

Racine, Rebecca

From: Richstone, Jeff
Sent: Thursday, December 13, 2018 4:11 PM
To: Racine, Rebecca
Subject: FW: Judges Replacing Conjecture With Formula for Bail - The New York Times
Attachments: RSD_RN2016_Pretrial Risk Assessment Tools.docx

Please print out.

-----Original Message-----

From: Davis-Barron, Sherri <Sherri.Davis-Barron@ppsc-sppc.gc.ca>
Sent: December 13, 2018 4:09 PM
To: Richstone, Jeff <Jeff.Richstone@ppsc-sppc.gc.ca>
Cc: Colton, Loretta <Loretta.Colton@ppsc-sppc.gc.ca>
Subject: Re: Judges Replacing Conjecture With Formula for Bail - The New York Times

Jeff,

As mentioned, here is the e-mail exchange (containing at the bottom the NYT article regarding algorithms in risk assessment) and the Research Note that DoJ principal researcher Susan McDonald sent to me on this general subject two years ago, a subject she raised with me after she attended a presentation. She was seeking my views after she went to the presentation; I think it was in the context of our mutual work at the time on Intimate Partner Violence. Sherri.

Sherri Davis-Barron
Senior Counsel | Avocate-conseil
Headquarters Counsel Group | Avocat(e)s de l'administration centrale Public Prosecution Service of Canada (HQ) |
Service des poursuites pénales du Canada (AC)
160 Elgin Street, Room 1216 | 160, rue Elgin, pièce 1216 Ottawa (Ontario) K1A 0H8 tel. | tél.: 613-948-1484 fax | téléc.:
613-941-8742 sdbarron@ppsc-sppc.gc.ca Government of Canada | Gouvernement du Canada

-----Original Message-----

From: McDonald, Susan
Sent: Wednesday, December 21, 2016 3:37 PM
To: Davis-Barron, Sherri <Sherri.Davis-Barron@ppsc-sppc.gc.ca>
Subject: RE: Judges Replacing Conjecture With Formula for Bail - The New York Times

Hi Sherri,

You are absolutely right that the issue of risk assessment is critical in the case of IPV. We did that report you found and the issue continues to be relevant and followed closely by everyone in the family violence field.

What they are doing in the US is developing software that utilizes thousands and thousands of cases to develop algorithms which when given the key data, are able to make risk predictions.

I am attaching a research note for your further information that was pulled together this fall. At the moment, it is internal and not to be distributed beyond PPSC, [REDACTED] The DM meeting in Toronto this Monday was focused on data driven solutions to overrepresentation. SK is already going down that road, hoping to have a tool ready for 2017-18 and ON is also doing some developmental work. I don't have more recent or detailed updates than that at this time, but I think this area will be assigned to a researcher in the new year.

You will note that in the research note, University of Regina academics review the evidence in the US for possible use in Canada, so if there were one report to look at, I would recommend this one.

All the best for the holidays and I'll be in touch in the New Year in terms of next steps.

Cheers
Susan

-----Original Message-----

From: Davis-Barron, Sherri
Sent: 2016-Dec-19 3:33 PM
To: McDonald, Susan <Susan.McDonald@justice.gc.ca>
Subject: RE: Judges Replacing Conjecture With Formula for Bail - The New York Times

Thanks Susan. Very interesting article. Thanks so much for bringing this to my attention. Risk assessments have come up in relation to the IPV WG as well.

As of now, it is not clear to me to what extent jurisdictions in Canada currently use risk assessment tools, which ones they use, at what stage they use them, and how effective they are. That said, I did find the following DoJ report, which is an inventory of spousal violence risk assessment tools used in Canada, which was updated in 2013.
http://www.justice.gc.ca/eng/rp-pr/cj-jp/fv-vf/rr09_7/rr09_7.pdf. At the front of the report, you will find a chart that identifies what risk assessment tools are used in each province or territory

Regards,
Sherri.

Sherri Davis-Barron
Senior Counsel | Avocate-conseil
Headquarters Counsel Group | Avocat(e)s de l'administration centrale Public Prosecution Service of Canada (HQ) |
Service des poursuites pénales du Canada (AC)
160 Elgin Street, Room 1216 | 160, rue Elgin, pièce 1216 Ottawa (Ontario) K1A 0H8 tel. | tél.: 613-948-1484 fax | téléc.:
613-941-8742 sdbarron@ppsc-sppc.gc.ca Government of Canada | Gouvernement du Canada

-----Original Message-----

From: Davis-Barron, Sherri
Sent: Friday, December 16, 2016 2:21 PM
To: McDonald, Susan
Subject: RE: Judges Replacing Conjecture With Formula for Bail - The New York Times

Hi Susan,
Thanks! Will take a read of this and get back to you.
Cheers,
Sherri.

Sherri Davis-Barron
Senior Counsel | Avocate-conseil
Headquarters Counsel Group | Avocat(e)s de l'administration centrale Public Prosecution Service of Canada (HQ) |
Service des poursuites pénales du Canada (AC)
160 Elgin Street, Room 1216 | 160, rue Elgin, pièce 1216 Ottawa (Ontario) K1A 0H8 tel. | tél.: 613-948-1484 fax | téléc.:
613-941-8742 sdbarron@ppsc-sppc.gc.ca Government of Canada | Gouvernement du Canada

-----Original Message-----

From: McDonald, Susan
Sent: Friday, December 16, 2016 1:38 PM
To: Davis-Barron, Sherri
Subject: FW: Judges Replacing Conjecture With Formula for Bail - The New York Times

I'd love your thoughts after reading this article ...

-----Original Message-----

From: Li, Ting
Sent: Wednesday, December 14, 2016 3:36 PM
To: * Research & Statistics All <RSA@JUSTICE.GC.CA>
Subject: Judges Replacing Conjecture With Formula for Bail - The New York Times

For those who are interested. Susan and I went to a presentation on Artificial Intelligent and the Future of Law, given by law professor Benjamin Alarie. During his presentation he mentioned the article by New York Time (please see the link below). It is an interesting article that shows how technology can help people to make better decisions

http://www.nytimes.com/2015/06/27/us/turning-the-granting-of-bail-into-a-science.html?_r=0

Ting

Research Note

This report is a work product, and the findings presented herein are not to be construed as an official Department of Justice Canada position, unless they are designated as such by other authorized documents and the report is posted on the official Department of Justice Canada Web site.

DO NOT DISTRIBUTE, FOR INTERNAL USE ONLY

Pre-trial Risk Assessment Instruments: The American Experience, a Canadian Proposal

Analysis of criminal court data can assist judges in making key decisions regarding an accused's risk to public safety and their likelihood to miss future court dates. The American Pre-trial Risk Assessment Instrument (PRAI) is an example where analysis of court data assists judicial decision-making.

A PRAI does not replace judicial discretion; rather, it enhances judicial discretion by providing evidence-based recommendations to the court concerning the risk level of an accused. A PRAI is based on a quantitative methodology that assigns a risk score to an accused; this score is a measurement of how likely the accused is to recidivate when released by the court and how likely he is to miss a court appearance. Using PRAI to help criminal courts divert accused from pre-trial remand is a topic of discussion at the highest levels. The White House Press Secretary has identified the need for using PRAI as part of the Data-Driven Justice Initiative.

This document analyses PRAs used in American criminal courts with a view to providing PRAI options for the Canadian criminal justice system. The background section defines PRAs, who uses them, and why they are used. A discussion on the method used by various American courts to generate PRAI scores follows this background section, as well as research on PRAs in American courts. The research focuses on recidivism rates, reductions in fail to appear rates, and fiscal savings for courts and remand facilities. This note then presents some of the challenges of implementing PRAI regimes with an emphasis on how courts can prepare for implementing such a regime and options for PRAI development in Canada.

Background

In both the United States and Canada, "over half of the state and provincial prison population is accounted for by defendants who were detained pre-trial rather than released" (Myburgh et al. 2015). American court research shows that the detention of accused prior to their day in court is costly: the US spends nearly \$9 billion a year remanding defendants who are awaiting trial (VanNostrand 2015). The research also shows that pre-trial remand impacts case outcomes (Oleson et al., 2014), the likelihood of receiving a custodial sentence, and the length of custodial sentences (Myburgh et al 2015, Sacks et al.

Research and Statistics Division

2014, Lowenkamp et al. 2013). Pre-trial detention also increases the likelihood of long-term recidivism for otherwise low-risk accused (VanNostrand 2015).

Nevertheless, pre-trial detention, in many cases, is necessary as it reduces or eliminates risks to public safety at least in the short term. Western justice systems are, however, risk based and must balance the need for public safety with the rights of individual liberty. There is a presumption in favour of release that exists in American and Canadian legislation (Myburgh et al 2015, p. 5). A key goal of PRAI that supports this presumption is to reduce the number of accused in pre-trial remand. The broader goals of the PRAI are to:

- Shift towards objective decision-making in the courts;
- Alleviate jail overcrowding and reduce operating costs;
- Expedite the release of low and medium risk accused;
- Reduce fail-to-appear and increase public safety; and to
- Improve the efficiency and effectiveness of local CJSs (Myburgh et al 2015, Mamalian 2011).

These goals can be met through the use of PRAs to increase pre-trial release rates, while managing risk to public safety. Although greater numbers of accused will be on release, PRAI regimes require strong alternatives to pre-trial custody to reduce accused pre-trial recidivism and FTA rates. These alternatives include:

- **Third-party custody**, whereby the defendant is designated to the custody of a person who agrees to assume responsibility for the supervision and report violations to the court;
- **Halfway house placement**, whereby the defendant is designated to a community-based residential facility and may leave the facility for approved purposes such as employment, education, medical treatment, and religious practices;
- **Intermittent custody**, whereby the defendant is released from detention for a limited time periods;
- **Substance abuse treatment**, whereby the defendant is required to participate in a drug or alcohol dependency program and/or submit to a period of drug testing; and,
- **Mental health treatment**, whereby the defendant is required to undergo psychological or psychiatric treatment or reduce the risk of nonappearance and/or danger to the community associated with emotional or mental health (VanNostrand and Keebler 2009).

The literature generally recommends that all low risk and medium risk accused be given pre-trial release, with various alternative programs to assist them while they await their court date. It is generally accepted that low risk accused should be automatically given pre-trial release, due to the nature of their crimes, their short/non-existent criminal histories, and their proven commitment to their family responsibilities and to their community. Research shows that evidence-based interventions directed at medium and high risk accused will result in better outcomes for the community, as well as the accused (VanNostrand and Keebler 2009, NIJ 2004). These better outcomes include increases in the likelihood of remaining arrest free and reductions in the numbers of failure to appear (FTA).

Research and Statistics Division

In several states, PRAIs are grounded in legislation. Colorado, Connecticut, Kentucky, Ohio, Utah, and Virginia are examples of states that have PRAIs in their criminal courts. Various counties (Allegheny County, Lake County Illinois, New York City's five counties, Washington, D.C.) also use PRAIs as tools to alleviate remand overcrowding and to encourage pre-trial release. One source indicates that, "Since 2012, 20 laws in 14 states created or regulated the use of risk assessments during the pre-trial process" (Widgery 2015, p. 1).

Methodology – Measuring Pre-trial Risk

Research notes that "actuarial risk measures are more accurate at classifying risk than clinical judgement" (Myburgh et al 2015, p. 18). A PRAI produces an actuarial score that helps courts answer the question of which pre-trial defendants should stay in a facility and who should be released into the community. A PRAI can also assist in deciding which strategies, techniques, and conditions can be used to mitigate risk when defendants are released into the community. Accused are typically eligible to be evaluated by a PRAI if:

- They are 18 years or older, or if they are a juvenile previously certified as an adult by the court;
- They are not incarcerated at the time of arrest or when warrants are served; and,
- They have been arrested for a criminal offence.

As noted, a PRAI is a tool that creates a risk score (low to high) based on a variety of factors relating to the accused's offence, criminal history, and life-world context. The structure of the PRAI is based upon factors that have been shown to be related to risks of pre-trial misconduct (VanNostrand and Keebler 2009, Mammalian 2011, Hickert et al. 2013, Myburgh et al. 2015). The American literature on PRAIs show that the best factors for measuring FTA and offending on release risk are:

- Nature and circumstance of the offence;
- Weight of the evidence;
- Input from prosecution and defence;
- Criminal history of accused;
- History of failures to appear;
- History of violent convictions;
- Length of current residence;
- Employment status;
- Whether the accused is a primary caregiver; and,
- Whether the accused has a history of substance dependence or abuse.

A scoring matrix that considers the above factors is used to develop a risk score for every eligible accused based on the above factors. One example uses a seven point scale, from low risk (1) to high risk (7), where higher risk scores are associated with higher probabilities of pre-trial failure. Another uses a low, medium,

Research and Statistics Division

and high risk categories. Ultimately, these scores are not predictions for the specific defendant's behaviour, but are statistical probabilities of failure for defendants with that specific score (Mamalian 2011).

Results and Discussion

This section presents research findings concerning PRAI in American jurisdictions including: highlights from a USDOJ sponsored study; Canadian research on US PRAI practice; key findings from a US Bureau of Justice Statistics sponsored report on PRAI; and results from a study of PRAs by the Utah Criminal Justice Centre.

Pre-trial risk Assessment in the Federal Court (USDOJ)

Findings from a USDOJ sponsored study of 170,000 criminally accused across 93 District federal courts by Marie VanNostrand and Gena Keebler are discussed (VanNostrand and Keebler 2009). The authors discuss the costs of remand versus alternatives to remand programs and the success rates of accused released using PRAs.

The authors note that remanding an accused is costly. They estimate the average pre-trial detention costs as \$19,000 USD per defendant. This contrasts with the average pre-trial release program cost of between \$3,100 and \$4,600 USD, depending on the accused's risk level and need.¹ By using PRAs to manage risk and release more accused, states can incur significant savings given the high success rates of accused who are released on PRAI (see below).

The authors show that low, medium and high risk accused have successful pre-trial outcomes following release in over 98% of cases for low risk accused and 85% of cases for high risk accused. That is to say that the majority of cases that are recommended for pre-trial release do not recidivate and report low fail to appear rates. Moreover, this study showed that low risk accused who were released by the court without alternatives to detention conditions were more likely to fail than those who were released with alternatives to detention conditions. The authors also show that when PRAs were provided to judges, the judges released accused at rates higher than actually recommended by the PRAI; for example, 22% of high risk accused were recommended by PRAI for release and 28% were released by the court. The high release rates in PRAI-using courts may speak to the ability of PRAI to modify court culture and eliminate the bias that some courts may have with regard to pre-trial custody being the only method by which public safety can be assured.

Review of Pre-trial Risk Assessment and Factors Predicting Pre-trial Release Failure

Canadian research of American PRAs focuses on a dozen PRAs used in American cities, counties, states, and the federal court. The authors, John-Etienne Myburgh, Carolyn Camman, and Stephen Wormith,

¹ VanNostrand and Keebler (2009) note that the average cost of fugitive recovery, for those fugitives who abscond while on pretrial release, was \$215 USD.

Research and Statistics Division

conduct a vast review of American PRAI with a view to making a recommendation of the use of PRAIs to Saskatchewan Justice and MLA members. This subsection will review some findings from each jurisdictional level analysed by the authors (city, county, state, and national).

At the city court level, the authors review the use of PRAIs in New York City. The authors note that of 27,630 docketed cases who were granted some form of release via a PRAI, 10% reported a FTA, 12% recidivated while on release, and 72% successfully completed pre-trial release. Analysis of court and accused data show that the following factors were correlated with reductions in FTA and recidivism:

- having a telephone or cellular phone,
- having verified employment/schooling/training,
- having a verified address,
- having a prior FTA, and
- having prior misdemeanor convictions.

The authors also note that re-evaluating the PRAI after a few years shows that with time in the field, the tool can be tweaked and does improve its ability to assess the risk levels of accused.

The authors present a variety of findings at the county level. First, the Lake County (Illinois) PRAI was shown to reduce rates of pre-trial failure from 32% to 28% over a four year period. In Washington D.C., the use of PRAI has accurately predicted pre-trial failure 80% of the time among District of Columbia defendants. In Iowa's Fifth Judicial District, the use of a PRAI has released an additional 29% of African American defendants on bail, decreasing PRAI eligibility disparity between Caucasian and African American defendants from 10.4% to 4.3%.

At the state level, the authors present data on PRAI use in Virginia, Kentucky, Ohio, Colorado, and Connecticut. Virginia's PRAI was consistent with other PRAIs. It was found that as PRAI risk levels increased, the risk of FTA and/or recidivism by the accused also increased. In Kentucky, the PRAI guided release of 38,478 persons resulted in a FTA rate of 8% and an over-all re-arrest rate of 7%. Data from Ohio show that low risk accused on PRAI guided release had a 5.4% rate of pre-trial failure and high risk accused had a 30% risk of failure. In Colorado, an overall pre-trial failure rate of 32% for accused on PRAI guided release was recorded; low risk accused had a failure rate of 13% while high risk accused had a failure rate of 67%. Connecticut's use of PRAIs has been shown to decrease FTA rates from 21% to 10% and to have increased the number of defendants receiving a non-financial release recommendation (from 52% to 66%). Although PRAIs at the state level are constantly being re-evaluated and re-tooled to meet the needs of various court cultures and salient population and social influences, the results of PRAI use in the five states reviewed by the authors are positive and promising insofar as the courts are releasing more accused and reporting acceptable failure rates.

At the national level, the authors show that a federal PRAI benefited violent offenders more than most other defendants when looking at FTA and recidivism rates. They note that use of the PRAI increased release recommendations by 13% while actual release rates increased between 2% and 6%. Recidivism

Research and Statistics Division

and FTA rates were low for low risk offenders, and gradually increased to between 20% and 35% for high risk offenders.

State of the Science of Pre-trial Risk Assessment

In a study funded by the US Bureau of Justice Statistics (BJS), Cynthia Mamalian presents an overview of American research concerning the use of PRAIs in US criminal courts. Mamalian presents a discussion of risk and how PRAIs may alleviate perceived risks. The author also presents a discussion of how PRAIs can contribute to both risk assessment of an accused and the risk management regime for an accused on court ordered release. Mamalian's paper, while lacking in statistics supporting the efficacy of PRAIs, outlines how PRAIs should be developed and how their existence supports evidence-based decision-making in criminal court.

Mamalian notes that a court's reticence to release an accused prior to their trial rests on the court's perception of risk that an accused might reoffend while on release. This position is supported by Canadian research on Canadian release/remand decisions (Myburgh et al 2015). Should accused offend on release, the perceived ability of the court to protect public safety may be undermined. Thus, courts are weighing two risks: the risk of the accused offending while on court ordered release and the risk of negative public perception of the court's authority.

The perception of this risk is not supported by evidence, as the majority of accused on court ordered release do not reoffend. For example, Mamalian notes that, "in a study of federal criminal case processing between 2003 and 2004 (N=30,952), 80% of defendants released prior to trial completed their periods of release without violating the conditions of their release" (2011, p. 16). The author notes that specific types of offender, drug and weapons offenders, were more likely to commit at least one violation of the conditions of their release. Using a PRAI will assist courts in reducing remand populations while reducing the risk of accused reoffending while on court ordered release. Supporting risk management regimes should be an integral part of PRAI use.

When released, accused are subject to a variety of risk management approaches (e.g. conditions of release, sureties, bonds). Mamalian posits that there is a lack of connection between the reasons for pre-trial release and how the court directs the management of the accused while on release. The author suggests that strong linkages can be made from the data used to calculate the PRAIs and the management regimes for released accused. For example, the court "must be open to the possibility that [some] defendants do not need as much supervision and as many conditions of release as we seem to think they need" and that "not everyone needs all resources, and a reallocation of existing resources may be all this is needed" and that "the field also needs to consider the extent to which over-supervising defendants could have negative consequences for them and the community" (Mamalian 2011, p. 20). There are implications for Canadian courts as the use of PRAIs will not only reduce the remand population, but may also reduce the costs affiliated with monitoring accused on release and may reduce bail breach rates. PRAI data can be used to custom tailor conditional release programs to specific types of offender.

Research and Statistics Division

Pre-trial Release Risk Study, Validation and Scoring: Final Report

Audrey Hickert, Erin Worwood, and Kort Prince conducted a study on pre-trial failure and the development of a pre-trial release instrument. The study took a random sample of cases where the accused received pre-trial release and whose information on FTA and recidivism had been fully tracked (n=1,066). The authors show that FTA rates were 49% and that the pre-trial recidivism was 15%. With pre-trial risk assessment and affiliated release management programs, the authors posit that these rates can be reduced. They hypothesize that the ability of PRAIs to rank offenders by risk level will reduce FTA and recidivism risk rates. For example, applying a PRAI to their sample would identify low-risk offenders who had less than a 30% chance of missing a court date, as opposed to the 49% base rate. Moreover, low-risk offenders had a 5% probability of recidivism as opposed to the 15% probability of the sample. The argument made here is that the courts are currently treating accused with solutions that do not account for the actual risk the accused pose to public safety. While low-risk offenders have reduced likelihoods of FTA/recidivism, they note that even the high-risk offenders have substantial probabilities of not reoffending. The authors propose a PRAI be developed by courts to "change the number and type of defendants who are released pre-trial" (Hickert et al 2013, p. 29), reducing the overload of remand facilities and ensuring fairness in the criminal courts.

The reviews of the use of PRAIs in the United States are generally positive insofar as they indicate that pre-trial release rates have increased, or can be increased, and that low and medium risk offenders show lower rates of pre-trial failure and that high risk offenders are failing at an acceptable rate. Constant re-evaluation of PRAIs is recommended by the various studies in this section, as re-evaluation keeps the tool fresh and allows it to adapt to local court culture.

Challenges

It is accepted that pre-trial programs typically have underdeveloped information management systems and limited financial resources. However, many courts routinely keep the necessary data and may only lack trained staff to manage the timely and accurate preparation of PRAIs. Adjusting to the data requirements of a PRAI regime will be a necessary inconvenience for courts: technical assistance provisions must include skilled computer programmers who can mine and extract data, build the necessary databases, and generate PRAI reports for the court. Programmers will make PRAIs possible, but general staff will require training in interpreting and collecting the necessary data.

Training and technical assistance are mandatory when implementing a PRAI scheme in a courthouse. Training must occur at multiple levels including the judiciary, law enforcement, and the court legal and administrative community (Mamallian 2011). Training provided will help court actors to make PRAIs reflective of the practices of their court. One state, Virginia, has legally proscribed training (§19.2 – 152.3 *Department of Criminal Justice Services*) relating to PRAIs and other pre-trial service programs. The State of Virginia publishes a training manual that details the steps by which court staff can generate PRAI reports for use by the court.

Research and Statistics Division

A PRAI will need to be modified to reflect local court culture. For example, some courts record every FTA a defendant has committed, while other courts offer a warning for an FTA and only subsequent FTAs are recorded and charged. Each court will generate PRAI scores in a similar manner, although every court will score minor aspects of the PRAI differently. This is completely acceptable and is considered a positive manifestation of court culture in the PRAI methodology.

Guiding practices for pre-trial risk assessment instruments for courts should include:

- Evidence that the PRAI can predict risk of failure to appear and danger to the community pending trial;
- Evidence that the PRAI classifies defendants regardless of race, ethnicity, gender, or financial status; and
- Evidence that the PRAI conforms to applicable federal statutes (e.g. Charter compliance).

Conclusion and Options

Developing a Canadian pre-trial risk assessment instrument will aid the court in making decisions regarding pre-trial custody; such a tool will never replace judicial discretion, only assist it. A good starting point would be the development of a universal pre-trial risk assessment instrument that could be modified and customized for local courts. The development of a universal PRAI would provide local courts with a functioning tool to which they can add any criteria or modify the existing factors to meet the needs of local court culture. Moreover, using PRAs in Canadian criminal courts will likely reduce remand populations, reduce FTA rates, and reduce pre-trial recidivism and long-term recidivism.

It is recommended that criminal justice officials explore avenues to develop a PRAI for one or two Canadian criminal courts, using data provided by police, prosecution, and court staff. This PRAI could be piloted by a court, with the recommendation that all accused identified as low-risk be given pre-trial release. Failure rates can be measured for low-risk accused and can be used to validate or refine the tool. Once validation is complete, the tool could be used to recommend release for medium and high risk offenders. If the tool is shown to reliably predict failure and reduce remand populations in one court, the successes can be used to market the tool to other courts.

Research and Statistics Division

References

The White House, Office of the Press Secretary. (2016). *Launching the Data-Driven Justice Initiative: Disrupting the Cycle of Incarceration* [Press release]. Retrieved from <http://linkis.com/www.whitehouse.gov/t/wmDmZ>

Myburgh, J.E., Camman, C., & S. Wormith. (2015). *Review of Pretrial Risk Assessment and Factors Predicting Pretrial Release Failure*. Centre for Forensic Behavioural Science and Justice Studies, University of Saskatchewan.

VanNostrand, M. (2015). *Measuring and Managing Pretrial Risk: Improving Public Safety, Fairness, and Cost Effectiveness*. California Pretrial Summit.

Oleson, J.C., Lowenkamp, C.T., Wooldredge, J., VanNostrand, M. and Cadigan, T.P. (2014). "The sentencing consequences of Federal Pretrial supervision." *Crime & Delinquency*, 1-21.

Sacks, M. and Ackerman, A.R. (2014). "Bail and sentencing: Does pretrial detention lead to harsher punishment?" *Criminal Justice Policy Review*, 25:59-77.

Lowenkamp, C.T., VanNostrand, M. and Holsinger, A.M. (2013). "The hidden costs of pretrial detention." Laura and John Arnold Foundation: Houston, TX

Mamalian, C.A. (2011). *State of the Science of Pretrial Risk Assessment*. Pretrial Justice Institute and the Bureau of Justice Statistics (US Department of Justice).

VanNostrand, M., & Keebler, G. (2009). *Pretrial Risk Assessment in the Federal Court*. Office of the Federal Detention Trustee (US Department of Justice).

Crime and Justice Institute and Department of Justice, National Institute of Justice. (2004). *Implementing Evidence-Based Practices in Community Corrections: The Principle of Effective Interventions*

Hickert, A.O., Worwood, E.B., & Prince, K. (2013). *Pretrial Release Risk Study, Validation, & Scoring: Final Report*. University of Utah, Utah Criminal Justice Center.

Widgery, A. 2015. *Trends in Pretrial Release: State Legislation*. National Conference of State Legislatures.