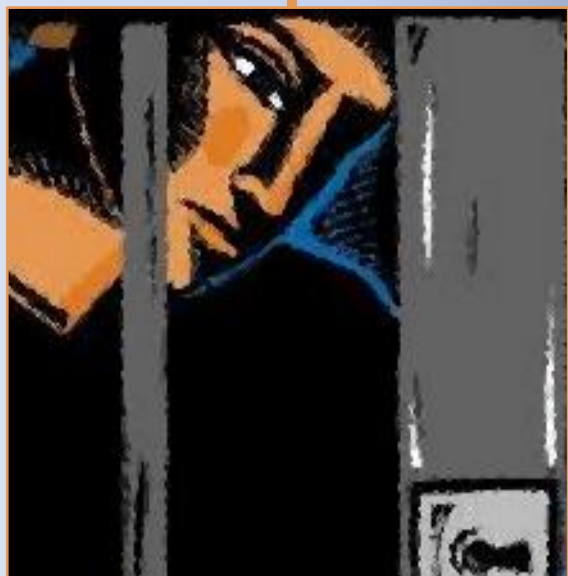


# Prescription Opioid and Heroin Addiction Treatment Needs Assessment

Final Report



*Produced for*  
Delaware Department of Justice

*Produced by*  
Hornby Zeller Associates, Inc.  
48 Fourth St. Suite 300  
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## Executive Summary

### Study Goal and Purpose

The purpose of this study is to identify gaps and deficiencies in Delaware’s addiction treatment system, make recommendations for improvement, estimate the costs of doing so, and prioritize implementation of recommendations.

The specific objectives focus on individuals addicted to prescription opioids and heroin, within three distinct population groups in Delaware: 1) the general population; 2) the pre- and post-incarcerated population; and 3) the incarcerated population.

Four primary questions guide the identification of gaps and deficiencies in the system:

1. How many individuals have been identified as needing treatment services for opioid and heroin addiction in Delaware’s three population groups?
2. What are the service needs of those individuals?
3. What are the paths to accessing services in Delaware?
4. Are there sufficient services available to meet their needs and, if not, what services need to be added?

While the initial mandate for the study focused on treatment needs and capacity, the investigation led to another factor affecting the performance of Delaware’s treatment system: access to services. Ultimately, the study included an examination of three factors: 1) system access; 2) types of treatment, and 3) system capacity. In keeping with the request to distinguish among three populations, Table 1 provides an overview of the populations in relation to these system components. As will be seen, some of the recommendations address multiple populations or multiple system components.

Table 1. Addiction Treatment System Matrix			
	General Population	Pre- and Post-Incarcerated Population	Incarcerated Population
<b>Access</b>	Paths developed by state agencies and private entities	Paths defined by DOC/CJ or state agencies	Defined by DOC/CJ
<b>Treatment Type</b>	Defined by state agencies and private market demand	Defined by DOC/CJ or state agencies	Defined by DOC/CJ
<b>System Capacity</b>	Defined by available state agency and private funding	Defined by state agencies and DOC/CJ funding	Defined by DOC/CJ funding

As Table 1 illustrates, two of the three population groups (pre- and post-incarcerated population and incarcerated population) are relatively constrained regarding access, treatment types and system capacity. Access for the general population, however, is diverse, often disparate, and nearly always unwieldy; the number of public and private entities creating pathways to treatment cause overlap, exclusions, and confusion. The result of multiple system access pathways in the general population can be site-specific underutilization. This is especially true when limited payment options, such as paying by Medicaid, prohibit longer stays in residential facilities.

Access to treatment for an individual can involve the staff of law enforcement, social services, behavioral health and criminal justice agencies, as well as public hospitals and private health care systems. Access to treatment is the most diverse component of any addiction treatment system, due to multiple, and sometimes specific, paths to access that vary not only by initial point of contact with an addicted individual (e.g., hotline, hospital, arrest), but by the number and type of state agencies involved, location of the addicted individual (e.g., general population, pre-post incarceration, incarceration), and by payment method (e.g., state-funded, private).

Types of addiction treatments offered are most often based on efficacy research conducted by national organizations, grant providers, and governmental entities. Addiction treatments vary by type of population served and location.

System capacity is, in essence, the number of beds or slots in treatment programs, but is also a function of access; that is, if access pathways are under-functioning, statewide capacity may be under-utilized. Other potential contributors to under-utilized capacity may be geographic location of treatment, and obstacles to payment for services.

The purpose of this report is to review Delaware's components of access, type of treatment, and capacity, and to provide Delaware with recommendations that move towards unifying the access/treatment path, as well as increasing capacity when truly needed. Increasing system capacity is both time and cost-intensive, while building stronger and clearer pathways to treatment (*i.e.*, the way an individual moves through the referral and application process to receive treatment) can increase utilization of current capacity as well as produce positive outcomes for individuals in the addiction treatment system.

## Methodology

In this study, Hornby Zeller Associates (HZA) uses a mixed-method approach to address the extent of opioid and heroin addiction in the Delaware population, the treatment service needs of those individuals, the availability of services for opioid and heroin addiction, and gaps in those services.

The first method is quantitative and inventories the Delaware treatment system. The goal is to assess treatment capacity in order to gauge deficiencies in the provision of opioid treatment services. Additionally, HZA uses national and state-level data to assess the size of the opioid- and heroin-addicted population in Delaware. These quantitative methods are designed to reveal patterns of unmet treatment needs, as well as system strengths, when treatment capacity is compared to treatment-service-needs data.



The second method is qualitative and supplements the quantitative findings. This method translates numerical patterns into meaningful observations about factors underlying system deficiencies, the means of correcting those deficiencies, the cost of those corrections, and ranking corrective priorities (see page x for recommendation rankings). It addresses the reasons such patterns are found in the data, recommendations for prioritizing methods of correcting system deficiencies, and the estimated costs of corrective measures.

Data for the mixed-method approach were gathered from a variety of sources: The National Survey of Drug Use and Health (NSDUH); Substance Abuse and Mental Health Services Administration's (SAMHSA) Treatment Episode Data Set (TEDS) and the National Survey of Substance Abuse Treatment Services (N-SSATS); and two surveys designed and conducted by HZA. The first HZA survey was conducted with specialty treatment facilities; the second conducted with Delaware's Key/Crest/Aftercare Programs for inmates.<sup>1</sup> Interviews with treatment advocates, administrators, medical professionals and officials working within treatment and justice agencies were another source of data used to supplement the quantitative data. Focus groups and interviews with individuals in specialty treatment for opioid addiction generated additional data.

## Overview of Findings

### Access and Treatment Needs, General Population

- In the past decade, the number of people in Delaware with opioid use disorders nearly doubled, from 6,000 to 11,000.
- During the same period, the number receiving treatment for opioid use disorders increased by 500 percent, from 1,000 to 5,000 people.
- While the rate of increase in treatment was greater than the rate of increase in the number of people with opioid use disorders, the result was a net need of 6,000 people in 2014, a thousand more than ten years earlier.<sup>2</sup>

### Access and Treatment Needs, Pre-/Post-incarceration and Incarcerated Populations

- Approximately 46 percent of the Delaware offender population is estimated by the Delaware DOC to have substance use issues, while 13 percent have committed drug crimes.
- Assuming that 46 percent of the offender population has an SUD, and, assuming the same ratio of OUD to SUD that we see in the general population ( $11,000 / 24,300 = 45.3$  percent; see Table 6), of the 17,000 people served in community corrections, over 3,542 have an opioid use disorder.<sup>3</sup>

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<sup>1</sup> Both surveys uncovered gaps in data processing, data management and data utilization across public and private sectors, and agencies, with respect to assessment of substance use disorder (SUD) and opioid use disorder (OUD) treatment in Delaware. Examples are provided throughout this report.

<sup>2</sup> This report separates the discussion of need from the discussion of capacity. While discussion of people who have received treatment and admissions to treatment may sound like a capacity discussion, it is used to represent unmet need from the perspective of the person. The capacity discussions, instead, focus on the treatment providers and the services available in Delaware.

<sup>3</sup> If the rate of SUDs in the Delaware offender population is closer to the CASA estimate of 80 percent (The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2010). Behind

- Fewer than one in five opioid treatment admissions (17.6 percent) in the community are referred from a criminal justice setting, representing 782 of 4,445 admissions in 2014.
- Level IV and V facilities do not maintain complete information on inmates with opioid addictions; although they do have counts of people needing addiction services in general.
- While certain types of treatment services are underutilized, for example SUD/ODU education, some of the most important types of services are unavailable. Through early 2017, Delaware provided no Medication Assisted Treatment (MAT) or detoxification services for its incarcerated population with OUD (except in the case of pregnant women). However, the Department of Correction (DOC) did initiate programs to provide Vivitrol and buprenorphine to certain inmates on a trial basis during the spring and summer of 2017.

### Treatment Capacity, General Population

- Based on N-SSATs data, the number of facilities in Delaware providing OUD treatment has risen by 70 percent in the past eight years.
- While 23 percent of treatment facilities provided some OUD services in the past, 43 percent do so now.
- Despite the expansion in OUD treatment, the need has risen at a higher rate, particularly for Medication-Assisted Treatment which includes Cognitive Behavioral Therapy and other interventions to sustain the medication regimen.
- An examination of Opioid Treatment Programs' (OTP) capacity shows that the thirteen (Methadone) providers in the state are being underutilized at a rate of 25 percent.
- Delaware provides Association of Addiction Medicine (ASAM) 3.3 level residential care. An examination of residential capacity (*i.e.*, any overnight beds) shows that the residential treatment system, as it exists in Delaware, is being underutilized. Moreover, during the study period, entry into this system was constrained by insurers' policies, prohibiting longer stays.<sup>4</sup>
- There are approximately 90 registered MAT providers in Delaware, representing 6.5 percent of primary care physicians.
- Data on treatment capacity in Delaware, especially for individuals with OUDs, are incomplete for a number of reasons, including discontinuity in data collection methods, private versus public payment schemes, and complications with data accountability.

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Bars II: Substance abuse and America's prison population. New York, NY.), then, the total number would be closer to 6,000. That is,  $.80 * 17,000 = 13,600$ , and  $.453 * 13,600 = 6,161$

<sup>4</sup> Full utilization would yield an increase of about 57 beds of 153 (see Table 11). Furthermore, new legislation passed after the study period is expected to increase the length of stay in residential facilities, increasing the odds of greater long-term recovery for individuals who get those beds.

## Treatment Capacity, Pre-/Post-incarceration and Incarcerated Populations

- Delaware’s accredited OTP facilities offer criminal justice programming at a higher rate (62 percent of all OTP programs) than do facilities with simple OUD programming (47 percent). However, only eight providers were listed as OTPs in 2014 and thirteen in 2017.
- Through early 2017, there was no OTP programming in Delaware’s prison system and MAT was not permitted. However, DOC initiated a program to provide Vivitrol and buprenorphine to certain inmates on a trial basis during the spring and summer of 2017 (see Access and Treatment Needs for pre-/post incarceration, above).

## Recommendations and Costs

Table 2. Addiction Treatment System Matrix with Recommendation Key			
	General Population: Recommendations	Pre- and Post-Incarcerated Population: Recommendations	Incarcerated Population: Recommendations
Access	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7	N/A
Treatment Type	N/A	N/A	8
System Capacity	9	9	8, 10

### Access

**Recommendation 1.** Develop a central navigation system for Delaware’s addiction treatment system and continuum of care for opioid treatment services, through the expansion of the Delaware 2-1-1 Help Hotline, DHSS Helpsherede.com Website, and Delaware’s Crisis Intervention Service which include resources from both public and private payers. Build on existing resource programs: (a) use “warm hand-offs” when referrals are made by calling a provider and staying on the line until contact is achieved; (b) develop an off-hours provider directory for emergency (but not overdose-related) treatment needs; (c) make greater use of the DSAMH treatment locator as well as SAMHSA’s provider locator by including updated links and phone numbers in promotional material and training.

**Total Cost, Recommendation 1: \$50,000<sup>5</sup>**

**Recommendation 2.** Increase community-based treatment information for potential clients: (a) promote client knowledge of the OUD treatment system and the Delaware 2-1-1 Help Hotline, DHSS Helpsherede.com website and Delaware’s Crisis Intervention Service through information/public service campaigns and workshops/educational programs at community shelters and churches; (b) promote OUD treatment system and Delaware 2-1-1 Help Hotline, DHSS Helpsherede.com website, and Delaware’s Crisis Intervention Service through entitlement programs, social services agencies, the department of motor vehicles, unemployment offices, medical clinics and other community-based facilities with high

<sup>5</sup> For cost components and sources for costs, see Recommendations and Costs for Easing Deficiencies at the end of the report

population contact, including retail businesses, bus stop signage, billboards and social media.

**Total Cost, Recommendation 2: \$375,000**

**Recommendation 3.** Increase referrals to the treatment system for individuals currently experiencing a crisis through law enforcement and emergency room staff training: (a) expand Crisis Intervention Training (C.I.T.) to encompass identification and referral of incidents of overdose and dangerous use; (b) use the Delaware 2-1-1 Hotline and C.I.T. to liaise with treatment providers who will accept referrals during off hours; (c) promote use of the Newcastle Hero model in which offenders and police negotiate treatment for those who choose treatment instead of arrest.

**Total Cost, Recommendation 3: \$150,000**

**Recommendation 4.** Increase referrals to treatment system through medical practitioners: (a) develop models patterned after Project Engage at Wilmington Hospital to link providers; (b) develop multi-disciplinary training on OUD treatment system which engages social and human services, treatment providers, law enforcement and medical community.

**Total Cost, Recommendation 4: \$100,000**

**Recommendation 5.** Develop local infrastructure of multi-disciplinary teams of providers from multiple disciplines (law enforcement, medicine, mental health, substance abuse, education) at the community level. These groups, or councils, would negotiate services for the most hard-to-serve clients or those who have been rejected elsewhere. Local councils would use a portion of existing staff time (10–15 percent) for council activities, and function as system advocates for the most pressing instances of access, treatment and capacity, at the individual client level.

**Total Cost, Recommendation 5: \$100,000**

**Recommendation 6.** Create incentives for participation in treatment diversion programs (e.g., Hero Help) by making treatment less onerous through programming that rewards selection of treatment. Include job preparation and placement as a component of treatment diversion.

**Total Cost, Recommendation 6: \$10,000**

**Recommendation 7.** Develop programming aimed at law enforcement and treatment providers to enhance offender access to treatment through a continuum of contact which establishes a warm hand-off of clients between criminal justice system, treatment providers, medical practitioners, case workers and others.

**Total Cost, Recommendation 7: \$25,000**

## Treatment Type

**Recommendation 8.** Institute MAT programs for incarcerated individuals, including those who are pre-trial. These may cover Methadone, Suboxone or Naltrexone (Vivitrol). Since a Vivitrol and buprenorphine trial is underway (June and August, 2017), two control groups—one receiving no treatment and the other receiving either Methadone or Suboxone—would demonstrate the efficacy of MAT, as long as other conditions, such as other MAT components, including therapy and continuing care, were in place. Accompany the medication component with an array of evidence-based services (including cognitive behavioral therapy, care coordination or community supports) building on current planning for the Aftercare program for those exiting to the community or who are already there. Using the National Commission on Correctional Health Care guidance, develop Standards for Opioid Treatment Programs for Delaware facilities and implement programs where appropriate.<sup>6</sup> Note, that instituting MAT programs for incarcerated individuals is controversial. Doing so presents challenges, such as establishing protocols to address diversion issues that require careful planning. In the first year, implement a single program and evaluate these challenges against program successes.

**Total Cost, Recommendation 8: \$60,000** per month per two hundred inmates for MAT medications (Methadone and Suboxone). Vivitrol is less expensive.

## Capacity

**Recommendation 9.** Institute a multi-stage expansion of capacity to serve up to 3,000 additional people through a stepped program of capacity expansion, beginning with lower-cost measures. Reassess capacity as incremental increases are complete.

- (a) **Primary Care:** Increase the number of physicians, nurse practitioners and physician assistants who can prescribe medications for opioid addiction and serve as an entrée into the treatment system through timely assessment and referral in primary care settings. To increase the number by 50 percent adds 45 newly trained prescribers to the current total of 90 prescribers. Assuming each newly certified practitioner treats the limit of 30 people with opioid addiction per year, this would increase community access/capacity by 1,350 (45 newly certified practitioners with 30 patients each). Thirteen hundred new clients would amount to almost half of the 3,000 additional individuals the expanded system could accommodate. Expand the *linkage* between new MAT prescribers and extant behavioral health practices such as cognitive behavioral therapy, and education and employment programming, among other services.

**Total Cost, Recommendation 9a: \$315,000**

- (b) **ODU Treatment/ Opioid Treatment Programs:** Increase the number of OTP facilities (with a mix of both inpatient and outpatient) from 13 to 17. At current utilization rates (75 percent) doing so would accommodate an

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<sup>6</sup> National Commission on Correctional Health Care. (2016). Standards for opioid treatment programs in correctional facilities. Chicago, IL.

additional 1,320 individuals in need of intensive medication-assisted treatment for opioid addiction. Alternatively, increase the utilization rate of OTPs from 75 percent to 100 percent through a public information campaign. An increase of 25 percent would reach 1,492 individuals who need but are not currently receiving opioid treatment. Another option is to combine the two mechanisms which would increase availability and access by 2,812, nearly the entire 3,000 individuals representing the targeted population.

**Total Cost, Recommendation 9b: \$4,030,000 start-up costs for four new facilities (at \$1,007,500 each) with \$254,000 monthly costs (per OTP), and/or \$375,000** (public information campaign to increase utilization, using Recommendation 2). Alternatively, increasing the utilization rate of OTPs from 75 percent to 100 percent involves instituting Recommendation 2, the Public Information Campaign, at a cost of \$375,000. A third option adds \$375,000 to the total start-up cost, to increase utilization rates.<sup>7</sup>

- (c) **Sober Living/Withdrawal/Residential care:** Double the number of sober living beds from 137 to 274, promote utilization of withdrawal services, residential care and sober living to current capacity (gaining full utilization of 127 underutilized beds). Doing so would capture 264 individuals of an expanded community access/capacity target of 3,000.

**Total Cost, Recommendation 9c: Sober living – \$520,000 start-up costs (13 facilities with 10 residents; 137 additional slots) with \$220,913 monthly costs, and \$375,000** (public information campaign to increase utilization, using Recommendation 2)<sup>8</sup>

**Recommendation 10.** Within DOC, devote funding to developing an electronic records management system that records unambiguous behavioral health assessment and tracks the individual throughout their involvement at each level, whether in community or facility.

**Total Cost, Recommendation 10: \$500,000**

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<sup>7</sup> See discussion and detailed breakout of costs in the Recommendations section of the report, including footnote 135.

<sup>8</sup> See discussion of this recommendation and its costs in the body of the report. Recommendation 9c is not listed under Recommendation Priorities, below, because we recommend absorbing unmet demand through other recommendations first, then, turning to 9c.

## Recommendation Priorities

1. Increase treatment system resources in the community: MAT prescribers  
(Recommendation 9a: \$315,000)
2. Increase treatment system resources in the community: OTP facilities  
(Recommendation 9b: \$4.03 million; \$254,000 monthly)
3. Institute MAT in corrections facilities  
(Recommendation 8: \$60,000 per month per 200 inmates)
4. Foster interagency councils  
(Recommendation 5: \$100,000)
5. Expand community access  
(Recommendations 1–4: \$675,000; not including treatment itself)





## Study Purpose and Methodology

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The purpose of this study is to identify deficiencies in Delaware's addiction treatment system, make recommendations for improvement, estimate the costs of doing so, and prioritize implementation of improvements. The specific objectives focus on three distinct populations: individuals addicted to prescription opioids and heroin in the general population (including those who have already volunteered for treatment); individuals with the same conditions who have been identified by the criminal justice system but who still reside in the community or who have been released to the community after incarceration; and people incarcerated in state facilities.

Three primary questions guide the identification of the gaps and deficiencies in the system:

1. How many individuals have been identified as needing treatment services for opioid and heroin addiction both in the general population and within the justice system?
2. What are the service needs of those individuals?
3. Are there sufficient services available to meet their needs and, if not, which services should be increased to meet current needs?

This study was conducted by Hornby Zeller Associates, Inc., (HZA) a research and evaluation firm that specializes in the fields of substance abuse, mental health, corrections and child welfare. The study was conducted over 12 weeks in early 2017.

In this study, HZA uses a mixed-methods approach to address the extent of opioid and heroin addiction in the Delaware population, the treatment service needs of those individuals, the availability of services for opioid and heroin addiction, and deficiencies in those services. Data are both contemporaneous, including a recent 2017 census of treatment providers, as well as historical, extending back to 2006. Both criminal justice and non-criminal justice populations are of interest and are analyzed separately.

The first method is quantitative and aims at inventorying the Treatment Network. The goal is to assess treatment capacity and treatment needs in order to gauge deficiencies in the Delaware treatment system. The second, qualitative method supplements these findings and translates them into meaningful observations regarding factors underlying any deficiencies, the means of correcting those deficiencies, the cost of those corrections, and ranking of priorities. The first method reveals patterns of unmet treatment needs (as well as system strengths). The second method supplements findings about treatment needs. It also addresses patterns found in the data, and recommendations professional stakeholders would offer for prioritizing ways of correcting system deficiencies, and their estimated costs.

Data for the mixed-method approach were gathered from a variety of sources: The National Survey of Drug Use and Health (NSDUH); Substance Abuse and Mental Health Services Administration's (SAMHSA) Treatment Episode Data Set (TEDS) and the National Survey of Substance Abuse Treatment Services (N-SSATS); two surveys designed and conducted by HZA: the first directed at specialty treatment facilities, the second, directed at Delaware's

Key/Crest/Aftercare Programs for inmates. Interviews with treatment advocates, administrators, medical professionals and officials working within treatment and justice agencies were another source of data addressing these questions. Focus groups and interviews with individuals in specialty treatment for opioid addiction generated additional data.

The SAMHSA-sponsored NSDUH is a national survey of households which provides national and state-level data on the use of tobacco, alcohol, illicit drugs (including non-medical use of prescription drugs) and mental health in the U.S. In this study, it addresses the three primary areas of need, capacity and deficiencies by providing unbiased estimates of the prevalence of SUDs/ODDs in Delaware, the rate of treatment for those disorders, and gaps in the treatment of those disorders.

Similarly, TEDS documents the characteristics of some 1.5 million substance abuse treatment admissions annually. While TEDS does not represent the total national demand for substance abuse treatment, it does comprise a significant proportion of all admissions to substance abuse treatment, and includes those admissions that constitute a burden on public funds.<sup>9</sup> N-SSATS is an annual census of all known public and private substance abuse treatment facilities in the U.S.

In addition to government-sponsored data, HZA also designed and implemented two surveys to estimate need, capacity and deficiencies. The first survey, conducted with treatment providers (Appendix C), investigates Delaware's current treatment capacity as well as services required to meet client treatment needs. The survey uses facility-level questions to gain insight about the treatment network in Delaware. The prison treatment survey, conducted through Delaware's Department of Correction (DOC) facility site directors (Appendix D), explores the provision of substance abuse treatment services in Delaware's correctional facilities.

In addition, HZA conducted extended interviews with several dozen treatment advocates, administrators, medical professionals and officials working within treatment and justice agencies. HZA also gathered data from four focus groups ranging from five to nine individuals receiving specialty treatment for opioid addiction.

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<sup>9</sup> Note that TEDS comprises data that are routinely collected by state agencies with regard to their individual substance abuse treatment systems. Facilities reporting TEDS data are those that receive State alcohol and/or drug agency funds (including Federal Block Grant funds). Treatment facilities that are operated by private for-profit agencies, hospitals, and the State correctional system, if not licensed through the State substance abuse agency, may be excluded from TEDS. Note, however, in recent years, SAMHSA has been including private for-profit agencies and hospitals in their survey in order to obtain a more comprehensive census. TEDS does not include data on facilities operated by Federal agencies (the Bureau of Prisons, the Department of Defense, and the Veterans Administration).

Definitions relevant to this study:

1. Opioid and heroin addiction are substance use disorders with a primary diagnosis of dependence and/or abuse<sup>10</sup> to opiates, licit or illicit; substance use disorders in general are referred to as SUD whereas opioid use disorders are specifically called OUD.
2. General population consists of all residents of Delaware 12 years old or older.
3. Criminal justice system population addressed in this study consists of adults 18 years old and older in pre-trial diversion after being arrested (either incarcerated or in the community), and adults who are incarcerated.
4. Individuals who volunteer for treatment consist of individuals who have been admitted to treatment for opioid and heroin addiction in Delaware.
5. OUD treatment services are based on protocols commonly used to treat opiate addiction. Many are supported by scientific research while others are based on the clinical judgment of the providers. The combined volume and characteristics of treatment services for OUDs helps assess treatment capacity.
  - a. Medication-Assisted Treatment (MAT) is one such treatment characteristic. It employs a combination of medications and behavioral health interventions to treat opioid addiction.
6. Sufficient services and, its contrast, deficient services, are system performance measures defined both by Delaware professional stakeholders with an interest in opioid treatment as well as by national experts in the field of opioid treatment.
7. Residential treatment is SUD/OUD programming which takes place in a non-outpatient, residential setting. In Delaware, this type of setting contains beds that range from 23-hour observation services at New Castle County's Kirkwood Detox and Connections Community Support Programs, Inc., to American Society of Addiction Medicine (ASAM) 3.3 and 3.5-ranked treatment settings, such as Gateway, PSI Women's/Men's Residential AD, and Gaudenzia.<sup>11</sup>

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<sup>10</sup> Definitions based on: American Psychiatric Association. (1994, 2013). *Diagnostic and statistical manual of mental disorders* (4<sup>th</sup> and 5<sup>th</sup> editions). Washington, American Psychological Association.

<sup>11</sup> Based on Delaware Adult Behavioral Health DHSS Service Certification and Reimbursement Manual, November 1, 2016, and DSAMH's Report #3, April, 2017.



## Context: Delaware and Comparable State Needs

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The new millennium has brought with it a prescription opioid and heroin crisis in America that is unprecedented; overdose deaths from these causes have quadrupled since the year 2000, with the costs to society is estimated in the billions of dollars. Delaware is not immune; its drug-related overdose deaths grew precipitously, from 228 in 2015 to 308 in 2016, a 38 percent increase. Fentanyl-related deaths increased from 42 to 120<sup>12</sup> in 2015. Consistent with national trends, heroin and prescription opioids were the primary cause of drug-related overdose deaths in Delaware.

In an effort to address the opioid and heroin epidemic, federal, state, and local initiatives began targeting opioid prevention and treatment exclusively. On the prevention side, comprehensive monitoring of prescription opioids (and other scheduled drugs) served as the underpinning of the 2002 Harold Rogers Prescription Drug Monitoring Program (PDMP). On the treatment side, the use of medication-assisted treatment (MAT), which encompasses both medication and behavioral therapy (provided in a residential, inpatient or outpatient setting) served as the primary evidence-based treatment option for heroin and prescription opioid addiction. From the evidence of MAT effectiveness, a putative gold standard for opioid treatment has emerged. These are SAMHSA's Opioid Treatment Programs (OTPs). OTPs include a MAT protocol, as well as an array of essential services ranging from cognitive and other behavioral therapies, to education, employment and vocational assistance. Facilities with OTP accreditation differ from facilities that offer services to treat OUDs in that they offer a program of treatment based on a coordinated delivery system rather than simple array of services.

In Delaware, opioid treatment meeting federal standards is provided by a variety of agencies under the purview of the Division of Substance Abuse and Mental Health (DSAMH). For criminal justice populations, opioid treatment is coordinated by the DOC. Treatment services also are available for those involved in the criminal justice system through the Key/Crest/Aftercare programs, which provide services to incarcerated individuals through their reintegration into the community as part of a work-release program. Individuals residing in the community have access to screening and evaluation, detoxification, outpatient counseling, methadone maintenance and other programming.

This section briefly examines the opioid epidemic, while discussing the standards of practice in the provision of opioid and heroin addiction treatment at national and state levels. It examines the treatment infrastructure and practices in Delaware and comparable states, including the District of Columbia, Maine, New Hampshire, Rhode Island, and Vermont.

Relevant information, in Table 3, shows how these states parallel Delaware. Delaware's population size and *per capita* income fall in the low to mid-range of the selected comparison states, yet Delaware had the highest *per capita* health care costs associated with treatment of opioid addiction of these chosen locations. At \$117 *per capita*, Delaware's

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<sup>12</sup> Associated Press. (2017). Delaware reports 308 overdose deaths in 2016. *The Washington Times*. Retrieved from: <http://www.washingtontimes.com/news/2017/feb/14/delaware-reports-308-overdose-deaths-in-2016/>

costs are 14 percent higher than its nearest neighbor, Rhode Island, and 48 percent higher than the lowest cost state, Vermont. Each state has roughly 15 to 30 opioid related deaths per 100,000 persons in the general population. Delaware is closer to the bottom, at 14.8 per 100,000, while New Hampshire’s rate is more than twice as high, at 31.3 per 100,000.

The key message in Table 1 is that Delaware spends more, *per capita*, on the cost of opioid addiction while experiencing fewer overdose deaths. From these data alone it is not possible to ascertain if the increased costs are successfully preventing overdose deaths, or if costs are associated with system redundancies and inefficiencies.

Table 3. Delaware and Comparable States/Districts						
State/District	2016 Population Estimate <sup>13</sup>	2015 Per Capita Income <sup>14</sup>	2015 Overdose Deaths <sup>15</sup>	2015 Opioid Death Rate per 100,000 <sup>16</sup>	2015 Per Capita Health Care Cost of Opioid Addiction <sup>17</sup>	2015 Percent of Substance Abuse-Related Health Care Costs <sup>18</sup>
Maine	1,331,479	\$42,077	269	19.3	\$70.00	0.4%
New Hampshire	1,334,795	\$54,817	422	31.3	\$81.00	0.4%
Rhode Island	1,056,426	\$50,080	310	23.5	\$103.00	0.4%
<b>Delaware</b>	<b>952,065</b>	<b>\$47,662</b>	<b>198<sup>19</sup></b>	<b>14.8</b>	<b>\$117.00</b>	<b>0.4%</b>
Vermont	624,594	\$47,864	99	13.4	\$61.00	0.2%
Washington D.C.	681,170	\$71,496	125	14.5	\$95.00	0.3%

## Opioid Treatment Practices

In this section, we briefly discuss the opioid epidemic as well as opioid treatment standards and practices within the civilian and criminal justice populations, nationally, in Delaware, and in the set of comparable states.

<sup>13</sup> Retrieved 03/29/2017 from: <https://www.census.gov/data/tables/2016/demo/popest/state-total.html>

<sup>14</sup> Retrieved 03/29/2017 from: <http://www.infoplease.com/ipa/A0104652.html>

<sup>15</sup> Retrieved 03/29/2017 from: <https://www.cdc.gov/drugoverdose/data/statedeaths.html>

<sup>16</sup> Retrieved 03/29/2017 from: <http://kff.org/other/state-indicator/opioid-overdose-death-rates/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22.%22sort%22:%22asc%22%7D>

<sup>17</sup> Retrieved 03/29/2017 from: [http://drugfree.org/wp-content/uploads/2015/04/Matrix\\_OpioidAbuse\\_040415.pdf](http://drugfree.org/wp-content/uploads/2015/04/Matrix_OpioidAbuse_040415.pdf); These costs are based on hospital adjusted expenses per inpatient day for each state, calculated by Birnbaum, H. G., White, A. G., Schiller, M., Waldman, T., Cleveland, J. M., & Roland, C. L. (2011). Societal costs of prescription opioid abuse, dependence, and misuse in the United States. *Pain Medicine*, 12(4), 657-667. Hospital costs will vary across states.

<sup>18</sup> *Ibid.*

<sup>19</sup> The US CDC reports 198 while the Delaware Division of Forensic Science reports 228.

## Community Practices: Nationwide

The prescription opioid and heroin crisis has accelerated dramatically in the past fifteen years. Prescription drug- and heroin-related overdoses in the U.S. have quadrupled since 2000. In 2014, more people died from drug overdoses than in any other year, and among the 47,055 drug overdose deaths recorded in 2014, 61 percent involved an opioid.<sup>20</sup> In 2015, the Centers for Disease Control and Prevention (CDC) documented 20,101 overdose deaths related to prescription pain relievers and 12,990 overdose deaths from heroin.<sup>21</sup>

To lower opioid-related fatalities, SAMHSA, the CDC, the U.S. Department of Health and Human Services (U.S. DHHS), state health and human/social service agencies and local organizations have adopted initiatives that target key areas in both prevention and treatment.

Controlling and monitoring prescribing practices represent two of the primary strategies for preventing opioid-related fatalities. Typically, this involves establishing tighter controls on, and monitoring of, scheduled substances, especially prescription opioids such as OxyContin, Fentanyl, and Oxycodone. It also entails limiting the amount of morphine milligram equivalent (MME) doses, through legislation, that can be prescribed by physicians. To curtail prescription drug misuse and abuse, Congress appropriated funding in FY 2002 for the Harold Rogers Prescription Drug Monitoring Program (PDMP) to increase state-level capacity (*i.e.*, law enforcement, public health, regulatory boards) to collect and analyze controlled substance prescription data through state administered databases (with each state managing its own database). Greater monitoring and control was predicted to limit the supply of available opioids, reduce opioid abuse and dependence, and curtail fatalities.

Treatment strategies include not only the development of new treatments but also research on treatment effectiveness, given the 900 percent increase nationwide since 1997 in the number of people who are seeking substance abuse treatment for prescription opioid painkillers.<sup>22</sup> Studies have shown that most individuals with substance abuse addiction need a minimum of three months of treatment to reduce or stop their drug use, with lengthier involvement in treatment resulting in better outcomes.<sup>23</sup> The first phase of substance use treatment, especially for benzodiazepine- and opioid-related disorders is detoxification through medically managed withdrawal. Medical staff monitor the often-dangerous physiological impact of withdrawal. After detoxification, referral to the appropriate modality and level of substance abuse treatment follows.<sup>24</sup>

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<sup>20</sup> Rudd, R. A. (2016). Increases in Drug and Opioid-Involved Overdose Deaths—United States, 2010–2015. *MMWR. Morbidity and Mortality Weekly Report*, 65.

<sup>21</sup> Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999–2015. (December, 2016). Retrieved January 11, 2017, from CDC WONDER website: <http://wonder.cdc.gov/ucdid10.html>

<sup>22</sup> Alexander GC, Frattaroli S, Gielen AC, eds. (2015). The Prescription Opioid Epidemic: An Evidence-Based Approach. Johns Hopkins Bloomberg School of Public Health, Baltimore, MD. Retrieved 3/21/2017 from <http://www.jhsph.edu/research/centers-and-institutes/center-for-drug-safety-and-effectiveness/opioid-epidemic-town-hall-2015/2015-prescription-opioid-epidemic-report.pdf>

<sup>23</sup> *Ibid.*

<sup>24</sup> Alexander GC, Frattaroli S, Gielen AC, eds. (2015). The Prescription Opioid Epidemic: An Evidence-Based Approach. Johns Hopkins Bloomberg School of Public Health, Baltimore, MD. Retrieved 3/21/2017 from



Substance abuse treatment modalities consist of residential, inpatient, and outpatient models. Long-term residential treatment models such as therapeutic communities provide 24-hour care, lasting between six months and one year. In this setting, all aspects of the community are considered to be part of the treatment.<sup>25</sup> Long-term residential treatment focuses on developing personal accountability, responsibility, and a socially productive life and frequently entails comprehensive services such as employment and educational supports. Short-term residential treatment models, lasting as few as three to six weeks, serve those with similar needs, but are recommended for higher functioning clients. These kinds of residential treatment models might be linked to hospital- or community-based outpatient or aftercare treatment programs to reduce the risk of relapse.

A wide variety of community-based outpatient substance abuse treatment programs exist, and are frequently less expensive and more appropriate for individuals who have jobs and support networks. Outpatient programs range in intensity from drug education to intensive outpatient programs similar to residential treatment programs in their service intensity and effectiveness. Outpatient programs consist of individual or group counseling and may be designed to treat individuals with co-occurring mental health disorders. Individual counseling frequently addresses not only substance abuse and addiction, but other areas such as family and social functioning. It is intended to address an individual's recovery, emphasizing short-term behavioral goals. Group counseling, on the other hand, uses social reinforcement and peer discussion to promote abstinence from substances.<sup>26</sup>

One of the most beneficial treatments methods used today is Medication Assisted Treatment, combining behavioral therapy and medications to treat substance use disorders.<sup>27,28</sup> Current opioid treatment standards promulgated by the ASAM in the National Practice Guidelines for the Use of Medications in the Treatment of Addiction Involving Opioid Use, and SAMHSA Treatment Improvement Protocols or Technical Assistance Publications, rely heavily on medication assisted treatment. MAT is a crucial treatment method for various kinds of addictions, such as alcoholism and opioid-related disorders.<sup>29</sup>

Reliance on MAT programming is clear in the National Institute on Drug Abuse's (NIDA) 2012 principles for effective treatment, which note that medications are an important element of treatment for many patients, especially when combined with counseling and other behavioral therapies. For opioid addiction, the use of MAT can play a substantial role in an individual's recovery and future abstinence from substances. Methadone, buprenorphine,

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<http://www.jhsph.edu/research/centers-and-institutes/center-for-drug-safety-and-effectiveness/opioid-epidemic-town-hall-2015/2015-prescription-opioid-epidemic-report.pdf>

<sup>25</sup> NIDA. (2012, December 1). Principles of Drug Addiction Treatment: A Research-Based Guide (Third Edition). Retrieved from <https://www.drugabuse.gov/publications/principles-drug-addiction-treatment-research-based-guide-third-edition-on-2017>. May 31

<sup>26</sup> *Ibid.*

<sup>27</sup> NIDA. (2015). Long-Term Follow-Up of Medication-Assisted Treatment for Addiction to Pain Relievers Yields "Cause for Optimism." Retrieved 4/03/2017 from <https://www.drugabuse.gov/news-events/nida-notes/2015/11/long-term-follow-up-medication-assisted-treatment-addiction-to-pain-relievers-yields-cause-optimism>

<sup>28</sup> Substance Abuse and Mental Health Services Administration. (2015). Medication and Counseling Treatment. Retrieved 4/03/2017 from <https://www.samhsa.gov/medication-assisted-treatment/treatment>

<sup>29</sup> *Ibid.*



and naltrexone are components of a comprehensive MAT model<sup>30</sup> and MAT is frequently the most cost-effective treatment model for reducing heroin and opioid misuse, overdose, and deaths while also improving treatment retention.<sup>31</sup>

The most rigorous use of MAT takes place within specialized OTP treatment programs. These programs are certified by SAMHSA and accredited by a SAMHSA approved body overseen by the Division of Pharmacologic Therapies (DPT), SAMHSA Center for Substance Abuse Treatment (CSAT).<sup>32</sup> In addition to the medication (e.g., buprenorphine, methadone, naloxone, or other drug), individuals who receive treatment for opioid use disorder at an OTP are required by federal law to receive medical, behavioral, vocational, educational, and targeted treatment services.<sup>33</sup> MAT has been proven to be a clinically effective treatment model for opioid use disorder and significantly reduces the need for inpatient detoxification services for individuals who are entering treatment. The comprehensive model has been shown to increase retention in treatment, increase the ability to gain and maintain employment, and decrease illegal opiate use and impact on other criminal activity.

Despite the often heavy emphasis on the medication-assisted component of MAT, behavioral therapies, including family, individual, and group counseling, are the most commonly used forms of substance abuse treatment. In fact, the National Institute of Drug Abuse (NIDA) urges programs to provide recovery programming in the form of counseling, cognitive therapies, and social psychological supports.

NIDA outlines 13 principles of effective drug addiction treatment, displayed in Table 4; these can provide one tool for assessing practice.<sup>34</sup>

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<sup>30</sup> Murphy, K., et al. (2016). Finding Solutions to the Prescription Opioid and Heroin Crisis: A Road Map for States. Washington, D.C.: National Governors Association Center for Best Practices.

<sup>31</sup> Reif, S., Horgan, C. M., Kreiner, P., & Nikitin, R. (2016). Behavioral health organizations' current and future approaches to addressing the U.S. opioid crisis. *Association for Behavioral Health and Wellness White Paper*, 1-21.

<sup>32</sup> <https://www.samhsa.gov/medication-assisted-treatment/treatment>

<sup>33</sup> *Ibid.*

<sup>34</sup> NIDA. (2012, December 1). Principles of Drug Addiction Treatment: A Research-Based Guide (Third Edition). Retrieved from <https://www.drugabuse.gov/publications/principles-drug-addiction-treatment-research-based-guide-third-edition> on 2017, May 31

**Table 4. Principles of Effective Drug Addiction Treatment**

1. Addiction is a complex but treatable disease that affects brain function and behavior.
2. No single treatment is appropriate for everyone
3. Treatment needs to be readily available
4. Effective treatment attends to multiple needs of the individual, not just his or her drug abuse
5. Remaining in treatment for an adequate period is critical
6. Behavioral therapies-including individual, family, or group counseling-are the most commonly used forms of drug abuse treatment
7. Medications are an important element of treatment for many patients, especially when combined with counseling and other behavioral therapies
8. An individual's treatment and services plan must be assessed continually and modified as necessary to ensure that it meets his or her changing needs.
9. Many drug-addicted individuals also have other mental disorders
10. Medically assisted detoxification is only the first stage of addiction treatment and by itself does little to change long-term drug abuse
11. Treatment does not need to be voluntary to be effective
12. Drug use during treatment must be monitored continuously, as lapses during treatment do occur
13. Treatment programs should test patients for the presence of HIV/AIDS, hepatitis B and C, tuberculosis, and other infectious diseases as well as provide targeted risk-reduction counseling, linking patients to treatment if necessary
<b>Source: National Institute on Drug Abuse (NIDA)</b>

To make medication-assisted treatment more readily accessible in the community there has been a greater focus of late on expanding access to buprenorphine in community settings, including primary care practices. When it was approved in 2002, buprenorphine was the first opioid addiction medication that could be prescribed by doctors. The only other medicine available for addicts at the time was methadone, which had to be dispensed daily at highly regulated clinics. More than 900,000 U.S. physicians can write prescriptions for opioid painkillers such as OxyContin, Percocet and Vicodin by signing on to a federal registry. Nurse practitioners and physician assistants can also prescribe opioids. But to prescribe buprenorphine to people who become addicted to opioids and heroin, doctors must take an eight-hour course and apply for a special license.

The federal Drug Enforcement Agency has special record-keeping requirements for dispensing buprenorphine.<sup>35</sup> So far, fewer than 32,000 doctors have received the buprenorphine license and the vast majority who have a license seldom, if ever, use it.<sup>36</sup> See Appendix A for the percent of people with addictions in all states who can access buprenorphine due to physician availability.

## Community Practices: Delaware

Consistent with national trends, heroin and prescription opioids were the primary reason for drug-related overdose deaths and treatment admissions in Delaware and comparable states during the past five years. Delaware, like comparable states and the nation at large, has experienced a dramatic increase in opioid-related overdose deaths, accompanied by growing addiction treatment admissions for heroin and other opiates. The Department of Health and Social Services has reported that there were 308 drug overdose deaths in 2016, up from 228 in the previous year, and that fentanyl-related deaths increased to 120 from 42 in 2015.

In 2015, the Delaware Division of Forensic Science reported 228 total drug-related deaths, of which 114 were prescription drug-related, 42 fentanyl-related and 83 heroin-related.<sup>37</sup> During that time, close to 35 percent of individuals admitted for substance abuse treatment indicated the primary substance of abuse was heroin, while five percent indicated other opiates.<sup>38</sup> Although alcohol tends to be the most prevalent primary substance abused in treatment admissions in most states, in Delaware, Washington D.C., Maine, New Hampshire, Rhode Island, and Vermont, opiate use (either heroin or non-heroin opiates) was the primary substance identified in substance abuse treatment admissions.<sup>39</sup>

In an attempt to curb the increasing abuse of heroin and legal opioids and deaths from overdose, Delaware enacted a prescription monitoring program (Senate Bill 59, 2013) requiring all prescribers holding a Delaware Controlled Substance Registration (CSR) to register with the Delaware Prescription Monitoring Program (PMP) on or before January 1, 2014. This requirement includes prescribers who do not dispense or prescribe controlled substances. Also, pharmacies licensed and located in Delaware must report to the Delaware

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<sup>35</sup> Physicians who are conducting office-based buprenorphine treatment should adhere to specific DEA medical recordkeeping requirements; some exceed standard Schedule III requirements. Buprenorphine treatment records should include a log identifying patients (by name or ID number), name of drug prescribed or dispensed, strength/quantity of medication prescribed, and date of issuance. One way to comply is to keep a photocopy of the prescription within each patient's record for at least two years.

<sup>36</sup> Vestal, C. (2016). Waiting Lists Grow for Medicine to Fight Opioid Addiction. Retrieved 5/31/17 from <http://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2016/02/11/waiting-lists-grow-for-medicine-to-fight-opioid-addiction>

<sup>37</sup> Delaware Division of Forensic Science 2015 Annual Report (Rep.). (2016). Retrieved January 11, 2017, from The Division of Forensic Science website: <http://dshs.delaware.gov/forensics/pdf/Final%202015%20DFS%20Annual%20Report.pdf>

<sup>38</sup> Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality. (2015) Treatment Episode Data Set (TEDS). Based on administrative data reported by States to TEDS through April 03, 2015. Rockville, MD.

<sup>39</sup> Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality. (2015). Treatment Episode Data Set (TEDS): 2004–2014. State Admissions to Substance Abuse Treatment Services. BHSIS Series S-85, HHS Publication No. (SMA) 16-4987. Rockville, MD.

PMP all schedule II, III, IV and V controlled substance prescriptions that they dispense. All such prescriptions must be reported, including those dispensed for non-Delaware residents or mailed/shipped out of state. Moreover, out-of-state pharmacies must report to the Delaware PMP all schedule II through V controlled substance prescriptions that they deliver, ship or mail into Delaware.

In addition to the state's prescription monitoring, DSAMH, under the Department of Health and Social Services, oversees the provision of community-based substance abuse treatment throughout the state. Among its several missions, it is charged with providing public drug and alcohol treatment services for adults, primarily through contracts with private agencies. Treatment services through these agencies generally cover a range of common practices including: screening and evaluation; outpatient counseling; opioid treatment, methadone maintenance; treatment team programs for individuals with long-term alcohol and drug dependence disorders; outpatient case management services, detoxification; and residential services.<sup>40</sup>

Delaware's residential services are reported to DSAMH under several different rubrics, which creates uncertainty regarding the types of OUD programming available to individuals with opioid use disorders. The Delaware Adult Behavioral Health DHSS Service Certification and Reimbursement Manual, November 1, 2016, (DSAMH's treatment manual) defines residential treatment as SUD/OUD programming which takes place in a non-outpatient, residential, setting. In some reports to the agency, this type of setting encompasses beds in a 23-hour observation detoxification program as well as Sober Living.

The Delaware Division of Substance Abuse and Mental Health produces a standard report (#3— see Table 11) that documents daily available "beds" in the Delaware system. These "beds" cover residential services rather than outpatient/ambulatory services. So, for example, there are "residential detox beds" for withdrawal management, and observation. There are also detox beds that have an ambulatory component with an IOP. DSAMH's own Service Certification and Reimbursement manual does not define residential treatment except in opposition to non-residential treatment (i.e., ambulatory services), which is defined. This document only captures residential services that DSAMH contracts for directly and the IOP programs that are connected to the comprehensive withdrawal management services. This is a daily report that is disseminated to show where there are open residential beds.

Further clarification of the nature of residential care in contrast to outpatient care in Delaware turns on the ASAM 3.3 and 3.5 definitions.

ASAM 3.3 (and 3.5), Clinically Managed Population-Specific High-Intensity Residential Services is an adults-only level of care typically that offers 24-hour care with trained counselors to stabilize multidimensional imminent danger along with less intense milieu and group treatment for those with cognitive or other impairments unable to use full active milieu or therapeutic community. Level 3 encompasses residential services that are

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<sup>40</sup> The Delaware Division of Substance Abuse and Mental Health: retrieved 2/20/2017  
<http://www.dhss.delaware.gov/dhss/dsamh/about.html>

described as co-occurring capable, co-occurring enhanced, and complexity capable services, which are staffed by designated addiction treatment, mental health, and general medical personnel who provide a range of services in a 24-hour treatment setting. A detailed description of the services typically offered in this level of care, the care setting and how to identify what patients would benefit best from these services based on an ASAM dimensional needs assessment, begins on page 234 of *The ASAM Criteria: Treatment Criteria for Addictive, Substance-Related, and Co-Occurring Conditions (2013)*.

Under this definition, according to several providers, there are several residential treatment programs in Delaware but these are limited. Providers wrote to us that:

1. PSI has a 10-bed program for men in Dover
2. PSI has a 10-bed program for women in Dover
3. Connections Community Support Programs, Inc. has a 10-bed program for women in Wilmington
4. Gateway has a 47-bed program for men in Smyrna
5. Gaudenzia has a 32-bed program for young adults (under age 25) with OUD in Wilmington
6. Gaudenzia has a 16-bed program for adults with co-occurring disorders in Sussex County

In addition to the residential treatment programs there are the medically monitored withdrawal management centers:

1. Kirkwood in New Castle County has 28 beds (Northeast Treatment)
2. Harrington serves Kent and Sussex with 28 beds (Connections)

And there are at least 143 state-funded Residential Recovery (Sober Living) beds statewide.

A lengthy conversation with stakeholders reveals that Withdrawal Management and Sober Living, while provided in a residential setting, are not typically what patients and their families think of as residential treatment. Rather, using the ASAM definition of residential treatment, Delaware's OUD treatment system consists of several ASAM 3.3 facilities. These offer 24-hour care with trained counselors to stabilize patients in imminent danger and those with cognitive or other impairments unable to use full active milieu or therapeutic community.

Note that in Delaware, as in other states, residential inpatient services have experienced problems with accessibility because of insurance policies. As one of our treatment providers explained:

*They are all technically indefinite length of stay programs—that is, people should be able to stay for as long as they clinically meet the ASAM Patient Placement Criteria for that level of care. And, before the system went to 100% Fee for Service, that is how they operated. The problem is the Medicaid*

*Managed Care companies and other insurers. They have required that this level of care be “prior authorized” and they dole out the days one or two at a time. It takes a lot of persistence to get a patient authorized for more than 14 days (although it can be done—we do it successfully regularly).<sup>41</sup>*

In 2013, approximately 29 percent of the facilities in Delaware (12 out of 42) provided some kind of medication assisted treatment for opioid addiction, while 21 percent of the facilities (9 out of 42) were accredited by SAMHSA as an OTP (in 2017 the number grew to 13). The latter is crucial since OTPs are designed to meet standards of practice established by SAMHSA. Comparable states also provide medication assisted treatment, albeit four out of five are at lower rates than Delaware (*i.e.*, 24 percent in Washington D.C., 10 percent in Maine, 22 percent in New Hampshire and 25 percent in Vermont; Rhode Island is higher at 31 percent.<sup>42</sup>

Under the Drug Addiction Treatment Act of 2000, physicians must also obtain a special license that allows them to prescribe buprenorphine to 30 patients in their first year and then subsequently up to 100 patients at any one time. Due to the special requirements, as of February 2015, less than 50 percent of the total number of possible patients who could be prescribed buprenorphine actually received this medication as part of their opioid abuse treatment in Delaware, lower than the United States average of roughly 50 percent.<sup>43</sup> The District of Columbia, Maine, Rhode Island, and Vermont, are providing buprenorphine to over 50 percent of the possible patients they could be serving, while New Hampshire is providing this medication to an even smaller pool of patients than Delaware.<sup>44</sup> Appendix A shows how Delaware compares to all states in the country.

Because of the varying state population sizes, costs of untreated opioid addiction fluctuate markedly from state to state and across administrative regions. Focusing solely on prescription opioids, a recent study showed that in Delaware, Washington D.C., Maine, New Hampshire, Rhode Island, and Vermont roughly half of one percent of healthcare related costs are consumed by opioid-related costs. Per capita costs of opioid addiction treatment are \$117 in Delaware, placing it above each of the comparable states in terms of the economic impact of the crisis on healthcare costs. Since Delaware’s statewide population is just under one million residents, this per capita cost equates to over \$111 million in healthcare costs for opioid addiction treatment; nationally, Delaware was ranked third after Oregon and Washington State in per capita healthcare costs of opioid addiction.<sup>45</sup>

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<sup>41</sup> Following the study period, Delaware’s governor signed into law a legislative package that created greater accessibility for individuals with SUDs and OUDs by counteracting insurer restrictions on coverage.

<sup>42</sup> Center for Behavioral Health Statistics and Quality, SAMHSA. (2013). 2013 State Profile – United States National Survey of Substance Abuse Treatment Services (N-SSATS). Rockville, MD.

<sup>43</sup> Vestal, C. (2016). Waiting Lists Grow for Medicine to Fight Opioid Addiction. Retrieved 5/31/17 from <http://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2016/02/11/waiting-lists-grow-for-medicine-to-fight-opioid-addiction>

<sup>44</sup> *Ibid.*

<sup>45</sup> Matrix Global Advisors. (2015). Health Care Costs from Opioid Abuse: A State-by-State Analysis. Retrieved 2/20/17 from [http://drugfree.org/wp-content/uploads/2015/04/Matrix\\_OpioidAbuse\\_040415.pdf](http://drugfree.org/wp-content/uploads/2015/04/Matrix_OpioidAbuse_040415.pdf)



## Community Practices: Comparable States

### Maine

Maine, like Delaware, has seen a large increase in the number of opioid-related overdose deaths. The state has a larger opioid-related death rate than Delaware (See Table 3 above). Maine, through the Department of Health and Human Services, Office of Substance Abuse and Mental Health Services, offers substance abuse treatment options including medication assisted therapy, residential treatment, detoxification services and therapeutic services.<sup>46</sup> What is unusual about Maine, however, is its strict laws limiting MMEs that can be prescribed (see Appendix B for summary of provisions).

The state provides 50 beds for addicted individuals to detoxify, while 78 licensed substance abuse agencies offer more than 900 licensed substance abuse clinicians for treatment purposes. For MAT, Maine offers more than 7,000 slots for treatment, while offering roughly 350 residential treatment beds for inpatient substance abuse treatment. Maine also provides an enhanced parenting project (MEPP) that supports families by “co-locating parenting education classes and substance abuse treatment services;” this model provides support for approximately 250 families annually.<sup>47</sup> For opioid addiction, the state utilizes MAT with many agencies available for service provision, some of which offer accredited OTPs. In 2013, ten percent of the 222 facilities statewide offered medication assisted therapy but just five percent were accredited as OTPs, the lowest proportion of the states discussed in this review. *Per capita* costs for the treatment of substance abuse were also the second lowest among these states at just \$70 per person.<sup>48</sup>

### New Hampshire

New Hampshire has also seen a large increase in the number of opioid related overdose deaths and has the largest opioid related death rate of the states in this review (See Table 3 above). New Hampshire, through the Department of Health and Human Services, Bureau of Drug and Alcohol Services, offers treatment options including: early intervention, withdrawal management services, outpatient counseling, intensive outpatient programs, partial hospitalization services, residential services, recovery support services, and medication assisted treatment.<sup>49</sup>

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<sup>46</sup> Maine Department of Health and Human Services. (2017). Substance Abuse Treatment in Maine. Retrieved 04/03/2017 from <http://www.maine.gov/dhhs/samhs/osa/files/Substance-Abuse-Treatment-in-Maine-2.7.2017.pdf>

<sup>47</sup> *Ibid.*

<sup>48</sup> Center for Behavioral Health Statistics and Quality, SAMHSA. (2013). 2013 State Profile – United States National Survey of Substance Abuse Treatment Services (N-SSATS). Rockville, MD.

<sup>49</sup> New Hampshire Department of Health and Human Services. (2016). New Hampshire’s Substance Use Disorder Treatment System. Retrieved 04/04/2014 from <https://www.dhhs.nh.gov/dcbcs/bdas/documents/issue-brief-treatment.pdf>

New Hampshire offers MAT services to persons diagnosed with an opioid related addiction some of which are provided by OTPs. In 2013, 22 percent of the state's 55 facilities offered medication assisted therapy while 15 percent were accredited as OTPs. Per capita costs for the treatment of substance abuse was relatively low at just \$81 per person.<sup>50</sup>

### *Rhode Island*

Rhode Island saw a 21 percent increase in the number of opioid related overdose deaths between 2014 and 2015 and the state has the second largest opioid related death rate of the states in this review next to New Hampshire (refer to Table 3 above). Rhode Island, through the Department of Behavioral Healthcare, Developmental Disabilities, and Hospitals, Substance Use Disorders Services, offers treatment options including: detoxification services, residential treatment services, outpatient services, and medication assisted treatment.<sup>51</sup>

The state offers MAT services for persons diagnosed with an opioid related addiction and they collaborate with partners across the state (*i.e.*, state police, local law enforcement, and other agencies) to create and compile training curricula and resources to help these agencies fight opioid abuse and overdose.<sup>52</sup> In 2013, 31 percent of the state's 62 facilities offered medication assisted therapy while 24 percent were accredited as OTPs. The per capita costs for treatment of substance abuse were the second highest of the states discussed here at \$103 per person.<sup>53</sup>

### *Vermont*

Vermont had the second lowest increase in the number of opioid related overdose deaths between 2014 and 2015 and had the lowest opioid related death rate of the states in this review (see Table 3 above). However, Vermont still had 99 overdose deaths statewide during 2015. To combat substance abuse, the state, through the Department of Health, Alcohol and Drug Abuse Programs Division, offers service options including: prevention programs, family programs, and recovery services. Substance abuse treatment options in Vermont are inclusive of outpatient programs, intensive outpatient programs, inpatient treatment, short-term residential treatment, and opioid treatment programs.<sup>54</sup>

The state offers MAT services through their OTPs (which they also refer to as "Hubs") for persons diagnosed with an opioid-related addiction. These OTPs are a part of what Vermont

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<sup>50</sup> Center for Behavioral Health Statistics and Quality, SAMHSA. (2013). 2013 State Profile – United States National Survey of Substance Abuse Treatment Services (N-SSATS). Rockville, MD.

<sup>51</sup> Rhode Island Department of Behavioral Healthcare, Developmental Disabilities, and Hospitals (2016). Agencies Licensed to Provide Substance Abuse Treatment. Retrieved 04/04/2017 from [http://www.bhddh.ri.gov/substance\\_use/pdf/BHDDH-Licensed%20Substance%20Abuse%20Agencies%20for%20External%20Data%20Base%20\(revised%2010-3-2016\).pdf?](http://www.bhddh.ri.gov/substance_use/pdf/BHDDH-Licensed%20Substance%20Abuse%20Agencies%20for%20External%20Data%20Base%20(revised%2010-3-2016).pdf?)

<sup>52</sup> *Ibid.*

<sup>53</sup> Center for Behavioral Health Statistics and Quality, SAMHSA. (2013). 2013 State Profile – United States National Survey of Substance Abuse Treatment Services (N-SSATS). Rockville, MD.

<sup>54</sup> Vermont Department of Health, Alcohol and Drug Abuse Programs Division. Retrieved 04/04/2017 from <http://healthvermont.gov/alcohol-drug-abuse/programs-services/treatment-options>



refers to as “The Hub and Spoke System,” which is a statewide partnership of clinicians and treatment centers providing MAT services statewide. In 2013, 25 percent of the state’s 44 facilities offered medication assisted therapy while 20 percent were accredited as OTPs. The per capita costs for treatment of substance abuse in Vermont were the lowest of the states discussed here at just \$61 per person (almost half that of Delaware \$117).<sup>55</sup>

### **Washington D.C.**

Of the states in this review, Washington D.C. had the largest increase in the number of opioid related overdose deaths between 2014 and 2015 and it logged 125 overdose deaths during 2015 (see Table 2 above). In order to treat persons with substance abuse issues, the District, through the Department of Behavioral Health, Substance Use Disorder Services, offers service options including: detoxification, residential treatment, MAT, individual and group counseling, self-help and recovery activities, and outpatient services, based on the individual’s level of need. D.C. offers recovery support services inclusive of wrap-around services such as care coordination, mentoring, coaching, educational support, job readiness and training, public transportation and other services to support recovery.<sup>56</sup>

The District of Columbia offers MAT services for persons diagnosed with an opioid related addiction some of which occur through agencies accredited as OTPs. In 2013, 24 percent of the district’s 37 facilities offered medication assisted therapy; however, just 14 percent of these facilities were accredited as OTPs. The per capita costs for treatment of substance abuse was the third highest of the states discussed here at \$95 per person.<sup>57</sup>

### **Criminal Justice Practices: Nationwide**

In 2010, the National Center on Addiction and Substance Abuse (CASA) at Columbia University found that 80 percent of federal inmates, 81 percent of state inmates, and 77 percent of local inmates were substance involved. Of the 2.3 million inmates in U.S. prisons, 65 percent, roughly 1.5 million inmates, met the DSM-IV criteria for alcohol or other drug abuse and addiction while another 20 percent were substance involved (*i.e.*, were under the influence of alcohol or other drugs at the time of their offense, stole money to buy drugs, were substance abusers, violated the alcohol or drug laws, or share some combination of these characteristics) even though they did not meet the DSM-IV medical criteria for addiction.<sup>58</sup>

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<sup>55</sup> Center for Behavioral Health Statistics and Quality, SAMHSA. (2013). 2013 State Profile – United States National Survey of Substance Abuse Treatment Services (N-SSATS). Rockville, MD.

<sup>56</sup> District of Columbia Department of Health, Substance Use Disorder Services. Retrieved 04/04/2017 from <https://dbh.dc.gov/node/145462>

<sup>57</sup> Center for Behavioral Health Statistics and Quality, SAMHSA. (2013). 2013 State Profile – United States National Survey of Substance Abuse Treatment Services (N-SSATS). Rockville, MD.

<sup>58</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2010). *Behind Bars II: Substance abuse and America's prison population*. New York, NY.

Other studies indicate that more than half of the people sentenced to probation across the U.S. have conditions requiring them to participate in substance abuse treatment. Yet only 17 percent of those initiate participation in substance abuse treatment.<sup>59</sup> A second report by CASA found that of all the inmates nationwide with substance abuse and addiction disorders only 11 percent received any treatment during their incarceration. It also estimated that if all inmates who needed treatment and aftercare services received such services, the U.S. would break even financially in a year if just over ten percent remained substance free, crime free, and employed. Subsequently, for each inmate who remained sober, employed, and crime free the nation would reap an economic benefit of \$90,953 per year.<sup>60</sup>

Research studies have shown that incarcerated individuals are at greater risk for drug-related harm, including higher than average drug overdoses, than the general population.<sup>61</sup> Untreated drug abuse among the offender population is related to higher post-release mortality rates, greater risk of relapse to drug abuse, higher costs and a return to criminal behavior. Consequently, access to quality treatment is especially important for this group.

Similar to the impact on the general population, MAT reduces opiate use and mortality; offenders on re-entry are more likely to pursue treatment and less likely to test positive for serious drug use involving opioids and cocaine. In fact, the National Governors Association recommends that states support MAT (combined with recovery programming), expand and strengthen the workforce and infrastructure for providing MAT, ensure access to MAT (and recovery programming) in correctional facilities and on re-entry, and make naloxone more accessible.<sup>62</sup>

Various organizations including the American Correctional Association (ACA) in conjunction with Therapeutic Communities of America, the National Institute of Corrections (NIC), and the Center for Substance Abuse Treatment (CSAT) have developed guidelines for substance abuse treatment in correctional facilities; Table 5 provides a broad, comparative overview of these guidelines<sup>63</sup>.

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<sup>59</sup> Karberg, J.C. & James, D.J. (2005). Substance dependence, abuse, and treatment of jail inmates, 2002. Department of Justice Publications, Washington D.C. NCJ 209588, as cited in Walters, et al. (2014). MAPIT: Development of a web-based intervention targeting substance abuse treatment in the criminal justice system. *Journal of substance abuse treatment*, 46(1), 60-65.

<sup>60</sup> The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2010). *Shoveling Up II: The Impact of Substance Abuse on Federal, State and Local Budgets*. New York, NY.

<sup>61</sup> Gisev, N., Shanahan, M., Weatherburn, D. J., Mattick, R. P., Larney, S., Burns, L., & Degenhardt, L. (2015). A cost-effectiveness analysis of opioid substitution therapy upon prison release in reducing mortality among people with a history of opioid dependence. *Addiction*, 110(12), 1975-1984.

<sup>62</sup> Murphy, K., et al. (2016). *Finding Solutions to the Prescription Opioid and Heroin Crisis: A Road Map for States*. Washington, D.C.: National Governors Association Center for Best Practices.

<sup>63</sup> Bartlett, C., Dinsmore, J., Gilbert, J. M., Kornblum, A., Latham, J., Oliff, H., & Sutton, D. (2005). Substance Abuse Treatment for Adults in the Criminal Justice System. Treatment Improvement Protocol (TIP) Series 44. *Substance Abuse and Mental Health Services Administration*.

**Table 5. Comparative Guidelines for Substance Abuse Treatment in Correctional Facilities**

	<b>ACA</b>	<b>NIC</b>	<b>CSAT</b>
<b>Screening and assessment</b>	Diagnosis of chemical dependency by a physician and determination of whether that individual requires pharmacologically-supported care	Screening and assessment	Standardized screening and assessment
<b>Treatment plans</b>	Individualized treatment plans	Development of comprehensive treatment services Continuity of services across the corrections system	Individualized treatment plans
<b>Other</b>	Referrals to community resources upon release	Staff recruitment Staff training Sanctions Program accountability and evaluation	Matching to different levels or types of treatment services Case management services Use of cognitive-behavioral, social learning, and self-help approaches Inclusion of relapse prevention training Use of self-help groups Use of therapeutic communities Provision for isolated treatment units In-prison drug testing Continuity of services Program evaluation Cross-training of staff

Sources: ACA 1990; CSAT 1993; NIC 1991.

In 2011, there were 1.7 million discharges from substance abuse treatment programs, just over one third of which (34 percent) were referred to treatment from the criminal justice system.<sup>64</sup> While in 2012, just 26 percent of treatment facilities offered treatment programming specifically designed for criminal justice-involved individuals.<sup>65</sup> Of the treatment facilities that had programs catering to individuals involved with the criminal justice system, over half provided assistance obtaining social services, housing, and domestic violence services.<sup>66</sup>

The most common service provided to offenders in prison with substance abuse or addiction is drug education, not treatment, and those that do provide treatment services tend to lack continuity of treatment post-release, an essential component to recovery.<sup>67</sup> Once released from jail or prison, individuals with substance abuse addictions experience many challenges that increase their risk of relapse, such as finding housing, employment, reuniting with family, and the requirements of their probation or parole.<sup>68</sup>

### Criminal Justice Practices: Delaware

In Delaware, corrections administrators claim that 46 percent of the state's offender population has substance abuse-related issues,<sup>69</sup> and recidivism rates can be high (approximately 70 percent) without intervention and treatment.<sup>70</sup> To combat the issue in Delaware, DSAMH offers specialized case management for adult offenders with alcohol/drug abuse problems who are involved in the Drug Courts (Treatment Access Center–TASC). It also provides alcohol and drug abuse prevention programs that address a number of high-risk and under-served populations and geographic areas.

Delaware operates a widely-recognized three-phased substance abuse treatment program (KEY/Crest/Aftercare) that has been shown to treat incarcerated individuals with drug problems successfully.<sup>71</sup> Delaware was the first state in the nation to fully implement such an aggressive offender substance abuse program in which the offender's treatment follows him or her from incarceration to work release to the community.

The KEY program, supported by the Bureau of Justice Assistance (BJA), began in 1987 as a treatment program and therapeutic community for drug-involved offenders in the men's maximum security prison.<sup>72</sup> The program was self-contained and participants were

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<sup>64</sup> Smith, K., & Strashny, A. (2016). Characteristics of Criminal Justice System Referrals Discharged from Substance Abuse Treatment and Facilities with Specially Designed Criminal Justice Programs. Retrieved on 3/21/2017 from [https://www.samhsa.gov/data/sites/default/files/report\\_2321/ShortReport-2321.html](https://www.samhsa.gov/data/sites/default/files/report_2321/ShortReport-2321.html)

<sup>65</sup> *Ibid.*

<sup>66</sup> *Ibid.*

<sup>67</sup> Chandler, R. K., Fletcher, B. W., & Volkow, N. D. (2009). Treating drug abuse and addiction in the criminal justice system: improving public health and safety. *JAMA*, 301(2), 183-190. Retrieved on 3/24/2017 from [http://www.courtinnovation.org/sites/default/files/documents/Treating\\_Drug\\_Abuse.pdf](http://www.courtinnovation.org/sites/default/files/documents/Treating_Drug_Abuse.pdf)

<sup>68</sup> *Ibid.*

<sup>69</sup> But cf. other states' figures of 80 percent.

<sup>70</sup> Delaware Department of Correction, 3/31/17, <http://www.doc.delaware.gov/treatmentServices.shtml>. But cf. [CASA study estimates that 81 percent of state offender populations have substance abuse issues.](#)

<sup>71</sup> *Ibid.*

<sup>72</sup> Inciardi, J. A. (1995). *A corrections-based continuum of effective drug abuse treatment*. National Institute of Justice. Retrieved on 3/24/2017 from <https://www.ncjrs.gov/App/Publications/abstract.aspx?ID=152692>

separated from other offenders, based on the idea that in order to treat a substance abuse disorder, the whole person must be treated and that treatment should focus on building self-esteem and change attitudes and values.<sup>73</sup> The primary goal of the KEY program is to alter negative behaviors, thinking, and feelings that predispose one to substance abuse, and it stresses that addiction is the symptom, “not the essence of the disorder.” Inmates typically become involved with the KEY program within the final 12 to 18 months of incarceration, allowing material learned to stay at the forefront of their minds as the offender moves into the next stage of treatment.<sup>74</sup>

The second stage of Delaware’s substance abuse treatment program for offenders is the Crest substance abuse programs which are offered to offenders sentenced in a Level IV facility. The Crest Centers are available to both men and women and allow the recovering inmates to continue their treatment as they transition into their community. Supported by NIDA, the Crest Outreach Center, a work-release center in Delaware, was the first therapeutic community work-release program in the United States, created after research showed the 12 to 15 months that offenders would participate through the Key program would be insufficient treatment for long-term change.<sup>75</sup>

The Crest program requires participants to stay at the center for their first three months of treatment while they learn job skills such as preparing resumes and learning how to interview.<sup>76</sup> Individuals, including females, who were not participants in the Key program while incarcerated, are also admitted into the Crest program.<sup>77</sup> A research study conducted by the University of Delaware found that offenders who received 12 to 15 months of treatment in prison followed by six months of drug treatment and job training after their release were more than twice as likely to remain drug-free than offenders who received prison-based treatment alone.<sup>78</sup> Similarly, offenders who participated in both the Key and Crest programs were more likely to remain arrest-free for 18 months post-release (71 percent compared to 48 percent for the comparison group).<sup>79</sup>

Delaware is in the process of providing for a third stage of treatment for recovering offenders called the Aftercare Program. This stage is the final component of the substance abuse program and begins when an offender has completed Crest and is released on probation/parole. The offenders taking part in Aftercare reside full-time within the community and attend weekly group sessions and counseling at an assigned center. Each offender receives mandatory random drug testing, and offenders enrolled in the Aftercare program typically live in “host houses”.<sup>80</sup>

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<sup>73</sup> Inciardi, J. A. (1995). *A corrections-based continuum of effective drug abuse treatment*. National Institute of Justice. Retrieved on 3/24/2017 from <https://www.ncjrs.gov/App/Publications/abstract.aspx?ID=152692>

<sup>74</sup> Delaware Department of Correction, 3/31/17, <http://www.doc.delaware.gov/treatmentServices.shtml>

<sup>75</sup> Inciardi, J. A. (1995). *A corrections-based continuum of effective drug abuse treatment*. National Institute of Justice. Retrieved on 3/24/2017 from <https://www.ncjrs.gov/App/Publications/abstract.aspx?ID=152692>

<sup>76</sup> *Ibid.*

<sup>77</sup> *Ibid.*

<sup>78</sup> *Ibid.*

<sup>79</sup> *Ibid.*

<sup>80</sup> Delaware Department of Correction, 3/31/17, <http://www.doc.delaware.gov/treatmentServices.shtml>

In the coming months, the DOC will be giving Vivitrol and buprenorphine to inmates with OUD who meet DOC criteria before their re-entry into the community.

According to treatment providers developing the Vivitrol project: <sup>81</sup>

*The Vivitrol Re-entry Project is a collaborative effort between prison-based treatment services and community-based agencies to provide a continuum of care post-release. The program employs a multi-faceted approach to treatment, including the use of the medication assisted treatment, Vivitrol, counseling and continued treatment with community based providers. Due to the undetermined release dates of pre-trial offenders, they are not eligible to participate in the Vivitrol Re-Entry Project. Pretrial offenders who are interested in medication assisted treatment will receive information linking them to providers in the community and the discharge team will facilitate medical care in the community. Sentenced offenders who are interested in participating in the Vivitrol Re-Entry Project must be enrolled in a substance use disorder treatment program (i.e., Key or Crest) and will be evaluated to determine if they meet program eligibility requirements [which include]:*

- 1. The offender must complete MAT education groups as part of the Therapeutic Community phase 2 group schedule.*
- 2. Offenders interested in Vivitrol must express interest to their primary substance use counselor after completion of the MAT education group and submit a written request to the TC program Director asking for consideration for enrollment.*
- 3. The offender must be deemed medically appropriate and agree to remain engaged in comprehensive community-based treatment upon release.*
- 4. Insurance coverage must be established upon re-entry to the community. Offenders must submit written request to their assigned Re-entry Coach to be enrolled in DMMAP approximately 3 months prior to release.*

*Upon entry, the Substance Use Counselor will refer the offender to the medical department to obtain medical clearance. Once cleared medically, the offender will receive pre-release motivational counseling 60 days prior to release and then again in the last month of release. Offenders participating in the Vivitrol Re-entry Project will be prescribed a Naltrexone Tolerance Trial approximately 7 days prior to release. If tolerated, the offender will receive the first injection of Vivitrol approximately 3-4 days prior to their release. (Alkermes Pharmaceutical Company has agreed to*

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<sup>81</sup> Delaware Department of Corrections and Connections Community Support Programs, Inc.



donate free sample doses of Vivitrol to the DOC for use in the Vivitrol Re-entry Project).

*The Re-entry Coach/ case manager is responsible for securing the initial appointment with the community based provider within one week of the offender's release. Post-release data will be collected on a monthly basis. The goal is to have a 6-month post-release evaluation to collect data on compliance with treatment, Vivitrol and length of stay in treatment.*

In the buprenorphine program, offenders who are potential candidates for withdrawal will begin a withdrawal protocol. They will be evaluated by a physician with a Data 2000 waiver. Buprenorphine induction will take place if clinically indicated. After the taper, substance abuse treatment will take place under the auspices of the 6 for 1 program. Upon release, either while in active treatment or after the conclusion of the taper, the offender will be transported to a community-based OTP for continuation of care.

Delaware's KEY/Crest/Aftercare programming, along with its Treatment Access Center, is crucial for programming opioid treatment services for criminal justice populations. As noted, there is a considerable body of evidence indicating that incarcerated individuals are at greater risk for overdoses, relapse to drug use and criminal behaviors except in cases where MAT is used to reduce opiate use and mortality. Moreover, offenders who received post-release MAT cost the treatment and criminal justice systems about half of what offenders without post-release MAT do. In addition, a study completed by the California Department of Alcohol and Drug Programs estimated that for each dollar spent on substance abuse treatment, about seven dollars is saved in criminal justice costs. This makes long-term substance abuse treatment a cost-effective approach to not only treatment but also to reduce crime.<sup>82</sup>

## **Criminal Justice Practices: Comparable States**

### **Maine**

Maine's Department of Corrections, Substance Abuse Department provides for substance abuse treatment services to offenders in the state's corrections system. The substance abuse department offers services including individual counseling, group counseling, a drop-in weekly group session, and self-help activities.<sup>83</sup>

Individual counseling focuses one-on-one with an offender, providing assessment and evaluation, treatment planning and prioritization of treatment issues, and recovery issues. Group counseling is offered for issues such as: commitment to change; relapse prevention; return to self-relapse prevention; Addiction 101 (a psycho-educational group); and an intensive six-month 12-step group. The drop-in group offers weekly group counseling activities to individuals on a waiting list and provides basic information on a variety of

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<sup>82</sup> Delaware Department of Correction, 3/31/17, <http://www.doc.delaware.gov/treatmentServices.shtml>

<sup>83</sup> Maine Department of Corrections, Substance Abuse Services. Retrieved 04/03/2017 from <http://www.maine.gov/corrections/facilities/msp/MSPProgramsandServices.htm>

subjects related to substance use/abuse. Finally, Maine offers offenders a self-help program similar to Alcoholics' Anonymous groups.<sup>84</sup>

### *New Hampshire*

New Hampshire's Department of Corrections, Medical and Forensic Services Division provides substance abuse treatment services to offenders in the state's corrections system. This takes place through the Behavioral Health Unit and consists of services ranging from individual and group therapies to medication evaluation and management to treatment of mental health diagnoses, inclusive of substance use disorders. These services are provided by licensed clinicians and alcohol/drug counselors.<sup>85</sup>

Each inmate entering the New Hampshire Department of Corrections receives a mental health intake screening and each is referred to any of the available services offered: substance use assessment, substance use treatment, individual and group therapy, and psychological assessment.<sup>86</sup>

Medication assisted treatment is also available to offenders in the custody of the Department of Corrections to provide pre-release treatment for opioid- and alcohol-addicted offenders. "This program involves prison-based residential and non-residential substance abuse treatment and collaboration with community based clinics to provide aftercare treatment. The goal of this initiative is to increase and improve substance abuse treatment response among people under the control and custody of Department of Corrections."<sup>87</sup>

### *Rhode Island*

Rhode Island's Department of Corrections (RIDOC), Behavioral/Mental Health Services provides for substance abuse treatment services to offenders in the state's corrections system. The Substance Abuse Treatment Services Division provides "an organized approach to substance abuse treatment with three levels of service delivery." The levels of treatment are: Level 1, Level 2, and Level 3. These services are delivered through a contracted vendor. The current vendor for Substance Abuse Treatment is Spectrum Health Services, Inc.<sup>88</sup>

Level 1 consists of modified therapeutic communities which are six months in duration for males and three to four months for females. Level 2 is intensive day treatment services lasting for three to six months for both males and females. Finally, Level 3 is outpatient treatment which consists of eight to ten weekly sessions. According to the RIDOC, the concept of continual sobriety extends to the involvement of self-help programs (such as

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<sup>84</sup> Maine Department of Corrections, Substance Abuse Services. Retrieved 04/03/2017 from <http://www.maine.gov/corrections/facilities/msp/MSPProgramsandServices.htm>

<sup>85</sup> New Hampshire Department of Corrections, Medical and Forensic Services Division. Retrieved 04/03/2017 from <http://www.nh.gov/nhdoc/divisions/forensic/index.html>

<sup>86</sup> *Ibid.*

<sup>87</sup> New Hampshire Department of Corrections, Policy and Procedure Directive: Medication Assisted Treatment-Substance Use Disorders. (2015). Retrieved 04/04/2017 from <http://www.nh.gov/nhdoc/policies/documents/6-08.pdf>

<sup>88</sup> Rhode Island Department of Corrections, Substance Abuse Treatment Services. Retrieved 04/03/2017 from [http://www.doc.ri.gov/rehabilitative/health/behavioral\\_substance.php](http://www.doc.ri.gov/rehabilitative/health/behavioral_substance.php)



Alcoholics Anonymous and Narcotics Anonymous) within their institutions and their new contract calls for greater emphasis on outcomes, especially on recidivism rates. Additionally, the state is working to develop a comprehensive substance abuse data base that will facilitate treatments and placements.<sup>89</sup>

## Vermont

Vermont's Department of Corrections, Agency of Human Services provides for substance abuse treatment services to offenders in the state's corrections system. The Department states "substance abuse programs work to develop sober and drug-free lives among Vermont offenders and [works] to reduce the social, economic, and criminal impact of substance abuse on the lives of victims, perpetrators, and the community."<sup>90</sup>

The Department offers offenders in their correctional facilities an intensive substance abuse program (ISAP). The purpose of the program according to the Department "is an Intermediate Sanction program that operates in the community and is administered by the Department of Corrections' Probation and Parole offices. It is designed to reduce incarceration, address the connection between an offender's criminal pattern and substance use, maintain non-violent offenders in the community and create a risk-management structure that is integrated with treatment services."<sup>91</sup>

All offenders who have been diagnosed with a substance abuse disorder requiring intervention are eligible for the ISAP. Treatment services are delivered based on the clinical assessment and the normal duration of the intensive phase of the program is six months, followed by an aftercare component of three to six months. ISAP treatment teams may adjust the duration of treatment based on performance adherence to program rules by the offender. Following completion of this intensive portion of the program, the offender moves into the aftercare element. This element is generally three months in duration with group attendance of once per week, again based on the offender's performance.<sup>92</sup>

Services available during treatment include: group therapy; relapse prevention services; referral to more intensive treatment (when deemed necessary); case planning, casework, and case management; drug testing; provision of family education and involvement in treatment; and alternative treatment activities/services when clinically indicated.<sup>93</sup>

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<sup>89</sup> Rhode Island Department of Corrections, Substance Abuse Treatment Services. Retrieved 04/03/2017 from [http://www.doc.ri.gov/rehabilitative/health/behavioral\\_substance.php](http://www.doc.ri.gov/rehabilitative/health/behavioral_substance.php).

<sup>90</sup> Vermont Department of Corrections, Substance Abuse Programs. Retrieved 04/03/2017 from <http://www.doc.state.vt.us/programs/substance-abuse-programs>

<sup>91</sup> Vermont Department of Corrections, Intensive Substance Abuse Program Description. Retrieved 04/04/2017 from <http://www.doc.state.vt.us/programs/substance-abuse-programs/intensive-substance-abuse-program-isap-1/>

<sup>92</sup> Vermont Department of Corrections, Intensive Substance Abuse Program Description. Retrieved 04/04/2017 from <http://www.doc.state.vt.us/programs/substance-abuse-programs/intensive-substance-abuse-program-isap-1/>

<sup>93</sup> *Ibid.*

## *Washington D.C.*

The District of Columbia's Department of Corrections provides substance abuse treatment services to offenders in the district's corrections system through a grant-funded therapeutic substance abuse program. Called "Progress Towards Empowerment," the residential treatment program (RSAT) is open to both males and females. It uses a co-occurring modified therapeutic services model, is open to offenders who are either self-referred or are referred by correctional staff, the United States Parole Commission, and/or the Public Defender's Service.<sup>94</sup>

Each offender's length of stay (90-day average) is based on the offender's "unique circumstances and progress" in the program. Inmates involved in the RSAT program move through progressive therapeutic phases with workshops on domestic violence, parenting, fatherhood, life skills, arts, behavior modification, vocational education, and health education curriculum. When completed, RSAT graduates are transferred and placed into an Addiction Prevention and Recovery Administration (APRA) funded aftercare program for up to six months, and the Department successfully negotiated an agreement with the U.S. Parole Commission to allow for parole of offenders who successfully complete the 90-day program and transition into community programming for a six-month period.<sup>95</sup>

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<sup>94</sup> District of Columbia Department of Corrections, Substance Abuse Treatment at DOC. Retrieved 04/03/2017 from <https://doc.dc.gov/page/substance-abuse-treatment-doc>

<sup>95</sup> District of Columbia Department of Corrections, Substance Abuse Treatment at DOC. Retrieved 04/03/2017 from <https://doc.dc.gov/page/substance-abuse-treatment-doc>.

## Summary of Opioid Treatment Review

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This review examined the opioid epidemic, standards of practice in the provision of opioid and heroin addiction treatment, and treatment infrastructure and practices in Delaware and comparable states.

To treat opioid addiction, SAMHSA, the CDC, U.S. DHHS, state health and human/social service agencies and local organizations have adopted initiatives that set standards for treatment (among other innovations). NIDA also outlines 13 principles of effective drug addiction treatment (Table 2). One of these services that has become the “gold standard” for treatment of opioid addiction is MAT which plays a substantial role in an individual’s recovery and future abstinence from substances.

The most rigorous use of MAT takes place within special opioid treatment programs, called OTPs. Of the jurisdictions discussed in this review, with the exception of Rhode Island (31 percent), Delaware had the most prevalent use of OTPs with 21 percent of its 42 facilities being accredited as an OTP.<sup>96</sup> These programs are certified by SAMHSA and accredited by a SAMHSA approved accrediting body overseen by the Division of Pharmacologic Therapies (DPT), SAMHSA Center for Substance Abuse Treatment (CSAT). When considering the ability to provide buprenorphine, one of the few medications approved for opioid addiction in the community, Delaware is below the national mean. That means there are not enough authorized prescribers, which could include nurse practitioners and physician assistants as well as physicians.

According to the guidelines for substance abuse treatment in correctional facilities as set forth by the ACA, NIC, and CSAT (Table 3), Delaware’s substance abuse treatment programs for offenders housed in their correctional facilities (Key/Crest/Aftercare) seem to be a standard by which other states and districts can gauge their own programs. An analysis of Delaware’s Key/Crest/Aftercare program in its formative period during the 1990’s found that 76 percent of offenders who participated in both Key and Crest programs were drug free and 71 percent were arrest free one year post completion. In contrast, just 19 percent who received no treatment were drug free and 30 percent arrest free.<sup>97</sup> Similarly, another study found that 69 percent of the graduates from the Key/Crest/Aftercare program were arrest free three years out of prison, much higher than those who received no treatment (29 percent).<sup>98</sup>

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<sup>96</sup> Center for Behavioral Health Statistics and Quality, SAMHSA. (2013). 2013 State Profile – United States National Survey of Substance Abuse Treatment Services (N-SSATS). Rockville, MD.

<sup>97</sup> Mathias, R. (1995). Correctional treatment helps offenders stay drug and arrest free. National Institute on Drug Abuse, Rockville, MD. Retrieved 04/05/2017 from [https://archives.drugabuse.gov/NIDA\\_Notes/NNVol10N4/Prison.html](https://archives.drugabuse.gov/NIDA_Notes/NNVol10N4/Prison.html)

<sup>98</sup> Wells, D., & Bright, L. (2005). Drug treatment and reentry for incarcerated women. *Corrections Today*, 62(7), 98-99. Retrieved on 04/05/2017 from <https://www.ncjrs.gov/pdffiles1/nij/212776.pdf>

Overall, Delaware's opioid crisis and treatment response seems to show that its small population bears the considerable costs of opioid addiction; Delaware spends more per person than comparable states. It has more OTP treatment capacity than most of its cohort but a smaller group of prescribers in the community. Delaware has been somewhat of a pioneer in its correctional programming, extending treatment beyond imprisonment, which is a demonstrated component of success in reducing recidivism. Whether these early findings are borne out by more detailed evidence will be examined in the body of the full report.

# Needs, Capacity and Deficiencies in Delaware's Treatment Network

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## OUD Treatment Needs: General Population

### Findings:

- In the past decade, the number of people with opioid use disorders nearly doubled, from 6,000 to 11,000.
- During the same period, the number receiving treatment for opioid use disorders increased by 500 percent, from 1,000 to 5,000 people
- While the rate of increase in treatment was greater than the rate of increase in the number of people with opioid use disorders, the result was a net need of 6,000 people in 2014, a thousand more than ten years earlier.<sup>99</sup>

The relationship between the prevalence of addiction and access to addiction treatment is central to understanding the dynamics of the Delaware treatment system. Table 6 explores this relationship. It shows the rate per thousand of persons aged 12 and older with a substance use disorder (SUD) and the rate of those with an opioid use disorder (OUD), which is a subset, followed by the rate of those who received specialty treatment for their disorder and those who did not.

Substance abuse and dependence in general, which includes both alcohol and drugs, remained fairly stable over the decade, with a small rise in recent years while opioid use disorders increased markedly in the period 2011–2014. Although the number receiving treatment also increased greatly, from 1,000 to 5,000 over a decade, Delaware lost ground in that more people needed treatment for opioids who were not receiving it at the end of a decade (6,000) than at the beginning (5,000). Thus, while nearly half the people needing treatment received it, the residual need is 6,000 persons.

Because NSDUH surveys are based on small samples, the data have been averaged across years in Table 6. This should yield more stable estimates. However, it may also underestimate the true size of an effect.<sup>100</sup> The number and percentage of individuals in Delaware receiving SUD/ OUD treatment is based on the difference between those who need treatment and those who reported that they had not received it during the year. Considerably more people are receiving OUD treatment (5,000, a 500 percent increase) in 2011–2014 than in the previous two periods (1,000 each, respectively). Inspection of standard errors (see footnote 95) shows that the estimates across years for OUD dependence, treatment need and receipt of treatment are: 1,000, 1,000 and 2,000 for

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<sup>99</sup> This report separates the discussion of need from the discussion of capacity, which is in the next section. While this section does reference people who have received treatment and admissions to treatment, which may sound like a capacity discussion, we do so to represent unmet need from the perspective of the person. The capacity section, instead, focuses on the treatment providers and the services available in Delaware.

<sup>100</sup> Averages based on small samples create problems by smoothing the estimate, and show greater uniformity than there actually is in the data. For discussion of the methodology of the NSDUH see Center for Behavioral Health Statistics and Quality. (2015). 2003-2014 National Survey[s] on Drug Use and Health (HHS Publication No. SMA 15-4927, NSDUH Series H-50). For standard errors, see NSDUH tables in this series.

each measure at each time period, respectively. Still, the dramatic increase from 1,000 individuals receiving OUD treatment in the earlier years (plus or minus 1,000 individuals) to 5,000 individuals (plus or minus 2,000) in the period 2011–2014 indicates a real increase in the direction of greater OUD treatment.

<b>Table 6. Past Year Substance and/or Opioid Abuse/Dependence, and Treatment among Persons Aged 12 or Older, Number in Thousands and Rate per Thousand Population</b>									
<b>Substance Use Disorder/Opioid Use Disorder</b>									
	<b>Number and Rate Past Year Abuse/Dependence</b>			<b>Number and Rate Past Year Who Did Receive Treatment</b>			<b>Number and Rate Past Year Who Did Not Receive Treatment</b>		
	2003-2006	2007-2010	2011-2014	2003-2006	2007-2010	2011-2014	2003-2006	2007-2010	2011-2014
<b>Substance Use Disorder</b>									
<b>N</b>	21.3	21.0	24.3	2.3	1.7	5.0	19.0	19.3	19.3
<b>Rate</b>	30.3	28.8	29.6	2.9	2.3	6.1	27.4	26.5	23.5
<b>Opioid Use Disorder</b>									
<b>N</b>	6.0	5.0	11.0	1.0	1.0	5.0	5.0	4.0	6.0
<b>Rate</b>	8.7	6.8	13.4	1.4	1.4	6.1	7.2	5.5	7.3
Source: Center for Behavioral Health Statistics and Quality. (2015). 2003-2014 National Survey[s] on Drug Use and Health (HHS Publication No. SMA 15-4927, NSDUH Series H-50).									

While Table 6 discusses people with needs, Table 7 shifts the focus to treatment admissions; that is, the frequency with which people seek treatment. Note that admissions data represent individual attempts to enroll in OUD treatment, not the number of clients in treatment. Multiple enrollments may reflect relapses or the inability to be seen in one place quickly enough, followed by an attempt to enroll someplace else. The data are drawn from the Treatment Episode Data Set generated by SAMHSA.

Table 7 shows the relationship between treatment admissions for substance abuse in general and opioids in particular over three time-periods from 2006 to 2014. The number of OUD admissions grew by 45 percent during the period and the opioid admissions as a portion of substance use admissions grew by over 52 percent. The rate of opioid use disorder admissions per thousand grew by 33 percent during the period. These data illustrate the burgeoning demand for services focused specifically on opioid use disorders. Higher rates of addiction and treatment, as seen in the survey data in the first table, were paralleled by higher rates of OUD admissions.

**Table 7. Delaware: Number of OUD Treatment Admissions, OUD Admissions as a Percent of SUD Admissions, Rate per Thousand among Persons Aged 18 or Older**

Year	Number of OUD Admissions			OUD as Percent of SUD Admissions <sup>101</sup>			OUD Admissions Rate per Thousand Population		
	2006	2010	2014	2006	2010	2014	2006	2010	2014
	3065	3113	4445	37.5	46.6	57.2	4.2	4.1	5.6

Source: Treatment Episode Data Set (TEDS): 2006-2014. National Admissions to Substance Abuse Treatment Services, 2016.

### Stakeholder perceptions:

- OUD treatment needs from the perspectives of clients and professional stakeholders focus more on how the system operates than on the need for particular types of services.
  - Clients are unclear how to access the system in general or how to obtain treatment without undue delays.
  - Practitioners, who are not addiction specialists (e.g., first responders, primary care physicians, law enforcement) but who interact with individuals with OUD, do not know how the treatment system works, specifically, with regard to criteria for admission and payment for services.

This section discusses treatment needs from the perspectives of OUD treatment clients, as well as key professional stakeholders. Perceptions are drawn from interviews and focus groups. Professional stakeholders include those who come in contact with clients as providers in the behavioral health and medical fields as well as law enforcement. They include OUD treatment advocates and state officials overseeing drug treatment.

Common themes emerged from the diverse group of people interviewed on Delaware’s treatment services and systems. Treatment needs are not always seen as the need to add services, but the need for better knowledge about what already exists, how to access it and how to pay for it. Thus, the focus for some stakeholders was: access, including payment coverage for treatment, communication/information about treatment, including establishing point of contact programs, and, type of treatment (such as individualized/client-centered programs, MAT and long-term treatment).

**General access.** Treatment clients identified access as a central barrier to receiving OUD services. Those we interviewed said: “Access to treatment should be easier; there are not a lot of options...” Specifically, clients preferred to be able to access treatment directly, even as a walk-in, than to be referred by a professional, which tended to result in delays. They had several reasons, including shorter wait times between referral and intake, and fewer restrictions on choice of provider. Some said it took several weeks to up to a month to get into treatment. One client claimed that for methadone maintenance he had to line up at

<sup>101</sup> The number of SUD admissions has been omitted to ease readability. It is simply the number of OUD admissions divided by the percentage of OUD admissions; e.g., 4445/.572 = 7,771, and so forth.



three a.m., and the clinic took only the first 10 people in line. Another noted: “It took me about three weeks to get them [to return my calls] so I just called my dealer because I knew he was going to answer.”

One treatment provider agreed, yet provided a nuanced observation that “treatment is there, but there is a lot of red tape.” Access, not capacity, seems to be a problem in this rendering. Like other providers, this one notes that: “There are enough beds. We can’t fill them all and there are data to show that. The problem is access. It’s a cumbersome system... the intake process is cumbersome, it can be a barrier. Clients can’t get in to see doctors, it takes a while. But everyone who needs beds can get one.” Importantly, this stakeholder observed, that the state has open slots. When asked about the perception that there weren’t enough beds, he answered: “[You are wondering] how can that be? Is it about the delay in access or is it a capacity issue? It’s not a capacity issue. It could be that they have to see a doctor and that takes time and then, because of the delay, perhaps, they aren’t interested in getting into treatment.”

***Service payments or coverage.*** Another perceived need is the ability to pay for services. Clients argued that “Medicaid does not give enough time for treatment. You are in rehab or inpatient and can’t stay long enough because insurance doesn’t pay.” Others agreed and explained how they had felt compelled to leave the state for treatment facilities in Maryland and Pennsylvania. And yet most agreed that Medicaid coverage was effective, if one had it. On the other hand, a provider noted: “People with private insurance have more barriers to access than those with Medicaid or even Medicare. The deductibles are so high.”

When asked about payment coverage, a well-placed professional stakeholder observed that coverage is more likely to keep people out of treatment than accessibility. “Treatment providers complain that everyone is getting kicked out of treatment after 14 days,” he notes. “No... [the state] has promised to cover them even if their insurer is denying coverage. Should [the state] provide shorter lengths? No. The state has made a statement to its vendors, that when an insurer denies service they should appeal it. They should question insurers on their denial of service. Not meeting parity is the problem.”

***Communication/ information about addiction treatment.*** Communication and/or the failure to get information about treatment is another problem focus group respondents noted consistently. One respondent claimed that after a Narcan administration there was no information to help her find treatment. Any kind of advertising, in a clinic, hospital or police department, she said, would be helpful.

In a group containing a number of mothers, one said “I don’t know what my options are and I see my peers struggle to get slots and there are not a lot of them; Oxford Houses are hard to get in to and women with children is harder.” Another said that she called several different numbers to get help but the numbers from the website were wrong or disconnected. “It was easier just to get high. I would get the run-around, wrong number, disconnected... when I finally got the right number I went right in...”



A medical provider involved in a successful outreach program that seeks to increase the point of contact with potential clients argues: “There is a knowledge gap. Professional stakeholders don’t know what there is to offer and people need to know what is out there. For example, what are admissions criteria for treatment? People don’t know how to get into treatment.” The answer her program offers is to train providers in identifying OUDs in a medical setting that contains a pathway to treatment.

These barriers were part of a larger problem with lines of communication, or so-called touch points, between those in need of treatment services and service providers. “[E]ven when the options are there, if you don’t know the right questions to ask, you aren’t going to get the right treatment,” noted one client, who said he felt lost in the system.

***Treatment type, duration and continuity.*** Another theme was the disparity between kinds of treatment clients thought they needed, and what they actually received. The first case exemplifies the robust client-focused OUD treatment: “I get one-on-one counseling and the financial life coach; it’s free and she has connected me and helped me with getting food; she is helping me and coming to my home and she is very open; she is going above and beyond and it means a lot to me.” In another case, however, even residential inpatient services, a service modality most OUDs seek, were problematic: “Thirty days doesn’t do the trick,” one argued, “you get back out doing the same thing.” Moreover, “...social workers aren’t giving the attention you deserve and the doctors don’t even talk with you and are in and out.”

One provider discussed an extensive scope of services which included methadone, Suboxone, Subutex, DUI services, and outpatient services for OUD/criminal justice-involved clients. He noted that while his agency provided a raft of services to many different populations, one provider cannot offer everything clients need. These additional services might include stable living services, basic needs like food, money for bills and so forth. Sober living and halfway houses (such as the Oxford system) can supplement specialty treatment services.

## OUD Treatment Needs: Criminal Justice Population

### Findings:

- About 46 percent of the offender population is estimated by the Delaware DOC to have substance use issues while 13 percent has committed specifically drug crimes.
- Assuming that 46 percent of the offender population has an SUD, and, assuming the same ratio of OUD to SUD that we see in the general population (11,000/ 24,300= 45.3 percent; see Table 6), of the 17,000 people served in community corrections, over 3,542 have an opioid use disorder.<sup>102</sup>

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<sup>102</sup> If the rate of SUDs in the Delaware offender population is closer to the CASA estimate of 80 percent (The National Center on Addiction and Substance Abuse (CASA) at Columbia University. (2010). Behind Bars II: Substance abuse and America's prison population. New York, NY.), then, the total number would be closer to 6,000. That is,  $.80 * 17,000 = 13,600$ , and  $.453 * 13,600 = 6,161$

- Somewhat under one in five opioid treatment admissions (17.6 percent) in the community are referred from a criminal justice setting. That amounts to 782 of 4,445 admissions in 2014.
- Level IV and V facilities do not maintain information on inmates with opioid addictions; although they do have counts of people needing addiction services in general.
- While certain types of treatment services are underutilized, for example SUD/ODU education, some of the most important types of services are unavailable. Through early 2017, Delaware provided no MAT or detoxification services for its incarcerated population with OUD (except in the case of pregnant women). However, DOC did initiate a program to provide Vivitrol and buprenorphine to certain inmates on a trial basis during the spring and summer 2017.

The Bureau of Community Corrections (BCC) Probation and Parole provides supervision to offenders upon completion of the incarcerated portion of a sentence or upon direct assignment by the courts to Levels III, II, or I. Community corrections supervises about 17,000 people on a given day. While BCC tracks certain special populations such as individuals with serious mental illness (15 percent) and sex offenders (14 percent) there is no special attention to categorizing people with addictions in general or opioid addictions in particular. Therefore, the numbers had to be extrapolated from the rates in the general population as well as existing data sets such as the Treatment Episode Data Set. HZA also used provider surveys to estimate both need and capacity.

Given that there are 17,000 people under community supervision on a given day in the spring of 2017, and that 46 percent have an SUD, if opioids constitute 45.3 percent of those with substance use disorders in the general population (Table 6), we can assume that about 3,542 people in community corrections have an opioid use disorder. The question, then, is how many are being treated? For that, we look at treatment admissions, and later Delaware's Key/Crest/Aftercare program.

Table 8 focuses on opioid treatment admissions among individuals with a criminal justice status who are located in the community. These individuals may be on pre-trial diversion, probation or parole, or under some other criminal justice injunction when admitted to a community-based treatment facility. It examines criminal justice and non-criminal justice OUD admissions to these treatment facilities.

The table separates three types of admissions associated with criminal justice from non-criminal justice admissions. Sources of criminal justice admissions to OUD treatment are: prison/probation/parole, pre-trial diversion, other criminal justice, which covers DUI/DWI, while non-criminal justice sources include family and friends, school, employer and self. Table 8 also separates opioid-related admissions from other substance use disorder admissions.

Opioid use disorder admissions from all criminal justice categories constitute 17.6 percent of all opioid admissions. Substance use disorder admissions, excluding opioids, constitutes nearly another 30 percent. These are weighted by DUI/DWIs. Combining the two, nearly half of the treatment admissions in Delaware involve people with criminal justice referrals, while somewhat less than a fifth involve opioids specifically.

Since there were 4,445 OUD treatment admissions at last count (Table 7) and 17.6 admissions entail OUDs from corrections, 782 admissions involved the correctional population with OUD. As in the discussion above, admission counts will be higher than people counts since a given person can have multiple admissions. However, even if every person had only one admission, we know that no more than 782 of the total number of the corrections population with an OUD received services. If the average was two admissions per person, then less than 400 were served. It is probably safe to say that approximately the same proportion of people in the general population with unmet service needs, is represented in the community corrections population.

Table 8. Criminal Justice. Opioid Treatment Admissions through Criminal Justice Referrals, 2014							
Percent OUD Admissions by Referral				Percent Non Opioid SUD Admissions by Referral			
Prison Probation Parole	Diversion	Other Criminal Justice	Non- Criminal Justice	Prison Probation Parole	Diversion	Other Criminal Justice	Non- Criminal Justice
3.2	4.1	10.3	82.4	6.3	6.7	16.5	70.5
Source: Treatment Episode Data Set (TEDS): 2006-2014. National Admissions to Substance Abuse Treatment Services, 2016.							

We move now to a discussion of treatment needs in Delaware’s correctional facilities. In February 2017, when we administered a survey to criminal justice facilities throughout the state, there were 815 Level IV inmates and 5,575 Level V on a given day. About two-thirds of Level IV have been there for less than a year as have a somewhat smaller portion of Level V. Length of time is a consideration because it is difficult to engage people in treatment with insufficient time ahead of them. Because Levels IV and V facilities do not track opioid use disorders in a data system, we tried obtaining the information through surveys of the facilities as well as through qualitative methods, interviews and focus groups. By asking questions both about need and capacity in the surveys, we collected information on both sets of issues at once.

Table 9 provides the facility survey results. It examines the range of opioid treatment service needs, treatment availability and utilization within the two levels of the Delaware criminal justice incarcerated population. There were eight facilities surveyed, two of which include offenders in pre-trial who have access to a program referred to as “6-for-1.”<sup>103</sup>

<sup>103</sup> Estimates represent numbers of inmates in one of the Key or Crest treatment programs, or in a pre-trial “6-for-1” program, at two facilities. The total volume of need across the entire incarcerated population, like that of the probation/parole/ pre-trial population is unknown. See narratives for discussion and recommendation.

While no respondent could estimate the number of inmates needing each specified service type for OUD specifically, the response overall was that 360 offenders of the total 617 offenders in the program needed OUD treatment. That is, 58 percent of those needing any addiction service needed OUD treatment specifically. As one might expect, this is slightly higher than the 45 percent we observed in the general population as the OUD subset of SUD.

Table 9 provides a fairly low estimate of offenders receiving services given the total offender population (617 to 625/6,390). Essentially 10 percent are receiving some form of treatment for addiction services, while five percent are estimated to need treatment for opioids specifically (360/6,390). If the Department's own low estimate that 46 percent have at least some issue with substance use and 13 percent have committed a drug crime (although not all drug crimes implicate usage), one would expect greater participation in treatment. In fact, the facilities report underutilization of many services. This is demonstrated by the difference in the number receiving services and the available slots, with the last column on the right showing the proportion of underutilized slots. Thus, while treatment is available to the incarcerated population within the prison system, and for some offenders on pre-trial, in Young or Baylor correctional facilities, there is a yawning gap.

The one service that has shown the most promising long-term effectiveness is absent from Delaware's correctional facilities: Medication Assisted Treatment. Although Delaware has instituted a MAT program for women under DOC supervision who are pregnant, and is piloting a Vivitrol and buprenorphine program for selected offenders, providing MAT for all offenders with an OUD diagnosis would provide a significant cost savings (as noted in research cited below).<sup>104</sup>

Historically, criminal justice systems have been resistant to using medication, particularly opioid agonist medication, the cornerstone of OTP programming, to treatment inmates.<sup>105</sup> The long national debate about whether people with addictions should be permitted to use medication to fight addictions seems to be resolving itself; there is a growing consensus to permit medications, especially those such as buprenorphine (with naloxone) or Vivitrol which cannot easily be diverted to produce a euphoric effect.<sup>106</sup>

The consensus panel for SAMHSA's Treatment Improvement Protocol<sup>107</sup> recommends that access to treatment with methadone and other FDA-approved medications for opioid addiction be increased for people who are incarcerated, on parole, or on probation. In addition, it is recommended by the standard setting body, National Commission on

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<sup>104</sup> Site directors were also unable to produce estimates of the number needing these services, although we might suppose that at least 58 percent (those with an OUD) did need them.

<sup>105</sup> Knudsen, H. K., & Roman, P. M. (2012). Financial factors and the implementation of medications for treating opioid use disorders. *Journal of addiction medicine*, 6(4), 280.

<sup>106</sup> During the study period, DOC, its treatment provider and a biopharmaceutical company were developing Vivitrol and buprenorphine protocols for testing among inmates which are now being tested.

<sup>107</sup> SAMHSA. (2005). Medication-assisted treatment for opioid addiction in opioid treatment programs. Treatment Improvement Protocol (TIP) Series 43, DHHS Publication No (SMA) 05-4048. 2005., Retrieved from: <http://store.samhsa.gov/product/TIP-43-Medication-Assisted-Treatment-for-Opioid-Addiction-in-Opioid-Treatment-Programs/SMA12-4214>

Correctional Health Care.<sup>108</sup> Federal agencies such as the Bureau of Justice Assistance will not grant funds to states for drug courts that do not permit MAT as a treatment option. Importantly, the expansion of MAT in prisons is controversial not just because according to some treatment perspectives it is substituting one drug for another; rather, because buprenorphine and methadone are Schedule II drugs themselves, they carry the potential for abuse and diversion.<sup>109</sup> Instituting MAT in incarcerated settings raises the challenges that all contraband presents.

<b>Table 9. Level IV and V Delaware Criminal Justice Facilities Offering MAT Services, Detoxification, Education, Therapeutic Community, Behavioral Therapies, Co-Occurring Disorder Treatment, HIV/AIDS/Hepatitis B and C Treatment, Narcotics Anonymous and Alcoholics Anonymous Groups</b>				
	<b>Number of Inmates Needing Any Addiction Services</b>	<b>Number Receiving Any Addiction Services</b>	<b>Number of Available Slots</b>	<b>Proportion of Underutilized Slots</b>
<b>MAT and Detoxification</b>	N/A	N/A	N/A	N/A
<b>OUD Education</b>	617	617	757	18.5
<b>SUD Education</b>	625	625	657	4.9
<b>Therapeutic Community</b>	623	623	757	17.7
<b>Cognitive Behavioral Therapy and other Behavioral Therapies</b>	625	625	757	17.4
<b>Co-Occurring Disorder Treatment</b>	268	166	N/A	N/A
<b>HIV/AIDS and Hepatitis B and C Treatment</b>	673	673	N/A	N/A
<b>Narcotics Anonymous</b>	617	617	757	18.5
<b>Alcoholics Anonymous</b>	419	419	422	0.7
<b>Source: Delaware Department of Correction, Level IV and Level V Site Director Survey, April, 2017</b>				

As with MAT,<sup>110</sup> currently, none of the incarcerated population receive detoxification. While individuals involved with the criminal justice system can receive these services in the community, at treatment facilities that provide opioid and criminal justice programming, there is no provision for these services for those incarcerated.

The last column in Table 9 estimates the proportion of *underutilized* openings for opioid treatment services such as OUD education (18.5 percent), or cognitive behavioral therapy (17.4 percent).

<sup>108</sup> National Commission on Correctional Health Care. (2016). Standards for opioid treatment programs in correctional facilities. Chicago, IL.

<sup>109</sup> *Ibid.*

<sup>110</sup> However, see current Vivitrol and buprenorphine projects, above.

## Stakeholder perceptions:

- Diversion programs have declined because many offenders prefer incarceration or probation to treatment. They are unclear about how diversion programs promote treatment.
- Not offering Medication Assisted Treatment in facilities contributes to recidivism upon release.
- In addition, incarcerated and pre-trial inmates are vulnerable to relapse and recidivism because of discontinuity in care.

With professional stakeholders, the most focused critique throughout this study has been the lack of MAT in the prisons. The concern is that offenders go through withdrawal, are clean for a period of time, and then relapse the first chance they have the opportunity to use again. Moreover, even when they are released to the community, facilities are limited in their resources and treatment becomes harder to coordinate. MAT promotes long-term recovery by reducing cravings.

This section includes observations from individuals in treatment who had been in the criminal justice system. They may have been incarcerated, in pre-trial detention, under probation or parole or some other judicial authority. Many were involved in the Key/Crest/Aftercare program which, as noted earlier, provides services to incarcerated individuals through their reintegration into the community as part of a work-release program. Also included are professional stakeholders: treatment providers, advocates, state officials and medical practitioners involved in criminal justice treatment.

Some issues that arose for individuals who were, or had been, under criminal justice supervision, and living in the community, were similar to those of their non-criminal justice peers: access, including payment for treatment, and treatment options (such as individualized programs, MAT and long-term treatment), for example, while some were different, such as their views on efforts at diversion from prison. However, because of their legal status, the complexity of these issues was exacerbated. Moreover, for those who were incarcerated, issues such as access to treatment had an entirely different meaning. It had to do with the sheer availability of treatment rather than finding a way to attain it.

**General access.** Treatment in prison is limited to programming offered by the sole treatment provider for the state in the Key/Crest /Aftercare programs. It currently does not include MAT, except, as noted, for pregnant women and for selected offenders in its Vivitrol pilot program. These programs are available to prisoners prior to the end of their sentence (and for individuals on pre-trial diversion in two facilities). OUD/criminal justice-involved clients spoke extensively about the Key/Crest/Aftercare program. While some supported the program, others bemoaned their inability to stay clean despite the continuity between the different stages of the program. Apparently, the laxity of rules after such a strict regimen increased the risks of using drugs again. As one former inmate put it, you're set up for failure...since they force you to go through withdrawal [no MAT in prison] "you are so ready to get high when you are out...I went right back to it." For individuals on probation and parole, or in the community on pre-trial diversion, transportation can be problematic if there has



been a DUI charge involved or driving privileges have been suspended. This was an issue several OUD/criminal justice-involved respondents addressed at length.

In contrast to offenders' ambivalence about the Key/Crest/Aftercare programs, one of the benefits of the step-down programs, according to treatment providers is that when an individual comes out of prison or is on probation or parole, "there is a referral and we sign releases and there is a direct contact... individuals who come out of prison are a priority...if they were in our program [while in prison] we try to get them right away because they are most vulnerable."

***Aversion to diversion.*** Both clients and treatment providers discussed diversion programs and the problems with them. A stakeholder representing treatment interests explains: "On the criminal justice side, we are working with treatment providers and state agencies more on their diversion programs. Enrollment has gone down. Diversion has been reduced in its reach. Diversion isn't working because people aren't choosing it. People have a choice so they think maybe probation could be easier than going into treatment, take their punishment [rather than facing and having to give up their addiction...]."

One suggestion for increasing enrollment in diversion programs is to enhance "point of contact" programs. Stakeholders explained that Hero Help, as an example, is a service run by the Delaware police department where they do not arrest an addict or a substance abuser but put his or her arrest status on hold, in abeyance, while they get treatment. Law enforcement can be key to recovery. It is the first point of contact, when an addict may be most vulnerable.

Point of contacts are sustained by "warm handoffs" in which offenders on probation and parole received intensive continuity of care. As one treatment provider explained: "The pre-trial population has huge health problems they are OUD and have lots of system interactions; if we could do a warm hand off on the days they get out we could reduce recidivism. The legislature has a commission reviewing ODs, looking at the last touch point where we could have intervened."

***Types of treatment.*** One central problem, regarding types of treatment among the criminal justice population, both incarcerated and pre-trial diversions who have not been released to the community, is the lack of access to MAT. As the prison survey shows, no MAT was available for any inmate in either Level 4 or Level 5 facilities. Moreover, when asked about juveniles in detention, a juvenile healthcare provider in that system reported that there were no MAT OUD services available for juveniles either. What if they experience withdrawal on entering the detention, we wondered? "They are taken to Christiana Care and put on a Klonopin taper before they are returned to us," was the response, "on release, because there are no juvenile inpatient facilities in Delaware, they have to get treatment at Mountain Manor in Maryland."

## OUD Treatment Capacity: General Population

### Findings:

- Based on N-SSATs data, the number of facilities providing OUD treatment in the past eight years has risen by 70 percent.
- While 23 percent of treatment facilities provided some OUD services in the past, 43 percent do so now.
- Despite the expansion in OUD treatment, the need has risen at a higher rate, particularly for Medication Assisted Treatment which includes Cognitive Behavioral Therapy and other interventions to sustain the medication regimen.
- An examination of OTP capacity shows that the thirteen OTP providers in the state are being underutilized at a rate of 25.8 percent.
- An examination of residential capacity shows that the residential treatment system, for all SUDs, and presumably for OUDs, is being underutilized.
- There are about 90 registered MAT providers in Delaware, representing 6.5 percent of primary care physicians.
- Data on treatment capacity in Delaware, especially for individuals with OUDs, are incomplete for a number of reasons, including discontinuity in data collection methods, private versus public payment schemes and complications with accountability.

Table 10 investigates the capacity of the Delaware treatment network to provide OUD services. Recall that facilities with OUD services differ from OTP facilities in that the former offer services to treat OUDs yet lack the comprehensive array, typically medications such as methadone or buprenorphine, included in an OTP (a SAMHSA-defined and approved protocol). The number of OUD treatment facilities overall, and as a proportion of all SUD facilities, increased dramatically from 2006 to 2014, growing from 10 to 17 facilities, a 70 percent increase. Proportionate to SUD facilities, OUD facilities jumped 87 percent. Yet, due to the increased demand for OUD services, the average rate of admissions remained stable, if high. That is, admissions per OUD facility were in the 300 range in 2006 and the upper 200's in 2014.



**Table 10. Number of Treatment Facilities Providing OUD Treatment, OUD Treatment Facilities as a Percent of all SUD Treatment Facilities, Average Number of OUD Admissions per Treatment Facility Providing OUD Treatment**

Year	Number of OUD Treatment Facilities			OUD Treatment Facilities as a Percent of SUD Facilities			Average Number of OUD Admissions per OUD Facility		
	2006	2010	2014	2006	2010	2014	2006	2010	2014
	10	14	17	23.3	37.8	43.6	306.5	222.4	261.5 <sup>111</sup>

Source: National Survey of Substance Abuse Treatment Services (N-SSATS): 2006-2014. Data on Substance Abuse Treatment Facilities, 2016.

OUD treatment includes both outpatient or community treatment and residential treatment, based on ASAM guidelines, yet defined in several different ways in Delaware depending on the source (see Definitions). Because there is no single data system that captures all treatment types, both capacity and usage, for all treatment providers, both publicly funded and private financed, HZA carried out a survey of community treatment providers similar to the one for corrections providers discussed above. As with the correctional data, we were unable, however, to accurately capture usage and capacity because of significant gaps in the data provided. We therefore turned to several DSAMH reports to help us understand treatment system utilization. These data are more robust yet are limited in that they do not provide information about OUDs separate from SUDs, nor do they include information about providers who depend on private fiscal arrangements to treat substance abuse.

Table 11, from DSAMH reports, shows residential treatment providers funded by the state.<sup>112</sup> It depicts their capacity with regard to all SUD clients, which includes but is not limited to those needing treatment for an OUD. The table shows that across treatment services for withdrawal (detoxification), residential treatment, sober living houses (community care), and OTP programming, capacity exceeded use.

Of particular note, capacity to deliver residential care is not fully utilized, by about 37.3 percent. Thirty-seven percent of slots are underutilized on a statewide basis. This suggests a disproportionate distribution of beds or the inability for people to access beds in different parts of the state. By increasing utilization rates of residential facilities (not including withdrawal management/observation/ambulatory or sober living) by a third, the state could increase the number of clients (many, although not all of whom are OUDs) by about 57 individuals.<sup>113</sup>

<sup>111</sup> See Table 7 for number of admissions: 4,445/17 = 261.5

<sup>112</sup> The Delaware Division of Substance Abuse and Mental Health produces a standard report (#3) that documents daily available “beds” in the Delaware system. These “beds” cover residential services rather than outpatient/ambulatory services. So, for example, there are “residential detox beds” for withdrawal management, and observation. See Page 13 for a discussion.

<sup>113</sup> .373 \* 153 is about 57 more individuals in residential treatment under a full utilization regimen. When we calculate increases in utilization for sober living and withdrawal management as well, we get another 70 slots, or 127 total. See Recommendation 9c in body of report for additional gains to be made in this category.

Table 11. Delaware Residential-Type Treatment Services Including Sober Living, Reported to DSAMH. Numbers Represent all SUD Clients. Single Day Census April, 2017					
	Capacity	Census	Available Beds	Wait List	Proportion of Underutilized Slots
Withdrawal Management (N=2)	32	22	10	0	31.3%
Withdrawal 23-hr observation (N=2)	24	6	18	0	75.0%
Withdrawal Ambulatory (N=2)	60	32	28	0	46.7%
Residential	153	96	57	10	37.3%
Sober Living	137	123	14	50	10.2%
<b>Total</b>	<b>406</b>	<b>279</b>	<b>127</b>	<b>60</b>	<b>31.3%</b>

Source: Delaware Department of Substance Abuse and Mental Health, Daily Census, 4/3/2017

For a fuller evaluation of OTP programming, Table 12 reports counts of all OTPs in the state, not just those with in-patient beds. In this table, utilization is under 100 percent by about a quarter (25.8 percent), emphasizing further that access/capacity is not a simple issue of slots for patients, but utilization of those slots. For instance, increasing utilization of OTPs by 25.8 percent would add another 1,492 individuals served, while increasing the number of OTPs by four would boost the number of OUD clients served by about thirteen hundred.<sup>114</sup> Increasing OUD treatment through these two mechanisms would meet the needs of about a third of the 6,000 (untreated) clients (*i.e.*, 2,812).

Table 12. Delaware OTP Facilities Reporting to DSAMH. Numbers Represent all Clients. Single Day Census April, 2017					
	Capacity	Census	Available Beds	Wait List	Proportion of Underutilized Slots
Delaware OTPs (N = 13)	5,784	4,290	N/A	N/A	25.8%

Source: Delaware Department of Substance Abuse and Mental Health, Daily Census, April 2017

Yet, the conclusion that treatment in Delaware can be characterized by underutilization is not as straightforward as these two tables suggest.<sup>115</sup> Delaware providers (in the previous section and below) were frequently at odds concerning whether clients could get into treatment or not, and whether capacity was being met, exceeded or underutilized. A number of providers, for instance, argue that indeed, they “are struggling with space and enough personnel to meet the demand.” Moreover, many told us that they did not even know what their capacity was, since their mission entailed not turning anyone in need of treatment away. This translated into data in HZA’s survey that was unreliable and, finally, unusable. In

<sup>114</sup> That is  $4,290/13=330$ ;  $330*4=1,320$ , and,  $.258* 5,784 = 1,492$ .

<sup>115</sup> This is especially the case regarding Table 11, since these counts refer to all SUDs and not solely OUDs, the focal population.

short, the discussion about capacity with regard to OUDs cannot be settled using only the data which were made available during the study period, February 2017–April 2017.

### Stakeholder perceptions:

- As reported above, treatment clients found access, especially limited payment coverage of their treatment, and therefore the type of options available to them, to be a barrier to recovery.
- Treatment providers noted that the rate structure for payment posed a significant challenge in providing OUD treatment.
- Treatment providers reported “siloed communications networks” were problematic in two ways: they fail to link clients with services; professional stakeholders who come in contact with clients during emergencies, such as emergency department physicians remain unaware of treatment options for individuals with OUD.
- Treatment providers noted the attenuated career path for those in the workforce as problematic.
- Various stakeholders found the shortage of MAT prescribers to be problematic.

This section provides a narrative overview of OUD treatment capacity from the perspective of focus group participants, as well as key professional stakeholders. Here we are interested in the capacity of the system to meet the treatment needs of the OUD population. We examine the conditions under which it can do so, and, the conditions in which it cannot do so. A number of comments addressing treatment challenges and deficiencies also were abstracted from the treatment providers’ survey (see Appendix E).

**General access.** Treatment needs expressed by the client population naturally overlap with the capacity of the system to meet those needs. Clients voiced complaints about lack of access to services, failure to obtain essential communication/information about available treatments, and unfulfilled requests for specific kinds of treatment.

While our initial comparison of Delaware’s system to other comparable states reflected positively on Delaware, that is of limited value to OUD treatment clients who believe their options are constrained by the treatment system. For example, many asked for more detoxification options in a state where there is only one stand-alone facility, the NET New Castle County Kirkwood detox. Other treatment clients, especially women with children, argued for more sober living options, such as provided by the Oxford system, a type of half-way house which is run by people in recovery.<sup>116</sup> One respondent claimed that there were “No Suboxone prescribers in Sussex... I don’t believe in maintenance [I don’t do methadone] ... I’d rather go to a [Suboxone] provider.” Yet, there are, in fact nine Suboxone providers in Sussex County. Other limits on access noted were payer restrictions on length of stay and type of treatment. Many (four of the nine focus group members) went out of state for

<sup>116</sup> <http://www.oxfordhouse.org/userfiles/file/> Retrieved 3/20/17.

treatment. While client perceptions may not be accurate, understanding the misconceptions, whether deliberate or not, can help to understand why some do not get into treatment.

Treatment providers noted that recent changes in the way addiction treatment is funded in Delaware caused misperceptions about treatment access among clients; such misperceptions can produce detrimental effects on service provision. In 2015 Delaware altered its substance abuse treatment payment structure from a cost based reimbursement scheme to a fee for service system. As providers explained, the system redesign included modification of the level of care continuum. Staffing, program sizes, and service array were reorganized which also increased the operating costs. While client service needs did not change, the payment structure did, in some instances disallowing payment for services that were bundled with others in the past. For example, in IOP there are no individualized therapies, it is all group based. But the state pays for individual therapy only. Hence, no one in an IOP would get reimbursed for therapy. Changes such as this have an impact on the capacity of the treatment system to provide OUD services, and perceptions among clients on who can get what services and who will pay for those services. Providers report a net loss in fees.

Treatment providers also argued that there was a problem with payers limiting coverage especially for residential treatment. As these stakeholders remarked: residency is attenuated by payment plans. As one of our informants explained: “The problem is the Medicaid Managed Care companies and other insurers. They have required that this level of care be “prior authorized” and they dole out the days one or two at a time... “

Legislation passed after the study period, bridged this gap by counteracting insurer restrictions on coverage.<sup>117</sup>

Whether payment is an issue or not, one official noted: “Clients are unclear regarding how to access various points of the system (*i.e.*, detox vs. inpatient vs. outpatient vs. sober living).”

Problems with payment coverage should be mitigated by the position taken by the state that it will reimburse all treatment costs even when insurers refuse to do so. Several agency officials argued that the real OUD treatment problem is one of *delay in access* that creates the perception among potential treatment clients that the system is not responsive to their needs. That is a communication problem that, they felt, could be solved by outreach into the lives of addicts at their most vulnerable moments, for example, in the emergency department, or at a point of contact with law enforcement.

One official provides a pointed analogy: “We see overdose deaths, lots of them. We make the assumption that we didn’t treat them. That’s why they died. But maybe they didn’t seek treatment. Lots of people die of colon cancer but maybe we needed to intercede more effectively... so we ran a campaign to get people into colon cancer testing. One way for us to

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<sup>117</sup> See <http://news.delaware.gov/2017/05/30/governor-carney-signs-package-of-legislation-to-combat-addiction-crisis/>

intercede with addicts is if we try to create more community-based services. We need to get providers and physicians to talk to one another.”

This lack of communication creates silos where stakeholders remain unaware of their potential role in addiction treatment. On the medical side, a treatment provider in a hospital setting underscores the importance of educating healthcare professionals in addiction. She notes that a local healthcare system has established a successful program of training staff on their medical units to screen for OUD. The point of contact principle ensures that patients who might not otherwise know that they need treatment will be assessed and perhaps motivated to seek help. For example, an IV drug user who is on a unit with endocarditis because of her drug use can be engaged by a trained healthcare specialist and encouraged to seek drug treatment. This requires building an infrastructure with communications networks that can reach across medical disciplines and across institutions.

Components of this infrastructure are already in place. For example, as noted in the discussion of treatment access, DSAMH offers a continuum of mental health crisis services, some of which are focused on substance abuse. Services are located across the state in Crisis Intervention Service Centers, Community Mental Health Centers, a Rapid Response Center and emergency departments in local hospitals. At the Crisis Intervention Centers, staff provide phone support, mobile outreach and walk-in services 24 hours a day seven days a week for mental health problems including substance abuse.<sup>118</sup>

Providers also argued, not only for enhancing communications networks to link providers and clients, but for more extensive treatment that includes increasing the number providers, and introducing half way houses into the treatment network.

A treatment provider working to develop interventions for OUD agrees: “Outreach is where we are trying to go. The first responder is where we have them at their most vulnerable. Once we get them then we are not giving them the support they need in terms of employment and education. This is how the sober living works: supervised environment with paid staff throughout the day depending on the level. The counseling happens with a contractor outside the house. It is like inpatient-lite.”

***MAT and Prescribers.*** A related matter is the availability of prescribers for MAT. It is not necessary to be associated with a particular treatment facility to be able to prescribe buprenorphine or other withdrawal-mediating products for opioid dependency. The Drug Addiction Treatment Act of 2000 (DATA 2000) expands the clinical context of medication-assisted opioid dependency treatment. Qualified physicians are permitted to dispense or prescribe specifically approved Schedule III, IV, and V narcotic medications (medications that have a lower risk for abuse, like buprenorphine) in settings other than an opioid treatment program (OTP). This is often referred to as office-based treatment.

Several providers told us that there were not enough prescribers in the state, regardless of setting. The lack of prescribing physicians results in clients being scheduled for appointment services several days into the future. A provider noted: “extended scheduling is problematic

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<sup>118</sup> [http://dhss.delaware.gov/dhss/dsamh/crisis\\_intervention.html](http://dhss.delaware.gov/dhss/dsamh/crisis_intervention.html)

for two reasons: The lag time between scheduling and engagement proves to be detrimental in some cases, as the client has a longer window of opportunity to reconsider and/or decline treatment; the lag time causes confusion, as some interpret the lag time to be a result of wait lists within the system. Currently there are no outpatient wait lists within the system; outside of those waiting to see the doctor for medication.”

In Delaware and other states, a dire need for expansion of workforce and infrastructure for providing evidence-based MAT and recovery services is typically invoked by providers and clients alike. The National Governors Association and the American Association of Addiction Medicine recommend that MAT expansion (the entire package, not just the medication component) be a cornerstone of healthcare strategies for treatment and recovery of opioid addicts.<sup>119</sup> Medication assisted treatment reduces the risk of fatal opioid overdoses, and it has been found to lower healthcare expenditures.<sup>120</sup> In a review of 2013 TEDS discharge data, we found that opioid addicts who use MAT stay in treatment almost two weeks longer than those who do not use MAT.<sup>121</sup> MAT is not a panacea, however. It must include the full range of services that comprise an evidence-based continuum of care for opioid addicts proposed by ASAM.

There is growing evidence that expanding treatment to primary care office-based practices is an effective way to reach more people in the community and keep them engaged in treatment.<sup>122</sup> One mechanism is through the “hub and spoke” model. In this model, there are regional centers, or “hubs.” These may be already-existing clinics or one newly designed for the purpose of serving as a center for coordinating care and support services. Patients who need medication-assisted treatment may be treated at a hub-center or they may be treated in an office-based practice linked to a center. The spoke is an office-based practice for receipt of medication assisted treatment. Clients here are less clinically complex and may be further along in the recovery process than those associated with a hub. The image of a wheel is not accidental. The parts of the system are interdependent. Prescribers are supported by the hub-center and in turn provide specialized services that support it, creating a more holistic system.

Delaware has approximately 90 registered MAT providers. In 2016, Delaware had 1,382 primary care physicians and 1,498 specialty physicians. Therefore, only 6.5 percent of primary care physicians are licensed prescribers.<sup>123</sup>

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<sup>119</sup> Murphy, K., et al. (2016). Finding Solutions to the Prescription Opioid and Heroin Crisis: A Road Map for States. Washington, D.C.: National Governors Association Center for Best Practices.; American Association of Addiction Medicine 2016. The American Society of Addiction Medicine (ASAM); National Practice Guideline for the Use of Medications in the Treatment of Addiction Involving Opioid Use (2015)

<sup>120</sup> Clark, R. E., Baxter, J. D., Aweh, G., O’Connell, E., Fisher, W. H., & Barton, B. A. (2015). Risk factors for relapse and higher costs among Medicaid members with opioid dependence or abuse: opioid agonists, comorbidities, and treatment history. *Journal of substance abuse treatment*, 57, 75-80.

<sup>121</sup> Average length of stay 31.2 days, versus 19.03. Source: TEDS 2013.

<sup>122</sup> Moore, B. A., Fiellin, D. A., Barry, D. T., Sullivan, L. E., Chawarski, M. C., O’Connor, P. G., & Schottenfeld, R. S. (2007). Primary care office-based buprenorphine treatment: comparison of heroin and prescription opioid dependent patients. *Journal of general internal medicine*, 22(4), 527-530.

<sup>123</sup> These data do not include nurse practitioners and physician assistants who are also eligible to prescribe opioid medication, under policy guidelines, although SAMHSA has not indicated when that will occur.



While primary care physicians would have to make linkages with behavioral health providers, either in their own practices, or with sister agencies, increasing the number of prescribers is a low barrier mechanism for expanding treatment in the community. A 50 percent increase would make a significant impact on unmet treatment need. Forty-five additional practitioners serving 30 patients each would provide treatment to 1,350 more people, about a third of the estimated community need (based on 6,000 in the NSDUH estimate in Table 6). In addition, individuals could be dispersed throughout the state, increasing access considerably.

## OUD Treatment Capacity: Criminal Justice Population

### Findings:

- Delaware's accredited Opioid Treatment Program (OTP) facilities offer criminal justice programming at a higher rate (62 percent of the all OTP programs) than do facilities with simple OUD programming (47 percent). However, only eight providers were listed as OTPs in 2014 throughout the state.
- As of spring 2017, there was no OTP programming in Delaware's prison system. Medication Assisted Treatment is not permitted, except for pregnant women under supervision. There is however a new Vivitrol and buprenorphine pilot project underway.

Table 13 investigates the convergence of OUD programming for criminal justice populations in the community-based treatment system, consisting of 39 facilities in 2014. The first column shows the percent of facilities out of a total of 39 offering both OUD programming and criminal justice services. The next two columns provide the number and percent of facilities with an accredited OTP program and the proportion of those serving the criminal justice population.

Table 13 shows that just under half the treatment facilities offer criminal justice services. Only one in five facilities, or 20 percent, have certified Opioid Treatment Programs. Five of those, that is two-thirds of the OTPs, offer services for individuals who are or have been under criminal justice injunctions (such as DUI/DWI and pre-trial). These figures illustrate the potential for growth of services to people in the community-based criminal justice system using existing providers. Strategies would include increasing the number of OUD providers serving this population, increasing the number of providers who become certified OTP agencies, and increasing the number of OTP agencies serving the criminal justice population.

**Table 13. Criminal Justice. Community-based Treatment Facilities with OUD Programming Offering Criminal Justice Services; Percent of Treatment Facilities with Specialty Opioid Treatment Programs; Opioid Treatment Facilities Offering Criminal Justice Services, 2014. N=39 <sup>124</sup>**

	Facilities with OUD Programming Offering Criminal Justice Services		Treatment Facilities with Opioid Treatment Program		Opioid Treatment Program Facilities Offering Criminal Justice Services	
	No CJ Services	CJ Services	No OTP Program	OTP	No CJ Services	CJ Services
N	21	18	31	8	3	5
%	52.9	47.1	79.5	20.5	37.5	62.5

Source: National Survey of Substance Abuse Treatment Services (N-SSATS): 2006-2014. Data on Substance Abuse Treatment Facilities, 2016.

While Table 13 references the status of community facilities it does not address the capacity of prison facilities in Delaware to provide OUD treatment. As discussed in the section on Criminal Justice need, Delaware lacks the capacity to provide MAT to people in its facilities with a few exceptions (notably, pregnant women, as well as a new Vivitrol and buprenorphine programs begun in the spring-summer of 2017). The capacity can be created by adding licensed providers; either having state doctors licensed through SAMHSA as discussed above, or contracting with physicians, physician assistants or nurse practitioners in the community who could provide dispensing services. These would need to be complemented with behavioral health treatment; cognitive behavioral therapy is already available but would need to be expanded if MAT were introduced.

**Stakeholder perceptions:**

- Delaware lacks a data management system which permits recording of unambiguous addiction evaluation and treatment recommendations for the criminal justice population, both incarcerated and probation and parole.

In our concluding narrative section, we are interested in an important component of the capacity of the criminal justice treatment system to process individuals with OUD. This is the lack of an interlinked and comprehensive data management system.

**Communication/ Information.** Maintaining information on offenders, their needs and access to treatment services is not an entirely coordinated activity but the individual responsibility of professionals involved with offenders at various stages in their transition through the criminal justice system. As in all monitoring systems, there are gaps in communication and available information. Our interviews with professional stakeholders provide two telling examples.

<sup>124</sup> These are the most current N-SSATS data.



First, as incarcerated individuals join the Key or Crest program, they are assessed and provided with an array of services (see Table 9). However, group members self-select into these programs so that the volume of those needing treatment and those receiving it remain unknown, even to those administering the programs. As this corrections stakeholder explains it: “[Agency X] is the sole provider of drug treatment in the prisons... They have treatment data on the people they are treating not the overall system. What offenders are incarcerated with a substance use disorder is not in our current records. So, we cannot know the population in prison who have SUD, or SUD for opioids. No one has that number.” “We are working on that,” she continues, “we just went live in September 2016 with EHR that has a behavioral health component. But for now, we rely on the provider of treatment for data.”

Second, a similar situation exists for those on probation or parole or pre-trial diversion. As professional stakeholders in this division explained: “[Agency X] is the sole provider of long term treatment. So, we don’t know who goes into treatment or not. We maintain individual case records on our offenders, but unless they tell us (or a judge), we don’t know who has an OUD and who does not.” Of course, many of the offenders on their caseloads are under legal conditions that require testing for drug use but others are not. This led to varying perceptions among several professional stakeholders about the extent and nature of OUD among the probation/parole/pre-trial population.

As one pre-trial supervisor noted: “If committed in default of bail we file the report with bailing conditions, criminal history etc. When motions are filed in superior court they make recommendations. A substance abuse evaluation would be an appropriate referral. But the data is not collected in a way that can accurately be tracked. We might make a referral to [Agency Y].” A supervisor in this group notes: “A PO might have the referrals in their case notes etc. and any court-ordered treatment is monitored in the DACS system, but whether they have an OUD or not... and who gets treatment... presently we do not have the capability of pulling that information from our DACS system. The lab result information goes in DACS and a report can be generated as to positive, negative or adulterated results. Officers can enter in DACS case notes as to which offenders have an opioid problem and treatment status but that is as far as it goes. There is no specific identifier for this population in DACS. Importantly, there are many pleas of addiction at pre-trial hearings but that’s often to get off a drug trafficking charge...then they disappear, not serious [about getting help],” concludes the supervisor.

This discussion leads to a broader one regarding information sharing and communication within and between agencies responsible for criminal justice involved individuals who need OUD treatment. As noted above, just as there is a window of opportunity to help motivate an individual with an OUD after an overdose or a health scare, for those involved in the criminal justice system, the opportunity to motivate them to treatment requires coordination between and among individuals and institutions. An official who runs an enhancement program (similar in format to a diversion program for special offenders, such as DUI’s), notes that: “Sometimes they’ll admit they need treatment, but there isn’t a good follow through. Too much time between when they are vulnerable and when they might get into a program.” The criminal justice treatment provider notes that a committee is reviewing so-called “touch points” where continuity of treatment breaks down. “There doesn’t seem to be one in DOC,

yet,” she observes. In this scenario, follow through would be facilitated by closer monitoring of individuals as they move from one institutional system to another.

The group suggested: “Partnerships with local health providers should be organized. The DOC could help monitor their clients better this way. Partnerships with Christiana Care. It would only cost \$80,000 a year to have a nurse...who can do medical and behavioral assessments.” More significantly, doing so may motivate criminal justice administrators to build data systems linking criminal justice and health records, in the way the division of behavioral health in the prisons has established an electronic health monitoring system for the incarcerated population.

As these probation/parole and pre-trial officials argue: “Why can’t we cross reference the offender database with doctor records? That’s what we need to do. It’s an assist model. We need more real-time information. We don’t know if they OD’d or not or had Narcan. We need medical and criminal justice information linked... I do discharge planning for offenders but I can’t get any access to their medical records. That means they go out without a plan of care.”

In short, Delaware seems to need a more comprehensive data management system which provides better addiction evaluation and treatment recommendations for the criminal justice population.

## Recommendations and Costs for Easing Deficiencies

The recommendations that follow are organized by the three themes of Access, Treatment Type and System Capacity. As mapped in Table 14, some recommendations serve more than one population. Many of those that expand access and system capacity, for example, can serve anyone in the general population, regardless of prior experience in the criminal justice system. Also, one recommendation, 8, addresses both treatment type and system capacity. Recommendation 8 relates exclusively to incarcerated populations.

Table 14. Addiction Treatment System Matrix with Recommendation Key			
	General Population Recommendations	Pre- and Post-Incarcerated Population: Recommendations	Incarcerated Population: Recommendations
Access	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 6, 7	N/A
Treatment Type	N/A	N/A	8
System Capacity	9	9, 10	8, 10

### Access Recommendations

**Recommendation 1.** Develop a central navigation system for Delaware’s addiction treatment system and continuum of care for opioid treatment services, through the expansion of the Delaware 2-1-1 Help Hotline, DHSS Helpisherede.com website and Delaware’s Crisis Intervention Service (CIS) which include resources from both public and private payers, building on existing resource programs: (a) use “warm hand-offs” when referrals are made by calling a provider and staying on the line until contact is achieved; (b) develop off-hours provider directory for emergency (but not overdose-related) treatment needs; (c) make greater use of DSAMH treatment locator as well as SAMHSA’s provider locator by including updated links and phone numbers in promotional material and in training.

**Total Cost, Recommendation 1: \$50,000**

Develop training workshop and training materials for “warm hand off” protocol and resource guide for hotline staff, \$25,000. Run 2 trainings per year for 2-1-1 and CIS staff; 1 training per year for other state hotline staff, per location (e.g., NAMI, Domestic Violence, child abuse, suicide, and more). Cost for 5–7 workshops: \$25,000. <sup>125</sup>

**Recommendation 2.** Increase community-based treatment information for potential clients: (a) promote client knowledge of OUD treatment system and Delaware 2-1-1 Help Hotline, DHSS Helpisherede.com website, and Delaware’s Crisis Intervention Service through information/public service campaigns and workshops/educational programs at community shelters and churches (for example), (b) promote OUD treatment system and Delaware 2-1-1 Help Hotline, DHSS Helpisherede.com and Delaware’s Crisis Intervention Service through

<sup>125</sup> Sources: Delaware DSAMH; Maine 2-1-1; NAMI Maine

entitlement programs, social services agencies, the department of motor vehicles, unemployment offices, medical clinics and other community-based facilities with high population contact, including retail businesses, bus stop signage, billboards and social media.

**Total Cost, Recommendation 2: \$375,000**

A statewide public information campaign with print, television, and social media components requires engaging an advertising agency (\$50,000), and the development and implementation of diverse media campaigns. A print campaign consists of: posters (\$25,000 for 1,500 posters), magazine ads (free placement), billboards (\$90,000 per year for five billboards), materials mailed to locations with high population contact (\$10,000). A media campaign consists of: a T.V.-based public service announcement (\$100,000 for cost of production, assuming free PSA ad placement), and a social media campaign (\$50,000). Local workshops include the cost of staff (\$15,000), materials development and distribution (\$5,000) and staff travel (\$5,000). Total cost per year for a public information campaign: \$375,000. <sup>126</sup>

**Recommendation 3.** Increase referrals to treatment system for individuals currently experiencing a crisis through law enforcement and emergency room staff training: (a) expand Crisis Intervention Training (C.I.T.) to encompass identification and referral of incidents of overdose and dangerous use; (b) use the Delaware 2-1-1 Hotline and C.I.T. to liaise with treatment providers who will accept referrals during off hours; (c) promote use of the Newcastle Hero model in which offenders and police negotiate treatment for those who choose treatment instead of arrest.

**Total Cost, Recommendation 3: \$150,000**

Training of 5–10 percent of Delaware’s police officers and emergency room staff (\$6,250 for 10 staff, 24 training groups) is estimated to cost \$150,000. <sup>127</sup>

**Recommendation 4.** Increase referrals to treatment system through medical practitioners: (a) develop models patterned after Project Engage at Wilmington Hospital to link providers; (b) develop multi-disciplinary training on OUD treatment system which engages social and human services, treatment providers, law enforcement and medical community.

**Total Cost, Recommendation 4: \$100,000**

Develop multi-disciplinary training for medical provider audience, focused on referrals and treatment access, conducted in office, at medical meetings and online: \$50,000. Multi-disciplinary training of state government employees: \$50,000. <sup>128</sup>

**Recommendation 5.** Develop local infrastructure of multi-disciplinary teams of providers from multiple disciplines (law enforcement, medicine, mental health, substance abuse, education) at the community level. These groups, or councils, would negotiate services for the most hard-to-serve clients or those who have been rejected elsewhere. Local councils would use a portion of existing staff time (10–15 percent) for council activities, and function

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<sup>126</sup> Source: Rinck Advertising Inc., ME

<sup>127</sup> Sources: NAMI National Office; Newcastle County Government Center, DE

<sup>128</sup> Source: Wilmington Hospital, Wilmington, DE

as system advocates for the most pressing instances of access, treatment and capacity, at the individual-client level.

**Total Cost, Recommendation 5: \$100,000**

Staff time for implementing point-of-contact infrastructures and multi-agency workgroups: \$100,000. <sup>129</sup>

**Recommendation 6.** Create incentives for participation in treatment diversion programs (e.g., Hero Help) by making treatment less onerous through programming that rewards selection of treatment. Include job preparation and placement as a component of treatment diversion.

**Total Cost, Recommendation 6: \$10,000**

Diversion systems are already in place and simply need re-formulating to make their message more persuasive. Indirect costs amount to less than \$10,000. <sup>130</sup>

**Recommendation 7.** Develop programming aimed at law enforcement and treatment providers to enhance offender access to treatment through a continuum of contact which establishes a warm handoff of clients between criminal justice system, treatment providers, medical practitioners, case workers and others.

**Total Cost, Recommendation 7: \$25,000**

Fostering interagency partnerships should have as its goal the development of programming to provide a continuum of care. Expanding the continuum of care can evolve from single points-of-contact with few or no administrative costs. <sup>131</sup>

## Treatment Type Recommendations

**Recommendation 8.** Institute MAT programs for incarcerated individuals, including those who are pre-trial. These may cover Methadone, Suboxone or Naltrexone (Vivitrol). Since a Vivitrol and buprenorphine trial is underway (June and August, 2017), two control groups—one receiving no treatment and the other receiving either Methadone or Suboxone—would demonstrate the efficacy of MAT, as long as other conditions, such as other MAT components, including therapy and continuing care, were in place. Accompany the medication component with an array of evidence-based services (including cognitive behavioral therapy, care coordination or community supports) building on current planning for the Aftercare program for those exiting to the community or who are already there. Using the National Commission on Correctional Health Care guidance, develop Standards for Opioid Treatment Programs for Delaware facilities and implement programs where appropriate.<sup>132</sup> Note, that instituting MAT programs for incarcerated individuals is controversial. Doing so presents challenges, such as establishing protocols to address diversion issues that require careful planning. In the first year, implement a single program and evaluate these challenges.

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<sup>129</sup> Source: Hornby Zeller Associates project management costs from similar studies.

<sup>130</sup> Source: Maine DOC, Augusta Maine

<sup>131</sup> Source O: Hornby Zeller Associates project management from similar studies

<sup>132</sup> National Commission on Correctional Health Care. (2016). Standards for opioid treatment programs in correctional facilities. Chicago, IL.

**Total Cost, Recommendation 8: \$60,000** per month per two hundred inmates for MAT medications (Methadone and Suboxone). Vivitrol is less expensive. Based on vendor estimates of the Delaware criminal justice population, the costs per month for methadone for one hundred inmates is roughly \$12,000. The cost of Suboxone, for one hundred inmates per month is roughly \$48,000. This is offset by the current estimated cost of emergency department visits for inmates who meet clinical opiate withdrawal criteria which is \$21,000. However, this cost estimate does not include budgeting for additional staff, including costs of training and accreditation to create an OTP. It also assumes that the challenges presented by diversion can be met at minimal cost through protocols dealing with contraband already in place.<sup>133</sup>

## Capacity Recommendations

**Recommendation 9.** Institute a multi-stage expansion of capacity to serve up to 3,000 additional people through a stepped program of capacity expansion, beginning with lower cost measures. Reassess capacity as incremental increases are complete.

- (a) **Primary Care:** Increase the number of physicians, nurse practitioners and physician assistants who can prescribe medications for opioid addiction and serve as an entrée into the treatment system through timely assessment and referral in primary care settings. To increase the number by 50 percent adds 45 newly trained prescribers to the current total of 90 prescribers. Assuming each newly certified practitioner treats the limit of 30 people with opioid addiction per year, this would increase community access/capacity by 1,350 (45 newly certified practitioners with 30 patients each). Thirteen hundred new clients would amount to almost half of the 3,000 additional individuals the expanded system could accommodate. Expand the linkage between new MAT prescribers and behavioral health practices such as cognitive behavioral therapy, and education and employment programming, among other services.

### **Total Cost, Recommendation 9a: \$315,000**

Recruitment and/or promotion campaigns for mid-level prescribers along with training costs could be subsidized by DSAMH via NIH workforce enhancement funding stream. The *Comprehensive Addiction and Recovery Act 2016* (CARA) carries a provision that authorizes state grants to expand the availability of MAT and behavioral therapy, including education of medical students, residents and other prescribers. DSAMH could bear the cost of registration and training (\$10,000 for 45 new prescribers). Indirect costs of licensing and training can be carried by the practice. Additional training supplementing SAMHSA's prescriber training should integrate newly certified office-based practitioners into the treatment network. Based on the Wilmington Hospital model, for forty-five trainees, this will cost \$40,000. The cost for primary care recruitment, including recruitment materials and outreach by DSAMH-trained staff would be \$25,000 for

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<sup>133</sup> Source: Delaware DOC; Connections Community Support Programs, Inc., Wilmington, DE



materials, \$50,000 for personal recruitment visits to physicians and physician practice advisory services.

In addition, it is necessary to braid extant subsidiary treatment into the medication component of MAT provided by new MAT prescribers. These costs include expanding the *linkage* between new MAT prescribers and behavioral health practices such as cognitive behavioral therapy, and education and employment programming, among other services. Develop multi-disciplinary training for medical providers focused on referrals and treatment access, conducted in office, at medical meetings and online. Two years' worth of trainings (using estimates from Recommendation 4) \$200,000.<sup>134</sup>

- (b) **ODU Treatment/ Opioid Treatment Programs:** Increase the number of OTP facilities (with a mix of both inpatient and outpatient slots) from 13 to 17. At current utilization rates (75 percent) doing so would accommodate an additional 1,320 individuals in need of intensive medication-assisted treatment for opioid addiction. Alternatively, increase the utilization rate of OTPs from 75 percent to 100 percent through a public information campaign. An increase of 25 percent would reach 1,492 individuals who need but are not currently receiving opioid treatment. Another option is to combine the two mechanisms which would increase availability and access by 2,812.

**Total Cost, Recommendation 9b: \$4, 030,000 start-up costs for four new facilities with \$254,000 monthly costs (per OTP), and/or \$375,000** (public information campaign to increase utilization, using Recommendation 2). Alternatively, increasing the utilization rate of OTPs from 75 percent to 100 percent involves instituting Recommendation 2, the Public Information Campaign, at a cost of \$375,000. A third option adds \$375,000 to the total start-up cost to increase utilization rates. <sup>135</sup>

- (c) **Withdrawal/Residential Care/Sober Living:** Double the number of sober living beds from 137 to 274, increase detoxification from 116 beds to 232, and promote utilization of withdrawal services, residential care and sober living to current capacity (gaining full utilization of 127 underutilized beds). Doing so would capture 330 individuals of an expanded community access/capacity target of 3,000.

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<sup>134</sup> Source: SAMHSA; NIH/CARA, Washington, DC; Maine AdCare (workforce development statistics); Wilmington Hospital, DE.

<sup>135</sup> Source: Connections, Inc. Millsboro facility. Components for a 700-client facility include: acquisition - \$1,200,000 which includes parking for 95 cars and a building 4,000 SF; engineering - \$815,000= 2.015 million. Costs for a smaller facility providing care for half the number of clients, approximately 350, would, in theory be halved. This recommendation advocates for increasing the number of OTPs from 13 to 17. At this rate, the total amount would be 4.030 million dollars for 4 new OTPs (based on Millsboro costs), not including operating costs at \$254,000 a month. The latter include: \$175,000 in staffing; \$24,000 in medication; \$55,000 on other expenses such as security systems, vehicles for recovery coaches, insurance, and occupancy costs.



**Total Cost, Recommendation 9c: Sober living – \$520,000 (137 additional sober living beds); with \$220,913 monthly costs, and \$375,000 (public information campaign to increase utilization, using Recommendation 2).**<sup>136</sup> Doubling the number of sober living beds from 137 to 274, involves increasing the number of facilities (or beds per facility). Total cost estimates are \$40,000 for start-up of a new house (\$40,000 \* 13 new houses of 10 residents each = \$520,000).<sup>137</sup> For example, half are owned and half rented which reduces start-up costs to a rental down payment of some portion of \$3,000 a month. Sober costs run between \$12,775 a month per house of 10 residents to \$16,425 a month per house of 10 residents. Finally, a public information campaign involves instituting Recommendation 2, to promote use of withdrawal services, residential care and sober living: \$375,000

**Recommendation 10.** Within DOC, devote funding to developing an electronic records management system that records unambiguous behavioral health assessment and tracks the individual throughout their involvement at each level, whether in community or facility.

**Total Cost, Recommendation 10: \$500,000** Putting EHRs in place can be costly. DOC has a system already, but the current system would require multiple levels of expansion to become a statewide reporting system with multi-agency access and data entry capabilities. End-user training by state and external staff also would be required.<sup>138</sup>

## Recommendation Priorities

1. Increase treatment system resources in the community: MAT Prescribers  
(Recommendation 9a: \$315,000)
2. Increase treatment system resources in the community; OTP facilities  
(Recommendation 9b: \$4.03 million; \$254,000 monthly)
3. Institute MAT in corrections facilities  
(Recommendation 8: \$60,000 per month per 200 inmates)
4. Foster interagency partnerships  
(Recommendation 5: \$100,000)
5. Expand community access  
(Recommendations 1–4: \$675,000; not including treatment itself)

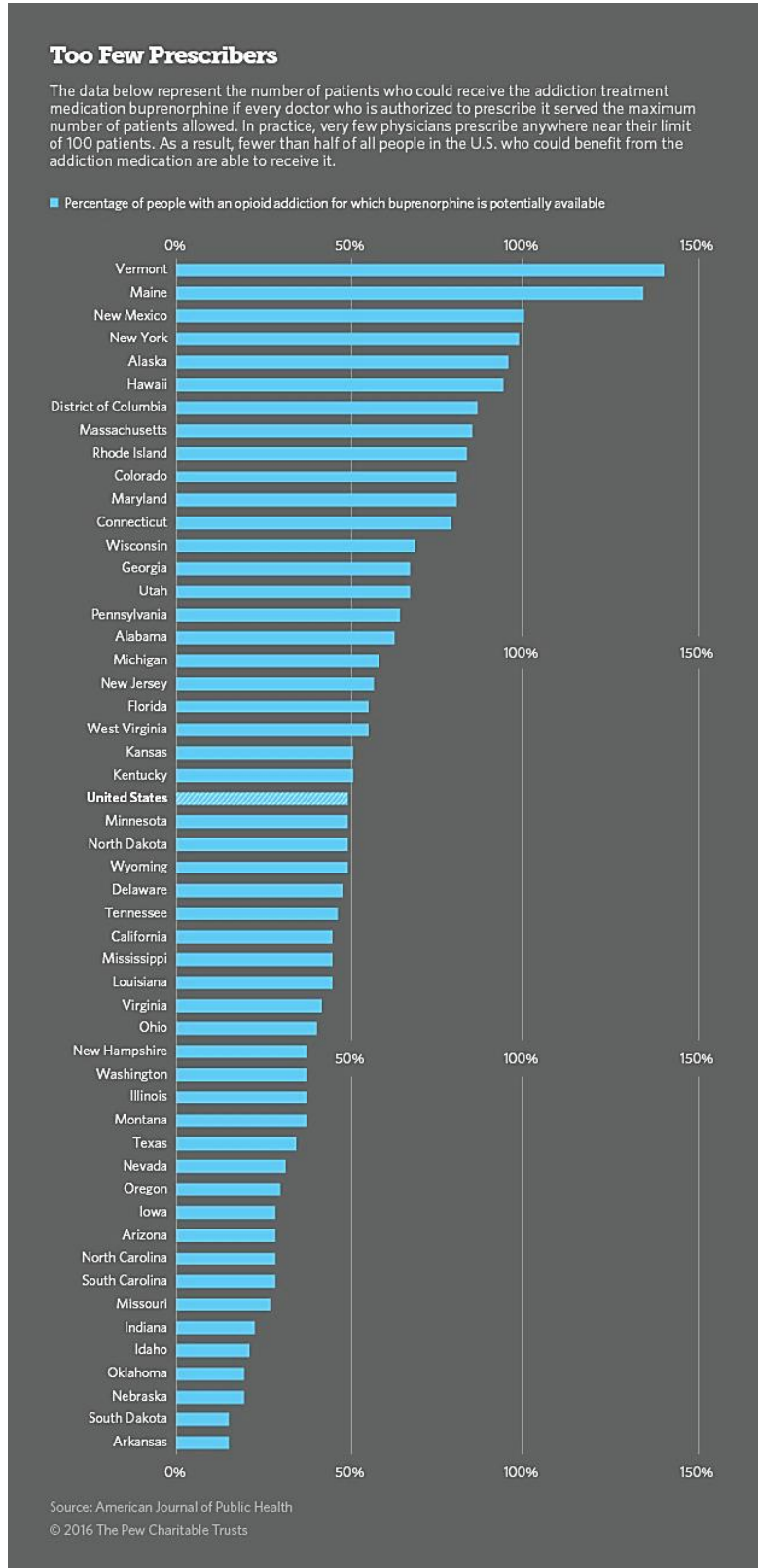
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<sup>136</sup>Campaigns to increase both OTP and residential utilization rates can be combined if necessary.

<sup>137</sup> Estimate based on DSAMH and Connections, Inc. conversation during May 2, 2017 meeting

<sup>138</sup> Sources: Maine DOC Information Technology division; HZA Information Technology division

# Appendix A: Percent of People with Opioid Addiction Who Can Receive Buprenorphine by Availability of Licensed Prescribers





## Appendix B: Maine Statutory Changes in 2017

Purpose	Citation	Summary
<b>Automatic Enrollment of Health Professionals in PMP at Time of Licensure or Renewal</b>	Ch. 488 L.D. No. 1646 127th Maine Legislature  Sec. 35 & 36	Requires automatic enrollment mechanism for pharmacists and veterinarians who are registering with the program or renewing registration when applying for or renewing a professional license in the same manner as health care professionals with authority to prescribe controlled substances
<b>Mandatory PMP Check; Every 90 days</b>	Ch. 488 L.D. No. 1646 127th Maine Legislature  Sec. 9. 22 MRSA §§7253 and 7254	Requires prescribers to review prescription monitoring information about the patient's prescription and diagnosis history prior to the initial benzodiazepine or opioid medication prescription and every 90 days as long as prescription is renewed.  Requires dispensers to review prescription monitoring information prior to dispensing a benzodiazepine or opioid medication if: <ul style="list-style-type: none"> <li>• person is not a Maine resident</li> <li>• the prescription is from a prescriber with an address outside Maine</li> <li>• the person is paying cash when he or she has prescription insurance on file</li> <li>• the person has not had a prescription for a benzodiazepine or an opioid medication in the previous 12 months</li> </ul> See rule for exemptions
<b>Dosage and Prescription Length Limits</b>	Ch. 488 L.D. No. 1646 127th Maine Legislature  Sec. 13. 32 MRSA §2210	Establishes limits on opioid medication prescribing: <ul style="list-style-type: none"> <li>• Less than 100 MME</li> <li>• Acute pain for 7 days</li> <li>• Chronic pain for 30 days</li> </ul> See rule for exemptions



## Appendix C: Treatment Facility Inventory

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### Treatment Facility Inventory

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The Delaware Department of Justice has contracted with Hornby Zeller Associates, Inc., a management consulting firm, to perform an inventory of Delaware's addiction treatment system involving individuals with an opioid use disorder (OUD), addicted to opioids (such as oxycodone and morphine) and using illicit opiates such as heroin. This inventory is designed to identify Delaware's current treatment capacity as well as services that are needed to meet the treatment needs of those currently involved in the treatment system and those waiting to be involved. This survey has been adapted from the National Survey of Substance Abuse Treatment Services survey (N-SSATS) and Opioid Treatment Program (OTP) questionnaire to gain insight about the treatment network in Delaware.

The information you provide about your facility will be kept confidential and will be aggregated to inform the study as a whole.

Thank you in advance for taking the time to participate.

Facility: \_\_\_\_\_

Name and title of Representative Completing the Survey: \_\_\_\_\_

1. Does your facility offer substance abuse treatment services for opioid use disorder (OUD)?

- YES
- NO (End of Survey. Submit survey.)

2. Is your facility a SAMHSA-certified Opioid Treatment Program (OTP)?

- YES
- NO, but our facility is currently in the process of becoming an OTP.
- NO, we do not intend to pursue such certification.

3. What type of care does your facility offer for OUD? Please check all that apply to your facility.

[Programming note: Each check box will need to be linked to a separate question 5]

- Outpatient (Includes in a hospital setting or non-hospital setting)
- Residential (Non-hospital)
- Hospital Inpatient
- NONE (End of Survey. Submit survey.)

4. Please complete the following table for [OUD outpatient services, OUD Residential services, OUD Hospital inpatient services].<sup>139</sup>

Treatment	Provided by this Facility	Referred to another Facility for this Treatment	Number of Individuals Receiving Services from this Facility on March 1, 2017	Number of Available Slots for this Treatment at the Facility	Number of Individuals on Waitlist for this Treatment on March 1, 2017	Unit Cost per Service (by client)	Average Number of Units Prescribed per Patient, per Treatment Episode
Methadone	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No					
Naltrexone	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No					
Vivitrol	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No					
Buprenorphine, with naloxone (Suboxone)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No					
Buprenorphine, without naloxone	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No					
Detoxification	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No					
Opioid-related education	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No					
Substance abuse education	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No					
Day Treatment Services	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No					
Therapeutic community	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No					
Other substance abuse disorder treatment services	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No					
Twelve-step or Other Mutual-Help Groups	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No					
Cognitive Behavioral Therapy	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No					
Other behavioral therapy	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No					

<sup>139</sup> The provider will be asked to complete the matrix for each type of care it provides, e.g., if the provider offers both residential and outpatient services, the provider will be asked to complete the matrix for residential care and outpatient services.



Treatment	Provided by this Facility	Referred to another Facility for this Treatment	Number of Individuals Receiving Services from this Facility on March 1, 2017	Number of Available Slots for this Treatment at the Facility	Number of Individuals on Waitlist for this Treatment on March 1, 2017	Unit Cost per Service (by client)	Average Number of Units Prescribed per Patient, per Treatment Episode
Co-occurring disorder treatment	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No					
HIV/AIDS, Hepatitis B/C treatment	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No					
Narcotics Anonymous	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No					
Other (please specify below)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No					
1.	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No					
2.	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No					
3.	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No					
4.	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No					
5.	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No					

**Detoxification Best Practices** [Questions 5 and 6 will populate only if the respondent indicates the facility offers detoxification treatment.]

5. How many patients that were discharged during calendar year 2016 were referred to one of the following after OUD detox?

- Outpatient treatment at this facility \_\_\_\_\_
- Outpatient treatment at a different facility \_\_\_\_\_  
Please name the facility: \_\_\_\_\_
- Residential treatment at this facility \_\_\_\_\_
- Residential treatment at a different facility \_\_\_\_\_  
Please name the facility: \_\_\_\_\_
- Other: Please specify \_\_\_\_\_

6. What are the challenges your facility faces in placing a client in care after OUD detox? Check all that apply.

- Deficits in the full range of care settings
- Deficits in the levels of care available
- Limitations imposed by third-party payers (e.g., strict adherence to standardized admission criteria)
- Clinicians' lack of authority (and sometimes sufficient knowledge) to determine the most appropriate care setting and level of care
- Insurance that does not include a substance use disorder benefit
- Absence of any health insurance at all
- Other (Please Explain)

**Facility Accessibility for Outpatient Services** [Questions 7 and 7a will populate only if the respondent indicates the facility offers outpatient care.]

7. Do any OUD outpatients travel an hour or more, each way, to be treated at your facility?

- YES
- NO (Skip to question 9)

7a. What percentage of OUD outpatients travel an hour or more, each way, to be treated at your facility?

- None of our clients travel an hour or more
- 25% or less of clients
- 26% to 50% of clients
- 51% to 75% of clients
- 75% or more of clients

**Other Services for OUD Clients**

8. In addition to Medication Assisted Treatment (MAT), what percentage of your OUD clients also receive substance abuse counseling services in any format (individual, group, etc.) at this or another facility?

- Not Offered
- Received by 25% or less of clients
- Received by 26% to 50% of clients
- Received by 51% to 75% of clients
- Received by more than 75% of clients

9. Does your facility provide referrals or resources to other community services for OUD clients?  
Please check Yes or No for each.

Community Service	Referral (Call for appointment or placement)	Resources (Print or online materials)
Mental Health	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Housing Support	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Employment Support	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Transportation	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Daycare	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No

10. Does your facility conduct outreach to persons in the community who may need OUD treatment?

YES

Please describe how:

NO

#### Pre-trial and Incarcerated Clients

11. Does your facility treat individuals with OUD who have been referred by the criminal justice system?

YES

NO (Skip to Question 13)

11a. How many individuals were referred to your treatment agency by the criminal justice system (whether pretrial, probation, or parole) during calendar year 2016?

\_\_\_\_\_ individuals

11b. Does your facility provide regular updates on justice-involved individuals to the criminal justice system?

YES

What information is provided?

NO

#### Treatment Challenges

12. Do recommended treatments align with what is approved for the client based upon their insurance or funding?

YES, for 25% or less of clients

YES, for 26% to 50% of clients

YES, for 51% to 75% of clients

YES, for 75% or more of clients

NO, not for any of our clients

13. Please indicate the top three challenges the facility faces in treating patients with OUD?  
[open ended question]

### **Treatment Successes**

14. Please indicate the top three successes the facility has achieved in treating patients with OUD? [open ended question]

### **Perceived Gaps**

15. What are the gaps in the treatment network for treating OUD in Delaware? [open ended question]

### **Reporting to DSAMH**

16. What percentage of this facility's OUD clients are reported to DSAMH?

- 25% or less of clients
- 26% to 50% of clients
- 51% to 75% of clients
- 75% or more of clients
- None of our OUD clients are reported to DSAMH

*Thank you for taking the time to complete the Treatment Facility Survey.  
Please click submit survey once all questions are complete.*

## Appendix D: Delaware Opioid and Heroin Addiction Treatment Questionnaire – Site Directors for Facilities with Incarcerated Population

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### Instructions

The Delaware Department of Justice has contracted with Hornby Zeller Associates, Inc. to conduct an inventory of Delaware’s addiction treatment system focusing both on individuals addicted to opioids (such as oxycodone and morphine) and illicit opiates such as heroin. The inventory includes the treatment needs and availability of services to individuals who are incarcerated after sentencing, as well as those who are incarcerated in pre-trial diversion after arrest.

The basic premise of the assessment of incarcerated individuals is to quantify: 1) Number of individuals identified as needing treatment services for opioid and heroin addiction; 2) Services available to meet those needs and their level of utilization; and 3) Costs of those services.

Your responses to the questions below will help to determine where there are gaps in services for incarcerated individuals with opioid addiction. Note that this information will be aggregated and remain confidential. Identification is for follow-up purposes only.

Please complete this form, save it as a Word document (.docx) and email to

**Judith.Caprio@state.de.us**

Thank you for taking the time to provide this information to our evaluators.

**Facility Name:** [Click here to enter text.](#)

**Your Name:** [Click here to enter text.](#)

**Date:** [Click here to enter a date.](#)

**1. Does this facility hold individuals on pre-trial diversion?**  Yes  No

**2. How many individuals in this facility as of today’s date have an opioid or heroin addiction?** [Click here to enter text.](#)

**3. Of those with an addiction, how many are in need of services?** [Click here to enter text.](#)

**4. Of those in need of services, how many are:**

[Click here to enter text.](#) **Pre-trial** [Click here to enter text.](#) **Post-conviction**

**5. What protocol or assessment does your facility use to determine if an individual has an opioid or heroin addiction and if services are needed?**

[Click here to enter text.](#)

**6. As part of the study, Hornby Zeller Associates is creating an inventory of the opioid/heroin-related treatment services available, the extent to which those treatments are provided and their associated costs. In the following table, please identify this information for your facility.**

### Inventory of Opioid and Heroin Treatment Services and Need

**Facility Name** 
**Contact Person:** 
**Contact Number:-**

Treatment	Provided In-house	Contracted Service	No. of Inmates Needing Services	No. of Inmates Receiving Services	Number of Available Slots	Cost per Service (specify if unit cost or contract cost)
<b>Methadone</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No				
<b>Naltrexone</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No				
<b>Vivitrol</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No				
<b>Buprenorphine, with naloxone (Suboxone)</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No				
<b>Buprenorphine, without naloxone</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No				
<b>Opioid-related education</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No				
<b>Substance abuse education</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No				
<b>Therapeutic community</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No				
<b>Detoxification</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No				
<b>Cognitive Behavioral Therapy</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No				
<b>Other behavioral therapy</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No				
<b>Co-occurring disorder treatment</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No				
<b>HIV/AIDS, Hepatitis B/C treatment</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No				
<b>Narcotics Anonymous</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No				
<b>Other (specify below)</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No				
<b>1.</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No				
<b>2.</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No				
<b>3.</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No				
<b>4.</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No				
<b>5.</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No				