COMPREHENSIVE OPIOID ABUSE SITE-BASED PROGRAM (CARA) CATEGORY 2: TECHNOLOGY-ASSISTED TREATMENT PROJECTS PROGRAM NARRATIVE

Statement of the Problem

Data has confirmed that the state of West Virginia has been impacted more severely than any other state in the nation. West Virginia has the highest drug overdose mortality rate in the nation at 41.5 per 100,000 residents in 2015, which is more than double the rate of the United States (Rudd, Seth, David, & Scholl, 2016). From 2014 to 2015, West Virginia had an increase in drug overdose death rates of 16.9% and has led the nation in drug overdose deaths by at least 7.5% since 2013 (Rudd et al., 2016). Furthermore, from 2014 to 2015 West Virginia was one of five states that experienced the largest absolute rate change in deaths from synthetic opioids other than methadone and one of four states that experienced the largest absolute rate changes in heroin deaths (Rudd et al., 2016).

Currently, opioids are responsible for over 87%, 639 of 751, of all overdose fatalities in West Virginia in 2015, and this number continues to grow. From 2007 to 2012, wholesalers shipped over 780 million hydrocodone and oxycodone pills to West Virginia, primarily to small, independently-owned pharmacies, while 1,728 West Virginians fatally overdosed on those two pain killers (Eyre, 2016). In 2015, West Virginia filled more opioid prescriptions than there are people with 1,049 opioid prescriptions per 1,000 West Virginians (IMS Institute for Health Informatics, 2016). In addition, West Virginia is struggling with prison and jail overcrowding due to the impact that the opioid epidemic is having on the justice system at the state and county levels. The West Virginia prison population increased from about 1,675 prisoners in 1992 to about 7,085 prisoners in 2012, an average yearly increase of 5.4%.

Based on the trends provided, West Virginia's correctional population forecast projects that the state's correctional population will continue to grow over the next 10 years. The rapid growth in prison population in West Virginia has cost the taxpayers significantly by resulting in the construction of three new correctional facilities within the last decade (Haas & Spence, 2016). In addition to the cost of constructing new correctional facilities, all current facilities are operating at capacity with an additional 500 Division of Corrections inmates being housed at regional jail facilities while waiting for prison beds to become available (Haas & Spence, 2016). With the burden that currently falls on West Virginia's prisons and regional jails, there has been a push toward implementing alternative forms of correction for offenders that need less than institutional custody, but also need cognitive behavioral treatment, addiction recovery services, and individual or group counseling while also being held accountable for the crimes that they committed. In 2012, the Council of State Government's (CSG) Justice Center began working with state leaders in West Virginia to develop data-driven, consensus-based policy options designed to reduce corrections spending and increase public safety. The CSG experts conducted a comprehensive analysis of West Virginia's criminal justice data and interviewed stakeholders across the criminal justice system to identify challenges facing the state. They concluded:

- Between 2007 and 2011, the biggest cause for the growth in West Virginia's prison population was the number of revocations of offenders who were under communitybased supervision (Council of State Governments Justice Center, 2013).
- The number of offenders who completed their sentence in prison and returned to the community with no supervision significantly increased during this time period (Council of State Governments Justice Center, 2013).

 Probation and parole failure was heavily impacted by an individual's substance use and addiction needs, and few of those under additional supervision received treatment within their communities, which contributed to the growing prison population (Council of State Governments Justice Center, 2013).

West Virginia is aware of the challenges many offenders encounter when they are released back into the community and the high risk of recidivism. According to the Recidivism Study published by the West Virginia Division of Corrections (WVDOC) Office of Research and Planning, nearly 73% of offenders who returned to the WVDOC in 2004-2005 did so within 18 months of their release (Hildebrand, 2009). The highest return rate (24.9%) came within 6 months of being released from the WVDOC (Hildebrand, 2009). From 2003 to 2013, the number of individuals reincarcerated due to parole violations escalated, in part driving the increase in overall incarceration rates in the state and many of these parole violations are a result of opiate use (Haas & Spence, 2016).

West Virginia is a very rural state and is the only state that is located entirely within the Appalachian Region. A population of 1.8 million residents spread across 24,038 square miles by itself is an example of how rural the population of West Virginia is with approximately 75 residents per square mile and 11% of the population living in the five largest cities of Charleston, Huntington, Parkersburg, Morgantown, and Wheeling. The rural nature of West Virginia is exacerbated by the mountainous terrain that is prevalent throughout the state given the location within the Appalachian Mountains and because of this terrain, many residents are isolated from services to combat opioid abuse and addiction that are available in the more populated regions. A significant factor contributing to the economic struggle of West Virginia is low educational attainment with only 19.6% of residents having a bachelor's degree or higher, which is

significantly below the national average of 30.6%. The state also suffers with issues of low literacy rates with the West Virginia Department of Education providing that 17% of West Virginia adults have significant difficulty with literacy tasks related to daily life and work, and an additional 32% face some degree of difficulty with certain literacy skills. Given these statistics and understanding the fact that West Virginia is a state that has relied on industries that do not require additional education but instead specialized training, such as coal mining, there is a general lack of educated professionals that can provide the necessary resources to the struggling regions of the state.

Compounding on the general problems that a rural state has, West Virginia is currently experiencing significant financial shortfalls across all government and locally run agencies. A major factor in the current financial difficulties is the national and global push away from using coal, which has historically been the industry that has helped West Virginia's economy. The "coal-impacted" communities throughout West Virginia, primarily in the southern counties, are seeing the largest struggle to fund and retain programs and services that are offered in other regions that are an hour or further commute for residents. Currently, West Virginia is one of the most impoverished states in the country with a median household income greater than 20% below the national average. With more than 22% of families with children under the age of 18 and more than 60% of families having a female head of household (i.e., no husband present) and children under the age of 5 having an income below the poverty level, the financial struggles are evident. There are significant contributing factors to the low economic standing in West Virginia. The first is a higher than national average unemployment rate of 5.9%, with higher rates in the southern counties, or "coal-impacted" counties. Currently, because there is no industry or profession growing or ability to leverage additional taxes on the citizens of the state,

funding is being sought from, and relied upon, many federal grant programs to assist in keeping services and programs tasked with targeting opioid abuse and addiction in the state of West Virginia.

Most counties in West Virginia have limited mental health treatment providers, with many of them only having one provider within the county. In areas such as this, individuals involved with the justice system that may have limited or no health insurance are not deemed a priority and are put on a waiting list to receive service and, in many instances, they are not seen before they commit a new crime or have their bond, parole, or probation revoked and are incarcerated. Not only are clients having difficulty finding treatment providers within their own locale, but many either do not have a personal vehicle or they do not have a valid driver's license. With very few public transportation options in the state, transportation to and from treatment for opioid abuse and addiction is not a viable option for most. On top of issues with transportation and lack of service providers is, once again, the terrain of West Virginia. Being located in the Appalachian Mountains, weather during the Spring, Fall, and Winter seasons are unpredictable. With large accumulations of rain and snow, West Virginia experiences road closures due to damaged roadways, delays, and poor conditions many times during these months which creates an additional, albeit seasonal, barrier to accessing the necessary services for opioid abuse and addiction treatment and recovery.

The target population for the Technology-assisted Treatment Projects are those individuals that encounter the justice system through any number of pathways but whom are not sentenced to prison or jail. This population of justice-involved individuals are those that are typically found on probation, home confinement, parole, or other alternatives to incarceration. In West Virginia, a program was created in the 2002 that implemented a new form of sanctioning

that incorporated correction and punitive sanctions for criminal wrongdoing while also providing the opportunity to assist individuals who find themselves sent to these programs to receive counseling, addiction and mental health treatment, education, and numerous other resources that the targeted population has traditionally had trouble obtaining. These programs came to existence through the West Virginia Community Corrections Act and individually are known generally as a Day Report Center (DRC). Currently in West Virginia there are 29 DRC programs that provide various services to the described population in 50 of West Virginia's 55 counties. Each DRC has varying services that they provide to clients that are referred to them based on the resources in the local communities and the ability to access those resources. In some of the more populated areas these services can include individual therapy and mental health treatment with licensed treatment providers, group therapy sessions, individual case planning and case management, referrals to outside treatment providers and physicians, as well as many other services. In the more rural counties in West Virginia, the number of services available for clients are significantly less in number and variety. Additionally, most programs do not have the ability to access licensed treatment providers for individual therapy and counseling or mental health treatment, even outside of the program in the local communities.

The proposed pilot sites for the Technology-assisted Treatment projects will be twelve (12) of the nearly 50 Day Report Center sites located in various regions of the state. The DRCs have been chosen due to the consistent flow of referrals from the justice system of individuals that have been arrested, charged with, or incarcerated previously for a crime. All individuals that are referred to DRCs for treatment and recovery services are assessed via the Level of Service/Case Management Inventory (LS/CMI) assessment that scores an individual's risk for recidivism and calculates an overall score and eight (8) criminogenic need categories in which

that individual can score from very low risk to very high risk (Davidson, Haas, Spence, & Arnold, 2016). Of the community offenders assessed, West Virginia has approximately 75% of offenders scoring within the medium and high risk categories compared to a national average of approximately 57% (Davidson et al., 2016). This is significant due to the requirement that those accepted for services to DRCs score overall in the medium to high risk categories. Within the 8 criminogenic need categories is Alcohol/Drug Problem, which measures the level of need an offender has for this category. For community offenders in the state, the average score on a scale of 0-8 is 4.20 which classifies the average as medium risk/need for Alcohol/Drug Problem. The proposed project would coordinate programs with qualified treatment professionals to provide additional services to those programs in counties that do not have the same level of resources. West Virginia DRCs are funded through County Commissions and the West Virginia Community Corrections Grant Program that receives policy and direction from the Community Corrections Subcommittee of the West Virginia Governor's Committee on Crime, Delinquency and Correction. The Community Corrections Subcommittee has staff at the West Virginia Division of Justice and Community Services (DJCS) to oversee the WV Community Corrections Grant Program and has working relationships with and membership from the West Virginia Supreme Court of Appeals (WVSCA), West Virginia Division of Corrections (WVDOC), West Virginia Regional Jail Authority (WVRJA), and West Virginia Department of Health and Human Resources (WVDHHR) with whom the operation and coordination of DRCs is reliant upon. In addition to the Community Correction Subcommittee, the state of West Virginia has passed the Justice Reinvestment (JRI) Act in 2013 that strengthened community-based supervision by requiring supervision agencies to use risk assessments to ensure that supervision practices focus on individuals most likely to reoffend and expanded access to substance abuse

treatment by creating a new "treatment supervision" sentencing option that provides substance abuse treatment to individuals under supervision. The JRI Act designates that referrals to treatment supervision programs must come directly from DRCs after an individual has been assessed and a risk/need level has been determined. With the required programming, policies, and collaboration that DRCs must utilize, these are the ideal locations to implement these projects. The West Virginia DJCS will work in tandem with the WVDHHR and WVSCA to implement the proposed project, as well as the WV Community Corrections Subcommittee members and represented agencies by providing updates and discussion regarding the progress that is be made toward establishing more effective treatment across the state.

Federal funding is being sought to implement these Technology-assisted Treatment
Projects due to the financial struggles that the state is currently facing, as previously mentioned.
Without these federal funds, there would not be a viable option for implementing these programs
due to the need for hardware and additional service providers in the DRCs. A portion of federal
funds will be utilized to purchase and install cameras, microphones, monitors, and high speed
internet in the facilities chosen to participate. Additionally, funds will be utilized to assist in
recruiting and/or retaining licensed treatment professionals to broadcast to partnering locations to
provide additional opioid abuse and addiction treatment and recovery services and assessments
for any individual that may be referred to these programs. At current funding levels, DRCs
cannot purchase or be provided with the necessary components to provide or implement any
technology-assisted treatment projects.

Project Design and Implementation

The proposed Technology-assisted Treatment Project has been designed with careful consideration of what is financially and programmatically feasible with the current DRCs in

West Virginia, as well as the collaboration with the WVSCA to implement the project as quickly as possible upon notice of funding. Consideration of all DRCs and the need to address the lack of opioid abuse and addiction treatment and recovery services will remain a top priority when considering funding allocations. DJCS staff project the purchase and installation of the necessary equipment and software in the twelve (12) pilot sites to occur in two or three phases, separated by three to four month intervals with flexibility to account for manpower and other projects.

Support for recruiting and retaining personnel and technical assistance would continue during the remainder of the grant period to ensure services continue through the life of the grant period.

The proposed project will be designed in a way that utilizes current staff and treatment programming found within DRCs. The installation of the purchased equipment will correlate with current efforts from WVSCA and WVDHHR, who are currently working together to put the same equipment in five (5) DRCs. The funds for this project will add an additional twelve (12) sites, for a total of seventeen (17) DRCs to be connected via the installed system. There will be five established "broadcast sites", two (2) funded by the current efforts and three (3) from this proposal. These sites will be chosen based on a variety of factors, including but not limited to, current staff credentials, services currently offered, and the ability to bill for appropriate medical services in relation to opioid use disorder treatment and mental health treatment. In addition to the five "broadcast sites", twelve "receiving sites" will be established, three (3) funded through the current efforts and nine (9) from this proposal, to receive support and additional services not found within the current staff or local region. The nine "receiving sites" from these funds will be determined based on a variety of factors including but not limited to population currently being served, lack of available services and/or programming, and ability to effectively plan and coordinate with "broadcast sites".

The three "broadcast sites" proposed will be DRCs that currently have licensed treatment staff and provide the most effective services to that individual program's participants. It is theorized that these "broadcast sites" will be those located in the more populated areas due to the availability of resources and the ability to recruit personnel that would be qualified in providing effective opioid abuse and addiction treatment, however, the final decisions of which sites will become "broadcast sites" will be made based upon a solicitation made from DJCS to current DRCs that can provide these services. A "broadcast site" under this solicitation will be tasked with having an available treatment provider on site that will dedicate time to providing mental health treatment, substance use disorder treatment, and individual and/or group therapy to a determined number of "receiving sites". Funds that would be received from this federal award that are not proposed to install hardware at the physical locations for "broadcast" or "receiving" sites will be made available via solicitation to the five total "broadcast sites" (including those being established through WVSCA and WVDHHR) to assist recruiting efforts for additional treatment personnel or to recruit additional case managers in their location to allow the current treatment personnel more time to provide services to the twelve total "receiving sites" (including those being established through WVSCA and WVDHHR). All "broadcast sites" that are providing services to "receiving sites" and receiving funds from this solicitation will be the responsible party for conducting or coordinating necessary assessments to accurately assess the level of drug abuse, addiction, and dependence with assessments such as the Substance Abuse Subtle Screening Inventory (SASSI), Psychiatric Diagnostic Screening Questionnaire (PDSQ), Addiction Severity Index (ASI), and others that can provide appropriate information. These will be conducted as necessary in addition to the already required LS/CMI assessments, which will be conducted by staff at the site that a participant is located.

The nine "receiving sites" will be DRCs that currently serve a population that has a little to no licensed treatment staff and minimal resources in the immediate surrounding region. These sites will be tasked with providing the location for clients to access the hardware that is installed and providing the immediate oversight, case planning, and case management. Any program participant must be assessed using the LS/CMI and these will be done by trained staff at the site that the participant is located. Additional assessments that are deemed necessary by treatment staff from a "broadcast site" will be coordinated and conducted via agreement between the two sites.

Having two different classes of DRCs under this project will allow for additional participants to receive higher quality services as well as services that are directly related to illicit drug use and abuse. Providing treatment services conducted by licensed professional staff to participants in the "receiving sites" will allow for those locations to utilize their budgets in ways that can better serve the participants in other manners. This could be accomplished by hiring additional staff to conduct educational classes, case management, and classes that are geared toward providing general life skills that may be necessary for the reintegration of participants to the community or by offsetting costs to purchase additional supplies and equipment necessary to provide effective services for reducing risk for recidivism of participants. With these possible cost savings, caseloads could increase and the total number of participants that could benefit from the treatment would ultimately increase. The DRCs have been mandated to begin billing medical insurances by the WV Community Corrections Subcommittee for eligible services by July 2018. With this mandate and the proposed project occurring in the same time frame, the "broadcast sites" can greatly benefit from providing treatment services to outside locations.

These DRCs could potentially bill medical insurances of participants that they provide services

for to offset the salaries of the licensed professionals being utilized. Having the additional funds from the West Virginia Community Corrections Grant that previously funded these personnel will provide for the ability to recruit additional case managers to increase caseloads and the total number of participants receiving treatment services.

All technology purchased with federal funds that may be obtained through this award will not be utilized for the purposes of remotely monitoring participants at DRCs or other locations. The technology will solely be utilized for the assessment and determination of illicit drug use and severity, cognitive behavioral treatment, and individual or group therapy of those individuals. Case planning, case management, and additional educational services will not be a requirement or priority of those individuals at "broadcast sites".

DJCS is currently collaborating with the WVSCA to implement this project on a pilot basis and will continue to work together through the life of the grant period as the majority of participants at DRCs are referrals from the various levels of the court system. DJCS will also work with WVDHHR to continue to implement best practices in treatment for those with opioid and other illicit substance abuse and addiction issues as well as continued coordination with JRI programs and other projects dedicated to increasing the options and services available to address illegal opioid abuse. On a local level, DRCs will continue to work closely with WVDOC and the justice system to continue to obtain referrals from probation, parole, and direct-sentence justice system involved participants. The DRCs continued work with these agencies will assist in the state-wide effort to reduce prison overcrowding while also working to reduce illegal substance use and increasing mental health and substance abuse treatment.

Capabilities and Competencies

The West Virginia Division of Justice and Community Services (DJCS) is the State Administering Agency (SAA) for all criminal justice related programs in the state. DJCS is responsible for the administration of most federal funds awarded to WV by the U.S. Department of Justice and has extensive experience administering a wide range of both formula and discretionary grants.

The Office of Research and Strategic Planning (ORSP) is a unit within DJCS that provides the research and statistical functions for the Agency

analyzing large data systems and has been instrumental in the development of key information sharing initiatives in the state. For example, the ORSP was instrumental in the development of a web-based application that provides near real-time information to both practitioners and policymakers about community corrections programs in the state. Development and implementation of both the WV Community Corrections Information System, CCIS, and the Level of Service/Case Management Inventory, LS/CMI, online offender assessment system were facilitated by ORSP staff. In addition, each of these data systems developed by the ORSP were nationally recognized through a peer-review process as significant technical innovations by the Justice Research and Statistics Association (JRSA) and the Bureau of Justice Statistics (BJS) during their annual meeting in 2008 and 2011, respectively. In addition to the above-mentioned systems, the ORSP routinely works with other agencies to obtain and prepare large data sets for analysis and reporting.

The project coordinator for the proposed project will a Criminal Justice Specialist employed by the WV DJCS who will be responsible for the following:

- Preparing solicitations for sub awards for both "broadcast sites" and "receiving sites".
- Coordinating the purchase of equipment, hardware, and software.
- Collaboration with WV DHHR and DJCS's Office of Research and Strategic Planning (ORSP) to collect data and compile reports for status on goals, objectives, and performance measures.
- Provide oversight to the DRCs that are awarded funding and provide technical assistance and ensure that goals and objectives are being met and to review and process financial reimbursement requests when appropriate.
- Review sub grantee applications and confer with respective parties before recommending or awarding funds.
- Attend required BJA trainings yearly and work closely with BJA's training and technical
 assistance providers and evaluators to ensure that the project is being operated as
 intended.

The project coordinator will dedicate approximately 20 to 30 hours per week to the proposed project and will be tasked with ensuring that all equipment, hardware, and software is purchased and installed in a timely manner to allow for treatment services to begin being broadcasted between DRC locations as quickly as possible. The coordinator will also work closely with DRC directors to ensure that memorandums of understanding are prepared and followed between designated "broadcast sites" and "receiving sites". The person in this position will have additional responsibilities and roles that are determined upon implementation of the project and in response to needs that present themselves as the project begins and moves forward during the pilot phase until full implementation.

This project will have three goals that will be achieved during the life of the grant. The first goal for the project is to purchase and install all equipment, hardware, and software in twelve (12) DRCs. The timeline for this goal is within the first one and a half years of the threeyear project period (October 1, 2017 - March 30, 2019). This will be attainable by creating solicitations for both "broadcast sites" and "receiving sites" with a deadline for application within the first three (3) months of funding being awarded. Review of applications for sub grantees will take place with sub awards being made within the first six (6) months. Upon the selection of participating DRCs, funds will be utilized to begin the installation of technology and recruitment and/or retention of treatment personnel. After installation of the required technology at participating DRCs, the second goal will be to increase access to cognitive behavioral treatment for those in underserved communities. This will be an ongoing objective that will be evaluated for success by reporting information that will be required of "broadcast" and "receiving" sites. The third goal for this project is to reduce the costs for commuting to treatment for both clients and treatment providers. Like the second goal, this ongoing goal will be evaluated for success by data reported from the designated sites. These goals will be used to objectively assess the impact of this project in providing services to an increasing number of justice-involved individuals with a history of opioid misuse and abuse, and to assess the financial benefit of this project to the local communities, participating individuals, and DRCs.

Possible barriers that could hinder the implementation of the project are unforeseeable changes in personnel at the WVDJCS that would change the staff working to implement the project as designed, and changes in personnel at DRCs that could impact selected "broadcast" and "receiving" sites. In the first case, the strategy that will be used to overcome this possible barrier is cross training staff at both agencies to understand the project goals and objectives set

forth. Having multiple personnel involved with the project could relieve the stress and possibly keep from delaying the implementation of the project. Changes in the DRC personnel is a barrier that will be addressed at the time that it may occur. All funds to sub awardees are made available on a reimbursement basis only, therefore if staff turnover causes loss of services being provided, reimbursement to these DRCs would halt until the project was being operated as designed.

Plan for Collecting the Data Required for this Solicitation's Performance Measures

Collecting data for the performance measures will be done in collaboration with supporting agencies as well as sub awardees. The WVDJCS program staff will, in collaboration with ORSP, develop monthly reporting forms that will be required to be submitted from all sub awardees. These reports will detail services provided, financial impact, and updates of daily operation of the project, as well as any additional data required by the BJA for research purposes. This data will be evaluated by the ORSP personnel and submitted with reports to BJA to show the impact of the proposed project on the DRC staff, treatment, and number of clients served.

Additional data will be collected by the WVDHHR to measure the impact of all categories of funding awarded on various health and emergency departments, opioid overdose rates, and many more areas that the opioid epidemic and use impacts throughout West Virginia. Through collaboration and partnerships, the data collected by both agencies will be evaluated and disseminated to all necessary agencies throughout the state for information and educational purposes. With the goal of reducing opioid abuse and mistreatment, the information delivered to these agencies will highlight the problem and show the impact that the federal funding for all categories and this proposed project has on the epidemic West Virginia is currently battling.

Impact/Outcomes, Evaluation, and Sustainment

Upon implementation of the proposed project, the expected impact would be that DRCs would be able to provide additional treatment of opioid and other illicit drug abuse and addiction to justice involved individuals who lack the opportunity to receive effective treatment services, and to the rural areas of West Virginia that do not have similar treatment services in the immediate local vicinity. In addition to providing these mental health and substance use disorder treatment services to those already being referred to DRCs in the more rural areas, the project will impact the justice system and community by providing these services to an increased number of individuals and being able to provide other necessary support and education to assist in the rehabilitation and reintegration to the communities in which these people live.

Monthly progress of the DRCs implementing this program will be documented in required monthly reporting of all WVDJCS sub grantees. In addition to required monthly reporting, staff will conduct on site monitoring of these programs to evaluate the services provided and monitor the collaboration with "broadcast" and "receiving" sites and to ensure that reported information is accurate and complete. WVDJCS requires that monthly reports be submitted by the 20th day following the closing of the previous month. With this requirement, all data and reports to BJA will be submitted on time and as scheduled by ensuring all sub awardees are abiding by set conditions.

WVDJCS staff expects that this project will have a much wider impact in the years to come due to the expansion of Medicaid billing and the requirement that DRCs begin billing for eligible services being delivered. With this additional funding in the future, it is projected that the West Virginia Community Corrections Grant funds could be used to provide for additional,

non-billable services, possibly including technology-assisted treatment, even if only in a limited capacity.

WVDJCS is hoping that the local communities and county level governments will see the benefit of utilizing this technology-assisted treatment project and would continue to fund any necessary aspects to sustain this program if federal funding was unattainable in the future. DJCS would continue to provide the data and research to those counties and communities without the technology-assisted programs to demonstrate the effectiveness and financial gain of implementing these services. With research driven data, the hope would be that additional sites would become available to act as both "broadcast" and "receiving" sites with funds from the local communities.

References

- Council of State Governments Justice Center. (2013). Justice reinvestment in West Virginia:

 Analyses & policy options to reduce spending on corrections & reinvest in strategies to increase public safety. 1-20. Retrieved April 14, 2017, from

 https://csgjusticecenter.org/wp-content/uploads/2013/06/BJA.JR-West-Virginia v5.pdf
- Davidson, L. J., Haas, S. M., Spence, D. H., & Arnold, T. K. (2016). Evidence-based offender assessment: A comparative analysis of West Virginia and U.S. risk scores. 1-14.

 Retrieved April 14, 2017, from

 http://www.djcs.wv.gov/ORSP/SAC/Documents/Davidson%20et%20al%202015_EBP%
 20Offender%20Assessment%20Comparative%20Analysis.pdf
- Eyre, E. (2016). *Drug firms poured 780M painkillers into WV amid rise of overdoses*. Retrieved April 14, 2017, from Charleston Gazette-Mail: http://www.wvgazettemail.com/news-health/20161217/drug-firms-poured-780m-painkillers-into-wv-amid-rise-of-overdoses
- Haas, S. M., & Spence, D. H. (2016). The impact of correctional population reduction strategies in West Virginia: Forecast projections and cost savings estimates for 2014-2024. 1-27.
 Retrieved April 14, 2017, from http://www.djcs.wv.gov/ORSP/SAC/Documents/Haas%20and%20Spence%202015%20F orecast%20Projections%20and%20Cost%20Savings%20FINAL.pdf
- Hildebrand, R. L. (2009). Recidivism in West Virginia 2004-2005. 1-7. Retrieved April 14, 2017, from http://www.wvdoc.com/wvdoc/Portals/0/documents/Recidivism2004-2005.pdf
- IMS Institute for Health Informatics. (2016). Use of opioid recovery medications: Recent evidence on state level buprenorphine use and payment types. 1-19. Retrieved April 14,

2017, from

 $https://www.imshealth.com/files/web/IMSH\%20Institute/Reports/Healthcare\%20Briefs/I\\IHI_Use_of_Opioid_Recovery_Medications.pdf$

Rudd, R. A., Seth, P., David, F., & Scholl, L. (2016). Increases in drug and opioid-involved overdose deaths — United States, 2010–2015. *Morbidity and Mortality Weekly Report* (MMWR), 65(50-51), 1445-1452. doi:10.15585/mmwr.mm655051e1