

The Real-World Application of the Risk Principle¹: Is It Possible in the Field of Probation?

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ALTHOUGH SEVERAL CRIMINAL justice theories exist as a roadmap to effective supervision, the Risk, Needs, and Responsivity (RNR) model dominates the scholarly literature. A quick search in the Criminal Justice Abstracts Database reveals 140 peer-reviewed publications referencing the RNR model since 2000. As Andrews and Bonta (2007) note, the RNR model has been used, with increasing success, in North American and around the world. The authors further comment on the robustness of the model, but observe (2007:15) that “The greatest challenge is transferring the RNR model into ‘real world’ settings.” Research on correctional services and the risk principle certainly supports this contention.

In a review of 38 correctional programs, researchers found only 1 program that met the criteria for varying programming intensity and duration by risk (Lowenkamp, 2004). Similarly, Lovins (2012) found that 36 out of 134 correctional treatment programs reviewed were varying program duration by risk. Finally, Lowenkamp, Pealer, Smith, and Latessa (2004) found that approximately 33 percent of supervision-based programs in Ohio were targeting high-risk offenders or varying program

duration by risk or program intensity by risk. Further, only four programs were meeting all three of these criteria. Echoing Andrews and Bonta (2007), it does seem that translating the RNR model in real-world settings is a challenge and has been quite elusive.

A recent attempt to bring the RNR model to probation supervision was presented in a monograph titled *Dosage Probation* (Center for Effective Public Policy, 2014). This model drew upon the extant research on the RNR model as well as the emerging (but limited) research on dosage. One of the aspects of this model focused on setting correctional service thresholds by risk level. That is, high-risk offenders would receive 300 hours of treatment, which would require longer periods of supervision compared to moderate-risk offenders, who would receive 100 hours of treatment, thereby requiring shorter periods of supervision. This in effect would lead to varying the duration and intensity of services by risk level for offenders placed on supervision. A demonstration project of this model was developed and carried out. The authors of the evaluation found that the model had no effect on offender outcomes; however,

the model (either due to complexity or some other reason) was not fully implemented (Lowenkamp, Holsinger, & Bechtel, 2016). Although it may intuitively seem easy, the struggle to properly implement the risk principle lies in the details of implementation and the availability of resources.

In the federal probation system, there has been a concerted effort to align supervision practices with the RNR model since 2009. This article examines the system’s effectiveness in implementing the Risk Principle. Additionally this paper examines the adoption of a violence assessment and how this can further refine the use of this Risk Principle.

¹ The Risk Principle was introduced by Andrews, Bonta, and Hoge (1990) as a way to see the intervention of supervision through the prism of psychological principles. More specifically, they proposed three principles that make up the foundation of effective correctional practice: the Risk, Needs, and Responsivity Principles. This article is examining only the implementation of the Risk Principle, but it is important to note that this principle is only one part of an interdependent model.

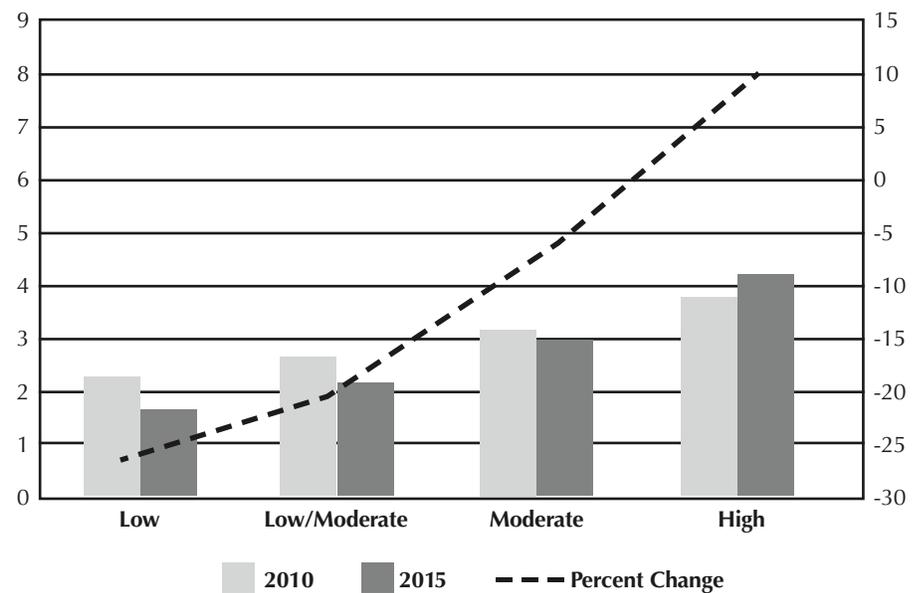
History of the Risk Principle in the Federal System

The federal probation system has a long history of using various risk prediction assessments. Individual districts used various forms of standardized risk assessment instruments throughout its history. In 1982, the Federal Judicial Center (FJC) collected survey data from across the federal system and learned that over two dozen risk prediction tools were in use (Vance, 2011). Soon after, the FJC created the RPS-80 for the entire federal probation system. The RPS-80 evolved into the RPI, which was the system's main risk assessment through 2010 (Vance, 2011).

In 2008, the Administrative Office of the United States Courts (AOUSC) embarked on the creation of a fourth-generation risk assessment instrument for federal probation. In 2010, implementation of the Post Conviction Risk Assessment (PCRA) began. As Vance (2011) recounts, over the course of 18 months, every chief probation officer, supervisory probation officer (over a supervision unit), and federal probation supervision officer was trained in the RNR model. Chief probation officers were trained through telephone calls with AOUSC staff combined with a group of pre-trained deputy chiefs. During the same time period, 94 conference calls were held where the group reviewed the risk principle and examined each district's data regarding their current application of the risk principle. Supervisors were trained in two larger regional training events that included material on the RNR model and the risk assessment instrument. Officers received training in one of dozens of regional events in a manner similar to supervisors (Vance, 2011).

Simultaneously, the AOUSC reviewed and revised its supervision policy to further comport with the RNR model. The first step of this revision expanded the pool of low-risk candidates eligible for less intense supervision by officers, and more clearly spelled out the reduced supervision requirements for those in that pool. This revision was aimed at better alignment of policy with the RNR model, but also provided an opportunity to take unnecessary tasks off the plates of officers to provide them with the time necessary to learn and implement this new assessment instrument. The rationale was that freeing officers from certain requirements for low-risk offenders would allow them to focus more on the higher-risk offenders (Vance, 2011).

FIGURE 1.
Change in the Median Number of Monthly Contacts and Percentage Change in Median Monthly Contacts from 2010 to 2015 by Risk Level



Did Policy Change Impact Officers' Behavior?

As expected, the federal probation system has seen significant change in practice, both in terms of officers' efforts and in use of treatment resources. Figure 1 illustrates this change in practice by showing the percentage change in the days between officer/offender contacts. These data were extracted from the case management system used by federal officers and show that officers are increasing the amount of time between contacts with lower-risk persons on supervision, and therefore spending fewer resources on them, while more frequently having contact with those who are at higher risk (see Cohen, Cook, & Lowenkamp, 2016).

Figure 2 displays the percentage change in daily treatment costs from 2009 to 2015 by risk level. More treatment money was allocated for higher-risk persons on supervision and fewer resources for lower-risk people on supervision.

These data show marked improvement in the federal probation systems' adherence to the risk principle. By providing a new risk instrument and supporting training on the research behind the risk principle, while simultaneously removing burdensome requirements that arguably add little to the goal of recidivism reduction, officers were able to shift resources in support of the risk principle.

The federal probation system policy for

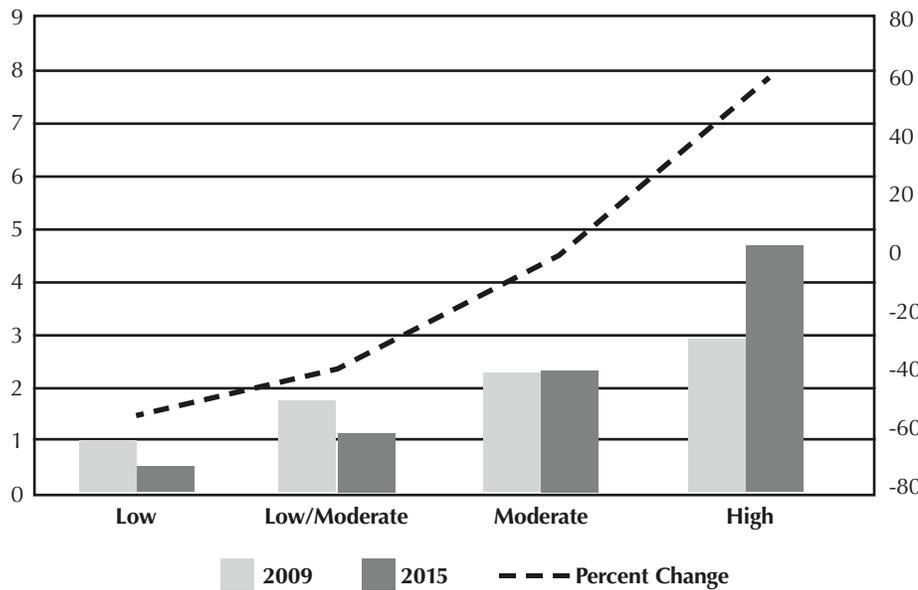
decades has been that supervision should be individualized. There has long been an expectation that officers spend proportionately more time and energy on higher-risk persons. The new policy, though, removed specific task requirements and broadened eligibility for low-risk supervision.

Did Reduced Attention to Low-Risk Persons Put the Community at Risk?

This, of course, leads us to ask whether the reduction in supervision resources, both in officer time and in treatment dollars, had an impact on recidivism rates of low-risk persons. A recent article (Cohen, Cook, & Lowenkamp, 2016) sheds some light on this question. While not a direct test of this shift in the allocation of resources based on risk, Cohen et al. (2016) evaluated various outcomes for time periods before and after the implementation of a low-risk supervision policy that directed districts to spend fewer resources on low-risk offenders. The authors concluded that:

In general, findings are supportive of the low-risk policy. This research shows that low and low/moderate risk offenders in the post policy group have fewer officer/offender contacts compared to their pre-policy counterparts (Cohen et al., 2016). This finding suggests that the low-risk policy is influencing officer behavior by encouraging federal officers to engage in fewer interactions with offenders on the lower end of the

FIGURE 2.
Change in Treatment Dollars Spent Per Day by Risk Level from 2009 to 2015



risk continuum. Importantly, the policy of supervising low-risk offenders less intensively has not compromised community safety. Post-policy low-risk offenders were no more likely to recidivate compared to their pre-policy counterparts. This finding indicates that federal officers can spend less time and resources on low-risk offenders without an accompanying rise in their recidivism rates.

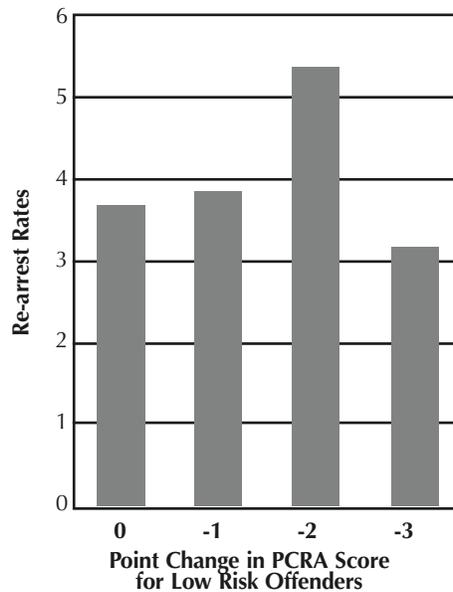
Was There a Benefit to Continued Supervision at a More Intense Rate for Low-Risk Persons?

Even with this renewed commitment to the adoption of the risk principle and data to support this commitment, there were some probation officers who struggled to let go of lower-risk offenders on supervision. The officers anecdotally reported that these individuals had issues that needed attentive supervision to further lower their risk. Officers have access to community resources and may feel compelled to connect those on supervision with community resources. We wanted to explore whether there was a benefit to providing supervision resources to those individuals.

Cohen, Lowenkamp, and VanBenschoten (2016) looked at this question and determined that individuals who started in the low-risk category and whose risk score lowered even further did not have lower rates of recidivism. (See Figure 3, which displays the one-year

rearrest rate for low-risk offenders by change in their second PCRA assessment.) Low-risk offenders that evinced no change in risk at their second assessment had a 3.8 percent rearrest rate. Low-risk offenders whose PCRA score dropped at their second assessment had rearrest rates of 3.9 percent, 5.2 percent, and 3.2 percent (for those low-risk offenders whose PCRA score dropped by 1, 2, and 3

FIGURE 3.
Twelve-Month Rearrest Rate for Low-Risk Offenders By Change in PCRA Score Time 1 to Time 2



points respectively).

In short, acceptance of the risk principle as applied in the federal probation system’s policy has been a success. Rearrest rates of low-risk offenders have remained steady, while officers’ time and treatment dollars have been protected for higher-risk cases.

Enhancing Adherence to the Risk Principle: The Identification of Violence

Although the PCRA does a solid job of predicting risk of general recidivism and revocation, it was not built to maximize predictions about the likelihood of violence. In 2014 research began to better identify which individuals on supervision are at an elevated risk of violence. This research included a large-scale data collection effort from case files of individuals who failed on supervision due to a violent act (see Lowenkamp, Johnson, Trevino & Serin in this issue). This research, in combination with research on the introduction of “due diligence” and case level assessment (see Serin, Lowenkamp, Johnson, & Trevino in this issue) provide a means for accurate and ongoing assessment of an offender’s risk of violent offending. More specifically, officers will be equipped with a static estimate of violent reoffending that is based on 14 markers of risk for violence. These 14 markers, in conjunction with the PCRA score, generate AUC-ROC values of roughly 0.80 when predicting rearrest for a violent offense.

Once the violence assessment was complete, the AOUSC tasked a group of probation officers, supervisors, deputy chiefs, and chiefs to operationalize the use of the violence prediction data, in combination with the PCRA, to create supervision contact standards. This group struggled with the concept of contact standards and drew from a position paper developed in the District of South Dakota to expand the use of risk assessment into a more comprehensive supervision dosage document. Would it be possible to further enhance the adoption of the risk principle by dividing out those in the lower risk categories who have an elevated risk of violence? Would this new tool allow the system to place more individuals on low-risk supervision in order to focus additional resources on the higher-risk populations without compromising community safety?

The initial task this group faced was to take the violence tool in combination with the PCRA risk level and determine the proper amount of dosage in the three categories that

TABLE 1.
Re-arrest Rates for Any Crime and Violent Crime by PCRA/Violence Risk Category

		PCRA Risk to Commit a Violent Act		
		Category 1	Category 2	Category 3
PCRA Risk of Recidivism	Low	L/1 (white) Any Crime = 9% Violent Crime = 1%	L/2 (white) Any Crime = 5% Violent Crime = 0%	L/3 (yellow) N/A
	Low/Mod	LM/1 (green) Any Crime 23% Violent Crime = 2%	LM/2 (yellow) Any Crime = 29% Violent Crime = 8%	LM/3 (orange) Any Crime = 42% Violent Crime = 16%
	Moderate	M/1 (yellow) N/A	M/2 (orange) Any Crime = 43% Violent Crime = 11%	M/3 (red) Any Crime 54% Violent Crime 21%
	High	H/1 (red) N/A	H/2 (red) N/A	H/3 (red) Any Crime = 53% Violent Crime = 24%

drive supervision: Monitoring, Restrictions, and Interventions (MRI). The grouping of the twelve cells in the matrix into five categories was based, in part, on rearrest rates for any crime and for a violent crime. Those numbers are presented in Table 1. The five categories of risk include the following cells from Table 1: white (cells L/1 and L/2), green (cell LM/1) yellow (cells L3, LM/2, and M/1), orange (M/2 and LM/3), and red (M/3, H/1, H/2, and H/3).

Although not binding, the advisory group provided examples of supervision levels (MRI) for each cell of Table 1. These examples of supervision levels are presented in Table 2 and direct, in a general way, districts and officers to focus on those offenders at higher risk of being arrested for any new offense and particularly those offenders at higher risk of being arrested for a violent offense. The advisory group also encouraged each district to think through what each of these levels might mean within their district and determine their local supervision standards.

When providing community-based supervision to those convicted of a federal offense, the safety of the community is paramount. Community safety is compromised by new criminal conduct committed by those under supervision and the harm caused by new offenses. Therefore, a person's risk to commit a more harmful act should be measured along with the person's risk to commit any criminal act. More resources and higher supervision levels are necessary to respond to someone who has demonstrated or has been assessed as likely to cause more serious harm should they reoffend.

As mentioned above, accurate assessment of risk to reoffend through valid actuarial instrumentation is standard practice in the federal probation system and provides the foundation to implement proven ways to reduce the likelihood of reoffending. Assessing the likely harm that might result from reoffending or from other negative behaviors is also essential to community safety and should be standard practice once valid actuarial instruments that predict harmfulness are developed and implemented. Just as marketing companies target their potential customers on both likelihood of any purchase and likelihood of an expensive purchase, so must probation officers target based on both general risk and expected severity.

As the AOUSC continues to develop national policy and procedures related to targeting supervision strategies for those at a higher risk of committing a violent offense,

TABLE 2.
Supervision Matrix Rehabilitation, Monitoring, Intervention Level Recommendations

		PCRA Risk to Commit a Violent Act		
		Category 1	Category 2	Category 3
PCRA Risk of Recidivism	Low	L/1 (white) Low Risk Supervision Caseload	L/2 (white) Low Risk Supervision Caseload	L/3 (yellow) Monitoring: Elevated Restrictions: Responsive to Circumstances Interventions: Moderate
	Low/Mod	LM/1 (green) Monitoring: Basic Restrictions: Responsive to Circumstances Interventions: Responsive to Circumstances	LM/2 (yellow) Monitoring: Basic Restrictions: Responsive to Circumstances Interventions: Minimal	LM/3 (orange) Monitoring: Elevated Restrictions: Intermediate Interventions: Moderate
	Moderate	M/1 (yellow) Monitoring: Elevated Restrictions: Responsive to Circumstances Interventions: Moderate	M/2 (orange) Monitoring: Elevated Restrictions: Intermediate Interventions: Moderate	M/3 (red) Monitoring: Intense Restrictions: Intense Interventions: Intense
	High	H/1 (red) Monitoring: Intense Restrictions: Intense Interventions: Intense	H/2 (red) Monitoring: Intense Restrictions: Intense Interventions: Intense	H/3 (red) Monitoring: Intense Restrictions: Intense Interventions: Intense

we wanted to consider whether our expected increased requirements for officers supervising these persons could be accomplished with current staffing levels. That is, can the current number of total contacts officers have with persons under supervision be shuffled even further away from the lower-risk persons to satisfy the increased expectations for officers supervising these newly identified violent offenders? Similarly, can existing treatment resources be re-allocated from lower-risk offenders to offenders with relatively higher risks of rearrest for a violent offense?

To answer that question, AOUSC conducted a quick analysis that included using the revised PCRA (including violence assessment) to categorize federal offenders into the five groups referenced in Tables 1 and 2. Extrapolating from data on the number of contacts officers make, we assumed for a caseload of 60 persons under supervision that an officer makes 119 contacts (including contacts at the home, the place of employment, by telephone, etc.). We then made some guesses about the number of contacts that may be appropriate in order to address the monitoring, restrictions, and interventions appropriate for a person that falls into each category. (See Figure 4.)

Using a similar process we also investigated treatment expenditures for a hypothetical but typical caseload. This process focused on determining if districts could redirect funds in an intentional way to ensure that the needs of higher-risk offenders are being addressed. We wanted to know how much treatment money would be available for the orange and red categories of offender if we shifted 90 percent of funds spent on treatment for the white category of offenders, 75 percent of the funds spent on the green category of offenders, and 25 percent of the funds spent on the yellow category of offenders. The answer to that question is contained in Figure 5 and indicates that taking 90 percent, 75 percent, and 25 percent of treatment dollars spent on lower-risk cases (White, Green, and Yellow Categories respectively) allows our system to increase treatment dollar expenditures on higher-risk cases (Orange and Red Categories) by 2.4 and 3.7 times respectively. (See Figure 5.)

Figures 4 and 5 demonstrate that with current resources, a typical officer could stretch the current risk differentiation even further, and almost double the number of contacts made related to the higher-risk cases and double or triple the amount of treatment dollars spent on the higher-risk cases. This is possible

FIGURE 4.
Existing Monthly and Reallocated Monthly Contact Rates by Offender Risk Category

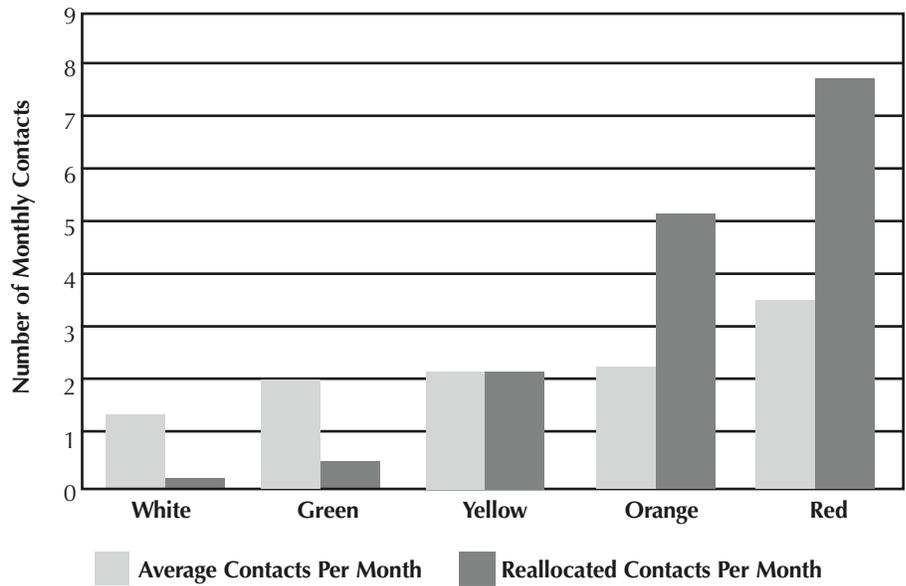
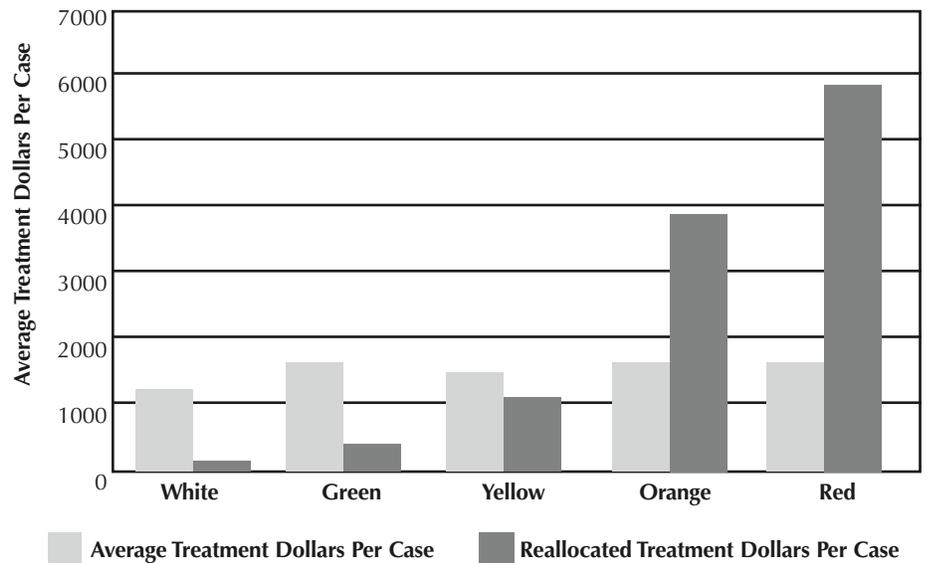


FIGURE 5.
Existing Average and Reallocated Treatment Dollars by Offender Risk Category



only because of the large percentage of federal cases that fall in the “green” category. It should be noted that we in no way believe that frequency of contact or shifting treatment dollars on paper is adequate to provide complete and practical application of this matrix. We also must state that in no way do we believe the number of contacts alone will increase overall effectiveness. The quality of the contact, the purpose of the contact, the skill level of the officer, all play a role in the success of supervision. Likewise the quality of treatment, the

purpose of the treatment, and the skill level of facilitators in correctional treatment programs also play a significant role in determining the effectiveness of correctional efforts. Finally, we acknowledge that each district’s caseload composition, contact averages, available treatment dollars, and expenditures by risk might differ from the averages we present here. Nonetheless, what we have presented above is an exercise that communicates the concepts the advisory group settled on and will hopefully lead to many additional thoughtful

FIGURE 6.
Average Days Between Contacts and Percent Change in the District of South Dakota from Fiscal Year 2009-2016

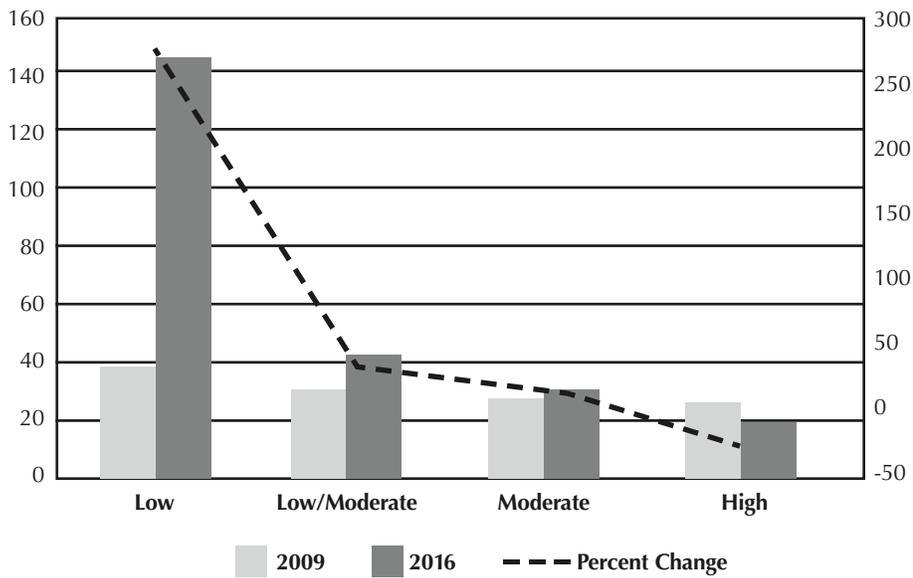
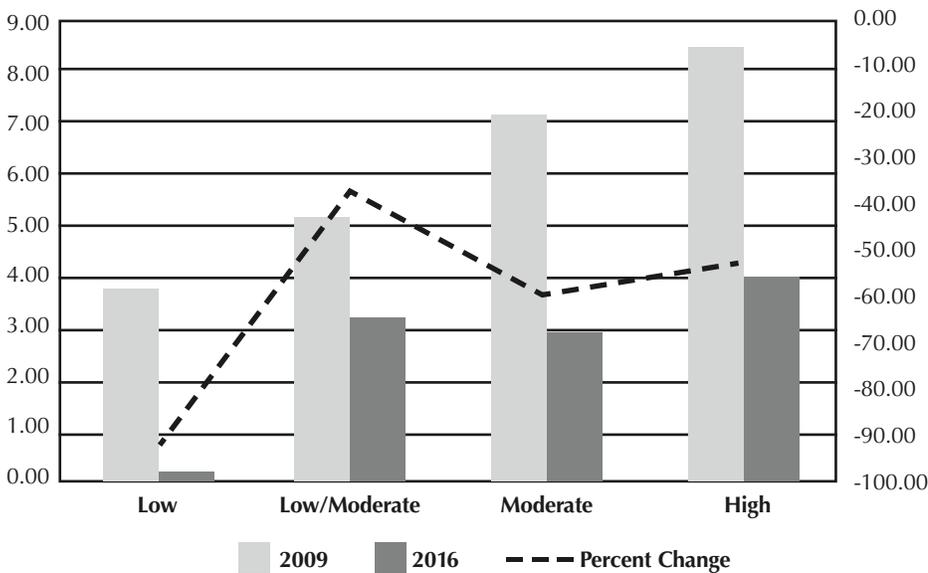


FIGURE 7.
Average Daily Treatment Costs and Percent Change in the District of South Dakota from Fiscal Year 2009-2016



conversations, in districts and on the national level, about how the federal probation system might move in this direction.

An example of the application of the advisory group’s supervision process can be seen in the District of South Dakota. The experience of the District of South Dakota is presented in brief below to give staff in the field a more concrete and practical application of what has been discussed to this point.

Case Example

The United States Probation and Pretrial Services Office in the District of South Dakota (hereafter Office) has made efforts to improve its service to the public by engaging in evidence-based decisions and by aligning its resources with empirical evidence on effective practices. At a macro level, we have initiated cost-effective risk reduction and risk management strategies and practices to realize a compelling vision of enhanced community

safety and greater achievement of justice. At a micro level we have engaged in a day-to-day awareness of and focus on making the best decisions. Figure 6 displays the average number of days between contacts by risk level for fiscal years 2009 and 2016, while Figure 7 displays the average daily cost of treatment by risk for fiscal years 2009 and 2016.

As Figure 6 makes clear, as we increased the number of days between contacts for low-risk offenders (by over 250 percent) from fiscal year 2009 to fiscal year 2016, we reduced the time between contacts for high-risk offenders by roughly 25 percent. Figure 7 indicates that while average treatment costs for all risk categories have decreased from fiscal year 2009 to fiscal year 2016, the greatest reductions were seen among the low-risk offenders (92 percent reduction). Smaller but meaningful reductions were also seen in the other risk categories; however, note that the average daily cost of treatment is highest among the high-risk offenders.

In summary, the data available from the District of South Dakota indicate that the risk principle is coming into focus. There is certainly some more work to be done; however, clearly there is an evident and growing differentiation in the daily cost of treatment services between low- and high-risk offenders. Further, by increasing the length of time between visits with low-risk offenders, the district has been able to increase the focus on the higher-risk offenders that cause the system and the public the greatest concern.

Conclusion

Years of effort and hard work by leaders in the federal probation and pretrial services system throughout the country have resulted in the risk principle solidly taking hold. The indicators we have, though only indicators, certainly point to a shift in the attention of probation officers to those at highest risk of recidivism. This is great news. As noted above, federal policy has long promoted individualized supervision that calls for additional resources on the higher-risk cases. Therefore it is no surprise that even the 2010 pre-RNR implementation numbers reflect a stair-step approach by officers in terms of their number of contacts with various risk categories of people. Given those numbers, the difference in these past five years is remarkable. This more extended differential between treatment of high- to low-risk persons is mirrored by the funds allocated for treatment needs. While we recognize these measures cannot capture

the quality of supervision, and are therefore merely proxies for good supervision attention, they are the best indicators currently available, and demonstrate a very encouraging trend. Also supporting the risk principle is the analysis of those low-risk persons who, for whatever reason, receive a higher level of attention than their risk level would require: The additional attention is not accompanied by improved outcomes for the low-risk persons.

Although this article focuses only on risk, we realize that the risk principle's optimum value is realized only when it is embraced as part of the full risk/needs/responsivity model. We will continue to analyze the risk principle in action once the revised violence assessment is in full use. The guidance that will be shared widely with probation officers will provide a fuller view of the person's risk, and will lead to a more fine-tuned action plan for supervision. The case study from South Dakota reinforces the notion that this shift is possible without the need for additional resources. South Dakota's federal supervisee population is higher risk and more violent than most in the federal system. While all districts nationwide work toward embracing the RNR model, we hope to continue to learn from one another and to be encouraged to move forward. While we are asking federal probation offices to make these changes without additional funding, we will continue to measure and analyze the costs of success in this important endeavor. If we can demonstrate the costs of achieving the goal of fewer victims and fewer crimes in a system as diverse and large as our federal system, we will

surely have advanced the conversation in an important way. We expect that the delineation of risk and accompanying suggested levels of monitoring/restrictions/interventions will lead to more consistent, targeted supervision efforts, and when addressed as a part of the federal Risk/Needs/Responsivity model, will lead ultimately to fewer victims and fewer crimes.

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