Health Impact Review of SHB 1551 Modernizing the control of certain communicable diseases (2019 Legislative Session)

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Staff contact: Cait Lang-Perez Phone: (360) 628-7342 Email: <u>caitlin.lang@sboh.wa.gov</u>



Full review

The full Health Impact Review report is available at: https://sboh.wa.gov/Portals/7/Doc/HealthImpactReviews/HIR-2020-02-SHB1551.pdf

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Executive Summary SHB 1551, Modernizing the control of certain communicable diseases (2019 Legislative Session)

Evidence indicates that SHB 1551 would likely decrease penalties and collateral consequences, decrease prosecution and involvement in the criminal justice system, and decrease stigma, which could lead to improved health outcomes and decreased inequities for individuals living with HIV.

BILL INFORMATION

Sponsors: Jinkins, Cody, Stonier, Fey, Appleton, Pollet

Summary of Bill:

This summary highlights all provisions in the bill. However, this analysis was scoped to assess only the provisions related to modifying crimes related to transmission of human immunodeficiency virus (HIV).

- Modifies crimes related to transmission of HIV and repeals prohibitions on an individual who has a sexually transmitted disease, other than HIV, from having sexual intercourse if the partner is unaware of the disease.
- Repeals statutes related to counseling for HIV testing, the Office of AIDS, and requirements that agencies establish rules requiring acquired immune deficiency syndrome (AIDS) training for certain professions and employees.
- Updates language and changes references in the control and treatment of sexually transmitted diseases chapter from AIDS or HIV to sexually transmitted disease or blood-borne pathogen.
- Allows a minor of 14 years of age or older to give consent to treatment to avoid HIV infection without a parent or guardian's consent.
- Consolidates and expands rulemaking authority for the State Board of Health relating to control of sexually transmitted diseases.

HEALTH IMPACT REVIEW

Summary of Findings:

This Health Impact Review found the following evidence for relevant provisions in SHB 1551:

Pathway 1: Decreased Penalties and Collateral Consequences

This review makes the informed assumption that modifying HIV-related crimes from a felony to a misdemeanor or gross misdemeanor will lower the penalties and collateral consequences associated with the crime. This informed assumption is based on maximum sentences, findings of the U.S. Commission on Civil Rights' report on collateral consequences, and discussions with key informants.

• Very strong evidence that decreased penalties and collateral consequences of conviction will likely improve access to employment opportunities, housing, and social services for persons living with HIV convicted of the proposed charge.

• Very strong evidence that improved access to employment opportunities, housing, and social services will likely result in improved health outcomes for individuals living with HIV who are convicted of the proposed charge.

Pathway 2: Decreased Prosecution and Criminal Justice Involvement

This review makes the informed assumption that modifying HIV-related crimes to included detailed defenses to prosecution in the RCW will likely result in decreased prosecution and criminal justice involvement. This informed assumption is based on proposed defenses to prosecution, key informant interviews with prosecuting attorneys and law enforcement officers, and available Washington State and national data.

• **Very strong** evidence indicating decreased prosecution and criminal justice involvement will likely improve health outcomes.

Pathway 3: Decreased Stigma

This review makes the informed assumption that modifying HIV-related crimes from a felony to a misdemeanor or gross misdemeanor will decrease stigma for individuals living with HIV. This informed assumption is based on information from key informant interviews.

- **Strong** evidence that decreasing stigma for individuals living with HIV may improve access to and use of healthcare services.
- Very strong evidence that increasing access to and use of healthcare services for individuals living with HIV will likely improve health.
- **Very strong** evidence that improving health outcomes for individuals living with HIV will likely reduce health inequities by race/ethnicity; by sex, sexual orientation, and gender identity; and for other potentially marginalized individuals.

Introduction and Methods

A Health Impact Review is an analysis of how a proposed legislative or budgetary change will likely impact health and health disparities in Washington State (<u>RCW 43.20.285</u>). For the purpose of this review 'health disparities' have been defined as the differences in disease, death, and other adverse health conditions that exist between populations (<u>RCW 43.20.270</u>). This document provides summaries of the evidence analyzed by State Board of Health staff during the Health Impact Review of Substitute House Bill 1551 (<u>SHB 1551</u>).

Staff analyzed the content of SHB 1551 and created a logic model depicting possible pathways leading from the provisions of the bill to health outcomes. We consulted with experts and contacted key informants about the provisions and potential impacts of the bill. We conducted an objective review of published literature for each pathway using databases including PubMed, Google Scholar, and University of Washington Libraries.

Since there is limited research on the impacts of HIV criminalization reform, we conducted key informant interviews to gather additional supporting evidence. In total, we spoke with 27 key informant interviewees, including: 9 informants who are current or previous prosecuting attorneys and staff; 7 informants who are community advocates or work with organizations serving individuals living with HIV; 4 informants who conduct research on HIV policy; 3 informants at state agencies or local health jurisdictions; and 3 informants representing law enforcement. We also spoke with 2 subject matter experts from Washington State Department of Health (DOH), Office of Infectious Disease. More information about key informants and more detailed methods are available upon request.

Interviews were conducted within time and process constraints. The primary intent of key informant interviews was to gather supporting evidence. Interviews also assisted with understanding different viewpoints, challenges, and benefits to the bill; however, we did not intend to gather all potential viewpoints. Interviewees were selected purposively, with emphasis on key informants that could help elucidate potential impacts of HIV defelonization. We identified further key informants using snowball methodology. While we followed-up with many of these recommendations, we were not able to contact all individuals due to time limitations. Therefore, results should not be construed as comprehensive or representative of all perspectives. Additionally, results are likely skewed geographically based on jurisdictions that analysts spoke with during key informant interviews.

Interview questions were tailored to provide the most information, and focused on the impact of HIV defelonization penalties, prosecution, criminal justice involvement, stigma, and access to care. We took detailed notes during the conversations, and coded and analyzed these notes to identify themes. We then summarized these themes and incorporated salient results into the HIR document, as applicable. All results from key informant interviews are presented in summary by theme, and are not attributed to individual interviewees (unless otherwise noted).

The following pages provide a detailed analysis of the bill including the logic model, summaries of evidence, and annotated references. The logic model is presented both in text and through a

flowchart (Figure 1). The logic model includes information on the strength-of-evidence for each relationship. The strength-of-evidence has been defined using the following criteria:

- Not well researched: the review of literature yielded few if any studies or only yielded studies that were poorly designed or executed or had high risk of bias.
- A fair amount of evidence: the review of literature yielded several studies supporting the association, but a large body of evidence was not established; or the review yielded a large body of evidence but findings were inconsistent with only a slightly larger percentage of the studies supporting the association; or the research did not incorporate the most robust study designs or execution or had a higher than average risk of bias.
- **Strong evidence:** the review of literature yielded a large body of evidence on the relationship (a vast majority of which supported the association) but the body of evidence did contain some contradictory findings or studies that did not incorporate the most robust study designs or execution or had a higher than average risk of bias; or there were too few studies to reach the rigor of "very strong evidence;" or some combination of these.
- Very strong evidence: the review of literature yielded a very large body of robust evidence supporting the association with few if any contradictory findings. The evidence indicates that the scientific community largely accepts the existence of the association.

This review was subject to time constraints, which influenced the scope of work for this review. The annotated references are only a representation of the evidence and provide examples of current research. In some cases, only a few review articles or meta-analyses are referenced. One article may cite or provide analysis of dozens of other articles. Therefore the number of references included in the bibliography does not necessarily reflect the strength-of-evidence. In addition, some articles provide evidence for more than one research question, so are referenced multiple times.

Analysis of SHB 1551 and the Scientific Evidence

Summary of relevant background information

- HIV-specific criminal laws are punitive laws used to criminalize behaviors that are associated with potential exposure to HIV.¹ The primary legal justification of such laws is "to deter certain behaviors and to impose retributive justice on those engaging in those behaviors."¹
- Federal government guidance:
 - In 1988, the Report of the Presidential Commission on the Human Immunodeficiency Virus Epidemic stated "criminal sanctions for HIV transmission must be carefully drawn, must be directed only towards behavior which is scientifically established as a mode of transmission, and should be employed only when all other public health and civil actions fail to produce responsible behavior."¹
 - In 1990, the Ryan White Comprehensive AIDS Resources Emergency Act (PHL101-881), which provided federal funding to states for AIDS treatment and care, "required states to certify that criminal laws were adequate to prosecute individuals who knowingly exposed another person to HIV."¹
 - In 2010, 30 states had HIV criminalization laws.² That year the President's "National HIV/AIDS Strategy" addressed HIV-specific criminal laws, stating that "in some cases, it may be appropriate for legislators to reconsider whether existing laws continue to further the public interest and public health."¹
 - In 2014, the Civil Rights Division of the U.S. Department of Justice (DOJ) and the Centers for Disease Control and Prevention (CDC) released a substantive review encouraging states with HIV-specific criminal laws to use scientific findings "to re-examine those laws, assess the laws' alignment with current evidence regarding HIV transmission risk, and consider whether the laws are the best vehicle to achieve their intended purposes."¹
 - In 2014, DOJ released the "Best Practices Guide to Reform HIV-Specific Criminal Laws to Align with Scientifically-Supported Factors," which provides states technical assistance in re-examining HIV-specific criminal laws.³ Specifically, guidance directs states to ensure existing policies "do not place unique or additional burdens on individuals living with HIV/AIDS" and that they "reflect contemporary understanding of HIV transmission routes and associated benefits of treatment."³
 - In 2015, the National HIV/AIDS Strategy was updated and called for review of "the broad range of criminal statutes to ensure their consistency with current science and public health approaches to HIV prevention and treatment."²
 - Since 2014, many states have initiated reform of their HIV criminalization laws (HIV Law and Policy Center, personal communication, October 2019).
 - As of 2018, 26 states had laws that criminalize HIV exposure.⁴

- Washington State law:
 - In 1988, the State Legislature amended RCW 9A.36.021 to include specific reference to HIV (<u>Chapter 206, Laws of 1988</u>), thereby enacting its first HIV-specific criminal law.⁵ It classified the exposure to or transmission of HIV with an "intent to inflict bodily harm" as assault in the second degree, a class B felony.⁵
 - In 1997, the Legislature amended the law (<u>Chapter 196, Laws of 1997</u>) and elevated the HIV-specific criminal violation to assault in the first degree.⁶
 - Under current state law (<u>RCW 9A.36.011</u>) "a person is guilty of assault in the first degree if [they], with intent to inflict great bodily harm: [...] exposes, or transmits to another [...] the human immunodeficiency virus".⁷ Assault in the first degree is a class A felony in Washington State.⁷
 - <u>RCW 9A.20.021</u> establishes the maximum sentence for a class A felony as "confinement in a state correctional institution for a term of life imprisonment, or by a fine in the amount fixed by the court of [\$50,000], or by both such confinement and fine."⁸
 - There are instances where individuals convicted under Washington's HIV-related criminal law have been required to register with sex offender status, despite charges that did not include sexual assault (personal communications, October 2019).
- In 1996, trials using triple drug combinations showed preliminary positive results with sustained decrease in plasma HIV viral load.⁹ Shortly thereafter, highly active antiretroviral therapy (ART) became widely available in North America, and HIV/AIDS morbidity and mortality fell drastically.^{9,10}
- In 2011, ART was demonstrated as a way to significantly reduce HIV transmission.⁹
- A 2012 study estimated about half (49%) of HIV transmissions were from the 20% of persons living with HIV who are unaware of their infection.¹¹
- Scientific advancements have allowed HIV, with testing and treatment, to be a manageable chronic disease.³
- In absence of a vaccine or cure, the Health Resource & Services Administration, an agency of the U.S. Department of Health and Human Services, strongly supports increased prevention efforts focusing on geographic areas disproportionately impacted by HIV/AIDS and the populations at greatest risk of infection.¹⁰ For example, "Test and Treat" is an approach that relies on HIV treatment as prevention. Widespread testing and swift connections of those who are HIV seropositive to ART treatment (which suppresses the amount of HIV in the body) significantly reduces the risk of transmission.¹⁰
- Currently, no HIV test can detect HIV immediately after infection.¹² The window period (i.e., time between when a person may have been exposed to HIV and when a test can tell for sure whether they have HIV) varies from person to person and is dependent on the type of test used.¹² The window period can range from 10 to 90 days after an exposure, depending on the type of test.¹²
- According to CDC:
 - In the absence of risk reduction measures or treatment, the estimated per-act probability of acquiring HIV from an infected source is 138 per 10,000 exposures

for receptive anal intercourse; 11 per 10,000 exposures for insertive anal intercourse; 8 per 10,000 exposures for receptive penile-vaginal intercourse; and 4 per 10,000 exposures for insertive penile-vaginal intercourse.¹³ The CDC notes, "even relatively small risks can add up over time [...] if *repeated many times*, the overall likelihood of becoming infected after repeated exposures is actually much higher."¹³

- The risk of transmission of HIV during receptive and insertive oral intercourse is low, even in the absence of risk reduction measures.¹³ Experts state, "the risk of HIV transmission as a result of oral sex is so low that scientists have been unable to establish a statistically sound estimate."¹⁴
- For HIV-positive persons who use ART daily as prescribed and achieve and maintain viral suppression, there is effectively no risk of transmitting HIV to an HIV-negative partner (100% effectiveness estimate).¹⁵
- When condoms are used consistently and correctly ("optimal use") they provide an impermeable barrier to HIV. Specifically, "FDA quality control standards and laboratory studies indicate leaks due to product failure are extremely rare [estimates 0.01% to 0.4%]."¹⁵
- When "consistent use" of condoms is reported but it is not known whether condoms were correctly used in each instance, then population level effectiveness estimates are applicable.¹⁴ Consistent use of condoms with an HIV-positive partner reduces the risk of HIV acquisition: during sex for heterosexual men and women by an estimated 80%; during receptive anal sex for HIV-negative men who have sex with men (MSM) by an estimated 72-91%; and during insertive anal sex for HIV-negative MSM by an estimated 63%.¹⁵
- Additionally, pre-exposure prophylaxis (or PrEP) is a daily medicine for people at very high risk of HIV to prevent HIV, and "studies have shown that PrEP reduces the risk of getting HIV from sex by about 99% when taken daily."¹⁶ Additionally, "among people who inject drugs, PrEP reduces the risk of getting HIV by at least 74% when taken daily."¹⁶
- Biting, spitting, throwing bodily fluids (including semen or saliva), and sharing sex toys present negligible risk of HIV transmission.^{13,14} HIV scientists note, "[n]umerous studies have considered the possibility of HIV transmission through saliva but none have found any evidence, including a 1997 study of 34,000 cases in the UK."¹⁴ Similarly, no cases of HIV transmission resulting from the spitting of blood have been reported (e.g., landing in the eye or mouth).¹⁴ Expert opinion is that "there is no possibility of HIV transmission from saliva containing small quantities of blood."¹⁴ Finally, "the possibility of HIV transmission from biting where the HIV-positive person's saliva contains a significant quantity of blood, and their blood comes into contact with a mucous membrane or open wound, and their viral load is not low or undetectable varies from none to negligible."¹⁴
- In general, HIV-specific criminal laws do not take into account measures that reduce the risk of HIV transmission, including condom use, ART, or PrEP.¹

In 2018, 20 HIV scientists with expertise in scientific research, epidemiology, and patient care from regions across the world published a Consensus Statement on the science of HIV in the context of criminal law. Authors "strongly recommend that more caution be exercised when considering criminal prosecution, including careful appraisal of current scientific evidence on HIV-related risks and harms."¹⁴ Such caution was cited as necessary to "reduce stigma and discrimination and to avoid miscarriage of justice."¹⁴
Furthermore, they encouraged those working in the legal system to "pay close attention to the significant advances in HIV science [...] and make all efforts to ensure that a correct and complete understanding of current scientific knowledge informs any application of the criminal law in cases related to HIV."¹⁴ The Consensus Statement has been endorsed by the International AIDS Society, the International Association of Providers of AIDS Care, Joint United Nations Programme on HIV/AIDS, and additional scientists.¹⁴

Summary of SHB 1551

- Modifies crimes related to transmission of HIV (i.e., from a class A felony to a misdemeanor or gross misdemeanor) and repeals prohibitions on an individual who has a sexually transmitted disease, other than HIV, from having sexual intercourse if the partner is unaware of the disease.
 - Section 5(2) states, "it is a defense to a prosecution under this section if: (a) HIV was not transmitted to the partner; or (b) The person took or attempted to take practical means to prevent transmission of HIV."¹⁷
 - Section 5(4)(a) defines "practical means to prevent transmission" to include "good faith employment of an activity, behavior, method, or device that is scientifically demonstrated to measurably reduce the risk of transmitting a sexually transmitted disease" and provides examples for reference.¹⁷
- Repeals statutes related to counseling for HIV testing, the Office of AIDS, and requirements that agencies establish rules requiring AIDS training for certain professions and employees.
- Updates language and changes references in the control and treatment of sexually transmitted diseases chapter from AIDS or HIV to sexually transmitted disease or blood-borne pathogen.
- Allows a minor of 14 years of age or older to give consent to treatment to avoid HIV infection without a parent or guardian's consent.
- Consolidates and expands rulemaking authority for the State Board of Health relating to control of sexually transmitted diseases.

Health impact of SHB 1551

Evidence indicates that SHB 1551 would likely decrease penalties and collateral consequences, decrease prosecution and involvement in the criminal justice system, and decrease stigma, which could lead to improved health outcomes and decreased inequities for individuals living with HIV.

Pathway to health impacts

The potential pathway leading from the provisions of SHB 1551 to decreased health inequities are depicted in Figure 1.

Pathway 1: Decreased Penalties and Collateral Consequences: This review makes the informed assumption that modifying HIV-related crimes from a felony to a misdemeanor or gross misdemeanor will lower the penalties and collateral consequences associated with the crime. This informed assumption is based on maximum sentences, findings of the U.S. Commission on Civil Rights' report on collateral consequences, and discussions with key informants. There is very strong evidence that decreased penalties and collateral consequences of conviction will likely improve access to employment opportunities, housing, and social services for persons living with HIV convicted of the proposed charge.¹⁸ In turn, there is very strong evidence that improved access to employment opportunities, housing,¹⁹ and social services²⁰⁻²³ will likely result in improved health outcomes for individuals living with HIV who are convicted of the proposed charge.

Pathway 2: Decreased Prosecution and Criminal Justice Involvement: This review makes the informed assumption that modifying HIV-related crimes to include detailed defenses to prosecution in the RCW will likely result in decreased prosecution and criminal justice involvement. This informed assumption is based on proposed defenses to prosecution, key informant interviews with prosecuting attorneys and law enforcement officers, and available Washington State and national data. There is very strong evidence that decreased involvement in the criminal justice system will likely improve health outcomes.²⁴⁻²⁹

Pathway 3: Decreased Stigma: This review makes the informed assumption that modifying HIV-related crimes from a felony to a misdemeanor or gross misdemeanor will decrease stigma for individuals living with HIV. This informed assumption is based on information from key informant interviews. There is strong evidence that decreasing stigma for individuals living with HIV may improve access to and use of healthcare services.³⁰⁻³⁷ There is also very strong evidence that increasing access to and use of healthcare services for individuals living with HIV will likely improve health.^{20,30-32,34,37-39}

Lastly, there is very strong evidence that improving health outcomes for individuals living with HIV will likely reduce health inequities by race/ethnicity; by sex, sexual orientation, and gender identity; and for other potentially marginalized individuals.^{2,18,37,40-46}

Factors for each of these pathways are analyzed in more detail beginning on page 14.

Scope

This analysis focuses on the provisions in the bill related to modifying HIV-related crimes. Provisions related to counseling for HIV testing, the Office of AIDS, AIDS training for specific employees, language updates and reference changes, and allowing minors 14 years of age and older to consent to treatment to avoid HIV infection are not included in this analysis. Due to time limitations, we only researched the most direct connections between the provisions of the bill and decreased health inequities and did not explore the evidence for all possible pathways. For example, we did not evaluate potential impacts related to:

• HIV criminalization on family members of individuals living with HIV. For example, key informants shared that family members of individuals convicted of an HIV-related crime have faced stigma, experienced economic burden, have had difficulty finding employment, or have had to make other lifestyle changes (e.g., moving out of state, changing churches) (personal communications, October 2019). Research has also shown that parental incarceration can impact children's mental, emotional, and social health.^{25,47}

Magnitude of impact

In 2018, there were approximately 14,000 individuals living with HIV in Washington State.⁴⁰ The number of new cases of HIV in Washington State remained stable from 2013 to 2017, with an average rate of 6.15 new cases of HIV per 100,000 people.⁴⁰ Approximately 89% of individuals living with HIV are engaged in care, and 80% of individuals living with HIV have a suppressed viral load.⁴⁰ King County is the only county in which the rate of new HIV cases (11.12 cases per 100,000 people) is greater than the state rate.⁴⁰ Pierce, Mason, Chelan, and Clark Counties have rates similar to the state rate (6.19, 5.38, 5,21, and 5.14 cases per 100,000 people, respectively).⁴⁰ In 2017, 49% of new HIV cases occurred in King County.⁴⁰

Unpublished data from the Washington State Administrative Office of the Courts (AOC) showed that 10 individuals were charged with an HIV-related felony under <u>RCW 9A.36.021(d) or (e)</u> between 1986 and 1998, and 3 individuals were charged with an HIV-related felony under <u>RCW 9A.36.011(1)(b)</u> between 1998 and 2019 (AOC, personal communication, October-November 2019). However, these 13 cases are an undercount as Washington State has a non-unified court system and information and data are not consistently reported (AOC, personal communication, October 2019). For example, some cases may only be reported as RCW 9A.36.021 or RCW 9A.36.011, without additional information indicating a charge specific to HIV (AOC, personal communication, October-November 2019). In addition, key informants shared that many cases are plead down from an Assault 1 to a lower crime (e.g., Assault 4) and the originating charge may not be adequately represented in the data (personal communication, October 2019). Therefore, using unpublished data from AOC and information shared by key informant interviews, analysts have been able to identify 33 unique cases in which originating charges or prosecuting charges were brought under RCW 9A.36.021(d) or (e) or RCW 9A.36.011(1)(b).

AOC records and key informants provided more detailed information about the 33 identified cases. Of the 33 cases, 6 had both an HIV-specific originating charge and final charge, 17 had an HIV-specific originating charge only, and 7 had an HIV-specific final charge only. Twenty-seven cases were found guilty, with 11 cases pleading guilty to an HIV-specific charge. For HIV-specific charges, sentences ranged from 3 months to 59 years in prison. Other cases were plead down from an originating charge of Assault 1 to Assault 2 (6 cases), Assault 3 (5 cases), Assault 4 (3 cases), or a different charge with individuals serving 3 months to 7 years in prison. At least 5 individuals were required to register as a sex offender. In at least one case, prosecution was deferred based on scientific and medical evidence that transmission was not possible (personal communication, October 2019). In at least two cases, the individuals with an

originating HIV-related Assault 1 charge were HIV seronegative (personal communication, November 2019).

For the 28 cases with county data available, cases occurred in 10 different Washington counties. Analysts are aware that data from AOC and key informant interviewees are not representative of all 39 counties in Washington State. Identified cases are likely skewed geographically based on jurisdictions that analysts spoke with during key informant interviews. Available information reported by law enforcement or court documents indicates that individuals in 29 out of 33 cases (88%) were male, and individuals in 12 out of 33 cases (36%) were individuals of color. The majority of identified HIV-related cases have not included transmission (personal communications, October 2019). Key informants identified only 5 cases (out of 16) that resulted in HIV transmission, suggesting that transmission has only occurred in less than a third of cases in Washington State. In addition, one key informant shared that, of 10 individuals charged with an HIV-related crime, 90% had mental health concerns; 80% were of low socioeconomic status; 60% were heterosexual; and 50% had substance use disorders (personal communication, October 2019).

While these 33 cases may provide a sense of cases that were arrested, charged, and/or prosecuted, it is still likely an undercount, and the impact of Washington's HIV-specific criminal law is likely much greater. Key informants shared that the threat of the Felony 1 charge is greater than the actual use of the law and likely impacts every individual living with HIV in Washington State (personal communications, October 2019). For example, in two known cases, an HIV-related crime was not listed as the originating or final charge (personal communications, October-November 2019). In one case, the Assault 1-HIV charge was used as leverage to get an individual with an originating charge related to prostitution to plea to Assault 4. In the other case, an individual was charged with Assault 3, and then charged with an intermediate charge of Assault 1-HIV before pleading to an Assault 3 charge (personal communications, November 2019).

Data about the impact of HIV criminalization laws from other states and nationally are also incomplete. University of California Los Angeles (UCLA) School of Law's Williams Institute has conducted in-depth analyses to determine the extent that HIV criminal laws have been applied in California, Florida, and Georgia. Researchers from the Williams Institute contacted relevant state agencies and requested access to data documenting any contact with the criminal system—arrest through convictions (since enactment).⁴¹⁻⁴³ Researchers from the Williams Institute noted data challenges similar to those described in Washington, including lack of data uniformity throughout records, potential data entry errors, and the need to decipher data.⁴¹⁻⁴³ Additionally, lack of information regarding sexual orientation and gender identity⁴¹⁻⁴³ and bias in the collection of race/ethnicity data (e.g., officer perception), which resulted in potential misclassification of individuals,^{41,42} limited analyses of potential inequities in the application of these laws (by sexual orientation, gender identity, and race/ethnicity).⁴¹⁻⁴³ Despite these limitations, the results add to growing analyses that "indicate existing estimates of national HIV criminalization rates are highly underestimated."⁴²

In California, "800 people came into contact with the California criminal system [in 1,174 separate incidents] from 1988 to June 2014 under an HIV-related law or under the misdemeanor

exposure law as it related to a person's HIV-positive status."⁴³ Of those, 30 people (33 incidents) came into contact with the criminal justice system for exposure with intent to transmit and 5 people (8 incidents) for exposure to communicable disease (limited to known HIV).⁴³ Overall, the Williams Institute found that 95% of all HIV-specific criminal incidents in California impacted people engaged in sex work or people suspected of engaging in sex work.⁴³

In Florida, laws criminalize people living with HIV and other sexually transmitted diseases (STDs) in the contexts of consensual sex without disclosure, sex work, nonconsensual sex offenses, and donation of blood and other bodily products.⁴² Similar to current Washington law, "criminal transmission of HIV" does not require any actual transmission to initiate criminal penalties, and application of the law does not reflect the preventive methods to reduce transmission risk.⁴² Unlike Washington, Florida's laws do not require any intent to transmit.⁴² Overall, there were 874 HIV- or STD-related arrests (representing 614 people arrested specifically for an HIV-related offense) in the state from 1986 through 2017.⁴² Over the same period, 210 incidents involved STDs other than HIV.⁴²

In Georgia, state statute outlines seven HIV-related criminal offenses.⁴¹ Reckless conduct by a person living with HIV includes offenses related to sex work, needle sharing, sexual exposure, and blood tissue donation and assault on a law enforcement officer with intent to transmit HIV or hepatitis.⁴¹ Overall, 571 HIV-related arrests (representing 543 people) were identified from 1988 to September 2017.⁴¹

Based on this research, it is likely that the number of individuals arrested, charged, or prosecuted under Washington's HIV-specific criminal law is higher than the 33 cases identified, and the law likely impacts—through actual criminal justice involvement or threat—every individual living with HIV in Washington State.

Logic Model



Summaries of Findings

Pathway 1: Decreased penalties and collateral consequences

Will modifying HIV-related crimes from a felony to a misdemeanor or gross misdemeanor result in decreased penalties and collateral consequences?

We have made the informed assumption that modifying HIV-related crimes from a felony to a misdemeanor or gross misdemeanor will lower the penalties and collateral consequences associated with the crime. This informed assumption is based on maximum sentences detailed in <u>RCW 9A.20.021</u>, findings of the U.S. Commission on Civil Rights (The Commission) 2019 Report "Collateral Consequences: The Crossroads of Punishment, Redemption, and the Effects on Communities," and discussions with key informants representing current and previous prosecuting attorneys.

Specifically, under the current class A felony charge (RCW 9A.20.021[1][a]), an individual may be sentenced to confinement for a maximum term of life in prison and/or fined up to \$50,000.⁸ These penalties would be lowered to a maximum of 90 days in jail and/or up to a \$1,000 fine under a misdemeanor charge (RCW 9A.20.021[3]) or a maximum of 364 days in prison and/or up to a \$5,000 fine under a gross misdemeanor charge (RCW 9A.20.021[2]).⁸ Assuming law enforcement officers and prosecuting attorneys use the proposed charges to be included in chapter <u>70.24 RCW</u> (Control and treatment of sexually transmitted diseases), this change would result in decreased penalties for individuals convicted of an HIV-related crime. In general, key informants shared that law enforcement officers and prosecuting attorney's office indicated that if the change occurred they may look to see if individuals could be prosecuted under another statute (i.e., Assault 4) (personal communication, October 2019).

Felony convictions are also associated with a greater number of collateral consequences than are misdemeanor or gross misdemeanor convictions. Collateral consequences are sanctions, restrictions, or disqualifications resulting from criminal history that are imposed by federal, state, or local laws and policies.¹⁸ In 2019, The Commission released its report noting, "[c]ollateral consequences of criminal records can create an array of lifelong barriers that hamper successful reentry into society—including barriers to [...] education, employment, professional licensing, housing, and receipt of public benefits. These collateral consequences can profoundly affect individuals and families and their economic security."¹⁸ Evidence indicates that "[m]any collateral consequences are unrelated either to the underlying crime for which a person has been convicted or to a public safety purpose."¹⁸ Furthermore, there is no requirement that the convicted person be notified of the collateral consequences in the jurisdiction in which they are charged—not in court proceedings, plea bargaining, or counseling by attorneys.¹⁸

Nationally, The Commission found, among approximately 44,631 collateral consequences, nearly 40% (17,436) are elicited by any felony conviction, and about 19% (8,294) are elicited by any misdemeanor.¹⁸ Additionally, 5,013 collateral consequences are initiated by sex offenses.¹⁸ Further discussion of sex offender requirements can be found in "Other Considerations."

Based on maximum penalties outlined in statute, national findings related to collateral consequences, and discussions with key informants, we would expect that modifying HIV-related crimes from a felony to a misdemeanor or gross misdemeanor would result in decreased penalties and collateral consequences associated with the crime.

Will decreased penalties and collateral consequences improve access to employment opportunities, housing, and social services for those convicted of this charge?

There is very strong evidence that decreased penalties and collateral consequences of conviction would likely improve access to employment opportunities, housing, and social services for persons convicted of the proposed charge.¹⁸ According to The Commission's 2019 Report, which cites 955 sources, "alleviating collateral consequences can help formerly incarcerated individuals lead more productive lives, secure gainful employment, find housing, and obtain the resources they need to become self-sufficient."¹⁸ Since this connection is widely accepted, less time was dedicated to researching this relationship.

Access to employment opportunities

Criminal background checks often act as barriers to employment for people who were formerly incarcerated. The Director of the Collateral Consequences Resource Center explained, "[m]any [collateral consequences] consist of nothing more than a direction to an official decision-maker to conduct a criminal background check, frequently understood as an unspoken warning that it is safest to reject anyone with a criminal record."¹⁸ For example, results of an audit study found that applicants with a criminal record are 50% less likely to receive a callback or job offer than applicants without criminal records.¹⁸

The Commission cited a 2018 Brookings Institution study which found, "during their first full year after release, only 55 percent of formerly incarcerated people reported earnings."¹⁸ Among employed formerly incarcerated individuals, "their mean annual income was only \$10,090, and only 20 percent of these individuals earned more than \$15,000 that year." The Commission also noted that "incarceration may impede women's access to a sustainable income even more drastically than it does for men" given the gender pay gap.¹⁸ Evidence also shows, "[t]he recidivism rate for people who are unemployed post-incarceration is nearly twice that of those who find employment."¹⁸

Additionally, licensing requirements also act as barriers for people who were formerly incarcerated. About 30% of U.S. workers need licenses.¹⁸ Nationally, about 8,000 documented state licensing restrictions apply to people convicted of any felony conviction and over 4,000 apply to people convicted of any misdemeanor.¹⁸ In addition, "at least 9,000 state licensing disqualifications apply for an indefinite period and could last a lifetime, and more than 4,000 are mandatory disqualifications, for which licensing agencies have no choice but to deny a license."¹⁸

Access to housing

Individuals with criminal convictions also face barriers to both public and private housing. As such, "[a]pproximately two-thirds of formerly incarcerated individuals rely on family members for housing."¹⁸ However, housing restrictions can also limit the family support available to formerly incarcerated persons. For example, individuals subject to a lifetime registration

requirement under a state sex offender registration program are permanently restricted from occupying or receiving low-income housing assistance.¹⁸ For families living in subsidized housing, "their presence would put all household members at risk for eviction."¹⁸ One study found that nearly 80% of formerly incarcerated individuals reported ineligibility or denial of housing because of their or a family members' conviction history.¹⁸ The private market poses additional challenges to formerly incarcerated individuals: rents are expensive compared to public housing; background and credit checks are often required; and stigma is associated with criminal records.¹⁸

Housing prospects are also negatively impact by the collateral consequences that formerly incarcerated individuals face when trying to earn a living. Therefore, "formerly incarcerated individuals face a high risk of housing insecurity and homelessness."¹⁸ There is a large body of evidence demonstrating the association between incarceration and homelessness as "prior incarceration has been identified as a risk factor for homelessness, and individuals experiencing homelessness are vulnerable to incarceration."¹⁸ Evidence also indicates that "individuals who cannot secure adequate housing post-incarceration are twice as likely to recidivate."¹⁸

Access to social services

In the face of barriers to gainful employment and housing, "formerly incarcerated individuals often need temporary assistance until they can secure jobs to meet their basic needs of paying for rent, food, clothing, and other necessities."¹⁸ However, "certain laws prohibit states from providing public assistance to individuals with certain types of felony convictions."¹⁸

Incarcerated persons are ineligible for Medicaid benefits, Supplemental Security Income (SSI) benefits, and Social Security Disability Insurance (SSDI) benefits; therefore, these benefits are often either suspended or terminated.^{18,48} The Affordable Care Act and state Medicaid expansion created additional opportunities for individuals that are incarcerated to obtain health insurance upon release. Washington State enacted a law in 2017 that required Health Care Authority (HCA) to suspend (rather than terminate) Medicaid coverage for individuals that are incarcerated.⁴⁸ While suspended, individuals that are incarcerated are still covered for inpatient hospitalizations longer than 24 hours, and full coverage is automatically reinstated upon release.⁴⁸ If individuals incarcerated in a Washington State Department of Corrections (DOC) facility do not have insurance, they are enrolled in Medicaid prior to release, and HCA is required to expedite enrollment so that individuals have insurance the date they are released.⁴⁸ City and county jail facilities may allow individuals to apply for Medicaid depending upon resource availability (e.g., staffing).⁴⁸

Related to SSI and SSD, "for individuals who received SSDI and were confined for less than one year, benefits are reinstated the month after their release. If an individual has been incarcerated for more than 12 consecutive months, SSI benefits are terminated, and the individual must reapply for those benefits."¹⁸ Furthermore, "the reapplication process can be cumbersome, requiring detailed documentation from prison administrators whose willingness to assist with the bureaucratic process varies."¹⁸ The terms of confinement for the proposed misdemeanor (not more than 90 days) or gross misdemeanor (not more than 364 days) charges would prevent eligible individuals from needing to reapply for SSI or SSD assistance.

Overall, The Commission concluded, "there is scant evidence that collateral consequences act as a deterrent: however, the evidence shows harsh collateral consequences unrelated to public safety increase recidivism [...] by limiting or by completely barring formerly incarcerated persons' access to personal and family support."¹⁸ There is very strong evidence that decreasing penalties and collateral consequences, in particular, will likely improve access to employment opportunities, housing, and social services for those convicted of this charge.

Will improved access to employment opportunities, housing, and social services result in improved health outcomes?

There is very strong evidence that improved access to employment opportunities, housing,¹⁹ and social services²⁰⁻²³ will likely result in improved health outcomes for individuals living with HIV who are convicted under the proposed statute. Since these connections are widely accepted, less time was dedicated to researching these relationships.

As key informants shared, HIV is intimately tied to economic stability and housing access. The current HIV-specific felony charge impacts the entire continuum of care for people living with HIV. The layers of living with HIV and criminal justice involvement creates barriers to maintain undetectable viral loads (personal communication, October 2019). For example, housing functions as an "intermediate structural factor, linking 'upstream' economic, social, and cultural determinants to the more immediate physical and social environments."¹⁹ As such, "[u]nstable or inadequate housing is one of the most important factors limiting uptake of [antiretroviral] medications, regardless of insurance or payer status or other health services considerations."¹⁹ In addition, key informants shared that, of 10 known cases in which individuals were charged with an HIV-related crime in Washington, 50% have had difficulty obtaining housing and 40% have had difficulty obtaining employment after charges (personal communications, October 2019).

Access to employment opportunities

A meta-analysis of 28 studies assessed the association between the employment status of individuals living with HIV and adherence to ART.⁴⁹ The study found the association between being employed and adhering to ART was significant for studies from high-income countries (n= 10, including 8 U.S. studies) and low-income countries (n = 7).⁴⁹ Authors concluded that people living with HIV who were employed, particularly those in low- and high-income countries, "were more likely to adhere to ART than unemployed individuals."⁴⁹ More generally, an analysis of data from the U.S. Panel Study of Income Dynamics (1999, 2001, and 2003) estimated the effects of job loss on health.⁵⁰ When controlling for other variables (e.g., demographic characteristics, health insurance, occupational category), results showed, "losing a job because of an establishment closure increased the odds of fair or poor health by 54%, and among respondents with no preexisting health conditions, it increased the odds of a new likely health condition by 83%."⁵⁰ Moreover, respondents who lost jobs because of establishment closures but were reemployed by the time of the survey did "appear to have faced increased risk of new likely health conditions."⁵⁰ Additionally, the analysis found "no evidence that job loss effects differ for white- and blue-collar workers."⁵⁰

Access to housing

A systematic review of 152 studies examined available evidence on the association between housing status, medical care, and health outcomes among people living with HIV.¹⁹ Overall,

authors rated 111 quantitative studies as meeting quality assessments requirements (i.e., "good" or "fair") for inclusion in the analysis.¹⁹ Authors found, "[w]ith rare exceptions, all studies in all domains, worse housing status was independently associated with worse outcomes, controlling for a range of individual patient and care system characteristics."¹⁹ Specifically, "[e]vidence supports considering housing status as a contextual factor that influences consistent, appropriate HIV medical care, adherent antiretroviral medications use, and sustained viral suppression."¹⁹

Access to social services

It is well-documented that enrollment in health insurance leads to improved health outcomes. Healthy People 2020 finds that individuals who are uninsured are, "more likely to have poor health status...and more likely to die prematurely" than individuals with insurance.²⁰ The author of a systematic literature review of 54 analyses (in 51 distinct studies) concluded, "[t]here is a substantial body of research supporting the hypotheses that having health insurance improves health."²¹ In addition, evidence indicates that health insurance is associated with better general,²² physical, and mental health.²³

Therefore, improved access to employment opportunities, housing,¹⁹ and social services²⁰⁻²³ will likely result in improved health outcomes for individuals living with HIV who are convicted of this crime.

Pathway 2: Decreased prosecution and criminal justice involvement

Will modifying HIV-related crimes to define defenses to prosecution result in decreased prosecution and criminal justice involvement?

We have made the informed assumption that modifying HIV-related crimes to include detailed defenses to prosecution in the RCW will likely result in decreased prosecution and criminal justice involvement. This informed assumption is based on defenses to prosecution outlined in SHB 1551, interviews with key informants representing law enforcement officers and prosecuting attorneys, as well as 33 identified cases in Washington State and nationally available data.

Existing and proposed laws

Researchers have noted that the impact of criminalization laws on HIV diagnosis and transmission has been debated. Proponents of HIV criminalization laws state, "criminal exposure laws could potentially reduce transmission by encouraging disclosure of HIV status to comply with the law or by deterring HIV-positive persons from engaging in behaviors that could expose others."² However, others have expressed concern that "[o]n the contrary, these laws could increase transmission by discouraging testing or disclosure because of perceived stigma or by discouraging HIV-positive persons from learning their HIV status (to avoid satisfying the 'knowing' element of the crime)."² A longitudinal evaluation analyzing the impact of state HIV criminalization laws on HIV and AIDS diagnosis rates found no association between diagnosis rates and laws that criminalize HIV, suggesting that "these laws have not affected HIV behaviors or transmission."²

Currently, Washington State's criminal code (RCW 9A.36.011[1][b]) does not detail specific defenses to prosecution for someone charged under the HIV-specific subsection of the felony

statute. However, prosecuting attorneys noted that, as a class A felony, Assault 1 requires the highest standard of proof of any criminal offense: assault "with intent to inflict great bodily harm" (personal communications, October-November 2019). Specifically, <u>RCW 9A.04.110(4)(c)</u> defines "great bodily harm" as "bodily injury which created a probability of death, or which causes significant serious permanent disfigurement, or which causes significant permanent loss or impairment of the function of any bodily part or organ."⁵¹ Key informants noted that this high burden of proof likely explains why only a few HIV-related cases have been charged in Washington State (personal communication, October-November 2019).

SHB 1551 would make it unlawful for a person knowingly living with HIV to have sexual intercourse if: "(a) The person has been counseled by a health care provider or public health professional regarding the risk of transmitting HIV to others; (b) The partner or partners exposed to HIV through sexual intercourse did not know that the person had HIV; and (c) The person intended to transmit HIV to the partner."¹⁷ SHB 1551 would establish defenses to prosecution, including: 1) "HIV was not transmitted to the partner" or 2) "the person took or attempted to take practical means to prevent transmission of HIV."¹⁷ SHB 1551 defines "practical means to prevent transmission" to include "good faith employment of an activity, behavior, method, or device that is scientifically demonstrated to measurably reduce the risk of transmitting a sexually transmitted disease."¹⁷ Means include but are not limited to: "the use of a condom, barrier protection, or other prophylactic device; or good faith participation in a treatment regimen prescribed by a health care provider or public health professional."¹⁷

As of October 2019, there have been no formal evaluations of the impact of HIV criminalization reform in any U.S. state (Center for HIV Law and Policy, personal communication, October 2019) and there is no literature looking at the impacts of defelonizing HIV on individual or community-level involvement with the criminal justice system. Some key informants representing prosecuting attorneys noted that proving "intent to transmit" presents a lower burden of proof than the current "intent to cause great bodily harm" and may potentially broaden the pool of people that could be subject to this law (personal communication, October 2019). However, other key informants noted that the defenses to prosecution would likely limit the number of cases referred for prosecution, charged, and convicted (personal communication, October-November 2019). Generally, key informants stated that the provisions of SHB 1551 would remove some discretion from law enforcement and prosecutors, decreasing the number of arrests and prosecutions for potential HIV-related crimes.

Discretion of law enforcement

It is the responsibility of law enforcement officials to refer criminal cases to a jurisdiction's prosecuting attorney's office. Under <u>RCW 10.31.100</u>, police officers have the authority to arrest a person without a warrant if they have "probable cause to believe that a person has committed or is committing a felony."⁵² Therefore, it is at the discretion of law enforcement officer to review the available facts to determine if evidence provides probable cause for a physical arrest (personal communication, November 2019). Alternatively, law enforcement can forward evidence to the prosecuting attorney's office to review a complaint. In the case that charges are brought, officers would then have an arrest warrant from the court. Key informants representing law enforcement shared that they do not see many physical arrests under the current HIV-specific felony statute (personal communications, November 2019).

If HIV-related crimes were modified from a class A felony charge (Title 9A.36 RCW) to a misdemeanor or gross misdemeanor (Title 70.24 RCW), law enforcement officers would still have legal authority to make an arrest under the statute (Washington Association of Sheriffs and Police Chiefs [WASPC], personal communication, November 2019). However, this change would affect law enforcement officers' ability to enact an arrest (personal communication, November 2019). In cases of misdemeanor or gross misdemeanor offenses, RCW 10.31.100 states that police officers may only arrest a person without a warrant if "the offense is committed in the presence of an officer" or in specified circumstances defined in RCW 10.31.100(1-11).⁵² Therefore, in many circumstances, if an officer would need to petition the court for an arrest warrant before locating the person and making a physical arrest (personal communication, November 2019).

Moving the offense from Title 9A RCW (Assault—Physical Harm) to Title 70 RCW (Public Health and Safety) would also likely limit law enforcement officers' awareness of the law (personal communications, November 2019). Officers typically use documents (i.e., cheat sheets, bail books) that list titles and cross reference typical laws enforced—predominantly those detailed in Title 9A RCW (personal communications, November 2019). Officers are also frequently tested on offenses included in Title 9A RCW and, therefore, are likely familiar with the HIV-specific Assault 1charge (personal communication, 2019). Key informants noted that Title 70 RCW is not an intuitive or typical place for officers to look for a criminal offense (personal communication, November 2019). Thus, while moving the criminal offense to <u>Chapter 70.24 RCW</u> would not prohibit officers from using the law, it may present a barrier to its use as officers are less likely to be familiar with criminal offenses contained in public health statutes (personal communication, November 2019).

In addition to moving the offense to Title 70 RCW, key informants shared additional factors that may decrease the number of arrests under the proposed changes. Key informants felt that, given capacity and resource constraints, law enforcement may prioritize investigating felony crimes over misdemeanors or gross misdemeanors. One key informant also felt that all of the proposed changes in SHB 1551 may shift the environmental context and conversation about HIV in Washington State in such a way that would make arrests unlikely. Generally, while key informants were split about whether the number of arrests would stay the same or decrease under the proposed changes, key informants felt that arrests were low now and would remain low.

Overall, key informants stated that law enforcement are obligated to and will continue to investigate all crimes. They anticipated that proposed changes in SHB 1551 would result in the same or fewer physical arrests and referrals to prosecuting attorneys (personal communication, October 2019).

Discretion of prosecutors

When a prosecuting attorney's office receives a case referral from law enforcement, the prosecuting attorney reviews the referred charges, corresponding statutes, and the evidence collected as part of the criminal case to determine whether to pursue the case (personal communication, October-November 2019). In Washington, prosecuting attorneys use <u>RCW</u> 9.94A.411 (Evidentiary sufficiency)⁵³ to determine whether or not to pursue charges in any given

criminal case (personal communication, October 2019). Once they have reviewed the case, prosecutors can: 1) pursue the case by filing charges (all or a subset of offenses referred by law enforcement); 2) return the case to law enforcement with direction to determine if additional evidence exists to meet the legal requirements necessary for prosecution; or 3) reject the case (personal communication, October 2019). If the prosecutor determines sufficient evidence exists to meet the legal elements necessary to charge the individual, they then consider whether it is in the interest of justice to do so (personal communication, October 2019). Finally, limited time and resources requires offices to prioritize which cases to pursue. For example, one key informant shared that local law enforcement refers approximately 10,000 felony cases each year to the county prosecuting attorney's office, and the office prosecutes roughly half of those cases (personal communication, November 2019).

If HIV-related crimes were modified from a class A felony charge to a misdemeanor or gross misdemeanor charge, prosecuting attorneys noted that it would not change their offices' process of reviewing cases (personal communications, October 2019). Prosecuting attorneys would consider whether evidence exists that an individual intended to transmit HIV to the partner(s). Again, key informants noted that proving intent to transmit presents a lower standard of proof than "intent to inflict great bodily harm" (personal communication, October-November 2019). However, they would also consider the detailed defenses to prosecution during their review of cases referred by law enforcement (personal communication, November 2019). Some key informants noted the outlined defenses to prosecution would limit which cases their offices could pursue (personal communication, November 2019).

Overall, key informants representing prosecuting attorneys shared they anticipate prosecuting some number of HIV-related cases as long as the Legislature deems such actions as criminal (personal communications, October 2019). However, the majority of key informants, including current and former prosecuting attorneys, felt that SHB 1551 would make it more difficult to prosecute these cases and may result in fewer prosecutions. Only one key informant felt changing HIV-related crimes from a felony to a misdemeanor or gross misdemeanor would increase prosecution. However, there is no data to support this assumption. For example, evidence of HIV criminalization reform in Iowa, though less generalizable to Washington State, suggested a similar number of cases have continued to be prosecuted and a reduction in criminal severity has not resulted in an increase in prosecution (personal communication, October 2019). Similar to the impact on law enforcement, key informants felt that prosecutors may prioritize felony investigations, that prosecutors would be less familiar prosecuting under 70.24 RCW, and that overall contextual changes may limit prosecution. In addition, key informants felt that the defenses to prosecution narrowed the possibility of prosecution, and the emphasis on transmission would intrinsically limit the number of cases that could be prosecuted. Overall, key informants predicted that prosecution of HIV-related crimes would decrease as a result of SHB 1551.

One key informant also noted the proposed language does not specifically address <u>RCW</u> <u>9A.28.020</u> (Criminal attempt). RCW 9A.28.020(1) states, "a person is guilty of an attempt to commit a crime if, with intent to commit a specific crime, he or she does any act which is a substantial step toward the commission of that crime."⁵⁴ Moreover, RCW 9A.28.020(2) notes, "it is no defense to a prosecution of such attempt that the crime charged to have been attempted was, under the attendant circumstances, factually or legally impossible of commission."⁵⁴ Therefore, under the proposed provisions of SHB 1551, if evidence exists that an HIV positive individual intended to transmit HIV to another person, they could in theory be charged under RCW 9A.28.020 for a criminal attempt under the new statute, even if transmission did not or could not have occurred. According to RCW 9A.28.020(3)(e), an attempt to commit a crime is a "misdemeanor when the crime attempted is a gross misdemeanor or misdemeanor."⁵⁴ This provision is particularly relevant as at least 7 out of 12 (58%) identified criminal cases in Washington resulted in convictions despite the fact that HIV was not transmitted (personal communications, October 2019). Each of these cases resulted in jail or prison sentences ranging from 3 months to 9 years (personal communications, October 2019).

Washington State and national data

Available data from Washington State suggest that the majority (66%) of cases do not involve transmission. Similarly, a key informant with expertise in HIV decriminalization shared that available national data in the U.S. indicates that "transmission does not occur in the majority of cases that reach trial" (Fred Hutchinson Cancer Research Center, Office of HIV/AIDS Network Coordination, personal communication, October 2019). Analyses show that people are being charged for non-disclosure of their HIV seropositive status, not for actual transmission of HIV (personal communication, October 2019). This is consistent with how the majority of HIV criminalization laws were written.

Overall, based on the proposed defenses to prosecution, information shared by key informants representing prosecuting attorneys and law enforcement officers, and state and national data suggesting that most HIV-related cases do not result in transmission, we have made the informed assumption that modifying HIV-related crimes will likely result in decreased prosecution and criminal justice involvement.

Will decreased criminal justice involvement result in improved health outcomes?

There is very strong evidence indicating that involvement in the criminal justice system is linked to poor health outcomes.²⁴⁻²⁹ Criminal justice contact can be measured by a number of indicators including, but not limited to, arrest, conviction, and incarceration.^{55,56} A large body of evidence supports the association between incarceration and poor health outcomes. Individuals who are incarcerated are more likely to experience chronic medical conditions, infectious diseases, lower self-rated health, increased psychiatric disorders, and a greater risk of mortality upon release.^{47,56,57} Research shows that those with a history of incarceration have a significantly greater likelihood of major depression, life dissatisfaction, and mood disorders when compared to individuals who do not have a history of incarceration 55,57 and that effects persist after release. Analysis of a contemporary cohort's criminal justice contact and mental health over time found arrest and incarceration, but not conviction, are independently associated with poor mental health.⁵⁵ In addition, women who are incarcerated often have worse physical and mental health than the general population and experience higher rates of early sexual initiation; STIs; HPV; HIV; hepatitis B and C; chronic diseases; substance use; mental health disorders; and histories of physical, sexual, and psychological abuse and trauma.⁵⁸⁻⁶² Since there is very strong evidence indicating that criminal justice involvement is linked to poor health outcomes, less time was spent on researching this relationship.

Pathway 3: Decreased stigma

Will modifying HIV-related crimes from a felony to a misdemeanor or gross misdemeanor decrease stigma for individuals living with HIV?

We have made the informed assumption that modifying HIV-related crimes from a felony to a misdemeanor or gross misdemeanor may decrease stigma for individuals living with HIV. This informed assumption is based on information from key informant interviews.

HIV-related stigma has been defined as "discounting, discrediting, and discriminating against people perceived to have HIV,"³⁰ including enacted, anticipated, and internalized experiences of stigma.^{30,31} The literature defines each type as, "anticipated stigma involves expectations of discrimination, stereotyping, and/or prejudice from others in the future due to one's serostatus...enacted stigma involves experiences...that have already occurred...internalized stigma refers to self-endorsing negative feelings and beliefs about having HIV."³¹ The People Living with HIV Stigma Index Project documented experiences of internalized, social, and institutional stigma among individuals living with HIV in Detroit, Michigan.³⁷ Overall, 80% of individuals experienced negative feelings of self-blame and guilt about their positive serostatus; 73% experienced at least one form of social discrimination (e.g., rejection from potential partners); 20% experienced at least one form of institutionalized discrimination (e.g., healthcare, housing, insurance access); and 20% felt their rights as an individual living with HIV had been violated or abused.³⁷ Key informants stated that HIV-related stigma also perpetuates stigma for LGBTQIA individuals, individuals experiencing violence, and communities of color.

HIV criminalization contributes to generalized HIV-related stigma and intersects with fear of arrest and prosecution.³⁷ Key informants stated that any level of HIV-related criminalization would continue to perpetuate stigma and have negative impacts on individuals living with HIV. However, key informants also felt that removing a felony charge may help to reduce some stigma associated with HIV criminalization. They felt that a felony perpetuates the idea that "HIV is worse than any other disease you could get." Key informants stated that removing the felony charge would also make it less likely that the law could be used to force individuals to accept a plea bargain and would allow more science and facts to enter into discussions.

Therefore, while defelonizing HIV is unlikely to eliminate stigma related to HIV criminalization since individuals could still be arrested, charged, or convicted of HIV-related crimes, we have made the informed assumption that defelonization may reduce the stigma, threat, and fear associated with a felony charge for individuals living with HIV. Further discussion about the potential impacts of full decriminalization can be found in "Other Considerations."

Will decreasing stigma for individuals living with HIV improve access to and use of healthcare services?

There is strong evidence that decreasing stigma for individuals living with HIV may improve access to and use of healthcare services. Research has found that HIV-related stigma may impact the entire continuum of care, including access to testing, treatment, medication adherence, and care for other health conditions. Results from People Living with HIV Stigma Index Project analysis found that 81% of people living with HIV said it was reasonable to avoid testing for fear

of prosecution; 51% said it was reasonable to avoid treatment for fear of prosecution; and 46% said it was reasonable not to disclose HIV status for fear of prosecution.³⁷

Similarly, a meta-analysis of 9 studies that evaluated access to care and controlled for potential confounding factors found that individuals that experienced HIV-related stigma were 21% less likely to access or use health and social services.³⁰ The authors of the study summarized past research stating, "despite a few studies that do not support the association between HIV-related stigma and access to and usage of health and social services, other studies support the notion that perceived stigma of people living with HIV was associated with low access to care, or delayed presentation in care, possibility stemming from perceived discrimination by healthcare providers."³⁰

A systematic review and meta-synthesis of qualitative literature published between 1997 and 2003 found that HIV-related stigma may lead individuals to not take medication for fear of disclosure.³² The review, which also included 41 quantitative studies found that 61% of studies showed that stigma was associated with reduced ART adherence.³² The review concluded that both enacted and internalized stigma undermine ART adherence.³² Similarly, a separate systematic review examining the relationship between HIV-related stigma and medication adherence found that, overall, "the majority of studies using single measures of stigma (n= 25/29) found an association between increased stigma and adherence difficulties, while every study assessing multiple indicators (n= 8/8) found an association between at least one type of stigma and nonadherence."³¹

Other research has suggested that HIV-related stigma may also impact whether an individual seeks other healthcare services. Approximately 71% of individuals living with HIV die from non-HIV-related complications,³³ and individuals living with HIV may have increased susceptibility to non-communicable diseases including cancer, cardiovascular disease, chronic pulmonary disease, diabetes, anxiety, and depression.³⁴ A review of literature analyzing 16 articles published between 2007 and 2017 identified that HIV-related stigma may negatively impact access to care for non-communicable diseases for individuals living with HIV.³⁴ The authors found that fear of disclosure of HIV status, internalized shame and embarrassment, and action or perceived negative perceptions of health care providers negatively impacted access to care for non-communicable diseases for individuals living with HIV.³⁴ A study completed with 67 Asian Americans living with HIV in California found that HIV-related stigma was significantly associated with individuals living with HIV being less likely to recognize and seek care for a heart attack.³³

In addition to improving access to testing, treatment, and care, decreasing stigma for individuals living with HIV may also reduce additional social barriers to accessing healthcare. Key informants shared that individuals living with HIV experience additional barriers to care, including fear of prosecution, provider bias,^{30,34} limited provider and clinic options, limited language access, and lack of culturally and linguistically appropriate services. For example, a systematic review found evidence that fear of provider discrimination, homophobia, or differential treatment are a barrier to healthcare services.³⁵ Additionally, though not specific to HIV, a study with male immigrants in rural communities in the Pacific Northwest found that male interpreters and bilingual providers were not often available, which restricted men's access

to reproductive healthcare, reduced their sense of privacy and confidentiality, and degraded their relationship with and trust of providers.³⁶

Overall, there is strong evidence that decreasing HIV-related stigma for individuals living with HIV may improve access to and use of healthcare services.

Will improving access to and use of healthcare services for individuals living with HIV improve health outcomes related to stigma and access to care?

There is very strong evidence that increasing access to and use of healthcare services for individuals living with HIV will improve health. Generally, Healthy People 2020 states that access to healthcare must be improved by increasing access to health insurance coverage, health services, and timeliness of care to promote and maintain health, prevent and manage disease, reduce unnecessary disability and premature death, and achieve health equity.²⁰ There is a large body of evidence supporting the positive association between use of health services for the early detection and treatment of physical and mental health disorders³⁸ and improved health outcomes. Since there is strong consensus in the scientific literature supporting this association, less time was dedicated to researching this relationship.

Researchers have noted that intersectionality for individuals experiencing multiple types of stigma (e.g., HIV-related stigma, sexual stigma, racism, gender discrimination) may worsen health outcomes.^{30,32,34} A meta-analysis of 64 studies examining the association between HIV-related stigma and various health outcomes found significant associations between stigma and high rates of depression, low levels of social support, low treatment adherence, and lower access to and use of health care and social services.³⁰ The analysis also found positive, but weaker relationships between stigma and anxiety, quality of life, physical health, emotional and mental distress, and sexual risk practices.³⁰ Experiences of stigma have also been associated with depression, anxiety, hopelessness, negative social interactions, loss of social support, and decreases in self-esteem and self-efficacy.³¹ Approximately 79% of respondents to the People Living with HIV Stigma Index Project reported a reduction in psychological, physical, and material well-being as a result of stigma experiences, including depression, anxiety, social isolation, and decreased sleep and physical activity.³⁷

In addition, the U.S. Preventive Services Task Force (USPSTF) found evidence to support that screening tests for HIV are accurate and that antiretroviral therapy (ART) reduces the risk of death and sexual transmission of HIV.³⁹ While these examples do not indicate that all treatments are effective, they illustrate that evidence-based treatments are available.

Therefore, improving access to and use of healthcare services will likely improve health outcomes for individuals living with HIV.

Will improving health outcomes for individuals living with HIV impact health inequities?

There is very strong evidence that improving health outcomes for individuals living with HIV will reduce health inequities by race/ethnicity; by sex, sexual orientation, and gender identity; and for other potentially marginalized individuals.^{18,40} In addition, "the intersectionality among disability and race/ethnicity, sex, sexual orientation, gender identity, and class affect many incarcerated and formerly incarcerated individuals [who] experience overlapping or intersecting

social identities—and related systems of oppression and discrimination."¹⁸ In addition, individuals with a history of incarceration experience more consequences as a result of HIV-related stigma.³⁷ Therefore, improving health outcomes and reducing criminal justice involvement may reduce inequities experienced by individuals living with HIV.

Inequities by race/ethnicity

Non-Hispanic Black and Hispanic Washingtonians are disproportionately represented among the state's new cases of HIV. In 2018, non-Hispanic Blacks comprised 3.7% of the state's total population⁴⁴ but accounted for 26% of new HIV cases.⁴⁰ Foreign-born Blacks had the highest rate of new HIV cases, with 123.3 cases per 100,000 individuals.⁴⁰ National data show that African American women accounted for 60% of new HIV infections that occurred among all women in 2014.⁴⁵ Similarly, Washington data indicate that HIV rates among non-Hispanic Black women have been more than 30-times higher than those of non-Hispanic White women.⁶³ Additionally, Hispanics comprised 13% of the state population⁴⁴ and accounted for 21% of new HIV cases.⁴⁰ The rates for Blacks (both foreign-born and U.S. born) and Hispanics (foreign-born) were higher than the state rate.⁴⁰ Meanwhile, non-Hispanic Whites represent 68.5% of Washington's population⁴⁴ and accounted for 43% of new HIV cases.⁴⁰

In Washington, available information reported by law enforcement or court documents indicates that individuals in 12 out of 33 cases (36%) were individuals of color (AOC, personal communication, October-November 2019). However, these data are not collected uniformly and are likely not representative of all cases in Washington State (AOC, personal communication, November 2019). Key informants have indicated that current laws may disproportionately impact individuals of color in Washington. HIV criminalization data from California, Florida, and Georgia indicate racial/ethnic disparities in the application of HIV-specific laws.⁴¹⁻⁴³ For example, Black and Latino/a Californians made up 67% of the people who came into contact with the criminal justice system based on their HIV status but just 51% of those living with HIV and AIDS in the state.⁴³ Whereas, white men make up 40% of the population of people diagnosed with HIV in California, they make up only 16% of those who had contact with the criminal justice system related to their HIV status.⁴³ In Florida, "Black men were more likely to be arrested for HIV-related offenses than their White counterparts (22% versus 17%, respectively) and were the most likely to be convicted (in 30% of all cases)."⁴² Additionally, "in the rare cases where there appeared to be a 'downgrade' to an STD conviction instead on [sic.] an HIV conviction, it only occurred for White people."⁴² Criminal justice data specific to HIV laws were unavailable in Florida and Georgia for Latino/as.

Due to overrepresentation in the criminal justice system, people of color are disproportionately impacted by collateral consequences,¹⁸ which negatively affect access to social determinants of health (e.g., employment, housing, social services). For example, Black and Latino males are disproportionately affected by criminal background checks.¹⁸ One study found that "60 percent of all black applicants with criminal records did not receive callbacks or job offers, compared to 30 percent of all white applicants with criminal records."¹⁸

Inequities by sex, sexual orientation, and gender identity

In Washington State, approximately 84% of individuals living with HIV are male, 15% are female, 1% are transgender female, and less than 1% (9 individuals) are transgender male.⁴⁰ Of

445 new HIV cases in Washington State in 2017, approximately 77% were among males, 22% among females, 2% among transgender females, and 0% (1 case) among transgender males.⁴⁰ The majority of new cases (53%) were among men having sex with men.⁴⁰

Available information from Washington State indicates that individuals in 29 out of 33 cases (88%) were male. However, information about sexual orientation or gender identity is not available from AOC records. One key informant shared that, of 10 individuals charged with an HIV-related crime, 60% were heterosexual (personal communication, October 2019). The Williams Institute's evaluation of criminal justice data from California, Florida, and Georgia also noted that analysis was limited by lack of information about sexual orientation and gender identity.

As LGBTQIA individuals are overrepresented in the criminal justice system, they also disproportionately experience collateral consequences.¹⁸ Moreover, evidence indicates that LGBTQIA individuals often face steeper challenges post-reentry. For example, "[LGBT individuals] often lack access to culturally competent reentry, parole, and probation programs, [they] may not receive relevant advice on how to handle discrimination (based on their sexual orientation or gender identity) while searching for employment or housing, or how to get adequate physical or mental health care (especially for HIV)."¹⁸ Additionally, "[t]ransgender people also face unique challenges, [...] which can be problematic when searching for jobs or housing."¹⁸

Potential inequities for other marginalized individuals

Key informants noted that individuals experiencing violence (e.g., intimate partner violence), those in the sex trade, those with co-occurring mental health conditions, those with disabilities (e.g., cognitive delays), those with substance use disorders, those experiencing homelessness, and those living in rural communities may also disproportionately experience HIV and/or involvement with the criminal justice system in Washington State.

Data analyzed by the Williams Institute indicate the application of HIV-specific laws disproportionately affects individuals in the sex trade, particularly females.⁴¹⁻⁴³ While very few studies have documented the prevalence of HIV among female sex workers in the U.S., "the available evidence suggests that HIV prevalence among this vulnerable population is high."⁴⁶

The Williams Institute's studies also found evidence that HIV-specific criminal laws may be enforced differently based on geographic location.^{41,42} In Georgia, "the counties with the highest arrest rates among people living with HIV were mostly rural counties."⁴¹ As many as 10% of the residents living with HIV in smaller counties had experienced an HIV-related arrest.⁴¹ Data from Florida also point to some race-, sex-, and geographic-based disparities in the application of these laws and showed disproportionality (by race and sex) varied by county.⁴² In Florida, 76% of the HIV-specific incidents occurred in 8 (out of 67) counties.⁴² For example, Duval County is home to only 6% of the people living with HIV in Florida, but 23% of all HIV-related arrests in the states occurred there.⁴²

Overall, there is very strong evidence that improving health outcomes for individuals living with HIV will reduce the health inequities they experience.

Other considerations

Public health pathway

While current law and SHB 1551 detail the role of local health officers and health orders, they do not prioritize the public health pathway over the criminal justice pathway. Key informants shared that the pathway is dependent on the county and on the "entry point" of the case. Often, these cases are referred by law enforcement and so they will stay on a criminal justice path with little opportunity or power for public health system to intervene. Key informants felt that the public health pathway would be more effective, less destructive, and result in improved behavior change and health outcomes than the criminal justice pathway. Overall, this would have a greater benefit for individuals living with HIV and the larger community.

A few key informants shared that case managers at health care organizations or local health jurisdictions have worked with some prosecuting attorney's offices within the state to avoid prosecution of individuals living with HIV for HIV-related crimes (personal communication, October 2019). However, this is not a common practice. In addition, case managers working with clients living with HIV have shared scientific information about methods to reduce or eliminate the risk of transmission (e.g., condom use, ART treatment, behavior modifications) with prosecuting attorneys to demonstrate that an individual took means to prevent transmission and therefore did not have intent to transmit HIV (personal communication, October 2019). Similarly, they have shared scientific information to show that, even with intent, specific actions (e.g., spitting) are not viable exposure or transmission pathways and pose no risk of HIV-transmission (personal communication, October 2019).

However, the current public health pathway is not without challenges. Key informants shared that health orders are vague, too short in duration (i.e., 3 months), and lack enforcement mechanisms that would improve their effectiveness. In addition, key informants shared that there are no formal connections or mechanisms between the criminal justice and public health systems to require or facilitate referrals of individuals living with HIV out of the criminal justice pathway and into public health interventions for this specific crime. For example, there is no specific legal mechanism (responsibility or requirement) for a prosecuting attorney to divert a case to a local health jurisdiction (personal communications, October 2019). Moreover, as these cases occur relatively rarely compared to other crimes, offices have not identified a need for such a system (personal communication, October-November 2019).

Since current law and the proposed changes do not prioritize the public health pathway, and since the criminal justice pathway has been used more often in Washington State, the public health pathway was not included in the logic model on page 13.

Decriminalization

Generally, key informants felt that full decriminalization would decrease stress, fear, and threats for individuals living with HIV. Key informants also agreed that full decriminalization would reduce HIV-related criminalization stigma. While generalized HIV-stigma may persist, full decriminalization would remove the added stigma that living with HIV is a crime. In addition, key informants felt that full decriminalization would improve health outcomes by improving mental health outcomes, improving use of an access to healthcare services, and reducing health inequities for individuals living with HIV.

Some key informants expressed concern that full decriminalization could create the potential for unintended consequences. For example, following full decriminalization in Texas, individuals were charged under other general criminal laws (e.g., attempted murder, aggravated assault).⁶⁴ One key informant also expressed concern that full decriminalization would allow for those currently convicted to appeal their case or be released on probation. Another key informant expressed concern that decriminalization would be unjust for victims of potential HIV-related crimes. Since provisions outlined in SHB 1551 do not include full decriminalization, this pathway was not included in this analysis.

Sexual motivation and sex offender status

At least 5 individuals convicted of an HIV-related crime in Washington State were required to register as a sex offender. <u>RCW 9.94A.030(49)</u> defines "sexual motivation" as "one of the purposes for which the defendant committed the crime was for the purpose of [their] sexual gratification."⁶⁵ Charging a defendant with sexual motivation is at the discretion of the prosecuting attorney (personal communications, October 2019). According to <u>RCW</u> 9.94A.835(1), "the prosecuting attorney shall file a special allegation of sexual motivation in every criminal case, felony, gross misdemeanor, or misdemeanor [...] when sufficient admissible evidence exists, which, [...] would justify a findings of sexual motivation by a reasonable and objective fact finder."⁶⁶ Under Washington State law, if a case is charged and convicted with sexual motivation then the offense is subject to adjustments to standard sentences (<u>RCW</u> 9.94A.533): 2 years for a class A felony; 18 months for a class B felony; 1 year for a class C felony; and twice these amounts if it is not the first offense with any sexual motivation enhancement.⁶⁷ Additionally, the person is required to register as a sexual offender, which affects access to housing, employment, and social services.¹⁸

Key informants shared that adding the sex offender requirement to sentencing for HIV-related crimes is common. Additionally, while not dictated in statute or required by DOC procedures, key informants shared that at least one HIV-specific condition has been written into provisions of supervision (more commonly known as conditions of parole) documents used by DOC's Community Corrections Officer System (personal communication, October 2019). Specifically, for the period of time the individual is required to report to their Community Corrections Officer (CCO), they must bring any potential sexual partner to meet their CCO for the purposes of disclosing their HIV-positive status and the details of their case (personal communications, October 2019). If the individual violates this condition they are subject to additional confinement. Analysts know of at least two cases in which this HIV-specific condition was added.

Since SHB 1551 would not amend the RCWs related to sexual motivation special allegations and since this allegation applies to felony, gross misdemeanor, or misdemeanor cases, it is unclear how SHB 1551 may impact sex offender requirements and these potential impacts were not included in this analysis.

Annotated References

1. Lehman J. S., Carr M. H., Nichol A. J., et al. Prevalence and public health implications of state laws that criminalize potential HIV exposure in the United States. *AIDS Behav.* 2014;18(6):997-1006.

Lehman et al. used "public health law research methods, data from the legal database WestlawNext(c) were analyzed to describe the prevalence and characteristics of laws that criminalize potential HIV exposure in the 50 states (plus the District of Columbia) and to examine the implications of these laws for public health practice." Specifically, they "assessed the prevalence and characteristics of state HIV-specific criminal laws and examined their implications for public health practice with a specific focus on elements of the laws that may criminalize behaviors that pose low or negligible risk of HIV transmission." The final analysis database included "the enactment year of each law, disclosure requirements, activities prohibited under the law (including sexual activity without disclosure, prostitution/solicitation, blood/tissue/fluid donation, and biting/spitting/throwing of bodily fluids), most severe degree of punishment under a particular law, and available defenses delineated in the law." Authors found the first state laws were enacted in 1986, and Washington was among the four states to enact HIV-specific criminal laws that year. As of 2011 a total of 67 laws had been enacted in 33 states. "Overall, two-thirds (22 of 33) of states enacted their first law from 1986 to 1990; by 1995, more than three-fourths (26 of 33) of states had enacted their first law; and by 2000, nearly 90% (29 of 33) of states had passed their first law." Twenty-four states require persons who are aware that they have HIV to disclose their status to sexual partners and 14 states require disclosure to needle-sharing partners. Twenty-five states (of which Washington is not one) criminalize one or more behaviors that pose a low or negligible risk for HIV transmission. Nearly two-thirds of states have legislation that criminalizes potential HIV exposure. "The majority of laws were passed before studies showed that antiretroviral therapy (ART) reduces HIV transmission risk and most laws do not account for HIV prevention measures that reduce transmission risk, such as condom use, ART, or pre-exposure prophylaxis." Authors also note, "The number of prosecutions, arrests, and instances where HIV-specific criminal laws are used to induce plea agreements is unknown. Because state-level prosecution and arrest data are not readily available in any national legal database, the societal impact of these laws may be underestimated since many prosecutions lead to plea agreements, and most cases that go to trial are not reduced to written, published opinions." Washington is one of 5 states in which sentences imposed may be longer than 20 years. Authors highlight that 1) many HIV-specific criminal laws do not account for transmission risk variation; 2) levels of knowledge of HIV-specific criminal laws among people living with HIV are not well known; and 3) the degree to which these laws affect disclosure rates (i.e., to sexual and needle-sharing partners) is unknown. These factors call into question the effectiveness of these laws at decreasing risk behaviors and increasing disclosure. Furthermore, these laws may have unintended consequences (e.g., intimate partner violence) following disclosure of HIV status. States with HIV-specific criminal laws are encouraged to use the findings of this paper to re-examine those laws, assess the laws' alignment with current evidence regarding HIV transmission risk, and consider whether the laws are the best vehicle to achieve their intended purposes.

2. Sweeney P., Gray S. C., Purcell D. W., et al. Association of HIV diagnosis rates and laws criminalizing HIV exposure in the United States. *AIDS*. 2017;31(10):1483-1488.

Using data from the National HIV Surveillance System, Sweeney et al. conducted a longitudinal evaluation to determine whether "state criminal exposure laws are associated with HIV and stage 3 (AIDS) diagnosis rates in the United States." In 2010, 30 states had HIV criminalization laws. In 2015, the National HIV/AIDS Strategy, published by the U.S. Department of Health and Human Services, called for review of "the broad range of criminal statutes to ensure their consistency with current science and public health approaches to HIV prevention and treatment." The authors noted that, "whether these laws may influence risk behaviors that could lead to transmission and whether they ultimately serve to advance or undermine prevention goals has been debated." For example, "criminal exposure laws could potentially reduce transmission by encouraging disclosure of HIV status to comply with the law or by deterring HIV-positive persons from engaging in behaviors that could exposure others. On the contrary, these laws could increase transmission by discouraging testing or disclosure because of perceived stigma or by discouraging HIV-positive persons from learning their HIV status (to avoid satisfying the 'knowing' element of the crime)." Diagnosis rates varied significantly by education and percentage of individuals living in an urban area. However, criminal exposure laws were not associated with HIV or stage 3 (AIDS) diagnosis rates. This finding held true across all states. The authors concluded that, "these laws have had no detectable HIV prevention effect" and "finding no association between HIV and AIDS diagnosis rates and laws that criminalize HIV exposure supports the hypothesis that these laws have not affected HIV behaviors or transmission."

3. Justice U.S. Department of. Best Practices Guide to Reform HIV-Specific Criminal Laws to Align with Scientifically-Supported Factors. Washington, DC: 2014.

This Best Practices Guide from the U.S. Department of Justice's Civil Rights Division provides "technical assistance to states that wish to re-examine their HIV-specific criminal laws to ensure that existing policies 'do not place unique or additional burdens on individuals living with HIV/AIDS' and that these policies 'reflect contemporary understanding of HIV transmission routes and associated benefits of treatment." Authors cite evidence that "the stigma associated with HIV remains extremely high and fear of discrimination causes some Americans to avoid learning their HIV status, disclosing their status, or accessing medical care." Moreover, "the CDC has unequivocally asserted that HIV 'stigma hampers prevention.'" In the U.S., 15.8% of those carrying HIV do not know their status, and the virus is disproportionately spread by those unaware of their status. According to CDC data and other studies, "intentional HIV transmission is atypical and uncommon." The majority of law criminalizing non-disclosure of known HIVpositive status "were enacted when far less was known about risk, likelihood, and mode of transmission of the virus and at a time when the quality of life and lifespan of an individuals with the virus was vastly different than it is currently." Today, with proper steps, "HIV can be manageable as a chronic disease." For example, "As of 2013, a 20-year old with the HIV virus who is on ART and is living in the United States or Canada has a life expectancy into their early 70's, a life expectancy that approaches that of an HIV-negative 20-year old in the general population." Therefore, some laws do not accurately reflect the current science and understanding that "HIV may be a manageable medical condition." DOJ recommended best practices would be for states to reform laws to "eliminate HIV-specific criminal penalties except": 1) when a person who is aware of their HIV-positive status "commits a (non-HIV specific) sex crime where there is a risk of transmission (e.g., rape or other sexual assault)" and 2) when a person is aware of their HIV-positive status and "the evidence clearly demonstrates

that their individual's intent was to transmit the virus and that the behavior engaged in had a significant risk of transmission, whether or not transmission actually occurred." If states choose to maintain HIV-specific criminal laws beyond the limited circumstances, DOJ recommended they be modernized to accurately reflect the current science of "risk and modes of transmission, the quality of life and life span of individuals who are living with HIV, account for circumstances where the failure to disclose is directly related to intimate partner violence, and ensure they are the desired vehicle to achieve the states' intended purpose." Authors note the CDC's categories of risk of transmission of HIV. Specifically, "The estimated per-act probability of acquiring HIV during the following activity per 10,000 exposures is as follows: insertive penile-vaginal intercourse, 4; receptive penile-vaginal intercourse, 8; insertive anal intercourse, 11; and receptive anal intercourse, 138. These risk assessments are in the absence of risk reduction factors."

4. Centers for Disease Control HIV and STD Criminal Laws. HIV and the Law 2019; Available at: <u>https://www.cdc.gov/hiv/policies/law/states/exposure.html</u>. Accessed

November, 2019.

This CDC webpage provides an overview of HIV and STD criminal laws in the U.S.

5. An Act Relating to sexually transmitted diseases, 9A.36.021 Revised Code of Washington(1988).

The Washington State Legislature passed and the Governor approved Section 916, chapter 206, Laws of 1988 amending RCW 9A.36.021. Effective July 1, 1988, a person was guilty of assault in the second degree if he or she with intent to inflict bodily harm exposed or transmitted HIV as defined in chapter 70.24 RCW.

6. An Act Relating to crimes, 9A.36.011 Revised Code of Washington(1997).

In 1997, the Washington State Legislature passed Engrossed Substitute Senate Bill 5044, which upgraded exposure to or transmission of HIV to another "with the intent to inflict *great* bodily harm" to an assault 1 (RCW 9A.36.011), a class A felony.

7. Assault in the first degree, 9A.36.011 Revised Code of Washington(1997).

Effective July 27, 1997, exposure to and transmission of HIV "with intent to cause great bodily harm" is deemed an assault in the first degree in Washington State.

8. Maximum sentences for crimes committed July 1, 1984, and after., RCW 9A.20.021 Revised Code of Washington.

This statute establishes the maximum sentences for crimes committed in Washington State.

9. Vella Stefano, Schwartlander Bernard , Sow Salif Papa , et al. The history of antiretroviral therapy and of its implementation in resource-limited areas of the world. *AIDS*. 2012;2012(26):1231-1241.

Vella et al. provided a history of antiretroviral therapy (1987 to 2011) as well as its implementation in resource-limited areas of the world.

10. U.S. Department of Health and Human Services A Living History | Timeline. Available at: <u>https://hab.hrsa.gov/livinghistory/timeline/toward_passage.htm</u>. Accessed October, 2019.

This Health Resources & Services Administration page outlines the history of the HIV/AIDS epidemic and the scientific advancements and policy efforts to treat people living with HIV and to prevent transmission of the disease. Information cited was included in the following timeline discussions: 1995 - First Protease Inhibitor Becomes Available and 2013 - High-Impact Prevention.

11. Hall H. Irene, Holtgrave David R., Maulsby Catherine. HIV transmission rates from persons living with HIV who are aware and unaware of their infection. *AIDS*. 2012;2012(26):887-896.

This research letter from Hall et al. provides HIV transmission rate modeling estimates of secondary infections from those aware and unaware of their HIV infection. "An estimated 49% of transmissions were from the 20% of persons living with HIV unaware of their infection." Additionally, "About eight transmissions would be averted per 100 persons newly aware of their infection; with more infections averted the higher the percentage of persons with viral suppression who can be linked to care. Improving all stages of HIV care would substantially reduce transmission rates." Authors noted several limitations to the analysis: 1) the percentage of persons with viral suppression may vary based on the definition used; 2) little new information was available for some of the parameters in the model (e.g., magnitude of reduction in risk behavior or number of partners); and 3) other factors may contribute to HIV transmission not considered in the model.

12. Centers for Disease Control and Prevention. HIV | Testing. HIV Basics 2019;

Available at: <u>https://www.cdc.gov/hiv/basics/testing.html</u>. Accessed November, 2019. This CDC webpage provides answers to common questions related to HIV testing, including the types of tests available, where to get one, and what to expect when getting tested. Nucleic acid tests (NAT) can usually detect an HIV infection 10 to 33 days after an exposure. Antigen/antibody tests performed by a laboratory on blood from a vein can usually detect infection 18 to 45 days after an exposure. Antibody tests can take 23 to 90 days to reliably detect HIV infection. Blood tests using blood from a vein can detect HIV more quickly after infection than tests using blood from a finger prick or with oral fluid.

13. Centers for Disease Control and Prevention. HIV Risk Behaviors. 2015; Available at: <u>https://www.cdc.gov/hiv/risk/estimates/riskbehaviors.html</u>. Accessed September, 2019. This Centers for Disease Control and Prevention webpage documents the estimated per-act probability of acquiring HIV from an infected source.

14. Barre-Sinoussi F., Abdool Karim S. S., Albert J., et al. Expert consensus statement on the science of HIV in the context of criminal law. *J Int AIDS Soc.* 2018;21(7):e25161.

This Consensus statement was developed by 20 HIV scientists with expertise in scientific research, epidemiology, and patient care from regions across the world and has been endorsed by the International AIDS Society, the International Association of Providers of AIDS Care, Joint United Nations Programme on HIV/AIDS, and additional scientists. It was developed due to "concern that criminal law is sometimes applied in a manner inconsistent with contemporary

medical and scientific evidence: including overstating both the risk of HIV transmission and also the potential for harm to a person's health and wellbeing." Authors noted that "limited understanding of current HIV science reinforces stigma and may lead to miscarriages of justice" and "may also undermine efforts to address the HIV epidemic." Authors conducted a detailed literature review of articles published in English up to April 2017; key articles were used to identify related articles; and other sources were identified by expert authors. Preference was given to meta-analyses, reviews, and important studies. Authors used a hierarchy to consider the best available scientific and medical research data. Researchers discussed multiple factors influencing the possibility of HIV transmission. 1) Correct use of a condom (male or female) prevents HIV transmission because it "acts as an impermeable physical barrier through which HIV cannot pass." In cases where multiple sex acts have occurred and it is not known whether condoms were correctly used in each instance, then the population level estimate of 80% condom effectiveness should be applied to the risk associated with different sex acts. "For example, if the estimated risk of HIV transmission from an HIV-positive man to a [HIV seronegative] woman during a single episode of condomless vaginal sex is 0.08%, then the risk of transmission when a condom is used can be understood as at least 80% lower, or 0.016% (less than 2 in 10,000)." 2) Viral load that is low or 'undetectable' significantly decreases or eliminates the possibility of HIV transmission. Antiretroviral therapy (ART) prevents the virus from replicating, significantly reducing the viral load in a person's bodily fluids. Reduced viral loads improve immune function, decrease the long-term likelihood of illness and death, and greatly reduce the possibility of HIV transmission. "Recent analyses from key studies [...] involving both heterosexual and male couples of different HIV status have not identified any cases of sexual transmission from a person with an undetectable viral load." Based on these findings, the CDC "describes the estimated possibility of HIV transmission from an HIV-positive person with an undetectable viral load (as a result of effective [ART]) as "effectively no risk." For example, "The PARTNER and Opposites Attract studies found no HIV transmission from people with a viral load below 200 copies/mL after more than 75,000 acts of condomless vaginal or anal sex." 3) Pre-exposure Prophylaxis (PrEP) significantly decreases the possibility of HIV acquisition. Results of one study showed PrEP to be up to 95% effective among adherent users. However, the few incidents of PrEP failures suggest that it is likely that PrEP is more than 95% effective. 4) Post-exposure Prophylaxis (PEP) significantly decreases the possibility of HIV acquisition (e.g., 81% reduction among patients using older-style treatments and up to 100% among patients using newer treatments). 5) Risk reduction practices such as withdrawal or strategic positioning decrease the possibility of HIV transmission. 6) Sexually transmitted infections (STIs) can increase the possibility of HIV transmission in some circumstances. However, "the presence of an STI does not increase the possibility of transmission if the HIV-positive person is on effective [ART], or if the HIV-negative person is taking PrEP." Researchers also discussed the possibility of HIV transmission through various sex acts. Specific to oral sex, results of the literature review found, "the possibility of HIV transmission from oral sex performed on an HIV-positive person, including when the person does not have a low viral load and/or a condom is not used, varies from none [i.e., either biologically implausible or effectively zero] to negligible [i.e., extremely unlikely, rare, or remote] depending on the context." The risk of HIV transmission from oral sex is "so low that scientists have been unable to establish a statistically sound estimate." Furthermore, expert opinion is "there is no possibility of HIV transmission from oral sex performed on an HIV-positive person when the HIV-positive partner has a low viral load, or a condom is properly used, or the HIV-negative partner is taking PrEP." Specific to vaginal-penile
sex, evidence shows "the possibility of HIV transmission from vaginal-penile intercourse when the HIV-positive partner does not have a low viral load and a condom is not used is low [possible but the likelihood is low; i.e., 0.08% or 8 in 10,000 exposures]. The likelihood of transmission decreases further if no ejaculation occurs inside the HIV-negative partner's body." Moreover, "The possibility of HIV transmission from vaginal-penile intercourse when the HIV-positive partner has a low viral load or uses a condom or the HIV-negative partner is taking PrEP varies from none to negligible depending on the context." For anal-penile sex, "the possibility of HIV transmission when a condom is not used and the HIV-positive partner does not have a low viral load is low, whether the receptive partner is male or female. The likelihood is lower where the HIV-positive partner takes the receptive, rather than the insertive, role. It is also lower if the HIV-positive insertive partner does not ejaculate inside the receptive partner." Results of two systematic reviews (2010 and 2014) found a per-act estimate of approximately 1.4% (140 in 10,000) for receptive anal sex, in which the HIV-positive person is the intertive partner. This likelihood decreased from 1.43% (143 per 10,000) with ejaculation to 0.54% (54 per 10,000) with no ejaculation. Meanwhile, "per-act likelihood of transmission was estimated to be 0.11% (11 per 10,000) when the HIV-negative person is the insertive partner." Finally, "The possibility of HIV transmission when a condom is not used and the HIV-positive partner does not have a low viral load is low, whether the receptive partner is male or female [86]. The likelihood is lower where the HIV-positive partner takes the receptive, rather than the insertive, role. It is also lower if the HIV-positive insertive partner does not ejaculate inside the receptive partner." Specifically, "there has not been a reported case of transmission from a person with an undetectable viral load in any clinical trial." Authors then state there is no possibility of HIV transmission from casual contact (e.g., contact with an environmental surface; food or drink; causal human contact like hugging), kissing, spitting, or biting. Specific to casual contact, many scientific studies have tested the possibility, and results show that "HIV cannot survive long in air and is unable to penetrate intact skin." Similarly, "numerous studies have considered the possibility of HIV transmission through saliva but none have found any evidence, including a 1997 study of 34,000 cases in the UK." The lack of transmission is attributed to two factors: 1) saliva contains a very small amount of HIV, and 2) saliva acts to protect susceptible cells from HIV infection through several inhibitory components in oral secretions. Researchers also found, "There is no possibility of HIV transmission from biting or spitting where the HIV-positive person's saliva contains no, or a small quantity of, blood." As no cases of HIV transmission resulting from the spitting of blood have been reported (e.g., landing in the eye or mouth), expert opinion is that "there is no possibility of HIV transmission from saliva containing small quantities of blood." Finally, "The possibility of HIV transmission from biting where the HIVpositive person's saliva contains a significant quantity of blood, and their blood comes into contact with a mucous membrane or open wound, and their viral load is not low or undetectable varies from none to negligible." Next, authors consider the harms of HIV "because persistent misconceptions exaggerating the harms of HIV infection appear to influence application of the criminal law." They note the natural course of untreated HIV infection varies widely from person to person. However, "ART therapies dramatically reduce HIV-associated disease progression," and studies from many countries have shown life expectancies and quality of life have improved dramatically. The use of ART has shifted cause of death of those living with HIV from "traditional AIDS-defining to non-HIV-related causes similar to those affecting the general population." Authors also addressed establishing proof of HIV transmission. Authors note that medical records can provide context but cannot establish transmission between a complainant

and defendant. "Importantly, whether the complainant or defendant was infected first cannot be based on who tested HIV-positive first or which brought charges against the other." Additionally, they state "consideration of the use of scientific evidence in court found that phylogenetic analysis alone cannot prove beyond reasonable doubt that one person infected another although it can be used to exonerate a defendant." Authors conclude, "the application of up-to-date scientific evidence in criminal cases has the potential to limit unjust prosecutions and convictions." Authors "strongly recommend that more caution be exercised when considering criminal prosecution," as "this is instrumental to reduce stigma and discrimination and to avoid miscarriages of justice." Finally, authors "encourage governments and those working in legal and judicial systems to pay close attention to the significant advances in HIV science that have occurred over the last three decades to ensure current scientific knowledge informs application of the law in cases related to HIV."

15. Centers for Disease Control and Prevention. Effectiveness of Prevention Strategies to Reduce the Risk of Acquiring or Transmitting HIV. 2019; Available at:

https://www.cdc.gov/hiv/risk/estimates/preventionstrategies.html. Accessed September, 2019.

This Centers for Disease Control and Prevention (CDC) website provides "the best estimates of effectiveness for various strategies to prevent HIV acquisition or transmission. Each estimate was identified from the published scientific literature and represents the effectiveness of each strategy when used optimally." Additionally, "combining prevention strategies may be even more effective." However, strategies must be used correctly and consistently in order to work. This page includes effectiveness estimates for antiretroviral therapy (ART) for HIV-positive people, oral daily pre-exposure prophylaxis (PrEP) for HIV-negative people, male condom use, and circumcision of adult males.

16. Centers for Disease Control and Prevention. PrEP. HIV 2019; Available at: <u>https://www.cdc.gov/hiv/basics/prep.html</u>. Accessed October, 2019.

This Center for Disease Control and Prevention webpage provides details regarding pre-exposure prophylaxis (or PrEP) as a means of preventing HIV in people who are at very high risk of HIV.

17. Modernizing the control of certain communicable diseases. Jinkins, trans. *Revised Code of Washington*. 2019-2020 ed2019.

Substitute House Bill 1551, Modernizing the control of certain communicable diseases, was requested by the Washington State Department of Health. Among its provisions, the bill would modify crimes related to transmission of HIV and repeals prohibitions on an individual who has a sexually transmitted disease, other than HIV, from having sexual intercourse if the partner is unaware of the disease.

18. **Rights USCoC. Collateral Consequences: The Crossroads of Punishment, Redemption, and the Effects on Communities. Washington, DC: United States Commission on Civil Rights; June 2019 2019.**

This briefing report from the U.S. Commission on Civil Rights (The Commission) "provides an overview of the relevant data and arguments for and against the imposition of collateral consequences on people with criminal records." It defines the collateral consequences as "sanctions, restrictions, or disqualifications that attach to a person because of the person's

criminal history." Of particular relevance to this Health Impact Review, it discusses barriers to securing employment, obtaining housing, and receiving public assistance faced by formerly incarcerated persons. It also discusses disproportionality and how collateral consequences inequitably impact those with intersectional identities that are marginalized and oppressed. The Commission also provides recommendations based on its findings to address collateral consequences that "do not serve public safety, bear no rational relationship to the offense committed, and impede people convicted of crimes from safely reentering and becoming contributing members of society."

19. Aidala Angela A., Wilson Michael G., Shubert Virginia, et al. Housing Status, Medical Care, and Health Outcomes Among People Living With HIV/AIDS: A Systematic Review. *The American Journal of Public Health* 106(1).

Aidala et al. conducted a systematic review to examine available evidence on "the association between housing status (broadly defined), medical care, and health outcomes among people with HIV and analyzed results to inform future research, program development, and policy implementation." Authors searched 8 electronic health and social science databases from January 1996 through March 2014 using search terms related to housing, dwelling, and living arrangements and HIV and AIDS. Searches yielded 5,528 references, and authors included 152 quantitative studies (2 randomized controlled trial housing interventions, 64 cohort or casecontrol studies, and 86 cross-sectional studies; representing 139,757 HIV-positive participants). The majority of studies occurred in the United States (n = 112) or Canada (n = 27). Study populations included a mix of general samples of people living with HIV as well as studies with substance using, recently incarcerated, or other socially marginalized HIV-positive people. Studies examined "access and utilization of HIV medical care [n = 35 studies], adherence to antiretroviral medications [n = 30], HIV clinical outcomes [n = 27], other health outcomes [n = 27]27], emergency department and inpatient utilization [n = 13], and sex and drug risk behaviors [n= 22]." Authors rated studies as "poor" for undefined or ill-defined housing status or for lack of adjustment for confounders. Studies that were not rated as "good" or "fair" on all criteria were excluded. "Overall, findings from included studies [n=111] show that worse housing (i.e., stability, structure, or quality of housing) is associated with poorer access to and engagement in health care and treatments, lower adherence to ARV therapy, worse health outcomes, and higher rates of HIV risk behaviors." Of the 35 studies that examined housing status and HIV healthcare access or utilization, 29 studies (82.9%) reported statistically significant associations between unstable housing and not receiving appropriate HIV care. Of the 30 studies that examined housing status and antiretroviral (ARV) adherence, 24 studies (80%) reported statistically lower ARV adherence among those who were homeless or unstably housed. Of the 27 studies that examined housing status and HIV clinical health outcomes, 20 studies (74.1%) reported worse housing status was statistically significantly associated with worse health outcomes for people with HIV. Of the 27 studies that examined housing status and other health outcomes, 25 studies (92.6%) reported that homelessness or unstable or inadequate housing was associated with "statistically significantly poorer outcomes on 1 or more indicators of physical or mental health functioning and quality of life, mental health symptoms or diagnoses, or diagnosed with physical health comorbidities" (e.g., hepatitis C and tuberculosis). Of the 13 studies that examined housing status and ED visits or inpatient stay, 12 studies (92.3%) reported that people with HIV in unstable living arrangements or who were homeless had statistically significantly higher utilizations of hospital based ED or inpatient care than did those with HIV who were stably

housed. Of the 22 studies that examined housing status and HIV risk behavior, 18 studies (81.8%) reported statistically significant associations between housing need (homelessness or unstable or inadequate housing) and risk behaviors for forward transmission of infection. Authors noted, "Poor health, loss of income, stigma, and policy restrictions on housing assistance for people with drug use or incarceration histories, as well as preexisting social disadvantage, make it difficult if not impossible for many people with HIV to secure or maintain adequate housing." Authors conclude, "Evidence supports considering housing status as a contextual factor that influences consistent, appropriate HIV medical care, adherent antiretroviral medications use, and sustained viral suppression."

20. Healthy People 2020: Access to Health Services. 2018; Available at:

https://www.healthypeople.gov/2020/topics-objectives/topic/Access-to-Health-Services. Accessed October 2018, 2018.

Although the Affordable Care Act of 2010 increased opportunities to access health insurance, many individuals still lack coverage. Access to health insurance and healthcare varies by race/ethnicity, socioeconomic status, age, sex, disability status, sexual orientation, gender identity, and geography. As a result, one goal of the Healthy People 2020 initiative is to improve access to healthcare by improving access to health insurance coverage, health services, and timeliness of care. Healthy People 2020 found that "access to comprehensive, quality health care services is important for promoting and maintaining health, preventing and managing disease, reducing unnecessary disability and premature death, and achieving health equity for all Americans." Barriers to accessing healthcare "lead to unmet health needs, delays in receiving appropriate care, inability to get preventive services, financial burdens, [and] preventable hospitalizations." Access to health insurance is the first step to improving access to health services generally as it provides entry into the healthcare system. Individuals who are uninsured are, "more likely to have poor health status, less likely to receive medical care, more likely to be diagnosed later, and more likely to die prematurely" than individuals with insurance. Improving access to health services includes ensuring people have a "usual and ongoing source of care (that is, a provider or facility where one regularly receives care." Patients with a usual source of care experience better health outcomes, fewer health inequities, lower health costs, and better use of preventive health services. Lastly, delay in healthcare can negatively impact health outcomes and also result in, "increased emotional distress, increased complications, higher treatment costs, and increased hospitalizations." Healthy People 2020 noted that "future efforts [to improve access to care] will need to focus on the deployment of a primary care workforce that is better geographically distributed and trained to provide culturally competent care to diverse populations."

21. Hadley Jack. Sicker and poorer--the consequences of being uninsured: a review of the research on the relationship between health insurance, medical care use, health, work, and income. *Medical Care Research Review*. 2003;60(June 2003):3S-75S.

As part of this systematic review of literature more than 9,000 citations were screened for inclusion; 285 distinct, potentially relevant articles were identified for more detailed review; and 54 analyses (in 51 distinct studies) were included in the detailed review. The final set of studies of health outcomes were organized into three major groups: (1) studies of the relationship between insurance status and the outcomes of specific diseases or conditions, (2) studies of the relationship between insurance status and either general mortality or morbidity/health status, and

(3) studies of the relationship between medical care use and mortality. "Overall, 43 analyses report statistically significant and positive relationship, and 11 have results that are not statistically significant. However, of those 11, 4 have quantitative estimates that are similar to those of comparable studies with statistically significant results, and 4 provide partial results supporting a positive relationship between health insurance or medical care use and health." Despite all studies reviewed suffered from methodological flaws, "one general observation emerges: there is a substantial degree of qualitative consistency across the studies that support the underlying conceptual model of the relationship between health insurance and health." The author concludes, "there is a substantial body of research supporting the hypotheses that having health insurance improves health and that better health leads to higher labor force participation and higher income."

22. Baker David W., Sudano Joseph J., Albert Jeffrey M., et al. Lack of health insurance and decline in overall health in late middle age. *The New England Journal of Medicine*. 2001;345(15):1106-1112.

Baker et al. conducted a prospective cohort study using data from the Health and Retirement Study, a national survey of adults age 51 to 61 in the United States (n=7577). The aim of the study was to examine the relationship between health insurance, or a lack thereof, and changes in overall health from 1992-1996. The authors found that compared to continuously insured participants, continuously and intermittently uninsured participants were more likely to report a major decline in overall health between 1992-1996 (p<0.001), with the continuously uninsured being at the highest risk (adjusted relative risk, 1.63). This increased risk remained even after adjusting for sex, race and ethnicity, and income. Further, continuously uninsured participants were 23% more likely to have a new physical difficulty that affected walking or climbing stairs than privately insured participants. The authors conclude that a lack of health insurance, even intermittently, is associated with increased risk of a decline in overall health and that further efforts are needed to reform the U.S. health insurance system, particularly for older adults.

23. Van Der Wees Philip J., Zaslavsky Alan M., Ayanian John Z. Improvements in health status after Massachusetts health care reform. *The Milbank Quarterly*. 2013;91(4):663-689.

Van Der Wees et al. aimed to compare trends in the use of ambulatory health services and overall health status before and after health reform in Massachusetts. In 2006, Massachusetts underwent a health care reform that, among other provisions, established, "...an individual mandate to obtain health insurance if affordable, expanded Medicaid coverage for children and long-term unemployed adults, subsidized health insurance for low and middle-income residents, and a health insurance exchange to help higher-income residents obtain unsubsidized insurance." This study utilized data from the Behavioral Risk Factor Surveillance System (BRFSS) from 2001-2011 for Massachusetts as well as surrounding states that did not undergo reform (Connecticut, Maine, New Hampshire, Rhode Island, and Vermont). The total number of survey participants aged 18-64 that were included in this study was 345,211. The authors found that compared to residents in neighboring states, Massachusetts residents reported better general, physical and mental health, increased use of screening tests for cervical and colorectal cancer, and cholesterol, and a higher likelihood of being covered by insurance and having a personal doctor. These differences remained significant after adjusting for individual sex, age, race/ethnicity, income, employment, marital status, and education, and the annual unemployment

rates in each state. In a subgroup analysis, the authors found that Massachusetts residents with an income less than 300% of the federal poverty level had the greatest increase in health status outcomes. The authors conclude that although health care reform in Massachusetts was associated with some meaningful gains, health disparities still exist for low-income residents and that further innovations, as well as federal health care reform, may be necessary.

24. London A, Myers N. Race, incarceration, and health. *Research on Aging*. 2006;28(3):409-422.

London and Myers conducted a review of the literature around health and other outcomes for incarcerated individuals. They highlighted research that indicates that black Americans have worse health outcomes than other racial/ethnic groups, and also are disproportionately represented in the justice system. The authors also outlined data indicating the high rates of injury in jails and prison as well as the high rates of communicable disease among incarcerated and formerly incarcerated individuals. In addition, they highlight research that indicates that incarceration is associated with lower educational attainment, lower income, higher rates of unemployment, and higher involvement in jobs with high risk of injury or exposure to hazardous working conditions. Evidence also indicates that incarceration is associated with divorce and separation of families.

25. Murray J, Farrington DP, Sekol I. Children's antisocial behavior, mental health, drug use, and educational performance after parental incarceration: A systematic review and meta-analysis. *Psychological Bulletin.* 2012;138(2):175-210.

Murray et al. conducted a systematic review and meta-analysis of the literature on parental incarceration and impacts on children's later mental, emotional, and social health. They identified 40 studies that met their strict inclusion criteria. The researchers pooled the odds ratios across all samples in order to determine if children with incarcerated parents had a greater risk of each outcome than children in the control group who did not have an incarcerated parent or parents. These pooled odds ratios indicated that parental incarceration was significantly associated with antisocial behavior among their children even after controlling for covariates. In some subpopulations parental incarceration was significantly associated with children's poor academic performance, poor mental health, and drug use, but this association was not significant for every subpopulation and did not always remain significant after controlling for covariates.

26. Swisher RR, Roettger ME. Father's incarceration and youth delinquency and depression: Examining differences by race and ethnicity. *Journal of Research on Adolescence*. 2012;22(4):597-603.

Swisher and Roettger analyzed data from the in-home portion of the National Longitudinal Study of Adolescent Health. Due to insufficient sample size for other racial/ethnic groups, only white, black, and Hispanic respondents were included in this study. The researchers found that among all racial/ethnic groups father's incarceration is associated with increased depression and delinquency for the children, even after controlling for other variables such as demographics and family background measures. In addition, when considering these results by race/ethnicity, the data indicate that among Hispanic respondents, having their father incarcerated is associated with a higher propensity for delinquency than among white and black respondents.

27. Turney K, Wildeman C, Schnittker J. As fathers and felons: Explaining the effects of current and recent incarceration on major depression *Journal of Health and Social Behavior*. 2012;53(4):465-481.

Turney et al. analyzed data from the longitudinal Fragile Families and Child Wellbeing study. The researchers found that currently and recently incarcerated fathers are more likely to report a change in employment status, separation from a child's mother, a change in relationship quality, and depression. The association between incarceration and depression remained significant even after controlling for variables such as demographic characteristics and history of depression.

28. Wu E, El-Bassel N, Gilbert L. Prior incarceration and barriers to receipt of services among entrants to alternative incarceration programs: A gender-based disparity. *Journal of Urban Health: Bulletin of the New York Academy of Medicine*. 2012;89(2):384-395.

Wu et al. collected data from a random sample of adults (N=322; 83 women and 239 men) entering alternative to incarceration programs in New York City. Researchers collected data though structured interviews including information on sociodemographics, substance use, prior incarcerations, and barriers that had prevented a participant from visiting or returning to a service provider. Less than half of the participants had earned a high school diploma or GED. When analyzing collapsed data for male and female participants, they found that a greater number of prior incarcerations were significantly associated with a greater number of barriers that prevented accessing a service provider. When they analyzed the data disaggregated by sex and controlling for sociodemographic and substance use indicators, researchers found that the relationship between a greater number of prior incarcerations and greater number of service barriers experienced remained significant only for men.

29. Esposito Michael, Lee Hedwig, Hicken Margart, et al. The Consequences of Contact with the Criminal Justice System for Health in the Transition to Adulthood. *Longit Life Course Stud.* 2017;8(1):57-74.

Esposito et al. examine the association between incarceration and health in the United States during the transition to adulthood. They applied the Bayesian Additive Regression Trees (BART) to data from The National Longitudinal Study of Adolescent to Adult Health dataset (n=10,785) to model incarceration's effect on health controlling for confounding variables (93 variables, and 36 covariates categorized as: demographic characteristics, prior health status behaviors, engagement in risky behavior, social connectedness, disposition characteristics, parental characteristics, and contextual residential characteristics). Authors examined three health outcomes: 1) an indicator for cardiovascular health (i.e. hypertension or raised blood pressure), 2) a measure of general health status (i.e. excellent/very good self-reported status), and 3) a measure of mental health status (i.e. depression). The analysis of two separate samples found individuals who had been incarcerated were more likely to suffer from depression, less likely to report being in excellent or very good health, and more likely to have hypertension than their peers with no history of incarceration. To examine if the health inequalities between previously incarcerated and never incarcerated individuals was a product of incarceration rather than a product of features that occurred prior to incarceration, they used the BART methodology to estimate how different the health of individuals who had experienced incarceration would be had they actually never experienced incarceration. Results suggest that elevated risk of depression among incarcerated individuals is largely a consequence of their incarceration (~5% both before and after accounting for confounders). Similarly, a prior history of incarceration appears to

decrease the probability of reporting excellent/very good health (~10%), roughly half of the decrease in probability before accounting for confounders. Results show no adverse effects of incarceration on hypertension.

30. Rueda S., Mitra S., Chen S., et al. Examining the associations between HIV-related stigma and health outcomes in people living with HIV/AIDS: a series of meta-analyses. *BMJ Open.* 2016;6(7):e011453.

Rueda et al. completed a meta-analysis of 64 studies published between 1996 and 2013 that examined the association of HIV-related stigma and health outcomes for people living with HIV. The majority of studies (42) were conducted in the U.S. and used a cross-sectional study design (53). The authors defined HIV-related stigma as "discounting, discrediting, and discriminating against people perceived to have HIV" and includes enacted, anticipated, and internalized experiences of stigma. They looked at health outcomes associated with HIV-related stigma, including mental health (e.g. depression), quality of life, physical health, social support, adherence to treatment, access to and use of health care services, and risk behaviors. They found significant associations between HIV-related stigma and high rates of depression, low levels of social support, low treatment adherence, and lower access to and use of health care and social services. They also found weaker relationships between stigma and anxiety, quality of life, physical health, emotional and mental distress, and sexual risk practices. Access to health care services was measured by the "degree that people living with HIV have access to and use healthcare units, clinics, and social services." The authors' meta-analysis of 9 studies that evaluated access to care and controlled for other potential confounders showed that individuals that experienced HIV-related stigma were 21% less likely to access or use health and social services. The authors stated, "despite a few studies that do not support the association between HIV-related stigma and access to and usage of health and social services, other studies support the notion that perceived stigma of people living with HIV was associated with low access to care, or delayed presentation in care, possibility stemming from perceived discrimination by healthcare providers." The authors also note that intersectionality for individuals experiencing multiple types of stigma (e.g. HIV-related stigma, sexual stigma, racism, gender discrimination) may worsen health outcomes. The authors concluded, "HIV-related stigma has a detrimental impact on a variety of health-related outcomes in people with HIV."

31. Sweeney S. M., Vanable P. A. The Association of HIV-Related Stigma to HIV Medication Adherence: A Systematic Review and Synthesis of the Literature. *AIDS Behav.* 2016;20(1):29-50.

In this systematic review, Sweeney et al. examine the relationship between HIV-related stigma and medication adherence, specifically antiretroviral therapies (ART). They included 38 studies published between 1997 and 2014 in their review. The authors did not note how many studies were conducted in the U.S. The authors considered 3 main types of HIV-related stigma: anticipated, enacted, and internalized stigma. They define each type as, "anticipated stigma involves expectations of discrimination, stereotyping, and/or prejudice from others in the future due to one's serostatus...enacted stigma involves experiences...that have already occurred...internalized stigma refers to self-endorsing negative feelings and beliefs about having HIV." Experiences of stigma have been associated with depression, anxiety, hopelessness, negative social interactions, loss of social support, and decreases in self-esteem and self-efficacy. HIV-related stigma may also impact HIV testing, access to care, medication adherence, and disclosure. The authors provide an example that since medication adherence may require individuals to take medication at inopportune times or in public environments, fear or anxiety about inadvertent disclosure may result in delayed or skipped doses. Of 15 studies that combined multiple dimensions of stigma, six found that stigma was significantly associated with poor selfreported medication adherence. Four studies examining the impact of internalized stigma and three studies examining the impact of anticipated stigma on medication adherence found mixed results, with most associations disappearing in multivariate analysis models. All three studies focused on enacted stigma found an association between stigma and poor medication adherence. However, the authors found that, overall, "the majority of studies using single measures of stigma (n= 25/29) found an association between increased stigma and adherence difficulties, while every study assessing multiple indicators (n= 8/8) found an association between at least one type of stigma and nonadherence." The authors noted that the mediator between stigma and adherence is unknown, though they propose that the relationship may be impacted by mental health concerns, self-efficacy, and concerns about disclosure.

32. Katz I. T., Ryu A. E., Onuegbu A. G., et al. Impact of HIV-related stigma on treatment adherence: systematic review and meta-synthesis. *J Int AIDS Soc.* 2013;16(3 Suppl 2):18640.

Katz et al. conducted a systematic review to determine the impact of HIV-related stigma on adherence to HIV antiretroviral therapy (ART). They reviewed 75 articles published between 1997 and 2013, including 34 qualitative studies and 41 quantitative studies. The authors did not identify how many studies were conducted in the U.S. However, they noted that the largest proportion (37%) of quantitative studies were conducted in the U.S. They conducted a metasynthesis of qualitative studies to identify emerging themes across studies. The qualitative research showed that social support was important for ART adherence and helped to overcome HIV-related stigma to access care and treatment. In addition, "in many settings, study participants described HIV-related stigma as being layered on top of pre-existing inequalities, such as those related to gender, race, or sexual minority status." In many instances, this stigma led to individuals opting not to take medication for fear of disclosure. The authors also identified a common theme of poverty and explained the reciprocal relationship between stigma and poverty: "HIV-associated illness reinforces the perceived economic inadequacy of HIV-positive persons, who are excluded from networks of mutual aid. Stigmatized persons are excluded from the community, undermining their social support and worsening economic insecurity." Among the 41 quantitative studies included in the review, 61% found that stigma was associated with reduced ART adherence or that disclosure was associated with improved adherence. Thirty-nine percent of studies found no association. Overall, both enacted and internalized stigma undermine ART adherence by undermining social support and adaptive coping.

33. Kamitani E., Fukuoka Y., Dawson-Rose C. Knowledge, Self-efficacy, and Selfpercieved risk for Cardiovascular Disease Among Asians Living with HIV: The Influence of HIV Stigma and Acculturation. *Journal of the Association of Nurses in AIDS Care*. 2015;26(4):443-453.

Individuals living with HIV often experience multiple co-morbidities in addition to HIV, and 71% of individuals with HIV die from non-HIV-related complications, including cardiovascular disease. Individuals with HIV have a higher risk of acute coronary syndrome (including myocardial infarctions (I.e. heart attack)). Kamitani et al. sought to understand the knowledge,

self-efficacy, and perceived risk of cardiovascular disease and acute coronary syndrome for individuals living with HIV. They also examined the influence of HIV-related stigma and acculturation on these factors. Overall, they found that HIV stigmatization was negatively correlated with self-efficacy (p=-.004) in recognizing and seeking medical attention for a heart attack.

34. Stockton M. A., Giger K., Nyblade L. A scoping review of the role of HIV-related stigma and discrimination in noncommunicable disease care. *PLoS One*. 2018;13(6):e0199602.

Stockton et al. completed a scoping review of literature to identify the potential role of HIVrelated stigma in accessing care for noncommunicable diseases. Individuals living with HIV are more susceptible to noncommunicable diseases (e.g. cancer, cardiovascular disease, chronic pulmonary disease, diabetes, anxiety, depression), especially as individuals experience longer life expectancy outcomes and as the global burden of noncommunicable diseases increases. HIVrelated stigma may serve as a barrier to accessing prevention, diagnosis, and treatment services for non-communicable diseases. The authors noted that, "as [people living with HIV] seek care outside their regular HIV-care settings, there is some evidence that suggests the risk of encountering stigma related to HIV within the health system may rise." Their review included 16 articles published between 2007 and 2017, including 5 that took place in the U.S. One study "among Asian Americans living with HIV found HIV stigma was negatively correlated with self-efficacy in recognizing and seeking medical attention for a heart attack (r= -0.43, p, .0005)." The authors also discuss that individuals may experience stigma related to noncommunicable diseases in addition to experiencing HIV-related stigma. In addition, "individuals may also face discrimination that influences their health for reasons unrelated to their health status and belonging to multiple stigmatized groups has been shown to compound the negative effects of stigma." HIV-stigma may also impact access to care for noncommunicable diseases for individuals that are HIV-negative, either due to beliefs that certain noncommunicable diseases are associated with HIV (e.g. cervical cancer) or due to integrated care models that provide care for both HIV and noncommunicable diseases. Overall, the authors found that fear of disclosure of HIV status, internalized shame and embarrassment, and actual or perceived negative perceptions of health care providers negatively impact access to care for noncommunicable diseases for individuals living with HIV. The authors also concluded that HIV-related stigma and noncommunicable disease-related stigma impacted access to care for patients regardless of HIV status.

35. Klein D. A., Berry-Bibee E. N., Keglovitz Baker K., et al. Providing quality family planning services to LGBTQIA individuals: a systematic review. *Contraception.* 2018. Klein et al. conducted a systematic review to synthesize findings from peer-reviewed literature examining the provision of family planning services, specifically services to prevent or achieve pregnancy, to lesbian, gay, bisexual, transgender, queer/questioning, intersex and asexual (LGBTQIA) clients to inform clinical and research strategies. Of the 7193 abstracts published from January 1985 through April 2016 that met search parameters; 19 descriptive studies met inclusion criteria. Two included studies focused on the perspectives of health care providers towards LGBTQIA clients. While 17 studies that documented client perspectives; of those 12 elucidated factors facilitating a client's ability to enter into care, and 13 examined client experience during care. Authors found, "[f]acilitators to care included access to a welcoming

environment, clinicians knowledgeable about LGBTQIA needs and medical confidentiality." Barriers to included fear of provider discrimination, homophobia, or differential treatment (identified by 4 studies); lack of health of health insurance or medical coverage difficulties (3); lack of access to relevant family planning information (2); negative provider attitudes towards clients to include uncaring, unsupportive, and judgmental attitudes (4); lack of provider knowledge about LGBTQIA family planning needs (4); absence of gender neutral clinical practices (4); concerns regarding medical confidentiality (3); Limited time spent with provider during clinic visit (1); and discomfort experienced within clinic environment (2). While this systematic review found limited evidence on provision of quality family planning services to LGBTQIA clients, it identified multiple contextual facilitators and barriers to family planning service provision. Though the study intended to include both experimental and descriptive studies, those that met inclusion criteria were all noninterventional descriptive studies (e.g., surveys, interviews, focus groups) and many included small sample sizes and limited diversity among sample race, ethnicity, and socioeconomic status. Therefore, the generalizability of these findings is limited. Authors concluded, "[f]urther research is needed to assess interventions designed to assist LGBTQIA clients in clinical settings, and to gain a better understanding of effective education for providers, needs of specific subgroups (e.g., asexual individuals) and the role of the client's partner during receipt of care."

36. Harvey S. M., Branch M. R., Hudson D., et al. Listening to immigrant Latino men in rural Oregon: exploring connections between culture and sexual and reproductive health services. *American Journal of Mens Health*. 2013;7(2):142-154.

Harvey et. al. completed 49 in-depth interviews with male, 18-30 year old, Latino immigrants in rural Oregon to explore access to and use of reproductive health services. The authors cite previous research about barriers to Latino immigrants accessing health care generally, including cost of care, lack of health insurance, language barriers, fear of discrimination and stigma, lack of time to seek services, misinformation, and lack of knowledge about available services. Based on their in-depth interviews with male immigrants, the authors identified barriers to accessing reproductive health care at the individual and structural levels. Individual level barriers included lack of knowledge about services, care and treatment options, clinic locations, and financial assistance; low perception of risk; lack of understanding about what "family planning" entails; cultural norms and beliefs (including machismo-related beliefs); and fear and potential shame of diagnosis. The authors state, "when combined with a cultural history that has not embraced the male role in sexual and reproductive health, the cultural belief of machismo perpetuates the idea that Latino men do not have to be responsible for their own sexual health or that of their partner." Structurally, the authors identified the importance of confianza or privacy, confidentiality, and trust when interacting with providers and front desk staff at clinics. Other structural barriers included lack of formative sexual health education, lack of respect by clinic staff and providers, being treated differently or receiving different counseling due to racism, cost of care, unemployment, lack of health insurance, concerns about documentation, lack of bilingual and/or male providers, and lack of translators (especially male translators). Interviewees also talked about clinic-related barriers, including distance from the clinic, wait times, and clinic hours. The authors suggest that using promotores or other lay health workers to provide reproductive health education may not be successful with male immigrants, especially due to cultural beliefs and norms. They recommend provider training to improve culturally appropriate care, and to create a

"client-provider partnership as a mechanism for Latino men to gain a sense of control over their own health by acting collaboratively."

37. Arnold M. P., Benton A., Loveluck J., et al. The People Living with HIV Stigma Index: Michigan, Wave I Findings, 2014-2016. UNIFIED-HIV Health and Beyond; 2016. The People Living with HIV Stigma Index Project documented experiences of internalized, social, and institutional stigma among individuals living with HIV in Detroit, Michigan. This report provides findings from Wave 1 of the study (2013-2016), which included a community survey and questionnaire with 70 individuals living with HIV in Detroit. Overall, 80% of individuals experienced negative feelings of self-blame and guilt about their positive serostatus; 73% experienced at least one form of social discrimination (e.g. rejection from potential partners); 20% experienced at least one form of institutionalized discrimination (e.g. healthcare, housing, insurance access); and 20% felt their rights as an individual living with HIV had been violated or abused. In addition, "79% of individuals living with HIV reported a reduction in psychological, physical, and material well-being, particularly with respect to depression and anxiety, social engagement and support, and physical self-care (e.g., sleep, physical activity)" as a result of experiences of stigma and discrimination. Findings suggested that experiences of stigma differed for some communities, with individuals of lower socioeconomic status, individuals engaged in sex work, and individuals with a history of incarceration experiencing more consequences as a result of HIV-related stigma. Some differences also existed by age and race. The report also details where people living with HIV and experiencing stigma turn for support. In addition, stigma contributes to depression, anxiety, loss of income, isolation, suicide ideation and attempts, and substance use. Specific to criminalization, the authors stated that, "stigma also fuels the HIV criminalization laws that are in most cases outdated, and puts a cumbersome burden on people living with HIV not to disclose their status, out of fear of future prosecution." As a result, nearly 60% stated that they would "probably not or definitely not" be given a fair hearing in the Michigan court system, suggesting a high level of distrust for a fair trial if accused of non-disclosure. Higher levels of distrust were reported for individuals that had a higher stigma fear score (22% of individuals with a low stigma fear score perceived the criminal justice system as unfair compared to 65% of individuals with a high stigma fear score). In addition, 81% of respondents felt it was reasonable for an individual not to get tested for HIV out of fear of being prosecuted, 51% felt it was reasonable to delay care based on fear of prosecution; and 46% felt it was reasonable not to disclose HIV status for fear of being prosecuted.

38. American Psychological Association. Evidence-Based Practice in Psychology: APA Presidential Task Force on Evidence-Based Practice. 2006;61(4):271-285.

The American Psychological Association (APA) created a policy indicating that the evidencebase for a psychological intervention should be evaluated using both efficacy and clinical utility as criteria. The Association President appointed the APA Presidential Task Force on Evidence-Based Practice and the task force published this document with the primary intent of describing psychology's commitment to evidence-based psychological practices. This document, though, also references many research articles providing evidence for the efficacy of a number of psychological treatments and interventions. The reference list for this document highlights the growing body of evidence of treatment efficacy from the 1970s through 2006. Note that this does not indicate that all treatments are effective, but rather than there is a very large body of evidence supporting that evidence-based treatments are available.

39. R Chou, S Selph, T Dana, et al. Screening for HIV: systematic review to update the U.S. Preventive Services Task Force recommendation. Evidence synthesis No. 95. *Agency for Healthcare Research and Quality.* 2012.

The U.S. Preventive Services Task Force (USPSTF) is an independent panel of experts who systematically reviews the evidence and provides recommendations that are intended to help clinicians, employers, policymakers, and others make informed decisions about health care services. This review, which focused benefits and harms of screening for Human Immunodeficiency Virus (HIV) in adolescents and adults, included randomized clinical trials and observational studies. Findings indicate that screening for HIV is accurate, screening only targeted groups misses a large number of cases, and that antiretroviral therapy (ART) reduces the risk death and sexual transmission of HIV.

40. Washington State Department of Health Office of Infectious Disease Assessment Unit. Washington State HIV Surveillance Report. 2018.

In 2018, there were approximately 14,000 individuals living with HIV in Washington State. The number of new cases of HIV in Washington State remained stable from 2013 to 2017, with an average of 6.15 new cases of HIV per 100,000 people. King County is the only county with new HIV case rates above the state rate (11.12 cases per 100,000 people). Pierce, Mason, Chelan, and Clark Counties have rates similar to the state rate (6.19, 5.38, 5.21, and 5.14 cases per 100,000 people, respectively). Approximately 89% of individuals living with HIV are engaged in care, and 80% of individuals living with HIV have a suppressed viral load. In 2016, there were 164 deaths among cases of HIV infection. In 2017, there were 445 new cases of HIV. Approximately 77% of new cases were among cis-gender males, 22% among cis-gender females, 1% among transgender females, and 0% among transgender males. Most cases (36%) were among individuals aged 25-34. The majority of new cases (53%) were among men having sex with men. By race/ethnicity, 43% of new cases were among Whites, 26% were among Blacks, and 21% were among Hispanics. Foreign-born Blacks had the highest rate of new HIV cases, with 123.3 cases per 100,000 individuals. The rates for Blacks (both foreign-born and U.S. born) and Hispanics (foreign-born) were higher than the state rate. Forty-nine percent of new HIV cases occurred in King County.

41. Hasenbush Amira. HIV Criminalization in Georgia Penal Implications for People Living with HIV/AIDS. Los Angeles, California: The Williams Institute January 2018 2018.

This report describes Georgia's statute which outlines seven HIV-related criminal offenses under state law— (1) Ga. Code Ann. § 16-5-60(c): reckless conduct by a person living with HIV—this includes offenses related to sex work, needle sharing, sexual exposure, and blood and tissue donation—and (2) Ga. Code Ann. § 16-5-60(d): assault on a law enforcement or corrections officer with intent to transmit HIV or hepatitis. The study provides an understanding of the enforcement of HIV criminalization laws in Georgia and assesses preliminary findings indicating disparities between subpopulations. Researchers contacted Georgia Crime Information Center at the Georgia Bureau of Investigation for access to criminal history record information (CHRI) data (enactment through 3rd quarter 2017). CHRI data document all interactions with the

criminal justice system—arrest through convictions. Overall, there were 571 HIV-related arrests (representing 543 people) in Georgia from 1988 to September 2017. Data indicate almost no enforcement prior to 1997, with an average of 27 HIV-related arrests annually. Arrests under HIV-related statutes occurred in 79 out of 159 counties in Georgia. "People living with HIV outside of metropolitan Atlanta were three times as likely to be arrested for an HIV-related offense as those within the metropolitan Atlanta area." Additionally, in some smaller counties, as many as 10% of the residents living with HIV had experienced an HIV-related arrest. "The counties with the highest arrest rates among people living with HIV were mostly rural counties clustered in the northern part of the state." Sixty-three percent of those arrested under an HIVrelated offense were Black, and Black men and Black women were more likely to be arrested for HIV-related offenses (46% and 16%, respectively) than their white counterparts (26% of White males and 11% of White females). Authors note, "this disproportionality may have been reflective of disparate HIV rates among Black people in Georgia." White women appear to be the most disproportionately arrested group under HIV-related laws: they comprise 3% of the population of people diagnosed with HIV in Georgia, but were 11% of the HIV-related arrests in the state. Data show 13% of HIV-related arrests resulted in a conviction for HIV-related crime. When analyzed by race/ethnicity, results showed "Black men were nearly twice as likely to be convicted of the HIV-related offense as White men (16% versus 9%, respectively)." These results were statistically significantly different from what was expected (p=0.01). Additionally, "White men were more likely than Black men to be convicted of the non-HIV-related offenses and not the HIV-related offense (24% versus 15%, respectively)." When looking at concurrent offenses and convictions, "Incidents involving sex work were both significantly more likely to result in a conviction for reckless conduct and were also more likely to result in a conviction for some other offense (usually a sex work offense) if they were not convicted of reckless conduct. Concurrent sex work incidents were also much less likely to result in no conviction than incidents that did not also involve sex work (26% versus 71%, respectively)." Additionally, concurrent sex work incidents were more likely to involve women, particularly Black women, than non-sex work incidents. Limitations of this research include potential data entry errors (not uniform throughout records, required deciphering data); lack of information regarding sexual orientation and gender minority status; bias in the collection of data on race/ethnicity (officer presumption, no reported data for Latino or Latina individuals) resulting in misclassification. These results add to growing analyses that "indicate existing estimates of national HIV criminalization rates are highly underestimated."

42. Hasenbush Amira. HIV Criminalization in Florida Penal Implications for People Living with HIV/AIDS. Los Angeles, California: The Williams Institute October 2018 2018. This report describes Florida's laws which criminalize people living with HIV and other sexually transmitted diseases (STDs) in the contexts of sex work, nonconsensual sex offenses, donation of blood and other bodily products, and consensual sex without disclosure. The author notes, under Florida law "criminal transmission of HIV" does not require any actual transmission to trigger criminal penalties and does not reflect the preventive methods to reduce transmission risk. Furthermore, none of the laws require any intent to transmit. The study provides an understanding of the enforcement of HIV criminalization laws in Florida and assesses preliminary findings indicating disparities between subpopulations. Researchers contacted Criminal Justice Information Services at the Florida Department of Law Enforcement for access to criminal history record information (CHRI) data (1986 through end of 2017). CHRI data

document all interactions with the criminal justice system—arrest through convictions. Overall, there were 874 HIV- or STD-related arrests (representing 614 people arrested specifically for an HIV-related offense) in Florida from 1986 through 2017. Over the same period, 210 incidents involved STDs other than HIV. Data indicate almost no enforcement prior to 1993, with an average of 36 HIV-related arrests involving an average 32 people annually. Arrests under HIVrelated statutes occurred in 47 out of 67 counties in Florida. However, 76% of the HIV-specific incidents occurred in 8 counties. For example, Duval County is home to only 6% of the people living with HIV in Florida, but 23% of all HIV-related arrests in the states occurred there. Notably, white men never exceeded 31% of HIV-specific arrests in any of the top 8 counties (range 6%-31%). Forty-three percent of those arrested under an HIV-related offense were Black, and none of those arrested were recorded as Latino/a. As 23% of Florida's population living with HIV are Latino/a, "it is possible that the exclusive use of Black and White racial categories is more a product of a lack of attention to detail in record keeping, and not a perfectly accurate reflection of the racial/ethnic makeup of those who had contact with the criminal system related to their HIV." Black men were more likely to be arrested for HIV-related offenses than their White counterparts (22% versus 17%, respectively). Over half (56%) of all individuals arrested under an HIV-related offense were women, despite only comprising 27% of people living with HIV in Florida in 2017. White women appear to be the most disproportionately arrested group under HIV-related laws: they comprise 4% of the population of people diagnosed with HIV in Florida, but were 39% of the HIV-related arrests in the state. "Black women were also overrepresented among HIV-related arrests when compared to the underlying population of people living with HIV." Further analysis showed disproportionality (by race and sex) varied by county. Data show 35% of HIV-related arrests resulted in a conviction for HIV-related crime. "People convicted of HIV exposure were sentenced to a median of three years." When analyzed by race/ethnicity and sex, results showed "clear disparities emerged in the context of sex work [...] Black women (60%) were the most likely to be convicted of an HIV-specific offense in sex work offenses." Meanwhile, in HIV exposure incidents that did not involve sex work, "Black women were the least likely to be convicted of an HIV offense (in only 3% of all cases), and Black men were the most likely to be convicted (in 30% of all cases)." Additionally, "in the rare cases where there appeared to be a 'downgrade' to an STD conviction instead on [sic.] an HIV conviction, it only occurred for White people." Finally, "sex work incidents were twice as likely as other exposure incidents to result in a conviction for an HIV or STD offense [44% versus 22%, respectively] and half as likely to result in individuals being released without a conviction [32% versus 64%, respectively]." Overall, Florida data point to some race-, sex-, and geographic-based disparities in the application of these laws. Limitations of this research include potential data entry errors (not uniform throughout records, required deciphering data); lack of information regarding sexual orientation and gender minority status; bias in the collection of data on race/ethnicity (officer presumption, no reported data for Latino or Latina individuals) resulting in misclassification. These results add to growing analyses that "indicate existing estimates of national HIV criminalization rates are highly underestimated." Overall, the study found that Florida's laws that criminalize activity by people who are know that they are living with HIV: disincentives testing; are being used to treat sex workers more harshly than others, which disproportionately affect women, particularly Black women; and may be enforced differently based on geographic region. Future research should look at the distinct experiences of gender and sexual minorities living with HIV who have engaged with Florida's criminal system. In addition, qualitative and quantitative studies should be undertaken to understand the

experiences of those impacted by these statutes and the mental health, emotional, and structural consequences of those experiences.

43. Hasenbush Amira, Miyashita Ayako, Wilson Bianca D.M. HIV Criminalization in California Penal Implications for People Living with HIV/AIDS. Los Angeles, California: The Williams Institute December 2015 2015.

This report describes California's four HIV-specific criminal laws and one non-HIV-specific criminal law that criminalizes exposure to any communicable disease: Cal. Penal Code § 647f (solicitation while HIV positive), Cal. Health & Safety Code § 120291 (exposure to HIV with intent to transmit), Cal. Penal Code § 12022.85 (sex offense sentence enhancement for HIVpositive status in nonconsensual sex crimes) and Cal. Health & Safety Code § 120290 (misdemeanor exposure to any communicable disease). The study provides an understanding of the enforcement of HIV criminalization laws in California and assesses preliminary findings indicating disparities between subpopulations. Researchers contacted the California Department of Justice and requested access to criminal offender record information (CORI) data (enactment through June 2014). CORI data document any contact with the criminal system—arrest through convictions. "Overall, 800 people came into contact with the California criminal system [in 1,174 separate incidents] from 1988 to June 2014 under an HIV-related law or under the misdemeanor exposure law as it related to a person's HIV-positive status." Specifically, 753 people (1,113 incidents) came into contact for felony solicitation, 30 people (33 incidents) for exposure with intent to transmit, 31 people (35 incidents) for non-consensual sex offense sentence enhancement, and 5 people (8 incidents) for exposure to communicable disease (limited to known HIV). Ninety-five percent of all HIV-specific criminal incidents impacted people engaged in sex work or people suspected of engaging in sex work. Enforcement was highest from 1995 to 2004, with a peak of 70 arrests in 2000. In 2013, 17 people had HIV-related criminal contact (lowest number since 1991). Black people and Latino/as made up 67% of the people who came into contact with the criminal justice system based on their HIV, but just 51% of those living with HIV and AIDS are Black and Latino/a. Furthermore, women were disproportionately represented among those HIV-positive individuals who came into contact with the criminal justice system (43%) compared to the proportion of people living with HIV in California who are female (13%). "Black women and White women make up 4% and 3% respectively of the population of people diagnosed with HIV in California, but 21% and 15% respectively of the population of people who had contact with the criminal justice system related to their HIV status." Meanwhile, "White men make up 40% of the population of people diagnosed with HIV in California, but only 16% of those who had contact with the criminal justice system related to their HIV status." Moreover, Black men, Black women, and White women (to a lesser degree) disproportionately experienced multiple HIV-specific criminal incidences. Of arrests for HIV-specific criminal incidents related to HIV, 33% resulted in charges, 100% of incidents with HIV-specific charges resulted in conviction for at least one of the HIV-specific charges, and 90% of convictions were sentenced to immediate confinement. Specifically, people convicted of exposure to HIV with intent to transmit were sentenced to an average of 4.5 years, and those living with HIV convicted of the misdemeanor exposure law were incarcerated for 45 to 90 days. "Across all HIV-related crimes, White men were significantly more likely to be released and not charged (in 61% of their HIV-specific criminal incidents) than expected, and Black men (38%), Black women (44%) and White women (39%) were significantly less likely to be released and not charged." Data suggest some race- and sexbased disparities in the application of California's laws. The analysis was limited by lack of information about sexual orientation and gender minority status. Additionally, unclear or undecipherable data were excluded from the analysis. Authors noted some race- and sex-based disparities in the application of California's laws, however future research is needed to identfy root cause9s) for data-informed policy interventions.

44. Small Area Demographic Estimates by Age, Sex, Race and Hispanic Origin (2010-2018). In: Management WSOoF, ed. Olympia, Washington2019.

This Washington State dataset from the Office of Financial Management presents estimates of April 1, 2018 population by age, sex, race, and Hispanic origin.

45. **Prather Cynthia, Fuller Taleria R., Marshall Khiya J., et al. The Impact of Racism on the Sexual and Reproductive Health of African American Women.** *Journal of Womens Health (Larchmt).* 2016;25(7):664-671.

Prather et al. use the socioecological model to describe racism and its effect on African American women's sexual and reproductive health. Authors examine the historical context of racism (e.g., medical experimentation) as well as institutional racism (society), personally mediated racism (neighborhood/community), and internalized racism (family/interpersonal supports and individual). Authors concluded, "[i]n both historical and contemporary contexts, race-based mistreatment has been shown to place African American women at increased risk for HIV/STIs, pregnancy-related complications, and early mortality."

46. **Paz-Bailey Gabriela, Noble Meredith**, Salo Kathryn, et al. Prevalence of HIV Among U.S. Female Sex Workers: Systematic Review and Meta-analysis. *AIDS Behav.* 2016;20(10):2318-2331.

Paz-Bailey et al. conducted a systematic review of published studies reporting HIV prevalence among female sex workers in the U.S. Authors included 14 studies published from 1987 to 2013 that reported HIV prevalence for a total of 3,975 adult female sex workers. However, only 2 of the 14 studies were conducted after 2006. "The pooled estimate of HIV prevalence was 17.3 % (95 % CI 13.5–21.9 %); however, the prevalence of HIV across individual studies varied considerably (ranging from 0.3 to 32 %) and statistical heterogeneity was substantial (I2 = 0.89, Q = 123; p < 0.001)." Overall, authors concluded "the available evidence does suggest that HIV prevalence among this vulnerable population is high."

47. Turney Kristin. Stress Proliferation across Generations? Examining the Relationship between Parental Incarceration and Childhood Health. *Journal of Health and Social Behavior*. 2014;55(3):302-319.

Turney conducted a multivariate analysis that incorporates children into the stress process paradigm to examine the relationship between parental incarceration and children's health. The author used data collected through the 2011-2012 National Survey of Children's Health (NSCH), a cross-sectional probability sample of non-institutionalized children ages 0-17 years in the U.S. Adjusted for demographic, socioeconomic, and familial characteristics, the analyses show parental incarceration is independently associated with 5 of 19 health conditions considered: learning disabilities, Attention Deficit Disorder/Attention Deficit Hyperactivity Disorder, behavioral or conduct problems, developmental delays, and speech or language problems. Results suggest parental incarceration is more detrimental to behavioral or conduct problems and developmental delays than parental divorce or separations. Findings add to the literature that children's health disadvantages may be an unintended consequence of mass incarceration. In addition, household member mental health problems are associated with 15 of 19 indicators of children's health. The use of a cross-sectional dataset made it impossible to determine whether the association is due to shared genetics, shared environments, or some combination of the two. Further research is needed to determine how mental health, incarceration, and children's mental health are associated.

48. Authority Health Care. Health Care Services and Supports- Incarceration Overview. 2017.

In 2017, Substitute Senate Bill 6430 directed Health Care Authority to suspend (rather than terminate) Medicaid coverage for incarcerated individuals in Washington State. While suspended, incarcerated individuals are still covered for inpatient hospitalizations longer than 24 hours, and full coverage is automatically reinstated upon release. If incarcerated individuals do not have insurance, they are enrolled in Medicaid prior to release and House Bill 1290 (passed in 2005) required Health Care Authority to expedite enrollment so that incarcerated individuals have insurance the date they are released.

49. Nachega Jean B, Uthman Olalekan A, Peltzer Karl, et al. Association between antiretroviral therapy adherence and employment status: systematic review and metaanalysis. *Bulletin of the World Health Organization*. 2015;2015(93):29-41.

Nachega et al. conducted a meta-analysis of 28 studies (published between 1996 and 2014) to assess the association between the employment status of individuals living with HIV and adherence to antiretroviral therapy (ART). Authors searched databases for studies published between January 1980 and September 2014. Grey literature sources were also reviewed. Authors used a random-effects model to pool study data on the association between being employed and adhering to ART. They evaluated between-study heterogeneity and sources of bias. Overall, the meta-analysis included data for 8,743 individuals living with HIV from 14 countries. The study found, "The overall pooled odds ratio (OR) for the association between being employed and adhering to ART was 1.27 (95% confidence interval, CI: 1.04–1.55)." The association was significant for studies (n = 7) from low-income countries (OR: 1.85, 95% CI: 1.58–2.18) and studies (n = 10) high-income countries (OR: 1.33, 95% CI: 1.02-1.74). However, results were not significant for studies (n = 11) of middle-income countries (OR: 0.94, 95% CI: 0.62–1.42). Results also showed that "studies published after 2011 and larger studies showed less association between employment and adherence than earlier and small studies, respectively." Authors concluded, "Employed HIV-infected individuals, particularly those in low- and high-income countries, were more likely to adhere to ART than unemployed individuals." However, they recommend further research assess the mechanisms by which "employment and ART adherence affect each other and on whether employment-creation interventions can positively influence ART adherence, HIV disease progression and quality of life."

50. Strully Kate W. Job Loss and Health in the U.S. Labor Market. *Demography*. 2009;46(2):221-246.

Strully used data from the U.S. Panel Study of Income Dynamics (PSID) to "estimate the effects of job loss on health, reducing the risk of selection bias by first isolating job losses that resulted from establishment closures, and then focusing on specific health conditions that should be the

most sensitive to a recent stressor like job loss." Data analyzed in the study were from the 1999, 2001, and 2003 waves of the PSID, a nationally representative longitudinal survey of American families. The dataset is "well-suited to this analysis because it provides detailed employment information and regularly collects data on health." The author also considered potential differences across occupations (i.e., blue-collar jobs vs. white-collar jobs). "Isolating respondents who held blue-collar (i.e., operative or labor) or white-collar (i.e., professional or managerial) jobs in January of the year prior yields 3,359 white-collar respondents (5,954 person-years) and 1,851 blue-collar respondents (2,870 person-years)." The author used 4 mutually exclusive categories for job losses/separations (i.e., no-fault job loss; fired/laid off; voluntary job separation; and miscellaneous job separation). Health measures included 3 variables: fair/poor health, likely health conditions (i.e., stroke, hypertension, heart disease, heart attack, arthritis, diabetes, and emotional/psychiatric problems should all be sensitive to recent job losses), and unlikely health conditions (i.e., lung disease, cancer, and loss of memory or mental ability should not be sensitive to a recent event like job loss). The author controlled for: age, gender, race, education, family income, health insurance, and occupational category. Changes in marital/relationship status and moving to a new residence were more challenging to control for within the analysis. Modeling results showed, "Losing a job because of an establishment closure increased the odds of fair or poor health by 54%, and among respondents with no preexisting health conditions, it increased the odds of a new likely health condition by 83%." The author noted, results suggest "there are true health costs to job loss, beyond sicker people being more likely to lose their jobs." For respondents who "lost jobs because of establishment closures but were reemployed by the survey do not appear to have assessed their health in worse terms than their stably employed counterparts; however, they do appear to have faced an increased risk of new likely health conditions." Additionally, the analysis provides "no evidence that job loss effects differ for white- and blue-collar workers."

51. Definitions, RCW 9A.04.110 Revised Code of Washington, §(4)(c).

RCW 9A.04.110 provides definitions for the chapter. RCW 9A.04.110(4)(c) defines "Great bodily harm" as bodily injury which creates a probability of death, or which causes significant serious permanent disfigurement, or which causes a significant permanent loss or impairment of the function of any bodily part or organ.

52. Arrest without warrant, RCW 10.31.100 Revised Code of Washington.

RCW 10.31.100 establishes the instances in which law enforcement officers may make an arrest without a warrant. Additionally, a police officer may arrest an individual without a warrant for committing a misdemeanor or gross misdemeanor only when the offense in committed in the presence of an officer. However, RCW 10.31.100(1-11) provide exceptions to the rule.

53. Evidentiary sufficiency, 9.94A.411 Revised Code of Washington.

Evidentiary sufficiency (RCW 9.94A.411[2][a]) sets the standard of a decision to prosecute as, "Crimes against persons will be filed if sufficient admissible evidence exists, which, when considered with the most plausible, reasonably foreseeable defense that could be raised under the evidence, would justify conviction by a reasonable and objective fact finder."

54. Criminal attempt., RCW 9A.28.020 Revised Code of Washington.

RCW 9.28.020 (Criminal attempt) states, "(1) A person is guilty of an attempt to commit a crime if, with intent to commit a specific crime, he or she does any act which is a substantial step toward the commission of that crime." Furthermore, subsection (2) states, "If the conduct in which a person engages otherwise constitutes an attempt to commit a crime, it is no defense to a prosecution of such attempt that the crime charged to have been attempted was, under the attendant circumstances, factually or legally impossible of commission." The statute goes on to establish an attempt to commit a crime as: "(a) Class A felony when the crime attempted is murder in the first degree, murder in the second degree, arson in the first degree, child molestation in the first degree, indecent liberties by forcible compulsion, rape in the first degree, rape of a child in the first degree, or rape of a child in the second degree; (b) Class B felony when the crime attempted is a class A felony other than an offense listed in (a) of this subsection; (c) Class C felony when the crime attempted is a class B felony; (d) Gross misdemeanor when the crime attempted is a class C felony; (e) Misdemeanor when the crime attempted is a gross misdemeanor or misdemeanor."

55. Sugie Naomi F., Turney Kristin. Beyond Incarceration: Criminal Justice Contact and Mental Health. *American Sociological Review*. 2017;82(4):719-743.

The authors examined associations between criminal justice contact and mental health using data from the National Longitudinal Survey of Youth (NLSY97). The nationally representative survey of a contemporary cohort includes information about criminal justice contact (including arrest, conviction, and incarceration) and mental health over time. Analysis showed arrest and incarceration—but not conviction—are independently associated with poor mental health. Arrests accounted for nearly half of the association between incarceration and mental health. Authors propose uncertainty and anticipatory stress are primary mechanisms that worsen mental health and deserve further study. Researchers document that criminal justice contact is socially patterned and is more common among non-Hispanic blacks than non-Hispanic whites and Hispanics. However, the associations between criminal justice contact and mental health are similar across racial/ethnic groups. Researchers found respondents' previous exposure to disadvantaged ecological contexts (i.e. counties with high proportions of residents with incomes below the poverty, unemployed civilians, female-headed households, and households receiving public assistance income) had negative consequences for mental health. The authors asserts the importance of mental health for other life course outcomes (e.g. physical health, socioeconomic status, children's wellbeing) and conclude that the consequences of criminal justice contact may extend beyond mental health and have broad intra- and inter-generational consequences.

56. Natapoff Alexandra. Misdemeanor Decriminalization. *Vanderbilt Law Review*. 2015;68(4):63.

This law review found that full decriminalization, defined as reclassification of misdemeanors as civil infractions, of non-violent offences may reduce arrests, days of incarceration, and fines associated with offenses like driving while license suspended in the third degree (DWLS 3). However, Natapoff noted outcomes may vary dependent on how local jurisdictions apply the provisions. Defendants with the resources to pay fines can terminate contact with criminal justice system quickly and without the lasting effects of a criminal record. However, because Washington State incarcerates defendants for failure to pay fines, a fine-only model may translate into jail time for indigent individuals through the use of contempt proceedings (pay or appear). Incarceration due to failure to appear may exacerbate disparities in incarceration rates

by disproportionately affecting people with low-incomes and people of color who may be less likely to find the time and transportation required to appear than offenders with more time and resources. Failure to pay may also negatively impact an individual's credit rating and their ability to rent an apartment, buy a car, or secure employment. An individual's records (arrest and criminal) and/or inability to reinstate their driver's license may also negatively affect employment (current and future prospects). Jurisdictional use of citations to measure performance or fines to fund the criminal justice systems and general budgets could exacerbate disparities by further racializing enforcement and serving as a regressive tax.

57. Yi Youngmin, Turney Kristin, Wildeman Christopher. Mental Health Among Jail and Prison Inmates. *American Journal of Men's Health*. 2017;11(4):900-910.

Yi et al. analyzed a sample (n = 3,139) from the Fragile Families and Child Wellbeing Study (FFCWS), a longitudinal survey commonly used to study the individual and spillover consequences of incarceration, to assess how the relationship between current incarceration and self-reported mental health varies across jail incarceration and prison incarceration. Researchers found fathers incarcerated in jails "...have higher odds of depression (OR=5.06), life dissatisfaction (OR = 3.59), and recent illicit drug use (OR=4.03)" compared to those not incarcerated. While fathers incarcerated in prisons "...have higher odds of life dissatisfaction (OR=3.88) and lower odds of heavy drinking (OR=0.32) compared with those not incarcerated." Results confirm the negative associations between incarceration and mental health and provide new insight into between-facility differences in mental health of currently incarcerated fathers. Authors conclude that further research is needed to better understand the effects of incarceration in jails and the implications for the well-being of current and former inmates' children and families.

58. Sufrin C. B., Kolbi-Molinas A., Roth R. Reproductive Justice, Health Disparities, And Incarcerated Women in the United States. *Perspectives on Sexual and Reproductive Health.* 2015;47(4):213-219.

In this commentary, Sufrin et al. discuss reproductive health outcomes for incarcerated women in the U.S. In general, the number of women incarcerated is increasing faster than then number of men incarcerated (e.g. number of women incarcerated increased by 30% versus 13% for men between 2000 and 2013), women of color are incarcerated at rates higher than white women (e.g., black women are incarcerated at a rate 2.3 times that of white women), and the majority of incarcerated women (70%) are convicted of non-violent crimes. 74% of incarcerated women are of reproductive age and between 3% and 5% are pregnant. Incarcerated pregnant women have a high risk for poor birth outcomes, including preterm labor, low birth weight babies, and stillbirth. Women who are incarcerated have high rates of sexually transmitted diseases (STDs), unintended pregnancy, abortion, histories of trauma and physical and sexual abuse, substance use, and mental health disorders than the general public. Incarceration puts women at increased risk for violence, sexual assault, injury, communicable disease, poor nutrition, and poor living conditions. They explain that "imprisonment infringes on women's constitutionally protected reproductive rights by confining them during their reproductive years, denying them access to necessary medical care, subjecting them to substandard medical care and separating them from their children." They also note that incarceration provides an opportunity for individuals to receive health care and the U.S. constitution "prohibits correctional officials and staff from 'intentionally denying or delaying access to medical care or intentionally interfering with

treatment once prescribed." Barriers to care for incarcerated women include, lack of required, national standards for medical care in prisons (standards developed by the American Public Health Association and National Commission on Correctional Health Care are optional); inconsistent care related to pregnancy care, contraception services, and abortion; policies restricting direct access to care (e.g. requiring a court order from a judge to authorize release for treatment); cost of care (e.g., some facilities require women to pay for care up front, pay for procedure, transportation, and staff time); transportation; state laws (e.g., one third of state prison systems lack a written abortion policy, state requirements on waiting periods for abortions, use of restraints and shackling); reliance on correctional facility staff as "gatekeepers" to access care; untrained staff (e.g., relying on untrained guards to determine when medical attention is required); geography (e.g., 89% of US counties lack an abortion provider); inflexible schedules (e.g., rest periods, mealtimes); lack of data (e.g., no national data about how many women are pregnant or give birth while incarcerated); and fragmented care (upon entry, during incarceration, and upon release). The authors also note that these barriers are aggravated by "unique power dynamics, limited autonomy, and coercive conditions that are inherent in the prison and jail environment." For example, "more than 100 women in California's prison system were unlawfully sterilized from 2006 to 2010" and communities of color have experienced histories of eugenics. Incarcerated women also experience reproductive coercion by being "prevented from having abortions, pressured into using birth control or shackled to the rail of a hospital bed during childbirth." Recommendations to reduce barriers to care include implementing community-based alternatives for women in the criminal justice system who are pregnant or postpartum and providing family planning counseling and access to contraception for women who are interested prior to release.

59. Ferszt G. G., Clarke J. G. Health care of pregnant women in U.S. state prisons. *J Health Care Poor Underserved*. 2012;23(2):557-569.

Ferszt and Clarke conducted surveys with 19 state correctional facilities to evaluate health care practices for pregnant women in state prisons. Past research has shown that incarcerated women are often in worse physical and mental health than the population and have higher rates of sexually transmitted infections (STIs), human immunodeficiency virus (HIV)), hepatitis B and C, chronic diseases, mental health disorders, and experiences of physical and psychological violence. Approximately 5% to 6% of incarcerated women are pregnant when they enter correctional facilities. The authors state that, "prior to incarceration, most pregnancies of incarcerated mothers are unplanned and compromised by a lack of prenatal care, poor nutrition, domestic violence, drug and alcohol abuse, high STD rates, HIV, hepatitis C, human papillomavirus (HPV), homelessness, psychiatric illness, physical and/or sexual abuse, and exposure to potentially teratogenic psychotropics." Pregnant women who are incarcerated often have poor birth outcomes and maternal health outcomes due to conditions both before and during incarceration. The authors also state that there is no mandatory accreditation that requires correctional facilities to adhere to standards of care for incarcerated pregnant women and, as a result, health care practices for pregnant women vary by state. Overall, Ferszt and Clarke found that most correctional facilities do not follow recommended standards of care for incarcerated pregnant women, and that women receive substandard care during pregnancy. While the surveys in this study were completed with wardens at state correctional facilities, some of the barriers described could be barriers to women accessing care, including limited equipment (e.g. fetal monitors), limited service availability (e.g. prenatal education programs, childbirth education

classes), difficulty monitoring high-risk pregnancies, lack of continuity between prison and hospital systems (e.g. if women are required to deliver at a local hospital), prioritization of security over care, state policies (e.g. some states permit restraining women during pregnancy), and facility conditions (e.g. not permitting nutritional, work schedule, or sleeping change and accommodations). The authors recommend making doula services available to incarcerated individuals before, during, and after birth and to help women navigate the health care system. They also recommend adopting minimum standards of treatment (e.g. United Nations), considering alternative sentencing (e.g. halfway houses or residential community-based facilities), and prohibiting the use of restraints for incarcerated pregnant women.

60. Gynecologists American College of Obstetricans and. Reproductive Health Care for Incarcerated Women and Adolescent Females: Committee Opinion, Committee on HealthCare for Underserved Women. 2012.

This report by the American College of Obstetricians and Gynecologists, Committee on Health Care for Underserved Women presents information about reproductive health outcomes and access to care for incarcerated women and adolescent females. ACOG states that incarcerated women and adolescent females disproportionately experience sexually transmitted infections (STIs), including chlamydia, gonorrhea, and human immunodeficiency virus (HIV). In addition, previous research has found that approximately 6% to 10% of incarcerated women are pregnant. Both STIs and pregnancies may result from sexual assault and violence during incarceration by other inmates or staff, with rates of sexual victimization between 5.1% to 10.8% at some prisons. ACOG reports that "although most state and federal prisons provide some level of care to prisoners, availability and access to medical care in jails is variable." Barriers to care include lack of care continuity (especially in jails and at release), preventive care and health education, care tailored to women, funding (e.g. Medicaid funding cannot be used to provide care to adults or adolescents in secure confinement), and federal or state accreditation for correctional health facilities or mandatory standards for prisons. They state that "care for incarcerated women and adolescent females should be provided using the same guidelines as those for women and adolescent females who are not incarcerated." To improve access to and quality of care for incarcerated women and adolescent females, AGOC recommends training medical students and correctional facility staff in appropriate care for inmates, providing preventive care services, ensuring access to qualified health care providers, providing a continuum of care (between initial screenings, in-house services, referrals, and release), providing appropriate and adequate care (e.g. promoting breastfeeding), and ensuring protection from sexual abuse while incarcerated.

61. Ramaswamy M., Lee J., Wickliffe J., et al. Impact of a brief intervention on cervical health literacy: A waitlist control study with jailed women. *Prev Med Rep.* 2017;6:314-321.

Ramaswamy et al. conducted a waitlist control study with 188 incarcerated women in three Kansas City jails aimed at improving health literacy related to cancer screening. In general, incarcerated women have higher rates of cervical cancer and abnormal pap smears and lower rates of pap screening compared to women without criminal justice histories. Incarcerated women have cervical cancer rates four to five times higher than the general population, and are at greater risk due to low socioeconomic status, low education, tobacco use, early sexual initiation, sexual and physical trauma, and high rates of Humanpapilloma Virus (HPV) and other sexually transmitted infections (STIs). Prior research by Ramaswamy found that "women's long trauma histories tend to impact on their beliefs about Pap screening- that is, an expectation of

fear, discomfort, and questionable safety during gynecological exams" and self-efficacy for screening or follow-up "may be compromised by drug use; mental health problems; trading sex for money, drugs or shelter; and a lifetime of cycling in and out of the criminal justice system." The authors also found that women experienced trauma, drug use, sex work, poverty, lack of health insurance, stigma, and on-going criminal justice involvement. Based on pre- and post-intervention surveys, the authors found only 38.8% of women that completed the survey had health insurance. The authors recommended expanding Medicaid coverage so that women can access health insurance upon release from jail.

62. Rizk R., Alderman E. Issues in gynecologic care for adolescent girls in the juvenile justice system. *J Pediatr Adolesc Gynecol.* 2012;25(1):2-5.

In 2000, adolescent girls comprised 28% of adolescents in the juvenile justice system. Rizk and Alderman provide a commentary about the reproductive health of adolescent girls in the juvenile justice system. Adolescent girls in the juvenile justice system are at high risk for medical, emotional, and gynecological disorders due to histories of trauma and abuse (sexual abuse and neglect), learning disabilities, substance use, and high-risk sexual practices (early sexual initiation, multiple partners, low use of contraception). Girls in the juvenile justice system often also self-identify as lesbian, bisexual, or questioning. Like adult facilities, there are no mandated, standard practices for providing health care at juvenile facilities. The National Commission on Correctional Health Care, American Academy of Pediatrics, and the Society for Adolescent Health and Medicine publish recommended standards, including gynecological services, vaccination, testing for sexually transmitted infections (STIs), prenatal care, contraception counseling, treatment of menstrual disorders, sexuality counseling, and trauma-related care due to physical or sexual abuse. The authors recommend that, "health care providers should promote and encourage healthy lifestyles with the aim of lowering their risk-taking behaviors, promote contraception and screen and treat sexually transmitted infections...it is important to encourage these girls to have a medical home" after release.

63. Washington State Department of Health Office of Infectious Disease Assessment Unit. Washington State HIV Fact Sheet | Women & HIV in Washington State. Tumwater, Washington: Washington State Department of Health; July 2014 2014.

This Washington State Department of Health fact sheet provides data from between 2009 and 2013. Most new female HIV cases in Washington during this time period were among Black and non-Hispanic women. HIV rates were highest among women belonging to a racial/ethnic minority. For example, HIV rates for non-Hispanic Black women were more than 30-times higher than those of non-Hispanic White women. Authors state, "Although many women are not sure how they became infected, most female HIV cases in Washington are believed to be the result of unprotected sex with an HIV-positive male partner."

64. Policy The Center for HIV Law and. HIV Criminalization in the U.S. A Sourcebook on State Fed HIV Criminal Law and Practice. Brooklyn, New York: The Center for HIV Law and Policy; 2019.

The Center for HIV Law and Policy developed the HIV Criminalization in the United States: A Sourcebook on State and Federal HIV HIV Criminal Law and Practice (Sourcebook) to outline punitive laws, policies, and cases affecting people living with HIV (PLHIV) and other communicable diseases. The Sourcebook addresses all 50 states, military, federal prisons, and

U.S. territories and was last updated through September 2019. It includes the text, related case law, and analysis of statutory provisions that: "1. criminalize non-disclosure of HIV status or exposure of a third party to HIV; 2. make exceptions to confidentiality and privacy rights of PLHIV; 3. provide for sentence enhancements for PLHIV convicted of underlying crimes such as prostitution and solicitation; and 4. require sex offender registration for PLHIV."

65. Definitions, 9.94A.030 Revised Code of Washington §48-49.

RCW 9.94A.030 (Definitions) defines "sexual motivation" as "that one of the purposes for which the defendant committed the crime was for the purpose of his or her sexual gratification." A felony with a finding of sexual motivation under RCW 9.94A.835 is deemed a "sex offense".

66. Special allegation—Sexual motivation—Procedures., RCW 9.94A.835 Revised Code of Washington.

According to RCW 9.94A.835(1), "The prosecuting attorney shall file a special allegation of sexual motivation in every criminal case, felony, gross misdemeanor, or misdemeanor, other than sex offenses as defined in RCW 9.94A.030 when sufficient admissible evidence exists, which, when considered with the most plausible, reasonably foreseeable defense that could be raised under the evidence, would justify a finding of sexual motivation by a reasonable and objective fact finder."

67. Adjustments to standard sentences, 9.94A.533 Revised Code of Washington, §(8)(af).

RCW 9.94A.533(8)(a-f) address adjustments to standard sentences for felony crimes committed on or after July 1, 2006, if the offense was committed with sexual motivation (RCW 9.94A.030). If the offense was committed with sexual motivation, then the following additional times shall be added: "(i) Two years for any felony defined under the law as a class A felony or with a statutory maximum sentence of at least twenty years, or both; (ii) Eighteen months for any felony defined under any law as a class B felony or with a statutory maximum sentence of ten years, or both; (iii) One year for any felony defined under any law as a class C felony or with a statutory maximum sentence of five years, or both; (iv) If the offender is being sentenced for any sexual motivation enhancements under (a)(i), (ii), and/or (iii) of this subsection and the offender has previously been sentenced for any sexual motivation enhancements on or after July 1, 2006, under (a)(i), (ii), and/or (iii) of this subsection, all sexual motivation enhancements under this subsection shall be twice the amount of the enhancement listed." According to RCW 9.94A.533(8)(b), "Notwithstanding any other provision of law, all sexual motivation enhancements under this subsection are mandatory, shall be served in total confinement, and shall run consecutively to all other sentencing provisions, including other sexual motivation enhancements, for all offenses sentenced under this chapter." Furthermore, "If the addition of a sexual motivation enhancement increases the sentence so that it would exceed the statutory maximum for the offense, the portion of the sentence representing the enhancement may not be reduced."