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Washington Offender Needs Evaluation: *Review and Examination of Reassessments*

In December 2017, the Washington State Department of Corrections (DOC) implemented a new dynamic risk and needs assessment—the Washington Offender Needs Evaluation (Washington ONE). The Washington ONE is used to classify individuals based on their risk of recidivism. Classifications from the assessment help inform decisions within DOC facilities for incarcerated persons and in the community for individuals under community supervision.

In 2021, the Washington State Institute for Public Policy’s (WSIPP) Board of Directors approved a contract with DOC to review the Washington ONE. The contract asks WSIPP to provide a review of the Washington ONE and similar correctional risk assessment instruments and to examine reassessments under the Washington ONE.

[Section I](#) provides an overview of Correction Risk Assessment Instruments. [Section II](#) describes different approaches to establishing risk level classifications. [Section III](#) discusses tradeoffs between predictiveness and classification comparability among subgroups. [Section IV](#) examines the Washington ONE reassessments including the rate of reassessment and changes in risk level classifications following reassessments. [Section V](#) concludes and discusses future research.

Summary

In December 2017, the Washington State Department of Corrections (DOC) implemented a new dynamic risk and needs assessment—the Washington Offender Needs Evaluation (Washington ONE). The Washington ONE is a dynamic risk and needs assessment used to inform case management for individuals under DOC jurisdiction.

The DOC contracted with WSIPP to review the literature on correctional risk assessments, including hierarchical classification systems. In addition, DOC asked WSIPP to examine the impact of reassessments on risk level classification changes since the instrument was introduced in 2017.

Our review of the literature found that the Washington ONE is generally consistent with national standards on the types of factors considered in the assessment. However, the hierarchical methods used to determine classifications are unique to Washington State. To date, information on the comparative accuracy of the Washington ONE is unavailable, but the report provides an overview of the national standards for reviewing accuracy and fairness in risk assessment instruments.

In general, most reassessments under the Washington ONE did not lead to a change in risk level classification (RLC). When reassessments did lead to a change, there were increases and decreases in RLC. Changes in RLC were driven by changes in many different domains.

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I. Correctional Risk Assessment Instruments

Risk assessment instruments (RAI) are tools used to inform practitioner decision-making by classifying individuals into risk categories. Many RAIs attempt to identify the likelihood of general recidivism (e.g., the likelihood that an individual will commit any new crime), while others attempt to identify the likelihood that an individual will commit a particular type of crime (e.g., the likelihood that an individual will commit a violent offense).

The types of information included in risk assessments and the ways that risk assessment classifications are used vary. This section provides an overview of the different types of risk assessment instruments, a review of characteristics that are unique to risk assessment instruments used in a corrections context, and a discussion of the development and implementation of Washington’s current DOC assessment—the Washington ONE. For a review of additional correctional RAIs, see [Appendix II](#).

Exhibit 1

Evolution of Risk Assessment Instruments

| | Description of risk prediction methods | Examples |
|-------------------|---|---|
| First generation | Unstructured clinical/professional judgments about the likelihood of offending behavior. Also include some structured clinical judgments. | HCR-20 |
| Second generation | Empirically based instruments that were developed atheoretically using mostly static risk factors. | Salient Factor Score; Violence Risk Appraisal Guide (VRAG) |
| Third generation | Empirically based instruments that use both static and dynamic risk factors or criminogenic needs based on theoretical foundations. | Level of Service Inventory-Revised (LSI-R) |
| Fourth generation | Empirically based instruments that include static and dynamic factors capturing risk, needs, and responsivity. Incorporate reassessments over time and are used to develop service plans, service delivery, and to monitor intermediate outcomes. | Correctional Assessment and Intervention System (CAIS); Correctional Offender Management Profiling for Alternative Sanctions (COMPAS) |

Note:

The typology of four risk assessment generations was developed by Bonta, J., & Andrews, D.A. (2007). Risk-need-responsivity model for offender assessment and rehabilitation. *Rehabilitation*, 6(1), 1-22.

Risk Assessment Instruments Over Time

Risk assessment instruments have evolved over time. RAIs are generally classified into four generations of instruments, described in [Exhibit 1](#).

During the 1960s through the 1980s, unstructured clinical judgments were frequently used to determine the “dangerousness” of individuals, primarily for purposes of making parole decisions under indeterminate sentencing structures.¹ Critics of unstructured clinical judgments focused on the low levels of accuracy and potential demographic disparities due to the subjective and inconsistent nature of these classifications.

During the 1990s, the criminal justice system saw a resurgence of RAIs. In contrast to previous RAIs, these instruments were empirically based, using algorithms developed on archival datasets to identify the statistical relationships between individual characteristics and the likelihood of reoffending, essentially using patterns identified in historical data to predict the likelihood of behaviors in current and future populations. By the 2000s, classical clinical predictions were largely replaced with structured and standardized assessment tools similar to instruments used in other fields such as calculating insurance premiums or college admissions.²

Concurrent with the resurgence of actuarial RAIs, many states shifted to more determinate sentencing structures, eliminating parole, increasing requirements for time served, and

implementing sentencing guidelines and/or mandatory minimum sentences. During this time, the use of RAIs began to shift away from decisions about release from incarceration (i.e., parole) and were increasingly integrated in earlier stages of the criminal justice system such as pre-trial confinement, sentencing, and correctional case management. As the use of RAIs changed, the methods used to develop the instruments and the types of factors included in the assessments also changed.

Risk-Needs-Responsivity Models

Actuarial RAIs evolved from models that strictly used static factors to more complex assessments considering both static and dynamic characteristics. In addition, actuarial tools expanded to include considerations of both risk and criminogenic needs.

The newest types of assessments (fourth generation) use both static and dynamic risks and needs to assess the likelihood of recidivism. Fourth-generation assessments are intended for use with case management and include reassessments to monitor changes in dynamic factors and subsequent risk levels over time. Fourth-generation assessments are often referred to as Risk-Needs-Responsivity (RNR) assessments as they also consider potential barriers to program effectiveness that may impact responsivity to treatment.

Research has identified eight different areas of risks and needs. [Exhibit 2](#) describes each of the eight domains and provides examples of associated risks and needs that may be considered in an RNR assessment. These eight components were derived from a wide array of criminological research analyzing correlates of recidivism.³

¹ Simon, J. (2005). Reversal of fortune: The resurgence of individual risk assessment in criminal justice. *Annu. Rev. Law Soc. Sci.*, 1, 397-421.

² Ibid.

³ Andrews, D.A., Bonta, J., & Wormith, J.S. (2006). The recent past and near future of risk and/or need assessment. *Crime & delinquency*, 52(1), 7-27.

Exhibit 2

Eight Primary Criminogenic Risk and Need Domains

| Factor | Risk | Dynamic need |
|--------------------------------|---|--|
| History of antisocial behavior | Early and continuing involvement in a number and variety of antisocial acts in a variety of settings | Build noncriminal alternative behavior in risky situations |
| Antisocial personality pattern | Adventurous pleasure seeking, weak self-control, restlessly aggressive | Build problem-solving skills, self-management skills, anger management and coping skills |
| Antisocial cognition | Attitudes, values, beliefs, and rationalizations supportive of crime; cognitive emotional states of anger, resentment, and defiance; criminal versus reformed identity; criminal versus anticriminal identity | Reduce antisocial cognition, recognize risky thinking and feeling, build up alternative less risky thinking and feeling, adopt a reform and/or anticriminal identity |
| Antisocial associates | Close association with criminal others and relative isolation from anticriminal others; immediate social support for crime | Reduce association with criminal others, enhance association with anticriminal others |
| Family and/or marital | Two key elements are nurturance and/or caring and monitoring and/or supervision | Reduce conflict, build positive relationships, enhance monitoring and supervision |
| School and/or work | Low levels of performance and satisfactions in school and/or work | Enhance performance, awards, and satisfactions |
| Leisure and/or recreation | Low levels of involvement and satisfactions in anticriminal leisure pursuits | Enhance involvement, rewards, and satisfactions |
| Substance abuse | Abuse of alcohol and/or other drugs | Reduce substance abuse, reduce the personal and interpersonal supports for substance-oriented behavior, enhance alternatives to drug abuse |

Notes:

The minor risk and/or need factors (and less promising intermediate targets for reduced recidivism) include the following: personal and/or emotional distress, major mental disorder, physical health issues, fear of official punishment, physical conditioning, low IQ, social class of origin, seriousness of current offense, and other factors unrelated to offending.

Source: Exhibit 2 is a reprint of Table 1 in Andrews, D. A., Bonta, J., & Wormith, J. S. (2006). The recent past and near future of risk and/or need assessment. *Crime & Delinquency*, 52(1), 7-27.

As a tool for case management, RNR assessments are based on three core principles.⁴

- 1) The Risk Principle—The level of treatment should be matched to an individual’s likelihood to re-offend with those who are at the highest risk being prioritized for treatment services.
- 2) The Need Principle—Assessments should identify criminogenic needs and treatment programs and services should target individuals’ needs.
- 3) The Responsivity Principle—Treatment and services should be provided in a way that recognizes differences in individuals’ abilities to learn based on their learning styles, motivation, abilities, and skills.

Research comparing different types of risk assessment instruments repeatedly finds that actuarial instruments produce more accurate predictions than clinical judgments.⁵

There are continuing concerns about the use of RNR instruments,⁶ namely the idea that persons should be treated individually and not based upon their group membership, the methods used to define predictive accuracy, and the potential for demographic disproportionality in classification outcomes and predictive validity. [Section III](#) provides a more in-depth discussion of these concerns.

⁴ Bonta & Andrews (2007).

⁵ Grove, W.M., & Meehl, P.E. (1996). Comparative efficiency of informal (subjective, impressionistic) and formal (mechanical, algorithmic) prediction procedures: The clinical-statistical controversy. *Psychology, Public Policy, and Law*, 2, 293–323.

Correctional Risk Assessment Instruments

Correctional facilities are tasked with housing individuals convicted of an offense, maintaining order within the facility, and providing rehabilitative services to incarcerated persons. In addition, corrections agencies are often responsible for providing community supervision for individuals released from incarceration, continuing their case management and support for rehabilitative services in the community. RNRs are increasingly popular tools for correctional case management as they can provide guidance about the appropriate level of security in a facility or supervision in the community (based on risk) and the appropriate types of treatment programming (based on need).

Corrections agencies may direct additional resources towards individuals with a higher risk of recidivism who may see the greatest benefits in participating in rehabilitative programs. Using RNRs can help agencies more effectively allocate limited resources. In addition, the information gathered in RNRs can assist correctional facilities as they develop reentry plans for individuals prior to release from incarceration. Once in the community, RNRs can assist corrections agencies with decisions regarding the appropriate level of supervision and required contacts with community corrections officers. Finally, RNRs in the community can help guide referrals to community treatment options to assist in the continued transition from prison facilities back into the community.

⁶ Eckhouse, L., Lum, K., Conti-Cook, C., & Ciccolini, J. (2019). Layers of bias: A unified approach for understanding problems with risk assessment. *Criminal Justice and Behavior*, 46(2), 185-209.

The theory behind dynamic RNRs is to allow agencies to adapt their resources to meet the changing needs of their population. As individuals complete programming and/or their life circumstances change, they may require fewer resources to support their continued desistance from crime.

Alternatively, reassessments may help agencies identify individuals whose circumstances are becoming increasingly risky and who may benefit from an increase in supervision and services. As such, these tools can help agencies more effectively adjust the allocation of resources to maximize outcomes for all individuals.

Washington ONE

The 1999 Washington State Legislature directed DOC to use a risk assessment under the Offender Accountability Act (OAA). Initially, DOC implemented the “Risk Management Identification” (RMI) tool, a third-generation RAI that classified individuals into four risk levels based in part on individual’s scores on the LSI-R.⁷ In 2008, DOC began using the “Static Risk Assessment” and shortly thereafter the “Static Risk Assessment – Revised” (SRA2),⁸ a second-generation assessment using static characteristics to classify individuals into four risk levels.⁹ These second- and third-generation assessments were

administered upon initial entry to DOC custody and were updated only if there was an update to an individual’s Criminal Conviction Record (CCR). The focus of these assessments was on identifying different levels of risk to ensure that resources were directed to the highest-risk individuals.

Concurrent with the SRA and SRA2, DOC used a separate needs assessment—the Offender Needs Assessment (ONA)—to examine criminogenic needs and to inform assignment to treatment programs.¹⁰

In 2013, DOC contracted with Washington State University to develop a dynamic RNR that combined elements from the SRA2 and the ONA. The developers examined how and whether the characteristics included in the ONA could increase the predictive accuracy of risk level classifications (RLCs) previously derived solely from the SRA2. In addition to assessing risk, the revised RNR included a revision of the needs assessment to optimize the identification of an individual’s deficits in certain domains. Together, the risk and needs scales from the new assessment would help inform case management decisions such as the appropriate level of supervision in the community and the types of treatment programs individuals should be assigned to while incarcerated.

⁷ The RMI determined risk levels based on an individual’s LSI-R score and a separate measure of the amount of harm done as a result of the crime.

⁸ The SRA and SRA2 were developed by WSIPP for DOC. The SRA2 included seven changes from the original SRA intended to increase the reliability and validity of the risk assessment. These changes included 1) changing the measure of criminal justice cycles from “commitments to DOC” to “sentencings;” 2) removing the item measuring prior commitments to a juvenile institution; 3) removing the item measuring sentence violations; 4) changing age from age at time of sentence to age at the time of the assessment; 5) combining prior juvenile non-sex violent felony convictions

and felony sex offense convictions into one item; 6) changing all negative weights to zero weights; and 7) developing recidivism rates for groups of individuals with specific risk scores.

⁹ Barnoski, R. & Drake, E.K. (2007). *Washington’s Offender Accountability Act: Department of Corrections’ static risk assessment* (Doc. No. 07-03-1201). Olympia: Washington State Institute for Public Policy.

¹⁰ DOC policies indicated that the ONA was to be reassessed on a regular basis. Scores on the ONA domains were a factor in determining placement in treatment programs along with other case characteristics, court orders, and counselor recommendations.

The Washington ONE is a dynamic risk and needs assessment instrument that is optimized separately for men and women. The assessment uses information from administrative records at DOC and information collected by corrections officers/case managers through interviews with the individual in custody. The Washington ONE classifies individuals based on information in the following domains:¹¹

- Demographics
- Juvenile record
- Adult felony records
- Adult misdemeanor records
- Alcohol offenses
- Correctional events
- Residential status
- Education and vocational status
- Employment status
- Relationship status
- Family status
- Children
- Friends
- Leisure time
- Alcohol/drug use
- Mental health
- Aggression
- Attitudes/Behaviors

While the overall instrument is a dynamic risk assessment, the static factors from the previous SRA are included in the Washington ONE. These individual factors are still static and, although they may change over time, they can only change in one direction (e.g., the number of prior convictions will only ever increase).

The Washington ONE is used for all DOC populations, including those incarcerated in state prisons, those in partial confinement, and those under DOC community supervision. The dynamic nature of the questions included in the assessment varies based on the population. For example, questions about a person's residence may be limited to the "6 months prior to incarceration," and those responses would not be subject to change while a person is in the state facility. Alternatively, the conditions of a person's residency may change frequently during their term of community supervision and those changes could cause changes in an individual's risk level classification. Consequently, individuals being assessed under community supervision may be more likely to see a change in their RLC upon reassessment than those who are incarcerated.

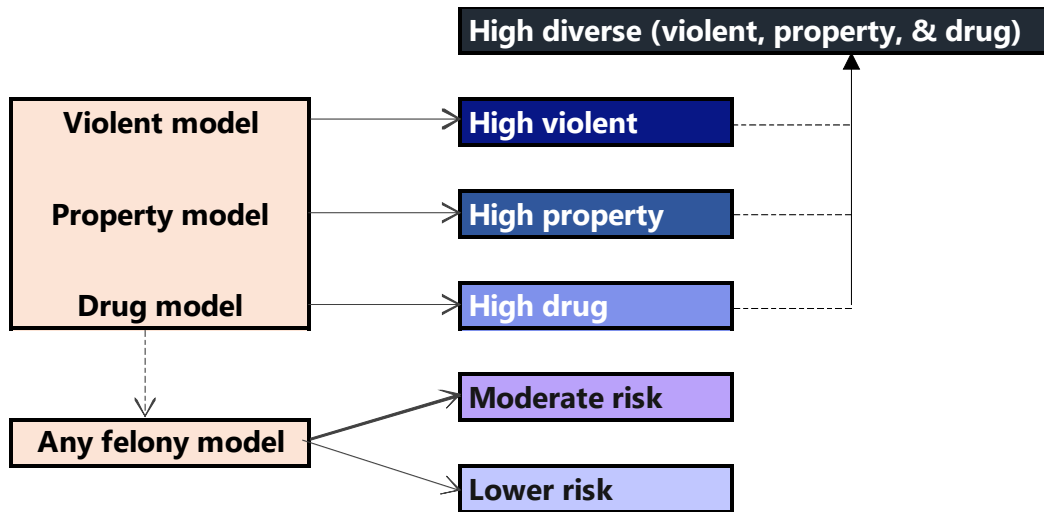
¹¹ These domain names were provided by DOC. The factors included in each domain capture a broad array of characteristics. For example, correctional events includes prison visitations, participation in DOC programming, and time since last conviction. For more information about the factors included in the domains, see [Appendix I](#) of Hamilton, Z., Kigerl, A., Campagna, M., Barnoski, R., Lee, S., Van

Wormer, J., & Block, L. (2016). Designed to fit: The development and validation of the STRONG-R recidivism risk assessment. *Criminal Justice and Behavior*, 43(2), 230-263. Some of the domain names have changed from the Hamilton et al. (2016) publication. For example, "Institutional Events" is now "Correctional Events."

Unlike other risk assessments, the Washington ONE uses a hierarchical design by which an individual’s final risk level classification is based on their scores on four separate algorithms (four for those classified as men and four for those classified as women). The four algorithms assess the likelihood of different types of recidivism: general felony recidivism, felony drug recidivism, felony property recidivism, and felony violent recidivism.¹² Each algorithm uses different weights for the individual factors in the domains.¹³

Exhibit 3 illustrates the hierarchical Washington ONE design. Information collected by the case manager and CCR is used to calculate scores on each of the four separate models. If an individual reaches the high-risk threshold on each of the offense-specific scales, they are classified as “high violent, property, drug” or “high diverse.” If an individual does not cross the high-risk threshold for all three scales, they are classified based on the most serious offense-specific scale for which they do meet the high-risk threshold with violent being the most serious, property being second, and drug being third.

Exhibit 3
Washington ONE Classification System



Notes:

Classifications are based on the scores from each of the offense specific models. Individuals who cross the high-risk threshold on each of the three offense-specific scales are classified as high diverse. Those not classified as high-diverse are classified as high violent if they cross the high-risk threshold for the violent model. Individuals who are not high-diverse or high-violent but who cross the high-risk threshold on the property model are classified as high property. Individuals who are not high diverse, high violent, or high property are classified as high drug if they cross the high-risk threshold on the drug model. All other individuals are classified as moderate risk or lower risk depending on their score on the felony recidivism model.

¹² In each of the offense-specific scales, the algorithm assesses their likelihood to recidivate for a specific type of offense vs their likelihood to either not recidivate or to recidivate with a different type of offense.

¹³ See Hamilton et al., (2016) for additional information. Due to the proprietary nature of the Washington ONE, we cannot provide detailed information about the Washington ONE including the different factors included in each domain and their associated item weights.

For example, an individual who is high-risk on the violent and drug scales but not high risk on the property scale would be classified as high violent. An individual who is not high risk on the violent scale but is high risk on the property scale would be classified as high property. Individuals who are not high risk on any of the offense-specific scales are classified as a moderate or low risk depending on their score on the general felony recidivism scale.

As a dynamic risk assessment instrument, the Washington ONE is intended to be administered multiple times while under DOC custody. When initially implemented, DOC entered a “norming period” that was still in effect as of July 1, 2021.¹⁴ During this norming period, reassessments followed the following standards:

For incarcerated individuals—

- Every six months;
- Within 30 days prior to a work-release;
- Between 60 and 90 days before release to the community from a work release; and
- When an individual had an update to their criminal conviction record (CCR).

For individuals on community supervision—

- Within 30 days of the CCR being completed or the individual reporting to for the first time to a Field Office and

- When an individual has an update to their CCR.

Case managers are also allowed to complete discretionary reassessments—

- Upon a guilty finding for a violation that demonstrates a pattern of behavior that interrupts/obstructs the individual’s case plan and
- Whenever the case manager determines it is beneficial to case management efforts.

Individuals under community supervision are assigned an initial RLC which is used as the individual’s Contact RLC. The minimum contact standards for an individual’s term of supervision are based on their Contact RLC and other case- or individual-level circumstances (e.g., if they are participating in DOSA treatment).

During the norming period, Contact RLCs were based only on the first RLC after their most recent CCR update.¹⁵ Any changes in RLC resulting from a reassessment would not change their Contact RLC.

Prior research on the Washington ONE indicates that the change from the SRA2 to the Washington ONE resulted in similar distributions of Contact RLCs for individuals on community supervision.¹⁶ In addition, preliminary research suggested that the dynamic nature of the assessment could allow DOC to shift resources to and from individuals under supervision as their risk level increases or decreases.

¹⁴ While not required, reassessments were recommended for individuals on community supervision during the norming period 1) 120 days after their initial intake to community supervision and 2) ten months after initial intake to community supervision and then on a six-month cycle for three years and once per year for subsequent years.

¹⁵ For more information, see Knoth, L., & Hirsch, M. (2020). *Washington Offender Needs evaluation (Washington ONE): Evaluating community contact impacts* (Doc. No. 20-11-1901). Olympia: Washington State Institute for Public Policy.

¹⁶ *Ibid.*

II. Risk Level Classifications

Different RAIs vary in both their methods for establishing risk level classifications and their methods for communicating levels of risk to practitioners. Most RAI tools classify individuals into broad categories based on their scores from a risk assessment instrument.

On most risk assessment instruments, responses on individual factors are used to calculate an individual's final risk score. For each assessment, there is a minimum possible score and a maximum possible score. These linear scores are then divided into categories of risk by identifying cut points on the linear scores and grouping scores above or below those cut points. Two common approaches to establishing cut points are 1) based on group size and 2) based on recidivism risk.¹⁷

Cut points based on *group size* often divide the population into equal proportions. For example, under a trichotomous risk category system, the cut point between the lowest and middle risk-level categories would be whichever score captures 33% of the population with the lowest risk scores. The cut point between the middle and highest risk-level categories would be whichever score separates 33% of the population with the highest risk scores.

Cut points based on *recidivism risk* divide risk scores into groups based on the different rates of recidivism for individuals with those scores. There are many possible methods to determine the appropriate cut-points based on recidivism risk. Regardless of the particular approach, cut points based on recidivism risk are unlikely to result in proportionate group sizes.

For the Washington ONE, developers presented several options to DOC using a recidivism risk approach to determining the risk level cut points. Ultimately, DOC selected a cut point option that kept the proportion of the individuals under each risk level classification most similar to the previous distributions under the SRA2.¹⁸

Communicating Risk Level Classifications

Communicating risk is an important aspect of risk assessment instruments. Practitioners who use the assessment are often not directly involved in or aware of the methods used to develop the instrument. In addition, many practitioners may not have formal training in analyzing data or interpreting statistics. When examining risk assessment instruments, it is important to consider what information is presented and how that information is presented to practitioners.¹⁹

¹⁷ Hu, C., Freeman, K.R., Jannetta, J., & Kim, K. (2021). [Communicating risk information for effective decision making.](#)

¹⁸ DOC Policy Number DOC 320.400.

¹⁹ Bucklen, K.B., Duwe, G., & Taxman, F.S. (2010). *Guidelines for post-sentencing risk assessment.* National Institute of Justice; Washington D.C.

Often, risk assessments convert raw scores into a categorical classification such as low-risk, moderate-risk, or high-risk. However, practitioners may misinterpret the meaning of those groups. The intuitive interpretation of risk categories is that ordered categories are similar sizes and that they cover the complete range of probability for recidivism (i.e., 0% to 100%).²⁰ For example, the natural or intuitive interpretation of an assessment tool with five risk categories is that the lowest group recidivates between 0-20% of the time, the second to lowest group recidivates 21% - 40% of the time, etc. However, this is often not how risk assessment instruments are constructed.

Each risk level classification is relative to the other classifications in a particular instrument. In other words, there is no objective "high risk" or "low risk" group. Rather, the "high risk" group on any given scale is the group of individuals who were more likely than all others in the sample to recidivate while the "low risk" group on any given scale is the group of individuals who are least likely than others in the sample to recidivate. An alternative way to think of "high risk" classifications is "higher" risk as it is indicative of the fact that those individuals are at a higher risk of recidivism than individuals classified as moderate- or lower-risk. Further, for any risk assessment, the percentage of individuals who recidivate in each risk level classification will vary based on the population that was used to develop the initial instrument. A risk assessment developed on a population with a very low rate of recidivism (e.g., 20%) will isolate individuals with the highest risk of recidivism, which may be only 30-40%. On the other hand, a risk assessment developed on a

population with a very high rate of recidivism (e.g., 60%) will isolate individuals with the highest risk of recidivism, which may be 70-80%.

In addition to the categorical risk labels, there are several additional ways to communicate the risk of recidivism from an RAI.²¹ First, an absolute recidivism rate could be included with the categorical risk label. For example, a risk assessment labeling an individual as high-risk could include an explanation that "on average, 68% of individuals classified as high-risk are convicted of a new offense within three years of release from incarceration." This approach provides more information about the absolute likelihood of recidivism to provide clarity to the categorical risk labels.

Second, risk assessments could include a percentile rank indicating how others in the correctional population compare to the individual. For example, *this individual scored in the top 10% to reoffend, so 90% of individuals in DOC custody have a lower risk score than this individual.* However, this approach does not provide information about what the absolute likelihood of recidivism is, so additional information about recidivism base rates may be helpful.

Finally, risk may be presented using a risk ratio such as comparing the individual's likelihood of recidivism to the average likelihood of recidivism for the sample. For example, *individuals with this risk score are two times more likely to recidivate than individuals with the average risk score.* Ratios may be difficult for practitioners to translate into meaningful information and additional information may be needed to support an accurate interpretation of these results.

²⁰ Eckhouse et al. (2019).

²¹ Hu et al. (2021).

Researchers in Pennsylvania examined differences in the interpretation of risk level classifications from a risk assessment using varying types of information (e.g., with and without percentage of recidivism for each group and each individual risk score within risk groups) and presentation styles (e.g., tables and graphs).²² In a survey of various criminal justice practitioners (e.g., attorneys, judges), they found that practitioners preferred options where they received more information over those that presented more limited information. Rather than just providing the risk level classification, practitioners preferred being able to see the percentage of people with that same risk score who recidivated as well as the percentage of people who recidivated with lower or higher risk scores. The latter information allows practitioners to put the information they are receiving about an individual into a broader context about the full population of individuals assessed with these instruments.

Communicating Risk on the Washington ONE

The Washington ONE instrument faces unique challenges in communicating risk information in a way that promotes interpretive fairness.²³ The risk assessment instrument is built on scores from four separate risk scales. Three of these scales are designed to predict the likelihood of only a specific type of recidivism (violent, property, drug). The fourth scale measures the overall risk of any recidivism and is used to differentiate between moderate- and low-risk classifications.

This general recidivism model is used only when an individual is not considered relatively higher risk of recidivism on any of the first offense-specific scales.

The final classifications are not directly relative to each other nor are the classifications from each scale mutually exclusive (i.e., being classified as high violent does not necessarily mean they are more likely to recidivate than those classified as high-drug or high-property). Instead, risk scores on each individual assessment are compared to determine which final classification group an individual will be placed in. An individual with a relatively low predicted likelihood of felony recidivism can be classified as high risk based on the results of a specific type of recidivism (violent, property, drug). Consequently, the "high risk" designation on each individual scale may have a different probability of recidivism associated with the high-risk classification and individuals who are high-risk on one of the offense-specific scales may be lower risk on the general recidivism scale.

²² Ruback, R.B., Kempinen, C.A., Tinik, L.A., & Knoth, L.K. (2016). Communicating risk information at criminal sentencing in Pennsylvania: An experimental analysis. *Fed. Probation, 80*, 47.

²³ Interpretive fairness concerns whether or not there is consistent understanding of what a risk score actually means for different individuals who use the assessment. For more information, see Eckhouse et al. (2018).

Misunderstandings about the meaning of risk level classifications and how they are determined may lead to interpretive bias when used by practitioners or policymakers. For example, if an individual scores as high risk on the drug scale, moderate risk on the property scale, and high risk on the violent scale, the individual would receive a final classification as High Violent. However, it is theoretically possible that the probability of recidivism with a drug offense for high-risk drug groups could be higher than the probability of recidivism with a violent offense for high-risk violent groups.

If practitioners are not aware of these differences, an individual who is high risk violent may be overlooked for drug-treatment programs even though they are more likely to recidivate with a drug offense than they are to recidivate with a violent offense. Depending on the different base rates of recidivism by offense type, it is even possible that individuals who are classified as moderate on the property risk scale would have a higher predicted likelihood of recidivism than individuals who are classified as high risk on the violent risk assessment scale. Understanding the independent nature of each of the offense-specific scales may better assist practitioners when considering risk levels for case management decisions.

III. Predictiveness and Classification Comparability

Recent literature on RAIs has increasingly focused on tradeoffs between predictive accuracy and differential rates of classification, specifically differences by gender and race.²⁴

Predictive accuracy can be generally thought of as how well the RAI estimates the likelihood that individuals recidivate. As discussed in Section II, RAIs are not intended to make determinative statements about whether or not a single individual will recidivate. Rather, these tools use historical data to estimate the percentage of individuals with similar characteristics in current populations who will likely recidivate.

Accuracy generally examines how well the risk assessment predicts outcomes. The most commonly used measure of accuracy is the area under the curve (AUC) from receiver operating characteristic (ROC) analyses. Ranging from a score of 0 to 1, an AUC greater than 0.50 indicates that the scale predicts outcomes better than chance.²⁵

Defining “fairness” in the context of risk assessments is a much more difficult task. There is no universal framework for determining whether a risk assessment is “fair” for different groups of individuals and often different aspects of fairness trade-off with one another. This section provides an overview of different ways to examine fairness within criminal justice risk assessments.

Measures of Accuracy and Fairness

While risk assessments are not diagnostic tools (i.e., they do not discern between those who *will* recidivate and those who *will not*), they can be assessed using confusion matrices (see Exhibit 4) to examine how accuracy varies for different classification groups. For example, false positives may be calculated by calculating the percentage of individuals classified as high risk who do not recidivate while false negatives may be calculated as the percentage of individuals classified as low risk who do recidivate.

Exhibit 4

Confusion Matrix Example

| | | Classified as: | |
|--------------------|---------------|--|--|
| | | High risk—likely to recidivate | Low risk—unlikely to recidivate |
| Observed behavior: | Recidivism | <i>True Positive</i> (High risk who do recidivate) | <i>False Negative</i> (Low risk who do recidivate) |
| | No recidivism | <i>False Positive</i> (High risk who do not recidivate) | <i>True Negative</i> (Low risk who do not recidivate) |

Note:

This example excludes individuals who are classified as moderate risk in order to focus on accuracy for low and high-risk classifications which are often the classifications most directly associated with policy decisions.

²⁴ Similar concerns also arise for gender. However, since the Washington ONE has separate instruments by gender, we focus primarily on the differential classifications within an instrument by race.

²⁵ Helmus, L.M., & Babchishin, K.M. (2017). Primer on risk assessment and the statistics used to evaluate its accuracy. *Criminal Justice and Behavior*, 44(1), 8-25.

While the AUC provides a measure of the overall tool's accuracy, confusion tables can expose whether the tool's precision varies between RLCs.

With regard to demographic subgroups, comparisons of measures of accuracy for different subgroups may be used to assess concepts of fairness. That is, the independent measures of accuracy for each subgroup could be compared to determine if there is equity in the performance of the tool across subgroups.

Different measures of fairness may include classification comparability which refers to differences in classification between groups (e.g., whether Black individuals are more likely to be classified as high risk than White individuals). This question of differential classification is measured in the literature as differences across groups as an equal distribution of individuals into risk classifications, an equal distribution of individuals to actual levels of supervision, and an equal distribution of recidivism across risk classifications.

[Exhibit 5](#) provides an overview of some of the measures that have been used in prior research examining accuracy and fairness in criminal justice RAIs. The table includes individual measures and their associated comparative measures, when available. Comparative measures are used to examine fairness and whether the tool performs similarly for different groups.

In practice, many of these measures may trade-off with one another, especially when the base rate of recidivism is different between two groups. For example, if group A has a higher recidivism base rate than group B, individuals in group A may be more likely to be classified as high risk than individuals in group B. The result of these differences in classifications would be a lack of statistical parity between the two groups. However, if you were to adjust the assessment to achieve statistical parity, the subsequent classifications will likely be less accurate in their predictions, leading to a decrease in predictive parity.

Policy decisions are necessary to determine the appropriate balance of different measures of accuracy and fairness. Various measures of comparative accuracy should be included in the development of each RAI and those measures may be used to help guide decisions about cut points or RLC thresholds discussed in [Section II](#).

[Risk Assessment Data](#)

Examinations of the probability of recidivism are reliant on criminal justice system data. RAIs typically use the rate of arrest, conviction, or prison sentence, which are proxies for the rate of underlying "offending behaviors." Systemic disparities in society including in the criminal justice system may lead to differences between the rate of offending behaviors and the observed rates of arrest and prison sentences. This discrepancy plays a role in different observed rates of recidivism by gender and race.

Exhibit 5

Independent and Comparative Measures of Accuracy and Fairness

| Independent measure | Description | Comparative measure | Description |
|---|---|---|---|
| Area Under the Curve (AUC) | Measure of the tool's overall accuracy in predictions based on the receiver operating characteristic curve. | | |
| Overall accuracy | The percentage of individuals in the population who are accurately predicted either as success or failure. | Overall accuracy equity | When the percentage of individuals in each group accurately predicted is equal. |
| Marginal distribution of predicted outcome classes | The percentage of individuals in the population classified in each group. E.g., the percentage of individuals who are high risk, the percentage of individuals who are moderate risk, and the percentage of individuals who are low risk. | Statistical parity | Marginal distributions of the predicted outcome classes are the same for each group. That is, the same proportion of individuals in each group (e.g., Black, Indigenous, and people of color (BIPOC) and Whites) are predicted to succeed or fail. |
| Conditional procedure error | The proportion of cases incorrectly classified based on actual outcomes. For cases expected to recidivate, this is the false positive rate. For cases expected to not recidivate, this is the false negative rate. | Conditional procedure accuracy equality/error rate balance | When the conditional procedural accuracy is the same for each group (e.g., when the false positive rate or false negative rate is the same for BIPOC individuals and for Whites). |
| Conditional use error | The proportion of cases incorrectly classified based on predicted outcomes. Of those predicted to recidivate, how many actually did. Of those predicted not to recidivate, how many actually did not. | Conditional use accuracy equality/Predictive parity | When the conditional use accuracy is the same for both groups (e.g., when the percentage of BIPOC individuals who were predicted to recidivate who did recidivate is the same as the percentage of White individuals who were predicted to recidivated who did recidivate.) When balanced, tools may be described as "well-calibrated." |
| Ratio of false positives and false negatives | Comparison of error rates for those predicted to succeed and those predicted to fail. A value of 1 means the error rates are equal. | Treatment equality | Comparison of the ratio of false negatives and false positives for each group. |

Even if the *true* rate of offending is similar, different groups may have different *observed* rates of recidivism.²⁶ RAls are built on only these observed rates of recidivism, i.e., on crimes processed through the criminal justice system. RAls will reflect these differences in some way, either by differences in classifications across groups (e.g., Black, Indigenous, and people of color (BIPOC) individuals generally having higher risk scores than White individuals) or differences in model predictiveness (e.g., a greater share of BIPOC individuals classified as high risk who do not recidivate).

Factors as Proxies

There is a general consensus that risk assessment instruments should not include race as a potential factor.²⁷ However, there are concerns that characteristics that are included may be proxies for race and risk assessments may subsequently include indirect forms of bias.

Statistical approaches may allow researchers to control for race in development models in a way that can remove some of the racial bias that is included in risk assessment factors. In addition to completing racial impact analyses comparing the accuracy measures previously discussed, basic descriptive statistics of the risk assessment factors by race may help reveal additional factors that could be operating as a proxy for race. If factors are highly correlated with race, including those factors may be an indirect inclusion of racial bias. However, removing factors that are predictive of recidivism may decrease the overall accuracy of the tool.

²⁶ Eckhouse et al. (2019).

²⁷ In early developments of risk assessments, race was explicitly included in risk assessments. However, direct inclusion of race is now largely considered to be

The Washington ONE

The Washington ONE attempts to maximize predictive parity by constructing separate scales by gender. Each of the four scales was separately developed on populations of women and men to assess the unique relationships between risk factors and recidivism.

The resulting gender scales are separated into RLCs using the overall base rate from the full population. As a result, the scales are equally predictive by gender (predictive parity), but the statistical parity varies. Specifically, women are more likely to be low risk than men.

The Washington ONE uses the same scales for all racial groups. Information on the distributional and predictive equity by race is unavailable at this time.

Issues of predictive fairness may also be amplified under a hierarchical risk assessment design. To avoid unfairness in the final classifications, there must be fairness in each of the individual risk scales. For example, if there is statistical parity such that people of color are more likely to be classified as high risk on the violent scale, then they would subsequently be more likely to end up with a final designation as either high violent or high diverse. Any analyses of fairness must examine the fairness on each individual scale as well as fairness in the distributions and predictive validity of the final classifications.

unconstitutional. For more information, see Harcourt, B.E. (2015). Risk as a proxy for race: The dangers of risk assessment. *Federal Sentencing Reporter*, 27(4), 237-243.

IV. Washington ONE Reassessments

The analyses for this report focus on the second and subsequent assessments (referred to as reassessments) administered while an individual is under DOC custody in prison or under community supervision. These analyses include all individuals assessed using the Washington ONE from December 2017 through June 2021.

Research Questions

DOC asked WSIPP to “evaluate to what extent individuals have been reassessed under the Washington ONE and, for those who have been reassessed, the relative frequency of RLC changes affected by reassessment.”

Our analyses are separated into three parts. First, we examine the overall rate of reassessments as well as the varying frequency of reassessments. Second, for those who received at least one reassessment, we examine how often the risk level classification changed upon reassessment. Third, for those whose risk level classifications do change, we examine which factors most commonly changed upon reassessment.

Data and Methods

Data for this project come from DOC’s Management Network Information (OMNI) system. WSIPP receives updated OMNI records quarterly as a part of the ongoing management of WSIPP’s Criminal History Database (CHD). DOC authorized the use of OMNI records for the current project.²⁸

We selected the OMNI records for all individuals under DOC supervision (either in prison or in the community) from December 2017 to June 2021. We used DOC’s information associated with demographic characteristics and all risk assessments completed while under DOC supervision.

Sample

The analysis in this section is designed to look at the dynamic nature of the Washington ONE as implemented by DOC. The sample includes individuals who received the Washington ONE beginning in December 2017 until June 2021. An individual may have multiple jurisdictional periods or distinct and separate periods of DOC custody. Not all individuals who were under DOC jurisdiction in December 2017 received an updated Washington ONE. For more information about the transition to Washington ONE and requirements for assessing individuals using the Washington ONE, see Knoth & Hirsch, 2020.²⁹

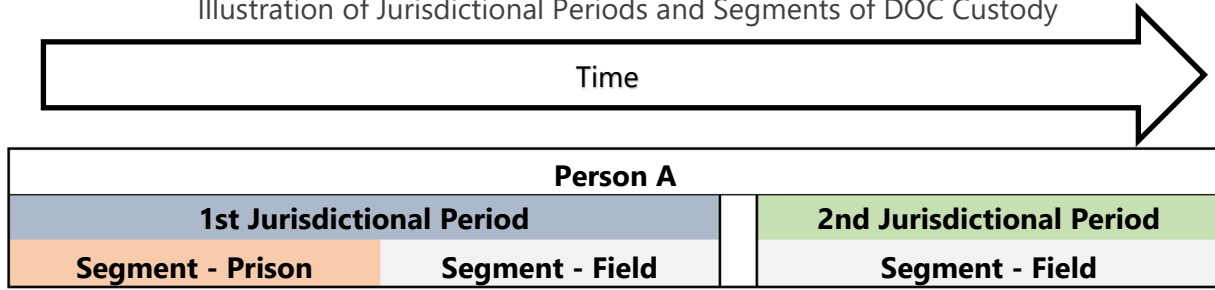
²⁸ The data/information contained herein was obtained from the Washington State Department of Corrections (DOC). DOC does not guarantee the accuracy, timeliness, or

completeness of the data/information supplied for this research.

²⁹ [Knoth & Hirsch \(2020\)](#).

Exhibit 6

Illustration of Jurisdictional Periods and Segments of DOC Custody



This report looks at the extent to which RLCs changed within an individual jurisdictional period (all administrations of the Washington ONE within a period of DOC jurisdiction) and includes all administrations of the tool starting in December 2017.³⁰ During the time period of our analysis, some individuals were incarcerated, others were solely on community supervision, and some individuals served both a segment of confinement in prison and a segment of custody in community supervision (see Exhibit 6) within a single jurisdiction period. When individuals transitioned from inmate status to community custody or from community custody to inmate status, they should have received a risk assessment upon intake either in the prison or in the field office. For some analyses, we examine each prison segment and community supervision segment within a single period of DOC jurisdiction separately.

There were some instances where individuals had a reassessment on the same day as a previous assessment and others where reassessments were submitted within a week after the previous assessment. Rather than reflecting a true change in characteristics on

the assessment, these proximal assessments most likely reflect reassessments due to errors in the previous assessment. When there were multiple assessments submitted for an individual within the same week, we included only the last assessment and removed all other assessments from that week.³¹ Robustness checks for these coding decisions are available in Appendix I.

Findings

Our analyses begin with an examination of how many individuals received a reassessment during a period of DOC custody and what the average number of reassessments was for individuals in the sample. We then examine, for those who received at least one reassessment, how often reassessments resulted in an increase or decrease in the individual's RLC. Finally, we examine which domains and factors were most likely to have changed during a reassessment and which factors appear to contribute the most to changes in RLCs over time.

³⁰ Previous WSIPP analysis (Knoth & Hirsch (2020)) looked at the expected change in total community contacts and excluded the seven-month period during which the Washington ONE was being administered for the first time as well as individuals who were incarcerated or released without community supervision.

³¹ The total number of completed assessments was 215,583. The 211,034 number only refers to the most recent assessment when more than one assessment was created within a week and occurred within a segment or within seven days of the start or end of a segment.

Within the sample time frame, 211,034 assessments were administered to 66,376 individuals across 68,065 periods of DOC jurisdiction. Of the jurisdictional periods, 44,224 included more than one assessment.

Rate of Reassessments

We separately analyzed each segment of DOC jurisdiction based on the type of jurisdiction. For example, if an individual spent time incarcerated in a state facility and was then released to community supervision, we considered the segment of time in prison separately from their segment in community custody. In the sample, the 68,065 periods of DOC jurisdiction are made up of 40,269 distinct segments in a state facility (prison) and 62,869 segments in community supervision (field).

When individuals moved from incarceration in prison to community supervision, they should have received a new Washington ONE assessment upon intake to community custody. We do not include the initial intake assessment on community supervision as a reassessment within this segment-level analysis. Only assessments conducted after the initial assessment during a stay in prison or community supervision are considered a segment reassessment. [Exhibit 7](#) presents the average number of segment reassessments by type of jurisdiction (either prison or community supervision) and the average and median time to segment reassessment for those who received at least one segment reassessment.³²

Some individuals in our sample may not have been under DOC custody long enough in a setting/within a segment to expect that they would receive a reassessment. As such, we also report the average number of segment reassessments, by type of jurisdiction, for individuals who were incarcerated or who were under community supervision for segments of at least seven months (29,320 prison and 47,888 field).

Overall, incarcerated individuals had reassessments more frequently than those on community supervision which is consistent with DOC's policies that require reassessments for incarcerated populations but only recommend reassessments for those on community supervision. These differences were larger when analyzing only those individuals who spent at least seven months in prison or on community supervision (meaning the segment length was at least that long).

³² A number of reassessments were conducted sooner than DOC policy recommends (assuming no change in CCR status). As a check on our assumption of within week reassessments being an adjustment to an existing reassessment we made similar rules to those described

above, collapsing assessments within seven days into the latest assessment. We performed this analysis over three different calipers about the "true reassessment" one day, one week, and one month. Results were generally similar and additional information can be found in the [Appendix](#).

Exhibit 7

Frequency of Reassessment within Segment, by Type of Jurisdiction

| | Average number of reassessments within a segment | Average time to reassessment (days) | Median time to reassessment (days) | Average number of reassessments for those with a segment of >7 months |
|--------|--|-------------------------------------|------------------------------------|---|
| Prison | 2.42 | 156 | 167 | 3.24 |
| Field | 0.50 | 214 | 177 | 0.63 |

For all segments, we would expect to see at least one segment reassessment (assuming individuals on community supervision are being given the recommended reassessments). On average, those incarcerated for at least seven months had 3.24 segment reassessments while those who were on community supervision for at least seven months had less than one segment reassessment on average.

The average time to segment reassessment for those who were incarcerated was 156 days, aligning closely with DOC’s policies for conducting reassessments six months after the initial assessment. For community supervision, the average time to segment reassessment was 214 days. However, the average was affected by some outliers for which there were extremely large gaps of time between assessments. These gaps may be driven by individuals who absconded or were otherwise not available for reassessment or may reflect the discretionary policies for reassessment on community supervision.

The median time to segment reassessment for individuals under community supervision was only 177 days, aligning more closely with the recommendations for community supervision segment reassessments after 120 days and every six months thereafter.

Classification Changes

Because individuals in our sample had different lengths of stay in prison or community custody, we look at changes in RLCs by analyzing each pair of Washington ONE assessments. Over time, an individual’s RLC may have increased, decreased, or both over a series of assessments. Consequently, we look at changes in RLC for each subsequent assessment compared to the prior assessment during the same period of DOC jurisdiction.³³

³³ The following analyses looks at pairs of assessments throughout an individual’s full period of time under DOC jurisdiction. Consequently, these analyses include those first assessments after a transition from prison to community

supervision or from community supervision to prison as a reassessment if there was a previous Washington ONE during the same period of jurisdiction.

Exhibit 8 displays changes in RLC upon reassessment based on the RLC of the prior assessment. Most of the time (87.3%) a reassessment did not result in a change in RLC. A change in RLC was least frequent for those individuals previously classified as low risk or high-violent. A minority of reassessments resulted in a change in RLC (12.7%; 18,141 reassessments changing RLC) with 7.1% of reassessments experiencing a decrease in RLC classification and 5.6% of reassessments experiencing an increase. Of the 44,224 unique periods of jurisdiction where there was more than one administration of the Washington ONE assessment, 16.4% ever experienced an increase in risk level and 20.5% ever experienced a decrease.

The rate of change upon a reassessment differed for individuals who were incarcerated and individuals who were on community supervision. Exhibit 9 displays the percentage of the time there was a change in RLC when a reassessment occurred within a period of incarceration or a period of community supervision and the percentage of the time there was a change in RLC when a reassessment occurred after a move from prison to field or field to prison.

Reassessments within a segment more frequently resulted in a change in RLC when conducted in a community supervision setting. This difference may be driven by the wording of the Washington ONE factors as many questions on the assessment ask about current living conditions or actions in the most recent time in the community and would not be possible to change while an individual was incarcerated.

For those individuals who transitioned from incarceration to community supervision or from community supervision to incarceration, there were opposing findings. Individuals moving from prison to field experienced an increase in RLC 28.1% of the time while those individuals who moved from field to prison experienced a decrease in their RLC 16.8% of the time. Again, these findings may be driven by increased exposure to risk factors when individuals are in the community compared to incarceration in a state facility. These differences reflect underlying differences in these populations that are subject to the same risk assessment factors and scoring.

Exhibit 8

Risk Level Classifications, by RLC of Previous Assessment

Assessment Pairs Starting RLC Distribution

| High diverse (HVPD) | High violent (HV) | High property (HP) | High drug (HD) | MOD | LOW |
|---------------------|-------------------|--------------------|----------------|--------|--------|
| 26,359 | 28,683 | 20,451 | 10,390 | 13,704 | 43,382 |

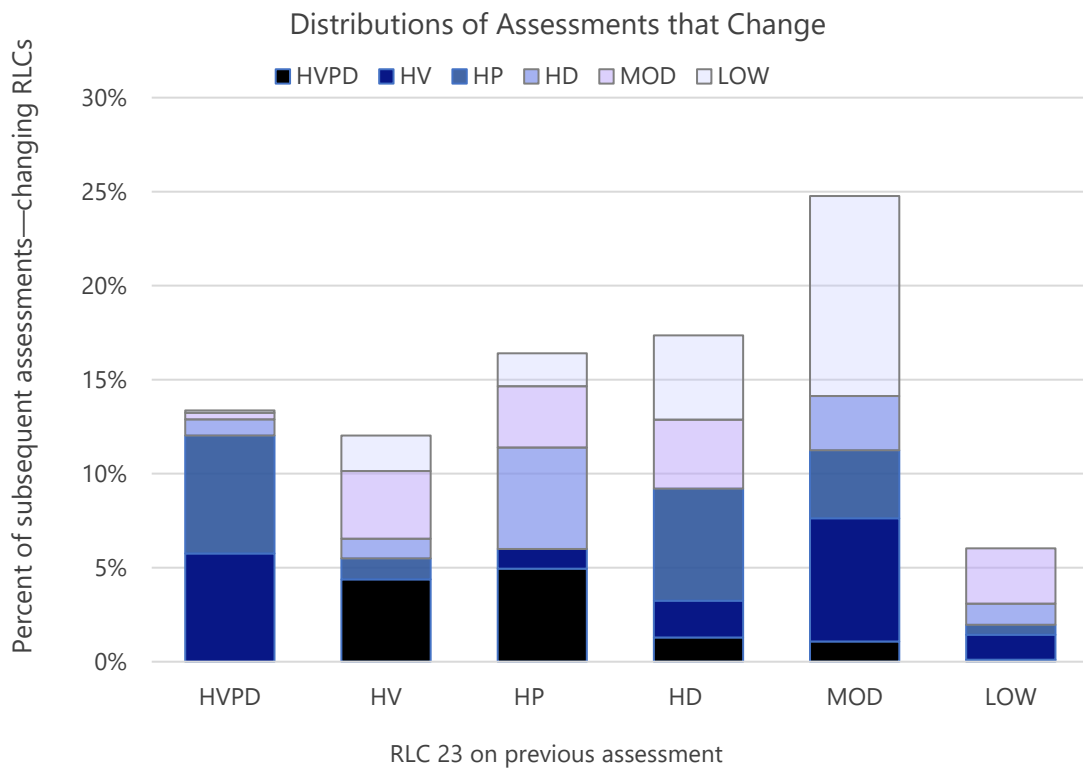
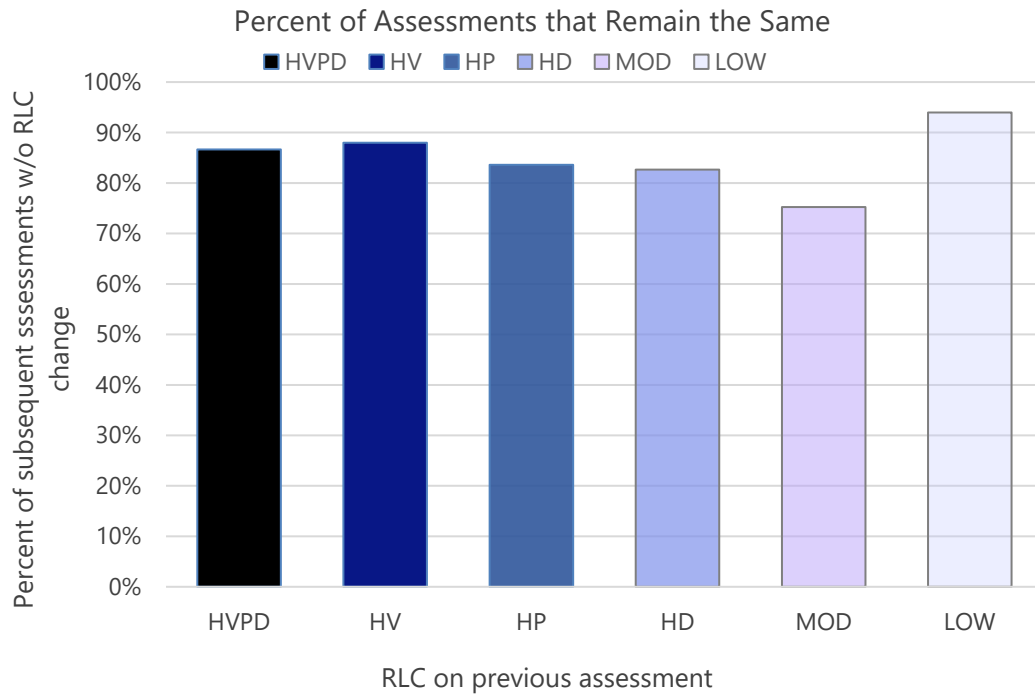


Exhibit 9

RLC Change Within a Segment Reassessment

| Location | Assessment pair N— within segment | Increase | No change | Decrease |
|----------|--------------------------------------|----------|-----------|----------|
| Prison | 97,357 | 4.0% | 90.7% | 5.3% |
| Field | 31,471 | 7.0% | 83.4% | 9.7% |

RLC Change on Assessment Following Move (Across Segment)

| Move type | Assessment pair N— within segment | Increase | No change | Decrease |
|-----------------|--------------------------------------|----------|-----------|----------|
| Prison to field | 3,678 | 28.1% | 65.5% | 6.4% |
| Field to prison | 8,703 | 6.8% | 76.4% | 16.8% |

Efforts to examine changes in RLCs between reassessments were made difficult by the independent nature of the offense-specific scales in the Washington ONE’s hierarchical structure. Changes in a particular risk scale (e.g., violent, property, or drug) were not always associated with changes in RLC. In addition, simply analyzing changes in RLC may not fully capture changes in the likelihood of recidivism as indicated by the individual scales. For example, across all assessments, about 10% of individuals classified as high-violent, high-property, or high-drug were simultaneously scored as low risk on the overall felony recidivism scale. However, despite their relatively low overall risk of recidivism, they were still classified into a high-risk category. On a reassessment, individuals may have a reduction of the general risk of recidivism from moderate to low risk or a reduced likelihood of recidivism on a specific scale from high risk to not high risk and end up with the same RLC.

Exhibit 10 provides the number of times an individual crossed a cut-point on a specific scale but did not see a change in their overall RLC. For example, 769 individuals saw a decrease in their risk score on the drug scale moving from high risk to not high risk for drug offense recidivism, but there was no change to their RLC because they were still high risk on the property or violent scales. In these cases, individuals had a reduction in risk score, but those changes were not reflected in the overall classification changes.

Exhibit 10

Movement Across Scale Threshold Without a Change in RLC

| Scale | Rise above Cut-point | Drop below Cut-point |
|----------|-------------------------|-------------------------|
| Violent | 0 (0%) | 0 (0%) |
| Property | 462 (0.37%) | 761 (0.61%) |
| Drug | 616 (0.49%) | 769 (0.62%) |
| Felony | 428 (0.34%) | 3,646 (2.92%) |

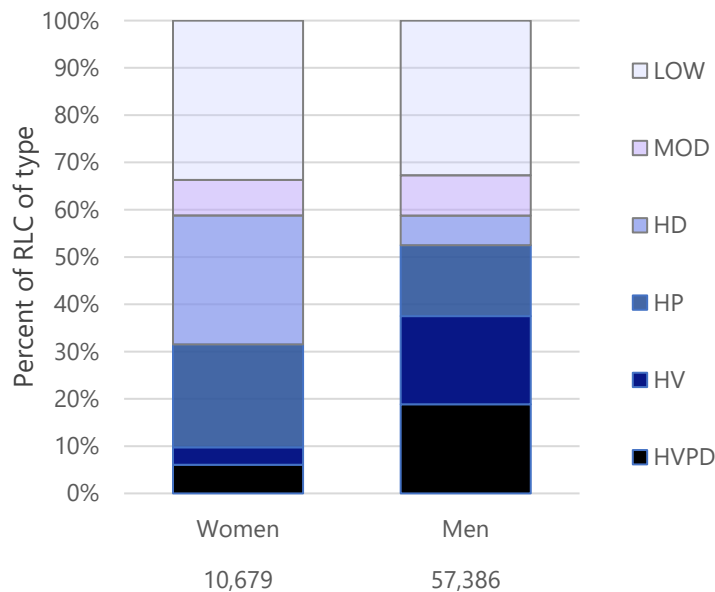
Similarly, 616 individuals actually saw an increase in their risk for drug-related recidivism such that they were now “high risk” for committing a drug offense, but they were still classified as either high property or high violent.

Classification Changes by Gender

We further analyzed changes in RLC by gender. Exhibit 11 presents the first RLCs recorded for a jurisdictional period. Overall men under DOC jurisdiction were more often classified as high diverse or high violent upon their initial Washington ONE assessment than women. Although the points for individual factors were established independently for men and women, the thresholds for RLCs were based on the recidivism rates for the full population of individuals in DOC custody, regardless of gender. Thus, it was unsurprising to find that men, on average, had higher RLCs than women as men tend to have higher rates of recidivism than women.³⁴

Exhibit 11

Distribution by Gender of the Initial Risk Level Classification on a Per-Jurisdictional Period Basis



³⁴ Steffensmeier, D., & Allan, E. (1996). Gender and crime: Toward a gendered theory of female offending. *Annual Review of Sociology*, 22(1), 459-487 and Knoth, L., Wanner, P.,

& He, L. (2019). *Washington State recidivism trends: FY 1995–FY 2014*. (Doc. No. 19-03-1901). Olympia: Washington State Institute for Public Policy.

Exhibit 12

RLC Change by Gender on an Assessment-Pair Basis

| Gender | Assessment pair N | Increase | No change | Decrease |
|--------|-------------------|----------|-----------|----------|
| Men | 127,794 | 5.5% | 87.7% | 6.9% |
| Women | 15,175 | 6.7% | 84.1% | 9.2% |

Exhibit 12 presents the percentage of reassessments by gender for which there was an increase, decrease, or no change in the individual's overall RLC. As indicated before, women had a lower initial RLC and Exhibit 12 shows that women more frequently experienced a decrease in RLC on reassessment than men. However, a greater percentage of reassessments for women also resulted in an increase in their RLC upon reassessment than did reassessments for men. Overall, women may have experienced a greater change in dynamic characteristics than men.

Classification Changes by Race

We further analyzed changes in RLC by race. Exhibit 13 presents the first RLCs recorded for a jurisdictional period. Overall Black, Hispanic, and American Indian/Alaskan Native individuals under DOC jurisdiction were more likely to be classified in one of the two most serious classification levels with greater supervision requirements³⁵ (high diverse and high violent) than White individuals under DOC jurisdiction upon their initial Washington ONE assessment.

Exhibit 14 presents the percentage of reassessments by race for which there was an increase, a decrease, or no change in the individual's overall RLC. For reassessments, there were generally similar patterns of change across race. When changes did occur, White individuals least frequently saw an increase in their RLC upon reassessment, and Black individuals most frequently saw an increase in their RLC upon reassessment, but the difference between these two groups was only 0.7 percentage points. Across all racial groups, most individuals saw no change in their RLC upon reassessment. When RLCs did change, they decreased more often than they increased for all racial groups. Given these similar rates of change, differences in initial classifications (Exhibit 13) may persist over time.

³⁵ See [Knoth & Hirsch \(2020\)](#) for more information about the relationship between RLC and community supervision requirements.

Exhibit 13

Distribution by Race of the Initial Risk Level Classification on a Per-Jurisdictional Period Basis

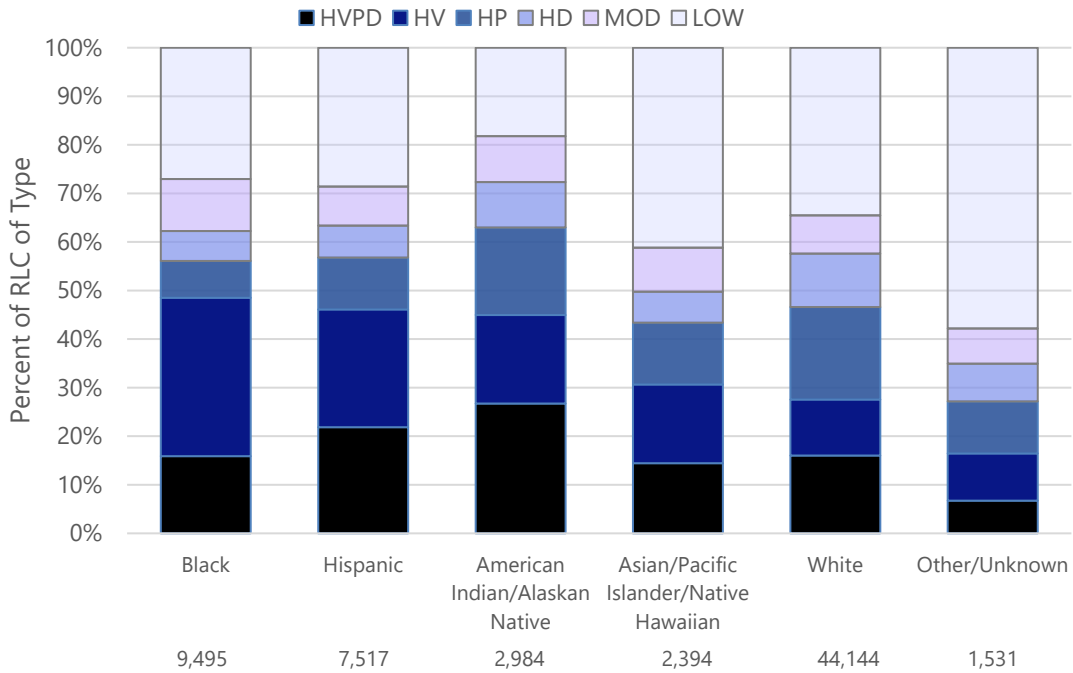


Exhibit 14

RLC Change by Race on an Assessment-Pair Basis

| Race | Assessment pair N | Increase | No change | Decrease |
|--|-------------------|----------|-----------|----------|
| Black | 23,473 | 6.0% | 87.4% | 6.6% |
| Hispanic | 17,169 | 5.9% | 87.6% | 6.5% |
| American Indian Alaskan Native | 6,959 | 5.9% | 86.7% | 7.4% |
| Asian Pacific Islander Native Hawaiian | 1,871 | 5.6% | 87.6% | 6.8% |
| White | 88,002 | 5.4% | 87.3% | 7.3% |

Change in Domains and Factors

Individuals' RLCs may have increased or decreased for varying reasons. To assess the relative impacts of changes in different domains and factors in the Washington ONE, we calculated the number of times that a scale score changed upon reassessment and the relative impact of changes in the scores within each domain on the change in the overall scale score for reassessments associated with a change in RLC. Due to restrictions associated with the proprietary nature of the Washington ONE, we are unable to report the average change in point values for the individual domains. Instead, we ordered the domains based on the average magnitude of change such that the domains listed first had the largest average change in points and consequently contributed the most to a change in RLC.

Exhibits 15 and 16 present the percentage of reassessments that included a change in the score within each domain upon reassessment and that saw a change in the overall RLC upon reassessment. The domains are ranked by the relative magnitude of change when the domain scores did change. For example, 13% of reassessments for men resulting in a change in RLC showed a change in the total score for the demographic domain on the any felony recidivism scale. Though, when the demographic domain did change, the average change in score was larger than average changes in other domains. On the other hand, 71% of reassessments resulting in a change in RLC had a change in the score for correctional events on the any felony recidivism scale. However, the change in score resulting from correctional events was much smaller than changes from nine other domains.

For men and women, across all four risk scales, changes in demographics had the largest or second-largest impact on overall scores. These findings represent the significant impact of age across all risk scales. On the other hand, other domains that are more likely to see scores change over time, such as correctional events, have a relatively low impact on the overall risk scores.

Domains highlighted in [Exhibits 15 and 16](#) represent the domains associated with demographics and criminal history. While not necessarily static (i.e., they can change over time), these factors change in only one direction (e.g., age only ever increases, and the number of prior convictions only ever increases). These domains include the factors most typically included on a static risk assessment instrument.

Across all scales, changes in demographics had the largest or second-largest impact on changes in scores and consequent changes in RLC. These changes may reflect natural aging processes and the decreases in risk associated with increases in age.

At least one criminal history domain was in the top three impactful domains for all scales. These changes likely reflect an updated CCR which would initiate a new reassessment with increased points for criminal history. Although the Washington ONE includes many dynamic factors that individuals may change over time with increased resources or programming, these findings highlight the larger impact that changes in demographics and criminal history still have on this dynamic assessment.

Due to restrictions on publishing detailed information about the Washington ONE (factor items, item weights, risk level cut-points, etc.) additional information about the specific factors within domains is not included in this report but was provided in a separate document to the Department of Corrections.

Exhibit 15

Risk Scale Domains Ordered by Relative Impact on Score Changes— Reassessments of Men Resulting in a Change in RLC (N = 15,729)

| Violent | | Property | | Drug | | Felony | |
|------------------------------------|-------------------------|------------------------------------|-------------------------|------------------------------------|-------------------------|------------------------------------|-------------------------|
| Domain | % of scores that change | Domain | % of scores that change | Domain | % of scores that change | Domain | % of scores that change |
| Demographics | 13% | Demographics | 13% | Total Adult Felony Record | 6% | Demographics | 13% |
| Aggression | 27% | Total Adult Felony Record | 5% | Demographics | 13% | Aggression | 11% |
| Total Adult Misdemeanor Record | 6% | Alcohol/Drug Use (Substance Abuse) | 33% | Alcohol/Drug Use (Substance Abuse) | 37% | Total Adult Felony Record | 15% |
| Partner/Relationship | 3% | Aggression | 4% | Attitudes/Behaviors | 24% | Alcohol/Drug Use (Substance Abuse) | 33% |
| Total Adult Felony Record | 7% | Mental Health | 3% | Aggression | 3% | Attitudes/Behaviors | 34% |
| Family | 3% | Children | 6% | Mental Health | 5% | Total Adult Misdemeanor Record | 6% |
| Attitudes/Behaviors | 33% | Total Adult Misdemeanor Record | 2% | Employment | 30% | Employment | 35% |
| Employment | 35% | Employment | 33% | Correctional Events | 70% | Family | 7% |
| Correctional Events | 62% | Correctional Events | 69% | Education/ Vocational | 5% | Juvenile Record | 2% |
| Mental Health | 6% | Attitudes/Behaviors | 27% | Friends | 17% | Correctional Events | 71% |
| Children | 2% | Education/ Vocational | 5% | Juvenile Record | 1% | Partner/Relationship | 3% |
| Education/ Vocational | 7% | Friends | 17% | Total Adult Misdemeanor Record | 6% | Friends | 18% |
| Alcohol/Drug Use (Substance Abuse) | 20% | Residential | 23% | Residential | 27% | Children | 2% |
| Residential | 30% | Juvenile Record | 2% | Alcohol Offenses | NA | Mental Health | 5% |
| Juvenile Record | 2% | Alcohol Offenses | NA | Children | NA | Residential | 27% |
| Friends | 11% | Family | NA | Family | NA | Education/ Vocational | 7% |
| Alcohol Offenses | NA | Partner/Relationship | NA | Partner/Relationship | NA | Alcohol Offenses | NA |
| Leisure Time | NA | Leisure Time | NA | Leisure Time | NA | Leisure Time | NA |

Notes:

Domains are ordered by their relative impact on score changes. Domains listed first had the largest impact on the final score within a risk scale.

Percentages represent the number of reassessments for which there was a change in the scores within each domain.

Domains listed as NA indicate that the domain does not contribute to the overall scale score.

Exhibit 16

Risk Scale Domains Ordered by Relative Impact on Score Changes—
Reassessments of Women Resulting in a Change in RLC (N = 2,412)

| Violent | | Property | | Drug | | Felony | |
|------------------------------------|-------------------------|------------------------------------|-------------------------|------------------------------------|-------------------------|------------------------------------|-------------------------|
| Domain | % of scores that change | Domain | % of scores that change | Domain | % of scores that change | Domain | % of scores that change |
| Demographics | 9% | Demographics | 9% | Total Adult Felony Record | 7% | Demographics | 9% |
| Total Adult Felony Record | 4% | Total Adult Felony Record | 5% | Demographics | 9% | Aggression | 2% |
| Aggression | 15% | Aggression | 2% | Mental Health | 19% | Employment | 52% |
| Total Adult Misdemeanor Record | 3% | Total Adult Misdemeanor Record | 3% | Employment | 48% | Total Adult Felony Record | 7% |
| Partner/Relationship | 6% | Employment | 48% | Attitudes/Behaviors | 31% | Alcohol Offenses | 1% |
| Alcohol Offenses | 1% | Attitudes/Behaviors | 35% | Juvenile Record | 1% | Children | 10% |
| Employment | 39% | Partner/Relationship | 5% | Partner/Relationship | 7% | Mental Health | 18% |
| Children | 6% | Residential | 28% | Aggression | 7% | Education/ Vocational | 6% |
| Correctional Events | 63% | Alcohol/Drug Use (Substance Abuse) | 54% | Total Adult Misdemeanor Record | 3% | Residential | 31% |
| Family | 8% | Children | 10% | Alcohol/Drug Use (Substance Abuse) | 60% | Correctional Events | 53% |
| Attitudes/Behaviors | 36% | Correctional Events | 53% | Alcohol Offenses | 1% | Juvenile Record | 1% |
| Mental Health | 17% | Friends | 31% | Children | 10% | Attitudes/Behaviors | 43% |
| Friends | 11% | Mental Health | 18% | Friends | 3% | Alcohol/Drug Use (Substance Abuse) | 58% |
| Alcohol/Drug Use (Substance Abuse) | 36% | Alcohol Offenses | NA | Residential | 22% | Partner/Relationship | 12% |
| Residential | 33% | Education/ Vocational | NA | Family | 4% | Total Adult Misdemeanor Record | 7% |
| Education/ Vocational | NA | Family | NA | Correctional Events | 53% | Friends | 31% |
| Juvenile Record | NA | Juvenile Record | NA | Education/ Vocational | NA | Family | 4% |
| Leisure Time | NA | Leisure Time | NA | Leisure Time | NA | Leisure Time | NA |

Notes:

Domains are ordered by their relative impact on score changes. Domains listed first had the largest impact on the final score within a risk scale. Percentages represent the number of reassessments for which there was a change in the scores within each domain. Domains listed as NA indicate that the domain does not contribute to the overall scale score.

V. Summary and Future Research

This report examined reassessment practices following DOC's implementation of the Washington ONE from December 2017 through June 2021.

Overall, among individuals who received the Washington ONE assessment, individuals incarcerated in state prisons more frequently received reassessments than individuals under DOC community supervision. Consistent with prior research on the Washington ONE, when reassessments did occur, most (87.3%) did not result in a change in overall RLC.³⁶ However, there were instances where individuals did increase or decrease their risk level on an offense-specific scale or the general felony scale without a resulting change in their overall RLC. When changes in RLC did occur, individuals more frequently saw a decrease in their RLC than an increase.

Black, Hispanic, and American Indian/Alaskan Native individuals were more frequently classified as one of the high-risk categories with their initial Washington ONE assessment than White individuals. Changes in RLCs upon reassessment were highly similar across all racial groups. Consistent with the overall findings, most individuals did not see a change in their overall RLC, regardless of race.

There were varying rates of change within each of the 18 domains on the Washington ONE when individuals experienced a change in their overall RLC. In addition to the different rates of change within each domain, the changes in each domain had varying impacts on the overall scale scores. As such, some domains that had the highest rates of change had some of the lowest impacts on the overall scale scores.

Additional research is needed to better understand whether and how changes in RLC over time correspond to changes in recidivism. This study did not examine whether individuals who decreased their RLC over time had lower rates of recidivism than individuals whose RLC did not change over time. In addition, future research could examine whether changes in the score on a particular risk scale that do not result in a change in the overall RLC have any association with overall reduced likelihoods of recidivism.

One benefit of a dynamic RAI is the ability to prioritize resources to help address risk factors and subsequently reduce the likelihood of recidivism. However, the findings in this report suggest that some of the largest drivers of changes in RLCs may not be related to programming but are instead related to natural aging processes (resulting in decreases in risk scores) and criminal history (resulting in increases in risk scores). Consistent with past research showing highly similar distributions between the formerly static RAI and the new dynamic Washington ONE, it appears that the dynamic assessment is still largely driven by the same factors previously used in the static RAI.³⁷

³⁶ Knoth & Hirsch (2020).

³⁷ Ibid.

Since the implementation of the Washington ONE, other changes to the criminal justice system may impact the future distributions of risk level classifications. In February 2021, the Washington State Supreme Court issued a decision in *The State of Washington v. Blake*³⁸ in which the court ruled that the state's law against possession of a controlled substance was unconstitutional. This decision invalidated prior and pending felony convictions for possession of a controlled substance. Importantly, this decision vacated prior convictions that may impact an individual's criminal history-related risk factors in the Washington ONE. Since the current weights were based on a sample that included convictions for felony drug possession in the criminal-history-related risk factors, updated analyses are necessary to determine if the removal of prior drug felony possessions reduces the predictive validity of the Washington ONE. For the analysis in this study, we used risk scores as recorded at the time that the assessment was administered.

Because the majority of our sample was assessed prior to this supreme court decision, it is unlikely that our findings reflect any changes in calculations of criminal history scores resulting from vacated convictions. If individuals have prior convictions vacated following the *Blake* decision, subsequent changes in their CCR may lead to a significant downward shift in risk level classifications upon reassessment. Additional research is necessary to examine the impact of the *Blake* decision on the performance of the Washington ONE assessment.

Finally, the analyses in this report suggest that Black, Hispanic, and Indigenous populations may have higher RLCs than White individuals on the Washington ONE. There is no current racial impact analysis using well-established comparative measures of statistical and predictive parity, such as those described earlier in this report, currently available for the Washington ONE.

³⁸ [State of Washington v. Shannon B. Blake, No. 96873-0 \(2021\)](#).



Appendices

Washington Offender Needs Evaluation: *Review and Examination of Reassessments*

| | |
|---|---|
| Appendices (Include titles of sections) | |
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I. Data and Methods

This report used data from the Department of Corrections (DOC) Offender Management Network Information System (OMNI). Throughout the process of reviewing data for this report, we made several coding decisions based on our research questions and patterns identified in the data. This appendix reviews these coding decisions for transparency and future replicability.

Assessment Score Creation

Scores for each risk assessment were created using the response level table and the weights for the Washington ONE previously provided by DOC to generate the scores in a format that could be broken down by domain and question.³⁹ All responses in the response database were scored for all questions within a particular assessment on each of eight scoring scales (four for men, four for women). We excluded 761 assessments that had responses on fewer than 60 questions of the 77 questions with scores on any risk or needs scale in the response database.

Across the eight scoring scales, two responses generated a significant number of differences in scores between the scores as calculated from the response table and the scores stored in the test-level table. After conversations with DOC, we adjusted the men’s violent score for the security threat group question and the men’s property risk score for illicit income in the response data to match the table version.

Following these adjustments, there were 187 assessments with 727 differences across the eight scales. No unique score difference occurred more than six times. The differences led to 73 instances where the classification based on the scores from the responses did not match the classification in the assessment database. We included these assessments using the RLC calculated from the response scores.

Creation of Segments and Linking Segments to Tests

For this report, we were interested in analyzing changes in RLCs for all individuals under DOC custody either in state prisons or under community supervision. Individuals enter DOC jurisdiction but their type of custody may change over time. For example, individuals may enter DOC jurisdiction following a sentence to incarceration in state prison. When they leave prison, they may remain under DOC jurisdiction under community supervision. If an individual commits a new crime, they may reenter custody in a state prison without ever leaving DOC jurisdiction.

³⁹ These scores match those found in the tb_strngr_rsp_cd file.

Because our report is focused on reassessments, we began looking at the individuals who received at least one assessment within the sample period. We retrieved their person detail table to obtain jurisdiction start and end dates and the prison admission and release table to determine the prison admission and release dates. Times not in prison but under jurisdiction were classified as field. We used 103,340 segments across 69,984 individual trips. Individuals may have multiple prison segments and multiple field segments within one period of DOC jurisdiction.

Assessments were matched to these segments by the submission date. Of the 215,583 assessments following our coding of the responses file, 214,606 fell within a segment. An additional 318 Assessments were considered matches as the submission date was either seven days before or after the nearest segment. Among the remaining segments, the average time from the submission date to the closest segment was 98 days.

Final Assessment Sample

A number of reassessments were conducted sooner than DOC policy would recommend (assuming no change in CCR status). There were some instances where individuals had a reassessment on the same day as a previous assessment and others where reassessments were submitted within a week after the previous assessment. After conversations with DOC, it seemed that rather than reflecting a true change in characteristics on the assessment, these proximal assessments may reflect reassessments due to errors in the previous assessment. That is, if errors are identified in an assessment, the updated record may be submitted as a new assessment rather than changing the previously created record. When there were multiple assessments submitted for an individual within the same week, we included only the last assessment and removed all other assessments from that week. This collapsing of assessments reduced the 215,924 Assessments further to 211,034.

As a check on our assumption of within-week reassessments being an adjustment to an existing reassessment, we made similar rules to those described above, collapsing assessments within X days into the latest assessment. We performed this analysis over three different calipers: 1 day, 7 days, and 30 days. The resulting assessments sample were 1-day 212,815, 7-day 211,034, 30-day 204,223. The changes in RLC can be seen in [Exhibit A1](#).

Our findings across each of the three calipers are below. We presented analyses in the final report based on the seven-day caliper assuming that assessments occurring within 30 days may be more likely to reflect a change in CCR or individual's characteristics rather than an adjustment for an error on a previous assessment.

Exhibit A1

Change in RLC—1-Day Caliper

| | | Subsequent assessment | | | | | |
|---------------------|------|-----------------------|--------|--------|-------|--------|--------|
| | | HVPD | HV | HP | HD | MOD | LOW |
| Previous assessment | HVPD | 23,046 | 1,519 | 1,656 | 226 | 92 | 34 |
| | HV | 1,272 | 25,486 | 318 | 303 | 1,033 | 544 |
| | HP | 1,036 | 216 | 17,369 | 1,105 | 668 | 362 |
| | HD | 137 | 207 | 630 | 8,722 | 387 | 468 |
| | MOD | 149 | 920 | 510 | 413 | 10,498 | 1,462 |
| | LOW | 47 | 592 | 232 | 504 | 1,309 | 41,306 |

Change in RLC—7-Day Caliper

| | | Subsequent assessment | | | | | |
|---------------------|------|-----------------------|--------|--------|-------|--------|--------|
| | | HVPD | HV | HP | HD | MOD | LOW |
| Previous assessment | HVPD | 22,836 | 1,518 | 1,653 | 226 | 92 | 34 |
| | HV | 1,257 | 25,233 | 318 | 301 | 1,032 | 542 |
| | HP | 1,012 | 214 | 17,097 | 1,104 | 666 | 358 |
| | HD | 134 | 203 | 619 | 8,587 | 381 | 466 |
| | MOD | 147 | 899 | 495 | 396 | 10,310 | 1,457 |
| | LOW | 47 | 577 | 227 | 486 | 1,280 | 40,765 |

Change in RLC—30-Day Caliper

| | | Subsequent assessment | | | | | |
|---------------------|------|-----------------------|--------|--------|-------|-------|--------|
| | | HVPD | HV | HP | HD | MOD | LOW |
| Previous assessment | HVPD | 21,624 | 1,506 | 1,628 | 228 | 89 | 34 |
| | HV | 1,217 | 24,168 | 318 | 297 | 1,012 | 531 |
| | HP | 973 | 209 | 16,145 | 1,094 | 651 | 356 |
| | HD | 128 | 192 | 591 | 8,103 | 374 | 458 |
| | MOD | 134 | 828 | 441 | 316 | 9,757 | 1,417 |
| | LOW | 48 | 524 | 197 | 396 | 1,186 | 38,988 |

Exhibit A2

Change in RLC—Men

| | | Subsequent assessment | | | | | |
|---------------------|------|-----------------------|--------|--------|-------|-------|--------|
| | | HVPD | HV | HP | HD | MOD | LOW |
| Previous assessment | HVPD | 22,004 | 1,467 | 1,534 | 184 | 85 | 33 |
| | HV | 1,207 | 24,748 | 316 | 262 | 1,012 | 521 |
| | HP | 942 | 210 | 14,037 | 625 | 593 | 315 |
| | HD | 100 | 176 | 355 | 5,286 | 236 | 299 |
| | MOD | 134 | 868 | 445 | 267 | 9,533 | 1,274 |
| | LOW | 45 | 549 | 199 | 319 | 1,157 | 36,457 |

Change in RLC—Women

| | | Subsequent assessment | | | | | |
|---------------------|------|-----------------------|-----|-------|-------|-----|-------|
| | | HVPD | HV | HP | HD | MOD | LOW |
| Previous assessment | HVPD | 832 | 51 | 119 | 42 | * | * |
| | HV | 50 | 485 | * | 39 | 20 | 21 |
| | HP | 70 | * | 3,060 | 479 | 73 | 43 |
| | HD | 34 | 27 | 264 | 3,301 | 145 | 167 |
| | MOD | 13 | 31 | 50 | 129 | 777 | 183 |
| | LOW | * | 28 | 28 | 167 | 123 | 4,308 |

Note:

*Suppressed due to low cell count.

Exhibit A3

RLC Change, By Race

White

| | | Subsequent assessment | | | | | |
|---------------------|------|-----------------------|--------|--------|-------|-------|--------|
| | | HVPD | HV | HP | HD | MOD | LOW |
| Previous assessment | HVPD | 13,378 | 831 | 1,170 | 147 | 64 | 29 |
| | HV | 621 | 10,289 | 173 | 162 | 473 | 272 |
| | HP | 732 | 108 | 13,252 | 827 | 472 | 290 |
| | HD | 89 | 108 | 461 | 6,144 | 263 | 374 |
| | MOD | 84 | 386 | 336 | 254 | 6,009 | 919 |
| | LOW | 25 | 289 | 162 | 342 | 753 | 27,714 |

BIPOC/Unknown

| | | Subsequent assessment | | | | | |
|---------------------|------|-----------------------|--------|-------|-------|-------|--------|
| | | HVPD | HV | HP | HD | MOD | LOW |
| Previous assessment | HVPD | 9,458 | 687 | 483 | 79 | 28 | * |
| | HV | 636 | 14,944 | 145 | 139 | 559 | 270 |
| | HP | 280 | 106 | 3,845 | 277 | 194 | 68 |
| | HD | 45 | 95 | 158 | 2,443 | 118 | 92 |
| | MOD | 63 | 513 | 159 | 142 | 4,301 | 538 |
| | LOW | 22 | 288 | 65 | 144 | 527 | 13,051 |

Note:

*Suppressed due to low cell count.

II. Correctional Risk Assessment Instruments

The Washington ONE is one of many correctional risk assessment instruments (RAIs) used throughout the United States. As a part of our research analyzing characteristics of other RAIs in Sections I-III, we compiled a list of RAIs used in other jurisdictions. While this list may not be exhaustive, it provides an overview of some of the other RAIs used by jurisdictions outside of Washington State.

Exhibit A2

Risk Assessment Instruments (RAIs) Used in Other Jurisdictions

| Risk assessment instrument | Outcome predicted (general recidivism, violent recidivism, etc.) | Classification groups (e.g., high, moderate, low) | Jurisdictions where it is (or has previously been) in use |
|---|--|--|---|
| Community Risk/Needs Management Scale (CRNMS) | Risk/needs assessment instrument used by the Correctional Service of Canada (CSC) to allocate resources in terms of frequency of contact for offenders who are under community supervision | Low, Moderate, High | Canada |
| Correctional Assessment and Intervention System (CAIS) | General recidivism | Low, Moderate, High | |
| Correctional Offender Management Profile for Alternative Sanctions (COMPAS) | General recidivism | High Risk, Medium Risk, Low Risk | New York |
| Dynamic Factors Intake Assessment (DFIA) | General recidivism | | Canada |
| Inventory of Offender Risks, Needs, and Strengths (IORNIS) | General, violent, and sexual recidivism | | |
| Level of Service instruments, including Level of Service/Case Management Inventory (LS/CMI), Level of Service/Risk, Need, Responsivity (LS/RNR), Level of Service Inventory (LSI), Level of Service Inventory-Revised (LSI-R), and Level of Service Inventory-Revised: Screening Version (LSI-R:SV) | General recidivism | Low Risk, Medium Risk, High Risk | |
| Offender Assessment System (OASys) | General recidivism | Low Risk, Medium Risk, High Risk | England and Wales |
| Offender Group Reconviction Scale (OGRS) | General recidivism | | England and Wales |
| Ohio Risk Assessment System, including the Ohio Risk Assessment System-Pretrial Assessment Tool (ORAS-PAT), Ohio Risk Assessment System-Community Supervision Tool (ORAS-CST), Ohio Risk Assessment System-Community Supervision Screening Tool (ORAS- CSST), Ohio Risk Assessment System-Prison Intake Tool (ORAS-PIT), and Ohio Risk Assessment System-Reentry Tool (ORAS-RT) | General recidivism | Low (0-2), Moderate (3-5), High (6+) | Ohio and Indiana |
| Federal Post Conviction Risk Assessment (PCRA) | General recidivism, violent recidivism | High Risk, Medium/High Risk, Medium/Low Risk, Low Risk | |

| Risk assessment instrument | Outcome predicted (general recidivism, violent recidivism, etc.) | Classification groups (e.g., high, moderate, low) | Jurisdictions where it is (or has previously been) in use |
|---|--|---|---|
| Recidivism Risk Assessment Scales (RISc) | Sexual, violent, and non-violent recidivism | Does not have specific classifications for levels of risk but calculates risk domains ranging from 0 to 1. | |
| Risk Management System (RMS) | General recidivism | Risk scores for violence and recidivism range 1.00 (Low) to 2.00 (High) | |
| Risk of Reconviction (ROC) | General recidivism | | |
| Statistical Information of Recidivism Scale (SIR) | General and violent recidivism | Poor, Fair/Poor, Fair, Good, Very Good | Canada |
| Salient Factor Score instruments, including the Salient Factor Score-1974 Version (SFS74), Salient Factor Score-1976 Version (SFS76), and Salient Factor Score-1998 Version (SFS98) | General recidivism | Very Good Risk, Good Risk, Fair Risk, Poor Risk | US Parole Commission |
| Self-Appraisal Questionnaire (SAQ) | General recidivism | Low, Low-Moderate, High-Moderate, High | North Carolina; Pennsylvania |
| Service Planning Instrument (SPIn) and Service Planning Instrument-Women (SPIn-W) | General recidivism | | Illinois |
| Static Risk and Offender Needs Guide (STRONG) | General recidivism, violent recidivism, property recidivism, drug recidivism | High Risk Violent, High-Risk Property, High-Risk Drug, Moderate Risk, and Low Risk | |
| Wisconsin Risk and Needs (WRN) and Wisconsin Risk and Needs-Revised (WRN-R) | General recidivism | Low, Medium, High | Wisconsin |
| California Static Risk Assessment | General recidivism | Low Risk, Moderate Risk, High Risk: Violent Re-Offending, High Risk: Property Re-offending, High Risk: Substance Abuse Re-offending | California |
| Colorado Actuarial Assessment Scale (CARAS) | General recidivism | Very Low, Low, Medium, High, and Very High | Colorado |
| Connecticut Salient Factor Scale | General recidivism | Very Good, Good, Fair, and Poor | Connecticut |
| Indiana Risk Assessment System | General recidivism | Low Risk, Moderate Risk, High Risk | Indiana |

| Risk assessment instrument | Outcome predicted (general recidivism, violent recidivism, etc.) | Classification groups (e.g., high, moderate, low) | Jurisdictions where it is (or has previously been) in use |
|---|---|---|--|
| Kentucky Parole Guidelines Risk Assessment Instrument | General recidivism | Level I, Level II, Level III, Level IV | Kentucky |
| Iowa Board of Parole Risk Assessment | General recidivism | Low Risk, Medium Risk, High Risk | Iowa |
| Louisiana Risk Needs Assessment | General recidivism | High Risk, Medium Risk, Low Risk | Louisiana |
| Michigan Parole Guidelines Score Sheet | General recidivism | Low, Average, or High probabilities of parole | Michigan |
| Nevada Parole Risk Assessment | General recidivism | Low Risk, Medium Risk, High Risk | Nevada |
| Offender Traits Inventory (OTI-R) | General recidivism | Minimal, Low, Moderate, High, Extreme | North Carolina |
| Public Safety Checklist for Oregon | General recidivism (2) | Low, Low/Medium, Medium/High, High, Very High | Oregon |
| Rhode Island Parole Risk Assessment | General recidivism | High Risk, Moderate Risk, Low Risk | Rhode Island |
| South Dakota Initial community Risk/Needs Assessment | General recidivism | Intensive Supervision, Maximum Supervision, Medium Supervision, Minimum Supervision, Indirect Supervision | |
| Texas Parole Risk Assessment Instrument | General recidivism | Low Risk, Moderate Risk, High Risk, Highest Risk | Texas |
| Vermont Parole Board Risk Assessment | General recidivism | Low Risk, Medium Risk, High Risk | Vermont |

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