From the Administrator

Juvenile justice practitioners often use standardized risk and needs assessments to help gauge a youth’s risk of recidivism and identify factors that, if addressed, can reduce the risk of recidivism. In addition, these professionals rely on assessment findings while they develop treatment and service plans to appropriately target a youth’s individual needs and promote the best possible outcomes.

Research suggests that the effectiveness of an assessment instrument is influenced by how well it was implemented. The factors that may help or hinder the effective implementation of an assessment instrument in juvenile justice agencies are not well understood. This bulletin discusses two studies that are examining the factors—such as staff training and buy-in, managerial support and operating procedures, and stakeholder engagement—that appear to drive effective implementation. The Office of Juvenile Justice and Delinquency Prevention funded these studies.

Consideration of these drivers provides a helpful framework for developing a strong assessment implementation plan. Effective implementation of risk and needs assessments is important in helping to ensure the proper allocation of scarce resources and appropriate levels of supervision and services for youth involved in the juvenile justice system.

Caren Harp
Administrator

Studying Drivers of Risk and Needs Assessment Instrument Implementation in Juvenile Justice

Gina Vincent, Christopher J. Sullivan, Carrie Sullivan, Laura Guy, Edward Latessa, Jennifer Tyson, and Benjamin Adams

Highlights

This bulletin describes Office of Juvenile Justice and Delinquency Prevention-supported research findings on factors that promote effective implementation of risk and needs assessment instruments in the juvenile justice system. Quality implementation has been shown to reduce reliance on formal system involvement and decrease recidivism. Using a framework based in implementation science, the authors analyzed qualitative and quantitative data to identify the following drivers of successful implementation:

• Positive staff perceptions about the reliability, credibility, and applicability of the instrument to the needs of their local jurisdictions.
• Engagement of staff and other stakeholders in the initial strategic planning, goal setting, and problem solving to ensure early buy-in.
• A pilot period that focuses on training of staff and other stakeholders.
• Ongoing supervisory support and training.
• Standardized operating procedures and written policies in state and local agencies and the ability to share information across multiple stakeholders.
• A strong data infrastructure, including both user-friendly technological systems to support data collection and staff data expertise.
Studying Drivers of Risk and Needs Assessment Instrument Implementation in Juvenile Justice

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Introduction

Many state and local governments, faced with the challenge of managing juvenile offenders and available services effectively and equitably while protecting public safety, have adopted risk and needs assessment instruments in their efforts to improve their juvenile justice systems (Lovins and Latessa, 2013; Wachter, 2015). States and local governments increasingly use these instruments to identify the risk a youth poses to public safety; guide decisionmaking and service planning at intake and/or diversion, disposition, and postdisposition and/or reentry (Hoge, Vincent, and Guy, 2012; Lipsey et al., 2010; Vincent, Guy, and Grisso, 2012); and promote prosocial behavior and decrease offending (Mulvey and Iselin, 2008).

There are many types of assessment instruments, ranging from brief screening tools for early decisions (e.g., preadjudication detention) that quickly estimate a youth’s risk for reoffending to more comprehensive assessment instruments. Comprehensive assessment instruments generally identify the following factors (Andrews, Bonta, and Wormith, 2006; Cohen and Whetzel, 2014; Mulford, 2014):

- **Risk factors**—the likelihood a youth will endanger public safety and come into future contact with the juvenile justice system.

- **Criminogenic needs or dynamic risk factors**—individual, familial, and environmental circumstances that, when resolved through intervention with services and treatment (or naturally as a youth matures), are thought to lead to reduced juvenile offending behaviors.

- **Protective factors**—buffers that decrease the influence of risk factors and support prosocial development.

- **Responsivity factors**—characteristics and circumstances that may affect a youth’s response to services and treatment.

The use of comprehensive risk and needs assessment instruments is generally rooted in a risk-need-responsivity framework. The risk principle suggests that the level of services provided should be based on the level of risk that the youth poses for reoffending; youth classified as higher risk should receive more intensive interventions than youth with lower risk levels. The need principle stipulates that treatment should focus on criminogenic needs (dynamic risk factors). The responsivity principle directs that the mode and strategies of services should be matched to the individual needs of youth.

Risk and needs assessment instruments are implemented at different contact points in the juvenile justice system (Vincent, Guy, and Grisso, 2012). Juvenile justice professionals can use information from comprehensive, validated assessments1, 2 to match youth to appropriate levels of system involvement (i.e., diversion, supervision, and/or placement) based on their risk of reoffending and to specific treatment and services based on their criminogenic needs. This match is critical for improving public safety because evidence exists that interventions have the greatest impact on public safety when they are used on higher risk youth (Lipsey, 2009). Researchers have found that matching appropriate treatment and services to address a youth’s identified risk factors and needs is associated with greater reductions in reoffending and the promotion of prosocial behavior (Peterson-Badali, Skilling, and Haqanee, 2015; Vieira, Skilling, and Peterson-Badali, 2009).
The Office of Juvenile Justice and Delinquency Prevention (OJJDP) and other organizations have funded research that suggests that the quality of risk and needs assessment implementation is a key component in a variety of case processing outcomes (Bonta et al., 2001; Lipsey, 2009; Vincent, Paiva-Salisbury, Cook et al., 2012; Vincent et al., 2016); however, the factors in a juvenile justice setting that may facilitate or hinder effective implementation are less well understood. In this bulletin, the authors examine findings from OJJDP-supported research at the University of Massachusetts Medical School and the University of Cincinnati on what drives appropriate implementation of risk and needs assessments.

Drivers of Well-Implemented Assessment Instruments

Implementation science examines the purposeful and specific set of activities that are involved when an agency, organization, or community initiates and integrates a new program or practice within its operations (Fixsen et al., 2005). For example, researchers might employ this approach to explore how school administrators initiate and integrate an evidence-based delinquency prevention program into the school’s day-to-day operations (Kam, Greenberg, and Walls, 2003). The scientific examination of implementation processes suggests that a range of contextual factors about the communities, systems, agencies, and individuals involved in the process influences the extent to which they adopt and sustain programs, practices, or policies as intended (Development Services Group, 2015; Green and Glasgow, 2006).

In an early study of the adoption of new interventions, Backer, Liberman, and Kuehnel (1986) established a framework that grouped implementation factors across three areas: the innovation, the adopting organization, and the adoption effort. More recently, several frameworks have been introduced that systematically examine the way in which a new program, practice, or intervention is implemented and highlight the key steps, or components, of the implementation (Fixsen and Fixsen, 2016; Welsh, Sullivan, and Olds, 2010).

Fixsen and colleagues (2005) reviewed the research on implementation and identified “implementation drivers,” which they defined as the core steps an agency should take to increase the likelihood that a new practice will be adopted. The National Implementation Research Network (n.d.) describes these drivers as belonging to three categories: competency, organization, and leadership:

- **Competency drivers** include the staffing decisions, the attitudes of staff toward the new practice being implemented, and the training, support, and ongoing coaching staff receive.
- **Organizational drivers** include the management and administrative processes of an agency that facilitate or hinder implementation and the data systems that support decisionmaking.
- **Leadership drivers** focus on the strategic planning of the initiative, which includes collaboration with staff and other stakeholders in establishing goals and procedures related to the new program or intervention.

OJJDP-Supported Implementation Studies

In the University of Massachusetts Medical School’s Risk and Mental Health Screening and Assessment of Youth (RAMSAY) study, cofunded with the John D. and Catherine T. MacArthur Foundation, researchers evaluated the implementation of the Structured Assessment of Violence Risk in Youth (SAVRY) (Borum, Bartel, and Forth, 2006) instrument. SAVRY identifies risk factors that have been shown to be related to violent reoffending among youth and is also strongly predictive of nonviolent reoffending (Olver, Stockdale, and Wormith, 2009). It also identifies protective factors that decrease the influence of risk factors and support prosocial development (Borum, Bartel, and Forth, 2006).

The RAMSAY study built on a previous MacArthur Foundation-funded implementation study—Risk/Needs Assessment in Juvenile Probation—that examined the impact of a comprehensive and structured implementation of valid risk assessment in six probation offices in two states. The RAMSAY study was conducted at six sites in two additional states—a southern state and a northeastern state. In the southern state, there were two experimental sites and two comparison sites; in the northeastern state, there was one experimental site and one comparison site.

Researchers compared the probation offices implementing SAVRY (the experimental sites) to comparison-group probation offices in each state that did not implement a valid risk assessment instrument. Researchers matched youth in the experimental and comparison groups on a variety of demographic and official record variables (i.e., gender, race, age, offense history, current offense, and psychosocial history) using propensity score matching for a total of 104 youth in each group in the southern state and 227 in each group in the northeastern state. Researchers collected data for case outcomes and recidivism for 10 to 17 months, depending on the probation office in the study.
ASSESSMENT IMPLEMENTATION AND CASE PROCESSING OUTCOMES

A significant body of evidence suggests that the use of risk-need-responsivity principles will lead to better outcomes in the justice system, mainly with respect to decreased recidivism rates (Andrews and Bonta, 2010, 2017; Dowden and Andrews, 1999; Lipsey, 2009) and decreased reliance on high levels of probation supervision (Luong and Wormith, 2011). In addition, studies examining the need principle at the individual youth level (studies that examine whether treatment and services are matched to the risk and need factors of individual youth on probation) have demonstrated that the better the match, the lower the likelihood of reoffending (Luong and Wormith, 2011; Peterson-Badali et al., 2015; Vieira, Skilling, and Peterson-Badali, 2009).

However, studies have also demonstrated that it may take as long as 3 years after implementation of a risk and needs assessment to realize the impact on recidivism (Flores et al., 2006). Because formal system processing has been shown to be associated with increased recidivism for juveniles (Petrosino, Turpin-Petrosino, and Guckenbarg, 2010), examining whether and how case processing outcomes can be affected is important during these implementation periods.

The University of Massachusetts Medical School’s Risk/Needs Assessment in Juvenile Probation study examined case processing outcomes and demonstrated that adherence to the risk principle of the risk-need-responsivity model can reduce reliance on formal system involvement and out-of-home placement, and can improve service allocation (Vincent et al., 2016). The study found that implementation had a positive impact on case processing in all but one juvenile probation agency, where the assessment was not conducted until after disposition and the judges (not juvenile probation officers) made all of the case management decisions in their dispositions, including the level of probation supervision. In the RAMSAY study, Guy and colleagues (2015) found that implementing risk assessment led to significant reductions in formal processing and improved service allocation.

How agencies implement assessment instruments affects the way staff perceive youth under their supervision and the effectiveness of case processing. In the Risk/Needs Assessment in Juvenile Probation implementation study, Vincent, Paiva-Salisbury, Cook and colleagues (2012) found that juvenile probation officers’ perceptions about which young offenders were likely to reoffend decreased significantly if they were trained in the use of a validated instrument, regardless of which instrument was used. In addition, staff decisionmaking became more consistent with risk-need-responsivity principles, such as making appropriate management decisions based on dynamic risk factors (rather than official offending history) and assigning levels of supervision based on a youth’s level of risk.

Rates of Severe Dispositions

In the southern state that participated in the RAMSAY study, youth in the experimental site that adopted the Structured Assessment of Violence Risk in Youth (SAVRY) and followed the prescribed procedures received significantly less severe initial case outcomes than a matched cohort of youth in the comparison sites that did not implement a risk and needs assessment instrument (see “OJJDP-Supported Implementation Studies” on page 3 for information on the research methods). As shown in figure 1, in the southern state, youth in the experimental site were significantly more likely than the matched cohort of youth in the comparison sites to receive an informal adjustment or no disposition at all instead of probation or placement dispositions and/or transfers to adult court.\(^2\)

In the northeastern state, youth in the experimental site were significantly less likely (2.2 percent) to receive a placement-related disposition (the most serious disposition) than matched youth in the comparison site (9.3 percent). The reduction in more severe dispositions in both states occurred as a result of adherence to the risk principle. As shown in figure 2, moderate- and high-risk youth were more likely to receive probation or commitment/placement, and low-risk youth were more likely to receive informal supervision/monitoring. In the northeastern state, both experimental and comparison sites followed the risk principle, but fewer youth in the experimental site experienced out-of-home placements than in the comparison site.

Out-of-Home Placements: Rates and Length of Time

The RAMSAY study examined whether there were any placements following a youth’s initial petition, including pretrial detention and placements following disposition or a probation violation (e.g., placement in a detention, residential, or correctional facility). In both states, there were no significant differences between the rates of matched groups of youth in the experimental and comparison sites being sent to out-of-home placements over the course of their disposition. Rates of out-of-home placement were similar in both states. In the southern state, 29 percent in the experimental site and 31 percent in the comparison sites received at least one out-of-home placement, and 27 percent in both the experimental and comparison sites in the northeastern state received at least one out-of-home placement. In the southern state, low-risk youth were the least likely to be placed, but a significant number of moderate-risk youth were placed.

The similarity between placement rates for the experimental site and comparison sites in both states is not surprising because they are both placing about 30 percent of their youth, which is roughly the average rate across states. Vincent and colleagues’ study (2016) found that risk assessment has its largest impact on out-of-home placement rates in sites that are placing higher rates of youth. The experimental sites in both states saw significant declines in the length of time spent in placement. In the southern state, youth in the experimental site spent about half of the number of total study days in any placement (average = 41.93 days; standard deviation [SD] = 45.40) relative to a matched cohort of youth in the comparison sites (average = 102.16). In the northeastern state, youth in the experimental site (average = 15.92; SD = 13.24) spent less than half of the total number of days in placement than matched youth in the comparison site (average = 36.88 days; SD = 33.06).

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1 As mentioned previously, case processing outcomes were analyzed for only one of the two experimental sites in the southern state because one experimental site did not follow required protocols.

2 \( \beta = -1.53; \ SE = 0.44; \ Exp[B] = .22; \ p = .001. \)
Number of Service Referrals

In the RAMSAY study, referrals to community services and to services that juvenile probation officers provided were recorded. Among the 85 adjudicated youth who could be included in analyses of the experimental site in the southern state, service allocation differed significantly by risk level, with higher risk youth receiving more referrals than lower risk youth. The average number of service referrals for youth at low, moderate, and high risk was 1.69 (SD = 0.85), 1.85 (SD = .97), and 3.00 (SD = 2.53), respectively. This difference was statistically significant.\(^3\) In the northeastern state, a similar pattern was observed among the full sample of 270 youth in the experimental group, where the average number of service referrals for youth at low, moderate, and high risk was 0.44 (SD = .70), 0.63 (SD = .74), and 0.68 (SD = .92), respectively.\(^4\)

In instances where there was a match between risk level and intensity of service referrals (i.e., fewer referrals for low-risk youth and more referrals for high-risk youth), recidivism rates were significantly lower.\(^5\) More specifically, among low-risk youth who received too many service referrals in the northeastern state, the rate of “any new violent referrals” over 15 months was 25 percent, compared to the recidivism rate of 4.4 percent for low-risk youth who received few service referrals. Among high-risk youth who received too few service referrals, the corresponding recidivism rate was 28.6 percent, compared with the recidivism rate of 20 percent for high-risk youth who received more referrals.

Recidivism Rates

As mentioned previously, if an agency appropriately matches services to a youth’s criminogenic needs (dynamic risk factors), the use of risk assessment instruments may lead to improved recidivism outcomes (Vieira, Skilling, and Peterson-Badali, 2009). However, one study indicated that recidivism reduction is not always evident within the first several years of implementation (Flores et al., 2006). Additional research findings suggest that this may be because of inadequate service quality, a poor match of services to youth’s needs, the overtreatment of youth who are at lower risk of reoffending, and improper training of staff (Fabelo et al., 2015; Flores et al., 2006; Vincent et al., 2016).

In the RAMSAY study, recidivism was defined as new petitions (violent or any petitions) in juvenile or adult court, which were tracked, on average, for 344 days in the southern state and 495 days in the northeastern state from the date of each youth’s initial baseline petition. Rates of new petitions were relatively high in both the experimental and comparison sites in both states—in the southern state, 38 percent and 50 percent, respectively; and in the northeastern state, 52 percent and 60 percent, respectively. Overall, rates of the various reoffending categories (e.g., violent, nonviolent) did not significantly differ between sites in either state. An important exception to this pattern was that, in the southern state, matched youth at the comparison sites were more likely than the experimental site to have new violent offenses. SAVRY’s overall risk ratings significantly predicted reoffending in both states after taking youth’s time at risk into account.

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\(^3\) ß = 0.25; SE = .19; \(p = .02\).
\(^4\) ß = .11; SE = .06; \(p = .05\).
\(^5\) ß = -.63; SE = .28; \(p = .02\).
The research team assisted the experimental sites with implementation of risk assessment instruments using a risk-need-responsivity framework. Because of significant implementation deviations, which will be discussed later, the researchers excluded the second experimental site in the southern state from analyses of case processing outcomes that would be affected by the timing of the assessment (e.g., disposition) to ensure that eligibility criteria across experimental and comparison conditions were the same.

In the University of Cincinnati’s ongoing Multi-Method Study on Risk Assessment Implementation and Youth Outcomes in the Juvenile Justice System, investigators have focused on three states that are at different stages of implementing the Ohio Youth Assessment System. The system’s tools measure risk and needs to inform court decisions as well as services and treatment. To date, the researchers have systematically assessed and analyzed the implementation of the tools at various decisionmaking points (diversion, detention, disposition, residential intake, reentry) in the juvenile justice system across states and developed recommendations for best practices concerning training, monitoring, and use.

Researchers are collecting data through a web-based survey and semistructured interviews. They are distributing the web-based survey to a wide range of Ohio Youth Assessment System administrators and juvenile justice system personnel (n = 582) to understand their perceptions of the instrument, its implementation, and its impact on their agency and the youth with whom they work. Researchers also conducted 217 intensive, semistructured interviews with staff at 23 juvenile justice entities—5 state-level administrative offices, 1 community corrections program, 9 juvenile courts/probation offices, 5 community-based facilities and institutions, and 3 parole regions/offices.

To identify the themes of implementation across both sets of studies, the researchers from each project then worked together to analyze data collected from their mixed-method research studies within the National Implementation Research Network implementation factor framework presented above. The following sections summarize the identified competency, organization, and leadership drivers that emerged from this research.

**Observed Competency Drivers Associated With Appropriate Implementation**

This section discusses the researchers’ findings regarding competency drivers of instrument implementation.

**Staff Perceptions**

**University of Massachusetts Medical School Study**

In the RAMSAY study, the investigators conducted focus groups with juvenile probation officers after they had been using the SAVRY instrument for approximately 9 months to identify themes related to implementation, including perceived benefits and barriers. In the southern state, where juvenile probation officers had not used structured assessments or screening tools before the study, implementation was met with mixed reactions. Some officers acknowledged the value of having more information about the youth to help make recommendations and to track services. They also appreciated having the ability to conduct the assessment before adjudication to identify youth who were inappropriate for probation. Other officers believed SAVRY did not lead to any conclusions that they could not have made on their own. In the northeastern state, before the study, probation officers routinely had completed assessments of risk using a locally developed actuarial tool; some officers welcomed the implementation of SAVRY because it emphasized structured professional judgment. Others said that the new instrument did not...
necessarily offer benefits beyond the locally developed tool that was already in place.

In the southern state, juvenile probation officers were not accustomed to conducting comprehensive social histories, such as those required to complete a risk assessment. They considered collecting information to complete the assessment instrument as burdensome and time consuming. Juvenile probation officers in the northeastern state also found completing a more comprehensive assessment instrument to be time consuming. The RAMSAY study did not investigate whether officers found the assessment instrument less time consuming after having more experience with it. However, previous research has shown that staff perceptions about the amount of time required for completion dissipate after using the assessment instrument for approximately 10 months (Vincent, Paiva-Salisbury, Cook et al., 2012).

**University of Cincinnati Study**

In the University of Cincinnati study, web-based survey and in-person interview questions elicited views about the Ohio Youth Assessment System and the implementation process from staff throughout the juvenile justice system, including probation and parole officers and supervisors, intake officers/assessment staff, judges and magistrates, treatment providers, and state-level juvenile justice administrators. The figure summarizes the results of the online survey questions. Researchers asked respondents to rate their overall satisfaction with the tool based on a scale of 1 to 5, with the lower end representing dissatisfaction and 5 indicating satisfaction. The mean score was about 3, with a standard deviation of 1.1. Survey respondents also reported moderate confidence in the validity and reliability of the Ohio Youth Assessment System. The rating was approximately 3 for questions regarding whether the instrument accurately captures youth’s risk levels and, beyond that, whether different administrators are likely to come to the same conclusion about the risk level for a given youth.
The interview process supplements the web-based survey by offering more context and elaborating on key implementation questions related to perceptions of the assessment system and the accompanying processes, infrastructure, and outcomes. The average overall level of satisfaction with the Ohio Youth Assessment System was 3.6 (on a scale of 1 to 5). Positive staff responses about the system included perceptions that the tool “gives people [juvenile probation officers] a place to start” when first getting to know a youth and “specific areas to work on [like] peers [and] family,” and that it “adds to credibility in the process and drives good decisions.”

Although many respondents had a favorable view of the assessment process, others identified challenges in integrating the tool into their agency’s practices. For example, one respondent mentioned that many in the agency “do it for the sake of doing it and not the value of the tool.” Furthermore, respondents often stated that they were unsure why they were implementing the assessment instrument and “what [they] were using it for,” which speaks to a lack of understanding in some cases about how the information from the assessment should be used in subsequent decisionmaking.

Staff perceptions appeared to be associated with differences in assessment instrument completion. Roughly half (53 percent) of 282 web-based survey respondents who scored the case vignette to which they were randomly assigned assessed risk and needs according to the benchmark score for training. Although the survey is still ongoing, these results suggest that the other half (47 percent) of those who responded diverged from the benchmark score, although the majority of their responses were within a point of that benchmark.

Preliminary analysis seems to indicate that some perceptual factors may be associated with the scoring discrepancies; specifically, participants who perceived the tool as more useful were less likely to depart from the benchmark score. These preliminary data also suggest that there is variation in the degree to which policies are in place for discretionary override of the assessment process (i.e., an alternate risk level is assigned despite the formal scoring process). Among the respondents, 86 percent indicated that their agency allowed for such discretionary overrides, but 52 percent stated that they did not know of a formal policy for doing so (the discretionary override occurred at a supervisory level in many cases). Respondents varied in their response to a question about the percentage of cases that received overrides. The average was 7.5 percent with a standard deviation of 16.4, which reflects the fact that there was a great deal of variation and some high outlier responses. Of the individuals who responded to the question, 38 percent indicated that they had not directly assigned overrides to any of their cases.

Interview responses parallel the web survey responses on validity and reliability; a portion of respondents in the two states that adopted the tool subsequent to Ohio had questions about whether the Ohio Youth Assessment System would accurately identify risk and needs in their population. This, in turn, speaks to the need to establish the viability of the assessment in a way that is convincing to users. As one respondent noted, “I think a validation study on . . . [our] sample would be helpful for buy-in.” Another mentioned similar issues in responding to a question about weaknesses in the assessment and implementation, citing “nonvalidation [and a] lack of statewide consistency and information sharing.” This suggests that some of the broad language of effective research on policy and practice (e.g., external validity and differences in effectiveness across place and youth populations) has been absorbed into practitioners’ vocabulary (see Weiss, 1980) and must therefore be considered in assessment instrument implementation and other evidence-based practices.

It is unclear whether the lack of local validation was a staff concern to begin with, or whether it was simply a reason given to support a general dissatisfaction with changes to their previous assessment practices, which often consisted of professional judgment or some other tool. In addition, probation officers who administered the Ohio Youth Assessment System suggested that their professional assessment of risk and needs based on their experience was sometimes at odds with the score and risk level that the tool(s) identified, and that this was cause for concern. One respondent said: “I don’t agree with the information or the results from the [risk assessment].” Another mentioned a discrepancy between staff perceptions and the scores on the assessment: “[I] see a lot of low scores for youth constantly in courts, [so I] don’t understand how it’s scored.”

Training

University of Massachusetts Medical School Studies

Staff in the University of Massachusetts Medical School’s Risk/Needs Assessment in Juvenile Probation and RAMSAY studies received extensive training on how to conduct and rate their agency’s selected assessment instrument, as well as how they were expected to use the instrument. The Risk/Needs Assessment in Juvenile Probation study used SAVRY and the Youth Level of Service/Case Management Inventory, and the RAMSAY study used only SAVRY. Staff received a separate training.
on risk-need-responsivity principles and the policies that each agency set for the instruments’ use. Stakeholders (e.g., judges, attorneys) also received training on the credibility of the risk assessment selected and risk-need-responsivity principles. Staff began using the instruments immediately after they completed training. In addition, every site in these studies received a booster training from the researchers approximately 6 months after they had started using the assessment instruments in their work.

One indicator of competency stemming from quality training and oversight is interrater reliability, which can be tested by having two persons (in this case, two juvenile probation officers or a juvenile probation officer and a trained research assistant) rate the same tool for the same youth based on the same interview (as well as additional information), and then examining the extent to which the ratings are in agreement. A tool must be reliable to be valid. In the Risk/Needs Assessment in Juvenile Probation study, reliability in the field was excellent (Vincent, Guy, Fusco et al., 2012), as was the probation officers’ understanding of the risk-need-responsivity model and the prescribed use of the assessment instruments in their decisions (Vincent, Paiva-Salisbury, Cook, 2012). In the RAMSAY study, the southern state had reasonable interrater reliability on their SAVRY overall risk ratings, and interrater reliability in the northeastern state was excellent.

University of Cincinnati Study

In the three states participating in the University of Cincinnati study, an initial training was the primary vehicle for implementing the assessment tool (95 percent of survey respondents stated that they received formal training), but in some cases there was a lag between training and the rollout in a specific agency. Staff at one such agency reported that this affected their ability to effectively apply the information learned at the training. In addition to training, some respondents reported that they used other methods for disseminating information about the tool. For example, one respondent stated that the resources provided for implementation consisted primarily of a “webpage for information . . . published studies, and an interrater reliability [study].” Of those surveyed, 63 percent stated that they did not know of any training-related quality assurance policies or practices to support implementation (e.g., booster trainings or recertification). The timing of rollout also proved to be an important point of consideration among respondents, especially at sites where staff had not been involved in the project’s pilot period, which is designed to address strategic planning and goal setting. One staff person reported that there was a multiyear gap between training and implementation, which staff thought was a waste of time because retraining was then necessary. When respondents were asked to suggest improvements and what advice they would give to other agencies implementing a new assessment instrument, they often responded with observations about the timing of training and implementation: “Roll it out with a set date. [The date] kept getting pushed out, and we don’t know why.” Another stated, “Follow through and train and do not delay [implementation].” In addition to the issue of timing, one respondent cited the need to engage all staff: “[Don’t] allow too much time to languish; cut down on this. The implementation committee needs to include people in all positions, with line staff, and better explanations as to why you use the tools.”

Respondents also reported some uncertainty about the possible uses of the screening and assessment tools included within the overall Ohio Youth Assessment System. One subset of questions in the in-person interviews asked staff how their agency used the tools. The interviewer cited possible uses of the tool, including matching youth to staff, allocating resources, developing specialized caseloads, determining supervision levels, measuring progress in reducing youth risk/needs, matching youth to treatment services, and assisting in disposition decisions. Many staff responded “no” or “not sure” to these questions about the uses of the assessment (ranging from a low of 19 percent for matching youth to treatment to a high of 80 percent for matching youth to supervisory staff), suggesting that the agency was not using the assessment in those particular ways or that their agency was not maintaining training on how to use the assessment. Given that some time had elapsed since adoption and initial rollout in the two states for which data are included here (they began training and use in 2011 and 2012, respectively), it is possible that staff turnover and the passage of time attenuated the impact of the initial message to staff about the various applications of the assessment instruments in their daily work.
Observed Organizational Drivers Associated With Appropriate Implementation

The following section discusses the researchers’ findings regarding organizational drivers of instrument implementation.

Managerial Support

University of Massachusetts Medical School Study

In one of the RAMSAY study sites in the southern state, focus group discussions with juvenile probation officers revealed that their system did not include supervisors who monitored their adherence to policy and the proper use of the assessment instruments, which led officers to feel that their organization was not supporting them. The probation officers expressed a desire to have supervisors in the office to provide general oversight. Instead, under the current system, officers relied on peers who had been selected as master trainers for support. In the northeastern state, which was more accustomed to supervision and the use of an assessment instrument, no dissatisfaction about managerial support was expressed.

University of Cincinnati Study

In the University of Cincinnati study, manager oversight tended to reflect administrative concerns rather than quality assurance and continuous improvement. Where stronger oversight was in place, it varied by state and across agencies. Of 167 responses, 62 interviewees (37.1 percent) stated that quality assurance measures are in place. This is nearly identical to the responses from the web-based survey (36.7 percent), which captures a higher percentage of line staff. Followup questions revealed that the practices more reflected staff management techniques focused on compliance than quality assurance focused on continuous improvement. For example, supervisors review the timing of reassessments and check the automated system to ensure that case plans had been completed or that staff did not diverge from the recommendations of the tool too frequently.

Policies, Procedures, and Related Training Supports

University of Massachusetts Medical School Studies

In the University of Massachusetts Medical School’s Risk/Needs Assessment in Juvenile Probation study, one of the major barriers to achieving positive youth outcomes was a lack of involvement on the part of judges in the assessment and risk-need-responsivity processes (Vincent et al., 2016). In one of the six probation offices studied, the judges made all of the disposition and case management-related decisions before juvenile probation officers could conduct any risk assessment or offer recommendations. As a result, that probation office did not experience any improvements in case processing—that is, no reductions in the use of out-of-home placements and high levels of supervision.

Similarly, in the RAMSAY study, the most significant challenge in the southern state (where judges, in their dispositions, determined all of the services youth would receive) was how to adjust the court processes so that probation officers could conduct the risk assessments before judges made their disposition decisions. Before investigating the potential impact of adopting an assessment instrument, it is essential to determine whether the point in the judicial process when the assessment is completed will influence case processing. In both states, the RAMSAY study required that the states have policies in place that ensured that SAVRY was completed before adjudication (with appropriate confidentiality protections), so the information could be used at disposition.

In the northeastern state, there were no problems with adherence to SAVRY administration policy. In the southern state, there were mixed findings. One site adhered to this policy (80 percent completed SAVRY before adjudication; 20 percent completed the assessment...
Strong implementation plans that consider competency, organizational, and leadership drivers will increase the likelihood of effectively allocating public resources, accurately identifying recidivism risk, and delivering appropriate supervision and services. For reassessment and professional judgment “overrides” of the assessment results, but staff have varying degrees of awareness about those policies. About 20 percent of the interview respondents stated that either they did not think such policies were in place or were unsure about whether they existed. This matches the findings from the web-based survey sample, where approximately 80 percent of respondents agreed that there were guidelines and protocols in place for use of assessments. Similarly, 86 percent of survey respondents stated that their agency allowed overrides, but only 48 percent of the sample stated that there was a formal policy in place.

However, the authors also found that staff did not always feel they were able to sustain their knowledge of the policies and procedures. When asked about ways to improve the implementation and ongoing quality assurance of the Ohio Youth Assessment System, interviewees frequently commented on the need for ongoing and booster trainings. Only 40 percent of survey respondents stated that they had received any followup training after their original certification, reinforcing the need for booster training. They also identified a need for training in best practices for operationalizing and applying the information from the assessments to case planning—beyond just recertification on use of the tool or the assessment process itself.

Together, these findings suggest that written policies indicating how the assessment instrument and the risk-need-responsivity framework will be integrated into practice are necessary, but not sufficient, requirements for obtaining buy-in to the process. Policies that explain exactly how to use the assessment instrument in court recommendations and case planning should be coupled with training of staff on the assessment instrument as

**University of Cincinnati Study**

University of Cincinnati researchers asked respondents about policies and protocols associated with the assessment process. Each of the states has a policy guide, but they vary in their level of detail and scope. The interview and survey responses suggest a degree of uncertainty about some policies, however. For instance, each state has a policy
well as with training on risk-need-responsivity principles (including the purpose and science behind this approach).

Data Capacity and Database Support

University of Massachusetts Medical School Study

In the RAMSAY study, a common dissatisfaction with SAVRY arose when the tool and/or case management plan were not integrated into the electronic case management system, which was antiquated. In the northeastern state, probation officers, who had become accustomed to not working in a “paper and pencil” manner, found delays in adapting the existing automated electronic case plan for use with the assessment instrument to be frustrating. Data capacity not only allows agencies to routinely evaluate their outcomes and adherence to assessment instrument-related policies, it also can make the whole process more user friendly for juvenile probation officers.

University of Cincinnati Study

For users of the electronic assessment management system in the University of Cincinnati study, findings suggested that there was a reasonably strong relationship between satisfaction with the automated interface and overall satisfaction with the Ohio Youth Assessment System and its implementation. Beyond those general responses, the automated record management system was mentioned as a potential place where case planning and treatment intersect with data capacity and infrastructure to affect successful implementation. Interviewees in one state, for example, mentioned that the “case plan is difficult to use, [I] wish there was more room for creativity with goals” and that they “want more access/ability to update case plan and information.”

Observed Leadership Drivers Associated With Appropriate Implementation

The following section discusses the researchers’ findings regarding leadership drivers of instrument implementation.

Engaging Staff

University of Massachusetts Medical School Studies

Management’s approach in the Risk/Needs Assessment in Juvenile Probation and RAMSAY studies was to engage staff in decisions about selecting risk and needs assessment instruments and the design of policies regarding how the selected instrument would be used and when. This procedure led to staff buy-in and more feasible procedures. However, one caveat was implementation of a comprehensive risk assessment like SAVRY in a state (the northeastern state) that already had previously used a different risk assessment instrument. This presented both benefits and challenges. On one hand, stakeholders in the northeastern state already were accustomed to using a tool and a risk-need-responsivity approach. On the other hand, the shift from using a system in which decisions about risk level and case management essentially were automated, requiring little if any input from the juvenile probation officers, to a system where juvenile probation officers were taught to prioritize needs based on nuances of the case, led to some resistance because of concerns about increasing probation officers’ accountability.

University of Cincinnati Study

Researchers asked juvenile justice personnel if they were aware of the reasons for using risk assessment instruments and the steps involved in the implementation process. Overall, 61 percent of interviewees said that they were told the reasons for using the assessment instruments, and 50 percent were aware of resources that were introduced to support that process. These data suggest a good deal of variation in general staff awareness; this variation also was evident in comments made in response to open-ended questions. One respondent said that the objectives of the assessment instruments in the overall assessment system had been clearly explained to staff: “At the time of rollout, it was presented as a tool that will help us do our job [and] manage our kids more efficiently.” Others felt that they had received little or no guidance about why assessment instruments were being implemented. For example, one interviewee stated, “No [we were just told that] on so and so date, we were using . . . [the Ohio Youth Assessment System]. The date is coming.”

Engaging Other Stakeholders

University of Massachusetts Medical School Studies

In the Risk/Needs Assessment in Juvenile Probation and RAMSAY studies, it was evident that involving judges in the strategic planning process was one of the most important drivers of effective implementation. In one site, the judge’s involvement in the initial planning did not ensure later buy-in; however, this experience occurred only once in more than 10 jurisdictions.

Other essential stakeholders in the project sites involved in both studies were leadership from both the county and state levels. Regardless of whether probation is county run or state run, or a hybrid of the two, support of both the state and local leadership is another essential driver of quality implementation. The state correctional agency and
local probation offices (where applicable) share some of the same youth; buy-in for implementation and use of the same risk assessment instrument will ensure a continuity of care and case planning. Lastly, engaging public defenders and prosecutors early in the implementation planning phase is another important facilitator to more effective use of risk assessment with a risk-need-responsivity approach.

**University of Cincinnati Study**

In the University of Cincinnati study, even in cases where respondents reported a degree of buy-in from staff in their agencies, questions sometimes emerged about whether other stakeholders who would be involved in using the information were invested in the new approach. For instance, one respondent stated that “we use [the tools], but partners (e.g., county attorney, referral agencies) aren’t on board... [The tools] are not validated for [our state] specifically... I think [local validation] could help [with the] issue of others being on board.” This situation might have been avoided if a diverse stakeholder committee had been formed prior to staff training and the implementation of the assessment to establish a process for sharing information with a range of stakeholders about the instrument and its use.

**Implications for Practice**

Together, the findings of the University of Massachusetts Medical School and the University of Cincinnati suggest that there are common themes about how competency, organizational, and leadership factors can drive (or inhibit) successful implementation of risk and needs assessment instruments.

These studies demonstrate the importance of obtaining buy-in from frontline staff who will be conducting and using the assessments. Engaging staff early and ensuring that they understand the importance of the instruments and how they can use the information from these tools will increase the efficiency and effectiveness of decisionmaking.

Training and supervisory oversight also appear to facilitate effective implementation. Training is associated with practitioners’ positive perceptions about the tools’ usefulness. The training should begin during a pilot period and continue throughout implementation. The pilot period offers an opportunity for staff to adjust to and improve their mastery of the assessment instrument before the official rollout to the remaining staff or jurisdictions. The pilot period also provides an opportunity to work through any barriers to implementation, test software and the data-gathering process, and revise relevant policies before advancing the practice to others.

The authors recommend that agencies devote at least half a day of training to these components and 1–2 days of case plan training. Staff should receive regular booster trainings on the assessment instruments, the risk-need-responsivity model, policies and procedures, and case planning. These trainings may also be able to blend the notion of stakeholder inclusion with treatment imperatives by involving advisory groups in the planning and administration of the trainings.

Supervisors should ensure that the assessment instruments are routinely administered on time and are used to set the case plan. Ongoing quality assurance processes and regular booster trainings for staff on both scoring of the instruments and how staff will use the information in case planning help ensure the sustainability of successful practices (Miller and Trocchio, 2017). The first booster training should occur within 6 months of the initial training.

Appropriate policies, procedures, and data infrastructure of the agency implementing the assessment instruments also facilitate implementation. State and local agencies that have standardized operating procedures and the ability to share information across multiple stakeholders may more easily integrate policy changes that support the implementation of assessment instruments. These tools are more likely to be valued and used in case planning as intended if they are completed electronically and aligned with an electronic case planning system that is user friendly and reliable. Assessment instruments completed by hand or electronic systems with misaligned assessment instruments and case plans pose a significant barrier to effective implementation and sustainability because staff members lose time or become frustrated with practical aspects of the assessment process and how to use the information from the assessments to develop an effective case plan.

Finally, the way in which the implementing agency engages with the broader system and stakeholders affects implementation. The authors recommend that key stakeholders be engaged early in the implementation process through the formation of a stakeholder committee. The committee would include essential juvenile justice personnel, judges, attorneys, and service providers to ensure that a quality need-to-service matching process can be established (Vincent, Guy, and Grisso, 2012).

Piloting the instrument with both staff and stakeholders before full implementation appears to facilitate adoption. The pilot enables the agency to gather staff impressions and build policies that work for staff. Moreover, implementation strategies that feature early participation...
and feedback from judges and attorneys are more successful than those that do not incorporate their feedback. Service providers should also be engaged early so they may adjust their treatment to address criminogenic needs and integrate the assessment information into their planning.

Agencies that establish a mechanism for sharing information from assessment instruments with their providers are likely to be more successful at matching services to needs.

**Conclusion**

Most states today have implemented a uniform risk and needs assessment tool in juvenile probation (Wachter, 2015). These assessments are important tools for improving public safety because they can determine which youth are at the greatest risk of reoffending and identify individual youth needs that can be targeted and addressed through intervention and services.

Yet, these instruments are not always fully implemented in practice, and poor implementation can have negative consequences for case processing outcomes. Research into implementation science indicates that “implementation by edict,” without sufficient buy-in, often falls short (Fixsen et al., 2005) and that consideration of key drivers offers a helpful framework to successfully promote implementation. It is essential that juvenile justice agencies develop a strong implementation plan that considers competency, organizational, and leadership drivers. Such consideration will increase the likelihood of effectively allocating public resources, accurately identifying recidivism risk, and delivering appropriate supervision and services.

**Endnotes**

1. An instrument is considered validated if sufficient research exists to demonstrate that it accurately reflects criminogenic risks and needs and achieves what it is supposed to—meaning, in this context, that it accurately assesses a youth’s likelihood of reoffending and does so regardless of gender or racial/ethnic differences. To be considered validated, an instrument must generally be tested by independent researchers and users in multiple jurisdictions, and their findings must be replicated. For additional information and background on assessment instruments, see *Prediction and Risk/Needs Assessment* (www.ncjrs.gov/pdffiles1/nij/243976.pdf); the OJJDP Model Programs Guide literature review *Risk/Needs Assessment for Youths* (www.ojjdp.gov/mpg/litreviews/RiskandNeeds.pdf); and *Risk Assessment in Juvenile Justice: A Guidebook for Implementation* (www.nysap.us/RiskAssessementTA.html).

2. A variety of assessment instruments have been validated in multiple settings and across gender, racial, and ethnic groups (Hoge, Vincent, and Guy, 2012; Latessa and Lovins, 2010; Vincent, Terry, and Maney, 2009).

3. For more information on case processing outcomes, see the sidebar titled “Assessment Implementation and Case Processing Outcomes” on pages 4–5.

4. Ongoing coaching is generally cited as an essential component in effective implementation (National Implementation Research Network, n.d); however, the research on assessment instrument implementation is still nascent in its examination of this topic. Although this bulletin does not present findings related to the impact of coaching during assessment instrument implementation, this topic will be an important focus of future research.

5. The RAMSAY study also examined the implementation of mental health and substance abuse screening instruments; however, the primary focus of this bulletin is the implementation of risk assessment instruments.

6. The Risk/Needs Assessment in Juvenile Probation study was conducted as part of the MacArthur Foundation’s Models for Change initiative. The assessment instruments used in the study were SAVRY and the Youth Level of Service/Case Management Inventory. For more information on the findings of this study, see Vincent, Guy, Fusco et al., 2012; Vincent, Paiva-Salisbury, Cook et al., 2012; and Vincent et al., 2016.

7. For detailed information about the RAMSAY study, see Guy et al., 2015. Also visit the OJJDP website at www.ojjdp.gov/research/risk-and-mental-health-screening-and-assessment-of-youth-project.html.
8. For more information on the Ohio Youth Assessment System, see Lovins and Latessa, 2013; and Latessa, Lovins, and Ostrowski, 2009.

9. Four of these state-level administrative offices contain separate correctional and judicial sections, and one of the offices operates as a single entity.

10. To learn more about the University of Cincinnati study, visit the OJJDP website at www.ojjdp.gov/research/University-of-Cincinnati-Risk-and-Needs-Assessment.html. Future data collection and analysis will assess court and programming outcomes based on varying practices in assessment instrument use and implementation; evaluate how recidivism changes with the implementation of assessment tools in the juvenile justice system; and evaluate both justice-related and other relevant youth outcomes associated with decisionmaking based on the use, monitoring, and implementation of assessment instruments.

11. An actuarial tool is one where the final decision about an individual’s level of risk is based on a score that the instrument generates and whether that score meets a designated cutoff for low, moderate, or high risk. The actuarial tool used in the northeastern state comprised primarily static risk factors (factors that are not amenable to intervention, such as previous offenses) as opposed to dynamic risk factors (factors that are potentially responsive to intervention, such as substance abuse or pro-offending attitudes).

12. Structured professional judgment differs from an actuarial tool in the sense that it is not score based. The trained individual completing the assessment rates a number of research-based items on the instrument using structured item definitions. Then, the rater considers both the presence and relevance of these items to the individual’s risk and makes a final determination as to whether the individual is low, moderate, or high risk, creating a more individualized assessment.

13. All standard deviations for these items were roughly 1, suggesting a fair degree of variability on a scale ranging from 1 to 5.

14. These vignettes were linked to one of three possible domains on the Ohio Youth Assessment System: juvenile justice history, peers and social support networks, and prosocial skills.

15. The maximum range for scoring the case vignettes was four points.

16. Thirty-eight percent of respondents gave a response of “0,” suggesting that there were no overrides. A small proportion of respondents (3.2 percent) stated that they overrode the score of 50 percent or more of assessments.

17. Ideally, agreement is examined using the intraclass correlation coefficient. Coefficients between .60 and .74 are considered good agreement, and coefficients of .75 or higher are excellent.

18. Intraclass correlation coefficient \( r_1 = .62 \).

19. Intraclass correlation coefficient \( r_1 = .95 \).

20. Researchers conducted the interviews and surveys in 2015 and 2016.

21. Gamma association statistic of 0.65 on a scale from 0 to 1.

References


Points of view or opinions expressed in this document are those of the authors and do not necessarily represent the official position or policies of OJJDP or the U.S. Department of Justice.

Acknowledgments

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