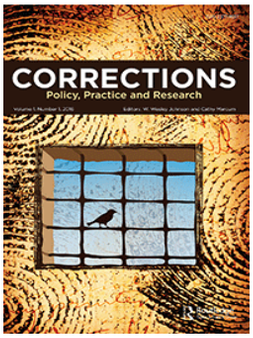

Corrections

Policy, Practice and Research

ISSN: 2377-4657 (Print) 2377-4665 (Online) Journal homepage: http://www.tandfonline.com/loi/ucor20

Using Plan-Do-Study-Act and Participatory Action Research to Improve Use of Risk Needs Assessments

Shannon Magnuson, Kimberly R. Kras, Holly Aleandro, Danielle S. Rudes & Faye S. Taxman

To cite this article: Shannon Magnuson, Kimberly R. Kras, Holly Aleandro, Danielle S. Rudes & Faye S. Taxman (2019): Using Plan-Do-Study-Act and Participatory Action Research to Improve Use of Risk Needs Assessments, Corrections, DOI: 10.1080/23774657.2018.1555442

To link to this article: https://doi.org/10.1080/23774657.2018.1555442

Published online: 11 Jan 2019.

CORRECTIONS: POLICY, PRACTICE AND RESEARCH
https://doi.org/10.1080/23774657.2018.1555442

Using Plan-Do-Study-Act and Participatory Action Research to Improve Use of Risk Needs Assessments

Shannon Magnuson[a], Kimberly R. Kras[b], Holly Aleandro[c], Danielle S. Rudes[a] and Faye S. Taxman[a]

[a]Criminology, Law & Society, George Mason University, Fairfax, VA, USA; [b]School of Criminology & Justice Studies, University of Massachusetts, Lowell, MA, USA; [c]Virginia Department of Corrections, Richmond, VA, USA

ABSTRACT

Many community supervision agencies use a risk/need assessment tool (RNA) to assess client risk level, inform case planning decisions, and allocate supervision resources. Research suggests agencies do not always implement RNA tools as intended, without offering practitioners solutions for improving these implementation concerns. Using a participatory action research framework, this case study highlights one probation office's efforts to improve their RNA fidelity concerns by using Plan-Do-Study-Act (PDSA), a data driven problem-solving strategy. Findings show increases in officer knowledge and comfort using the RNA, while revealing gaps in training, dissemination, and the underlying premise for the tool in practice. Results offer guidance for researchers and practitioners in developing collaborative and problem-solving research agendas to enhance the fidelity of evidence-based practices.

KEYWORDS

Participatory action research; fidelity; implementation science; quality improvement; PDSA; risk and need assessment; community corrections

Many community corrections agencies use the risk-need-responsivity (RNR) framework to guide selection and implementation of evidence-based and evidence-informed tools and practices (Bonta & Andrews, 2007; Taxman, 2002). The RNR framework focuses on identifying a client's risk of future offending, assessing needs that, when addressed, mitigate that risk, and requiring officers match clients to appropriate programs based upon their needs' profile. Some RNR tools and practices community corrections agencies use specifically include risk and needs assessments (RNA), case planning (Bourgon, Gutierrez, & Ashton, 2012), motivational interviewing (McMurran, 2009), communication strategies (Toronjo & Taxman, 2017) and contingency management (Trotman & Taxman, 2011).

Despite best intentions, staff sometimes do not use these tools as intended (Taxman, 2006; Guy, Nelson, Fusco-Morin, & Vincents, 2014; Viglione, Rudes, & Taxman, 2015; Rudes, Viglione, & Meyer, 2016; Rudes & Meyer, 2017). In fact, because many evidence-based practices (EBPs) require "technology clusters" including one or more tools, the misuse of one tool can limit the use of other tools (Rogers, 2003). This domino effect not only impedes maximization of many practices, but can also mitigates anticipated outcomes (Miller & Maloney, 2013; Viglione et al., 2015).

CONTACT Shannon Magnuson smagnuso@gmu.edu Department of Criminology, Law & Society, George Mason University, 4087 University Drive Suite 4100, Fairfax, VA 22030. USA

To guide identification of inefficient and ineffective processes interfering with intended outcomes, other fields, such as the automobile and healthcare industries, rely on Quality Improvement (QI) models (Powell, Rushmer, & Davies, 2008). Specifically, the plan-do-study-act (PDSA) model is a prescriptive strategy under the QI umbrella that embodies "trial and error" (Deming, 1986; Rudes, Viglione, & Porter, 2013). Its narrow focus and systematic, data-driven nature helps agencies identify concerns and implement immediate solutions, holding promise as a practical strategy for improving fidelity of EBPs and evidence-informed practices[1] (EIPs) in justice settings (Rudes et al., 2013). Within justice settings though, the strategy remains relatively unused (Rudes, Taxman, Portillo, Murphy, Rhodes, Stitzer, Luongo, & Friedman, 2012). PDSA is a uniquely suited tool for inclusion in participatory action research (PAR), where researchers and practitioners (who are the subjects or actors in the research) work together to study and solve problems (McIntyre, 2007; Wimpenny, 2010). Using a PAR model, the current study engages community corrections staff in using a PDSA strategy to confront, study, and resolve an implementation concern. Specifically, this article reviews one probation office's use of PDSA to improve proficiency communicating the purpose and results of their Risk Needs Assessment (RNA) tool to clients.

Literature review

Over the past two decades, corrections agencies increasingly adopted EBPs and EIPs to improve outcomes for individuals under supervision and increase public safety. One widely used practice is the RNA. A RNA helps agencies understand the probability of recidivism among the client population while directing line officers on how to engage clients to address risk and needs. RNAs do this by calculating a client's risk and need factors using a combination of actuarial methods for risk and psychometric measurement for needs (Desmaris & Singh, 2013; Fass, Heilburn, Dematteo, & Fretz, 2008). The scored output identifies the most probable components related to client potentially reoffending while on supervision (Fass et al., 2008). Probation officers (POs) must then translate and discuss these risk/needs scores with their client and develop, with the client, actionable steps, or a case plan, addressing probable areas of concern (Taxman, Shepard, & Byrne, 2004). These steps act as benchmarks for progress throughout the supervision period (Taxman et al., 2004). Through the case-plan driven supervision process, POs and probationers work toward proximal outcomes of improved need categories and the long-term outcome of desistance (Taxman, 2006).

Securing these outcomes is contingent upon effective use of RNAs and case plans; however, this is difficult when staff do not use these practices as intended. For example, Miller and Maloney's (2013) community corrections survey found one half of adult POs completed the RNA tool per policy but were not using it to guide their decision making and development of clients' case plan. Analyses revealed officers not complying with the RNA process were less confident in their use of the assessment and were less likely to work in organizational climates that positively supported its use (Miller & Maloney, 2013). In an ethnographic study of POs' use of RNAs, Viglione and colleagues (2015) report officers do not use the RNA as intended because they do not believe in the capacity of the tool to assess risk. In addition, when building case plans, officers most often rely on indicators of static risk (e.g., criminal history) or acute needs (e.g., housing instability) and neglect

dynamic needs (e.g., criminal thinking) related to recidivism (Viglione et al., 2015). The authors cite lack of officer confidence in addressing dynamic factors as one possible explanatory factor for its absence in case plans (Viglione et al., 2015).

Underlying officer confidence issues may be more subtle technical knowledge gaps. For example, Bonta et al. (2011) note officer difficulty using the dynamic needs aspects of a RNA when working with clients. Researchers also suggest officers conflate the terms *risk* and *need*, resulting in missed opportunities to employ the responsivity principle from the RNR framework (Rudes et al., 2016). In a study of two probation agencies, Rudes and colleagues (2016) find POs discuss needs as risks for failure on supervision, instead of a discussing these factors as dynamic and changeable needs that, if addressed, can reduce risks of offending. Effectively, the authors argue the preoccupation with risk language prevents any real understanding of needs by officers, and in turn, by clients (Rudes et al., 2016).

Regardless of why staff misuse RNAs, staff avoidance to fully engage with the RNR model in their agencies has remarkable implications for the implementation and fidelity of other EBPs implemented in the setting and the quality of supervision (Taxman, & Belenko, 2011). Lack of fidelity to EBPs may result in iatrogenic effects of supervision (Taxman, & Caudy, 2015). Further, amid continuous implementation of new initiatives, corrections agencies are responsible for wading through the noise of layered practices/protocols and formal and informal norms/routines to understand and solve for the core causes to fidelity concerns. To do this, practitioners must rely on strategies that provide hands-on guidance for unpacking organizational processes to uncover root issues to solve them. One such strategy, organized under a quality improvement (QI) framework, provides several principles that allow organizations to leverage staff expertise to improve systems.

Quality improvement models

In other bureaucratic and heavily structured industries such as automobiles, business, and healthcare, organizations employ QI models to improve the quality of products, services, and patient/client outcomes by improving how the process is completed by those working in the system (Kaplan et al., 2010). QI integrates a management philosophy and set of practices that emphasize continuous and iterative learning and improvement to achieve a stated goal (Powell, 1995). However, what defines the utility of QI processes is its ability to innovate by considering the system's context (Kaplan et al., 2010).

Beyond QIs main and explicit principles of continuous improvement and focus on organizational systems and consistent measurement and evaluation of outcomes, it remains a relatively amorphous model for practitioners to apply to ground level processes. A more specific strategy, derived from the QI framework, addresses this concern. The plan-do-study-act (PDSA) strategy reflects the iterative and cyclical principles of QI, but with a more prescriptive and descriptive application for use in the field (Cox, Wilcock, & Young, 1999; Langley, Nolan, Nolan, Norman, & Provost, 1996).

The PDSA process originates from the work of Deming (1986) and his research in QI models (Best & Neuhauser, 2005; Cleary, 1995). The PDSA framework provides a systematic process that allows line-level employees in organizations to select a measurable goal and then identify and improve/align the processes necessary to

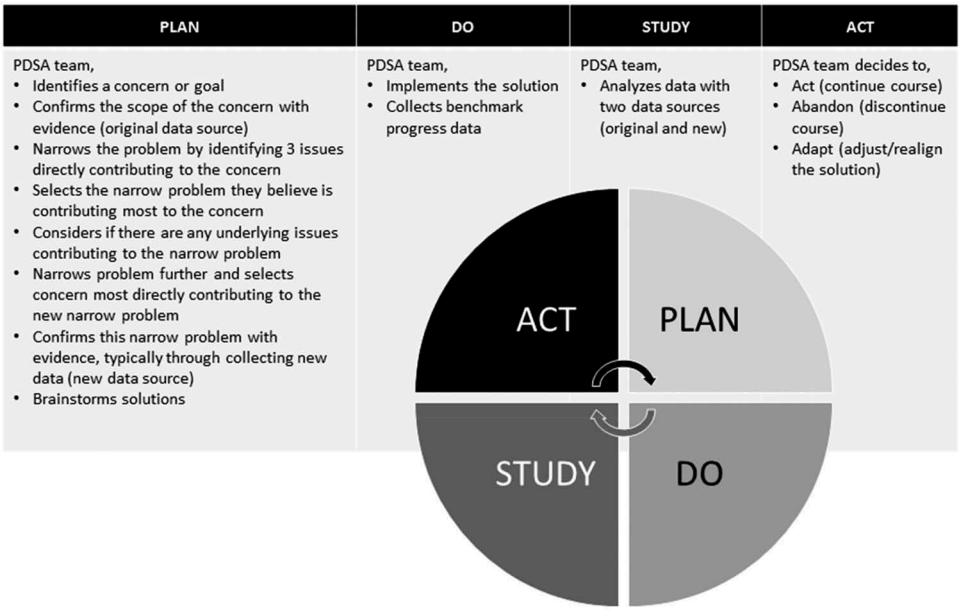

Figure 1. The plan-do-study-act process (adapted from Deming, 1986).

reach the goal. The PDSA process, detailed in Figure 1, includes four general steps: (1) plan: identify what is not working well with evidence and develop a solution; (2) do: implement the solution while measuring progress; (3) study: analyze progress measures to determine if continued implementation is suitable, or if the solution requires adjustment; and (4) act: adopt, abandon, or adapt the solution (Deming, 1986). Although these steps provide more explicit guidance than the umbrella QI model, each of these steps still presents as somewhat amorphous and without practical detail for practitioners. This became apparent after the authors first began facilitating PDSA cycles with various criminal justice practitioners. Informed by these lessons and practitioner feedback, the authors developed a more descriptive list of steps for using the strategy especially related to the plan stage, as described in Figure 1. These steps pay closer attention to defining the concern and unpacking the undercurrent contributing to the problem. When facilitating these narrowing discussions, researchers often work with practitioners to tease out multiple issues contributing to the problem that staff often muddle as a single problem. It is in this emphasis of narrow, separate, and concrete issues that solutions to concerns emerge on their own.

As solutions emerge, and users implement (do) and measure and analyze them (study), organizations must make decisions to continue with the solution or find ways to fit or align processes within the organization (act; Langley et al., 1996). Therefore, each cycle acts as a small, and rapid test of solutions lasting only a few weeks or months before the next iteration emerges following the study stage. It is possible the narrow problems identified in one local office context may be present across multiple offices within the same agency or organization. In this case, it may be reasonable to use the solution across many offices to solve the same problem. However, the purpose of PDSA is to facilitate

identifying and solving for specific process issues unique to local offices. In this way, each PDSA not only acts as a practical strategy for small-scale problem solving but can also empower staff to harness change and improvements in ways that provide them voice in the process (Cox et al., 1999).

The following case study applies QI to a community corrections setting. As community corrections agencies implement EBP/EIPs throughout various jurisdictions, the local setting and context will guide what the EBP/EIP looks like in practice (Taxman, & Belenko, 2011). To improve practice fidelity in local probation offices, a strategy is needed that teases out local context to identify root causes or barriers to implementation. The case study provides an example of how the PDSA model, used alongside a PAR method, proved as a strategy for one community corrections office to understand why their staff were misusing their RNA and develop solutions to address the issue. As corrections departments continue to improve practice fidelity, QI models are applicable and a valuable resource in criminal justice settings.

Case study context

The Virginia Department of Corrections (VADOC) is a combined probation and parole system that includes 43 field offices throughout the state tasked with supervising more than 65,000 probationers and parolees. Over the past decade, the VADOC implemented several EBPs and EIPs (RNA, Motivational Interviewing, case planning, swift, certain and fair sanctioning, cognitive behavioral programming, Effective Practices in Community Supervision [EPICS], etc.) across its community corrections offices. To facilitate the uptake and use of EBP/EIPs, VADOC developed a team of 10 staff (EBP managers) assigned as internal consultants to monitor and improve fidelity to EBP/EIPs throughout the state. The development of the EBP manager role is one aspect of VADOC's commitment as a learning organization that emphasizes creating roles and structures that allow flexibility, responsiveness and adaptations to manage the pace of change (Senge, 1990) to achieve outcomes.

VADOC and the Center for Advancing Correctional Excellence (ACE!) at George Mason University collaborated for nearly a decade in various PAR projects. Part of this collaboration involved the development of an implementation science course for their EBP managers, specifically. The main goal of the course was to equip EBP managers with the necessary information, skills, and resources to serve as internal fidelity consultants within their agency. The course considered each EBP/EIP the agency used and discussed the theory driving the practice, classic evaluation, and implementation research regarding the practice and facilitated discussions about how each EBP/EIP is currently used by their frontline staff. The course, including content and exercises were driven by practitioner needs and covered eight topics (i.e., RNA, case management, working relationships, incentives/sanctions, etc.). Together, practitioners and ACE! researchers discussed and compared study content with the practitioner's own experiences to draw lessons for implementation improvement. Tactical exercises such as system mapping, redesigning of initiatives, and other exercises that involved practicing and modeling their new responsibilities as EBP managers enriched these discussions. Additionally, in the spirit of the PAR method, ACE! researchers joined EBP managers in the field on multiple occasions to observe frontline officers using EBPs/EIPs in action (McIntyre, 2007; Wimpenny, 2010).

These joint observations often resulted in long class discussions about what each saw through their unique "lens," where researchers identified fidelity concerns and EBP managers provided context on processes that may be informing these concerns. These observations gave researchers necessary context to provide targeted and tailored technical assistance throughout the PDSA cycle.

The conclusion of the course included a capstone project designed to improve EBP/EIP fidelity across multiple offices. To facilitate this capstone project VADOC and ACE! engaged in PAR. PAR is a useful method for engaging researchers with a population of interest (in this case, the community corrections staff) to jointly collect data, interpret, and solve issues faced by the population (Wimpenny, 2010). PDSA is inherently compatible with the PAR method as Wimpenny (2010) states, "This method of research is about a group of people who are affected by some problem or issue and decide to get together to work out how they want to tackle" (p. 90). During the final two classes, participants learned the purpose and goals of PDSA and practiced facilitating their own PDSA cycles with an ACE!-designed PDSA instructors manual crafted specifically for VADOC's EBP managers. This instructor's manual deconstructs each step of the PDSA and provides descriptions, examples, guiding questions, and discussion questions to facilitate the process with POs in their local jurisdictions. Additionally, ACE! researchers also designed an accompanying participant PDSA manual for POs that includes handouts guiding the planning process. These PDSA classes emphasized building EBP manager skills of PDSA facilitation to sustain future cycles improving fidelity of practices sans researcher involvement. At the conclusion of the 10-module training course, researchers instructed EBP managers to select an EBP/EIP of focus in one of their probation offices and facilitate a four-month PDSA cycle. The findings details one PDSA case study from this course.

Bayhill Post PDSA case study

Although each of the ten EBP managers conducted a PDSA process in their respective offices, the focus of the current case study is the Bayhill Post field office.[2] Bayhill Post is located in a metropolitan area, where clients are under supervision principally for larceny (47%) and drug-related convictions (43%). Bayhill Post employs 21 POs responsible for supervising approximately 90 clients each on generalized caseloads, whereas specialized caseload officers carry approximately 40 to 60 cases each. The average age of staff in this office is 39 years (SD = 8.29) and are majority female (90%) and White (60%).

The EBP manager of Bayhill Post engaged with the research team to develop a strategy for introducing PDSA to the office and eliciting participation from POs. To begin, the manager asked for volunteers and selected staff to participate in the PDSA strategy totaling 10 participants. A combination of volunteer and selected staff represent a diverse team of roles, tenures and personalities, allowing many voices and lenses to deconstruct the process of using an EBP/EIP (Langley et al., 2006), while preventing one or two "loud" voices from monopolizing the direction of the PDSA. This element of the PDSA model attends to the necessary authentic participation component of PAR, where participants and researchers negotiate their roles and responsibilities in the course of the project (Kemps & Wilkinson, 1998; McIntyre,

2007; Wimpenny, 2010). Over the course of four months, the PDSA team conducted three of the four stages of the PDSA cycle.

Plan

After selecting the team, the PDSA team decided to concentrate efforts on improving use of the RNA tool by officers. The team selected this practice because the administration of the RNA tool with clients should drive a discussion with probation clients about risk and need factors during the first two contact visits, and the results inform the development of a case plan during the third visit. Then, throughout supervision, the client and PO focus each office visit attending to the needs defined in the case plan. The RNA tool used by the VADOC involves many questions, covering numerous RNR-driven dimensions and takes approximately 45 minutes to complete. Once completed, the tool produces a report with risk and need scores. The risk scores relate to two static risk domains, violent and general risk, and a multitude of need scores including substance abuse, residential instability, criminal thinking, etc. Needs are primarily scored as three results—low probable, probable, and highly probable—and relate to how likely the specific need is to contribute to continued offending.

The data informing the identified problem by the PDSA team come from Bayhill Post's observational data. Every quarter, each officer is observed at least three times working with their clients on various skills/component parts of using an EBP/EIP, including explaining, administering and discussing the RNA. Each interaction is scored on a three-point rubric.[3] The ACE! research team used their most recent observation data to analyze scores associated with RNA use (M = 2.29, SD = .54). The PDSA team identified officers' use of the RNA as barely meeting satisfactory standards and with a large Standard Deviation, suggesting inconsistency across officers. With evidence in hand that the administration and explanation of the RNA tool needs improvement across the office, the PDSA team began brainstorming reasons for the low scores. The team suggested that low proficiency scores resulted from:

(1) Officers running out of time to complete the RNA tool within a given office visit.
(2) Too few observations of the RNA tool resulting in a score based on too few officers given that not all officers had three observations.
(3) Officers not feeling comfortable completing the tool and discussing results with clients.

Among these hypotheses, the team believed reason Number 3 contributed the most to the low scores. The EBP manager continued narrowing the problem with the group by asking the team a series of questions to understand why they believed staff were uncomfortable using the RNA tool and discussing the results, despite attending numerous trainings on using the tool. The team reported:

(1) Officers are worried about client's asking questions about the RNA results they could not answer.
(2) Officers do not know how to translate the results to clients to increase client comprehension.
(3) Officers do not understand certain need items and could not interpret the results and, thus, cannot appropriately discuss them with clients.

As a team, they agreed the most pressing reason for discomfort was a lack of specific knowledge about interpreting results (Reason 3). Officers admitted they lacked the knowledge and appropriate language to discuss the results with their clients and therefore shied away from having discussions with the clients because they were uncomfortable with the material.

A necessary step in the PDSA strategy is to confirm this narrow problem with evidence to avoid solving an anecdotal problem. By doing so, this also creates another benchmark to measure effectiveness of the implemented solution (Rudes et al., 2013). To confirm the narrow problem, the manager and researchers developed a short survey to assess officers' perceived knowledge and comfort with each of the component parts of the RNA report. As part of constructing the survey, researchers purposefully did not rely on validated scales or pilot test questions. The intention is for PDSA to be easy to use and easy to replicate, especially without researcher help. Specifically, researchers did not write the first iteration of the survey questions, though researchers made slight semantic edits. The survey consisted of five questions assessing officer comfort with introducing and administering the RNA and 16 questions assessing officer perception of their knowledge about each risk and need score (e.g., "I feel knowledgeable about how to explain the 'violent risk recidivism' score to clients"). Items were scored on a 4-item Likert scale (1 = *strongly disagree* to 4 = *strongly agree*). For the ease of interpretation, we have combined categories into *agree* or *disagree*.

The manager disseminated the survey via a Survey Monkey (an online program for electronic survey distribution and analysis) link and requested staff complete the anonymous survey within the week. Of the 21 officers working in Bayhill Post, 17 officers (81%) completed the presolution survey within the specified time. Following completion of the survey, the ACE! researchers produced frequency tables for each item on the survey. Then, the researchers sent these preliminary tables to the EBP manager to assess if the results aligned with her expectations of staff knowledge and comfort, and to ascertain areas for improvement the manager wanted highlighted in the findings report. Following this conversation, ACE! researchers drafted a findings report the EBP manager used at the next PDSA team meeting where they brainstormed solutions. As is demonstrated in the findings sections below, the presolution survey report confirmed the team's concerns about officer knowledge and comfort discussing the results of the RNA tool. Based upon the confirmatory evidence, the PDSA team developed an action statement driving their PDSA solution: increase officers' knowledge and comfort with discussing the RNA results.

With this action statement in mind, the PDSA team agreed a targeted and focused booster session was needed specifically discussing (1) how to introduce the RNA tool to clients, (2) how each need score is calculated, and (3) techniques to discuss these scores in casual language with clients. Additionally, the team felt a workbook providing concrete examples of how to talk about each need with clients and a cheat sheet for how the scores are calculated would be an invaluable asset for staff to have at their desk. To achieve these solutions, researchers worked with the manager and PDSA team to recruit a VADOC RNA master trainer/specialist to lead the targeted booster session.

Do

The PDSA team and the researcher agreed a VADOC employee would be better suited to lead the booster because of their direct knowledge with the specific RNA and the process of discussing the results with clients. The RNA specialist, EBP manager, and researcher worked together to develop the content for the booster session. Part of this content included the RNA specialist practicing various scripts to help communicate the RNA tool generally and the results specifically to clients. The ACE! researcher took detailed fieldnotes of the booster session to use their scripts as examples to help the PDSA team put together a supplemental workbook to sustain their knowledge beyond the booster session. Following the booster session and after analyzing the field notes, researchers and the PDSA team developed supplemental materials including a one-page cheat sheet and manual and disseminated these materials to all officers. Officers had approximately one month with the materials following the booster training, after which the EBP manager administered the postsurvey. The postsurvey included the same questions as the presurvey, plus additional questions asking staff to report how often they use the knowledge/materials provided from the PDSA solution. The manager disseminated a postsurvey via a Survey Monkey link and 19 of 21 (86%) officers completed the survey within the specified time range.

Study

Although the ACE! researcher, EBP manager and PDSA team "studied" the results of the first survey to inform the solution, the PDSA study phase refers to studying the *outcomes* of the PDSA solution by comparing baseline data (the presolution survey data) with follow-up data (the postsolution survey data). As part of the PDSA team's study phase, ACE! researchers conducted descriptive analyses on each presurvey and postsurvey item and drafted a final survey report for the EBP manager.[4] Based upon the draft report, ACE! researchers discussed with the EBP manager areas where the data showed POs made improvements and areas that still needed improvements. As part of this discussion, the EBP manager asked the researchers to create a section in the report specifically highlighting the top three areas officers improved as a way to recognize staff progress and encourage future iterations of the PDSA strategy. Additionally, the EBP manager requested a section in the report describing the top three areas she identified as needing continued improvement as way to frame and inform the next PDSA cycle.

In 4 months, Bayhill Post identified areas for improvement, planned and implemented a solution, and studied this solution. We report the pre- and postsurvey results reflecting three important stages of using the RNA: (1) introducing the tool and results, (2) discussing risk scores, and (3) discussing need scores. In addition to quantitative results, we present representative fieldnotes from the booster session to contextualize and elucidate on the underlying processes improving or impeding the EBP and the PDSA strategy (Charmaz, 2006). This study section then concludes by presenting the results of practitioner and researcher built resources to help enhance and maintain fidelity of the RNA practice.

Introducing the RNA and its purpose for community supervision to clients

RNA tools facilitate the development of individualized case plans for probation clients, but Bayhill Post staff identified several barriers to realizing this potential. Many staff cite the RNA tool's length as tiresome and some of the language as awkward and intrusive, especially for an initial meeting with a client. Some officers indicated this can disrupt rapport building and may limit a client's level of disclosure throughout the assessment. However, the value of the tool's calculations are largely contingent upon how well officers discuss its meaning and purpose throughout the supervision process with clients.

As shown in Figure 2, the pre-urvey found nearly 20% of staff indicated they did not feel comfortable explaining how the results connect to the process of probation and nearly 40% of staff did not feel knowledgeable discussing with clients how the probation process incorporates the RNA results, specifically.

During the booster training session, participants and the RNA Specialist developed examples of how to introduce the tool, focusing on necessary components and language. The RNA Specialist and participants decided each example script needed to (1) describe the tool, (2) acknowledge the length and awkwardness of the tool's questions, and (3) discuss how the results will help the client on the remainder of probation. The RNA Specialist and participants brainstormed various introductions. Below is one example introduction they developed:

> Today, we're going to go over something called a RNA. The RNA is a tool we use to see how each person on probation is different. There are a lot of questions and some are a bit strange, so I appreciate your patience as we go through them. Once we complete the tool, we will get a printout that will help us identify areas we can work on together to help you be successful on and off probation. The collection of these areas will be the case plan and we will continue to work on this plan through your time on supervision.

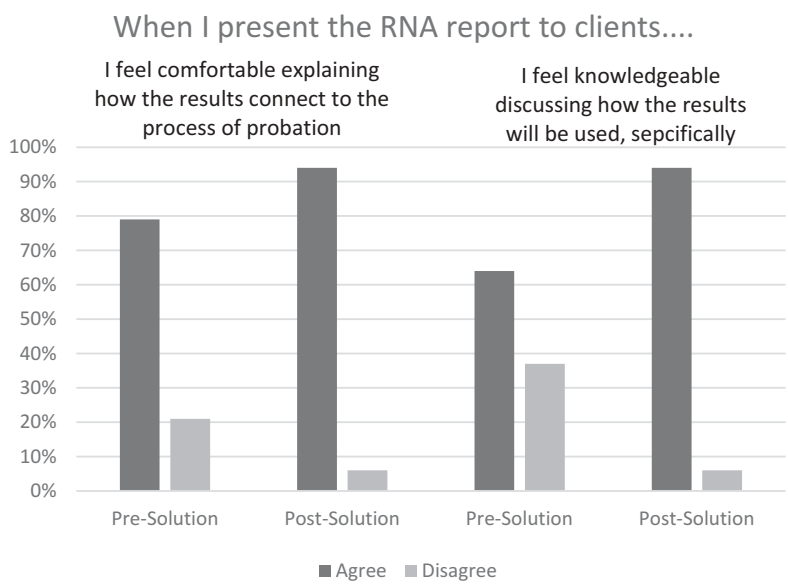

Figure 2. Introducing the Risk Need Assessment and its purpose to clients.

By deconstructing the microprocess of introducing the tool into even smaller components, including acknowledging the inherent social distance, or the perceived separation between two groups (officers and probationers), the tool creates during administration, the participants and the RNA Specialist are able to identify three core components they perceive to define effective introduction of the RNA to clients. In the true spirit of QI, the participants and RNA Specialist are then improving a small part, of the larger process of using the RNA, and identifying the underlying issues of low officer proficiency with the tool. Following the booster session where the RNA specialist discussed these strategies for explaining how the results are used, staff reported a 15% and 30% increase, respectively, in knowledge and comfort discussing how the results are used throughout probation.

Interpreting and translating risk to clients

As part of the RNR framework in practice, probation agencies, including the VADOC, often structure the number of officer–probationer visits based on the client's risk level to direct resources to those who appear likely for continued offending (high-risk individuals have more frequent office visits; Lowenkamp, Latessa, & Holsinger, 2006). As prior research suggests, officers struggle to trust RNAs because they do not believe in its capacity to score risk "correctly" (Viglione et al., 2015). In practice, this may mean that the scores assigned by the tool contradict POs' own professional judgment of what constitutes a low-, medium-, and high-risk client. Unpacking officer trust and believability of the tool requires officers' honesty and vulnerability about what specifically they do not understand about risk scores.

More than 42% of POs report in the presurvey they did not feel knowledgeable explaining the violent risk score, and nearly 38% of officers report they did not feel knowledgeable explaining the general risk recidivism score. Based upon these results, the RNA Specialist, EBP manager, and ACE! researcher agreed unpacking why staff struggle to understand and communicate risk scores would be central to the booster session's content thereby improving the quality of the RNA communication process (Deming, 1986). As a result, the RNA Specialist spent a significant amount of time during the booster session assessing officer assumptions and misconceptions about the meaning of the risk scores. The fieldnote below describes training participants asking the RNA Specialist a series of clarifying questions about the components of the violent risk recidivism score:

RNA Specialist: The category of *Current Violence* is not included in the violent risk recidivism score.

Officer 1: So, [the violence risk score is] the sum of criminal involvement, history of noncompliance and history of violence?

RNA Specialist: No. The violence risk recidivism score is calculated based upon the scales of history of violence, history of noncompliance, vocation/education scale, client's current age, and their age at first arrest.

Officer 2: It's really hard to wrap my head around someone who is seeing me because they have a murder charge, but their violence score is low. I don't understand why.

RNA Specialist: These scores are mostly calculated by past behavior that research says is the better predictor of future behavior. This is a good example of trying to think about supervising a person and their entire history of behavior instead of supervising their current charge.

The exchange between participants and the RNA Specialist showcases the difficulties staff have understanding the technical components of the scales. During this, and many other examples during the booster session, the RNA Specialist reiterated with participants the specific scales that calculate overall risk scores and developed sensitive language to explain these scores to clients. Following the booster session, POs reported substantial increases in knowledge explaining both violent and general risk recidivism scores, as shown in Figure 3.

Interpreting and translating needs to clients

Previous work suggests static risk factors alone are insufficient for evaluating an individual's propensity for future offending (Andrews & Bonta, 1998). As such, contemporary generations of risk assessment tools include a wide array of needs reflecting a broad selection of explanatory reasons why people commit crime. Once needs are assessed, they should drive the design and delivery of probation supervision via case planning (Andrews, Bonta, & Wormith, 2006).

Prior to the booster training sessions, all officers from Bayhill Post reported feeling knowledgeable explaining the need categories of leisure/recreation, substance abuse and criminal associates/peers (not shown). However, many staff reported not feeling knowledgeable explaining the following need categories: criminal involvement (28%), history of violence (17%), current violence (22%), criminal personality (39%) and criminal thinking (44%). Based upon these results, ACE! researchers suggested the booster session should also focus on improving how officers talk about these more technical need categories, particularly given their importance with facilitating desistance (Andrews & Bonta, 1998).

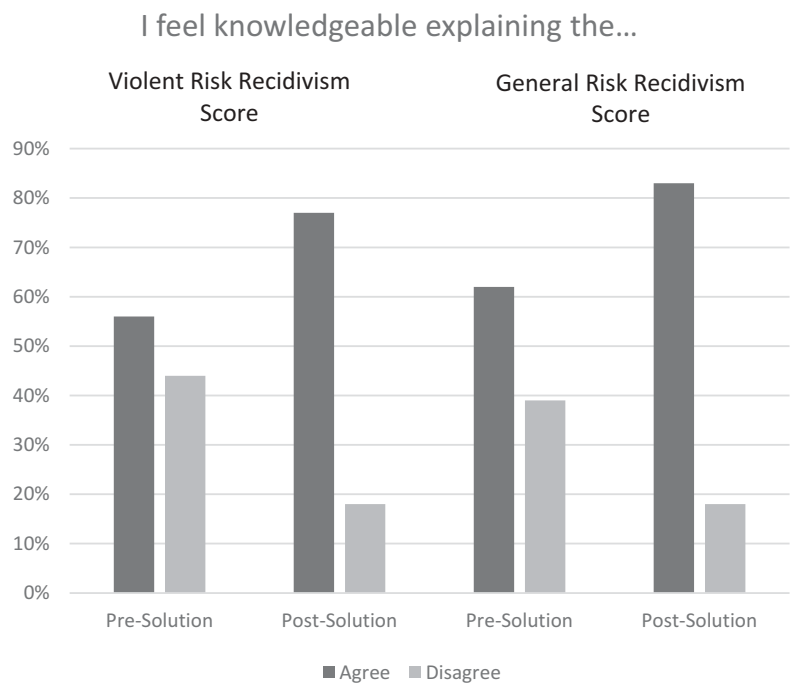

Figure 3. Interpreting and translating risk to clients.

During the booster sessions the RNA specialist included role play activities assessing how POs currently discuss need categories and offered real time feedback. Highlighted below are two need categories officers reported feeling least knowledgeable about and prior work suggests are least often addressed in case plans: criminal personality and criminal thinking (Viglione et al., 2015). Figure 4 reports the pre–post survey results for these domains.

During the booster sessions, officers cited difficulty understanding calculations of criminal personality and struggled with talking about it with clients in a nonstigmatizing manner. For example, one officer states, "When I talk about [criminal personality] all I say is, 'This says you are likely to score highly probable on criminality personality'" to which her peer responds, "Right, but it's like going to the doctor and hearing your test results, 'Doctor what does it mean?" This exchange highlights an important nuance in defining and training officers on what using the RNA as intended means. The exchange emphasizes the need to tease out the difference between officers simply regurgitating the RNA result to clients and officers facilitating constructive conversations about need scores with clients. In response, the RNA Specialist asks the participants to turn to the domain *criminal personality* in their original RNA training manual, as detailed in the fieldnote below:

> The RNA Specialist says, "On the [criminality personality] page, it tells you the assessment questions that contribute to the category." The RNA Specialist explains to the group that she does not remember all the questions that go into each domain need and she often shows the questions to the probationers so they understand. She says sometimes she'll pick one of the questions in the scale and talk about that at greater length with the probationer to help them understand more about the category they are discussing. She uses the example of the question, "I have the ability to sweet talk people to get what I want" as one of the questions comprising the need domain *criminal personality*. She explains that when she does the RNA and asks the probationer that question, inevitably the probationer always smirks or makes a sound, and

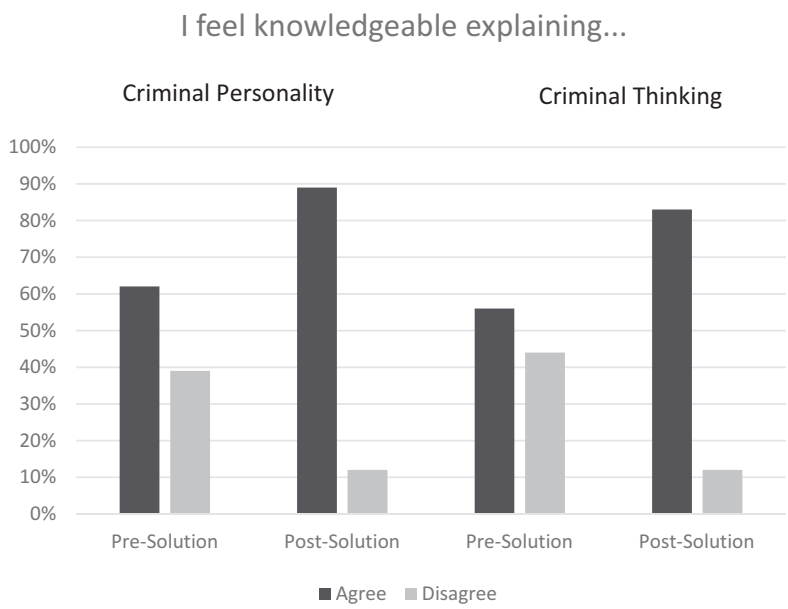

Figure 4. Interpreting and translating needs to clients.

> then responds a bit more modestly than their nonverbal communication suggests. She says that she'll often say to probationers [while discussing their RNA results], "You know, when I asked you about if you sweet talk people to get what you want, you indicated not really, but you smiled a bit before you answered. Talked to me about why you smiled." She explains that she jokes with them, but having them explain their thought process helps her use their own examples to explain the scales back to them without having to use stigmatizing language or explain that the question measures the client's propensity for manipulation.

This fieldnote displays the RNA Specialist's interpersonal strategies or best practices she developed over time to help diffuse tension related to describing the factors that make people "criminal." Following this exchange, she asks the officer participants how they engage with clients about the more tense and stigmatizing need categories. In this sense, she is facilitating the development of a repository of best practices for communicating each of the need categories that the researcher collated into a supplemental workbook following the session. Following the booster sessions where the RNA Specialist discussed each of the need categories, referenced the subscales contributing the scores, and offered strategies for how to start these challenging conversations, officers reported increased knowledge and comfort with many of the scales, including 88% of staff reporting feeling knowledgeable about criminal personality and criminal thinking.

Reflecting on the booster session's supplemental materials

An important element of PAR is that researchers and participants engage in creating meaningful change to problem practices by developing the confidence and capacity to continue developing solutions (McIntyre, 2007; Wimpenny, 2010). To that end, staff play an integral role in developing office resources to attend to the issues illuminated by the PDSA process. Staff learn in various ways, including listening to lectures, reading materials and through hands-on activities. In an effort to cater to each learning style, the PDSA team implemented a booster training led by a RNA Specialist with the assistance of researchers to guide the content and delivery. The trainer reviewed the tool's components by emphasizing the categories staff self-reported feeling the least knowledgeable. The RNA specialist included the original RNA training manual for those who learn by reading, role-plays for those who learn by doing and facilitated free-flowing discussion for those who learn by talking about the topic.

Throughout the booster session, the RNA tool specialist collaborated with officers to develop scripts for introducing the RNA and discussing each of the scores, at the same time the researcher took detailed fieldnotes on the computer, attempting to capture erbatim and nonverbal responses from POs about strategies and content. From these fieldnotes, the researcher and practitioner culled direct quotes or examples of how to discuss each of the scores using language and examples from officers. The researchers then organized these examples into a workbook for officers to reflect the ordering of the RNA results.

Officers also desired a one-page "cheat sheet" describing the component parts of each RNA category. To do this, researchers used the original RNA training manual to summarize the list of assessment questions for each need score. The summaries included lay and common language that described the themes of the RNA questions as shown below in Table 1.

Table 1. Example cheat sheet descriptions by need.

Criminal Personality Refers to your client's temper or aggression, impulsivity, feelings of empathy or remorse and comfort with emotions.	**Criminal Thinking Self Report** Refers to the type of thinking your clients use to justify, support, rationalize, or minimize the seriousness of their behavior and the consequences of behavior.
Leisure and Recreation Refers to how often your client feels bored, restless or can't focus attention on a single activity for too long.	**Criminal Opportunity** Refers to the number of potential crime opportunities the client is exposed to in their neighborhood and/or while hanging out with friends. This category also considers how they spend their free time, and if they might avoid crime opportunities by attending school or working.

For example, criminal personality consists of 15 questions from the assessment, but the researcher summarized it in the cheat sheet as, "Refers to your client's temper or aggression, impulsivity, feelings of empathy or remorse and discomfort discussing their emotions." Staff relied on these summaries to pinpoint specific characteristics their client exhibited to talk about the categories comfortably and with confidence with their clients.

In addition to items regarding comfort and knowledge related to need domains, the postsurvey also asked staff to self-report how often they used the information and supplemental materials, as shown in Figure 5. Staff report using the information provided through the booster session and supplemental materials at various frequencies, but most staff report using each of the tools at some point when working with clients. The most frequently used tool is the one-page RNA Cheat Sheet, and the least often used tool is the original RNA training manual. However, these reported frequencies indicate 40% to 50% of staff are only sometimes or never using the information/materials provided during the PDSA cycle. This may be a result of the limited amount of time between dissemination of materials and responding to the postsurvey such that the newness of the materials have not been routinized into practice.

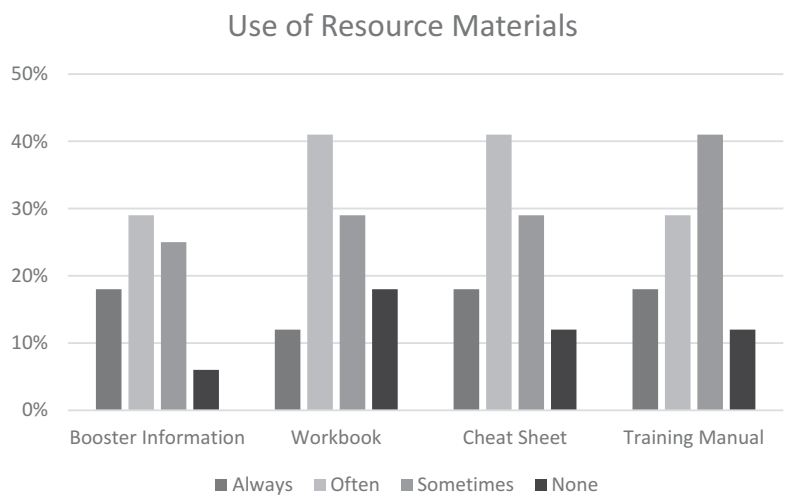

Figure 5. Frequency of booster information/materials use.

Act (discussion)

This research presents a case study as a part of an implementation science course facilitating collaboration between researchers and practitioners using PAR to develop and support a PDSA model. The case study shows how PAR and the QI model, PDSA, worked in concert to improve fidelity of an EBP within a local probation office. Specifically, this multidimensional effort included researchers collecting data with practitioners, and practitioners using this data in real time to improve practices (Kemps & Wilkinson, 1998; Wimpenny, 2010). The effort produced new knowledge about the justice contexts in which PDSA can work as well as illuminated the small microprocesses and rationales regarding why staff use (and misuse) EBPs and EIPs broadly, and RNAs specifically. More importantly researchers and practitioners developed a fuller understanding of complex process issues regarding using EBPs and creatively tested new procedures to address these issues.

Examining EBP/EIP microprocesses allows agencies to better understand reasons staff do not use practices as intended, solve for nuanced fidelity concerns, and use these lessons to improve future implementation efforts. It also begins to unpack under-researched frontline phenomena with potentially powerful implications. For example, though many presurvey results reflect more staff reporting feeling knowledgeable and comfortable than not, these numbers still represent a plethora of missed opportunities between clients and POs. If 20% of staff, or four officers, report discomfort discussing the RNA tool, this translates to approximately 390 clients (if each officer carries an average caseload of 90 clients—average for this district) who do not receive adequate information about how their lifestyle contributes to their potential continued offending, and whose time on probation is not maximized. When broadening these results to consider the implications of what these fidelity concerns are fostering, or not, it becomes clear using data-driven strategies to improve these microprocesses is invaluable for not only improving EBP/EIP fidelity, but also for yielding an outcome probation agencies attempt to achieve—reduced recidivism. Following the success of this PDSA cycle, other EBP managers administered the Bayhill Post presurvey in their own jurisdictions to understand the scope of the problem, only to discover the issue was not isolated to Bayhill Post. As such, PDSA is a useful and practical framework for improving local practices because it is a cost-effective strategy that does not necessitate large research teams or consultant agreements and can produce locally grown solutions applicable to other offices within an organization. .

Additionally, PDSA's "bottom-up" approach highlights officer concerns by empowering line staff, who are often removed from problem-solving discussions, to have a voice in an environment where there is no wrong answer and truthfulness and vulnerability are essential to the process. The PDSA strategy provides officers with a refreshing sense of optimism about change because the strategy demands discontinuing strategies that do not work and trying something new—rarely in highly bureaucratic organizations are staff encouraged to stop doing something that is not working. In discussions postsolution, staff felt refreshed by the possibility that they did not have to commit to a solution if it was not working and indicated they felt more appreciative of this strategy for this reason.

The PDSA case study also reflects a pillar of the PAR methodology where the borders between participants and researchers are blurry, and both are simultaneously learning from and contributing to one another. Officers believed the RNA wording, format, and color choices (the bars on the results printout are red and green) directly affected their

working relationship with clients early in the probation process. Although previous research suggests generalized components of using RNAs, current research does not consider how officers can and should maneuver through the tough academic jargon of the RNA and its report. As a result of the focused booster sessions inspired by the pre-survey, probation staff re-designed the offices' best practices to more acutely reconceive "using the RNA as intended." With this information, the EBP manager suggested new need category labels and new format/color scheme to the agency as a way to make the RNA more suitable for officers and clients, and increase its usability statewide. From this new practitioner-informed definition of "use as intended," researchers can help develop proximal measures that more adequately represent effective use of RNAs, such as improved client understanding of their own risk and needs. It is with such measures that researchers and practitioners can begin to understand and develop evidence-based or evidence-informed strategies for using RNA tools, including how to talk about and communicate risk and needs, and which strategies work best for whom.

Additionally, a key finding revealed the current ways of educating and training staff in the use of EBPs may be inadequate. In this case study, staff admitted not using the training manual provided by the RNA vendor, citing the manual lacked clarity and transportability to non-clinicians. The PAR response to this emergent issue included researchers and the PDSA team creating a more user-friendly and targeted tool that includes ordering, formatting, and language team members suggested would be most helpful. This reinforces the benefit of PDSA strategies to innovate and consider new, creative approaches to engage staff in the learning and training process. This includes throwing out the notion traditional training classes and a manual, or simply telling staff to use it "because research says so" are adequate for true staff learning and practice use. It is apparent from this case study (and likely confirmed by many reading this) staff are eager and hungry to learn why and how things operate.

There are potential limitations with the PDSA strategy that users should keep in mind as they embark on solving local problems. At its core, the strategy is designed to identify a part of a routine practice that is not working well and to smooth it out. These inefficient or ineffective parts of the process may vary or occur across settings, and how people solve for them will also be unique to the setting. It is possible this may mean that the ways in which two places solve for the same issue may be different or even compete. However, what is important is that the process improvements—varied as they might be—uphold the guiding principles or core components of the practice. As such, though the solution to improving the process may be different, the outcome should be the same. Users of the PDSA strategy should conduct fidelity checks throughout the process to ensure the implementation of EBP/EIP are consistent with the core components of the practice (Taxman & Belenko, 2011).

There were also some challenges encountered by the PDSA team, especially as it related to survey completion and meeting logistics. At the core of PDSA, solutions must be driven by evidence and data. This requirement hinged on completion of a pre- and posttest by all members of the Bayhill Post. There were difficulties securing more than 75% survey participation due to officer schedules and requiring the EBP manager to extend the deadline several times for both surveys. These extensions, combined with difficulties aligning scheduled with multiple PDSA team participants, lengthened the PDSA process beyond the initial 4-month timeline. Additionally, Bayhill Post at times struggled to maintain consistency of PDSA team members as they frequently experience staff turnover and transfers between offices. Instead of

replacing members midcycle, Bayhill Post continued the PDSA cycle with the remaining team members, at the expense of an additional lens on the process.

Despite these challenges in Bayhill Post, the EBP manager and POs identified an area of concern—discussing the RNA with clients—made improvements to this concern and highlighted areas that need continued improvement. The PDSA team identified the categories of violent risk and criminal thinking as areas POs identified as requiring help explaining to clients. Further, the team discussed the limited use of supplemental materials by POs following their dissemination. As a result, the PDSA team incorporated officer feedback of what they need to feel comfortable and knowledgeable discussing these categories with clients. To this end, PAR and PDSA are important strategies that agencies can use as they continue to implement, adapt, and maintain use as intended of evidence-based and evidence-informed supervision strategies. This is particularly important as agencies continue to layer EBPs in the field where the use of one EBP informs and builds onto the practices of another. Staff not using one EBP as intended may likely create a ripple effect on other practices (technology clusters) and undermine the ability to get the desired results. The PDSA model allows frontline staff to sift through the noise of layered practices to identify root causes of fidelity drift. Its iterative process lends nicely to mending the ripple effect and smoothing the layers of EBPs in practice. Most importantly, the PDSA model allows frontline staff to answer local issues by considering their own local context and tailoring solutions. PDSA strategy illuminates microissues that may go undetected in traditional academic research. Through a PAR approach, the PDSA benefits practitioners and academics—practitioners have a real-time research process that generates data and academics can be grounded in real-time and real-world experiences that integrates qualitative and quantitative methods and piloting new ideas. And, the ability to pilot new approaches provides both with opportunities to learn and grow. This embodies the purpose of the participatory action research partnership.

Notes

1. Evidence-informed practices lean toward an "evidence-base" but may not have enough rigorous scientific evidence to garner the EBP label yet.
2. Bayhill Post is a pseudonym to protect confidentiality of participants.
3. In prior PAR projects, the VADOC developed scoring instrument with ACE! researchers by using the literature on EBP/EIPs to outline the component parts of what each measured skill should look like in practice. Rubric scores include 0 (*missed opportunity to use skill*), 1 (*insufficient use of skill*), 2 (*satisfactory use of skill*), and 3 (*proficient use of skill*).
4. This report did not include statistical significance testing for two main reasons. First, the sample lacks sufficient power to conduct significance testing. Secondly, and most importantly, during future iterations of PDSA that do not include researchers, local POs and their managers do not have access to software packages to conduct significance tests on their own.

Acknowledgments

The authors wish to thank Teneshia Thurman and Kimberly Meyer for their contributions to collecting data and collaborating throughout the process. The authors would also like to thank Heather Toronjo for her willingness and keen eye to always offer fresh and constructive feedback to early drafts.

Disclosure statement

No potential conflict of interest was reported by the authors.

Funding

This work was supported by the Virginia Department of Corrections [VADOC 16 044].

References

Andrews, D. A., & Bonta, J. A. (1998). *A psychology of criminal conduct* (4th ed.). New York, NY: Routledge NY.

Andrews, D. A., Bonta, J. A., & Wormith, J. S. (2006). The recent past and near future of risk and/or need assessment. *Crime & Delinquency*, *52*(1), 7–27. doi:10.1177/0011128705281756

Best, M., & Neuhauser, D. (2005). W. Edwards Deming: Father of quality management, patient and composer. *Quality and Safety in Health Care*, *14*(4), 310–312. doi:10.1136/qshc.2005.015289

Bonta, J., & Andrews, D. A. (2007). Risk-need-responsivity model for offender assessment and rehabilitation. *Rehabilitation*, *6*(1), 1–22.

Bonta, J. A., Bourgon, G., Rugge, T., Scott, T., Yessine, A. K., Gutierrez, L., & Li, J. (2011). An experimental demonstration of training probation officers in evidence-based community supervision. *Criminal Justice and Behavior*, *38*(11), 1127–1148. doi:10.1177/0093854811420678

Bourgon, G., Gutierrez, L., & Ashton, J. (2012). The evolution of community supervision practice: The transformation from case manager to change agent. *Federal Probation*, *76*, 27.

Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative research*. London: Sage Publications Ltd.

Cleary, B. A. (1995). Supporting empowerment with Deming's PDSA cycle. *Empowerment in Organizations*, *3*(2), 34–39. doi:10.1108/09684899510089310

Cox, S., Wilcock, P., & Young, J. (1999). Improving the repeat prescribing process in a busy general practice: A study using continuous quality improvement methodology. *Quality in Health Care*, *8*, 119–125.

Deming, W. E. (1986). *Out of the crisis*. Cambridge, MA: MIT Press.

Desmarais, S. L., & Singh, P. P. (2013). *Risk assessment instruments validated and implemented in correctional settings in the United States: An empirical guide*. New York, NY: Council of State Governments Justice Center.

Fass, T. L., Heilburn, K., Dematteo, D., & Fretz, R. (2008). The LSI-R and the COMPAS validation data on two risk-needs tools. *Criminal Justice & Behavior*, *35*(9), 1095–1108. doi:10.1177/0093854808320497

Guy, L. S., Nelson, R. J., Fusco-Morin, S. L., & Vincent, G. M. (2014). What do Juvenile probation officers think of using the SAVRY and YLS/CMI for case management, and do they use the instruments properly? *International Journal of Forensic Mental Health*, *13*(2), 227–241. doi:10.1080/14999013.2014.939789

Kaplan, H. C., Brady, P. W., Dritz, M. C., Hooper, D. K., Linam, W. M., Froehle, C. M., & Margolis, P. (2010). The Influence of context on quality improvement success in health care: A systematic review of the literature. *The Milkbank Quarterly*, *88*(4), 500–559. doi:10.1111/j.1468-0009.2010.00611.x

Langley, G. J., Nolan, K. M., Nolan, T. W., Norman, C. L., & Provost, L. P. (1996). *The improvement guide: A practical approach to enhancing organizational performance*. San Francisco, CA: Jossey-Bass.

Lowenkamp, C. T., Latessa, E. J., & Holsinger, A. M. (2006). The risk principle in action: What have we learned from 13,676 offenders and 97 correctional programs. *Crime & Delinquency*, *52*(1), 77–93. doi:10.1177/0011128705281747

McIntyre, A. (2007). *Participatory action research* (Vol. 52). Thousand Oaks, CA: Sage Publications.
McMurran, M. (2009). Motivational interviewing with offenders: A systematic review. *Legal and Criminological Psychology*, *14*, 83–100. doi:10.1348/135532508X278326
Miller, J., & Maloney, C. (2013). Practitioner compliance with risk/needs assessment tools: A theoretical and empirical assessment. *Criminal Justice & Behavior*, *7*(40), 716–736. doi:10.1177/0093854812468883
Powell, T. C. (1995). Total quality management as competitive advantage: A review and empirical study. *Strategic Management Journal*, *16*(1), 15–37.
Powell, T. C., Rushmer, R. K., & Davies, H. T. O. (2008.) *A systematic narrative review of quality improvement models in health care*. Social Dimensions of Health Institute. at The Universities of Dundee and St Andrews.
Rogers, E. M. (2003). *Diffusion of Innovations* (5th ed.). New York, NY: Free Press.
Rudes, D. S., & Meyer, K. S. (2017). *Drift, risk, and misalignment: Evidence-based and evidence-informed practice use in juvenile justice*. Paper presented at the American Society of Criminology November annual meeting, Philadelphia, PA.
Rudes, D. S., Taxman, F. S., Portillo, S., Murphy, A., Rhodes, A., Stitzer, M., Luongo, P. F., & Friedmann, P. D. (2012). Adding positive reinforcement in justice settings: Acceptability and feasibility. *Journal of Substance Abuse and Treatment*, *42*(3), 260–270.
Rudes, D. S., Viglione, J., & Meyer, K. S. (2016). Risk entangled needs in probation supervision. *Handbook on Risk and Need Assessment. Theory and Practice*, *1*, 406.
Rudes, D. S., Viglione, J., & Porter, C. M. (2013). Using quality improvement models in correctional organizations. *Federal Probation*, *77*(2), 69–75.
Senge, R. M. (1990). *The fifth discipline: The art and practice of the learning organization*. New York, NY: Currency Doubleday.
Taxman, F. S. (2002). Supervision–exploring the dimensions of effectiveness. *Federal Probation*, *66* (2), 14–27.
Taxman, F. S. (2006). Assessment with a flair. *Federal Probation*, *70*(2), 3–15.
Taxman, F. S., & Belenko, S. (2011). *Implementing evidence-based practices in community corrections and addiction treatment*. Boulder, CO: Springer.
Taxman, F. S., & Caudy, M. (2015). Risk tells us who, but not what or how: Empirical assessment of the complexity of criminogenic needs to inform correctional programming. *Criminology and Public Policy*, *14*(1), 1–33.
Taxman, F. S., Shepardson, E. S., & Byrne, J. M. (2004). *Tools of the trade: A guide to incorporating science into practice*. Townson, MD: Maryland Department of Public Safety and Correctional Services.
Toronjo, H., & Taxman, F. S. (2017). Supervision face-to-face contacts: The emergence of an intervention. In *Evidence-based skills in criminal justice: International research on supporting rehabilitation and desistance* (pp. 217).
Trotman, A. J., & Taxman, F. S. (2011). Implementation of a contingency management based intervention in a community supervision setting: Clinical issues and recommendations. *Journal of Offender Rehabilitation*, *50*(5), 235–251.
Viglione, J., Rudes, D. S., & Taxman, F. S. (2015). Misalignment in supervision: Implementing risk/needs assessment instruments in probation. *Criminal Justice and Behavior*, *42*(3), 263–285.
Wimpenny, K. (2010). Chapter 10: Participatory action research, An integrated approach towards practice development. In M. Savin-Baden & C. H. Major (Eds.), *New approaches to qualitative research: Wisdom and uncertainty*(pp. 89–99). New York, NY: Routledge.