The First Step Act of 2018: Risk and Needs Assessment System

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Table of Contents

July 19, 2019

The efficient and effective implementation of the First Step Act is a priority for the Department of Justice and this Administration. Today, the Department is announcing three major achievements related to the implementation of this important criminal justice reform measure.

First, the Bureau of Prisons will release approximately 3,100 from its custody, as the First Step Act's provision increasing good conduct time takes effect. This action is in addition to the approximately 1,691 individuals whose sentences have been reduced due to the retroactive application of the Fair Sentencing Act.

Second, the Department will fully fund the $75 million authorized by the First Step Act in FY2019. I visited a BOP facility and saw first-hand how effective programs can have a positive impact on inmates. Therefore, I directed that existing resources be reallocated in FY2019 to expand vocational training and job readiness programs, to increase the availability of Medication Assisted Treatment, to support programs tailored to the needs of the female inmate population, and to increase education opportunities for inmates.

Third, we have developed a new Risk and Needs Assessment System called the Prisoner Assessment Tool Targeting Estimated Risk and Needs, or simply "PATTERN." In crafting the System, the Department worked to make the benefits of the FSA as widely available as possible without compromising predictive reliability. The System is a good initial step based on the available information, and we will aim to improve it, with more time, consultation, data, and research.

The Department drew on the expertise of a wide range of stakeholders in developing PATTERN. I would like to thank the Director of the Bureau of Prisons, the Director of the Administrative Office of the United States Courts, the Director of the Office of Probation and Pretrial Services, the Director of the National Institute of Justice, the Director of the National Institute of Corrections, and the members of the Independent Review Committee (IRC), with whom I consulted in developing the System. I also want to thank the experts, practitioners, and policy makers, the public, and other stakeholders who engaged in this process. Finally, thank you to the dedicated staff at the Department of Justice, who have worked tirelessly to faithfully implement the First Step Act.

While the launch of PATTERN is a big step, it is only the first step. The Department is committed to making the benefits of the Act widely available while maintaining the System's predictive reliability. To that end, the Department is holding a 45-day public study period, in which the public will be able to review the System and consider ways in which it may be

improved. Following this study period, the Department in September will invite stakeholders, public interest organizations, and the public to comment on the system. The experience of these communities will aid the Department as it works to improve the System.

Our communities are safer when we do a better job of rehabilitating offenders in our custody and preparing them for a successful transition to life after incarceration. The Department remains committed to this important aim and will continue to work to make America's communities safer.

William P. Barr
Attorney General

July 19, 2019

I am extremely proud of the more than 35,000 staff of the Bureau of Prisons (BOP) and the work we do every day keeping the American people and our Nation's communities safe. Throughout our nearly 90-year history, providing programs and training to prepare federal inmates for a successful return to the community has been central to our mission. The First Step Act (FSA) – the first meaningful criminal justice reform in many years – will allow us to enhance and improve these efforts.

The BOP, along with the Department of Justice, is fully committed to the successful implementation of the FSA. A number of important changes have already taken place. Over 1,500 inmates received sentence reductions under the FSA's retroactive application of the Fair Sentencing Act of 2010. BOP expanded its compassionate release and Second Chance Act home confinement programs. The BOP also continues to update existing policies to ensure they reflect the changes now memorialized in federal law. The BOP has completed new projected release date calculations for over 3,000 inmates due for release because of the FSA's Good Conduct Time changes. We wish these individuals every success in their transition back into our communities. For those still in custody, the BOP is working to ensure inmates maintain close ties with loved ones by transferring inmates closer to their release residences in accordance with BOP policy and practice, and consistent with the FSA.

We are committed to helping inmates return to their communities to lead productive, crime-free lives. The new risk and needs assessment system will ensure we conduct individualized assessments of each inmate's specific needs. These assessments will help us to create plans with programs and productive activities tailored to meet identified needs. These plans will provide inmates the opportunity for improvement and growth and promote successful reentry into their communities.

This is an exciting time for the Bureau of Prisons. The FSA will have a lasting impact on federal corrections and may serve as a model for state and local corrections as well. The dedicated corrections professionals throughout our 122 federal prisons nationwide remain mission-focused on helping change lives and enhancing public safety.

Hugh J. Hurwitz
Acting Director, Federal Bureau of Prisons

July 19, 2019

An offender's first steps out of prison are important steps toward a crime-free and productive life. The First Step Act of 2018 aims to reduce recidivism and reform the federal prison system so that those exiting the system do not return.

The National Institute of Justice (NIJ) is playing a key role in fulfilling those objectives. We are working with our federal partners, specifically the Bureau of Prisons in several areas, including prioritizing who should receive evidence-based recidivism reduction programming and determining who may be eligible for early release into the community. We are assisting to develop recommendations based, as always, on empirical evidence: Which recidivism reduction programs and activities work best? How are these programs assessed, and can we strengthen the best programs, and improve or end the worst?

At NIJ, we understand that research, development, and evaluation cannot happen in a vacuum. You have to listen to those on the front lines and get input from all perspectives. The development of a new risk and needs assessment system is no different. As an example, and in cooperation with the Department of Justice, we have hosted three listening sessions to obtain a diverse set of perspectives about the development of a risk and needs assessment system.

Beyond conducting research on recidivism and prison reform, NIJ has already taken critical steps in the development of the new risk and needs assessment system. We have reviewed and continue to review existing risk and needs assessment systems and the available empirical research to determine how NIJ can contribute to this important line of inquiry and development. We will continue to consult with external experts and stakeholders, including researchers, think tanks, prison reform advocates, corrections and law enforcement groups, and victims and victim advocacy groups, to learn more about how NIJ can support research to inform evidence-based practices.

The current recidivism statistics are not encouraging. Far too many offenders leave prison only to return. Taking steps toward reducing recidivism and reforming the federal prison system will take a sustained investment and commitment. NIJ is and remains dedicated to addressing these important challenges.

David B. Muhlhausen, Ph.D., Director
National Institute of Justice

INTRODUCTION

"America wins when citizens with a criminal record can contribute to their communities as law-abiding members of our society."

-**President Donald J. Trump**
June 13, 2019, from the East Room of the White House

On December 21, 2018, President Donald J. Trump signed the First Step Act of 2018 into law. Title I of the First Step Act of 2018 (FSA or the Act) is focused on reforms to reduce recidivism among the federal prison population. Many of Title I's reforms hinge on the creation of a risk and needs assessment system.

Under the FSA, the Attorney General is charged with developing and releasing a risk and needs assessment system for use in the federal prison system. With this report, Attorney General William P. Barr releases the First Step Act of 2018 Risk and Needs Assessment System.

This report outlines the work of the Department of Justice to develop and implement the Risk and Needs Assessment System (System). It also introduces the new System that the Federal Bureau of Prisons will deploy in its facilities. And the report announces the Department of Justice's strategic plan to evaluate, validate, and enhance the System over time.

Chapter 1

Chapter 1, Developing the First Step Act of 2018 Risk and Needs Assessment System, details the requirements of the FSA regarding the development of a risk and needs assessment system, including the responsibilities of the Attorney General and the Independent Review Committee. This chapter also summarizes the Department of Justice's work to fully implement the Act's requirements in creating the System.

Chapter 2

In Chapter 2, Characteristics of an Effective Risk and Needs Assessment System, this report identifies those characteristics and principles that are fundamental to developing an effective risk and needs assessment system. This chapter also describes the valuable data and information that the Department of Justice received from our federal and state partners and experts in the field on developing a strong risk and needs assessment system. These characteristics, principles, and data informed the development of the System.

Chapter 3

Chapter 3, The First Step Act of 2018 Risk and Needs Assessment System, describes the adopted System in detail, including the new assessment tool that will be deployed in the Federal Bureau of Prisons. This chapter then provides an explanation of the strengths of the tool and enhancements offered by the new System.

Chapter 4

Chapter 4, Implementing the First Step Act of 2018 Risk and Needs Assessment System, presents the Department's strategic plan to fully and completely implement the System in the field. It also includes an agenda for continued engagement with experts, stakeholders, and the public on the System. The chapter concludes by describing the significant resources that the Department of Justice is expending and will expend to implement the System.

Chapter 1
Developing the First Step Act of 2018
Risk and Needs Assessment System

BACKGROUND

President Donald J. Trump signed the First Step Act (FSA or the Act),[1] into law on December 21, 2018. The Act passed both houses of Congress with bipartisan support. As President Trump has said, the FSA "will give countless current and former prisoners a second chance at life and a new opportunity to contribute to their communities, their states, and their nation."[2] The FSA makes significant reforms to the criminal justice system.

As discussed below, several of the FSA's reforms turn on the development of a risk and needs assessment system for use in the Federal Bureau of Prisons (BOP). This chapter discusses the FSA's requirements with respect to that system, including the responsibilities of the Attorney General and the Independent Review Committee mandated by the Act. It also summarizes the Department of Justice's work to implement the requirements related to the system.

President Trump signs the First Step Act on December 21, 2018, in the Oval Office at the White House.

I. Statutory Obligations

A. Description of the Risk and Needs Assessment System

In passing the First Step Act, Congress placed a particular emphasis on the development and deployment of a risk and needs assessment system in the BOP Indeed, Section 101 of the FSA requires the Attorney General, in consultation with an Independent Review Committee (discussed in further detail below), to "develop and release publicly on the Department of Justice website a risk and needs assessment system."[3] The FSA provides that the Attorney General "may use existing risk and needs assessment tools, as appropriate." [4]

Pursuant to the FSA, the risk and needs assessment system "shall be used" to:

> (1) determine the recidivism risk of each prisoner as part of the intake process, and classify each prisoner as having minimum, low, medium, or high risk for recidivism;
>
> (2) assess and determine, to the extent practicable, the risk of violent or serious misconduct of each prisoner;
>
> (3) determine the type and amount of evidence-based recidivism reduction programming that is appropriate for each prisoner and assign each prisoner to such programming accordingly, and based on the prisoner's specific criminogenic needs, and in accordance with subsection (b);

(4) reassess the recidivism risk of each prisoner periodically, based on factors including indicators of progress, and of regression, that are dynamic and that can reasonably be expected to change while in prison;

(5) reassign the prisoner to appropriate evidence-based recidivism reduction programs or productive activities based on the revised determination to ensure that -

> (A) all prisoners at each risk level have a meaningful opportunity to reduce their classification during the period of incarceration;
>
> (B) to address the specific criminogenic needs of the prisoner; and
>
> (C) all prisoners are able to successfully participate in such programs;

(6) determine when to provide incentives and rewards for successful participation in evidence-based recidivism reduction programs or productive activities in accordance with subsection (e);

(7) determine when a prisoner is ready to transfer into prerelease custody or supervised release in accordance with section 3624; and

(8) determine the appropriate use of audio technology for program course materials with an understanding of dyslexia.[5]

Thus, the system is to be used to "determine the recidivism risk of each prisoner as part of the intake process, and classify each prisoner as having minimum, low, medium, or high risk for recidivism [and] assess and determine, to the extent practicable, the risk of violent or serious misconduct of each prisoner."[6] The system also must be used periodically to reassess the recidivism risk of each prisoner "based on factors including indicators of progress, and of regression, that are dynamic and that can reasonably be expected to change while in prison."[7]

A prisoner's risk classification level may affect the prisoner's ability to receive certain rewards and incentives. For example, eligible[8] prisoners are to earn 10 days of time credits for every 30 days of successful participation in evidence-based recidivism reduction programming or productive activities.[9] Eligible prisoners who are classified in the minimum or low risk categories and who have not increased their risk of recidivism over two assessments may receive five additional days of time credit for every 30 days of successful participation in evidence-based recidivism reduction programming or productive activities.[10] These time credits are available for eligible inmates who successfully complete evidence-based recidivism reduction programming or productive activities. A prisoner's risk assessment over time also affects that prisoner's ability to use those time credits to receive prerelease custody or early supervised release.[11]

The results from the system will be used to "provide guidance on the type, amount, and intensity of evidence-based recidivism reduction programming and productive activities that shall be assigned for each prisoner."[12] For example, the FSA requires the BOP to prioritize access to recidivism reduction programs for those who are at a higher risk of reoffending.[13] Results from the system also will be used to reassign prisoners to evidence-based recidivism reduction programs or productive activities based on the periodic reassessments of their recidivism risk.[14]

The system's other requirements include using results to provide "guidance on program grouping and housing assignment determinations" and, after taking account of the safety of prisoners and others at the prison, "provid[ing] that prisoners with a similar risk level be grouped together in housing and assignment decisions to the extent practicable;"[15] providing incentives and rewards for prisoners "to participate in and complete evidence-based recidivism reduction programs," including phone and visitation privileges, transfer to an institution closer to a prisoner's release residence (taking account of availability, security, and the recommendation of the warden where the prisoner is currently held), and other increased privileges and time credits;[16] determining "when to provide incentives and rewards for successful participation in evidence-based recidivism reduction programs or productive activities;"[17] and determining "the appropriate use of audio technology for program course materials with an understanding of dyslexia."[18]

The system must be released no later than 210 days after enactment of the FSA—July 20, 2019.[19]

B. Responsibilities of the Attorney General

In carrying out his responsibilities with respect to the system, the Attorney General must consult with the Director of the Bureau of Prisons, the Director of the Administrative Office of the United States Courts, the Director of the Office of Probation and Pretrial Services, the Director of the National Institute of Justice, the Director of the National Institute of Corrections, and the Independent Review Committee (IRC) authorized under the FSA.[20]

Attorney General William P. Barr and Housing and Urban Development Secretary Benjamin S. Carson, Sr., M.D., attend a First Step Act celebration in the East Room of the White House on April 1, 2019. Photo: Chip Somodevilla (Getty Images).

The FSA specifically directs[21] the Attorney General, in consultation with the IRC, to:

> (1) review the effectiveness of evidence-based recidivism reduction programs that exist as of the date of enactment of this subchapter in prisons operated by the Bureau of Prisons;
>
> (2) review available information regarding the effectiveness of evidence-based recidivism reduction programs and productive activities that exist in State-operated prisons throughout the United States;
>
> (3) identify the most effective evidence-based recidivism reduction programs;
>
> (4) review the policies for entering into evidence-based recidivism reduction partnerships described in section 3621(h)(5); and
>
> (5) direct the Bureau of Prisons regarding -

(A) evidence-based recidivism reduction programs;

(B) the ability for faith-based organizations to function as a provider of educational evidence-based programs outside of the religious classes and services provided through the Chaplaincy; and

(C) the addition of any new effective evidence-based recidivism reduction programs that the Attorney General finds.

The Attorney General also must "develop and implement training programs for Bureau of Prisons officers and employees responsible for administering" the system and "monitor and assess" the use of the system, including conducting annual audits of the BOP's use of the system.[22]

After releasing the system, the Attorney General must annually "review, validate, and release publicly on the Department of Justice website the risk and needs assessment system."[23] Consistent with this annual requirement, the Attorney General must "conduct ongoing research and data analysis"[24] on:

(A) evidence-based recidivism reduction programs relating to the use of prisoner risk and needs assessment tools;

(B) the most effective and efficient uses of such programs;

(C) which evidence-based recidivism reduction programs are the most effective at reducing recidivism, and the type, amount, and intensity of

programming that most effectively reduces the risk of recidivism; and

(D) products purchased by Federal agencies that are manufactured overseas and could be manufactured by prisoners participating in a prison work program without reducing job opportunities for other workers in the United States.

C. Independent Review Committee

1. Responsibilities

The IRC must assist the Attorney General in carrying out his responsibilities under 18 U.S.C. §§ 3631(b), 3632, and 3633.[25] That includes[26] assisting in:

(1) conducting a review of the existing prisoner risk and needs assessment systems in operation on the date of enactment of this Act;

(2) developing recommendations regarding evidence-based recidivism reduction programs and productive activities;

(3) conducting research and data analysis on—

(A) evidence-based recidivism reduction programs relating to the use of prisoner risk and needs assessment tools;

(B) the most effective and efficient uses of such programs; and

(C) which evidence-based recidivism reduction programs are the most effective at reducing recidivism, and the type, amount,

and intensity of programming that most effectively reduces the risk of recidivism; and

(4) reviewing and validating the risk and needs assessment system.

The Director of the Bureau of Prisons is required to assist the IRC in performing its duties and in promptly responding to requests from the IRC for access to BOP facilities, personnel, and information.[27] Within two years of the enactment of the FSA, the IRC must produce a report to the Senate and House Judiciary Committees and Senate and House Appropriations Subcommittees on Commerce, Justice, Science, and Related Agencies.[28]

2. Composition of the IRC

The members of the IRC "shall all have expertise in risk and needs assessment systems."[29] The FSA requires the National Institute of Justice (NIJ) to "select a nonpartisan and nonprofit organization with expertise in the study and development of risk and needs assessment tools to host the Independent Review Committee."[30] That outside organization then must appoint not fewer than six members to the IRC.[31]

II.   First Step Act Implementation

A. Department Implementation Efforts

Following the enactment of the FSA, the Department of Justice began the process of reviewing and implementing the Act's requirements. Department leadership, including the Office of the Deputy Attorney General and the Office of Legal Policy, began

to coordinate implementation efforts of relevant components, including the BOP, the NIJ, the Executive Office for United States Attorneys and the U.S. Attorney community, the Criminal Division, and the Office of Legislative Affairs. This coordinated effort has ensured that the Department carefully, diligently, and fully implements the FSA's requirements. For example, as discussed in Chapter 2, the Department has consulted with experts from state and federal criminal justice systems to inform its implementation efforts.

B. Appointing the Independent Review Committee

On April 8, 2019,[32] NIJ announced[33] that the nonpartisan and nonprofit Hudson Institute would host the IRC. In selecting an organization, NIJ considered a variety of factors, including the organization's legislatively mandated status as a nonprofit and nonpartisan organization, the ability to build a qualified team of experts, expertise regarding risk and needs assessments, staffing capabilities, and ability to complete high-profile projects in a timely manner.

The Host Committee's role is akin to that of a project manager, hosting, supporting, and monitoring the activities of the IRC. Hudson, as the Host Committee, administers the grant, establishes a secure document-retention system for archiving all official records and financial transactions, coordinates logistics, and selects the IRC members.

Hudson is not the IRC and has no formal role in developing the Risk and Needs Assessment System. However, its selection is necessary

to create the IRC, whose members would be leaders in their field and have expertise to design and implement a new system.

The Hudson Institute subsequently identified[34] six people to serve as members of the IRC. Those members include experts in criminology and prison systems, as well as former senior justice sector policymakers. Biographies of the IRC members are included below.

Within a week of funds being made available to select the IRC, the IRC host organization and membership were named.[35] Subsequently, the IRC independently organized its activities and gave advice to Department subject matter experts, the NIJ's outside experts, and the Attorney General. This advice occurred through formal meetings with the Attorney General, Deputy Attorney General, and Department subject matter experts and through informal consultation sessions between IRC members and NIJ outside experts.

Patti Butterfield, Ph.D. Dr. Butterfield is an adjunct faculty member at Southern New Hampshire University and a former Senior Deputy Assistant Director in the Federal Bureau of Prisons (BOP) Reentry Services Division. In addition to serving in leadership in the BOP's reentry services programs, Dr. Butterfield previously served as a prison psychologist and coordinator for inmate treatment programs. As a result, Dr. Butterfield has an appreciation for the needs of inmates within a prison and the needs of defendants as they reenter society.

James M. Byrne, Ph.D. Dr. Byrne is a Professor and Associate Chair at the School of Criminology and Justice Studies at University of Massachusetts Lowell and Director of the Global Community Corrections Initiative. Dr. Byrne received his undergraduate degree in Sociology (Summa cum Laude) from the University of Massachusetts, Amherst (1977), and his Masters (1980) and Doctoral degree (1983) in Criminal Justice from Rutgers University. He is the author of several books, monographs, journal articles, and research reports on a range of criminal and juvenile justice policy and program evaluation issues. Dr. Byrne is the Editor-in-Chief of the journal, *Victims and Offenders: An International Journal of Evidence-based Research, Policy, and Practice*. Dr. Byrne also serves on the editorial boards of two other journals, *Criminology and Public Policy*, and the *European Journal of Probation*, and on the National Advisory Committee for the journal, *Federal Probation*, a publication of the Administrative Office of the U.S. Courts.

Faye S. Taxman, Ph.D. Dr. Taxman is an University Professor and Director of the Center for Advancing Correctional Excellence! at George Mason University. Dr. Taxman's areas of research include evidence-based courts and corrections programs, including program design and interventions. She is currently researching, among other things, the development of web-based risk-needs-responsivity tools for federal, state, and local criminal justice agencies; she has developed the RNR Simulation Tool to determine whether the services provided are responsive to the risk and need factors of offenders in their correctional systems. Dr. Taxman is on the Editorial Boards of the *Journal of Experimental Criminology, Criminology and Public Policy*, and *Journal of Offender Rehabilitation.* She is co-editor of *Health & Justice.* She received the University of Cincinnati award from the American Probation and Parole Association in 2002 for her contributions to the field. She is a Fellow of the Academy of Experimental Criminology and a member of the Correctional Services Accreditation Panel (CSAP) of England. In 2008, the American Society of Criminology's Division of Sentencing and Corrections recognized her twice as Distinguished Scholar. In 2017, she received the Joan McCord Award from the Division of Experimental Criminology. In 2018, she was awarded a Fellow of the American Society of Criminology.

George J. Terwilliger III. Mr. Terwilliger has served in numerous leadership roles in the Department of Justice, including as Deputy Attorney General, Acting Attorney General, and United States Attorney for the District of Vermont. While serving as Deputy Attorney General, Mr. Terwilliger oversaw the Justice Department's operations, including the operation of the Bureau of Prisons. In total, Mr. Terwilliger served for 15 years with the Justice Department. Mr. Terwilliger currently is a partner at the Washington, DC, office of McGuireWoods.

John P. Walters. Mr. Walters is chief operating officer of the Hudson Institute and former director of the Office of National Drug Control Policy (ONDCP) in the cabinet of President George W. Bush. Mr. Walters served as the nation's "Drug Czar" from 2001 until 2009. In that position, Mr. Walters "guided all aspects of federal drug policy and programs—supporting efforts that drove down teen drug use 25 percent, increased substance abuse treatment and screening in the healthcare system and dramatically dropped the availability of cocaine and methamphetamine" in the United States.[36] Mr. Walters previously served as Chief of Staff and Deputy Director of Supply Reduction at ONDCP. Mr. Walters also has served as Assistant to the Secretary and Chief of Staff at the United States Department of Education.

John E. Wetzel. Secretary Wetzel is Secretary of Corrections for the Commonwealth of Pennsylvania and the Immediate Past Chair and member of the Executive Committee of the Council of State Governments Justice Center. After initially being appointed Secretary of Corrections in 2011, Secretary Wetzel was reappointed in 2015 and 2019. Secretary Wetzel has almost 30 years in the field of corrections. He is currently the President of the Association of State Correctional Administrators and a member of Harvard's Executive Session on Community Corrections. Secretary Wetzel previously was appointed as the corrections expert to the Charles Colson Task Force on Federal Corrections.[37]

C. Working with Outside Experts to Develop the System

In addition to receiving advice from the IRC, the Department went beyond the requirements of the FSA by working with outside experts and researchers throughout the country to develop the Risk and Needs Assessment System. On April 8, the NIJ announced that it began contracting with three experts, two of whom (Dr. Grant Duwe and Dr. Zachary Hamilton) focused on the development of the Risk and Needs Assessment System. Biographies of Drs. Duwe and Hamilton are included below.

Drs. Duwe and Hamilton quickly began to collect and review data from BOP. That data included information on BOP prisoners, prisoners released into the community, and BOP's risk prediction instrument, BRAVO (Bureau Risk Assessment Verification and Observation). BRAVO was designed to predict serious misconduct in prison. Drs. Duwe and Hamilton also learned about BOP's revised tool BRAVO-R, which is designed to address recidivism in the community. One of the experts completed a tour of BOP's Designation and Sentence Computation Center, located in Grand Prairie, Texas. Visiting the center enabled

the expert to learn about current risk and need tools that in are place and how those tools fit into the BOP's operations. These experts likewise met regularly with members of the IRC and consulted personally with the Deputy Attorney General.

Grant Duwe, Ph.D. Dr. Duwe is the Director of Research for the Minnesota Department of Corrections and a nationally recognized expert on the development of recidivism risk assessment systems. Dr. Duwe created the Minnesota Screening Tool Assessing Recidivism Risk (MnSTARR), as well as three other separate risk assessment instruments. Dr. Duwe was awarded the American Society of Criminology's Practitioner Research Award based on his development of the MnSTARR assessment system. Dr. Duwe has written over 60 articles that were published in peer-reviewed academic journals, including *Criminology*, *Criminology and Public Policy*, *Criminal Justice and Behavior*, and *Sexual Abuse: A Journal of Research and Treatment*. Dr. Duwe is a non-resident scholar at the Institute for Studies of Religion at Baylor University.

Zachary Hamilton, Ph.D. Dr. Hamilton is an Associate Professor of Criminal Justice and Criminology and the Director of the Washington State Institute for Criminal Justice. Dr. Hamilton has developed nationally renowned risk-need assessment systems for both juveniles and adults in Washington State, Nebraska, Tennessee, Delaware, and Iowa. Dr. Hamilton is a co-editor of the Handbook of Recidivism Risk/Needs Assessment Tools (2018). Dr. Hamilton has authored or co-authored numerous peer-reviewed publications, reports, and manuscripts on offender risk assessments. Dr. Hamilton's recent publications have appeared in *Experimental Criminology*, *Justice Quarterly*, *Criminology and Public Policy*, *Criminal Justice & Behavior*, and *Offender Rehabilitation*.

D. Consulting with Experts, Stakeholders, and Other Interested Parties

As part of the System's development, the Department held three listening sessions to enable experts, stakeholders—including organizations representing crime victims— and public interest organizations to comment on the development of the Risk and Needs Assessment System. The sessions took place on April 3, 2019, April 5, 2019, and May 3, 2019, at the Office of Justice Programs in Washington, DC.

First Step Act – Risk and Needs Assessment System listening session held on April 3, 2019, at the Office of Justice Programs.

First Step Act – Risk and Needs Assessment System listening session held on April 5, 2019, at the Office of Justice Programs.

First Step Act – Risk and Needs Assessment System listening session held on May 3, 2019, at the Office of Justice Programs.

Senior Department leadership, including the Director of NIJ and representatives from the Office of Deputy Attorney General and the BOP, welcomed those who offered comments and others who attended.

Those who offered oral and written comments included:

Aamra Ahmad, Sentencing Resource Counsel of the Federal Public and Community Defenders;

Sarah Anderson, Federal Affairs Manager, FreedomWorks;

Sakira Cook, Director of Justice Reform Program, The Leadership Conference on Civil and Human Rights;

Monique Dixon, Deputy Director of Policy, NAACP Legal Defense and Educational Fund, Inc.;

Ellen Donnarumma, President, International Community Corrections Association, and

Vice President of Justice Services, Community Resources for Justice;

Jim Felman, American Bar Association;

Richard Fiano, Regional Vice President, Association of Federal Narcotics Agents (AFNA);

Mark Holden, Senior Vice President, Koch Industries;

John Hollywood, Senior Operations Researcher, RAND Corporation;

DeAnna Hoskins, President and CEO, JustLeadershipUSA;

Susan Howley, Center for Victim Research, Justice Research and Statistics Association;

Jessica Jackson, National Director and Co-Founder, #cut50;

John Koufos, National Director of Reentry Initiatives, Right on Crime;

Paul Larkin, Senior Legal Research Fellow, The Heritage Foundation;

Nancy La Vigne, Vice President, Justice Policy, Urban Institute;

Mary Graw Leary, Chair, United States Sentencing Commission Victims Advisory Group;

Tom Manger, Major Cities Chiefs Association;

Marc Mauer, Executive Director, The Sentencing Project;

Jesselyn McCurdy, Deputy Director, American Civil Liberties Union;

Pat O'Carroll, Executive Director, Federal Law Enforcement Officers Association;

Sarah Picard, Research Director, Center for Court Innovation;

Arthur Rizer, Director, Criminal Justice & Civil Liberties, R Street Institute;

Christopher Scott, Director of Criminal Justice, Education, and Policing Reform, Open Society Policy Center;

Rabbi Levi Shemtov, Director, American Friends of Lubavith (Chabad);

Lindsay Silverberg, The Network for Victim Recovery of DC;

Faye Taxman, Professor, Criminology, Law and Society Department, George Mason University, and Director, Center for Advancing Correctional Excellence!; and

Jonathan Thompson, Executive Director and CEO, National Sheriffs' Association.

The participants offered constructive advice and comments on the following topics, among others: the contents of a useful risk assessment; the process for constructing a risk assessment; the need to avoid racial bias in the drafting and administration of risk assessments; the need to implement the FSA fully and expeditiously; and the desired contents of future criminal justice reform legislation. Additionally, some participants emphasized the need to take account of the harms suffered by crime victims.

The full written statements of the listening session participants will be available on the Department of Justice website.

E. Summary of Work to Develop the Risk and Needs Assessment System

The Department, its outside experts, and the IRC have conscientiously and expeditiously worked to meet the FSA's requirements with respect to developing the Risk and Needs Assessment System. This section highlights the Department's efforts.

1. Overview

As an initial matter, the Department and NIJ's experts researched and evaluated the attributes of a successful risk and needs assessment system. As discussed in Chapter 2, the Department requested and received information and recommendations from state prison systems and the BOP regarding recidivism and risk assessment tools. The outside experts from NIJ learned about BOP's revised recidivism tool, BRAVO-R, and analyzed it using relevant data from BOP. Those same experts looked for ways to improve the predictive accuracy of

BRAVO-R and to build a strong risk and needs assessment system.

While working on the Risk and Needs Assessment System, NIJ's experts regularly collaborated with members of the IRC. As part of this consultation process, the IRC reviewed NIJ's efforts, asked questions, and provided input.

In addition to the work of the Department of Justice's experts, Attorney General William P. Barr and Deputy Attorney General Jeffrey A. Rosen were personally involved in the process of developing the Risk and Needs Assessment System. Both the Attorney General and the Deputy Attorney General received information and input from Department components. And both of the Department's top leaders met individually with the members of the IRC to discuss the development of the System.

The Attorney General and Deputy Attorney General both personally visited BOP facilities to examine and understand the ways that a new risk and needs assessment system would impact inmates and the BOP system.

On July 8, 2019, the Attorney General toured the Federal Correctional Institution (FCI) in Edgefield, South Carolina. The Attorney General met with and was accompanied by U.S. Senators Lindsey Graham and Tim Scott of South Carolina. Senators Graham and Scott strongly supported passage of the FSA, and Senator Scott served as an original cosponsor of the bill. While at FCI Edgefield, Attorney General Barr spoke with prison officials, including vocational training, psychology, and education staff. The Attorney General also spoke with inmates who are participating in model BOP programs aimed at reducing recidivism and promoting

Attorney General William P. Barr, along with Senators Lindsey Graham and Tim Scott, receive a presentation from Supervisor Stephanie Ewing, of the Culinary Arts Vocational Training program at FCI Edgefield.

successful reentry into the community. The Attorney General toured Edgefield's UNICOR clothing and textile factory, an occupational and vocational training program, as well as other occupational and vocational training programs offered at the facility. Inmates in UNICOR clothing and textile factories cut, sew, weave, embroider, and use silk screening processes, among other things. In occupational and vocational programs, inmates learn a variety of skills-based, marketable job disciplines, such as the culinary arts, computer applications, and automobile service and maintenance. The Attorney General also learned about the facility's Residential Drug Abuse Program (RDAP), Non-Residential Drug Abuse Program (NR-DAP), faith-based programs,

and reentry services that help inmates successfully reintegrate into society.

The Deputy Attorney General visited the FCI in Englewood, Colorado, on July 2, 2019. During his visit, the Deputy Attorney General focused on programming opportunities for inmates. These opportunities included the National Roofing and Paving Program based at FCI Englewood, RDAP, NR-DAP, Culinary Arts Vocational Training (VT), UNICOR, and educational opportunities, among others. Consistent with the FSA's focus on evidence-based programming, the treatment philosophy in RDAP and NR-DAP is evidence-based, with both using Cognitive Behavioral Therapy. Skilled training, certificates, and licenses such as the Culinary Arts VT, UNICOR, and National

Inmate at FCI Englewood demonstrates Computer Aided Design (CAD) Drafting to Deputy Attorney General Jeffrey A. Rosen.

Roofing and Paving Program also are key to success under the FSA because they provide inmates with real-life employment skills and a better appreciation for the importance of developing responsible work habits.

2. FSA Statutory Obligations Met

Throughout the process of developing the Risk and Needs Assessment System, the Attorney General satisfied the obligations listed in 18 U.S.C. §§ 3631(a) and 3633.

As required by section 3631(a), the Attorney General consulted with the Director of BOP, the Director of NIJ, the Director of the Administrative Office of the United States Courts, the Director of the Office of Probation and Pretrial Services, the Director of the National Institute of Corrections, and the IRC in developing the System.

The Directors of BOP and NIJ have consistently supported and advanced the Department's efforts to develop the Risk and Needs Assessment System. For example, as noted previously, NIJ hired and worked closely with outside experts on risk and needs assessment systems to research, evaluate, and make recommendations as part of the process of developing the System. BOP has supported those experts' work and made its own experts available to work with NIJ on the risk and needs assessment tool. While the Department was developing the System, BOP also acted diligently to implement the FSA's initial requirements in its facilities through new and updated Bureau-wide policies. BOP and NIJ will remain closely involved as the Risk and Needs Assessment System is implemented and enhanced over time.

Both the Director of the Administrative Office of the United States Courts and the Director of the Office of Probation and Pretrial Services consulted with the Department regarding the FSA.

The Acting Director of the National Institute of Corrections (NIC) consulted with the Department during NIC's Advisory Board Meeting on Friday, June 21, 2019. During this meeting, the Acting Director and NIC's Advisory Board members offered recommendations and input regarding developing and implementing a new risk and needs assessment system. In addition to this in-person consultation, the Acting Director subsequently sent the Attorney General a detailed letter containing recommendations regarding the development and implementation of a risk and needs assessment system. The Attorney General considered the NIC's suggestions as part of the process of developing, publishing, and implementing the Risk and Needs Assessment System.

As discussed previously, the Attorney General and Deputy Attorney General personally consulted with the IRC. The IRC's members also regularly consulted with other members of the Department, including the NIJ and its experts. The IRC provided valuable input and raised probing questions to improve the risk and needs assessment tool. The Department will continue to consult with the IRC as the Department implements the Risk and Needs Assessment System.

In addition to satisfying the FSA's consultation requirements in developing the Risk and Needs Assessment System, the Attorney

Attorney General William P. Barr and members of the Independent Review Committee discuss the First Step Act of 2018 Risk and Needs Assessment System on July 11, 2019.

General satisfied the five requirements outlined in 18 U.S.C. § 3633(a).[38] First, as discussed previously, the Attorney General, through the efforts of BOP, NIJ, and other Department components, reviewed the effectiveness of evidence-based recidivism reduction programs in the BOP. The Attorney General also received input and recommendations regarding programming from the IRC.

Second, the Attorney General reviewed available information regarding such programs in state-operated prisons throughout the country. For example, Department representatives on June 27, 2019, visited the Volunteers of America Reentry Center (VOA) in Baltimore, Maryland. At the state reentry center, men and women receive counseling, job training, and customized support to help ensure success as they reenter their communities. The visitors had the chance to meet the leaders of the VOA, hear from individuals who have "graduated" from the center, and observe classes and a substance abuse support group.

Third, as a result of the above efforts, the Attorney General identified the most effective evidence-based recidivism reduction programs and has included aspects of those programs in the Risk and Needs Assessment System. Fourth, the Attorney General reviewed the policies for entering into evidence-based recidivism reduction partnerships. Fifth, the Attorney General directed the BOP regarding evidence-based recidivism reduction programs, the addition of any new evidence-based recidivism reduction programs, and the ability of faith-based organizations to provide educational evidence-based programs outside of religious classes and services. In carrying out these obligations, the Attorney General "consider[ed] the prevalence and mitigation of dyslexia in prisons."[39]

Thus, the Department has taken informed and proactive steps to study, develop, and publish a robust risk and needs assessment system. This report's subsequent chapters discuss in greater detail the information learned and the steps taken to develop and implement the Risk and Needs Assessment System. Chapter 2 addresses the characteristics of an effective risk and needs assessment system. Chapter 3 discusses the Risk and Needs Assessment System that the Department has developed. To conclude, Chapter 4 addresses processes to implement that System.

Attorney General William P. Barr and members of the Independent Review Committee. From left to right: George J. Terwilliger III, Dr. James M. Byrne, Dr. Patti Butterfield, the Attorney General, Secretary John E. Wetzel, and John P. Walters. Dr. Faye S. Taxman is not pictured.

NOTES

[1] Pub. L. 115-391.

[2] *Remarks by President Trump at 2019 Prison Reform Summit and FIRST STEP Act Celebration* (April 1, 2019), https://www.whitehouse.gov/briefings-statements/remarks-president-trump-2019-prison-reform-summit-first-step-act-celebration/ (last visited July 11, 2019).

[3] Pub. L. 115-391, § 101 (creating 18 U.S.C. § 3632(a)).

[4] 18 U.S.C. § 3632(a).

[5] *Id*.

[6] *Id*. § 3632(a)(1), (2).

[7] *Id*. § 3632(a)(4).

[8] *See Id*. § 3632(d)(4)(D), (E) (listing categories of prisoners who are ineligible to receive time credits). Eligible prisoners may earn time credits only by "successfully complet[ing] evidence-based recidivism reduction programming or productive activities." *Id.* § 3632(d)(4)(A).

[9] *Id*. § 3632(d)(4)(A)(i).

[10] *Id*. § 3632(d)(4)(A)(ii).

[11] *Id*. §§ 3624(g)(1), 3632(a)(7). Section 3624(g) takes effect "beginning on the date that the Attorney General completes and releases the risk and needs assessment system." First Step Act, Pub. L. 115-391, 102(b)(2).

[12] 18 U.S.C. § 3632(b); *see also* 18 U.S.C. § 3632(a)(3).

[13] *Id*. § 3621(h)(6).

[14] *Id*. § 3632(a)(5).

[15] *Id*. § 3632(c).

[16] *Id*. § 3632(d).

[17] *Id*. § 3632(a)(6).

[18] *Id*. § 3632(a)(8).

[19] *Id*. § 3632(a).

[20] *Id*. § 3631(a).

[21] *Id*. § 3633(a); *see also* 18 U.S.C. § 3631(b)(1), (b)(2) (requiring the Attorney General to "develop recommendations regarding evidence-based recidivism reduction programs and productive activities in accordance with section 3633"). In carrying out his obligations under section 3633(a), the Attorney General "shall consider the prevalence and mitigation of dyslexia in prisons." 18 U.S.C. § 3633(b).

[22] 18 U.S.C. § 3632(f), (g).

[23] *Id*. § 3631(b)(4); *see also id*. § 3631(b)(5) (requiring the Attorney General to "make any revisions or updates to the risk and needs assessment system that the Attorney General determines appropriate pursuant to the review under paragraph (4)").

[24] *Id*. § 3631(b)(3).

[25] First Step Act, Pub. L. 115-391, § 107(e).

[26] *Id*.

[27] *Id*. § 107(f).

[28] *Id*. § 107(g). The Attorney General also must provide a report to Congress, as discussed in 18 U.S.C. § 3634.

[29] *Id*. § 107(d).

[30] *Id*. § 107(b).

[31] *Id*. § 107(c).

[32] The Department selected the nonprofit and nonpartisan Hudson Institute as the host organization on April 8, 2019, after the 30 day deadline included in the FSA. This delay was unavoidable for two related reasons. First, under the Anti-Deficiency Act, the Department was unable to fund the IRC without an appropriation or congressionally-approved reprogramming of existing funds. Second, one day after the FSA was signed, many of the appropriations that fund the Department lapsed and the Department was partially shut down until Friday, January 25, 2019. Most of the staff working on FSA-related projects were furloughed until that date, and nearly all FSA-related work, including identifying funds to be reprogrammed, did not qualify as excepted work.

Despite these challenges, the Department diligently worked to ensure the creation of the IRC. When the Government opened on Monday, January 28, 2019, the Department began the process of identifying organizations that might serve as the Host Committee and worked to identify sources of funding for the IRC. The Department submitted a reprogramming request to the House and Senate Appropriations Committees in early March, 2019.

While awaiting Congress's determination, the Department engaged with those organizations deemed the most qualified to serve in this administrative role, including the Hudson Institute. At the end of that process, Hudson was selected as the most qualified organization.

The House and Senate Appropriations Committees' approval for the reprogramming request was completed on April 2, 2019. Within days of this approval, the Department obligated those reprogrammed funds and selected the Host Organization.

[33] *Department of Justice Announces First Step Act Implementation Progress* (April 8, 2019), https://www.justice.gov/opa/pr/department-justice-announces-first-step-act-implementation- (last visited July 12, 2019).

[34] *Hudson Institute To Host First Step Act's Independent Review Committee* (April 8, 2019), https://www.hudson.org/research/14945-hudson-institute-to-host-first-step-act-s-independent-review-committee (last visited July 12, 2019).

[35] *See* Note 33.

[36] *John P. Walters Biography Page*, https://www.hudson.org/experts/559-john-p-walters (last visited July 12, 2019).

[37] *John Wetzel Biography Page*, https://www.cor.pa.gov/Pages/Secretary%20of%20Corrections.aspx (last visited July 12, 2019).

[38] *See also* 18 U.S.C. § 3631(b)(1), (2).

[39] 18 U.S.C. § 3633(b).

Chapter 2
Characteristics of an Effective Risk and Needs Assessment System

I n order to develop a robust risk and needs assessment system that is effective for the federal prison population, it is critical to first examine and define the general characteristics of an effective risk and needs assessment system. This chapter discusses the fundamental aspects of an effective risk and needs assessment system and its common characteristics. It also discusses the necessity of validating a risk and needs assessment tool against the population for which it is being used and the importance of using scales to assess risk and needs. Finally, this chapter summarizes the information that experts in the field shared with the Department regarding the development of a robust risk and needs assessment system.

I. Common Elements of Effective Risk and Needs Assessment Tools

Risk and needs assessments are cornerstones of correctional systems and offender supervision management. Many correctional and post-supervision agencies in the United States utilize tools to assess offender risk.[1] Some of those agencies leverage tools to measure offender needs.[2] These tools are used to determine an offender's risk of carrying out misconduct while in custody, what criminogenic needs (*i.e.*, needs that research shows are associated with an offender's risk of recidivism) an offender may have and which programs may address those needs, and an offender's risk for reoffending once the offender returns to the community.[3] Although there are many different assessment tools in use, the most accurate assessment tools share a number of common characteristics, including dynamic individualized assessment, periodic re-validation and update, racial and ethnic neutrality, and a proper assessment of criminogenic needs.

A. Dynamic Individualized Assessment

The federal prison population changes over time, both demographically and culturally. Likewise, individual inmates also typically change over the course of their incarceration.[4] An effective risk and needs assessment (RNA) system should be able to recognize changes in each inmate and update that inmate's assessment score accordingly. The First Step Act (FSA or Act) requires an RNA system to "determine the recidivism risk of each prisoner as part of the intake process, and classify each prisoner as having minimum, low, medium, or high risk for recidivism."[5] The Act also requires periodic reassessment of prisoners.[6] And the FSA requires the system to provide "information on the best ways that the Bureau of Prisons can tailor . . . programs to the specific criminogenic needs of each prisoner so as to most effectively lower each prisoner's risk of recidivism."[7] Providing individualized assessments ensures the measurement of individual needs and the assignment of programming are based on an inmate's personal characteristics.

Nearly all effective RNA tools incorporate both static and dynamic factors.[8] Static factors are characteristics of inmates that are historical and therefore unchangeable, such as offense severity, age at first arrest, and criminal history at prison entry. By contrast, dynamic factors are variables that may change over time and may reflect more recent inmate behavior, such as prison misconduct or substance abuse. The use of dynamic factors in a risk and needs assessment tool helps agencies monitor individual changes in an inmate's risk or needs, and is a requirement of the FSA.[9] Dynamic factors are also more responsive to treatment options, because static items by definition do not change, even in response to an effective treatment. In many cases, however, dynamic items are only incrementally predictive of criminal behavior, as compared to the static items in various RNA tools.[10]

Additionally, as one of its core functions, the risk tool must be able to differentiate inmates at a higher risk for recidivism from inmates at a lower risk for recidivism. Based on the principles of Risk-Needs-Responsivity, the focus of treatment and programming is prioritized for high risk offenders.[11] This approach is key in areas where resources are limited. Consistent with these principles, the FSA requires the Bureau of Prisons (BOP) to ensure that "priority for participation in recidivism reduction programs shall be given to medium-risk and high-risk prisoners, with access to productive activities given to minimum-risk and low-risk prisoners."[12]

For purposes of needs assessment and programming, correctional staff should conduct a needs assessment for each inmate at or near the beginning of service of the sentence to determine the inmate's programming requirements. The specific needs identified by this assessment should include areas empirically associated with offender recidivism, such as substance abuse and educational and vocational needs.[13] The needs assessment also may identify additional critical targets for intervention, such as reducing symptoms of mental illness, improving offender quality of life, and improving institution adjustment. A needs assessment should also be updated periodically, through reassessments, to reflect an offender's progress toward addressing programming needs or to identify the emergence of any additional needs during incarceration.[14]

B. Periodic Re-Validation and Update

A robust risk and needs assessment tool should be re-validated (reviewed to confirm the tool is still accurate) and periodically updated to ensure it continues to measure risk and needs accurately. The tool should adapt as the inmate population changes. The FSA incorporates this best practice by requiring the Attorney General, "on an annual basis, [to] review, validate, and release publicly on the Department of Justice website the risk and needs assessment system."[15] An RNA tool should be re-validated by analyzing the most recent offender information available, including both custodial and post-release conduct. An RNA tool should contain as much current information as possible, while accepting that there will be a time lag to collect recidivism data for the system re-validation process.

The needs assessment tool should be validated to ensure that the needs assessments accurately measure an inmate's actual needs. In addition, the needs measures used in the tool should be relatively reliable, in that scorings by different assessors of the measure would yield the same approximate score. Consistent evaluations of a system's needs assessment will ensure its continued reliability and validity.

As noted previously, the FSA requires the Attorney General to "review, validate, and release publicly" the RNA system annually.[16] To fulfill that requirement, an effective RNA tool may collect data on new test items that receive no weight or have a minor impact on the inmate's risk assessment. A test

item is a suspected risk factor that is not currently included in the RNA tool and the correctional organization does not currently collect information about; for example, "age at first arrest" is a common risk factor.[17] Without information or data, researchers cannot test whether it is an effective recidivism predictor that could enhance the RNA tool. By collecting the necessary data, researchers could determine if the test item should be included in a future version of the risk assessment. When the risk assessment is later re-validated, the test item may be shown as an effective predictor of recidivism, in which case it may be fully scored and used in future versions of the RNA tool.

C. Racial and Ethnic Neutrality

An effective RNA system includes risk tools that are racially unbiased, where "racially unbiased" is defined as having the tool correctly calibrated or standardized within racial and ethnic groups. To be racially unbiased or neutral, the tool should ensure race and ethnicity have no effect on the tool's outcomes, specifically the prediction of whether an individual will recidivate, once the total score is controlled.[18] In concrete terms, this means that if an RNA tool applies the same risk score to two offenders of different races, the two offenders must still be proven to have the same recidivism rate.[19] This methodology was primarily how the Administrative Office of the U.S. Courts' Post Conviction Risk Assessment (PCRA) tool was previously tested for racial bias.[20] It was also how one study of Correctional Offender Management Profiling for Alternative Sanctions (COMPAS) validated that tool as racially unbiased.[21]

Alternately, an effective RNA tool can be proven to be racially or ethnically neutral based on some other acceptable criterion for fairness and equality. There is an ongoing academic debate regarding how to develop such a tool. For example, a ProPublica article criticized that same COMPAS RNA tool for having more false positives and fewer false negatives among black offenders than among white offenders,[22] even as COMPAS was properly calibrated within groups.[23] There are multiple definitions for racial fairness, and they are mutually exclusive.[24] When defining racial fairness as calibrated groups, COMPAS was racially unbiased, but to meet the standard of calibrated groups, it had to be racially biased by the definition of equal false-positive rates. Unless the racial groups have the exact same recidivism base rates, an RNA tool cannot achieve racial fairness by more than one definition of racial fairness at the same time.[25]

D. Assessment of Criminogenic Needs

Although RNA tools should assess criminogenic needs, an effective RNA system distinguishes needs from risks.[26] Whereas risk refers to an inmate's statistical propensity for recidivism or some other adverse outcome, needs represents the areas of intervention that must be addressed to mitigate the risk of recidivism.[27] On theoretical grounds, criminogenic needs are directly or indirectly linked to an adverse outcome, such as recidivism. However, they may not be predictive of that outcome and should not be included in the risk score unless they are predictive.[28]

Although research varies about how each of these needs is linked to recidivism risk, criminal thinking, antisocial peers, substance abuse, and education and vocational needs typically are identified as important criminogenic needs.[29] "Antisocial peers" means the extent to which an offender's social network is comprised of other criminal offenders. Criminal thinking encompasses the "attitudes, values, and/or behaviors of offenders that influence their involvement in criminal behavior."[30]

An effective RNA system includes tools to assess criminogenic needs for two key reasons. First, to the extent that needs assessments are conducted over time, inmate progress can be dynamically monitored consistent with that inmate's reentry goals. Certain needs areas, such as substance abuse patterns, can be assessed repeatedly. That repeated assessment allows correctional staff to determine whether an inmate's risk is adequately mitigated in that area or if the inmate would benefit from additional treatment. Other needs areas are more difficult to assess dynamically, but measures do exist and may be deployed with some degree of success.[31]

Second, a needs assessment can assist in programming decisions, as correctional departments match inmates to programs that address their specific criminogenic needs. For example, if an inmate has no assessed need for substance abuse treatment, then such treatment is likely to be of no benefit to the inmate and likely to represent a poor use of resources. The treatment will be more cost effective if high-need inmates can be identified and placed in the appropriate programs, thus maximizing taxpayer value and the total number of inmates who can participate in appropriate services.

Finally, an effective RNA system is practical about the needs assessment. It measures needs that correspond to the evidence based recidivism reducing programs and treatments that are available in the correctional system, currently or in the near future. Effective RNA tools do not collect data on measures that have no operational value.

II. Validating a Tool Against the Appropriate Population

Effective RNA tools must be validated on the population for which they will be used. "The intent of actuarial risk assessment is to identify subgroups within an offender population who have significantly different rates of recidivism."[32] One example of subgroups is male and female. As different correctional systems will have different subgroups within them, an effective RNA tool must be tailored to best identify and differentiate the subgroups that exist in each correctional system.

When it comes to risk assessments, there is no "one size fits all" tool. This is particularly important since the BOP inmate populations differ from the offender populations in state and local correctional systems, in numerous ways. Based on data collected by the Bureau of Justice Statistics (BJS),[33] the following table displays the differences in demographic and population characteristics between the prison populations of federal and state correctional jurisdictions.

Comparison of Federal and State Inmates in 2017, based on BJS National Prisoner Statistics Data

Category	Descriptor	Federal Inmate	State Inmate
Gender	Female	6.8%	7.6%
Race/Ethnicity*	White	27.6%	31.1%
	Black	37.1%	32.6%
	Hispanic	31.9%	21.6%
	Other	3.4%	14.7%
Citizenship	Non-US Citizen	19.7%	5.8%
Offense Type	Drug Offense	47.3%	14.8%
	Weapons	17.0%	4.2%
	Immigration	6.7%	0.0%
	Other Public Order (non-weapon, non-immigration)	14.9%	7.7%
	Homicide	1.6%	14.2%
	Robbery	3.8%	13.1%
	Other Violent Offense	2.4%	27.9%
	Burglary	0.2%	9.4%
	Other Property Offense	5.7%	8.1%

 * *"Hispanic" includes all races with Hispanic ethnicity; all other categories include non-Hispanics of that race.*

The BJS table also indicates that most federal inmates are incarcerated for drug trafficking, weapons charges, and other (meaning non-weapon and non-immigration) public order offenses. The majority of state inmates are in prison for violent offenses, such as murder and robbery.[34] State correctional populations also include more inmates with convictions for property offenses (mainly burglary), whereas the relatively few property offenders in the federal system are usually convicted of fraud. In terms of race and ethnicity, federal inmates are more often Hispanic or non-US citizens than state inmates, but they are slightly more likely to be black. Finally, federal inmates are slightly less likely to be female than state inmates.

Notably, these BJS statistics were drawn from the sentenced federal prison population. As

compared to the population of incoming or outgoing inmates, the general population will skew toward more severe crimes and longer sentences. For example, 14% of state inmates are in prison for murder, but far less than 14% of state crimes are murder. Rather, murderers tend to serve significant sentences and take up a disproportionate share of the prison beds. State offenders convicted of minor crimes may be numerous, but because they move in and out of prison more quickly, relatively few are using prison beds at any given time.

Due to these differences, state inmates may have more variety in their criminal histories than federal inmates, which would affect the predictive nature of a risk tool designed for a state prison population. A risk factor can better predict recidivism not only if it is more strongly related to recidivism, but also if there is more variety in the risk factor's scores and more individuals with extreme scores. State and federal prisons both have many offenders with extremely low violent histories, but if state prisons have more inmates with very violent histories, then violent history may be a stronger predictor of recidivism in state prisons. Accordingly, if

the BOP imported a state-validated RNA tool into the federal prison system and made no adjustments, the imported tool would likely overestimate the inmate's history of violence as an important risk predictor. Instead, a good risk and needs assessment tool should be validated for the population for which it will operate.

III. The Importance of Using Scales to Assess Risk and Needs

Risk and needs assessment tools often include scales to assess offender risk and needs. Scales are standardized measures that permit an objective and reliable way of interpreting a response. For example, after the question "how satisfied are you with our service" you might find the following scale of responses: 1 – very unsatisfied; 2 – unsatisfied; 3 – neutral; 4 – somewhat satisfied; or 5 – very satisfied. For an inmate's risk and needs assessment, specifically, data are collected regarding the inmate, scored, and compared with normative data to yield a determination of specific needs areas requiring intervention.

Example of Standardized Measures in a Scale

Question: How satisfied are you with our service?

1 – Very Unsatisfied	2 – Unsatisfied	3 – Neutral	4 – Somewhat Satisfied	5 – Very Satisfied

Statement: Sometimes I lose my temper.

1 – Strongly Disagree	2 – Disagree	3 – Not Sure	4 – Agree	5 – Strongly Agree

Statement: I have friends that I trust.

1 – Strongly Disagree	2 – Disagree	3 – Not Sure	4 – Agree	5 – Strongly Agree

As an example of a needs assessment tool, the Tests of Adult Basic Education (TABE) is a measure currently used in the BOP and other adult education settings to assess the needs of adult learners.[35] Based on an inmate's results on the TABE, that inmate may be referred to literacy or other educational programs. In addition to standardized measures like the TABE, needs assessments may also include empirically-based questionnaires. For example, the Adverse Childhood Experiences Survey has been shown to predict suicide risk and other critical outcomes, and is therefore a strong predictor of the need for mental health programming.[36]

The use of scales in assessment tools helps ensure that data are collected and used in a more quantifiable, consistent, reliable, and accountable manner. Actuarial risk assessments are generally more effective than subjective professional judgment at predicting recidivism and other adverse outcomes.[37] Additionally, it is more efficient to train staff to use a scale than it is to teach the years of experience required to leverage subjective professional judgment. It is also more efficient to validate, amend, and improve the scales over time. By contrast, professional judgment is harder to test systematically and harder to improve in an objective manner. Thus, scales are key to an effective RNA system.

IV. Guidance from the Experts

The Department has consulted with experts from state and federal criminal justice systems to inform its implementation efforts.

Specifically, experts from the Administrative Office of the United States Courts, Pennsylvania Department of Corrections, Minnesota Department of Corrections, and the BOP provided informative briefings on the research, development, and implementation of risk and needs assessment systems. These briefings provided critical information and evidence to assist in developing an effective risk and needs assessment system.

A. Administrative Office of the United States Courts

The Administrative Office of the United States Courts, Probation and Pretrial Services Office (Administrative Office), briefed the Department on its pre-trial risk assessment and post-conviction risk assessment tools. This included a discussion of the federal Post Conviction Risk Assessment (PCRA), which is used to help probation officers manage defendants while on supervision. The Administrative Office explained the prolonged process that it employed to evaluate existing commercial risk assessment tools and ultimately to decide to create its own risk assessment tool.[38] For example, the Administrative Office met with the developers of major existing risk and needs assessment tools, assembled a panel of experts, and began a pilot project in five districts. After completing that process, the Administrative Office decided "that creating an instrument with data specific to the federal probation system was preferable."[39]

The Administrative Office also discussed the need for high inter-rater reliability—that is, the extent to which different raters (in this

case, corrections and probation officials) yield consistent results. The Administrative Office also noted that training staff to enter data accurately and consistently was a key requirement for an effective system.

The Administrative Office also provided guidance on best practices that contributed to positive changes in an individual probationer's behavior: "1) intensive correctional interventions should be directed to higher risk rather than lower risk persons under supervision (risk principle), 2) dynamic risk factors should be targeted for change (need principle), and 3) strategies such as cognitive behavioral treatment should be delivered in a way that is specifically responsive to the characteristics of the individual (responsivity principle)."[40]

The Administrative Office shared research regarding the predictive effect of PCRA.[41] In one study, "changes in offender risk were associated with changes in re-arrest rates. Specifically, high-, moderate-, and low/moderate-risk offenders with decreases in either their risk classifications or overall PCRA scores had lower recidivism rates compared to their counterparts whose risk levels or scores either remained unchanged or increased, while increases in offender risk were associated with higher rates of rearrests."[42] The Administrative Office emphasized that PCRA was designed to assess behaviors for federal probationers and was not intended to be transferable to other jurisdictions or offender populations without appropriate modification.

Research studies also have evaluated PCRA for forms of bias, including racial bias. While a 2016 study found "that black offenders obtained higher average PCRA scores than white offenders, most of the racial differences in the PCRA scores (about 69%) were attributable to the criminal history domain[.]"[43] The remainder of the difference was attributable to employment and education, as well as social networks and attitudes.[44] Additionally, PCRA "strongly predicted rearrests for both black and white offenders across the instrument's risk levels. Stated differently, a given PCRA score had essentially the same meaning—*i.e.*, the same probability of recidivism—across the two race groups[.]"[45]

B. Pennsylvania Department of Corrections

The Pennsylvania Department of Corrections (PA DOC) briefed the Department of Justice on its risk and needs system and the research underlying that system. PA DOC explained the process used to select its suite of risk assessment tools and the situations in which those tools are deployed.

PA DOC emphasized the need to connect the risk assessment tool to the population for which it is being used–for example, by developing the tool based on that population. PA DOC promoted the idea of using computers to automate the process of calculating risk assessment scores to improve scoring consistency and to allow staff to spend more time engaged in other beneficial activities. PA DOC also emphasized the need to train staff on how to administer risk assessment tools properly.

Like other organizations that provided a brief, PA DOC used the area under the curve (AUC) to test the predictive validity of various tools. AUC represents the probability that a randomly selected recidivist would have received a higher risk rating than a randomly selected non-recidivist. The closer the AUC value is to 1, the more predictive it is.
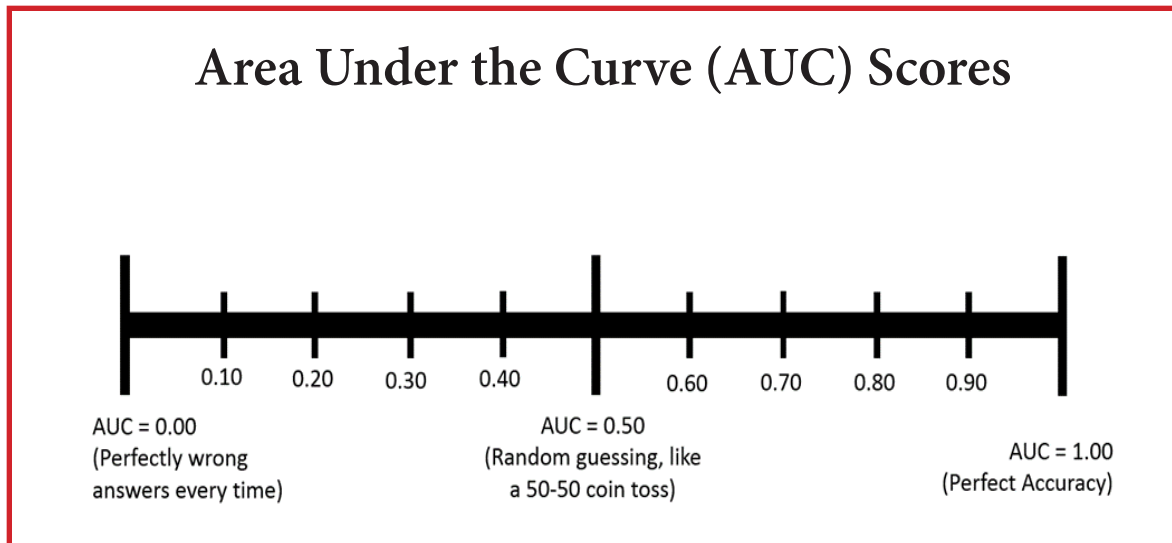
Area Under the Curve (AUC) Scores

C. Minnesota Department of Corrections

The Minnesota Department of Corrections (MNDOC) briefed the Department of Justice on its risk and needs system, Minnesota Screening Tool Assessing Recidivism Risk (MnSTARR assessment system) and the research that Minnesota found to be most relevant. MNDOC summarized the history of risk assessment tools and how current tools assess a defendant's risk and treatment needs. MNDOC also summarized the work of Daniel Kahneman and Amos Tversky,[46] who researched how cognitive biases affect decision-making. An example of such biases includes anchoring (giving too much weight to unimportant variables). Effective risk assessment tools minimize or address cognitive biases by relying on empirically validated factors.

MNDOC also noted how current risk assessment tools include both static and dynamic risk factors. Examples of dynamic risk factors include education, substance abuse, and criminal thinking. Current tools also more completely integrate protective factors (factors that reduce the risk of recidivism).

MNDOC discussed the benefits of using automated risk assessment tools, which leverage technology to allow staff simply to answer questions and input information. Such tools are more efficient, requiring less staff time manually calculating scores.

MNDOC emphasized the need for risk assessments to be designed for the population for which they are being used. For example, a facility should not assume that a risk assessment based on one prison

population will be an accurate predictor of recidivism for another prison population. This is because risk factors may vary among prison populations (such as males and females). MNDOC (like PA DOC) stated that it is essential that an assessment tool be used on the same population that was used to develop the tool.

D. Federal Bureau of Prisons

In addition to the information received from other experts, researchers from the Bureau of Prisons provided a briefing on its recidivism risk prediction instrument, BRAVO (Bureau Risk Assessment Verification and Observation). BRAVO is specifically used to predict serious misconduct in prison.

Consistent with the Administrative Office, PA DOC, and MNDOC, BOP discussed the AUC and the implications of the AUC values for its instruments. Using AUC, BOP found that BRAVO is a more dynamic predictor of recidivism for male offenders, with an AUC of 0.77.

BOP noted its risk assessment tool has included dynamic factors for several decades. Those dynamic factors include history of escape or attempts to escape; history of violence in prison; age; drug use while incarcerated; education level; program participation; contact with family and community; and criminal behavior while in prison.

Additionally, BOP demonstrated how a dynamic risk needs tool called BRAVO-R, customized to predict recidivism, was superior to BRAVO at accurately predicting recidivism for both male (AUC of 0.79) and female (AUC of 0.77) offenders and superior to other relevant instruments commonly used in predicting recidivism for both males and females.[47] As shown in the following Figure, BOP compared the AUC statistic for BRAVO-R to the AUCs for other well-known tools (including PCRA) and found higher AUCs for BRAVO-R than those reported for the other state and federal risk instruments.

AUCs for Commonly-Used Recidivism Predictors and the BRAVO-R Risk Assessment Tool

Tool	AUC
COMPAS	0.67
LSI-R	0.64
SPIN-W	0.73
STRONG	0.74
WRN-R	0.66
PCRA	0.73
BRAVO-R (Male)	0.79
BRAVO-R (Female)	0.77
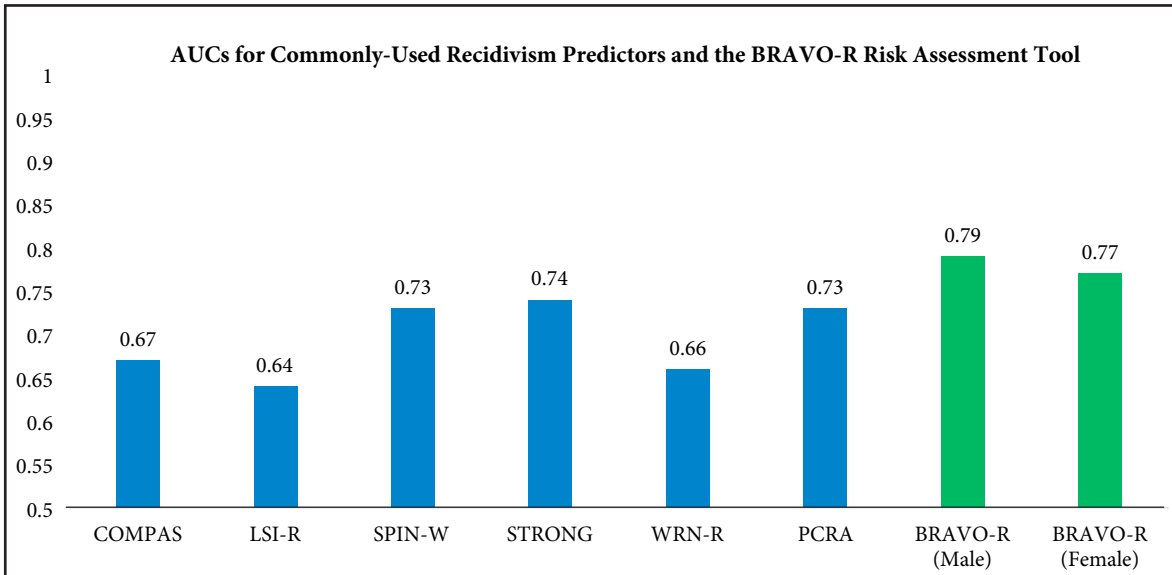
Commonly Used Recidivism Predictor Tools		
Acronym	**Full Name**	**Examples of Locations Where the Tool is Being Used**
COMPAS	Correctional Offender Management Profile for Alternative Sanctions	FL, MI, NM, NY, and WI
LSI-R	Level of Service Inventory – Revised	CA, CO, DE, HI, IA, IL, NE, PA, and WV
SPIN-W	Service Planning Instrument – Women	CT
STRONG	Static Risk and Offender Needs Guide	WA
WRN-R	Wisconsin Risk and Needs – Revised	WI
PCRA	Federal Post Conviction Risk Assessment	Administrative Office of the U.S. Courts for Federal Probation

The six recidivism predictor tools shown on the above graph were selected for comparison based on their level of use and the existence of a published AUC, which facilitates direct comparison.

BOP also emphasized that a risk assessment tool must be validated on each population for which it is used. For example, federal offenders are different from state offenders in material ways and those differences should be reflected in the RNA.

E. Common Principles

Several common principles arose from the expert briefings. For example, multiple briefers emphasized that risk assessment tools should be developed using the

populations for which they ultimately will be used. Likewise, risk assessment tools should be statistically validated on the populations for which they will be used.

The experts also agreed that risk assessment tools should include a mixture of static and dynamic risk factors. Finally, decision-makers should continually improve risk assessment tools based on ongoing research regarding the predictive value of certain risk factors. The AUC is widely used to test the predictive validity of risk assessment tools. These principles were instructive in developing an effective and robust risk and needs assessment system.

Common Principles from Federal and State Authority Briefings

- Develop Tools Using Appropriate Inmate Population

- Validate Tools on Appropriate Inmate Population

- Deploy Static and Dynamic Factors

- Continually Improve Tools Through Ongoing Research

NOTES

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[4] Craig Haney, *The Psychological Impact of Incarceration: Implications for Post-Prison Adjustment*, From Prison to Home: the Effects of Incarceration and Reentry on Children, Family and Communities Project (2001).

[5] 18 U.S.C. § 3632(a)(1).

[6] 18 U.S.C. § 3632(a)(4).

[7] 18 U.S.C. § 3632(b)(2).

[8] *Supra* note 1.

[9] 18 U.S.C. § 3631(b)(4)(C).

[10] Faye S. Taxman, R*isk assessment: Where do we go from here?*, in Handbook of Recidivism Risk/Needs Assessment Tools 271-284 (Jay P. Singh et al. eds., 2018).

[11] *Risk-need-responsivity model for offender assessment and rehabilitation 2007-06*, Public Safety Canada, https://www.publicsafety.gc.ca/cnt/rsrcs/pblctns/rsk-nd-rspnsvty/index-en.aspx (last modified Jan. 31, 2018).

[12] 18 U.S.C. § 3621(h)(6).

[13] James Bonta & Douglas A. Andrews, The Psychology of Criminal Conduct 180-181 (6th ed. 2017).

[14] See 18 U.S.C. § 3632(d)(5).

[15] 18 U.S.C. § 3631(b)(4).

[16] *Id*.

[17] Scott D. Camp, Federal Bureau of Prisons, A Risk Assessment Tool for Recidivism by Federal Inmates (2018).

[18] American Educational Research Association et al., Standards for Educational and Psychological Testing (1985).

[19] While the FSA does not explicitly require the Attorney General to create a race-neutral RNA system, 18 U.S.C. § 3631(b)(4)(E) requires the Attorney General to periodically conduct "*an evaluation of the rates of recidivism among similarly classified prisoners to identify any unwarranted disparities, including disparities among similarly classified prisoners of different demographic groups, in such rates.*"

[20] Jennifer L. Skeem & Christopher T. Lowenkamp, *Risk, Race, and Recidivism: Predictive Bias and Disparate Impact*. 54 Criminology 680-712 (2016).

[21] Anthony W. Flores et al., *False Positives, False Negatives, and False Analyses: A Rejoinder to Machine Bias: There's software used across the country to predict future criminals. And it's biased against blacks.* 80 Federal Probation 38 (2016).

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future criminals. And it's biased against Blacks. PROPUBLICA (2016).

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24 Richard Berk et al., *Fairness in Criminal Justice Risk Assessments: The State of the Art*, SOCIOLOGICAL METHODS & RESEARCH 1 (2018). Found at https://journals.sagepub.com/doi/full/10.1177/0049124118782533.

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27 Tony Ward & Shadd Maruna, REHABILITATION: BEYOND THE RISK PARADIGM, 48-49 (2007).

28 *Supra* note 26.

29 *Supra* note 13.

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31 Alese Wooditch et al., *Which Criminogenic Need Changes Are Most Important in Promoting Desistance From Crime and Substance Use?* 41(3) CRIMINAL JUSTICE AND BEHAVIOR, 276-99 (2014).

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33 U.S. DEP'T OF JUSTICE, BUREAU OF JUSTICE STATISTICS, PRISONERS IN 2017 1 – 44 (2019), https://www.bjs.gov/index.cfm?ty=pbdetail&iid=6546.

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39 *Id*. at 9.

40 *Id*. at 17.

41 *See Federal Post Conviction Risk Assessment Risk Compendium,* Administrative Office of the United States Courts Probation and Pretrial Services Office (March 2018). https://www.uscourts.gov/sites/default/files/federal_post_conviction_risk_assessment_research_compendium_0.pdf (last visited May 13, 2019).

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44 Jennifer L. Skeem and Christopher T. Lowenkamp, Risk, Race, and Recidivism: Predictive Bias and Disparate Impact (2016), https://onlinelibrary.wiley.com/doi/full/10.1111/1745-9125.12123. (last visited May 24, 2019).

[45] *Supra* note 41 at 3.

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Chapter 3:
The First Step Act of 2018
Risk and Needs Assessment System

Introduction

In late March 2019, the National Institute of Justice (NIJ) contracted with Dr. Zachary Hamilton and Dr. Grant Duwe[1] to serve as consultants for the development and validation of a risk and needs assessment system to be implemented by the Federal Bureau of Prisons (BOP) pursuant to the First Step Act (FSA or the Act). Hamilton and Duwe began their work by attending a series of listening sessions organized by NIJ. Moreover, they participated in numerous conference calls with staff from the BOP, NIJ, and the Independent Review Committee in which they discussed data availability and background information on BOP policies and practices.

Hamilton and Duwe began reviewing research material that BOP Office of Research and Evaluation (ORE) staff had prepared on Bureau Risk and Verification Observation (BRAVO), the BOP's current classification system,[2] and the BRAVO-Recidivism (BRAVO-R) tool. BRAVO-R is a risk assessment instrument developed by ORE and designed to predict recidivism—a new arrest or return to federal prison within three years after release from prison—for the BOP inmate population. BRAVO-R, which contains both static and dynamic items, is a modified version of the BRAVO assessment instrument the BOP currently uses to predict misconduct for custody-level classification purposes.

In May, the NIJ experts and BOP staff held a series of conference calls to exchange contextual information regarding quantitative data available for the development of risk and needs tools. The NIJ experts and BOP ORE and Reentry Services Division staff attended the weekly calls. Additional conference calls were also completed with BOP reentry staff to assess the availability of needs assessment data. On May 21, 2019, Hamilton visited the BOP's Designation and Sentence Computation Center (DSCC) in Grand Prairie, Texas. At the DSCC, Hamilton met with custody designation staff responsible for gathering many of the data collected about inmates admitted to BOP facilities. Hamilton observed the assessment process, learned how the BOP uses its classification assessment, and identified other routinely collected data that could be used to develop and/or improve the risk and needs assessment system.

In early May, Hamilton and Duwe received access to de-identified data, including three-year rearrest data, on BOP inmates. The dataset contained 278,940 BOP inmates released from BOP facilities between 2009 and 2015. The dataset included only those

inmates released to the community. It excluded released inmates who died during the three-year follow-up period and inmates scheduled for deportation. In addition to three-year rearrest data, the dataset contained a large number of variables relevant for the assessment of risk and needs. In particular, the dataset contained measures commonly associated with recidivism risk, such as criminal history, demographic characteristics such as age, prison misconduct, and participation in programming. The dataset also included measures used in both BRAVO and the recently-developed BRAVO-R.

As described below in more detail, Hamilton and Duwe used the BOP datasets to develop and validate a new tool, the Prisoner Assessment Tool Targeting Estimated Risk and Needs (PATTERN).[3] The PATTERN instrument is an assessment designed to predict the likelihood of general and violent recidivism for all BOP inmates over a three-year follow-up period. As required by the FSA,[4] the PATTERN assessment instrument contains static risk factors as well as dynamic items that are associated with either an increase or a reduction in risk. Like BRAVO-R, PATTERN is a gender-specific assessment providing predictive models, or scales, developed and validated for males and females separately. These efforts make the tool more gender responsive, as prior findings have indicated the importance of gender-specific modeling.[5]

Operating under an extremely short timeline, the development of PATTERN is a significant advancement in the U.S. Department of Justice's (the Department's) implementation of the FSA for the following reasons:

- The PATTERN assessment tool achieves a high level of predictive performance and surpasses what is commonly found for risk assessment tools for correctional populations in the United States;

- The PATTERN instrument makes great use of dynamic factors, enabling inmates to work to make behavioral changes while in prison;

- PATTERN's predictive performance reduces bias and aims to improve parity across race and ethnic classifications; and

- The PATTERN instrument is a single assessment, incorporating a design that seeks to encourage risk reduction behavior over time by inmates.

The following section briefly reviews the BRAVO-R assessment tool from which PATTERN builds. The next section then discusses the methods used to develop and validate PATTERN. And the following section details the enhanced predictive performance results for PATTERN. Finally, the chapter discusses the needs assessment component of the Risk and Needs Assessment System.

I. BRAVO-R

The BRAVO-R instrument is, as noted above, a modified version of the existing classification assessment the BOP created in the 1970s and has updated periodically as part of regular reviews. The current

classification assessment, the BRAVO instrument, enables staff to perform an initial assessment at the DSCC once they have received the sentencing documentation from the U.S. Probation Office.[6] A reclassification assessment is completed after an inmate has been in prison for seven months and every 12 months thereafter. The initial assessment contains items that measure whether the inmate has a detainer (a separate pending sentence of proceeding), offense severity, criminal history, history of escape/attempts, history of violence, voluntary surrender/pre-commitment,[7] age, drug use, and education level. The reclassification assessment contains these items along with the following additional measures: percentage of time served, program participation, living skills, prison misconduct type and frequency, and family/community ties. Therefore, the BRAVO instrument contains not only static factors, but also dynamic items that measure whether risk has increased or decreased while an inmate is confined. The same version of both assessments—initial and reclassification—are given to males and females, however the groups are measured using different cut points to account for gender differences in risk.

Taking advantage of the overlap between misconduct and recidivism, the BOP recalibrated its classification tool to predict recidivism once an inmate is released into the community.[8] Similar to the BRAVO instrument, the BRAVO-R instrument contains initial and reclassification assessments, which are the same for males and females with different cut points. BRAVO-R, however, contains three fewer items than BRAVO. More specifically, the detainer, offense severity, and percentage of time served items were removed because the BOP found them to be inconsistent measures in predictive accuracy.

Analyses performed by BOP ORE show that BRAVO performs very well in predicting misconduct for the BOP population. Independent analyses conducted by the NIJ consultants reveal that BRAVO-R performs similarly well in predicting recidivism.

II. Methodology for Developing PATTERN

In an effort to expand, enhance, and provide an assessment that meets the FSA's requirements, the NIJ experts were tasked with the development and creation of a risk and needs assessment tool. Through calls and site visits, every attempt was made to identify all available data elements that could be used in the development of the risk and needs tools. Using available, quantifiable data, the NIJ experts, in consultation with the Department and considering the advice of the Independent Review Committee, developed PATTERN, the risk and needs assessment tool that will be deployed in BOP facilities. PATTERN builds from the BRAVO-R tool, which was already quite good at predicting recidivism. The analyses used to develop PATTERN reflect recent advancements in risk assessment tool construction adding both gender and outcome (*i.e.,* general and violent recidivism) specificity. Recognizing the FSA's emphasis on using dynamic factors, additional items

relating to an inmate's program participation and performance were added to the possible predictors. PATTERN's prediction models were then developed and assessed for predictive validity and bias. The details of the analysis plan are provided below.

A. Data and Sample

As indicated, several factors were selected for testing from BRAVO/BRAVO-R, while others were created based on BOP-provided indicators. BRAVOBRAVO-R indicators selected for the PATTERN models included criminal history score, history of violence, history of escapes, voluntary surrender, and education score.[9] Additional indicators, including several dynamic factors, were also developed using routinely collected BOP data elements. The new or redesigned dynamic predictors include:[10]

- Infraction convictions (any), a count measure[11] identifying the number of infractions resulting in a guilty finding that the inmate has incurred during the current incarceration.[12]

- Infraction convictions (serious and violent), a count measure identifying the number of serious infractions (identified as being at the 100 or 200 level)[13] resulting in a conviction that the inmate has incurred during the current incarceration.

- An overall measure of the number of beneficial programs completed by the inmate (for example, education, parenting, drug treatment, and technical and vocational programs), converted into ordinal categories.

- The number of technical and vocational courses created as a count metric.

- Federal industry employment, also known as UNICOR, was indicated "yes" if the individual worked in UNICOR during his or her current incarceration.

- Drug treatment was assessed as a categorical measure, identifying programming need based on the BRAVO drug/alcohol abuse indicator and further assessing residential, non-residential, or no treatment completed during the current incarceration.

- Drug education completed during the current incarceration.

- And an offender's willingness to use income earned during incarceration for payment toward victim restitution and dependents was indicated with the created "non-compliance with fiscal responsibility" measure.[14]

The additional or redesigned static factors include:

- Age at first conviction,[15] an ordinal measure identifying the number of years between the individual's date of birth and his or her first recorded conviction by BOP assessment staff.

- Age at the time of assessment, calculated as the difference between the offender's current age when the BRAVO assessment is conducted and an individual's date of birth.

- If the crime of conviction that resulted in the current BOP incarceration was violent,[16] a "yes" response was identified in the instant offense measure.

- Finally, a "yes" response was indicated for an individual identified as a "sex offender" based on that individual's initial assessment under the Walsh criteria.[17]

To evaluate the PATTERN development sample, the NIJ experts computed basic statistics describing the sample. Eligible members of the sample included those who were released from a BOP facility to a location in the United States and had received a BRAVO assessment. This provided an eligible sample size of 222,970 individuals. Consistent with prior risk assessment development, continuous measures were converted to ordinal, categorical indicators. Category ranges were constructed based on the prevalence of responses and the impact on recidivism. Response prevalence for the development sample is provided in Table 1. While a large pool of items was considered, to provide a concise review of model descriptive statistics, only items selected via model prediction algorithms are displayed.[18]

Table 1. Sample Descriptive Statistics (N = 222,970)

MEASURE	PERCENT OF SAMPLE
Age at first arrest	
>= 35	14
< 35, >= 25	15
< 25, >= 18	52
< 18	18
Age at time of assessment	
> 60	4
< 50, <= 60	11
> 40, <= 50	22
> 29, <= 40	38
> 25, <= 29	14
>= 18, <= 25	11
Infraction convictions (any)	
0	63
> 0, <= 1	17
> 1, <= 2	8
> 2	12

MEASURE	PERCENT OF SAMPLE
Infraction convictions (serious and violent)	
0	82
> 0, <= 1	12
> 1, <= 2	3
> 2	3
Number of programs completed (any)	
0	49
1	15
> 1, <= 3	16
> 3, <= 10	15
> 10	5
Number of technical or vocational courses	
> 1	8
> 0, <= 1	10
0	82
Federal industry employment (UNICOR)	
Yes	8
No	92
Drug treatment while incarcerated	
No need indicated	22
Completed residential drug treatment during incarceration	8
Completed drug treatment during incarceration	13
Need indicated but no treatment during incarceration	57
Drug education while incarcerated	
No	60
Yes	40
Non-Compliance with financial responsibility	
No	97
Yes	3
Instant offense violent	
No	71
Yes	29

MEASURE	PERCENT OF SAMPLE
Sex offender (Walsh)	
No	90
Yes	10
BRAVO-R Initial: Criminal History Score[19]	
0-1 points	33
2-3 points	14
4-6 points	17
7-9 points	13
10-12 points	9
13+ points	14
BRAVO-R Initial: History of Violence	
None	58
>10 years minor	4
>15 years serious	6
5-10 years minor	5
10-15 years serious	5
<5 years minor	6
5-10 years serious	8
<5 years serious	6
BRAVO-R Initial: History of Escapes	
None	74
>10 years minor	4
5-10 years minor	3
<5 years minor or any serious	5
BRAVO-R Initial: Voluntary Surrender	
Yes	25
No	75
BRAVO-R Initial: Education Score	
HS degree or GED - Verified	67
Enrolled and progressing in GED	15
No verified degree and not participating in GED program	18
Sample	
Training	67
Test	33

MEASURE	PERCENT OF SAMPLE
Gender	
Male	85
Female	15
Recidivism	
General	47
Violent	15

B. Assessment Construction and Validation

The NIJ consultants used a dataset of all BOP releases from 2009 to 2015 to develop and validate PATTERN. The vast majority of items within the dataset were drawn from SENTRY, the BOP's centralized inmate management system. The BOP also provided data on recidivism, which was measured as a new arrest or return to BOP custody within three years of release.

The NIJ experts used both split-sample and K-fold procedures to develop and validate the predictive models. The classic split-sample procedure is a simpler approach in which data are partitioned into two equal halves, and one subset is used for training while the other is used to test how well the tool predicts recidivism. This method is limited in that it is unable to use all available data for each step, potentially resulting in prediction instability. Split-sample procedures are also limited in that the training set is smaller than what is otherwise achieved via the K-fold method, resulting in a less accurate final model. Despite these limitations, the split-sample procedure also makes it possible to carry out

an objective, "apples-to-apples" comparison with BRAVO-R on a test (or validation) set.

To create the PATTERN instrument, the NIJ experts placed all BOP inmates released between 2009 and 2013 in the training set (*i.e.,* the data used to develop the predictive models). As shown in Table 1 above, roughly two-thirds (66 percent) of the development sample were included in the training set, and the remaining one-third (33 percent) was reserved for the testing sample.

Gender is also relevant when trying to create an ideal assessment tool. Gender responsivity has been regarded as an essential component of risk instrument development.[20] Gender-responsive risk metrics are developed by separating males and females into individual samples to produce gender-specific prediction models, which improves both the context and accuracy of prediction.[21] To accommodate gender-specific modeling, two samples were also subdivided to create male- (85 percent) and female-only (15 percent) samples.

Most risk assessments utilize Burgess, or unweighted, scoring schematics.[22] Such

schemes treat each item equally in predicting recidivism, and the overall risk score is then summed. Based on findings of previous studies,[23] analytically weighting assessment items improves predictive accuracy, and this was the method adopted for PATTERN.

Related to gender-responsive modeling techniques, outcome specificity is also a concern. Instruments used to predict general recidivism may not be accurate if they are used only to identify a specific type of reoffending.[24] To accommodate outcome specificity, two PATTERN models were computed to predict general recidivism (any arrest or return to BOP custody following release) and violent recidivism (violent arrests following release) within three years. As indicated in Table 1, the base recidivism rate for all offenders is roughly 47 percent for general and 15 percent for violent recidivism.

The NIJ experts used this same process to develop predictive models for general and violent recidivism for males and females separately. More specifically, the team created four distinct predictive models: 1) general recidivism for males; 2) general recidivism for females; 3) violent recidivism for males; and 4) violent recidivism for females.

C. Predictive Performance Metrics

Model predictive validity, also known as discrimination, measures the degree to which an assessment separates the recidivists from the non-recidivists. One of the most widely used metrics for evaluating predictive performance is the area under the curve (AUC).[25]

D. Evaluating Predictive Performance on the Test Set

Relying on the AUC as the primary metric for evaluating predictive validity, the research team analyzed how the PATTERN instruments performed in predicting recidivism on the test set, which consisted of inmates released between 2014 and 2015. More specifically, risk points for each instrument (that previously were created in the training set) were calculated for subjects in the test set. AUC results showed how each assessment performed in predicting general and violent recidivism for males and females. Further analyses were completed to assess potential issues related to racial and ethnic neutrality.

E. Development of Risk Level Cut Points

Consistent with the FSA's requirement to "classify each prisoner as having minimum, low, medium, or high risk for recidivism," 18 U.S.C. § 3632(a)(1), the NIJ consultants identified risk level categories (RLCs) via cut points, which are risk score thresholds that place individuals into four categories: high, medium, low, or minimum. While there are several known methods for creating RLC cut points, PATTERN's cut points were set around the recidivism base rate. Briefly, each item response (*see* Table 2) results in a score, and an individual's response scores are summed to compute a total score. The total scores for individuals are analyzed, and their RLC is ascertained based on the score's reference to all other released inmates in the sample. An "aggregate," or collection of

scores, can be identified by determining the distribution of BOP releasees' total scores. Typically, this aggregation approximates a normal distribution in which most of the scores are near the average.

Cut points were next established to determine an individual's RLC. To identify which individuals are high, medium, low, and minimum risk, PATTERN uses the base rate, which is roughly the "average" rate of recidivism for the entire BOP development data set. The cut point is then set at a value above or below the base rate. As an example, let us assume a risk instrument had scores ranging from -50 to 100, where the average risk score was 25 with an accompanying 40 percent recidivism base rate (*see* Figure 1).

To provide an objective understanding of what low risk means for this population, one could then identify the risk score associated with a 20 percent probability of reoffending (or half the base rate) and set that as the mark for low risk. Using this example, if the average risk score is 25, and the risk score associated with 20 percent probability is 5, then any individual scoring 5 or less would be classified as low risk (*see* Figure 2).

Similarly, the BOP base rates for general and violent recidivism were used to help determine how inmates could be assigned to the four risk level categories for PATTERN. Specifically, the low risk threshold was set at roughly half the base rate (or 24 percent) for general recidivism and just over two-thirds the base rate for violent recidivism (or 12 percent). The minimum risk category was set at just under one-quarter of the base rate (or

10 percent) for general recidivism and one-third of the base rate for violent recidivism (or 5 percent). The high risk category was set at roughly two-thirds above the base rate (or 80 percent) for general recidivism, and just over twice the base rate (or 33 percent) for violent recidivism. Those individuals not identified as minimum, low, or high risk were classified as medium risk. This specific set of cut points was one of nearly a dozen examined and tested. The current cut points endeavor to set the appropriate balance between maximizing the number of inmates eligible to earn early release time credits and to participate in evidence-based programming that would reduce their recidivism risk to a low or minimum category, while also considering public safety and the risk of recidivism upon release.

The four categories were created for both general and violent recidivism risk scores. A final set of categories was created where an individual must be identified as minimum risk of both general and violent recidivism to be classified as minimum in the final RLCs. An individual that was identified as lower than medium risk in both the general and violent models was labeled as low risk in the final RLC. Those individuals identified as high risk in either the general or violent models were classified as high risk in the final RLCs. Finally, those not classified as minimum, low, or high risk were identified as medium risk in the final RLCs.

To prevent over-classification of female offenders, this process was completed separately for male and female samples, using the gender-neutral base rates for general

Figure 1. Example Risk Score Distribution

Average Risk Score

Higher Risk Scores

Lowest Risk Scores

-50
Lowest Risk Score

25
Average Risk Score

100
Highest Risk Score

Figure 2. Illustration of Aggregate Risk Score Distribution and Cut Point Creation

Base Rate

½ The
Base Rate

Low
Risk

20%
5
Low
Cut Point

40%
25
Average
Risk Score
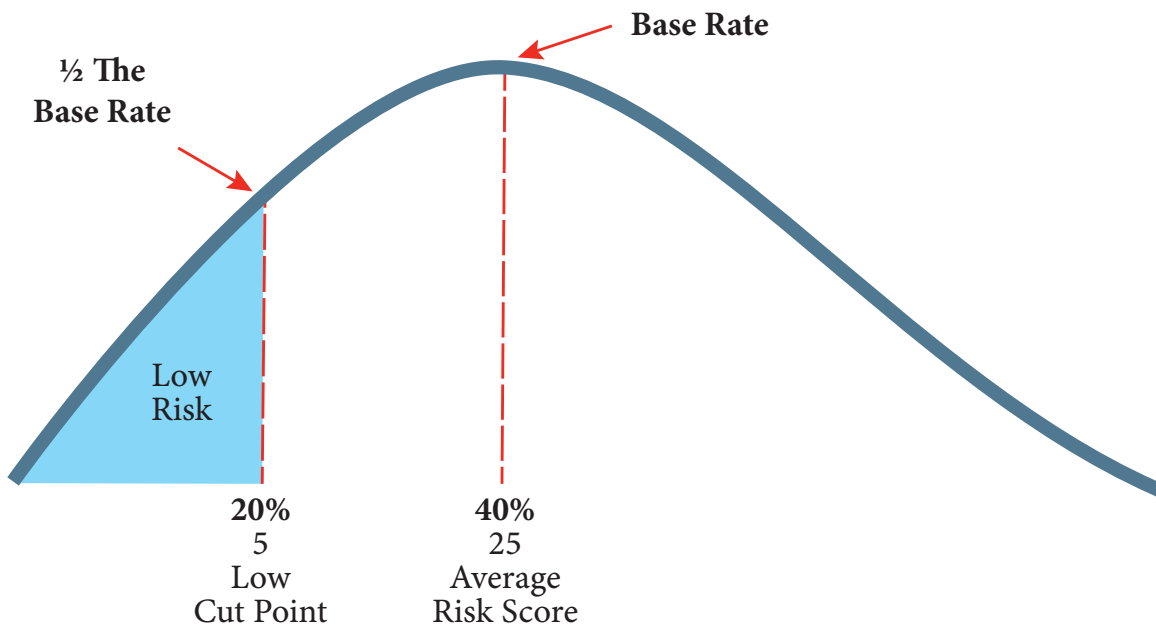
and violent recidivism (47 and 15 percent, respectively). Once again, the NIJ experts analyzed the impact of the RLCs on race/ethnicity, including diagnostic odds ratios to assess risk level category discrimination between FSA-eligible and non-eligible RLCs. In order to identify potential sources of bias, a relative rate index (RRI) was computed to assess the magnitude of disparity across risk categories. The RRI compares the rate, or proportion, of individuals across race/ethnicity groups in the RLCs of PATTERN.[26]

III. PATTERN Results

This section provides the findings from the developed PATTERN general and violent risk models, as well as the created RLCs. Results from the prediction models are displayed first, with comparisons between the PATTERN and BRAVO-R models, showing the achievements of PATTERN. Then, the RLC proportions and category recidivism rates are presented. Finally, tests and comparisons for racial and ethnic neutrality are provided.

A. PATTERN Risk Prediction Models

Four risk models were created for the BOP sample of individuals released.[27] Table 2 provides the response scoring for each of the four models created.

Each column represents a different gender- and outcome-specific prediction model. Cell values represent response scores, where blank cells indicate items not identified as predictive for a given model. Larger values indicate greater prediction strength for a given model. Of note is the overlap in predictors; they are more common than distinct across models. However, where some items distinctly predict for certain models, findings are consistent with expectations of recidivism specificity.

Table 2. Points Assigned in the PATTERN Risk Assessment Models

	General		Violent	
MEASURE	**Male**	**Female**	**Male**	**Female**
Age at first conviction				
>= 35	0	0	0	0
< 35, >= 25	4	5	2	1
< 25, >= 18	8	10	4	2
< 18	12	15	6	3

MEASURE	General		Violent	
	Male	Female	Male	Female
Age at time of assessment				
> 60	0	0	0	0
> 50, <= 60	6	3	3	1
> 40, <= 50	12	6	6	2
> 29, <= 40	18	9	9	3
> 25, <= 29	24	12	12	4
>= 18, <= 25	30	15	15	5
Infraction convictions (any)				
0	0	0	0	0
> 0, <= 1	3	2	2	1
> 1, <= 2	6	4	4	2
> 2	9	6	6	3
Infraction convictions (serious and violent)				
0	0	0	0	0
> 0, <= 1	2	2	2	2
> 1, <= 2	4	4	4	4
> 2	6	6	6	6
Number of programs completed (any)				
0	0	0	0	0
1	-3	-2	-1	-1
> 1, <= 3	-6	-4	-2	-2
> 3, <= 10	-9	-6	-3	-3
> 10	-12	-8	-4	-4
Number of technical or vocational courses				
0	-2	-4		
> 0, <= 1	-1	-2		
>1	0	0		
Federal industry employment (UNICOR)				
Yes		-1		-1
No		0		0

MEASURE	General		Violent	
	Male	Female	Male	Female
Drug treatment while incarcerated				
No need indicated	-6	-9	-3	-3
Completed residential drug treatment during incarceration	-4	-6	-2	-2
Completed drug treatment during incarceration	-2	-3	-1	-1
Need indicated but no treatment during incarceration	0	0	0	0
Drug education while incarcerated				
No	0		0	0
Yes	-1		-1	-1
Non-compliance with financial responsibility				
No		0		
Yes		3		
Instant offense violent				
No	0		0	0
Yes	4		5	3
Sex offender (Walsh)				
No	0		0	
Yes	1		1	
BRAVO Initial: Criminal History Score				
0-1 points	0	0	0	0
2-3 points	6	6	2	2
4-6 points	12	12	4	4
7-9 points	18	18	6	6
10-12 points	24	24	8	8
13+ points	30	30	10	10
BRAVO Initial: History of Violence				
None	0	0	0	0
>10 years minor	1	1	1	1
>15 years serious	2	2	2	2
5-10 years minor	3	3	3	3
10-15 years serious	4	4	4	4
<5 years minor	5	5	5	5

MEASURE	General		Violent	
	Male	Female	Male	Female
5-10 years serious	6	6	6	6
<5 years serious	7	7	7	7
BRAVO Initial: History of Escapes				
None	0	0	0	0
>10 years minor	2	2	1	2
5-10 years minor	4	4	2	4
<5 years minor or any serious	6	6	3	6
BRAVO Initial: Voluntary Surrender				
Yes	-12	-9	-1	-2
No	0	0	0	0
BRAVO Initial: Education Score				
HS degree or GED - Verified		-2		-2
Enrolled and progressing in GED		-1		-1
No verified degree and not participating in GED program		0		0
0 – Lowest			0	0
1 – Low/Moderate			1	1
3 - Moderate			3	3
5 – High			5	5
7 – Greatest			7	7

B. Predictive Validity

The strength of the predictive validity is of key importance. As described previously, predictive validity is measured through AUC values. As shown in Figure 3, PATTERN achieves a higher level of predictability and surpasses common risk assessment tools for correctional population in the U.S.

Simply put, an AUC of .5 means there is a 50 percent probability that the result is accurate, which is the same as a coin toss. An AUC of 1.0 means there is a 100 percent probability in the result, which is essentially perfection. Many risk assessments in the United States have an AUC in the .6 to .75 range. After computing the test sets' total scores using the PATTERN and BRAVO-R models, the predictive validity was compared. Using the two recidivism types (general and violent), AUC values were computed for males and females. Given that BRAVO-R has two tools, one at intake and one for reclassification, scores were combined so that if an individual possessed a reclassification score, it was

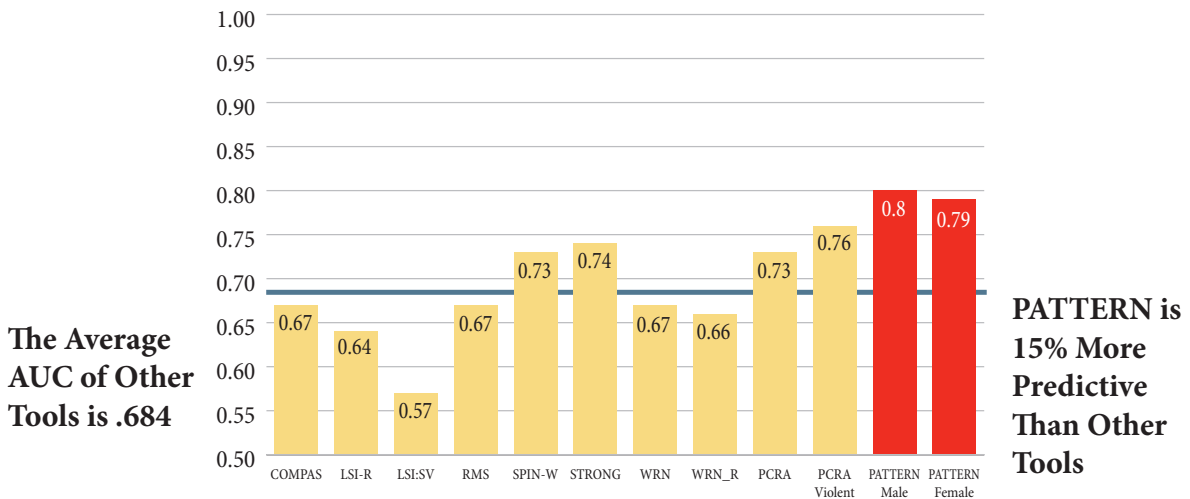Figure 3. AUC Values for Tools Used in the United States

The Average AUC of Other Tools is .684

	COMPAS	LSI-R	LSI:SV	RMS	SPIN-W	STRONG	WRN	WRN_R	PCRA	PCRA Violent	PATTERN Male	PATTERN Female
AUC	0.67	0.64	0.57	0.67	0.73	0.74	0.67	0.66	0.73	0.76	0.8	0.79

PATTERN is 15% More Predictive Than Other Tools

Table 3. The PATTERN and BRAVO-R AUC Comparisons

	General		Violent	
Model	Male	Female	Male	Female
PATTERN AUC Testing Dataset	0.80	0.79	0.78	0.77
BRAVO-R AUC Testing Dataset	0.77	0.77	0.75	0.76
AUC Enhancement	0.03	0.02	0.03	0.01

used. By contrast, an initial score was used only if a reclassification score was not available for a given offender. Findings from these analyses are presented in Table 3. When examining the models' AUC values, PATTERN demonstrates a consistent, modest improvement when compared to BRAVO-R, which was already a high-scoring tool. Specifically, there was a 1 to 3 percent improvement in AUC using the PATTERN model scoring.

Next, cut points were established for PATTERN based on the analytic placement method previously described.[28] Test set findings are presented in Table 4. As indicated, cut points were developed for the general and violent models and for females and males separately. The presented findings below show the model cut points, percentage of the population, and recidivism rates for each RLC.

Importantly, given the scoring for all four assessment models (*see* Table 2) and the cut point system developed to assign risk levels (*see* Table 4), 99 percent of offenders have the ability to become eligible for early release

Table 4. The PATTERN RLC Cut Point Scores, Population Distribution and Recidivism Rates

RLC	Cut Point		Population	Recid.
Any	Male	Female		
Minimum	10	9	20	10
Low	33	29	28	32
Medium	45	45	17	51
High			35	73
RLC	Cut Point		Population	Recid.
Violent	Male	Female		
Minimum	21	22	49	4
Low	35	30	35	19
Medium	40	35	9	32
High			8	44

Note: The base rate is 47 percent for general recidivism and 15 percent for violent recidivism.

through the accumulation of earned time credits even though they may not be eligible immediately upon admission to prison. That is, as offenders participate in evidence-based programming, carry out work assignments, and complete courses, nearly all have the ability to reduce their risk score to the low risk category.

Next, the RLC proportions and each category's associated rate of recidivism were examined (*see* Table 5). Nearly half of the population (48 percent) identified as low or minimum risk and thus eligible for early release under the FSA through earned time credits. When examining recidivism proportions, the proportion of recidivism increases as risk increases from minimum to high. General recidivism rates increase, on average, 22 percent with each successive RLC category and an average increase of 10

percent. Odds ratios comparing minimum and low risk offenders to those offenders who are not FSA eligible, or to those in the medium and high risk categories, were identified. With regard to general recidivism, minimum and low risk offenders possess 86 percent reduced odds of recidivating, and 88 percent reduced odds of recidivating violently, as compared to medium and high risk offenders. Collectively, these findings show that a substantial proportion of the population is deemed eligible for early release through the accumulation of FSA earned time credits, and the odds ratio statistics identify a substantial demarcation in recidivism rates between early-release-eligible (minimum and low) and non-eligible (medium and high) risk categories. Furthermore, the RLC levels identify their achieved goal, balancing public safety concerns (*i.e.,* a low rate of recidivism) while

Table 5. The PATTERN RLC Sample Proportions and Recidivism

PATTERN RLC	Population	Recid.	Violent Recid.	Recid OR	Violent OR
Minimum	20	9	1		
Low	28	31	6	0.14	0.12
Medium	17	51	13		
High	35	73	30		

Table 6. The PATTERN RLC Gender Comparisons

PATTERN	Population		Recidivism		Recidivism OR		Violent Recidivism		Violent OR	
RLC	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Minimum	17	38	10	9			1	1		
Low	25	42	30	35	0.14	0.16	7	4	0.13	0.19
Medium	18	14	50	60			14	11		
High	40	6	73	74			31	17		

simultaneously maximizing the proportion of individuals eligible for early release through the accumulation of earned time credits.

Next, gender differences were examined using the PATTERN RLCs. The population proportions and recidivism findings are presented in Table 6. In contrast to the overall RLC breakdown (*see* Table 5) there is a substantial distinction in population proportions when comparing males and females. Specifically, 42 percent of males versus approximately 79 percent of females are identified to be eligible for early release under the FSA through the accumulation of earned time credits. However, the rates of both general and violent recidivism are similar across all four RLCs. Furthermore, the odds ratios identity similar prediction strength with minimum and low risk males identify 86 percent reduced odds of general and 87 percent reduced odds of violent recidivism; where FSA eligible females identify 84 percent reduced odds of general and 81 percent reduced odds of violent recidivism. Collectively, these findings indicate gender parity when examining recidivism by RLC category.

C. Race/Ethnicity

The final set of tests examined potential issues related to racial and ethnic neutrality. While nearly all indicators likely to be used within a risk assessment model have the potential

to be correlated with socio-economic status (SES), race, and/or ethnicity, recent finding[29] have indicated that bias is reduced when assessments include dynamic needs indicators. Dynamic programmatic needs measures tend to have lower associations with SES/race/ethnicity[30] and, in turn, tend to reduce the impact of criminal history measures that are more highly correlated with SES/race/ethnicity. Therefore, when developing PATTERN, there was an attempt to include many predictive dynamic indicators. This effort served two purposes: to reduce potential sources of racial disparity and to develop an assessment that would allow offenders the opportunity to reduce their risk scores over time via good behavior (*i.e.,* a lack of infraction behavior) and successful completion of programming.

Below, AUC comparisons broken down by race/ethnicity are provided for PATTERN. Next, RLC population distribution variations are examined across the four primary BOP race/ethnicity categories—white, African-American (AA), Hispanic, and Other. The Relative Rate Index (RRI) is then computed to assess the likelihood of non-white individuals being identified as FSA-eligible, or the likelihood that minimum and low risk offenders will be eligible for the time credits. ORs are then provided, examining the differences between PATTERN's general and violent recidivism rates for both white and non-white FSA-eligible individuals.

To provide a detailed examination, race/ethnicity findings are broken down by gender. As displayed in Table 7, AUC findings are consistent across these groups. In particular, the PATTERN AUC values are consistently large. Specifically, AUC values for general recidivism range from 0.78 to 0.83 for males and from 0.76 to 0.81 for females. With regard to violent recidivism, AUC values range for 0.75 to 0.82 for males and from 0.75 to 0.81 for females. Overall, these findings indicate strong and comparable prediction strength for PATTERN models across all race/ethnicity categories, suggesting minimal racial/ethnic disparity for PATTERN's prediction strength.

In performing their analysis, the NIJ experts also examined gender and race/ethnicity variations across population distributions

Table 7. The PATTERN Race/Ethnicity AUC Comparisons

Recidivism	Male					Female				
General	*All*	*White*	*AA*	*Hispanic*	*Other*	*All*	*White*	*AA*	*Hispanic*	*Other*
PATTERN	0.80	0.81	0.78	0.78	0.83	0.79	0.79	0.80	0.76	0.81
Violent	*All*	*White*	*AA*	*Hispanic*	*Other*	*All*	*White*	*AA*	*Hispanic*	*Other*
PATTERN	0.77	0.80	0.75	0.78	0.82	0.78	0.75	0.80	0.75	0.81

for PATTERN. Those results are shown in Tables 8 -10.

IV. Needs Assessment Process

Under the FSA, the risk and needs assessment system must include both a risk component (PATTERN, described above) and a needs component. Specifically with respect to inmate needs, the system must be used to determine "the type and amount of evidence-based recidivism reduction programming that is appropriate for each prisoner and assign each prisoner to such programming … based on the prisoner's criminogenic needs."[31] As discussed in detail in Chapter 4, the BOP has a strong needs assessment process in place to match inmates with programs to address their criminogenic needs. Through the FSA implementation process, and in consultation with the IRC and others, the Department identified an opportunity to expand upon the present system and to create an updated, more comprehensive needs assessment. The details surrounding the project timeline are set forth in Chapter 4.

Dyslexia Screening

Under the FSA, the BOP is required to "incorporate a dyslexia screening program into the System,"[32] screen inmates for dyslexia, and "incorporate programs designed to treat dyslexia into the evidence-based recidivism reduction programs or productive activities."[33] The BOP currently provides a variety of educational opportunities to inmates housed within its 122 institutions.

Specifically, Program Statement 5200.05, Management of Inmates with Disabilities, outlines the BOP's strategy for managing inmates living with disabilities, including dyslexia. According to the policy and consistent with the FSA's requirements, inmates are pre-screened at the time designation takes place and assessed for disabilities once they arrive at an institution. Individualized accommodation procedures require institutions to convene interdisciplinary committees to ensure inmates have appropriate access to treatment, programs, and services.

As required by the FSA and to ensure a strong screening process specific to dyslexia, the BOP expanded current requirements for assessing and accommodating disabilities as part of the work of developing the Risk and Needs Assessment System. Psychologists and education experts within the agency consulted external experts and reviewed studies on the prevalence of dyslexia in prison populations within the United States and worldwide.[34]

The FSA requires that tools used in dyslexia assessment be psychometrically valid, efficient, low cost, and readily available.[35] Therefore, the BOP dyslexia screening process consists of two steps that ensure a quality assessment allowing for a diagnosis. The first step is the inmate screening. The FSA defines dyslexia as "an unexpected difficulty in reading for an individual who has the intelligence to be a much better reader, most commonly caused by a difficulty in the phonological processing (the appreciation of the individual sounds of spoken language), which affect the ability of an individual to speak, read, and spell."[36]

Table 8. PATTERN Population Distribution

PATTERN	Male							Female						
	White	AA	Hispanic	Other	White	Non-White	RRI	White	AA	Hispanic	Other	White	Non-White	RRI
Minimum	30	7	16	19				39	36	37	37			
Low	27	20	31	20				43	39	47	40			
Medium	15	20	20	16	0.41	0.63	1.54	14	15	12	17	0.21	0.22	1.08
High	29	53	33	45				5	10	4	7			

Table 9. PATTERN General Recidivism Rates by Gender

PATTERN	Male							Female						
	White	AA	Hispanic	Other	White	Non-White	Diff	White	AA	Hispanic	Other	White	Non-White	Diff
Minimum	9	9	10	8				9	8	9	9			
Low	31	29	26	38				39	29	28	49			
Medium	51	49	46	65	0.13	0.16	-0.03	62	55	56	69	0.17	0.17	0.00
High	73	73	70	81				75	75	70	72			

Table 10. PATTERN Violent Recidivism Rates by Gender

PATTERN	Male							Female						
	White	AA	Hispanic	Other	White	Non-White	Diff	White	AA	Hispanic	Other	White	Non-White	Diff
Minimum	1	2	2	1				1	1	1	1			
Low	6	8	5	6				4	5	5	4			
Medium	12	16	10	15	0.13	0.15	-0.02	8	14	9	12	0.25	0.17	+0.08
High	26	34	26	33				13	23	13	26			

Because experts in different disciplines may use other definitions, the BOP considered three additional diagnostic criteria to inform their process: the Specific Learning Disorder,[37] the Specific Learning Disability,[38] and the International Dyslexia Association's definition of dyslexia.[39]

Based on these requirements, BOP staff developed the Screening Checklist for Dyslexia. This checklist consists of three sections with questions related to historical information (*e.g.,* past diagnosis of a learning disorder), processing skills, and perceptual problems. This 30-question checklist will be read aloud to the inmate at the time of intake processing by education staff. A threshold score is set that indicates the possible presence of dyslexia. If this threshold is reached or if additional information suggesting dyslexia is obtained at any time during the screening, the inmate proceeds to the second step of the assessment process.

For inmates determined to possibly experience symptoms of dyslexia, step two of the process requires the BOP Special Learning Needs teacher to administer both batteries of the Woodcock-Johnson IV Tests of Achievement and Oral Language, following the guidance provided by its authors.[40] This information is then used to determine whether criteria for dyslexia are met, and if so, the inmate will receive appropriate, individually determined accommodations. This may include assistance (*e.g.,* tutors, extended time) with existing programming or specialized programming designed to treat dyslexia, such as courses on phonics.

Conclusion

The Risk and Needs Assessment System is strong. Utilizing available data metrics, the expert team created an optimal risk instrument, PATTERN, that outlines a single assessment which incorporates a design that encourages risk reduction behavior (*i.e.,* lack of infractions and increases in program participation) over time. PATTERN also provides scales for general and violent recidivism that are the same across all assessments.

The development of PATTERN is a significant advancement in the Department's implementation of the FSA. First, PATTERN achieves a high level of predictive performance and surpasses what commonly is found for risk assessment tools for correctional populations in the United States. Second, the PATTERN instrument more appropriately aligns with the goals of the FSA because it makes greater use of dynamic factors. Third, the PATTERN instrument's predictive performance is unbiased across racial and ethnic classifications. Fourth, PATTERN is a single assessment, incorporating a design that may encourage risk reducing behavior by inmates over time. Furthermore, BOP has needs assessment and dyslexia screening processes to identify and address the needs of inmates.

Notes

[1] Dr. Alex Kigerl, assistant research professor of criminal justice and criminology at Washington State University, provided valuable assistance to Duwe and Hamilton in the development of PATTERN.

[2] BRAVO, the BOP's classification system, is used to predict serious misconduct while an inmate is incarcerated in BOP facilities. It is also used to assign inmates to an appropriate security level. PATTERN, on the other hand, is used to predict general and violent recidivism after an inmate leaves BOP custody.

[3] As presently developed, PATTERN does not currently include a needs assessment component. As discussed in Chapter 4, the BOP will continue to use its current needs assessment system, which is being modified and enhanced at the time of this writing. The BOP's needs assessment system will continue to be developed and enhanced over the coming months.

[4] 18 U.S.C. §3632(a)(4).

[5] 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, 230-263.

[6] *See* Chapter 4 of this report for a more detailed discussion of how inmates are processed into federal custody.

[7] Voluntary surrender means the inmate was not escorted by a law enforcement officer to either the U.S. Marshals Office or the place of confinement. Additionally, this item applies only to post-sentencing voluntary surrender, and does not include cases where the inmate surrendered to the U.S. Marshals on the same day as sentencing. Voluntary Surrender Credit may only be applied to the initial term of confinement; it may not be applied to any subsequent Supervised Release, Mandatory Release or Parole Violation return to custody. *See* BOP Program Statement 5100.08, Inmate Security Designation and Custody Classification: https://www.bop.gov/policy/progstat/5100_008.pdf.

[8] Harer, M., Langan, N., & Gwinn, J. (2019). *The Federal Bureau of Prisons Inmate Classification Instrument as a Behavioral-Change Predictor of Serious Prison Misconduct and Post Release Recidivism.* Unpublished manuscript.

[9] For greater detail on selected BRAVO items and their operationalization, see Harer, M., Langan, N., & Gwinn, J. (2019). "The Federal Bureau of Prisons Inmate Classification Instrument as a Behavioral-Change Predictor of Serious Prison Misconduct and Post Release Recidivism." Washington, DC: Federal Bureau of Prisons, Office of Research and Evaluation.

[10] During the 45-day public study period discussed in Chapter 4, the Department welcomes input on what changes to these variables may increase predictability.

[11] A count measure refers to data in which the values are non-negative whole numbers such as 0, 1, 2, 3, etc.

[12] BOP Program Statement 5100.08, Inmate Security Designation and Custody Classification: https://www.bop.gov/policy/progstat/5100_008.pdf.

[13] Per the BOP's Program Statement 5270.09, Inmate Discipline Program, 100 security level offenses are categorized as the greatest severity level prohibited acts. They include but are not limited to "killing (100) and "assaulting"[a]ssaulting any person, or an armed assault on the institution's secure perimeter (a charge for assaulting any person at this level is to be used only when serious physical injury has been attempted or accomplished) (101)." Also, 200 level offenses are categorized as high security level, for example, "escape"[e]scape from a work detail, non-secure institution, or other non-secure confinement, including community confinement, with subsequent voluntary return to Bureau of Prisons custody within four hours (200)," and "fighting with another person (201)." See https://www.bop.gov/policy/progstat/5270_009.pdf.

[14] Age at first conviction measures the first conviction for any offense.

[15] Violent recidivism is any arrest that falls into the category "homicide/aggravated assault," "weapons/explosives," "sexual assault," "assault," "robbery," or "other violent."

[16] The Walsh criteria refers to whether the inmate is a sex offender as defined in the Sex Offender Registration and Notification Act (SORNA), Title I of the Adam Walsh Act. See https://www.justice.gov/archive/olp/pdf/adam_walsh_act.pdf.

[17] Diagnostic examinations were also completed (but not displayed), including bivariate assessments of item prediction strength. All findings indicated substantial prediction strength of selected risk items, and computed risk models were identified to meet model assumptions.

[18] The measure is the United States Sentencing Guidelines Criminal History item, used as part of the inmate's sentence computation.

[19] Van Voorhis, P., Wright, E.M., Salisbury, E., & Bauman, A. (2010). "Women's Risk Factors and Their Contributions to Existing Risk/Needs Assessment: The Current Status of a Gender-Responsive Supplement." *Criminal Justice and Behavior,* 37, 261-288.

[20] Hamilton, Z., Campagna, M., Tollefsbol, E., van Wormer, J., & Barnoski, R. (2017). "A More Consistent Application of the RNR Model: The STRONG-R Needs Assessment." *Criminal Justice and Behavior,* 44, 261-292.

[21] Hamilton, Kigerl, Campagna, Barnoski, Lee, van Wormer, & Block (2016). "Designed to Fit."

[22] Duwe, G. (2019). "Better Practices in the Development and Validation of Recidivism Risk Assessments: The Minnesota Sex Offender Screening Tool–4." *Criminal Justice Policy Review,* 30, 538-564; Hamilton, Kigerl, Campagna, Barnoski, Lee, van Wormer, & Block (2016). "Designed to Fit"; and Duwe, G. (2014). "The Development, Validity, and Reliability of the Minnesota Screening Tool Assessing Recidivism Risk (MnSTARR)." *Criminal Justice Policy Review,* 25, 579-613.

[23] Vincent, G.M., Laura, S.G., & Grisso, T. (2012). "Risk Assessment in Juvenile Justice: A Guidebook for Implementation." Chicago, IL: John D. and Catherine T. MacArthur Foundation.

[24] As Davis and Goadrich (2006) point out, the AUC can provide an overly optimistic estimate of predictive discrimination for imbalanced datasets. Nevertheless, the AUC is relatively robust across different recidivism base rates and selection ratios. *See* Smith, W. (1996). "The Effects of Base Rate and Cutoff Point Choice on Commonly Used Measures of Association and Accuracy in Recidivism Research." *Journal of Quantitative Criminology,* 12(1), 83-111; and Davis, J. & Goadrich, M. (2006). "The Relationship Between Precision-Recall and ROC Curves," in *Proceedings of the 23rd International Conference on Machine Learning.* Canada: Banff, 1-12.

[25] Puzzanchera, C., & Hockenberry, S. (2013). *An Interpretation of the National DMC Relative Rate Indices for Juvenile Justice System Processing in 2010 (National Disproportionate Minority Contact Databook).* Washington, DC: National Center for Juvenile Justice for the Office of Juvenile Justice and Delinquency Prevention.

[26] See detailed AUC discussion in Chapter 2.

[27] As discussed, boosted regression models were computed for each of the four models, with selected items and weights created from model coefficients. Coefficient values for each model were converted (multiplied by 100) to whole numbers to improve ease of risk scoring.

[28] Note that cut points were created using the training set and then applied on the test set.

[29] *See* Hamilton, Z., Kowalski, M.A., Kigerl, A., & Routh, D. (2019). "Optimizing Youth Risk Assessment Performance: Development of the Modified Positive Achievement Change Tool in Washington State." *Criminal Justice and Behavior.* DOI: 10.1177/0093854819857108; and Hamilton, Z., Kowalski, M.A., Schaefer, R., & Kigerl, A. (2019). "Recrafting Youth Risk Assessment: Developing the Modified Positive Achievement Change Tool for Iowa." *Deviant Behavior.* DOI: 10.1080/01639625.2019.1609302.

[30] Ibid.

[31] 18 U.S.C. § 3632(a)(3).

[32] 18 U.S.C. § 3632(h)(1).

[33] 18 U.S.C. § 3632(h)(2).

[34] External experts consulted and studies reviewed on the prevalence of dyslexia in prison populations within the United States and worldwide include:

American Psychiatric Association (2013). *Definition of Specific Learning Disorder,* in *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.).

Breaux, K., & Eichstadt, T. (2018). *Pearson Clinical Assessment Solutions: A Dyslexia Toolkit.*

Fabelo, T., et al. (2004). "The Impact of Ignoring Dyslexia and Reading Disabilities in the Criminal Justice System: What We Know and Need to

Know." In *Report to the Dyslexia Research Foundation, Inc.*

Gilbert, J.K., et al. (2012). "Early Screening for Risk of Reading Disabilities: Recommendations for a Four-Step Screening System." *Assessment for Effective Intervention: Official Journal of the Council for Educational Diagnostic Services,* 38(1), 6-14. https://journals.sagepub.com/doi/pdf/10.1177/1534508412451491.

Indiana Department of Education (2018). Criteria for Dyslexia Screeners. https://www.doe.in.gov/sites/default/files/literacy/criteria-used-for-vetting-and-approving-dyslexia- screeners.pdf.

International Dyslexia Association (2018). *Dyslexia Screener for Adults.* https://dyslexiaida.org/screening-for-dyslexia/dyslexia-screener-for-adults/.

International Dyslexia Association (2002). *Definition of Dyslexia* (2002). http://www.dyslexiaida.org.

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CHAPTER 4
IMPLEMENTING THE FIRST STEP ACT OF 2018
RISK AND NEEDS ASSESSMENT SYSTEM

With this report, the Attorney General is publishing the First Step Act of 2018 Risk and Needs Assessment System (System). The publication of the System is only the first step in an ongoing, collaborative, and dynamic process to enhance prison programming, improve inmate outcomes, and ultimately reduce recidivism and make every community safer.

The First Step Act (FSA or the Act) requires significant work to be completed in a short period of time. The Department met the FSA's ambitious deadline to publish the System within 210 days of the Act's enactment.[1] In crafting the System, the Department worked to make the benefits of the FSA as widely available as possible without compromising the predictive reliability of the risk and needs tool. In developing and validating the System, the Department necessarily was limited by the data available. Although the System is a good initial step based on the available information, it can be improved with more time, consultation, data, and research.

The Department is committed to improving the System's operation and implementation. To that end, the Department will engage in regular and ongoing dialogue with a wide range of stakeholders, experts, and the public. The experience and expertise of these communities will aid the Department as it works to improve the System. Just as

the Department seriously considered the available data at the time of the System's release, the Department will consider potential new sources of data, new research, and new metrics on an ongoing basis. The Department also is committed to continuing to work and to consult with the Independent Review Committee (IRC) and rely on its expertise to improve the System.

During a 45-day public study period following the publication of the System, the public will be able to review the System and consider ways in which it may be improved. Further work can and will be done during the 45 days to look for ways to improve the System. Following this study period, the Department in September will invite stakeholders, public interest organizations, and the public to comment on the System. In seeking ways to make the System better, the Department will welcome comment on ways to make the benefits of the FSA widely available while maintaining the System's predictive reliability. The Director of the Federal Bureau of Prisons (BOP) and other senior Department leadership will be present in September to receive input and feedback. After reviewing the input, we will reassess the tool, make any appropriate changes, and begin the process of assessing each individual inmate.

Angela Hawken, Ph.D. Dr. Hawken is a Professor of Public Policy at New York University and the founder and director of NYU's Litmus/BetaGov program. Her team's Segregation Solutions project works with corrections agencies to reduce the use of segregated housing, reform practices to reduce violent behavioral infractions, provide incentives for pro-social behaviors, and reduce stress. The project supports corrections agencies with strategic planning, policy guidance, data analysis, and evaluation. She is the principal investigator of Graduated Reintegration. Graduated Reintegration explores the feasibility and effectiveness of a resource- reallocation program that allows prisoners to release early into supported scattered-site housing and structured programming to ease the transition from prison to the community. Dr. Hawken primarily will assist the Department in implementing the risk and needs assessment system.

In addition, the National Institute of Justice (NIJ) has contracted an outside expert, Dr. Angela Hawken, to assist with implementation of the System. Dr. Hawken's biography is included above.

This chapter outlines the Department's plan to implement the Risk and Needs Assessment System in BOP facilities. First, it outlines the Department of Justice's robust plan for implementing the new System. Second, it provides estimated deadlines for completion of the steps in this work plan. Third, it describes how the System will be re-validated through further research. Fourth, this chapter chronicles the training that BOP will provide to its staff members on the Risk and Needs Assessment System, which is critical to the implementation process. Fifth, this chapter outlines the process for assessing the implementation of the System to ensure an effective and strong system. Sixth, the report explains how the risk and needs assessment tool will be used to determine the evidence-based recidivism reduction programming and productive activities that are appropriate for each inmate and assign those programs

and activities. Finally, the chapter outlines how BOP will communicate effectively with inmates and stakeholders throughout the implementation process.

I. Implementing the Risk and Needs Assessment System

Following the publication of the System, the FSA requires BOP to complete an initial intake risk and needs assessment for each inmate within 180 days.[2] The BOP is committed to completing this initial assessment for each inmate within this time frame. The Act also requires BOP to assign inmates to appropriate evidence-based recidivism reduction programs and productive activities based on that determination. The BOP, in consultation with the Department, is reviewing all programs currently offered at BOP facilities. When that review is complete, no later than January 2020, a full list of the approved programs will be posted on the BOP's website. BOP is committed to completing each of the tasks outlined below to meet the FSA's requirements. The implementation of the System, and other FSA requirements,

will involve a significant commitment of BOP resources. The Department has identified funds it received in Fiscal Year 2019 that may be used to support First Step Act priorities. The Department is working with the Administration and Congress to ensure that necessary funds will be available in Fiscal Year 2020 and beyond.

A. Assigning a Recidivism Risk Level and Conducting a Needs Assessment

As discussed above, BOP is responsible for assigning a recidivism risk level and conducting a needs assessment for all inmates, including newly committed inmates and current inmates. Once the Risk and Need Assessment System is fully operational and BOP staff fully trained, newly committed inmates will be assessed as they are processed into the BOP. Current inmates will have their needs assessed and their risk level communicated to them during regular Unit Management Team meetings, which are explained further below.

1. Newly-Committed Inmates

When an inmate is sentenced (or the BOP accepts custody of a sentenced individual), trained staff at the Designations and Sentence Computation Center (DSCC) in Grand Prairie, Texas perform an initial assessment of the inmate for purposes of determining where an inmate will serve his/her sentence (called "designation"). The DSCC staff review information from the U.S. Probation Office and the U.S. Marshals Service, including the Judgement and Commitment Order, the Statement of Reasons,[3] and the Presentence Investigation Report. The DSCC staff may also receive information from the U.S. Attorney's Office or Department component that prosecuted the inmate.[4] DSCC staff use this information to enter the inmate into the BOP's inmate management system and conduct the initial security scoring (via the Inmate Load and Security Designation Form). Subject-matter experts at the DSCC (including medical staff and clinical psychologists) also perform a preliminary review of the inmate's needs with regard to medical, mental health, and criminogenic programming, which may influence the designation decision. As part of the FSA implementation and in addition to the designation steps listed above, DSCC staff, with assistance from BOP Legal staff, will use the Risk and Needs Assessment System to assign each incoming inmate an initial recidivism risk level of Minimum,
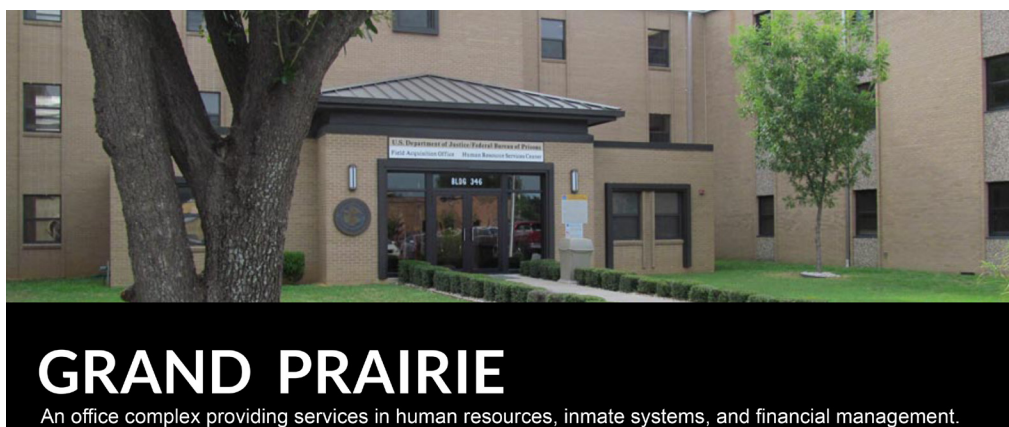
The BOP Grand Prairie Office Complex, located in Texas.

Low, Medium or High.[5] BOP will require additional staff resources added at the DSCC to support this work.

Once the inmate arrives at his or her designated facility, he or she is assessed again as part of intake in the Receiving and Discharge area. Within the first twenty-eight days of incarceration, the inmate has an initial interview by his or her Unit Management Team (comprised of the Unit Manager, Case Manager, and Correctional Counselor). Additionally, the inmate is seen by medical staff (which may include an exam) and mental health staff to determine initial treatment needs. Every inmate also participates in the Admissions and Orientation program, which is designed to familiarize inmates with the facility, including the rules and procedures, typical schedules for operations and visiting, and available programs and services offered.

Unit Management Team staff will interview the inmate to determine and assign any required programs (*e.g.*, the GED program[6]). The automated workflow for the collection and documentation of this assessment uses a BOP application called Insight. The Unit Management Team will also make recommendations for additional programs as necessary. The inmate will also receive a work assignment, provided that he or she is physically able to work.[7] As part of this assessment, the inmate will be formally advised of his or her risk level under the FSA. Inmates may grieve their FSA eligibility using existing administrative remedy procedures.

Based on the interviews with the inmate, as well as input from mental health staff and information in the inmate's sentencing documentation, the Unit Management Team will provide the inmate with an initial Needs Plan. The inmate will review this individualized plan to ensure he or she understands what is either required or is being recommended. BOP's Insight application is used to create the plan.

The inmate may also undergo additional tests and screening. Educational staff will screen inmates for disabilities and will use tests to determine recommended courses for those inmates that need literacy programming. BOP provides a variety of educational opportunities to the inmates within its 122 institutions.

Under the FSA, BOP is required to "incorporate a dyslexia screening program into the System,"[8] screen inmates for dyslexia, and "incorporate programs designed to treat dyslexia into the evidence-based recidivism reduction programs or productive activities."[9] As described earlier in this report, BOP has expanded current requirements for assessing and accommodating disabilities to ensure a strong screening process for dyslexia.

The BOP also performs additional assessment screenings. A clinical psychologist interviews inmates requiring mental health treatment. The psychologist will then develop an appropriate treatment plan and communicate this plan to the inmate's case manager. A Drug Treatment Specialist screens inmates requiring drug treatment. Each inmate is then interviewed by a Drug Treatment Coordinator (who is a clinical psychologist) to determine if the inmate should receive residential drug treatment. Sex offenders are referred for appropriate treatment.[10]

Inmates' needs are reassessed every six months (or every three months once the inmate is within a year of release) and documented using the Insight application. Staff will meet individually with the inmate and review the prior Needs Plan, document the inmate's progress, and update the Needs Plan. This assessment includes feedback solicited directly from relevant program areas including Health Services, Education, Religious Services, and Psychology. Unit Management Team staff determine if an inmate is successfully participating in assigned programs, has good work reviews, and is otherwise satisfying the terms of his or her sentence (such as payment of fines and restitution). Staff will also assess the inmate's institution adjustment (*e.g.*, whether he or she has engaged in misconduct) and any personal issues (*e.g.*, lack of family contacts, etc.). If unit management staff determine additional programs are required or recommended, they will describe the programs(s) to the inmate and, in some cases, incentivize participation in them. Inmates may choose

Attorney General William P. Barr, U.S. Senators Lindsey Graham and Tim Scott of South Carolina, BOP Acting Director Hugh J. Hurwitz, and others observe a UNICOR clothing and textile facility at Federal Correctional Institution (FCI) Edgefield.

to enroll in these programs or may decline to do so.[11]

As inmates successfully complete programs and succeed in addressing their assigned programming needs, their progress is captured in the BOP's inmate management system and in Insight as part of an educational transcript. If an inmate has no remaining needs to address, he or she can continue to participate in productive activities in order to continue improving his or her reentry outcomes. A collaborative process with the inmate throughout the needs assessment process is optimal. The inmate's Needs Plan is modified as the inmate addresses his or her needs by successfully completing programs or demonstrates new needs areas.

2. Currently-Admitted Inmates

Under the FSA, inmates currently serving a term of imprisonment must also have a recidivism risk level assigned and their needs assessed using the Risk and Needs Assessment System. BOP subject-matter experts from DSCC, the Correctional Programs Division case management staff, and the Office of Information Technology (OIT) are conducting an initial review of all current inmates to determine whether any are ineligible under the FSA's statutory bar based on the inmate's conviction.[12] If the exclusion process can be automated, the BOP's DSCC will work collaboratively with the BOP's Office of General Counsel staff to conduct the review of all inmates,[13] prioritizing assignment based on projected release dates. Once those inmates are assigned a recidivism risk level, the inmate's Unit Management Team will schedule them

for an initial needs assessment, as required by the FSA, to determine what additional programming, including evidence-based recidivism reduction programs and productive activities, would benefit the inmate.

BOP will reassess the needs of existing inmates on an ongoing basis in the same manner as described for newly-committed inmates.[14] BOP ordinarily reviews and assesses all inmates every six months. The inmate's Unit Management Team reviews the inmate's programming and needs, as well as conduct, by relying on several sources of information, including a personal interview with the inmate and input from various departments in the facility, including Education, Psychology, Health Services, and Religious Services. The Unit Management Team performs the reassessment of an inmate's risk level.

B. Enhancing the Needs Assessment Process

BOP is committed to enhancing its needs assessment process to incorporate additional objective tools and data to better capture the inmate's individualized needs and refine program and productive activity assignment to address those needs. For example, BOP has held preliminary discussions with the United States Probation Office about supplementing the Presentence Investigation Report[15] with more detailed education information about learning needs. Similarly, and as described above, BOP is implementing an enhanced screening process for dyslexia.

BOP is engaging an outside research contracting partner to assist with FSA

implementation in two areas: 1) program evaluation and 2) design of an enhanced needs assessment tool. The FSA requires BOP to expand available evidence-based recidivism reduction program and productive activities, including those offered by external organizations.[16] The IRC suggested the Department consider implementing a process for analyzing new programs that might qualify as evidenced-based, and cited a model used in the United Kingdom as one example of such process. Following that recommendation, the BOP is forming a working group composed of NIJ researchers, BOP researchers and program staff, and the outside research contracting partner to develop and publish a standardized process and framework to review and analyze requests from external entities for program submission. The working group will then serve as a clearinghouse by providing research expertise to determine whether a proposed program satisfies the FSA definition for an evidence-based recidivism reduction program, including that it "has been shown by empirical evidence to reduce recidivism or is based on research indicating that it is likely to be effective in reducing recidivism."[17] Any program or activity approved for consideration under the FSA will be assessed in light of security procedures, BOP protocols, BOP mission requirements, practicality, and resource availability.

The Department, specifically the National Institute of Justice (NIJ), is committed to sponsoring a long-term research and evaluation agenda that will support the full and sound implementation of the FSA in the years to come. This agenda will include NIJ working closely with the BOP to perform independent validations of PATTERN and scientifically rigorous evaluations of BOP programs, including programs designated under the FSA as "evidence-based recidivism reduction programs." Research and evaluations will be conducted consistent with ethical, legal, security, and operational concerns. In addition, BOP, in close consultation with the Independent Review Committee (IRC) will conduct research on prevailing best practices and tools in the area of needs assessment, particularly as it relates to corrections and recidivism. The research will include consideration of existing assessment tools that may be available for implementation by BOP. BOP will also coordinate meetings and briefings with various state and international correctional systems, including meetings with staff of large correctional systems in the United States. Briefings will include discussions with program staff, researchers, and correctional management regarding the available tools in use for needs assessment and the effectiveness of the tools.

Consistent with the Department's commitment to engage in continuous dialogue to improve the Risk and Needs Assessment System, BOP will partner with NIJ to host a meeting in August 2019 that will focus on needs assessments and how they are used in correctional settings. Invitees include research directors from Departments of Corrections, reentry and programming staff, researchers, and other relevant partners. This meeting will serve as a platform for BOP's continued work

in this area. Additionally, BOP will host a three-day symposium on needs assessment in October 2019. Invitees will include 1) practitioners with expertise on needs assessment from state correctional systems that conduct assessments at all prisons in their system; 2) academic researchers with demonstrated experience working on needs assessment systems and an understanding of diversity issues in implementation; and 3) staff representatives from federal partners including NIJ and the National Institute of Corrections. This symposium, moderated by BOP program staff, will include presentations from the different corrections systems and discussions with researchers on how to apply the material gleaned from the corrections presentations.

Following this meeting, and in furtherance of its research, the BOP will issue a request for information (RFI) regarding potential inclusions or sources of data for the needs assessment process. The purpose of this RFI is to provide an opportunity for advocacy groups, outside researchers, and any individuals to share input and suggest additions to the Risk and Needs Assessment System process, in regards to needs assessment. The RFI will be published for 45 days to allow for a robust comment period. The information gleaned from the overall research and the RFI solicitation will be used to design an enhanced needs assessment tool and process. BOP anticipates this overall engagement and collection process to take six months (culminating by March 2020).

The BOP will screen all inmates for risk using the PATTERN tool described in Chapter 3.[18] In addition, the BOP will screen all inmates for needs using BOP's current needs assessment system. At the same time, as described herein, the Department will begin immediate work building a more comprehensive needs assessment system. While the research is being conducted, BOP will work with NIJ to explore how additional existing data can be incorporated into the needs process and evaluate the impact of this additional data on the accuracy of the risk-scoring tool. In September, Department staff, members of the IRC, and an NIJ expert will travel to Ottawa, Canada to meet with the Correctional Service of Canada to learn about the development of its automated needs assessment system. Meanwhile, the BOP will continue to leverage its existing processes to assess, review, and address inmate needs to ensure that other aspects of the FSA are being carried out. As the assessment process is enhanced, changes will be incorporated into the current assessment and all inmates will continue to be reassessed using the updated system.

In the next several months, the BOP will add several additional data items into the current needs assessment process. The BOP is aware of the incredibly high rates of trauma and the associated impact of this trauma on the inmate population. By September 30, 2019, the BOP will add the Adverse Childhood Experience questionnaire to its existing screening process to better incorporate this need into the Risk and Needs Assessment System. Also by September 30, 2019, the BOP Reentry Services and Correctional Programs subject matter experts will meet with the IRC to present on the current needs assessment process and discuss ideas for expanding upon the existing system. Additionally, the Correctional Programs Division will review the current Insight system to determine if more discrete (non-

narrative) data regarding job performance and completion of specific programs can be captured to enhance evaluation of inmate risk and needs.

The BOP's overall research results will then be used to drive the design of a needs assessment tool that best addresses the processes and composition of the federal inmate population. The BOP will also engage the BOP's National Union in the design and development of the system to ensure that the ideas and concerns of staff, particularly case management and program staff, are incorporated into the design.

The BOP anticipates the design of the system to encompass several key requirements including, but not limited to, determination of: 1) the static and dynamic factors which identify the inmate's needs; 2) those tools and instruments which can best identify an inmate's specific criminogenic and non-criminogenic needs; 3) when those tools and instruments are best administered in the corrections cycle; 4) the evidence-based recidivism reduction programs (both those currently used and those that may be used) that will best minimize the risk that the prisoner will recidivate; 5) what measures can be used to indicate progress and regression; and 6) if and how to automate the assignment of programs based on the results of the assessment while allowing for sound judgment and decision-making.

The prototype system addressing the items above is expected to be available for testing by the second quarter of 2020. The testing of the system will involve training BOP staff in the use of the tools or instruments, assessing the system's effectiveness by evaluating available metrics such as prison misconduct or recidivism, and evaluating whether the tools or instruments are being applied in a consistent manner. Depending on the complexity of the tools or needs instruments, the BOP would either use electronic questionnaires or develop software

Enhancing the Needs Assessment Process

- Implement Enhanced Dyslexia Screening
- Engage Outside Research Partner
- Conduct Research and Issue RFI
- Hold Needs Assessment Meeting
- Convene BOP Symposium
- Review Current Insight System
- Develop New Needs Tool
- Pilot New Needs Tool
- Execute New Tool/Process Across BOP
- Train all BOP Staff
- Engage with BOP's National Union

to integrate the tools and instruments into Insight.

To collect a sufficient amount of data for evaluation purposes, identify issues and trends, and conduct a preliminary assessment of effectiveness, BOP plans to test the system using eight facilities, across four security levels and six regions, for twelve months. After testing has been conducted and the results validated, BOP will implement the final system and begin rolling it out to the remaining 114 BOP sites.

During this time, any required modifications would be made to the system and additional training provided to staff. All case management staff, programs staff, and correctional management will be trained in the new instruments and tools. The BOP will develop training materials, conduct in-person training, and leverage webinars and a train-the-trainer approach as part of the deployment strategy.

C. Implementing the Earned Time Credit System

Under the FSA, an eligible inmate may earn time credits for successfully completing approved evidence-based recidivism reduction programs or productive activities.[19] No later than January 2020, a list of approved evidence-based recidivism reduction programs and productive activities will be posted on the BOP's website. As required by the Act, an inmate cannot earn time credits if he or she is serving a sentence for a disqualifying offense or has a disqualifying prior conviction.[20]

An eligible inmate may "earn 10 days of time credits for every 30 days of successful participation in evidence-based recidivism reduction programming."[21] Additionally, an inmate at a minimum or low risk for recidivating may "earn an additional 5 days of time credits for every 30 days of successful participation in evidence-based recidivism reduction programming or productive activities."[22]

BOP will track and award time credits based on actual work and program activities completed. BOP will ensure that every evidence-based recidivism reduction program has an approved standardized curriculum, including duration and hours. To track participation and completion, assignment codes for each approved program will be created in the BOP's inmate management system. BOP will automate the calculation of the amount of programming activities completed. Unit Management Team staff will ensure that the inmate did in fact successfully complete the program.[23] BOP will also track inmate participation in productive activities.

There are clear instances when inmates would not be able to participate in evidence-based recidivism reduction programs or productive activities. Such circumstances include when inmates are: placed in a Special Housing Unit; in designation status outside the institution (*e.g.* for an outside medical trip, an escorted trip, etc.); in the custody of another jurisdiction (*e.g.* on state or federal writ; transfer to state custody for service of sentence; transfer to ICE, etc.); under medical/mental health/psychiatric holds; in detention as a material witness or for civil contempt; under Adam Walsh or other civil commitment; and refusing to participate in programs.

There are additional factors that may warrant limitations on the earning or application of time credits, such as being investigated for ongoing criminal conduct while in custody or while in the community in pre-release custody. Additionally, an inmate's recidivism risk score could increase if he or she engages in misconduct - for example, if the inmate assaults a corrections officer or other inmate, uses a contraband cell phone, or attempts to escape.

As discussed previously, case management staff will be trained on which programs and productive activities are approved for earning of time credits and on how to use the programs as part of their assessments using the BOP's Insight application.

Department staff toured an RRC and met with recently-released individuals who had participated in BOP programs and activities.

These individuals provided feedback that inmates often spend the majority of their time in recreation, rather than on activities that will prepare them for a more successful transition. Inmates who participated in activities, such as financial responsibility and parenting, were often ridiculed or heckled. Those at the RRC encouraged the Department to incentivize and promote participation in productive activities centered on parenting, education, and financial responsibility and to decrease emphasis on recreation. This would help change the culture within prisons and remove pressure from those seeking to better themselves. The Department recognizes the value that individuals in RRCs and those who were recently released and achieved a successful transition may contribute to this process and intend to seek input from this group in developing the list of productive activities.

Inmates participating in the UNICOR program.

To ensure that both inmates and staff understand the award and suspension of time credits and to ensure that stakeholders have an opportunity to provide feedback on this important issue, BOP will update federal regulations and BOP policy to describe the time credit methodology. To promote transparency in the process, the BOP will update and publish Program Statement 5100.08, Inmate Security and Custody Classification Manual.

D. Automation of Workflow

Currently, the BOP staff assign an inmate's security designation and custody classification scores using an automated workflow, where using information technology replaces manual and paper-based processes. This automation expedites the processing of tasks and eliminates errors. For these reasons, the BOP also plans to calculate, track, and report the recidivism risk level using an integrated automated process. Accordingly, BOP must make changes to the inmate management system and additional software applications to perform the risk level calculation, present the score in other system displays, and calculate an inmate's time credits. BOP anticipates that it will take approximately eight months to make the required changes. While the scoring process is being enhanced through automation, BOP will manually score recidivism risk levels so there is no delay in fully implementing the System. The BOP's OIT will coordinate with the Office of Research and Evaluation (ORE) and the DSCC to determine how to integrate and automate the data points required to be included in the PATTERN risk calculus, as well as how to score and classify the inmate with the Risk and Needs Assessment tool. OIT staff will modify existing programs by first, designing test programs based on the system requirements, validating their performance, seeking user input, verifying data inputs and outputs are as expected, and deploying the software changes to production.

OIT estimates that approximately 30 programs will need to be modified to capture and display the required data for the risk tool and ongoing workflow management. For example, BOP's discipline module tracks the incidents, sanctions, and history of inmate misconduct. With the addition of the FSA, the BOP will need to modify this module to account for sanctions related to time credits, as well as the FSA requirement to restore time credits. Discipline sanctions likewise impact an inmate's projected release date and the new projected pre-release custody eligibility date; sanctions may also impact the inmate's risk score. Thus, the BOP software programs that are affected by the FSA must be updated and integrated with each other.

OIT will focus first on implementing the programs associated with the inmates' risk and needs classification, followed by implementation of the time credit system, and then application integration.[24] OIT will require additional personnel and contractor resources to assist in this effort. Application integration is the practice of sharing processes and data among various information technology applications. It will take approximately 24 months to add appropriate software logic to each of these programs. The first eight months will focus on launching programs related to the risk tool PATTERN. The other program updates

and changes will be addressed at the same time. Ultimately, these changes will allow BOP staff to more efficiently and accurately compute, assign, and track the recidivism risk level for each inmate.

E. Policy Implementation

The FSA also requires BOP to develop new policies to address a number of requirements in the Act. Specifically, the Director of the Bureau of Prisons is required to "develop additional policies to provide appropriate incentives for successful participation and completion of evidence-based recidivism reduction programming."[25] Additionally, the BOP has a significant number of federal regulations and policies that require update or modification to implement the FSA and to provide clear and timely communication to all persons affected by the changes.

There are many steps involved in the formulation of extensive and complete federal regulations and BOP policy. A high-level outline of those steps follows.

i. **Regulations:** The issuance of federal regulations first requires the development of draft language known as the "proposed rule." The proposed rule is reviewed for legal compliance by the component and the Department of Justice. It is then sent for review to the Office of Information and Regulatory Affairs (OIRA) within the Office of Management and Budget. Once the proposed rule is approved, it is published in the Federal Register for public comment for 30-60 days as a Notice of Proposed Rulemaking. Members of the public and stakeholders will be able to review the proposed rule in full and provide comments. After the comment period closes, the issuing agency reviews and considers the submitted comments on the proposed rule. The next step in the process is to draft a final rule. If appropriate, the issuing agency may modify the proposed rule to address public feedback and comments in the final rule. The final rule is prepared and once again reviewed by OIRA if it is deemed to have significant economic impact or is a significant policy matter. The final rule is published a second time in the Federal Register and may go into effect no earlier than 30 days after publication.[26]

ii. **Policies:** To develop new policy or update existing policy, the applicable BOP program area reviews and modifies existing policy or develops new policy language. A program area is the specific office or Division responsible for oversight and enforcement of the function, service, or program within the BOP. The BOP's National Policy and Information Management (NPIM) staff review, format, and distribute draft policies internally to all Divisions and field sites, as well as to the BOP National Union, for comment. If the program area concurs with the comments, NPIM will incorporate the recommended changes and prepare a final draft. The NPIM staff prepare a final version for the BOP Director's signature and provide a copy of the signed policy to the BOP Labor Management Relation Office for review by the BOP National Union. If the National Union does not formally invoke negotiation[27] on the policy, the policy is published both internally and, if not

law enforcement sensitive, on the BOP's public website. Any applicable Program Review (BOP's internal compliance and audit process) guidelines are updated to ensure staff are following the new or updated policy beginning 30 days after publication. If the National Union formally invokes negotiation, the policy is put on hold until Management and the Union agree on the final policy.
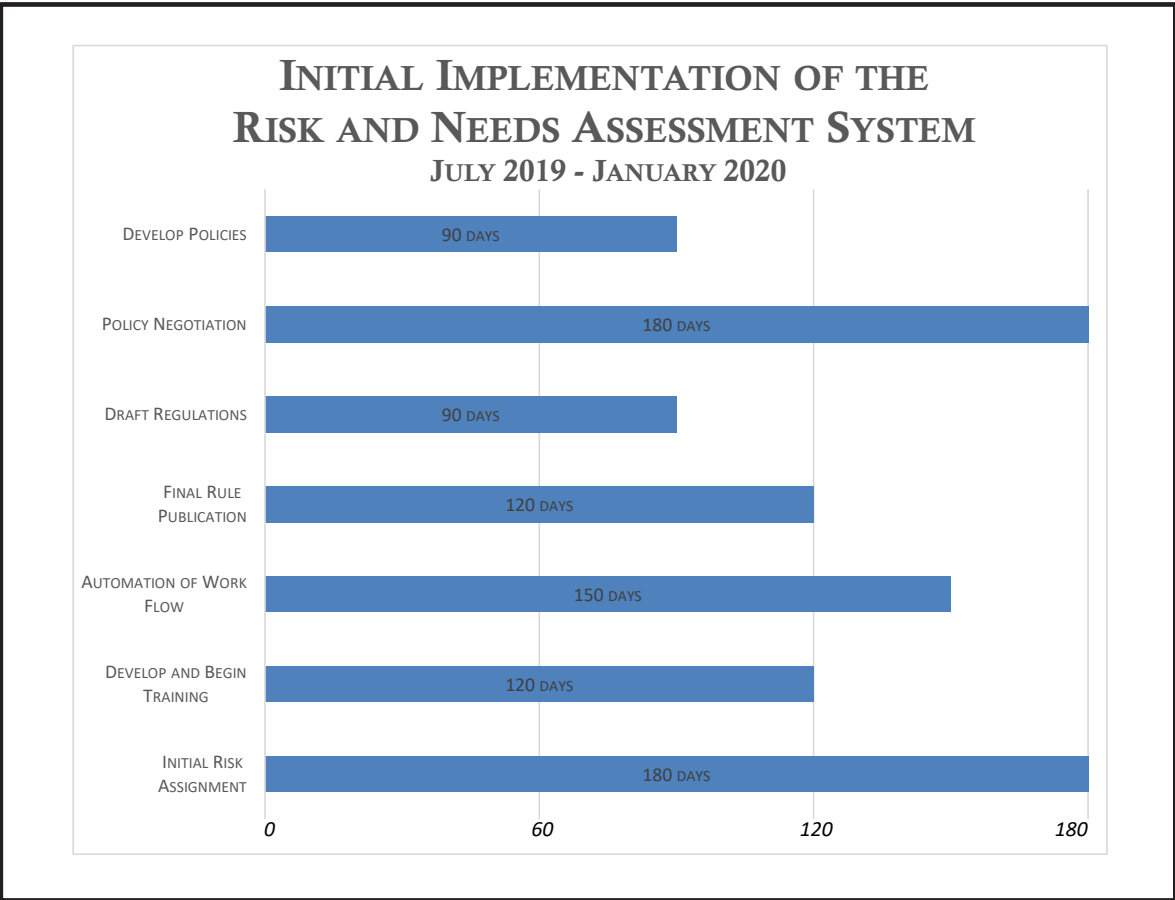
BOP estimates that approximately three regulations and 11 policies require revision to comply with the FSA's risk and needs assessment system requirements. There also may be a need to develop new policies to address the FSA. In general, policy formation and implementation that affect bargaining unit staff working conditions take approximately six months, but the process may be longer on key issues. Bargaining unit staff are members of and represented by a labor organization ("union"), and coordination with the BOP's National Union is required per the BOP's collective bargaining agreement. This work has already begun and will continue until all of the appropriate policies and regulations are updated to reflect the changes needed to implement the Risk and Needs Assessment System and to obtain the necessary approvals to publish these documents.

II. Timeline for Initial Implementation of the Risk and Needs Assessment System

There are many tasks that need to be accomplished before the new Risk and Needs Assessment System is fully operational. The keys to implementing the FSA successfully are meshing both new and current work processes, automating the information technology systems used to track and report inmate data, establishing the regulations and policies needed to convey the updated organizational requirements and practices, and, finally, training all BOP staff.

BOP has already begun to implement the FSA. Many BOP policies and some regulations have been updated to include language referencing the Act.[28] Information technology staff are mapping out a strategy that will incorporate the changes needed in SENTRY, Insight, and other BOP systems. In addition, BOP senior leadership are sharing information about the FSA and its impacts on BOP.

However, crucial work remains to implement the Risk and Needs Assessment. The image below tracks the major tasks that are to be accomplished with estimated dates for delivery of the product between July 19, 2019 and January 2020.[29] Importantly, the Department will meet the FSA's requirement to assess all BOP prisoners by January 2020.

INITIAL IMPLEMENTATION OF THE
RISK AND NEEDS ASSESSMENT SYSTEM
JULY 2019 - JANUARY 2020

Task	Days
Develop Policies	90 days
Policy Negotiation	180 days
Draft Regulations	90 days
Final Rule Publication	120 days
Automation of Work Flow	150 days
Develop and Begin Training	120 days
Initial Risk Assignment	180 days

Axis: 0, 60, 120, 180

III. Re-Validating the Risk and Needs Assessment System

As mandated by the FSA, the RNA tool must be reviewed and re-validated on an annual basis.[30] Re-validation will allow for any needed adjustment of the tool's algorithm to ensure that the tool is still reliable given any changes in the prison population or other variables over time. An annual re-validation timeline, however, presents a potential research and theoretical challenge. PATTERN was developed using a seven-year dataset of BOP releases, and it was validated as an effective predictor of recidivism over the inmates' subsequent three-year period in the community. In a research setting, a researcher would normally gather data to re-validate a risk and needs assessment tool three years after a large group of inmates were released from custody. Following this schedule, PATTERN and any new items would not be formally re-validated until 2024. To meet the annual FSA re-validation requirement, one-year recidivism data, instead of three-year, will be used to obtain results. This will cause an incongruence in the validation and re-validation processes, but

the results can serve as an interim estimate of PATTERN's predictive performance.

BOP's ORE and the NIJ will work together to re-validate PATTERN on an annual basis. Until enough time passes that PATTERN can be validated on three years of post-release data, ORE and NIJ will annually re-run the analyses that developed PATTERN, adding one additional year of recidivism data. Consistent with the FSA, the Attorney General will review and consider any modifications. Over time, the researchers will continue to assess PATTERN, gather external advice and recommendations, and use the time to consider further adjustments to PATTERN.

In addition to re-validating the System as described previously, the Department will look for opportunities to improve the System through an ongoing dialogue with key stakeholders, by working closely with the IRC, and by considering new research and potential sources of data. As the System is updated and improved, subsequent versions will be re-validated, as discussed previously.

IV. Training to Implement the Risk and Needs Assessment System

Following the publication of the System, all relevant BOP staff members in every institution, Regional Office, and Central Office will receive training on implementing the new System. The training of BOP staff will be informed by careful review of implementation research and use of best practices in training and quality assurance. The level and type of training will vary based on the role of the BOP staff member.

Foundational training will be sufficient for many staff in the institutions, as well as in the Regional and Central Offices. This training will provide an overview of the program, as well as how to score inmates in the new system and use the assessment results to identify appropriate programs, activities, and services for inmates.

Advanced training will be required for the Unit Management Teams and other appropriate staff at institutions, as they will have primary responsibility for assessing inmates and entering information into BOP automated systems relevant to the System. Additionally, on-the-job training will be required to ensure that the information entered is accurate and consistent. Unit Management Teams and program staff will receive training on the administration and scoring of the needs assessment of the System. Education and Psychology staff will receive training on the needs assessment procedures that will be implemented. In addition, the DSCC staff and BOP case management staff will receive training on how to score the risk assessment. Finally, Regional and Central Office program staffs will be trained on how to oversee and review institutions' implementation of the System and processes. This oversight and review is key to avoiding the misuse of the tools.

To facilitate this required training, the BOP will utilize a team of subject matter experts from the Reentry Services Division; Correctional Programs Division; Information, Policy and Public Affairs Division; and Office of General Counsel. This team will be primarily responsible

BOP staff members at a correctional facility.

for developing training and instructional materials for the System and processes. It will take approximately two months to develop the foundational initial orientation training and an additional two months to develop the more intensive, advanced training. Training will initially focus on staff conducting recidivism risk assessments and performing initial assessments for all inmates. BOP has already provided broad briefings on the provisions of the FSA to staff who perform these tasks. And the additional training will focus on more detailed requirements of the Risk and Needs Assessment System.

Education about the FSA for all staff will be delivered via a variety of platforms: online via the BOP's Learning Management System; using collaboration tools such as Adobe Connect; using videoconferencing; via communication materials published on the agency intranet; and in-person instruction. The training will be delivered by the end of 2019. The intensive training will be provided through in-person training and will include

interaction in small group settings with computer access. Using a "train-the-trainer" model, BOP subject-matter experts will train selected employees about the System, who will in turn serve as local experts to train others to use the new system. It is anticipated the all impacted staff will receive training during calendar year 2020.

As the System is improved, as discussed earlier, training will be adjusted to account for changes to the System. As capabilities and processes are enhanced and to ensure refresher training is consistent, the System training will become part of institution orientation for new staff. Additionally, BOP will incorporate Risk and Needs Assessment System training as a core module of Annual Refresher Training, which is required for all staff. Additionally, Central Office subject matter experts and Regional Office staff will maintain oversight of the implementation and can provide additional training as needed. In order to provide continuing support to these training efforts, BOP may need

additional resources to develop, coordinate, and provide the required training.

V. Assessing the Implementation of the Risk and Needs Assessment System

The Director of the BOP has 180 days to 1) "implement and complete the initial intake risk and needs assessment for each prisoner" and "begin to assign prisoners to appropriate evidence-based recidivism reduction programs;" 2) "begin to expand the effective evidence-based recidivism reduction programs and productive activities;" and 3) "begin to implement the other risk and needs assessment tools necessary to implement the risk and needs assessment system over time."[31] To ensure the implementation of the System is completed in an efficient and effective manner, the BOP will use established internal processes, described below, to provide appropriate checks on implementation.

The BOP's Program Review Division provides oversight, guidance, and direction to BOP facilities and staff to ensure that policies are being followed and that programs are performing as intended. This is accomplished through monitoring of program areas, facilitating guideline assessments, and analyzing trends and statistical data.

To test the competency and strength of its programs, the BOP subjects each one to a thorough examination by trained reviewers who are subject matter experts in the program area being reviewed. These independent reviews examine compliance with BOP policy, laws, rules, and regulations.

In addition, they examine the area's efficiency of operations and effectiveness in achieving program results. This process helps ensure that BOP programs are operating within policy and are free of fraud, waste, abuse, mismanagement, and illegal activities.

The Inmate Classification Workgroup is responsible for assessing the overall effectiveness of the BOP's inmate classification system. The Workgroup reports its findings to the Director and the agency's senior leadership team when changes to the BOP's system are warranted. The Inmate Classification Workgroup will propose changes to the Inmate Security Designation and Custody Classification Policy to implement the changes to the System. In addition, the Workgroup will outline steps for a field test of the policy draft. Following the field test of the draft policy, the Workgroup will seek final approval from senior leadership for a revised policy, 5100.08, the Inmate Security and Custody Classification Manual. This Workgroup will additionally take the lead in reviewing and assessing the implementation of the System.

VI. Connecting the Risk and Needs Assessment System to Programming

As described above, each inmate will be assessed under the Risk and Needs Assessment System. This assessment will be used to determine the type and amount of evidence-based recidivism reduction programming and productive activities that are appropriate for the inmate. The outcome of the needs assessment component of the system will be an individualized "Needs Plan" for each inmate designed to reduce his or her risk of recidivism. The Needs Plan

will identify areas the inmate must address and identify the evidence-based recidivism reduction programs available to address those needs. As the inmate successfully addresses a need, or new needs are identified, the inmate's Needs Plan will be modified, and the inmate's risk score will be adjusted as appropriate.

All evidence-based recidivism reduction programs, including current BOP programs, will be vetted, approved, and cataloged. Indeed, BOP's current programs have evolved and improved over the years and additional data is available for consideration. All programs will be assessed on the quality of their curriculum, data regarding improvement outcomes, and the ability of the BOP to ensure the programs can be provided as intended.[32]

In accordance with the FSA, medium and high risk inmates will receive priority for evidence-based recidivism reduction programs. Inmates at medium and high risk levels may volunteer to participate in productive activities. Inmates who are assigned minimum or low risk with no remaining needs on their Needs Plan will be assigned to participate in productive activities to remain productive. Assignment to evidence-based recidivism reduction programs will receive priority over assignment to productive activities.

No later than January 2020, a list of the approved evidence-based recidivism reduction programs and productive activities will be posted on the BOP's website.

VII. Communication to Inmates and Stakeholders

Engage Inmates
- Town Halls
- Electronic Bulletin Boards
- Unit Management Team Meetings

Engage Stakeholders
- Risk and Needs Assessment System Listening Sessions
- Request for Information
- Publication of Policies and Regulations

Engage Staff
- Webinars and Intranet Articles
- In-person and Web-based Training
- Meetings with National Union

Because the requirements of the FSA are varied and complex, it is important for inmates and staff to be fully briefed on the numerous changes required under the law and being implemented at BOP facilities. Accordingly, BOP will publish key announcements on the main page of its public website and provide information and updates on an ongoing basis on its new FSA resource page. Internally, in addition to the training described above, BOP staff will be briefed via video conferences, web collaboration, and the BOP's intranet site to remain current on all FSA-related changes and improvements.

Inmates' Unit Management Teams will be available for inmates to ask questions and offer feedback regarding the FSA. Inmates will be advised of changes and requirements via meetings with their Unit Management Teams; by the Warden and local leadership via institution Town Halls; and directly via announcements posted to inmate bulletin boards (including through TRULINCS, an application that provides inmates with the ability to view electronic notices). Members of the public may visit the BOP's website[33] to receive additional information.

Attorney General William P. Barr, U.S. Senator Lindsey Graham, and BOP Acting Director Hugh J. Hurwitz meet with an inmate at FCI Edgefield.

As mentioned previously, BOP will hold listening sessions to gather additional feedback from stakeholders and the public about the implementation of the Risk and Needs Assessment System. These sessions will provide BOP with direct input from interested and impacted parties about the strengths and challenges of the System as BOP fully implements the System in its facilities.

NOTES

[1] 18 U.S.C. § 3632(a).

[2] 18 U.S.C. § 3631(h)(1).

[3] The Statement of Reasons includes explanatory information about the sentence including any disagreements with the Presentence Investigation Report and information about how the sentence was determined (*e.g.* sentencing guideline departures). Some of this information, such as mental capacity, drug dependency, etc. informs the designation process. *See* https://www.uscourts.gov/sites/default/files/ao245sor.pdf .

[4] The applicable United States Attorney's Office provides guidance to BOP if it believes security risks exist with housing defendants with specific individuals (*e.g.* co-defendants or inmate witnesses).

[5] This determination is separate and distinct from BOP's security level classifications, which also include Minimum, Low, Medium and High. An inmate may be classified as Low security and designated to a commensurate facility because he or she poses little risk of flight or institutional misconduct, while at the same time have a high risk of recidivism. For example, an inmate with an extensive criminal history for defrauding senior citizens might have a high risk of recidivism, but a low security level because of a clear disciplinary record during prior periods of confinement.

[6] One exception to voluntary programs is the General Educational Development (GED), which is required by statute to be provided to any inmate without a prior high school diploma or GED. *See* 18 USC § 3624(f).

[7] This requirement confers several benefits to inmates and institutional operations, including development of vocational and pro-social skills, the earning of money to repay criminal fines and victim restitution and purchase desired commissary items, and the reduction of inmate idleness.

[8] 18 U.S.C. § 3632(h)(1).

[9] 18 U.S.C. § 3632(h)(2).

[10] Such persons are usually designated to one of the nine facilities that offer the BOP's Sex Offender Management Program.

[11] Note that failure to participate in a mandatory literacy program will result in an inmate failing to earn the maximum amount of good conduct time under 18 USC § 3624(b).

[12] *See* 18 U.S.C. § 3632(d)(4)(D).

[13] If the exclusion process cannot be automated, rosters of inmates will need to be sent from the BOP Central Office to each field site for case management staff to review and discuss at each inmate's Unit Management Team meeting.

[14] 18 U.S.C § 3621(h).

[15] Prior to sentencing, the probation officer will interview the defendant and conduct an investigation to provide the sentencing judge with pertinent information relevant for sentencing. This information is captured in a Presentence Investigation Report and includes details of the defendant's family history, community ties, education background, employment history and physical and mental health. *See* https://www.txs.uscourts.gov/presentence-investigation.

[16] 18 U.S.C. § 3621(h)(5).

[17] 18 U.S.C. § 3635(3)(A).

[18] This includes any modifications that might occur following the study period.

[19] 18 U.S.C. § 3632(d)(4).

[20] For example, 18 U.S.C. § 3632(d)(4)(D)(li) excludes inmates convicted of "(li) An offense described in section 3559(c)(2)(F), for which the offender was sentenced to a term of imprisonment of more than 1 year, if the offender has a previous conviction, for which the offender served a term of imprisonment of more than 1 year, for a Federal or State offense, by whatever designation and wherever committed, consisting of murder (as described in section 1111), voluntary manslaughter (as described in section 1112), assault with intent to commit murder (as described in section 113(a)), aggravated sexual abuse and sexual abuse (as described in sections 2241 and 2242), abusive sexual contact (as described in sections 2244(a)(1) and (a)(2)), kidnapping (as described in chapter 55), carjacking (as described in section 2119), arson (as described in section 844(f)(3), (h), or (i)), or terrorism (as described in chapter 113B)."

[21] 18 U.S.C. § 3632(d)(4)(i).

[22] 18 U.S.C. § 3632(d)(4)(ii).

[23] BOP case managers use the Insight application to schedule, develop, and store inmate assessments. The Insight application also integrates with SENTRY (the BOP's inmate management system) and the Residential Reentry Referral Management (R3M) system, used by RRM staff to manage pre-release processing and case management.

[24] The BOP's case management application, Insight, is used at all BOP institutions. The BOP uses a second case management application called the R3M system where Residential Reentry Management staff to communicate with Residential Reentry Center contract staff to manage inmates in pre-release custody. Insight currently includes a referral module that will be more tightly integrated into R3M.

[25] 18 U.S.C. § 3632(d)(3).

[26] For a detailed discussion of the rulemaking process, see "A Guide to the Rulemaking Process," https://www.federalregister.gov/uploads/2011/01/the_rulemaking_process.pdf (last visited July 3, 2019).

[27] Master Agreement, Federal Bureau of Prisons and Council of Prison Locals, American Federation of Government Employees, July 21, 2014 – July 20, 2017, https://www.afgelocal1034.org/ewExternalFiles/2014%20New%20Master%20Agreement.pdf (last visited July 3, 2019).

[28] BOP has already updated policies or memoranda that address: Recidivism-Based Partnerships, Secure Firearms Storage, Location Within 500 Driving Miles of Inmate's Residence, Compassionate Release/Reduction in Sentence, Home Confinement, Inmate Identification, De-Escalation Training, Juvenile Solitary Confinement, Dyslexia, and Unit-Based Programs. Some of these documents are currently under review by the Union. *See* https://www.bop.gov/PublicInfo/execute/policysearch.

[29] The timeframes listed are estimates and may be affected by funding, resources, or legal requirements.

[30] 18 U.S.C. § 3631(b)(4).

[31] 18 U.S.C. § 3621(h).

[32] The BOP will use federal partner resources to screen external programs. For example, existing evaluation resources which can be leveraged include: MITRE (https://www.mitre.org/research/overview); NIJ's Crimesolutions.gov (https://www.crimesolutions.gov/about_starttofinish.aspx); NIJ's betagov (http://www.betagov.org/index.html); and GSA's Office of Evaluation Sciences (https://www.gsa.gov/about-us/organization/office-of-governmentwide-policy/office-of-evaluation-sciences).

[33] *See* www.bop.gov.