conversion rate | 53.14% |
| COAT's participants | 239 |

Gloucester's Angel Program

The Gloucester's Angel Program, in Gloucester, MA, is one of the most well-known programs of its kind. It is a police department-led partnership between treatment centers and volunteers which began in 2015. Addicts may come to the police and receive help. They dispose of any drugs or drug paraphernalia and do not charge addicts with a crime. Like with the COAT program, they receive help from a volunteer who guides them through treatment. Statistics for this program are from a study from the *New England Journal of Medicine* titled "A Police-Led Addiction Treatment Referral Program in Massachusetts". It records the program's first year of existence. 376 people presented for assistance, with 53 people revisiting for a total of 429 instances of providing assistance. Among those who had previous detoxification treatment, 50.5% had 1-5 previous treatments, with another 30.9% having 6 or greater previous treatments. Only 18.6%

were having their first detox treatment. 54.6% have previous drug arrests. These statistics show that more often than not, the overdose is not an isolated incident.

Gloucester's program succeeded in placing 87.9% of its individuals into treatment, but in some cases, persons were ineligible for treatment or placement information was lost. When these patients are removed from the calculation, the success rate of placing individuals into treatment increases to 94.5%. The study also found that nearly half of the participants came from outside Gloucester County, and some even coming from outside the state. This differs from COAT's participants, who are from Wicomico County in an overwhelming majority.

The Gloucester's Angels Program has an offshoot program called the Police Assisted Addiction Recovery Initiative (PAARI), which seeks to spread Gloucester's program. With the help of PAARI, Gloucester's program had been adopted by 153 other police departments in 28 other states by the time of the study's writing. PAARI reports that in some communities there has been a 25% reduction in crimes associated with addiction and "cost savings by diverting people into treatment rather than triggering the criminal justice system". It shows the potential of the COAT program to spread and succeed in getting overdose victims into treatment.

The study acknowledges the following outside factors which enabled its success:

- Evidence for the motivation of participants who walked into the police station
- The additional support provided by volunteers
- 24 hour patrol by police looking for placements
- The relationship between the local treatment center (in which the majority of participants were placed) and the Gloucester police department
- The availability of immediate transportation to a treatment center
- The state-mandated insurance, which covers drug detoxification.

AnchorED program

Beginning in the summer of 2014 in Rhode Island, the AnchorED program connects overdose victims to recovery coaches with hope of getting victims connected with recovery support. AnchorED had 230 participants in its first year. 83% of participants went to recovery supports, 15% (36 participants) declined, and 5% (12 participants) had revisits. A study from PewTrusts.org states that as of June 2017, AnchorED has attended to "more than 2000" participants, with 87% engaged in recovery services, a 4% increase over its 3 years of life.

OIP-Overdose Intervention Program

OIP-Overdose Intervention Program is a collaboration with police departments in Massachusetts. Individuals can go to any participating police department and be given Narcan or be aided. After their release, they meet with a recovery coach to discuss treatment. The program has had 35

participants, with a 70% (28 participants) conversion success rate in bringing non-fatal overdose patients into treatment.

Estimated Cost of Drug and Alcohol Abuse

The Impact of Drug Use on Crime

Societal costs related to crime are broken down into two components: criminal justice system costs and victim costs. The difficulty in determining these costs stems from the attribution of alcohol or drugs as the cause of criminal activity.

Following the methodology of the U.S. Department of Justice, National Drug Intelligence Center Study, "The Economic Impact of Illicit Drug Use on American Society", two classifications of offenses are considered in this study: instrumental offenses and related offenses. Instrumental offenses are defined as crimes committed to support drug use while related offenses are defined as crimes that are drug-related. Whereas all instrumental offenses are directly attributable to drug use, related offenses may or may not be directly attributable to drug use. Rather alcohol or drug use and the offense may co-occur but not be in a cause-and-effect relationship. Therefore, only a portion of related offenses are apportioned as drug-induced.

Given that county-level or even regional level inmate survey data is not available to estimate a local attribution rate for related offenses as used in the USDOJ (2011) study, the national attribution rates for instrumental and related offenses for each uniform crime report (UCR) offense category calculated in that study will be used as the average attribution rates in this study and applied to local arrest records data.

Criminal Justice System

All jurisdictions are burdened with the cost of maintaining a criminal justice system. These costs represent societal costs in that tax payers' dollars support these systems. Offenses attributed to illicit drug use contribute to the costs of police protection, adjudication, and correctional activities. County budgets for FY15 provided the costs for each of these areas.

In order to properly assign adjudication costs, criminal and civil cases must be differentiated. Data pertaining to the number of criminal versus civil court cases for the district courts in Wicomico County in Fiscal Year 2015 was obtained from the Maryland Judiciary Annual Statistical Abstract prepared by the Court Operations Department. Table 1 in Appendix B provides this information for each county.

The proportion of cases in FY 2015 processed as criminal cases in each of the Eastern Shore counties ranges from 0.31 to 0.52 with a regional average of 0.42.

To estimate the costs of local police protection attributed to drug use, the county police department budgets are multiplied by the attribution factor of 0.24 (USDOJ, 2011). To estimate

the costs of adjudication attribution to drug use, the county court budgets are multiplied by the attribution of 0.24 to adjust for the proportion of cases related to drug use. This estimate is then multiplied by the proportion of cases that are criminal rather than civil in each county. To estimate the costs of corrections attributed to drug use, the county Departments of Correction budgets and the proportion of the Maryland Division of Corrections budget attributable to residents in Wicomico County (determined by dividing the total State of Maryland Division of Corrections facilities budgets by the percent of inmates committed in FY 2015 that are residents of each jurisdiction) are multiplied by the attribution factors estimated by the USDOJ (2011) study. Given that detailed data was not available to breakdown prison, parole, and probation costs separately, the attribution rates for these costs were averaged to get an overall attribution rate for local correction and state corrections costs of .403 and .407 respectively.

The total criminal justice systems cost for drug-related offenses on the Eastern Shore is approximately \$44.7 million. The total costs at the county level is estimated to equal \$7.4 million.

Detailed results for each county and the region are presented in Table 1 in Appendix B. These numbers were then inflated to estimate the costs in 2016.

Crime Victims Costs

Crime victimization costs estimates here focus on tangible losses that impact society including medical expenses, property loss, and lost productivity. Intangible costs, such as quality of life impacts and pain and suffering, are not estimated.

For all crime victimization cost component estimates the national average attribution rates of 0.12 for violent crimes and 0.31 for property crimes are used to attribute the proportion of crimes related to drug use (USDOJ, 2011).

Medical Expenses

In relation to drug induced criminal offenses, victim medical expenses stem only to violent offenses. The average medical expense per violent crime associated with a public payer was estimated using data from the Maryland Family Health Administration's Maryland Assessment Tool for Community Health (MATCH). Data was collected for Wicomico County to compute the total value of medical expenses for assault for which the expected payer is Medicare, Medicaid, or other government programs. These total public costs are then divided by the number of violent crimes to obtain a per event estimate. It is assumed that the public medical

costs related to property crimes are \$0. Since the costs were based in 2013, the values found in the data were inflated to 2017 dollars to estimate the current costs to Wicomico.

The total public medical costs of drug-related crime victimization on the Eastern Shore is approximately \$597K and \$112K in Wicomico County.

Property Loss

Property damage and destruction results in an overall loss in value to society. On the other hand, property theft, although a loss to the victim, results in a transfer of wealth rather than a net loss to society. Here, only the costs associated with loss from damage are calculated as public costs.

In 2008, the mean dollar amounts for stolen property were \$236 for violent crimes and \$993 for property crimes. Inflating these figures to 2017 dollars results in a mean of \$396 for violent crimes and \$1,665 property crimes. The property damage rates of 0.11 and 0.26 as reported by the USDOJ (2011) are used to estimate the lost value due to damage. Property loss is calculated as the value of stolen property multiplied by the rate at which the property is damaged multiplied by the number of events. Crime data was obtained from the Maryland Governor's Office of Crime Control and Prevention.

The total property damage costs associated with drug-related crime victimization on the Eastern Shore is estimated to be \$70K and \$21K in Wicomico County.

Lost Productivity

Lost productivity can be classified into lost workforce productivity and lost household productivity. In staying with the prevalence-based approach to calculating lost productivity, losses are estimated for the current year. The discounted value of future losses is not estimated.

As local violent crime and property crime victim counts are not available, it is assumed that each violent and each property crime have, on average, one victim.

According to the USDOJ (2011) report, 7.2% of victims of personal crimes experienced loss of time from work while 7.0% of property crime victims experienced loss of time from work. This national average will be used as a proxy local level variable given that local data is not readily available.

The attribution rates from the USDOJ (2011) report were used to determine the proportion of violent crimes (0.12) and property crimes (0.31) that are attributable to illicit drug use.

The adjusted Market Productivity Values and Home Productivity Values from the DOJ study (which utilized Grosse, et al study's figures as base MPV and HPV values) were utilized in the current study and inflated to 2016 dollars. More detailed data by age and gender could not be obtained at the county level. Therefore, the average productivity measures across age categories and genders are utilized throughout the study. This results in an average annual MPV of \$8,888 and an average annual HPV of \$2,653.

The total estimated loss of productivity of victims of violent and property crimes on the Eastern Shore is approximately \$49K and \$12K in Wicomico County.

The detailed results of Wicomico can be found in Table 5 in Appendix B.

Return on Investment

Return on investment is a performance measure used to evaluate the efficiency of a program by comparing the projects outcomes relatives to its costs. The purpose of calculating the return of COAT is to evaluate the impact of COAT on the total costs of illicit drug use in Wicomico County. We are reporting two numbers for return on investment based on different assumptions: 1) 100% of individuals who entered treatment remained sober and 2) 50% of individuals who entered treatment remained sober.

Assuming 100% of individuals remain sober, the return is calculated from the average cost per person multiplied by the number of callers to COAT who have moved into treatment. COAT's budget is then subtracted from the product of cost per person and callers in treatment. That number is then divided by COAT's budget. The average cost per person is the total cost incurred in Wicomico County from illicit drug use divided by the estimated population of drug users in Wicomico County. The average cost per person is \$6,221.67 and the program offered treatment to 101 individuals. With a COAT budget of \$82,014, the program experienced a return of 666% in their first year of operation.

The National Institute of Drug Abuse reports that relapse rates for people treated for substance abuse is between 40-60%. We will use the midpoint of 50% to calculate a new ROI. The calculation remains the same, except now the 101 individuals who were offered treatment will decrease by 50% to 50.5 individuals. Factoring in the chances of relapses occurring, the program experienced a return of 283% in their first year of operation.

The goal of COAT is to help people into treatment. As of this past year, COAT saw a 55.19% success rate of getting people into treatment. This success rate is calculated by dividing the total number of addicts enrolled into treatment through COAT (101) by the total number addicts served by COAT (183). The success rate of the enrollment number by the total calls received is the total addicts enrolled in to treatment (101) divided by the total calls received (267) shows a success rate of 37.83%.

The illicit drug use population is approximately 10,360. The success rate COAT has had in decreasing this number by helping people enroll into treatment is less than 1%. The contact success can be analyzed by comparing the amount of callers received to the total estimated population of illicit drug users. This calculation reveals that COAT has made contact with approximately 2.58% of this estimated population.

Recommendations and Best Practices

From a statewide perspective, the number of drug- and alcohol-related intoxication deaths occurring in Maryland increased in 2016 for the sixth year in a row, reaching an all-time high of 2089 deaths. This represented a 66% increase over the number of deaths (1259) in 2015, and the largest single year increase that has been recorded (Maryland Behavioral Health Administration).

Wicomico has seen a growing level of need for health care services due to exponential growth of intoxication drugs. Wicomico has seen an increase of drug-related intoxication deaths largely amongst fentanyl, heroin, and opioid users. Even though Wicomico has seen a steady increase of drug related intoxication deaths, since the inception of COAT, overdoses has gone down when compared to the amount of overdoses the year prior (Jun 2015-2016).

According to the National Institute on Drug Abuse, an estimated 22.7 million Americans (8.6 percent) needed treatment for a problem related to drugs or alcohol, but only about 2.5 million people (0.9 percent) received treatment at a specialty facility. As stated in the ROI, Wicomico holds an estimated population of 10,360 substance abusers, with a total cost of \$160 million dollars (ROI information). In the past year since its inception, COAT has serviced 239 addicts. Out of that 239, 137 enrolled in treatment (57.32%), and COAT assisted 82 of those 137. Compared to the nation, COAT is performing at a 62.68% higher rate than the nation in assisting drug users into rehabilitation at specialty facilities.

Considering the worsening problem of drugs in Wicomico County, and the success rate of COAT, there are also implications for preserving COAT, as well as increasing support, since COAT has also been successful supporting addicts outside of Wicomico County. Using the data received, COAT has successfully reduced drug-related costs to Wicomico County by 1%. Currently, COAT is geared to servicing the Wicomico population, but has been reached out to from the drug populations in both Somerset & Worcester. Since COAT has reached out to both Wicomico & neighboring communities, we would recommend increasing the peer support

specialists to increase the success of COAT. By increasing the peer support specialists, COAT could hope to increase the reduction in costs as well as begin tackling the drug epidemic on the Eastern Shore.

Recovery is a lifelong process, which requires constant work (Laudet 2007; Madacsy 2013). According to the National Institute on Drug Abuse, substance abusers in the United States have a 40-60% rate of relapse. To help lower those numbers, we would recommend long-term follow-up. Making at least one call a year to check on rehabilitation may help lessen the relapse rate in Wicomico. Some examples of long-term follow up are contacting the addict, support meetings where addicts receive support from recovering addicts, as well as those going through the same processes, and assisting the addict with additional resources, should the route of treatment become ineffective.

Since many substance abuse professionals in COAT are also recovering addicts, we would also recommend a support group for counselors to prevent relapse within COAT itself. Nearly 38% of surveyed addiction counselors admitted relapsing to drinking or drug use at some point during their careers (Brown University Digest of Addiction Theory and Application). We would advise setting up a process that is available to recovering professionals that would intervene and assist the counselor back onto the path of recovery.

Lastly, we recommend tracking additional data needed to measure effectiveness such as:

- Number/percentage of individuals that complete treatment
- Number/percentage of individuals using again after 6 months, 1 year, etc.

Appendix A - Citations

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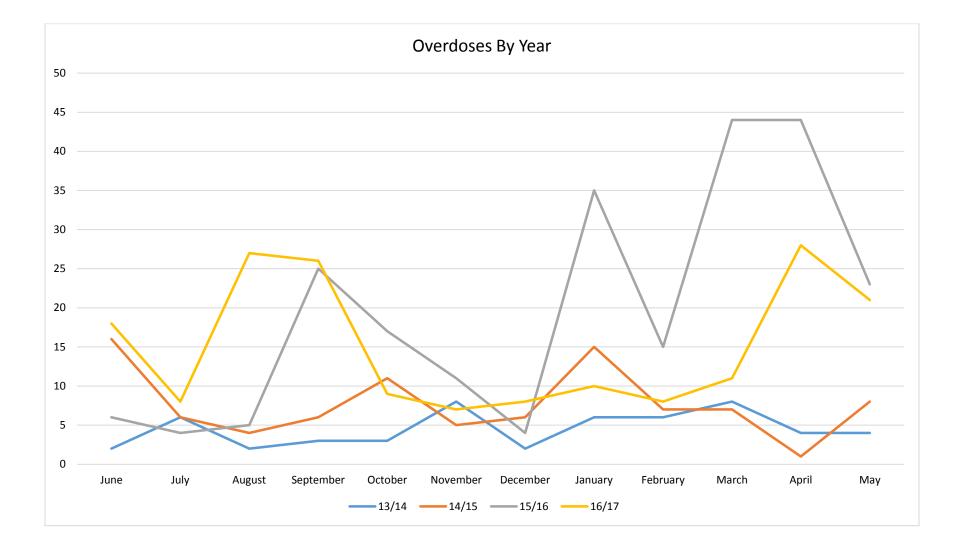
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Appendix B - Data, Charts, and Tables



Crime Costs

| | | Table | 1. Criminal Justic | e System Cost S | ummary Inflated | to 2016 Values | | |
|----------|---------------|--|-------------------------------|---------------------------------------|-----------------------|--|-----------------|-----------------------|
| | | Police Protection | | Adjudication | | Corrections | | |
| | | Proportion of arrests that are drug- related | Police Protection Costs | Proportion of cases that are criminal | Adjudication Costs | Proportion of corrections that is drug- related | Corrections | Drug Induced Costs |
| | Arrests | 0.24 | \$7,899,922.31 | | | | | \$1,895,981.35 |
| | Adjudication | 0.24 | | 0.31 | \$3,026,104.16 | | | \$225,142.15 |
| Wicomico | Local Jails | | | | | 0.403 | \$11,827,729.73 | \$4,766,575.08 |
| | State Prisons | | | | | 0.407 | \$1,301,606.61 | \$529,753.89 |
| | Total | | | | | | | \$7,417,452.47 |
| | Arrests | 0.24 | \$40,364,231.05 | | | | | \$9,687,415.45 |
| Eastern | Adjudication | 0.24 | | 0.51 | \$17,491,034.69 | | | \$2,140,902.65 |
| Shore | Local Jails | | | | | 0.403 | \$46,235,494.00 | \$18,632,904.08 |
| | State Prisons | | | | | 0.407 | \$34,990,243.30 | \$14,241,029.02 |
| | Total | | | | | | | \$44,702,251.20 |

| | Table 2. Crime Victim Cost Summary | | | | | | | | | | | | | | | | | | |
|------------------|------------------------------------|-----------------------------|---|---|-----------------------------|---------|----------|---------|--|----------|-----------------------------|----------|-------------|----------|--|------------------|--------------------------------------|--------------------------------|-----------------------------------|
| | | | | Crime Victim Costs Attributed to Violent Crimes | | | | | Crime Victim Costs Attributed to Property Crimes | | | | | | | | | | |
| | | | Medica | al Costs | | Prod | uctivity | Costs | | | | Pro | ductivity C | osts | | Total Medical | Total Property Damage Costs | Total Productivity Costs | Total Crime Victim Costs |
| Crimo | Violent Crime Events | Property Crime Events | Average Public Cost Per Violent Crime | Total Medical Costs | Property Damage Costs | MPV | HPV | TPV | from | Vienical | Property Damage Costs | MPV | HPV | TPV | Total Costs from Property Crime | | | | |
| Wicomico | 476 | 3,319 | \$236 | \$112,248 | \$1,764 | \$501 | \$150 | \$651 | \$114,663 | \$0 | \$19,171 | \$8,774 | \$2,619 | \$11,393 | \$30,564 | \$112,248 | \$20,935 | \$12,044 | \$145,227 |
| Eastern Shore | 1,597 | 11,723 | \$374 | \$597,236 | \$5,917 | \$1,929 | \$576 | \$2,505 | \$622,621 | \$0 | \$64,320 | \$35,718 | \$10,660 | \$46,379 | \$110,699 | \$597,236 | \$70,237 | \$48,884 | \$733,320 |

Health Costs

| Table 3. County Spending on Specialty Treatment | | | | | | | | | |
|---|----------|--|--|--|--|--|--|--|--|
| County | Spending | | | | | | | | |
| Wicomico \$349,887 | | | | | | | | | |

| Table 4. Attribution Factors for Each Diagnosis | | | | | | | | | | |
|---|------|------|--|--|--|--|--|--|--|--|
| Male Female | | | | | | | | | | |
| Hepatitis B | 0.2 | 0.21 | | | | | | | | |
| Hepatitis C | 0.17 | 0.15 | | | | | | | | |
| HIV | 0.17 | 0.24 | | | | | | | | |
| Tuberculosis | 0.09 | 0.04 | | | | | | | | |

| | Table 5. Attributed Hospitalization Costs | | | | | | | | | | | | |
|----------|---|-------------|-------------|--------------|--------------|---------------------------|-------------|--|--|--|--|--|--|
| | | | Estimated | | | | | | | | | | |
| | Illicit Drug Use | Hepatitis B | Hepatitis C | Tuberculosis | Total | Estimated Insurance Costs | | | | | | | |
| Wicomico | 37,760,152.15 | 202,031.34 | 133,393.30 | 87,040.45 | 1,069,966.43 | \$39,252,584 | \$2,355,155 | | | | | | |

Productivity Costs

| | Table 6. Lost Labor Participation | | | | | | | | | | | | |
|--|--|----------------|--------------|--------------|--------------|--|--|--|--|--|--|--|--|
| Lost Productivity Attributable to Drug Use | | | | | | | | | | | | | |
| | Population* | Estimated Drug | | | | | | | | | | | |
| | Users MPV (Annual) HPV (Annual) TPV (Annual) | | | | | | | | | | | | |
| Wicomico | 102,577 | 10,360 | \$69,798,687 | \$27,978,216 | \$97,776,903 | | | | | | | | |

| Table 7. Lost Productivity Due to Specialty Treatment | | | | | | | | | | |
|---|---------------|--|--|--|--|--|--|--|--|--|
| County | Estimated TPV | | | | | | | | | |
| Wicomico | \$12,846,110 | | | | | | | | | |

| | Table 8. Drug-Related Hospitalizations (Full Attribution) | | | | | | | | | | | | | |
|----------|---|------------------------------------|------------------------------|-------------------|--------------|-------------|--|--|--|--|--|--|--|--|
| | | Hospital A | dmissions | Lost Productivity | | | | | | | | | | |
| | | Admitted In Most Recent Year | Average Length of Stay | MPV (Annual) | TPV (Annual) | | | | | | | | | |
| | Males | 1,050 | 4.52 | \$674,990 | \$675,665 | \$684,449 | | | | | | | | |
| Wicomico | Females | 1,037 | 3.82 | \$579,058 | \$579,637 | \$587,172 | | | | | | | | |
| | Total | 2,087 | 4.17 | \$1,254,049 | \$1,255,303 | \$1,271,622 | | | | | | | | |

| Table 9. Drug-Related Hospitalizations (Partial Attribution) | | | | | | | | | | | | | |
|--|------------------------------|-------|--------------|------------------------|---------|-------------------|------------|-----|-----------------|--|--|--|--|
| | | Hosp | oital Admiss | sions | | Lost Productivity | | | | | | | |
| | Admitted In Most Recent Year | | | Average Length of Stay | f | MPV (Annual) | HP (Ann | | TPV (Annual) | | | | |
| Wicomico | | 93 | 4.69 | \$9,000 | \$3,607 | | \$12,607 | | | | | | |
| | | Table | e 10. Lost P | roductivity Due to I | ncarc | eration | | | | | | | |
| | Jails* | Local | State | MPV | MPV HPV | | | TPV | | | | | |
| | | Jails | Prisons* | ** | | | | | | | | | |
| | (ADP) | (ADP) | | (Total) | | (Tota | (Total) | | (Total) | | | | |
| Wicomico | 542 | 377 | 165 | \$8,46 | 7,239 | \$3,3 | 94,021 | | \$11,861,260 | | | | |

Summary of Costs

| Table 11. Illicit Drug Use Statistical Summary | | |
|--|--------------------------|----------|
| (in Millions) | | |
| Crime | | |
| | Criminal Justice System | \$7.42 |
| | Crime Victim | \$0.14 |
| | Lost Productivity | \$0.01 |
| | Subtotal | \$7.57 |
| Health | | |
| | Specialty Treatment | \$0.35 |
| | Hospitals | \$39.25 |
| | Insurance Administration | \$2.36 |
| | Subtotal | \$41.96 |
| Productivity | | |
| | Labor Participation | \$97.78 |
| | Specialty Treatment | \$12.85 |
| | Hospitalization | \$1.28 |
| | Incarceration | \$11.86 |
| | Subtotal | \$123.77 |
| Total | | \$173.29 |