Performance Measures in Community Corrections: Measuring Effective Supervision Practices with Existing Agency Data

Brandy L. Blasko
Sam Houston State University
Karen A. Souza
George Mason University
Brittney Via
Sara Del Principe
Faye S. Taxman
George Mason University

IN RECENT YEARS, community supervision in the United States has been changing dramatically, as corrections populations have mounted and philosophies have shifted accordingly to accommodate more evidence-based supervision. There are currently 6.8 million adults under some form of correctional supervision in the United States (Kaeble, Glaze, Tsoutic, & Minton, 2016). During the 1970s "tough on crime" movement, probation supervision practices emphasized surveillance, authority, and control. These law enforcement-oriented practices prevailed for three decades, despite mounting evidence against their effectiveness at reducing recidivism (Bonta, Rugge, Scott, Bourgon, & Yessine, 2008; Drake, 2011; Nagin, Cullen, & Jonson, 2009; Taxman, 2002, 2009). Today, growing attention to the ineffectiveness of punishment-oriented responses to criminal behavior and the associated financial strain (Bonta et al., 2008; Nagin et al., 2009; Taxman, 2002) has led to a renewed emphasis on rehabilitation ideals. But these ideals are cloaked in efforts to advance the use of science to identify effective practices. As a result, researchers and practitioners increasingly emphasize core correctional practices using proactive and behavioral management approaches in community supervision.

A core set of community supervision practices has been defined as effective in reducing recidivism. Referred to as evidence-based practices (EBPs), these core practices are:

- standardized, validated assessment instruments to assess risk and identify service needs;
- matching of offenders to treatment and referrals made according to identified risk and needs;
- provision of more treatment and referrals to offenders who pose the highest risk for reoffending;
- use of a human service environment; and
- use of cognitive behavioral and social learning approaches to work with clients. While the use of proactive and behavioral management approaches to supervision has gained currency in recent years, embedding EBPs within routine community supervision practices has presented significant challenges for researchers and practitioners alike.

A major drawback to the advancement of practice is that there are few reliable measures to describe these practices. We propose a series of measures of supervision that may be gleaned from administrative databases. In this article, we review the administrative data from four community supervision agencies to explore the measures and highlight their utility. We then discuss the implications of using these performance measures.

Evidence-Based Practices in Community Corrections

Growing evidence on the ineffectiveness of control-oriented supervision practices has led to an emphasis on EBPs—that is, practices that are empirically tied to recidivism reduction (Petersilia & Turner, 1993; Taxman, 2002; Taxman, 2008). In general, EBPs refer to the combined use of rigorous research and best available data to guide policy and practice decisions that improve outcomes for individuals under supervision (Bourgon, 2013). When applied to supervision specifically, EBPs refer to a core set of correctional practices found to be associated with effective intervention and reductions in recidivism (Dowden & Andrews, 2004). In one of the few meta-analytic studies on the topic, Chadwick and colleagues (2015) found that offenders supervised by trained officers in these skills had a 13 percent reduction in recidivism. This is promising given that in the most recent major national-level study by the Bureau of Justice Statistics (BJS), 43 percent of prisoners were rearrested within one year of release to the community (see Durose, Cooper, & Snyder, 2014), and 40 percent of probationers are

unsuccessful on supervision (Taxman, 2012). While adherence to evidence-based supervision strategies results in positive outcomes among individuals involved in the criminal justice system, we know little about the supervision process and its effectiveness due to a lack of research evidence (Bonta, Bourgon, Rugge, Scott, Yessine, & Gutierrez, 2011; Taxman, 2002; Taxman, 2008).

An Untapped Resource: Administrative Data in Community Supervision

An important but often overlooked aspect to establishing meaningful measures of performance is administrative databases (i.e., management information systems) that are routinely used by probation agencies. Administrative databases collect routine intake, process, and discharge information at the client level; they are used by the agency to manage the population and, in many instances, serve as a supplement to case files. They are a source of data that can be used to determine progress towards successful implementation of evidence-based supervision. These data can be used to evaluate the effectiveness of an agency's programs and policies (Drake & Jonson-Reid, 1999; English, Brandford, & Coghlan, 2000; Raybould & Coombes, 1992). An agency's monitoring of administrative data can help to ensure compliance with "what works" at a system level (Miller & Maloney, 2013). However, the functional utility of administrative data is very much contingent on the quality and completeness of the data collected by the agencies, and whether or not the agencies are using the data to construct meaningful measures that are both valid and reliable.

The Present Study

The aims of the present study are to:

- develop a set of process measures related to evidence-based supervision that might be measurable in administrative data;
- assess the quality and completeness of existing administrative data from four community corrections agencies; and
- compare the measures across different sites to assess their robustness. If community corrections agencies can assess how the staff and agency perform in relation to evidence-based practices, then they can more readily monitor the quality and cost-effectiveness of supervision. They can also then assess what practices need more attention to improve supervision.

Method

Background

The data in this study were collected as part of a larger project that involved assisting justice professionals in translating evidence-based research into practice. Self-selection sampling was used to select the four study sites. All sites are located within the United States in different geographical areas. According to 2010 census data, the percentage of urban population (as compared to rural) within the four selected jurisdictions ranged from 68 percent to 100 percent.[1]

Sample

Table 1 presents the case characteristics of individuals under supervision across the four study sites. The majority were male (range = 76 percent to 94 percent) and the mean age ranged from 30.6 (*SD* = 11.4) to 39.4 (*SD* = 10.1). The study sites provide a mix of racial and ethnic groups, with the White population ranging from 3 percent to 80 percent, the Black population ranging from 1 percent to 54 percent, and the Hispanic population ranging from 0 percent to 97 percent. Results from chi-square tests of independence and between-subjects t-tests indicated that, in addition to the characteristics above, offenders differed significantly across sites in terms of educational levels, risk and supervision levels, days on supervision, and history of prior supervision.

[1] Data are from the 2010 United States Census Bureau.

TABLE 1

Case Characteristics by Site

	Site 1 %/M(SD)	Site 2 %/M(SD)	Site 3 %/M(SD)	Site 4 %/M(SD)
Male	77%	76%	94%	85%
Age	30.6 (11.4)	30.8 (11.4)	39.4 (10.1)	38.8 (12.0)
Race				
White	44%	3%	79%	32%
Black	54%	1%	14%	52%
Hispanic	0%	96%	5%	9%
Other	2%	0%	2%	7%
Education level				
No diploma	36%	54%	31%	46%
Diploma	64%	30%	25%	42%
GED	0%	0%	42%	0%
Some college	0%	14%	2%	6%
Risk level				
Low	25%	30%	15%	-
Medium	48%	47%	20%	-
High	13%	23%	66%	-
Supervision level				
Low	7%	21%	15%	-
Medium	57%	55%	20%	-
High	30%	24%	66%	-
Days on supervision	353.4 (237.3)	251.2 (201.0)	210.7 (163.4)	417.3 (256.0)
Prior supervision	38%	100%	89%	41%
Current offense				
Violent	9%	10%	19%	23%
Property	15%	20%	19%	27%
Drug	22%	54%	25%	32%
Other	21%	16%	36%	18%

Note. Site 1 N = 821, Site 2 N = 2296, Site 3 N = 288, Site 4 N = 2490.

Measures and Procedure

The jurisdictions were all trained on the "Skills for Offender Assessment and Responsivity in New Goals" (SOARING2) eLearning system (www.gmuace.org/tools) through George Mason University's Center for Advancing Correctional Excellence! (ACE!). SOARING2 is an innovative eLearning training platform for professionals working with individuals involved in the criminal justice system to learn about EBPs and to enhance their case management skills. The SOARING2 program contains five self-guided modules on Risk-Need-Responsivity, Motivation and Engagement, Case Planning, Monitoring and Compliance, and Desistance. Recent modifications include segments for criminal thinking and lifestyles, substance abuse disorders, mental illness, emerging adults, and intimate partner violence. The process measures were developed based on these five areas of evidence-based supervision. Table 2 provides the variables extracted from the administrative data to develop the five domains for the current analyses.

Domain 1: Risk-Need-Responsivity

The Risk-Need-Responsivity (RNR) domain is the operating principle of Andrews and Bonta's (2010) model of correctional treatment. According to the RNR model, those at highest risk for recidivism should receive the most intensive programming; offender programs should target dynamic criminogenic needs; and correctional interventions should be tailored to meet the individual needs of offenders. Evidence suggests that the principles delineated in the RNR framework also apply to treatment outcomes for interventions with sexual offenders.

Based on the available administrative data, eight measures were created to assess how well agency staff are adhering to RNR principles. The risk/needs assessment variable is a dichotomous variable (yes/no) that was used to record whether a formal risk-needs assessment was carried out on each offender. The supervision level assigned variable refers to the clients' assigned supervision level based on their level of risk, which was divided into three categories: low, medium, and high. The risk and supervision level match variable was a dichotomous variable (yes/no) that recorded whether the clients' risk level matched the assigned level of supervision. For instance, if a client was identified as low risk by a risk-needs assessment and he or she was subsequently supervised at low level, this constituted a match (yes = 1). Total number of reassessments measured the number of reassessments that were carried out on each individual over the course of supervision. Total contact over supervision refers to the total amount of contact clients had with their probation/parole officers during their supervision. The types of contact included in this variable were telephone, e-mail, letters, and face-to-face at home, in the office, or in the community. It included "collateral" contact, which refers to contact with anyone else regarding the offenders' supervision (e.g., treatment providers, family members). The total contact over supervision was divided by the length of time the individual was on supervision to create the variable rate of monthly contact on supervision. The variable "rate of identified needs to treatment placement" refers to the number of identified needs that matched the number of treatment placements. Finally, needs reduction was a dichotomous variable (yes/no) that recorded whether the clients' number of needs, as determined by a needs assessment, reduced over the course of their supervision.

TABLE 2

List of Measures by the Five Domains

Domain	Variables
Risk-Need-Responsivity	Risk/need assessment
	Supervision level assigned
	Risk and supervision level match
	Total number of reassessments
	Total contacts during supervision period
	Rate of contact (monthly) on supervision
	Rate of identified needs to treatment placement
	Reduction in number of criminogenic needs
Motivation and Engagement	Referral and start date for treatment
	Initial treatment less than 14 days from referral date
	Number of days from referral to treatment
	Number of days between 1st and 3rd treatment sessions
Case Planning	Number of days between intake and assessment
Monitoring and Compliance	Revocations
	Special conditions given
	Number of special conditions given
Desistance	Successfully completed supervision
	Negative drug test
	Employed during supervision

Domain 2: Motivation and Engagement

Engaging clients in their community supervision experience and motivating them to make prosocial choices is important to the success of outcomes (Garnick, Horgan, Acevedo, Lee, Panas, Ritter, et al., 2014). To this end, four variables were used to measure the constructs of motivation and engagement: referral and treatment start dates, amount of time between referrals and start of treatment (and also if this was less than 14 days), and the number of days between the first and third treatment sessions. Although administrative data have a limited capacity to directly measure these intrinsically driven concepts, these proxy measures were developed based on the understanding that referrals start the process of engagement in care, and that early initiation of treatment with regular follow-up treatment sessions (typically monthly) can increase the odds of better client engagement (Garnick et al., 2014).

Domain 3: Case Planning

Given that case plans drive the supervision process, it is important to develop a plan early in the supervision process (Taxman, Shepardson, & Byrne, 2004). The effective use of case planning was assessed by the number of days between the intake date and the date of assessment. Of course, other aspects of case planning such as goal setting, feedback, and reinforcement are also important to supervision success (Alexander, Whitley, & Bersch, 2014); however, these factors are not typically gathered in management information systems.

Domain 4: Monitoring and Compliance

To ensure that clients are complying with the

terms and conditions of their supervision, it is necessary to know what terms and conditions have been imposed on them by the agencies and courts, and whether or not they were violated. Based on the available data for this sample, three measures were constructed to reflect this domain: special conditions given (yes/no), number of special conditions given, and number of revocations and violations.

Domain 5: Desistance

The success of community supervision is often judged by the degree to which it affects recidivism, and this is often measured by rearrest, reconviction, or reincarceration. However, this is rather short-sighted, as other factors that support the goal of desistance can also be used as markers for reentry success. For instance, employment and abstinence from substances have been identified as two important elements for reentry success (James, 2014). In the present study, three dichotomous desistance measures were created: whether the client successfully completed supervision; whether the client drug tests were negative; and whether the client was employed.

Findings and Discussion

Through the process of data harmonization, we were able to collate the information from multiple administrative management information systems to create measures that could be used consistently across sites. One important learning point is that the ability to create process measures using administrative data is very much contingent on the type and quality of information collected by the agencies.

Findings indicate that of the five domains, data related to RNR domain were the most frequently available (range = 0 percent to 100 percent) in the management information systems. Except for site 4, all of the sites had the ability of having RNR-related variables (see Table 3). Further investigation revealed that the site's policy was to utilize risk assessment information from past supervision. In other words, current clients on supervision were being managed according to their prior risk assessment information. This is problematic according to the RNR principle, as programming should be matched to the clients' current risk-needs appraisal (Andrews & Bonta, 2010). Data on the rate of identified needs to treatment placement was the least available in the RNR domain.

The second domain, motivation and engagement, had the least amount of data available across all four sites. While we were able to pull from the data whether or not clients had received a referral, the fact that the agencies did not track any information about these referrals (e.g., client attendance, completion of program requirements) limits our ability to tap motivation and engagement. Part of the problem may be that administrators are recording information according to the policies and procedures of their agency. Therefore, if an agency's responsibility is primarily to refer clients and the onus is on referral programs to track their own client information, it may not be feasible to acquire much information about this domain using agency administrative data.

Case planning was measured by the number of days between intake and assessment. Apart from site 4, which did not track this information, these data were available more than two-thirds of the time across sites. Of course, case planning also involves elements such as goal setting, expectations, rewards, and sanctions, but these data were not available for the agencies. One could speculate that this is in part because such elements involve more of an interactive process between probation

TABLE 3

Percentage of Administrative Data Available by Site

	Site 1 *N* = 821	Site 2 *N* = 2296	Site 3 *N* = 288	Site 4 *N* = 2490
RNR				
Risk/need assessment	86%	100%	100%	45%
Supervision level assigned	86%	100%	100%	45%
Risk and supervision level match	83%	100%	100%	45%
Total contact over supervision	100%	100%	100%	100%
Rate of contact (monthly) on supervision	100%	100%	100%	100%
Rate of identified needs to treatment placement	24%	66%	57%	–
Total number of reassessments	86%	100%	100%	100%
Needs reduction	38%	100%	51%	0%
Motivation and Engagement				
Referral and start date	–	9%	27%	–
Initial treatment less than 14 days from referral	–	9%	100%	–
Number of days from referral to treatment	0%	9%	31%	0%
Number of days between 1st and 3rd treatment sessions	0%	9%	100%	0%
Case Planning				
Number of days between intake and assessment	86%	100%	100%	4%
Monitoring and Compliance				
Revocations	100%	100%	100%	100%
Special conditions given	100%	100%	60%	–
Number of special conditions given	100%	100%	67%	0%
Desistance				
Successfully completed supervision	33%	32%	100%	17%
Drug test negative	–	100%	85%	–
Employed	100%	100%	100%	52%

Note: dashes denote that data were not available for that site

TABLE 4

Performance Measures by Site

	Site 1 *N* = 821	Site 2 *N* = 2296	Site 3 *N* = 288	Site 4 *N* = 2490
RNR				
% of population assessed for risk/needs	87%	100%	100%	47%
Assessment Level				
Low	28%	30%	14%	18%
Medium	55%	48%	19%	37%
High	17%	23%	68%	45%
Total average contacts over supervision	0.6 (1.1)	2.0 (17.8)	4.0 (3.0)	1.9 (9.0)
Contact rate per month on supervision				
Low	0.1 (0.2)	1.0 (1.5)	2.2 (1.4)	2.0 (0.0)
Medium	0.9 (1.2)	1.6 (15.1)	3.9 (2.8)	--
High	0.1 (0.5)	3.8 (28.3)	4.4 (3.2)	2.3 (0.0)
Rate of identified needs to treatment placement	35%	56%	63%	–
% of population with matched risk and supervision level	58%	90%	100%	98%
% of population with decrease in needs	1%	22%	9%	0%
Total average number of reassessments over supervision	1.3 (0.6)	1.6 (0.9)	1.5 (0.5)	0.5 (0.5)
Average reassessments per risk level				
Low	1.2 (0.5)	1.3 (0.5)	2.0 (0.0)	1.0 (0.1)
Medium	1.3 (0.6)	1.6 (0.8)	1.5 (0.5)	1.0 (0.0)
High	1.4 (0.6)	2.1 (1.2)	1.4 (0.5)	1.0 (0.0)
Motivation and Engagement				
% with both a referral and start date	–	9%	28%	–
Average days from referral date to treatment start date	–	302.5 (167.7)	2.4 (7.8)	–
Average days between 1st and 3rd treatment sessions	–	24.6 (19.4)	14.9 (14.7)	–
Average days between all treatment sessions	–	24.7 (19.8)	14.1 (13.9)	–
Initial treatment < 14 days from referral	–	4%	14%	–
Case Planning				
Average days between intake and assessment	14.6 (66.2)	16.0 (62.0)	44.9 (82.0)	171.5 (134.2)
Monitoring and Compliance				
% revoked	16%	2%	30%	17%
% of population given special conditions	29%	74%	61%	–
Average number of special conditions given	0.5 (1.0)	1.2 (1.0)	6.2 (3.3)	–
Desistance				
% successfully completed supervision	19%	30%	100%	1%
% drug test negative	--	85%	92%	–
% employed	14%	42%	64%	66%

Note: dashes denote that data were not available for that site

officers and clients that is not typically documented. It may be possible, however, to obtain this information from other sources such as single coordinated care plans (SCCPs).

Data for the monitoring and compliance measure were largely available across sites. This is not surprising given the supervisory role of community corrections agencies. Because it is highly likely for individuals under community supervision to have some sort of general supervision conditions (e.g., contact requirements, abstinence from substances), agencies may not deem the tracking of this information as important as tracking special conditions (e.g., no contact orders, treatment conditions). Of course, not all individuals are given special conditions, but for those who are, findings revealed that this information is not documented reliably. For example, special conditions data were available 60 percent of the time for site 3, but it was unclear whether the remaining 40 percent of cases had no special conditions or whether the special conditions were simply not recorded, as in site 4.

For the fifth domain, supervision completion and abstinence from illicit substances are logical desistance measures. However, data were not consistently available across sites. Supervision completion data were recorded in less than one-third of cases (range = 17 percent to 33 percent) and 50 percent of sites provided substance use screening data. The latter data were limited due to both the outsourcing of substance use testing by sites and also the quality of data records (e.g., recorded qualitatively as a string variable, inconsistent recording).

The principles of RNR suggest that matching treatment to clients' risk levels and associated needs is the key to treatment success (Andrews & Bonta, 2010; Taxman, 2008). In comparing the process measures that each site was able to construct with existing data (see Table 4), we found that sites 1 through 3 are, for the most part, carrying out risk and needs assessments with clients. The absence of recorded assessment data in more than 50 percentage of clients in site 4 is cause for concern, given that this is a crucial first step to interventions. This means that some clients' needs may not be properly identified, which is reflected in the fact that site 4 had the lowest percentage of the population with a decrease in needs. The implication here is that an examination of the agency's assessment and triage policies is much needed.

Another important principle for the RNR domain is that contact rate while on

supervision should correspond with the clients' risk level. As such, one would expect higher risk clients to receive more frequent contacts. While this is true for sites 2 through 4, for site 1, the monthly contact rate was lowest for the *high-risk* clients. In fact, the total average number of contacts over the supervision period was relatively low for this site for all risk levels, which suggests a need to examine the agency's policies of supervision and how clients are being monitored.

The findings for the case planning domain indicate that, on average, clients are waiting anywhere from around two weeks to six months to receive an assessment after initial intake. This may pose a problem if the goal is to start clients on the road to rehabilitation as quickly as possible. As previously mentioned, information on motivation and engagement is generally lacking in agency administrative data. However, the findings for site 2 show a large average gap between clients receiving a referral and the start of their treatment process (around 10 months). This is highly problematic given that research suggests that early initiation of treatment is positively associated with client engagement (Garnick et al., 2014). While this may indicate a problem with the triage procedures of that agency, it could also reflect the lack of resources and local treatment options available.

In regard to desistance, surprisingly, only one site (site 3) had complete data on clients who had successfully completed supervision. For the other three sites, this ranged from 1 percent to 30 percent. This is surprising given that rehabilitative success hinges in part on whether clients can successfully adhere to the requirements of their probation. As for the other indicators of success measured in this study, half of the sites in our sample do not track information on drug testing, and employment data was only tracked between 14 percent and 66 percent of the time.

Conclusion and Implications

In this article, we explored the feasibility of developing a set of measures that reflect evidence-based supervision processes. The measures were based on the five domains within the SOARING e-learning system: Risk-Need-Responsivity (RNR), Motivation and Engagement, Case Planning, Compliance and Monitoring, and Desistance. Findings suggest it is possible to create evidence-based process measures to identify quality supervision; however, some measures (e.g., treatment referral and identified needs) are unlikely to be available given that the data is not in the database. Of the four sites, 6 of 19 measures had less than 50 percent of the data available for two or more sites. These 6 measures were: rate of identified needs to treatment placement, needs reduction, referral and start date, initial treatment less than 14 days for referral, successfully completed supervision, and negative drug test. This demonstrates that it is possible to construct process measures using administrative data; however, this is a work in progress and further development is needed for some of the items within the model. For example, motivation and engagement was the most problematic domain. The implication is that information about clients' progress is not well-documented. The reason may be that motivation and engagement reflects a mindset and individual attitudes (and thus, are intrinsic), which makes it unlikely to be available in administrative data. Therefore we may need to reconsider how to measure this component of evidence-based supervision.

- Based on our findings, we offer agencies several suggestions for collecting administrative data for creating process measures that reflect evidence-based supervision practices:
- Create mandatory data fields that must be filled in before moving to the next entry.
- Add dropdown menus to provide clarity for data entered in text fields (e.g. selecting "no special conditions" in dropdown format as opposed to having a blank text field). It can also increase consistency in data entry within and between staff. Moreover, to maximize effectiveness, response options should be as comprehensive as possible.
- Supervision completion is often recorded dichotomously (yes/no) but could benefit from greater specificity by recording not just whether supervision was completed successfully but also why. For instance, we were unable to differentiate between those who completed supervision in full (i.e., fulfilled all conditions and requirements) without violations versus those who completed supervision but did not fulfil all treatment requirements and/or violated any conditions of their supervision (currently, both groups would be recorded as having "successfully completed supervision").
- Better tracking of information for client referrals and/or any outsourced treatment. This would require probation/parole staff to be more involved in the supervision process.
- And finally, in general, better staff training on how to use their data systems and what information needs to be recorded and why.

In sum, administrative data contain a wealth of information but are currently under-utilized by community supervision agencies. Using these data to create a set of process measures that reflect evidence-based supervision can aid community supervision agencies in identifying any gaps in service provision and inform policies and procedures for best practice. Future follow-up studies are also needed to validate these measures against client outcomes.

References

Alexander, M., Whitley, B., & Bersch, C. (2014). Driving evidence-based supervision to the next level: Utilizing PCRA, drivers, and effective supervision techniques. *Federal Probation*, *78*, 2-8.

Andrews, D. A., & Bonta, J. (2010). Rehabilitating criminal justice policy and practice. *Psychology, Public Policy, and Law*, *16*, 39-55.

Bonta, J., Rugge, T., Scott, T. L., Bourgon, G., & Yessine, A. K. (2008). Exploring the black box of community supervision. *Journal of Offender Rehabilitation*, *47*, 248-270.

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

Bourgon, G. (2013). The demands on probation officers in the evolution of evidence-based practice: The forgotten foot soldier of community corrections. *Federal Probation*, *77*, 30-35.

Chadwick, N., Dewolf, A., & Serin, R. (2015). Effectively training community supervision officers: A meta-analytic review of the impact on offender outcome. *Criminal Justice and Behavior*, *42*, 977-989.

Dowden, C., & Andrews, D. A. (2004). The importance of staff practice in delivering effective correctional treatment: A meta-analytic review of core correctional practice. *International Journal of Offender Therapy and Comparative Criminology*, *48*, 203-214.

Drake, E. K. (2011). *"What works" in community supervision: interim report*. Olympia, WA: Washington State Institute for Public Policy.

Drake, B., & Jonson-Reid, M. (1999). Some thoughts on the increasing use of administrative data in child maltreatment research. *Child Maltreatment*, *4*, 308-315.

Durose, M. R., Cooper, A. D., & Snyder, H. N. (2014). *Recidivism of prisoners released in 30 States in 2005: Patterns from 2005 to 2010*. Washington, DC: Bureau of Justice Statistics.

English, D. J., Brandford, C. C., & Coghlan, L. (2000). Data-based organizational change: The use of administrative data to improve child welfare programs and policy. *Child Welfare*, *79*, 499-515.

Farrell, J., Young, D. W., & Taxman, F. S. (2011). The effects of organizational factors on use of juvenile supervision practices. *Criminal Justice and Behavior*, *38*, 565-583. doi: 10.1177/0093854811401786

Garnick, D. W., Horgan, C. M., Acevedo, A., Lee, M. T., Panas, L., Ritter, G. A., & Wright, D. (2014). Criminal justice outcomes after engagement in outpatient substance abuse treatment. *Journal of Substance Abuse Treatment*, *46*, 295-305. doi: 10.1016/j.jsat.2013.10.005

James, N. (2014). *Offender reentry: Correctional statistics, reintegration into the community, and recidivism*. Washington, DC: Congressional Research Service.

Kaeble, D., Glaze, L., Tsoutic, A., & Minton, T. (2016). *Corrections populations in the United States, 2014*. Washington, DC: Bureau of Justice Statistics.

Miller, J., & Maloney, C. (2013). Practitioner compliance with risk/needs assessment tools: A theoretical and empirical assessment. *Criminal Justice and Behavior*, *40*, 716-736. doi:10.1177/0093854812468883

Nagin, D. S., Cullen, F. T., & Jonson, C. L. (2009). Imprisonment and reoffending. *Crime and Justice*, *38*, 115-200.

Petersilia, J., & Turner, S. (1993). Intensive probation and parole. *Crime and Justice*, 281-335.

Raybould, S., & Coombes, M. G. (1992). The research potential of administrative data: an illustrative example of the utility of register information in spatial analysis. *Environment and Planning B: Planning and Design*, *19*, 131–142. doi: 10.1068/b190131

Taxman, F. S. (2002). Supervision—exploring the dimensions of effectiveness. *Federal Probation*, *66*, 14-27.

Taxman, F. S. (2008). No illusions: Offender and organizational change in Maryland's proactive community supervision benefits. *Criminology & Public Policy*, *7*, 275-302. doi: 10.1111/j.1745-9133.2008.00508.x

Taxman, F. S. (2009). Effective community punishments in the United States: probation. *Criminal Justice Matters*, *75*, 42-44.

Taxman, F. S. (2012). Probation, intermediate sanctions, and community-based corrections. In J. Petersilia & K. Reitz (Eds.), *Oxford handbook on sentencing and corrections* (pp. 363-388). New York: Oxford University Press.

Taxman F. S., Shepardson, E. S., & Byrne, J. M. (2004). *Tools of the trade: A guide to incorporating science into practice.* Washington, DC: US Department of Justice, National Institute of Corrections.