A Behavioral Management Approach to Supervision: Preliminary Findings from Maryland’s Proactive Community Supervision (PCS) Pilot Program

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Faye S. Taxman, Ph.D.
Virginia Commonwealth University
923 West Franklin Street
Richmond, VA
fstaxman@vcu.edu

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Although community supervision is the arm of the correctional system that is most directly responsible for public safety, supervision is just beginning to be recognized as a valued component of the criminal justice system. Little attention has been given over the last several decades to community supervision. While intensive supervision, boot camps, drug courts, and a few other innovations occurred over the last two decades, the core function of supervision was not altered as part of this effort. Yet, research over the same period of time, has identified key structural components that, if employed, would improve community supervision as a crime-reduction strategy. This research is slowly being translated into new models for handling over 4.8 million offenders under probation and/or parole supervision. The transformation of supervision from a “slap on the wrist” to crime reduction strategy will evolve after the use of a principled, focused strategy to address criminogenic risk factors of the individual and related communities to make gains in reducing crime. Success will place supervision in the forefront of our criminal justice policy.

The “what works” research that grew out of the Canadian’s experience (now referred to as Evidence-Based Practices) (refer to Andrews & Bonta, 1998) and recent attention to reentry has propelled attention to community supervision. New models of community supervision are currently being piloted that change the focus of the supervision process from enforcing conditions to managing risky behaviors, and from holding the offender accountable to facilitating offender change and holding the system accountable. This paper will review some of these models, and outline a new generation of probation and parole supervision programming that redefines the nuts and bolts of the core business function of supervision--face-to-face contacts and supervision levels. And, then the paper will present preliminary findings from a study in Maryland that is implementing a behavioral management model of supervision.

Evolution of Supervision in the U.S.

1. **Traditional Parole Supervision**

   The Urban Institute paper on “Does Parole Work?” raised a number of issues regarding the efficacy of parole supervision (Solomon, Kachnowski, & Bhati, 2005). (Note: Although the discussion is focused on parole, the broader discussion pertains to all community supervision.) Regardless of the data used in the study, which has been the subject of much discussion (e.g., the data was dated, the data only pertained to 14 states, the data included California which has unique patterns, and so on), the report basically illustrates that parole supervision based on monitoring and face-to-face contacts has little saliency. In other words, as one would expect, parole does not suspend the recycling through the criminal justice system, and may even contribute to it. And, the use of antiquated supervision technologies results in little effect on offending behavior.

   The findings of this study should come as no surprise to anyone. Parole supervision in the 14 states under study involved face-to-face contacts that were intensified to monitor the conditions of the offender. Few agencies used risk instruments to determine the supervision level or even to identify the criminogenic needs that affect criminal behavior. Conditions were assigned to hold the offender accountable. The numerous intensive supervision experiments in the 1990’s basically found that number of contacts did not reduce recidivism, technical violations, and often did not result in increased access to services (Taxman, 2002; Mackenzie,
This type of monitoring or contact falls into the category of “watch ‘em” where offenders are given a number of conditions, the parole agent monitors the conditions, and the offender often fails to meet the expectations. The supervision process can then contribute to the number of failures due to increased revocations.

In an analysis of the caseload size and intensive supervision literature, I previously observed that the monitoring and face-to-face contacts supervision model is atheoretical (Taxman, 2002). Stated simply, the monitoring function focuses on compliance or external controls by formal institutions that place demands on individuals. Since negative behavior is likely to draw the attention of the criminal justice system, supervision agencies are responsible to respond to the negative behavior. In many ways, monitoring is an unforgiving process where the attention is drawn to what has NOT been done instead of any small, incremental gains that the offender might have made.

The burden of the monitoring protocol is on the offender as the sole party responsible for meeting the assigned condition(s). The offender is responsible for paying supervision fees (even if the offender is un-or-underemployed or can not afford basic life essentials such as rent, food, etc.), finding treatment (even if there are no services readily available in the community), becoming sober immediately after a rather long period of alcohol or drug use or finding a sober, crime-free place to live (even if other members are under community supervision or have substance abuse problems), and so on. All of these scenarios are not to excuse the offender dilemma but rather to illustrate how the correctional/supervision system can be unforgiving regarding the burden of the offender and the community that many offenders reside in. That is, the monitoring generally provides the offender with little assistance in learning how to be responsible or accountable.

Adding conditions to the standard parole (and probation) orders during the late 1980’s-1990’s has had a number of unintended consequences. The most obvious is the increased potential for technical violations that might result in incarceration. With added conditions of drug testing, electronic monitoring, house arrest, curfews, or other new tools, offenders have more chances for not being compliant or failing to meet expectations. Most parole agencies themselves recognize that the effectiveness of these new tools is likely to be tied to the ability for offenders to learn to change their ways, unfortunately funds were given for the tools but seldom for providing the accompanying behavioral interventions that would assist the offender in learning to change his/her ways.

Second, monitoring has translated into more parole agencies adopting an enforcer model, coupled with law enforcement technologies. Many parole/probation agencies assumed a law enforcement perspective that included arming their staff, with 41 states allowing their parole officers to be armed (38 for probation officers) (Fuller, 2002). For some organizations this raised the profile of the probation/parole staff including access to benefits afforded law enforcement (e.g. most notably retirement systems which are usually better than other state employees, salary enhancements for clothing, etc.). It also forced the organizations to participate in law enforcement type training, particularly the certification of gun use. And, it served to reinforce the commitment to rigorous “enforcement of conditions” as a form of accountability for the offender. The graduated sanction movement in the early 1990’s reinforced this mentality with a focus on responding to violations, and the importance of accountability.
Some parole officers subscribed to the law enforcement perspective while others continued to straddle the “hat” between law enforcement and social work. Some rigorously enforced the conditions, while others did not. And some officers suggest they become “frustrated” with offenders and their actions contributing to an acrimonious climate for supervision. In frequent scenarios, parole officers and offenders often get into verbal tugs of war that generally have negative results. The use of sanction guidelines (see Burke, 1999) were developed to assist the parole staff in working productively with offenders where the potential for recycling would be guarded through careful steps to sanction behavior before pursuing revocation. But, like other guidelines in the criminal justice system, these are difficult to implement because the staff resist the structure that the guidelines impose (e.g. it affects their professional, staff desire to individualize responses, staff believe that it gives the offender too many “bites at the apple”, parole officers do not agree with the premise of the guidelines).

The punitive tone, emphasizing the messages of individual accountability and responsibility, appears to be characteristic of parole agencies. Taxman and Thanner (2003) have noted that these messages of accountability and the actions of the parole/probation systems can create scenarios where some offenders are treated differently than other offenders. That is, procedural justice can not occur in parole settings because some parole officers will respond vigorously to violations of conditions while others will ignore the conditions unless the offender is arrested while others will reinforce some conditions but ignore others. Studies in other fields would suggest that such an environment of unjust punishment that is doled out under varying conditions is likely to lead to more disobedience of the conditions (Tyler, 2004; Skogan and Frydl, 2004, Taxman & Thanner, 2003/2004) than compliance.

2. Treatment as Part of Supervision

The intermediate sanction experiments have generally found that increasing the intensity of supervision through a variety of external controls has not improved offender outcomes (Taxman, 2002; Mackenzie, 2000). In fact, similar results are likely to occur for enhanced technical violations due to the detection that occurs from increased visibility of the offender. In the early 1990’s new programs were developed that included drug courts, break the cycle and other seamless efforts, diversion to treatment (both front-end and back-end), and other enhanced programs that built on traditional community supervision. Most of these programs emphasized treatment, drug testing, and sanctions. Overall the research has found that the provision of quality treatment services serves to reduce recidivism. The key programmatic components that have been tied to effective interventions are:

- Participation in treatment programs, particularly those that involve multiple levels of care (more intensive followed by less intensive services) such as in-prison based treatment services followed by aftercare, intensive outpatient services followed by less intensive services, etc.;
- Appropriate placement of higher risk offenders into treatment services;
- Engagement in clinical treatment services for periods that are at least 90 days in duration
- Participation in clinical treatment services that involve certain types of therapeutic interventions such as cognitive behavioral therapy, contingency management systems (reward systems), social learning based therapies, and, therapeutic communities.
- Programs that use positive reinforces are more likely to shape behaviors than sanctions (Festinger, 2005; see literature on contingency management)
• Programs that are well-implemented and maintain some integrity.

Most programs that are delivered are constrained by the failure to target offenders into appropriate programs based on their needs (Taxman & Marlowe, 2006; Lowenkamp, Latessa, & Hoslinger, 2006; Lowenkamp and Latessa, 2005), to implement programs that use more effective clinical strategies, or to manage the compliance of offenders.

During this era, the focus of the criminal justice system was finding the best avenue to facilitate offender participation in treatment programs. Drug courts, ISP, break the cycle, boot camps, and other criminal justice programs that incorporated some types of treatment services developed different techniques to link offenders with services:

• **Brokerage:** The parole officer refers the offender to another agency for assessment and/or services without having input into the assessment process and/or the services delivered.
• **Case Management:** The parole officer monitors participation in the assessment and service participation of the offender. The emphasis is on compliance with the order.
• **Dedicated Services:** The parole office offers services on-site where assessment and services are provided at the same location. Sometimes these services are paid by the parole office, other times they are offered by community and other services.

Although few quality studies have assessed the relative merits of the different linkage approaches, a review of the literature does suggest that dedicated staff that use behavioral management techniques (e.g. assessment tools, clinical, client centered interviewing techniques, etc.) are more likely to yield greater participation in treatment services. Depending on the nature of the treatment services, it is unclear whether these services have an impact on the overall outcomes. The major issue regarding treatment services is retention in treatment since 60 percent of the addicts that participate in treatment services do not fully complete their programs (McLellan, 2003).

The drawback to this era of programming is that the role of the supervision staff in the acquisition of treatment services and retention in treatment services has not been advanced. For the most part, the styles of supervision basically conformed to those used in some of the intensive supervision projects where the emphasis was on more face-to-face contacts to fulfill requirements. The actual nature of the contact was focused on compliance, and to make sure that the offender is meeting the conditions of release. That is, the offender was in the forefront of ensuring that conditions were fulfilled regardless of the actions taken by the supervision staff. The research basically did not examine the role of the supervision staff in achieving public safety goals.

3. **A Behavioral Management Strategy to Supervision**

While the research over the last three decades has many limitations, it does provide guidance to improve criminal justice public policy and supervision practice. Much of the relevant research derives from studies in substance abuse treatment, education, and vocational training besides traditional correctional and criminal justice. The research identifies themes that need to be weaved into the current policies and practices: 1) the supervision period should be short with clearly defined goals and objectives that speak to punishment/reparation of harms (for low risk offenders) and habilitation (for moderate to high risk offenders); 2) informal social
controls (e.g. families, friends, etc.) are more effective in controlling behavior than formal government agencies; 3) many of the external control tools (e.g. curfews, drug testing, etc.) merely serve to fuel the churning process and provide limited efficacy in improving offender outcomes (which suggests that it might advisable to limit the use or eliminate the use for the vast majority of offenders); 4) treatment based interventions should be delegated to moderate to high risk offenders that have clearly addressable criminogenic needs where clinical or pharmacological programming would be well-served; and, 5) clarifying expectations to the offender, limiting the use of discretion, and developing rapport with offenders are key programmatic components that can improve offender outcomes. All of this can be translated into a behavioral management approach that supervision staff can use with offenders, particularly for moderate to high risk offenders that are susceptible to the churning wheel.

Overall, the research suggests that efforts should be devoted to reducing the overarching umbrella of the correctional system for the clear purpose of focusing supervision resources on offenders and communities in the greatest need. Stated simply, core resources should be devoted to moderate to high risk offenders, particularly those that reside in highly disadvantaged geographical areas (e.g. high concentration of poverty, higher levels of instability, etc.), as a means to improve public safety and community well-being. Such a policy would require the criminal justice system to diversify responses in a manner that concentrates efforts on offenders that are likely to return to the community (as are most) and that are likely to have problem behaviors. Other offenders would be handled in ways that benefit the community and that require less intensive restrictions/interventions. This is particularly for the low risk offenders which might be better suited to be handled by using punishment and reparation goals.

The following provides a prescription for moving towards this new generation of supervision that is focused on offender outcomes. It should be noted that this prescription provides the framework to achieve public safety goals within current resource constraints.

1. **Systems should have validated, risk tools that assist in making decisions about the likelihood that an offender will be a public safety risk.** Risk tools are critical in assisting agencies to shift and sort offenders into categories which will determine the appropriate level of service. Low risk offenders should be placed in more punishment or reparation oriented programming. The risk tool should be used to identify medium to high risk offenders that need assistance in managing their behaviors to increase public safety. These risk tools are vital to provide systematic decision making, and will clarify how different offenders should be handled. It will also preserve the most expensive community based options for offenders that are more likely to benefit for such issues. Ed Latessa and Chris Lowenkamp have shown how important the use of risk level is in determining appropriate placement in services, and how better outcomes can be achieved by placing offenders in appropriate level of services.

2. **Systems would need to adopt some policy based contingency management systems that would guide decisions regarding reinforcing positive behaviors and pursuing revocation.** Discretionary decision by parole officers contributes to problems in the supervision system that allows some offenders with similar behavior to be treated differently from other offenders, and this situation does not bode well for compliance to general conditions of supervision (Taxman & Thanner, 2003/2004). Contingency management systems provide for swift and certain rewards (positive reinforcers) to facilitate prosocial behavior, and they change the focus of the criminal justice system
from acknowledging failures to recognizing gains. As part of the process, negative behaviors can be similarly handled in a swift and certain manner. Policy based guidelines should include both incentives to shape positive behavior and sanctions for negative behaviors. Modeling after parole guidelines (see Burke, 2001), contingency management systems can be delivered that provide a formula for focusing attention on improvements. (For a discussion of contingency management, see Taxman, Shepardson, & Byrne, 2004 and Petry, Tedford, Austin, Nich, Carroll, & Rounsaville, 2004). Offenders should not be reincarcerated for failure to comply with violations that are not criminal behaviors which should reduce reincarceration rates.

3. **Supervision should not be longer than 18 months for moderate to high risk offenders.** Any longer period of supervision requires too many resources that are not likely to yield public benefits. Reducing the length of supervision will reduce the workload of supervision staff and focus their efforts on achievable goals. During the tenure of supervision, the goal should be to transfer the control from formal institutions to natural support systems.

4. **Pharmacological interventions (e.g. medications for drug use, alcohol use, mental health, etc.) should become more common in habilitation efforts for moderate to high risk offenders.** Advancements in medications have made these tools useful in assisting people to learn to control their behavior and to become more productive citizens. Medications should not be perceived as a crutch but as a mechanism to improve the offender’s cognitive capabilities; some medications also serve to address addictions issues, and along with behavioral therapies, have been shown to be effective in changing offender behavior.

5. **Parole staff should be certified in different skills as they advance through the organization.** The development of staff should be towards client-centered skills such as interviewing and communication techniques, behavioral contracting, and problem-solving. On the social work-law enforcement pendulum of goals, these skills do not shift the officer in one direction or another but rather emphasize the tools that have been shown to be most effective in assisting the offender to move towards changing his/her own behavior.

6. **Low Risk Offenders should be given swift and certain punishments that have reparative principles.** For the most part, these offenders should not be under any form of supervision for any more than a month. The goal should be to handle these punishments expeditiously, and to have the offenders focus their efforts on reparation to communities. The model can replicate to day fines experiments in the early 1990’s or the day service (e.g. weekend service) concept that minimizes the period of correctional control but is focused on clear outcomes. This could be part of the strategy of supervision agencies addressing some of the needs of communities or neighborhoods that are highly disadvantaged (e.g. high poverty levels, high degree of instability, etc). Reinvesting in these communities, where many offenders happen to reside, would serve the benefit of increasing stability in the neighborhoods and contribute to healthier communities.

7. **Moderate to High Risk Offenders should be placed in supervision that is designed to facilitate offender change.** The risk tool should guide the identification of the types of
behaviors that contribute to criminal conduct such as violence or power/control issues, substance abuse/dependency, sexual predatory, detached or dissociated supervision, etc. The core component is a behavioral contract that includes the conditions for release and short term goals for the offender. The supervision plan should be encompassed in the behavioral contract to allow for one guiding document for the offender and the parole officer. The behavioral contract is a negotiated agreement where the conditions are designed to ameliorate criminogenic risk and need factors. The process of developing and monitoring the contract should involve:

- Establishment of agreed upon milestones
- Feedback provided to the offender on the progress on the contract
- Revisiting situations when the offender struggles with a particular issue
- Using incentives and sanctions to shape offender behaviors where feedback is provided
- Timely communication with the offender to review progress on the case plan and achievement of supervision goals; and,
- Develop natural supports to assist the offender in having a support system that can assist the offender after he/she completes supervision.

Focusing our attention on item 7 above (behavioral management strategies for moderate to high risk offenders), the role of the supervision agent in this model shifts significantly. The supervision officer does not merely have enforcement responsibilities but also has responsibilities to instruct and model prosocial behavior. This changes the basic function of the supervision business to goal-directive face-to-face concepts. Goal directive face-to-face concepts recognizes that in each interaction (e.g. interviews, collateral contacts, phone contacts, etc.), the purpose of the contact needs to be clear. Generally there are four main goals of contacts:

- **Engagement**: To assist the offender in taking ownership for his/her supervision contract and behavioral plan. Ownership derives from the offender understanding the rules of supervision (e.g. the criteria for being successful, the rewards for meeting expectations, the behaviors that will end in revocation, etc.), the offender’s criminogenic drivers that affect the likelihood of involvement with the criminal justice system, the dynamic criminogenic factors that can be altered to affect the chance that the offender will be likely to be change, and the prosocial behaviors that will be rewarded by the community (and criminal justice system). The supervision plan should be designed around components that should promote desistence from criminal behavior.

- **Early Change**: To assist the offender in addressing dynamic criminogenic factors that is meaningful to both the offender and the criminal justice system. As part of the change process, all individuals have certain interests and needs that can be used to motivate them to commit to a change process. The change process begins by allowing the offender to act upon these interests as well as begin to address one dynamic criminogenic driver (which will eventually lead to addressing other criminogenic traits). The trade-off in achieving this goal is that the offender’s interests in being a parent, provider, or addressing specific needs (e.g. religious, health, etc.) should be acted upon simultaneously to the needs identified in the standardized risk/needs tool as a means to assist the offender in taking ownership to his/her own change process.
• **Sustained Change:** The goal of supervision is to transfer external controls from the formal government institutions to informal social controls (e.g. parents, peers, community supports, employers, etc.). This is best achieved by allowing the offender as gains are made in the change process, to help the offender stabilize in the community, and to utilize informal social controls to maintain the changes. Part of the supervision process should be to identify those natural support systems that the offender has or to develop these natural support systems to be a guardian for the offender to provide the support mechanisms.

• **Reinforcers:** As part of each contact, the goal is to reinforce the change process. Formal contingency management systems assist with this goal by providing the supervision staff with the tools to reward positive gains and to address negative progress. The formal process of swift and certain responses provides the protective process for the offender that shows that the supervision staff recognizes small incremental steps that facilitate change and sustain change.

By having goal-directive contacts, within a process of supervision this will advance supervision to the next level.

Many supervision agencies have recognized that to put in place behavioral management systems requires other organizational changes and enhancements. These are needed to facilitate the behavioral management goals as well as to develop new resources within system to achieve these goals. And, as part of the advancements to improve reentry efforts and to change the nature of supervision, a need exists to ensure that supervision system addresses these goals. Some examples of new approaches are as follows:

• Advancing the use of motivational interviewing and other strategies to assist the staff to communicate constructively with the offender. Many agencies are training their staff on motivational interviewing techniques and other strategies for the purpose of providing a technique to focus on client-centered approaches that build trust and rapport. Communication becomes the key strategy for the behavioral management approach because parole officers must provide consistent feedback to the offender and community to assist the offender in the change process. And, to be effective in shaping behavior the offender needs to have timely and consistent information about performance and use of the case plans.

• Employing supervision plans that incorporate behavioral contracts, targeted goals to address criminogenic needs, conditions of supervision, and incremental steps to achieve goals. The supervision plan is more than a piece of paper; instead, it is a document that is subject to revision based on the progress of the offender and changing goals of supervision (e.g. engagement, change, sustaining progress). Also the plan incorporates the contingency management agreements which hold both the offender and the system actors accountable.

• Integrating natural supports as part of the reentry and supervision process. More agencies are developing programs and services that include the community in the supervision process. As part of some of the reentry efforts, community guardians (e.g. civic activists, community volunteers, etc.) are being assigned to offenders to assist them in the transition from prison to community, to assist offenders in retention efforts as part of jobs/employment, schooling, or treatment services, and to assist
offenders in developing a network that does not involve criminal peers or associates. These efforts are designed to both address retention issues as well as lay the groundwork for building those natural support systems.

- Expanding the service options to accommodate both the offender’s interests and a broader array of services that can be used to address criminogenic needs. Many parole agencies have expanded the service providers to include more natural supports in the community such as faith-based organizations, civic associations, educational institutions, employers or local businesses, and so on. Opening the doors of the correctional system has the potential of assisting the offender in the change and maintenance process.

- Using place-based strategies to adopt new innovations and affect the surrounding community that the offender resides (and that the parole officer is located). Place-based strategies allow the parole office to achieve key benchmarks that affect the whole office, and the integration of community-based services are more likely to occur since the parole office is drawing on the community to be part of the supervision process. Place-based strategies can have collateral impact by improving the community well-being, and this assists supervision agencies in becoming a more valued component of the community.

- Employing performance management systems to provide weekly feedback on progress. The old saying, “what gets measured, gets done” is being translated into strategic management sessions where supervision staff are held accountable for the gains in meeting supervision goals. In some offices these meetings are held weekly, others monthly. But the goal is to use the performance management system to monitor outcomes (e.g. assessments and case plans completed, employment retention, treatment sessions attended, drug test negative results, rearrests, warrants for violations, etc.), and then to build the organization to achieve these outcomes.

Proactive Community Supervision in Maryland

With over 70,000 adult offenders under community supervision in the late 1990s, and ratios of more than 1:100 agents to offenders, Maryland faced similar challenges as other states regarding the most cost-effective strategy to supervise offenders in the community. In 2000, the Maryland Division of Parole and Probation (MDPP) developed a strategy to reengineer supervision by integrating research-based findings pertinent to protecting community safety and returning offenders to a more prosocial lifestyle. The strategy, called Proactive Community Supervision (PCS), has three goals: to protect public safety; to hold offenders accountable to victims and the community; and to develop competency and character to help offenders become responsible and productive members of society (Sachwald, 2000). These goals are accomplished through the four major components of PCS: 1) to identify criminogenic traits using a valid risk and need tool; 2) to develop a supervision plan that addresses criminogenic traits employing effective external controls and treatment interventions; 3) to hold the offender accountable for progress on the supervision plan; and, 4) to use a place-based strategy wherein individual probation/parole office environments are engaged in implementing the strategy. Collectively, these four tenets are based on findings from research studies identifying crime reduction strategies over the last 30 years.
The PCS strategy was funded by the Maryland legislature in 2001. To allow MDPP to change the context of supervision, caseload sizes for intensive supervision by probation/parole agents were to be reduced from 100 to 55 in the four pilot areas: Mondawmin in Baltimore City, Hyattsville in Prince George’s County, Silver Spring in Montgomery County, and all of Caroline County. With PCS, probation/parole agents were armed with a research-based strategy regarding how to address the criminogenic traits that propel individuals to continue their involvement in criminal behavior. PCS offers a holistic approach for probation/parole agents to facilitate offender change while emphasizing accountability and public safety.

This section of the paper presents an overview of the impact of the PCS model on key offender outcomes—rearrest rates, warrants for violation of probation, and adherence to offender supervision plans. The evaluation study used an individual match design that compares the outcomes of 548 offenders—274 randomly selected offenders supervised in PCS offices with 274 matched offenders in offices that use the traditional supervision model. The researchers found that participation in PCS had a demonstrative effect on offender outcomes. In particular, regardless of the criminal history of the offender or risk level, the rates of rearrest and warrants filed for technical violations were significantly lower for offenders that were supervised under the piloted PCS strategy. The PCS model has shown to have statistically significant outcomes for offenders compared to traditional methods of supervision.

1. What is PCS?

The Proactive Community Supervision (PCS) model adopts the tenets of science-based research into reframing supervision services for offenders. The emphasis of the model is on the nature and intent of the contacts between the offender and his/her probation/parole agent. The contacts are central for the agent to facilitate change in three ways: 1) to engage the offender in a change process that focuses on obtaining prosocial skills; 2) to commence the offender change process by using supervision tools and treatment interventions to address criminogenic traits; and 3) to assist the offender in desistance and sustaining change through positive involvement with community support networks like family/associates, mentors, and civic associations. That is, the agent’s role has been broadened from merely “monitoring” the offender to facilitating the offender’s involvement in prosocial activities that focus on building skills to be productive in society.

The probation/parole agent role is essentially defined as a behavioral manager who works with the offender to understand the factors that influence the offender’s continued involvement in crime and criminal behavior and develop an action (or supervision) plan focused on addressing criminogenic factors. The agent monitors progress on the action plan and works jointly with the offender to: (1) revise the action plan to address issues that are precursors to further involvement in criminal behavior, e.g., substance abuse, mental health issues, or violence, and (2) develop prosocial, natural networks in the community. The behavioral manager role encompasses both the law enforcement and social work skills that are needed in protecting the public (Taxman, Shepardson, & Byrne, 2004). This framework is consistent with the research literature that identifies treatment and accountability as the critical ingredients to achieving improved offender outcomes and reducing criminal behavior (Sherman et al., 1997; MacKenzie, 2000; Marlowe, 2003).
The PCS model reflects the behavioral management theoretical model, and PCS incorporates its main ingredients in the following components of the process:

- Use of the Level of Service Inventory-Revisited (LSI-R) instrument to assess the criminogenic risk and need factors affecting the offender’s involvement in criminal behavior;
- Development of a case plan that is responsive to the criminogenic traits identified in the assessment process, which includes the LSI-R and other objective information (e.g., home environment, criminal record, offender self-identified interests areas, and drug test results), and that also addresses goals that are specific to the offender’s criminogenic traits. The focus is on identifying a purpose for the supervision plan that is specific for the goals and focuses on desistence;
- Referral to the appropriate array of treatment, educational, vocational, and other services to assist the offender in developing new skills to be a productive citizen;
- Use of the supervision process to assist the offender to learn about the triggers (e.g., people, places, or situations) that affect involvement in criminal behavior;
- Use of incentives and sanctions to shape offender behaviors;
- Timely communication with the offender to review progress on the case plan and achievement of supervision goals; and,
- Emphasis on desistence from criminal lifestyle and conduct.

MDPP used typologies to guide the supervision plans given to the most prevalent type of offenders. Seven main typologies were identified to assist agents to understand that different offenders have different drivers affecting their involvement in criminal behavior. The typologies are: drug-involved addict or entrepreneur, violent offender, disassociated offender, sex offender, mental health offender, and domestic violence offender. Each of these types of offender has different emphases for the supervision plan due to the unique factors affecting criminal behavior. See Table 1 below for an example of the identified goals of the supervision plan.

<table>
<thead>
<tr>
<th>Type of Offender</th>
<th>Emphasis of Supervision Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disassociated</td>
<td>Develop prosocial social support network</td>
</tr>
<tr>
<td>Drug-involved Addict</td>
<td>Achieve abstinence from illicit drug use</td>
</tr>
<tr>
<td>Drug-involved Entrepreneur</td>
<td>Obtain prosocial employment</td>
</tr>
<tr>
<td>Violent</td>
<td>Address violent tendencies</td>
</tr>
<tr>
<td>Domestic Violent</td>
<td>Manage power and control issues</td>
</tr>
<tr>
<td>Mental Health</td>
<td>Address mental health issues</td>
</tr>
<tr>
<td>Sex</td>
<td>Control sexual deviance behaviors</td>
</tr>
</tbody>
</table>

The organization of supervision plans around typologies (and key supervision goals) provides the framework for MDPP to develop partnerships with other agencies and organizations to further the services and programs that are available to the offender population as part of a strategy to reduce crime and to increase public safety. MDPP has developed over 90 partnerships with local organizations to provide services to the offender population (Eley, 2005). The partners provide services that MDPP can not offer due to the limited funds available in the agency’s budget for services. MDPP has less than one percent of the agency’s budget available for drug treatment and educational services. Partnerships have been developed in all four pilot sites to expand the ability of MDPP to integrate key services to address criminogenic traits.
within the supervision plans of offenders. Figure 1 depicts the PCS process.

**Figure 1: PCS Process**

**2. How Was PCS Implemented?**

During the first three years of the implementation of the PCS model, MDPP developed and trained staff in the model. PCS implementation was staged to accompany the development of new communication, interviewing, and contingency management skills needed by probation/parole staff to be successful as behavioral managers. First, MDPP introduced motivational interviewing and other communication strategies to provide probation/parole agents with interviewing and verbal communication techniques, which are not typically provided in pre-service or in-service training. Along with the communication strategies, MDPP also established guidelines regarding the use of socially acceptable decorum for dealing with offenders such as using salutations to address offenders and establishing eye contact with offenders. These techniques were designed to ensure that MDPP created an office environment where offenders could learn social skills through interactions with their agents. MDPP employed a coaching model where front line supervisors used the Quality Contact Standards (QCS) form to monitor agents’ use of the techniques and as a structured mechanism to provide feedback to develop staff skills.

The next level of staff development involved using the Level of Service Inventory-Revisited (LSI-R) instrument and developing case plans. These efforts focused on identifying criminogenic traits through interviewing the offender and addressing these traits in the resulting case plan. The supervision goals articulated in Table 1 define the main purpose of the supervision plan, and, along with the supervision tool box (e.g., drug tests, community services,

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1 Few probation/parole agencies provide staff with training in interviewing or communication strategies in working with offenders. Motivational interviewing is a well-recognized technique that is consistent with working with offenders/clients on behavioral change issues.
treatment, vocational education, employment, and support networks), ensure that a proper mix of external and internal controls are part of the supervision plan. The emphasis on staff development was to acquaint the staff to the toolbox and how the different tools can be used for the purpose of improving offender outcomes. To ensure that staff would use the tools in a case plan, they were provided with a software package--Maryland Offender Software for Case Empowerment (MOSCE)--that required first-line supervisors to certify the case plan. Requiring supervisor certification was a strategy to engage staff throughout the organization in the core principles of PCS.

As part of Managing for Results (MFR), MOSCE integrates a series of offender performance indicators to be used by supervisors to monitor outcomes. The goal is to provide front-line supervisors with easy access for monitoring the performance of their units. The PCS strategy involves not only equipping staff with new skills, but also equipping the organization with the means to focus on recidivism reduction strategies. The building of an organizational strategy has been reinforced by other related efforts of MDPP management such as sponsoring executive and leadership training.

3. Study Design

The purpose of the evaluation study of the PCS model was to determine whether the implementation of the PCS core concepts had an impact on offender outcomes, particularly on rates of rearrest and warrants for violation of probation/parole. The overriding issue is whether the use of the behavioral management components in the PCS model was sufficient to achieve measurable differences in offender outcomes. The sample size for the study is 548 which is considerable respectable and has the statistical power to detect a difference between the PCS and non-PCS sites (Cohen, 1998).

The study used a random selection-individual match design, which is considered the quasi-experimental design that closely approximates random assignment. Since PCS was implemented in four pilot sites, all offenders screened high risk at any of the four sites were eligible for the PCS study. The other offices were not considered to be part of the PCS project because they are not using the PCS tools such as LSI-R instrument, case planning, or the progress monitoring process; and staff in these offices were not trained in these tools. The individual match design allowed researchers to select offenders for a comparison group that had the same characteristics as those offenders served by the PCS pilot sites.

Sample Selection

Using the Offender-Based State Correctional Information System-II (OBSCIS-II), researchers randomly selected 335 PCS and 335 non-PCS cases from a total of 89,275 offenders who entered supervision in the State of Maryland from January through December 2004. The researchers began with four selection criteria. To be included in the study, offenders must have: 1) started supervision during calendar 2004; 2) served a minimum of six months on supervision (to ensure exposure to the core of the PCS process); 3) been rated high risk for recidivism using the MDPP risk screener; and 4) been active on parole, probation, or mandatory release. After

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2 The intent was to select individuals whom MDPP agents had classified during intake as requiring intensive supervision. We selected individuals classified as intensive at their most recent classification. We note that 79
eliminating the cases that did not meet the four eligibility criteria, researchers used a random number generator to select a sample of 335 individuals from the four PCS pilot offices. The number of cases selected from each office was proportionate to the total number of PCS cases entering supervision at each pilot site. The distribution of cases per office is listed in Table 2. The non-PCS cases were required to meet the same four eligibility criteria to be considered for the study and to be in the same geographical environment with potential matches from the PCS MDPP offices. The second column in Table 2 identifies the office selected to match the PCS cases. The final sample was reduced to 274 PCS and 274 non-PCS cases due to the inability to match unique offender characteristics (e.g., a female sex offender- 6 cases) or the PCS offender was not under active supervision for at least 6 months due to premature termination (58 cases), or the sentence was interrupted by the offender’s removal from the community (i.e., incarceration, hospitalization, etc.). Whenever a PCS case was eliminated from the sample, the matching non-PCS case was also deleted.

Table 2. Distribution of PCS Cases in the Study by Office

<table>
<thead>
<tr>
<th>PCS Office</th>
<th>Number of PCS Cases</th>
<th>Non-PCS Match Office</th>
<th>Number of Non-PCS Cases³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mondawmin area</td>
<td>143</td>
<td>Preston Street for probationers/ Guilford Avenue for parolees</td>
<td>113/30</td>
</tr>
<tr>
<td>Hyattsville</td>
<td>83</td>
<td>Upper Marlboro</td>
<td>83</td>
</tr>
<tr>
<td>Silver Spring</td>
<td>38</td>
<td>Gaithersburg</td>
<td>38</td>
</tr>
<tr>
<td>Caroline County</td>
<td>10</td>
<td>Glen Burnie</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>274</strong></td>
<td></td>
<td><strong>274</strong></td>
</tr>
</tbody>
</table>

The study design called for each individual offender in a PCS office to be matched to an individual offender in a non-PCS office on the following criteria: gender, race, age, type of supervision, and category of instant offense. As described below, the matching criteria are variables that have been empirically linked to criminal outcomes in the research literature. If the PCS and non-PCS individual share these common traits, there is a better chance of isolating the effects of the PCS protocol.

**Gender.** Males and females differ on the nature of their criminal behavior, criminal histories, and supervision needs.

**Race.** Research suggests that race is a proxy for other variables that might explain criminal conduct. The PCS sample included offenders of two predominate races: African-American and Caucasian.

**Age.** Age affects involvement in criminal behavior. While the association between age and crime is not directly linear, researchers differentiated between older and younger individuals.

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³ We attempted to draw the matched sample from one geographical area and were successful with 97% of the cases. For the Mondawmin area, 1% of the cases were matched at a location other than Preston, and for Hyattsville, 11% of the cases were matched elsewhere than Upper Marlboro.
First, individuals were divided into two groups, over 30 and under 30. For those in the over 30 age group, PCS cases were matched to non-PCS individuals who were within 6 to 10 years of their age.\(^4\)

**Category of Instant Offense.** The nature of the current conviction charge affects both supervision needs and involvement in criminal behavior. Current convictions were grouped into the following categories: violent, property, drug distribution, drug possession, domestic violence, driving under the influence (DUI), technical violations, and a category termed “broken windows”, which combined public nuisance offenses such as vandalism, prostitution, disorderly conduct, disabled motor vehicle, hit and run, littering/trash dump, reckless driving, loitering, rogue and vagabond, aggressive panhandling, animal bite, animal complaint, drunk, and fires (not arson).

**Sample Characteristics**

Table 3 compares the PCS and non-PCS groups at the time of intake according to selected individual characteristics.

**Table 3. Group Characteristics for PCS and Non-PCS at Time of Intake**

<table>
<thead>
<tr>
<th>Group Characteristics</th>
<th>PCS</th>
<th>Non-PCS</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender - % Male</td>
<td>82.8</td>
<td>82.8</td>
<td>274</td>
</tr>
<tr>
<td>Race - % Black</td>
<td>85.0</td>
<td>85.0</td>
<td>274</td>
</tr>
<tr>
<td>Employment Status - % Unemployed</td>
<td>61.1</td>
<td>69.5</td>
<td>167</td>
</tr>
<tr>
<td>Age - % Over 30</td>
<td>53.3</td>
<td>54.0</td>
<td>274</td>
</tr>
<tr>
<td>Marital Status - % Single</td>
<td>82.5</td>
<td>78.6</td>
<td>154</td>
</tr>
<tr>
<td>Education Categories - % At Least High School Diploma</td>
<td>62.1</td>
<td>60.6</td>
<td>132</td>
</tr>
<tr>
<td>Mean Number of Arrests Prior to Supervision Intake</td>
<td>7.41</td>
<td>6.83</td>
<td>259</td>
</tr>
<tr>
<td>Supervision - % Probation</td>
<td>88.0</td>
<td>87.6</td>
<td>274</td>
</tr>
<tr>
<td>Supervision - % Parole/Mandatory Release</td>
<td>12.0</td>
<td>12.4</td>
<td>274</td>
</tr>
</tbody>
</table>

The matching criteria were intended to define key behavioral characteristics linked to recidivism. There was also equivalency between PCS and non-PCS individuals on variables that were not used in the individualized match.\(^5\) For employment status, marital status, education

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\(^4\) We relaxed the age criteria in order to improve the proportion matched to 88 percent. The majority of the remaining 12 percent were matched after relaxing the distinction between mandatory release and parole (6 cases) and the categories for instant offense (28 cases); four cases remained unmatched.

\(^5\) Since these other characteristic variables were not used for selection into the study, there were missing data for many of the individuals. In addition to excluding PCS cases with missing data from the comparison in Table 3, the researchers excluded PCS cases for which the non-PCS match had missing data.
level, and prior arrest history, there are no statistically significant differences between the PCS and non-PCS groups.

Statistically significant differences in offender characteristics did emerge when comparing across PCS sites. The parolee population from the Mondawmin area is unique because it has the highest proportion of individuals who are male, black, unemployed, over the age of 30, and with the greatest number of prior arrests. The only other location approximating these characteristics is the matched comparison group. Another unique group is the Caroline County group, which has the smallest proportion of individuals who are black, unemployed, and single. The only other location with a similar group composition is Caroline County’s comparison group.

4. Implementation of PCS Core Components

The first question in the evaluation study was to determine the degree to which the PCS sites implemented the core components of the PCS model. The researchers focused on whether the following actions were taken: completion of the LSI-R, identification of the offender’s typology and triggers of criminal behavior, development of a case plan, and implementation of the case plan.

In the PCS model, the first core step is the completion of an LSI-R-based assessment. The supervision plan and progress monitoring cannot occur without substantive information from the LSI-R or another intensive assessment tool; otherwise the probation/parole agent is using a “generic” model of supervision instead of focusing the supervision on addressing the criminogenic traits of the individual offender. In this cohort, 70 percent of the offenders had an LSI-R; the remaining 30 percent did not. The average LSI-R score was 15.6, with a standard deviation of 7.9. This average score corresponds to a rating of medium risk in the community, according to the national standards for the LSI-R (MHS, 2004). About 30 percent of the offenders scored under 10, which indicates low risk; 29 percent scored 11-17, indicating medium risk; 28 percent scored 18-25, which is moderate to high risk; and 13 percent scored 26 or more, reflecting high risk.  

Overall, typologies were assigned in 56 percent of the PCS cases, including 80 percent of the cases in which an LSI-R was completed. The cases with typologies assigned were distributed as follows: 46 percent disassociated, 24 percent drug-involved, 20 percent violent, and 10 percent sex offenders, mental health, or domestic violence. For all but five of the cases for which a typology was assigned, the agent also identified the offenders’ triggers. In the following analyses for the PCS sites, researchers assumed that the 44 percent of PCS cases without a typology were handled by traditional supervision methods that do not address the specific criminogenic traits of the individual offender.

Once an offender’s typology and triggers have been identified, agents are responsible for working with the offender to create a case plan that assigns specific responsibilities to the agent and offender. If a typology has been assigned, the agent can choose from a set of responsibilities

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6 Offenders who scored in the highest category of risk on the LSI-R had the highest rate of rearrest (45%) during the observation period, while those who scored in the low risk category had the lowest rate of rearrest (19.3%). These findings validate the LSI-R instrument.
tailored to that typology as well as specify additional responsibilities. If a typology has not been assigned, the responsibilities are generally based on court orders.

Table 4 below presents a comparison of the implementation of the PCS model across the four sites in terms of the responsibilities assigned and completed. Again, the unidentified group was considered to approximate traditional supervision.

Table 4. Development and Implementation of Responsibilities in Case Plans

<table>
<thead>
<tr>
<th>Typology</th>
<th>Disassociated (n=71)</th>
<th>Drug Involved (n=36)</th>
<th>DV/MH/ Sex* (n=16)</th>
<th>Violent (n=30)</th>
<th>Unidentified (n=121)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean # of Agent Responsibilities in Case Plan</td>
<td>3.4</td>
<td>6.4</td>
<td>4.3</td>
<td>2.9</td>
<td>0.5</td>
</tr>
<tr>
<td>Mean # of Offender Responsibilities in Case Plan</td>
<td>3.8</td>
<td>5.0</td>
<td>4.2</td>
<td>4.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Mean # of Responsibilities Agent Took Action</td>
<td>2.3</td>
<td>4.2</td>
<td>3.1</td>
<td>2.5</td>
<td>0.3</td>
</tr>
<tr>
<td>Mean # of Responsibilities Action by Offender Was Taken</td>
<td>1.7</td>
<td>2.2</td>
<td>2.7</td>
<td>2.0</td>
<td>0.9</td>
</tr>
</tbody>
</table>

* Combines Domestic Violence (DV), Mental Health (MH), and Sex Offender (Sex) typologies.

Table 4 shows that offenders under PCS supervision have more responsibilities, and that they tend to have a greater number of actions taken on the case plan. For the most part, offenders have more requirements that are geared to their criminogenic traits and additional offender responsibilities generally include contacts with the agent. PCS offenders tend to have between 90 percent (disassociated) and 150 percent (drug) more responsibilities in their case plans that reflect goals to achieve to address criminogenic traits than those under traditional supervision. The PCS message of accomplishing supervision goals appears to be translating into more actions taken by both agents and offenders—offenders generally take action on 90 to 200 percent more responsibilities for the case plan than traditional supervision.

Table 5 examines whether having a typology affected the average contacts per month between the agent and the offender. Contacts include face-to-face and telephone contacts between the agent and the offender as well as agent collateral contact with the offender’s close family and associates. The mean number of contacts per month is higher for offenders with a typology as compared to offenders without a typology (p<.01). Similarly, for offenders with drug testing conditions, tests are performed more frequently on the offenders that have a typology assigned than on offenders without a typology (p<.05). In the PCS model, offenders had more frequent contact with their agent than under traditional supervision.
Table 5. Supervision Contacts and Drug Tests

<table>
<thead>
<tr>
<th>Had a Typology</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Number of Contacts per Month</td>
<td>1.7</td>
<td>1.3</td>
</tr>
<tr>
<td>Mean Number of Drug Tests per Month for Offenders with Court-Ordered Conditions</td>
<td>2.0</td>
<td>1.3</td>
</tr>
<tr>
<td>Mean Days Between Contacts</td>
<td>24</td>
<td>48</td>
</tr>
</tbody>
</table>

The average PCS offender had a greater number of responsibilities to achieve to be successful on supervision. Other studies where the number of conditions have intensified have resulted in more infractions and more violation of probation/parole for failure to abide by the conditions (Petersilia, 2000; Petersilia & Turner, 1993). In this study, it appears that the increased conditions do not necessarily result in increased noncompliance. As shown in Table 6, except for drug offenders (with the greatest mean number of conditions), all other typologies had a greater percentage of offenders that complied than the traditional supervision group. Surprisingly, the PCS cohort appears to be more compliant than the traditional supervision group. Given that the PCS group had more conditions than the traditional group, the mean number of noncompliant behaviors is similar to the traditional group.

There is no significant difference across typologies in the mean number of incidents of noncompliant behavior such as missed appointments, failures to appear for drug tests, positive drug tests, and failures to conform to court ordered provisions ($p<.05$), despite the fact that the PCS group had a far greater number of conditions. Proportionately the PCS group is actually attending to the components of the case plan at a greater rate. Not surprisingly, drug-involved offenders tended to have more incidents of noncompliance including attendance at treatment, and violent offenders had fewer. The difference between the traditional group (mean of 18.8 incidents per case) and the combined group of offenders who were assigned typologies (combined mean of 17.5 incidents per case) was not statistically significant. Again with the increased number of responsibilities one would have expected the PCS cases to have had more noncompliant incidences.

With respect to agents’ responses to noncompliant behavior, the differences across typologies and between the unidentified group and the group of offenders with typologies assigned were not statistically significant. While agents may provide more scrutiny over offenders for whom they have designated a typology, they are not more likely to sanction these offenders for noncompliant behavior.
Table 6. Noncompliant Behaviors and Sanctions

<table>
<thead>
<tr>
<th>Typology Type</th>
<th>Disassociated (n=71)</th>
<th>Drug Involved (n=36)</th>
<th>DV/MH/ Sex* (n=16)</th>
<th>Violent (n=30)</th>
<th>Unidentified (n=121)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Noncompliant Behaviors - %</td>
<td>17</td>
<td>6</td>
<td>13</td>
<td>17</td>
<td>9</td>
</tr>
<tr>
<td>Mean Number of Noncompliant Incidents</td>
<td>19.2</td>
<td>26.1</td>
<td>11.3</td>
<td>6.3</td>
<td>18.8</td>
</tr>
<tr>
<td>Noncompliant Incidents Sanctioned - %</td>
<td>33</td>
<td>27</td>
<td>44</td>
<td>26</td>
<td>39</td>
</tr>
</tbody>
</table>

* Combines Domestic Violence (DV), Mental Health (MH), and Sex Offender (Sex) typologies.

5. The Impact of PCS: Comparing Outcomes

Likelihood of Successful Supervision

The individual match design allows us to determine if there are any statistically significant differences between the group that was exposed to PCS goal-driven case plans and offenders under traditional supervision. The careful selection of like offenders in both groups, using an individual match approach, is similar to randomization in that the researcher selects offenders to be part of the study design. No self-selection occurs that could bias the outcomes. Since characteristics are consistent across the groups, outcome differences can be attributed to exposure to the PCS model.

We compared the PCS and non-PCS group according to four outcomes: positive drug tests, new arrests, requests for warrants (proxy for technical violation or non-criminal behavior acts that are violations of orders of release), and all negative, sanctionable behaviors. The drug test data were derived from the Statewide Maryland Automated Records Tracking System (SMARTS), an internet-based tracking system. Arrest data were obtained from the Maryland Criminal Justice Systems Information (CJIS), a central repository for criminal histories in Maryland. OBSCIS-II also provided information on requests for warrants for technical violations on probation and/or parole. We constructed the final outcome variable, all sanctionable behaviors, as a combination of the first three outcomes.

The analysis plan uses two main strategies to determine whether the PCS process has differential outcomes from the non-PCS process. Bivariate and logistic regression models (Tables 7 and 8 respectively) were used to determine whether differences between the PCS and non-PCS group are statistically significant. The logistic regression models were used to test for statistical significance controlling for variables that were not used in the case selection process that might be relevant to outcomes such as the number of days under supervision and criminal history of the offender (number of prior arrests). We used the covariate of number of days under supervision to ensure that we removed the “exposure” period as a possible explanation for any

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7 SMARTS was formerly called HATS (HIDTA Automated Tracking System).
differential effects (if they occur). Then we examined whether the differences affected the time that the offender is successful on supervision (survives).

**Drug Test Results.** Court-ordered drug testing conditions were in place for 48.9 percent of the PCS offenders and 62.8 percent of the non-PCS offenders. Statistical tests indicated that there are no differences between the two groups in terms of failure to appear for testing or positive urines.

Table 8 reports the findings from a logistic regression that determined participation in PCS had no effect on the likelihood of having positive urine, controlling for the influence of time on supervision and prior arrests. The results of these analyses suggest that PCS did not have an effect on the drug consumption patterns of those in our sample with a court-ordered mandate for urinalysis.8

**Table 7. Results for the PCS vs. Non-PCS Cases on Key Outcomes: Drug Testing Results, Rearrests, and Warrants for Violation of Probation/Parole**

<table>
<thead>
<tr>
<th>Drug Testing Results</th>
<th>PCS</th>
<th>Non-PCS</th>
<th>Odds Ratio9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Urines - %</td>
<td>22.8</td>
<td>25.4</td>
<td>1.12</td>
</tr>
<tr>
<td>FTA for Urinalysis - %</td>
<td>50.0</td>
<td>53.6</td>
<td></td>
</tr>
<tr>
<td><strong>Rearrest for New Crime</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Arrest* - %</td>
<td>32.1</td>
<td>40.9</td>
<td>0.62</td>
</tr>
<tr>
<td>Mean Number of New Arreasts*</td>
<td>0.45</td>
<td>0.65</td>
<td></td>
</tr>
<tr>
<td><strong>Warrants for Violation of Probation/Parole</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Warrant Filed* - %</td>
<td>20.1</td>
<td>29.2</td>
<td>0.60</td>
</tr>
</tbody>
</table>

Notes.
1. For drug test results, the sample size was 94 PCS offenders and 106 non-PCS offenders. For failure to appear, the number is 99 PCS and 121 non-PCS.
2. For all other measures, the sample size was 274 PCS and 274 non-PCS.

**Rearrest Rates.** The PCS group was statistically less likely to be arrested than the non-PCS group; 40.9 percent of the non-PCS group was arrested as compared to 32.1 percent of the PCS group. Individuals in the PCS group had a mean number of arrests that was 30.7 percent lower than the non-PCS group.

Two logistic regression models were developed to assess the impact of PCS on rearrests. In these models, researchers controlled for length of time on supervision and prior criminal history since these were not part of the original selection criteria. The results in Table 7 illustrate

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8 All of the logistic regression models were run adding in the covariate of the offender had a court-ordered condition for drug testing. The assignment of a court-ordered condition for drug testing did not explain any variance in the arrest and warrant for violation of probation/parole models, and the covariate was not statistically significant.

9 Logistic regression results are available in Appendix A. The odds-ratio of 1.12 indicates that there is essentially minimal difference overall between PCS and non-PCS. When the odds-ratio hover around 1, this indicates that there is little impact. The odds-ratio of .62 and .60 indicate that PCS has a lower probability of being arrested and violating parole/probation than non-PCS. Odds-ratios can be converted into probabilities, which can be more easily interpretable, using the formula OR/(1+OR).
that offenders participating in PCS were significantly less likely to be re-arrested during the study period. The odds-ratio of 0.62 means PCS offenders have 38.3 percent less chance of being rearrested for new criminal behavior than the non-PCS group.

**Warrant Filed for Violation of Parole/Probation.** As shown in Table 7, 20.1 percent of the PCS cases and 29.2 percent of the non-PCS cases had a warrant filed, a statistically significant difference (p<.05). Supervision agents for PCS cases filed a warrant when the offender had a median of 17 noncompliant behaviors for missing appointments, failing to inform the agent of location, failing to comply with court-ordered conditions of supervision (such as paying fines or attending drug treatment), testing positive at urinalysis, absconding from supervision, and failing to report for drug testing. In comparisons among the PCS locations, the frequency of warrants being filed for technical violations was statistically different\(^{10}\) where 3.3 percent of the offenders at one location had a warrant filed compared to 22.1 percent among the other locations; the fewer the number of misbehaviors, the less likely the agent was to file a warrant.\(^{11}\)

Findings from the logistic regression reveal an odds ratio of 0.60, which means that participation in PCS resulted in a 38 percent reduction in the probability of a warrant being filed for technical violations. Further, this finding was statistically significant, controlling for the number of days on supervision and the number of arrests prior to the current sentence.

**Length of Time in Successful Supervision**

The logistic regression findings were replicated in the analyses that examined the length of time until offenders started to be unsuccessful on supervision; no differences occur in the length of time to first positive urine analysis results or failure to have a drug test. Yet, PCS cases tended to be successful by being on supervision longer until they started to have serious misconducts such as new arrests or misbehaviors that result in warrants being filed.

Figure 2 illustrates the results from a Cox regression comparing differences in the length of time until the first rearrest for PCS and non-PCS, controlling for the number of days on supervision and the number of prior arrests. The two groups had similar survival rates for the first month on supervision with roughly 95 percent of both groups remaining without an arrest. After 40 days on supervision, non-PCS survival rates began to diminish at a rate faster than those under PCS. By the first year, 62 percent of the non-PCS group was arrest-free compared to 71 percent of the PCS group.

Similar results are presented for the length of time until a warrant request is filed for the PCS and non-PCS groups. For example, by the 50th day on supervision, 5.5 percent of the non-PCS group already had a warrant filed against them compared to 2 percent of the PCS group. By the first year, 28.5 percent of the non-PCS group had warrants filed against them compared to 20 percent of the PCS group.

\(^{10}\) Analysis of variance (ANOVA) indicated a significant difference between the groups (F=2.4; p-value=.05). Guilford was accountable for the most significant within group difference.

\(^{11}\) The percentages for the other locations ranged from 16-40 percent.
• **Warrant:** By the 50th day on supervision, differences between PCS and non-PCS are apparent with 5.5 percent of the non-PCS group having a warrant compared to only 2 percent of the PCS group. By the 300th day, 80 percent of the PCS group remained without a request for a warrant as compared to 71.5 percent of the non-PCS group.

• **Arrest:** After 40 days on supervision, the non-PCS group started to quickly diminish where 62 percent were arrest-free by the 300th day on supervision. The proportion of PCS that remained arrest-free by the 300th day was 71 percent.
6. What Have We Learned in the MDPP?

Over the last 30 years, the area of community supervision has seen experiments in caseload size, intensive supervision (more face-to-face contacts), case management, and specialized programs (e.g., electronic monitoring, day reporting). With few exceptions, the literature has shown that increasing the intensity of supervision through a variety of external controls has not improved offender outcomes. In fact, similar results are likely to occur or enhanced technical violations due to the detection that occurs from increased visibility of the offender. PCS provided a new model for supervision consisting of goal-directed supervision plans that are tied to specific criminogenic traits. The agents used behavioral management strategies—valid risk and needs tools, case plans, and compliance management strategies—in an environment where the focus was on resocializing the offender to be a productive member of the community. This strategy for supervision is theoretically sound, as it is based on the literature on behavioral change and conditioning as well as organizational change. PCS results illustrated that a goal-focused supervision plan can reduce the likelihood of arrest and technical violations that results in warrants. Even more importantly, the results suggest that more productive, goal-centered contact between the offender and agent can have a positive outcome.

PCS encompasses the key components of effective interventions: targeting high risk behaviors, focusing on key criminogenic traits, managing progress, using place-based strategies, and engaging the organization in change. The results illustrate the following:

- An assessment instrument, in this case the LSI-R, can be used to develop case plans that are meaningful to offenders;
- Case plans can target different goals based on criminogenic traits;
- Offenders will take responsibility for conditions in their case plan if they understand the rationale;
- Offender non-compliance can be managed in a way to reduce warrants for technical violations but ensure public safety; and
- Adherence to case plans can reduce rearrest and technical violation rates.

The PCS model resulted in increased numbers of: target conditions; actions taken by the offender on those conditions, and offenders who were compliant during the supervision period.

Participation in PCS had a demonstrative effect on offender outcomes. Comparing the results of the 274 PCS cases, of which 30 percent were not exposed to the PCS model due to implementation flaws, the study still obtained statistically significant differences in rearrest and warrants for technical violation rates. Regardless of the criminal history of the offender, the PCS model was shown to intervene in those patterns. Even more remarkable is that one of the jurisdictions (Baltimore City) had heightened law enforcement activity during the study period which should have meant that probationers/parolees under supervision who are involved in criminal activities would have had an increased likelihood of arrest. But this did not occur for the PCS group at all—the PCS process appears to be addressing criminogenic traits.

An advantage of place-based strategies is that the organizational unit is involved in the change process. The PCS process involved MDPP’s central administration, regional directors, and assigned pilot sites. Central administration had two senior staff members devoted to developing partnerships to expand services and linkages to key organizations in the four pilot areas. Each pilot site engaged in a holistic training process that involved redefining the role of
agency supervisors and unit directors. The use of MFRs was vital in assisting each unit to be held accountable. Outside evaluators monitored the progress of using MOSCE and the PCS process during the first two years to ensure that the process was being implemented. Collectively, this place-based strategy affected successful implementation in three of the four pilot sites. Implementation at most of the pilot sites was over the benchmark of 50 percent of the cases receiving an LSI-R, case plan, and compliance management strategies in an environment that encouraged offender change. One site had tremendous management and turnover problems that resulted in reduced implementation at the 20 percent level.

Overall, the findings support that improvements can be made in supervision to impact the outcomes of offenders. The tools of the trade, which are empirically-based such as assessment, case plans, accountability and compliance management techniques, and a learning environment, have been shown here to be both feasible and effective. While the work is still ongoing, the implementation strategy appears to have been productive. Supervision can be its own intervention that is theory-based and focused on desistance.

Next Steps for MDPP

While good progress has been found in this study, implementation of the PCS model is still ongoing. This study revealed some areas of growth and development that MDPP should consider as it continues implementing PCS. Below are several recommendations.

- Develop specific staff expertise in typologies and how they relate to different controls and services that can further improve offender outcomes. Case plans currently reflect an attention to key goals, but it is apparent that further work is needed to understand some of the more difficult, entrenched offender behaviors. The typologies that appear to need more refinement are disassociated, violent, and entrepreneur drug offenders.

- Develop management strategies for resistant staff who do not follow the PCS process including a set of compliance management strategies.

- Develop a process for using trigger analysis in the case monitoring process to ensure agents are working with offenders on high-risk situations that affect their outcomes.

- Develop supervisor expertise in areas of case planning and monitoring progress to further the skill development of line staff. Use the coach model for different components of the process.

Conclusion

Supervision and community corrections are the backbone of the correctional system with over 4.8 million adults under the control of these agencies. While researchers, scholars, and policy makers focus on the need to change our policies to reduce the use of incarceration, this is not possible until the public has confidence that supervision and community corrections can be effective in protecting the public. Prior efforts to improve correctional programs have neglected one of the core functions—the role of parole or supervision officer. Research has shown that the
type of treatment programming is important as is the type of offender that is placed in these programs, yet many prior efforts have not developed the role of the parole officer in achieving these goals. This article has highlighted some of the core components that are necessary to move in this direction of a behavioral management approach and provided preliminary findings from a study that evaluates the implementation of the model in Maryland.

*Tools of the Trade: A Guide to Incorporating Science into Practice* (Taxman, Shepardson, & Bryne, 2004) describes the core components and can guide practitioners in the development of their own behavioral management approach. Judith Sachwald’s (Director of Maryland’s Division of Parole and Probation (MDPP)) foreword in the manual reiterates that movement into this third generation of supervision programming requires a commitment of the organization. Her model consists of preparing the organization, clarifying the vision, establishing key benchmarks and meeting these benchmarks, building community supports, and implementing core components of the model in an incremental process (organizational change similar to individual change). Sachwald writes that:

> “Without ongoing thoughtful professional development, supervision based on science and offender outcomes will become a fad and quickly extinguishes the recent spark of interest in community supervision (2004:viii).”

These are words to the wise—the day has come for community supervision to step up and become the most critical component of the correctional and criminal justice system. Altering the role of the supervision officer and maximizing the benefits from the core function of contacts can not be realized without a commitment to a revised policy, vision and programmatic components. Supervision agencies must also make a commitment to use the key tools of the trade—communication, assessment tools, supervision plans, contingency management systems, using effective treatment and service programs, and policies that focus the efforts on moderate to high risk offenders and disadvantaged communities. This is where the most gains will occur, as well as how public safety goals can be achieved.
References


Sachwald, J. (2000). Proactive Community Supervision: A Plan for Making Maryland Communities Safer. Towson, Maryland: Report to the Budget Committees of the
Maryland General Assembly.


Appendix A:
Logistic Regression of the Effect of PCS on the Positive Urine Results, Rearrest, and Request for Warrant for Violation of Probation/Parole

<table>
<thead>
<tr>
<th>Impact on Positive Urine Test</th>
<th>Beta coefficient</th>
<th>S.E.</th>
<th>Odds-Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>In PCS</td>
<td>0.115</td>
<td>0.241</td>
<td>1.12</td>
</tr>
<tr>
<td>Number of Days on Supervision</td>
<td>0.004*</td>
<td>0.001</td>
<td>1.004</td>
</tr>
<tr>
<td>Number of Prior Arrests</td>
<td>-.009</td>
<td>0.017</td>
<td>0.991</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.742*</td>
<td>0.489</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Impact on New Arrest</th>
<th>Beta coefficient</th>
<th>S.E.</th>
<th>Odds-Ratio</th>
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</thead>
<tbody>
<tr>
<td>In PCS</td>
<td>-.480**</td>
<td>0.188</td>
<td>0.62</td>
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<tr>
<td>Number of Days on Supervision</td>
<td>.005**</td>
<td>0.001</td>
<td>1.005</td>
</tr>
<tr>
<td>Number of Prior Arrests</td>
<td>.039**</td>
<td>0.013</td>
<td>1.04</td>
</tr>
<tr>
<td>Constant</td>
<td>-2.385**</td>
<td>0.391</td>
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</table>

<table>
<thead>
<tr>
<th>Impact on Request for Violation of Probation/Parole Warrant Filed</th>
<th>Beta coefficient</th>
<th>S.E.</th>
<th>Odds-Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>In PCS</td>
<td>-.510*</td>
<td>0.204</td>
<td>0.6</td>
</tr>
<tr>
<td>Number of Days on Supervision</td>
<td>0.002*</td>
<td>0.001</td>
<td>1.002</td>
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<tr>
<td>Number of Prior Arrests</td>
<td>0.016</td>
<td>0.013</td>
<td>1.016</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.792*</td>
<td>0.413</td>
<td>0.167</td>
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</tbody>
</table>

*p<.05, **p≤.01