

**Electronic Supervision Technologies in Colorado:  
A Report to the Colorado Department of Corrections**

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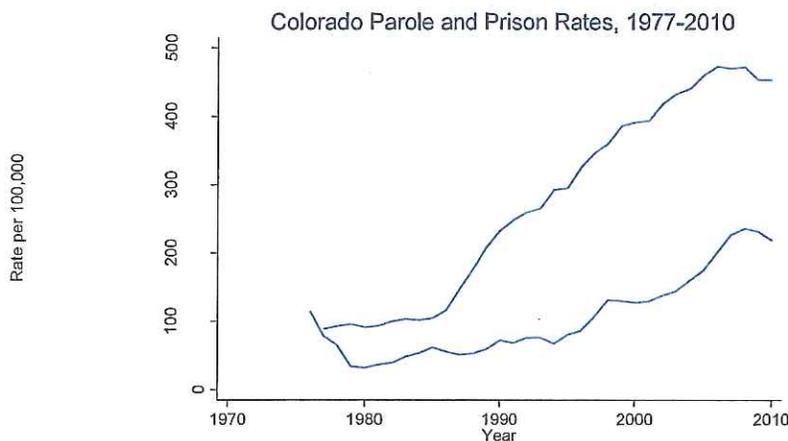
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This report is a response to a request for technical assistance to review the use of electronic supervision by the Colorado Department of Corrections (CDOC). The report was commissioned through the National Institute of Corrections to provide guidance to the CDOC. The report includes an introduction and five broad parts: (1) the development and capabilities of electronic supervision equipment, (2) research about outcomes associated with electronic supervision, (3) the administration of electronic supervision in Colorado, (4) five best practices, and (5) policy recommendations for CDOC. First, definitions of electronic supervision tools used in Colorado are provided, and a brief review of the research around these technologies is discussed. Second, a brief review of the literature around the evidence associating electronic supervision with specific offender outcomes in the community is provided. This is not intended as an exhaustive review of the research literature, but rather a quick review to contextualize the best practices and policy recommendations. Third, this report provides a review of electronic supervision in Colorado based upon interviews with CDOC staff and policy documents made available for review for the technical assistance. Fourth, research findings and supporting literature will be used to sketch out five broad best practices agencies should consider when using electronic supervision technologies in a community corrections setting. Fifth, the report concludes with a series of policy recommendations for CDOC's consideration as they move forward with their use of electronic supervision.

## Introduction

### **Electronic Supervision: Corrections Populations and Officer Workload Growth**

The U.S. correctional system has grown significantly over the past several decades. In fact, the national prison rate has grown from around 150 per 100,000 in the 1970s to well over 700 per 100,000. Simultaneous to the growth in the incarcerated populations, community corrections populations have grown as well. Figure 1 provides longitudinal data from the Bureau of Justice Statistics charting the growth in prison (top line) and parole (bottom line) rates in Colorado from 1977-2010.



The growth in both institutional and community corrections has created a situation in which correctional officials and researchers have been working to identify effective strategies to supervise such large numbers of adults. These growth patterns have also created a situation in which parole officer caseloads have grown in sheer numbers of individuals supervised, but also in the workload required to supervise each offender (DeMichele, Payne, and Matz, 2011). Petersilia (2004) made this clear when she depicted the California prison and parole system in which more offenders with higher risk of recidivism and more criminogenic needs were being returned to the community. This will become clearer later in this report, but the reason for discussing the prison and parole population growth and workload is to set the stage for how and why electronic supervision technologies have entered the community corrections field. Additionally, it is important to shift the framing of community supervision away from counting contacts to a more qualitative concern about the quality of officer-offender interactions.

Workload is an important concept because it forces one to realize that all offenders are not the same and all officer tasks are not the same. This is said because electronic supervision technologies come with major increases in the workload required per offender. Ironically, electronic supervision tools were introduced because they were seen as a way to alleviate officer burden, but the reality is they increase the required workload (DeMichele and Payne, 2009; Tennessee Board of Pardons and Parole, 2007). Many electronic supervision technologies are time-consuming. There is the time needed for installation, frequent repairs, and responding to alerts. Agencies need to establish clear policies and training around all of these (and several other) issues before including electronic supervision technologies as part of their supervision process.

This discussion is meant to contextualize this report to highlight three important features of electronic supervision practices for community corrections. First, there are unanticipated consequences that may stem from implementing electronic supervision technologies (DeMichele, Button, and Payne, 2008). Second, these technologies are tools, they are not solutions, programs, or strategies (DeMichele and Payne, 2009). Agencies that implement electronic supervision technologies without fully thinking through an overall strategy of supervision that focuses on responding to recidivism risks and altering criminogenic needs will not see an improvement in offender outcomes. Third, using these tools comes with several obstacles that require clear policy development prior to implementation and policy revisions as they are being used. In the next section of this report, there is a brief description of two types of electronic supervision tools that are being used in Colorado.<sup>1</sup>

## **Part 1:**

### **Electronic Monitoring and GPS: Become Part of Community Supervision**

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<sup>1</sup> Colorado's Division of Parole also uses transdermal alcohol detection devices, but review of those technologies was outside the scope of this technical assistance and will not be discussed in this report.

Before describing the evidence measuring the relationship between electronic supervision tools and offender outcomes, there is a brief introduction to the development and capabilities of the two predominant types of technologies used by CDOC. There is a lot of confusion around what electronic supervision tools can achieve, and how they work. This confusion potentially leads to an uninformed public and weak guidance for policymakers. First, there are numerous types of electronic supervision tools. Second, each of these tools is intended to serve specific purposes. Third, agencies should identify their needs before adopting any electronic tools into their supervision process.

The development of such tools dates back to the mid-1960s when two Harvard psychologists began experimenting with tracking systems to monitor the whereabouts of parolees, mentally ill patients, and research volunteers in Cambridge and Boston, Massachusetts (Schwitzgebel, Schwitzgebel, Pahnke, and Hurd, 1964, p. 237, as cited by Gable, 1986, p. 167). Then, in 1983, a District Judge in Albuquerque, New Mexico, introduced the first house arrest program by using radio-frequency electronic monitoring devices. Throughout the 1980s and 1990s, several probation and parole departments began adopting similar house arrest and curfew monitoring programs across the country (Gowan, 2000). These devices have, traditionally, been referred to as electronic monitoring devices, and they can only determine whether a person is within the proximity to a radio-frequency receiver installed in the offender's home.

This is a non-technical description of these devices. Offenders are fitted with a tamper-resistant anklet that transmits a radio-frequency signal, and the offender's house is fitted with a receiver that detects the distinct radio-frequency signal from the anklet-transmitter. The anklet and the receiver create a radio-frequency link or connection when the anklet and the receiver are within a certain distance from one another. Receivers can detect transmitter signals from a range of up to, and in some cases exceeding, 150 feet (80 meters) when installed in a typical home environment. The range on some systems can be programmed for individual offenders from as little as 35 feet (12 meters) to more than 500 feet (170 meters), depending on the type of equipment used.

The radio-frequency receiver sends reports of times when the frequency signal is connected between the transmitter and the anklet and when this signal is breached, or if there is a strap tamper or battery issue. The receiver detects the transmitter's signals and conveys a message via telephone that is reported to a central monitoring computer. Officers can review the pattern of connections and breaches and determine whether an offender is in compliance with his/her conditions of supervision. More is said below, but in Colorado these systems are observed by an external provider, Protocol,<sup>2</sup> that monitors the radio-frequency devices in real-time and contacts both offenders and officers to notify of any alerts.

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<sup>2</sup> Protocol is a subsidiary of APAC Customer Services ([www.apaccustomerservices.com](http://www.apaccustomerservices.com)) that provides 24-hour 7-day per week monitoring of the electronic monitoring and GPS equipment in Colorado and several other states. They communicate with offenders and officers by phone, email, and log data directly into the Colorado Web-Based Integrated Support Environment (C-WISE).

There have been numerous adaptations to these electronic monitoring systems, but officers realized that these devices only told them when an offender was at home. They did not provide information about an offender's whereabouts throughout the day. Therefore, location tracking with global position satellites (GPS) has become a popular form of electronic supervision over the past 15 years. GPS tracking combines the radio-frequency technology described above with GPS technology included in many common devices today (namely, cellular phones and car navigation systems) by using the 24 GPS satellites that orbit the Earth and are maintained by the U.S. Department of Defense.

Brown, McCabe, and Wellford (2007) provide a thorough discussion of GPS technology for the community corrections field, and the description here is a shortened adaptation. GPS vendors have developed location tracking GPS receivers that store location data, transmit such data, have a rechargeable battery, and include radio-frequency technology to ensure that the GPS receiver is with the offender. The offender is fitted with an anklet that detects a radio-frequency signal from a transmitter installed in the offender's home. More recently, GPS receivers use cellular phone technology to transmit location data in near-real time (i.e., active reporting), otherwise the location information is transmitted when the receiver is connected to the charging station installed in an offender's home. The receiver records location information on a predetermined time, and agencies can set this up as they wish. Location data can be collected by the second or every several minutes.

### **Electronic Supervision: Anticipating the Unanticipated**

Policymakers and administrators have the challenging task of identifying and implementing new practices. Often, these new practices are instituted following long thoughtful consideration of the implications, expectations, and costs of such new practices. Unfortunately, however, all potentially negative consequences cannot be foreseen before putting new practices into force. In fact, there is a large body of social policy scholarship pointing to unanticipated negative consequences to policy decisions (e.g., McCord, 2003; Merton, 1936; Roots, 2004). DeMichele, Payne, and Button (2008) demonstrated the potential unanticipated negative consequences of electronic supervision legislation for sex offenders in the community, and other researchers have shown numerous unanticipated problems related to using electronic technologies in the community. This discussion should be prefaced by saying that these problems, negative consequences, and obstacles are not insurmountable. Rather, several of these challenges have been discussed in the electronic supervision technology literature for several years now, and agencies have the responsibility to make themselves aware of these challenges prior to implementing technologies, as well as analyze their own practices following implementation to ensure that they are operating as desired.

#### Equipment Failure

Agencies should be prepared to spend a significant amount of time addressing issues related to equipment failure. Equipment failure is defined by Brown et al. (2007, p. 2-35) as the inability of the technology to function as intended. Failure can occur out-of-the box upon initial receipt or in the field while the equipment is in use. In an evaluation by the Tennessee Board of Probation and Parole (2007) one officer reported that:

“the main problem I have with GPS is the hardware. If an offender’s PTU [personal tracking unit] is not working properly, I have to change out the PTU. It is time consuming. It can take up to one hour to hook an offender to a PTU. Many times the new PTU is not working properly, so I have to start the process all over again. This interferes with my schedule of offenders I have to see, paperwork, warrants, violations, court, home checks, etc.” (Tennessee Board of Probation and Parole, 2007, p. 34).

Simply, electronic monitoring and GPS devices have the potential to create a host of issues that were not pre-planned, such as officers spending a lot of time handling malfunctioning equipment. DeMichele and Payne (2008) suggested that agencies should consider the potential for various problems when developing RFPs, contracts, and any agreements with vendors. Further, they suggest that agencies should require that vendors provide equipment troubleshooting training as part of their contracts. Such training will provide agencies with in-house expertise as well as inform officers more generally about how the equipment works.

#### Alerts, Violations, and Notifications

Another issue to consider is how officers will respond to alerts. An important point is that not all alerts result in violations. Rather, an alert is a notification that something out of the ordinary has been detected (Tennessee Board of Probation and Parole, 2007). The response protocol for alerts may vary across agencies depending on the nature of the alert. The Tennessee Board of Probation and Parole (2007) detail an evaluation of their GPS system and review how their alert process works. First, many alerts are what are referred to as “self-clear,” meaning that the alerts are resolved by the offender’s behavior or slight adjustments made to the device. An example is if an offender enters their home (i.e., inclusion zone) a few minutes before they are scheduled to do so, this could send a location alert, but the alert would self-clear as the correct time approached. This is an example of an alert that is not a violation, but neither is it a false alert. The technology is functioning exactly as programmed.

These alerts are transmitted in the following steps. First, a central reporting center recognizes that something is out of the ordinary (i.e., not an allowable programmed action). Second, the central monitoring system reviews the alert to determine if it will self-clear. If the self-clear does not take place, the offender and the officer are contacted. These steps have some variability across states depending on agency needs and vendor capabilities. Nonetheless, an important point here is that all alerts are to be investigated (Tennessee Board of Probation and Parole, 2007, p. 17).

Prior evaluations suggest that agencies should decide beforehand how they will respond to alerts. For instance, if agencies lack the ability to offer immediate response to all violations, then they should develop a continuum or hierarchy of alerts and prioritize these according to level of risk or other agency goals. Additionally, community corrections agencies should establish multi-agency partnerships that include law enforcement to determine how law enforcement might be able to contribute to responses to violations. Previous research shows that agencies need to develop policies and training around specific response protocols, especially since the bulk of alerts may be considered a low priority. For instance, some common lower level alerts include: low battery warnings, power loss, cuff low battery, and phone connect landline failure. Other alerts may suggest that the offender is intentionally tampering with the equipment, such as: cuff strap tamper, battery tamper, GPS tamper, and prolonged submersion in water.

Monitoring programs can be customized to provide alert and violation information in a variety of ways for an agency that can be individualized for particular offenders. DeMichele and Payne (2008) suggest that agencies should work with vendors to establish response protocols that include identifying how the offender and officer will be notified, the frequency of such notifications, and protocols for alerting staff when the immediate supervising officer is unreachable. DeMichele and Payne (2008) state that:

“It is difficult to suggest exactly how agencies should plan for their officers to respond to alerts, violations, and equipment failures. What is easy to suggest is that agencies prepare for an assortment of issues to emerge that will require training, patience, and preplanning.”

This discussion was intended to provide a brief introduction to electronic monitoring and GPS for community supervision. Space does not allow for a thorough review of many of the details involved in electronic supervision (for full treatment, see Brown et al., 2007; DeMichele and Payne, 2009; Tennessee Board of Probation and Parole, 2007). The next section of this report will review how electronic monitoring and GPS are administered in Colorado.

## **Part 2:**

### **Electronic Monitoring Effectiveness: Research Brief**

As evidence-based practice philosophies have moved into the community corrections field, there has been a greater attempt to ensure that practices, programs, and technologies are related to desired goals and outcomes. There is mixed support for electronic supervision tools being associated with improved offender outcomes. For instance, in a meta-analysis including 140 studies with six studies about electronic supervision tools (n = 1,414), Gendreau, Goggin, Cullen, and Andrews (2000) found nearly identical recidivism rates for offenders supervised

with electronic tools and a comparison group. They did find a 10 percent reduction in recidivism when cognitive-behavioral programs were included in the supervision plan.<sup>3</sup> Bonta, Wallace-Caprett, and Rooney (2000) found that medium and high risk offenders that completed treatment had lower recidivism rates, with no treatment effects for low risk offenders. Offenders on electronic supervision had significantly higher treatment completion rates.

The above studies suggest that electronic supervision may be an effective component to a supervision plan. Finn and Muirhead-Steves (2002) compared a sample of violent male parolees (n = 128) in Georgia over three time periods with an historical sample of similar offenders (n = 158). They defined failure as whether an offender returned to prison and time to return within four years of release. Failure rates were identical after 150 days, after one year the comparison (9.5 percent) was significantly higher than the electronic supervision group (3 percent), but after three years about 23.4 percent of each group had been returned to prison. The authors suggest that violent male parolees' failure rates are lower during the period of time in which electronic technologies are utilized, but failure rates are identical once the technologies are no longer utilized (through three years).

Padgett, Bales, and Blomberg (2006) recently completed research into electronic supervision using more than 75,000 offenders under house arrest in Florida. They found offenders monitored with either radio-frequency or GPS had significantly lower rates of revocations for technical violations or new crimes as well as lower absconding rates. Offenders on GPS had significantly higher failure rates when compared to those monitored with radio-frequency devices. More recently, Bales, Mann, Blomberg et al. (2010) conducted a follow-up study in which they used quantitative analysis of medium and high risk offenders (n = 5,034) on electronic supervision and offenders (n = 266,991) not placed on electronic supervision over six years. Face-to-face interviews were completed with 105 offenders, 36 supervising officers, and 20 administrators. Using Cox regression analysis, Bales et al. (2010) found a 31 percent reduction in an offender being revoked or absconding when using GPS or radio-frequency technologies, and the GPS offenders had a six percent greater reduction in absconding and revocations compared to those on radio-frequency monitoring. The interviews revealed that administrators view electronic supervision as a way to ensure compliance through tracking offenders and offenders and officers associate the equipment with fewer absconding, violations, and reoffending.

The research described above suggests that there may be some potential for reducing negative outcomes during the period of time when electronic supervision technologies are utilized. This research also suggests greater effects when these devices are integrated within an overall behavioral modification strategy.

### **Part 3:**

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<sup>3</sup> The authors do not indicate the specific definition of recidivism across the six studies measuring offender outcomes while on electronic supervision.

## **CDOC Electronic Monitoring and GPS**

This section of the report includes a detailed discussion of the use of radio-frequency electronic monitoring and GPS in Colorado. The forthcoming discussion and the scope of this technical assistance are to review electronic monitoring and GPS for parolees. This discussion includes details about the procurement process for equipment vendors and monitoring agency service contracts, protocols and training requirements related to the equipment, decision-making regarding appropriate technology for offenders, and responses to alerts and notifications.

### *Procurement Process*

Using electronic supervision tools requires a procurement process. Colorado has used electronic supervision tools for nearly 25 years,<sup>4</sup> and they now contract with two companies: the equipment vendor is BI<sup>5</sup> and the reporting center operator is Protocol. Originally, BI was the sole provider to Colorado for electronic supervision services. They provided the equipment and were the central reporting system for more than 20 years. Then, CDOC decided to investigate alternative providers, and released a new request for proposals (RFP). In 2009, BI lost the contract with CDOC to Rocky Mountain Offender Management Services (RMOMS)<sup>6</sup>, but CDOC was unsatisfied with RMOMS, and they released another RFP. BI, in 2012, was awarded two new contracts with CDOC: one to provide transdermal alcohol monitoring equipment and a second contract to provide the radio-frequency and GPS devices.

The reporting and monitoring are administered by Protocol. They are operating on their second contract with CDOC, both of which were sole source contracts due to lack of competition for their services. Protocol completed a five-year contract, and now is in the second year of another five-year contract.

### *Electronic Supervision: BI and Protocol*

Protocol and BI cooperate on reporting electronic supervision data. BI is only contracted to provide equipment, and as part of this service all data flows through BI to Protocol. BI operates a web-based data management system, Total Access, that is set-up with an automatic data push to Protocol that integrates the information to CWISE according to pre-established parameters. In Colorado, it is set-up that Protocol will pull electronic supervision data from Total Access every five minutes. BI records a data point per minute downloaded per hour, and these data points and any alerts are retrieved by Protocol (automatically) and updated to CWISE every five minutes, per their contracts with CDOC. These systems are fully integrated

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<sup>4</sup> This is an approximate length of time. The specific date that electronic supervision started in Colorado is unknown.

<sup>5</sup> <http://bi.com/>

<sup>6</sup> <http://www.rmoms.net/>

and appear seamless to the officers and offenders using any of the electronic supervision equipment.

All offenders are fitted with a BI anklet by BI staff. Once fitted with the anklet and entered into the Total Access system, their information is relayed to Protocol and entered into CWISE.

#### How are Decisions about RF and GPS Made?

CDOC prioritizes location tracking for individuals convicted for sex crimes. Therefore, GPS monitoring is typically reserved for sex offenders. There are fewer GPS units available, they are more expensive, and they require more officer time to operate. Most non-sex offenders placed on electronic supervision receive radio-frequency house arrest conditions. Decisions to place an offender on radio-frequency or GPS is left to officer discretion.

The parolees leaving correctional facilities are released to the community either after serving their entire sentence (mandatory release) or released early (discretionary release). In either situation, the parole board can recommend intensive supervision with electronic supervision for 180 days or at the supervising officer's discretion.<sup>7</sup> Officers have discretion to leave parolees on electronic supervision for the full 180 days, or they can use these days as a way to incentivize parolees for good behavior by reducing the number of days on electronic supervision for good behavior.

#### Alerts, Violations, and Notification Procedures

There are specific processes in place for alert notifications. All data is first received through BI's Total Access system, and it is automatically "pushed" to Protocol. Once Protocol receives alert notifications, they are to follow specific procedures detailed in a series of CDOC policy and procedure documents: Alert Handling Notifications, Alert Notifications, Tamper Procedures, and Handling Procedures. The Alert Notifications and Handling Procedures provide instructions to Protocol staff about how frequently they are to contact offenders once an alert has been generated, how frequently they are to contact officers, and whether the contacts are to escalate<sup>8</sup> (i.e., move up the chain of command to a supervisor or other parole officer) if the supervising officer is not reached following an alert in which there is a lack of confirmation that the offender is at home or there is an equipment issue.

Initially offenders are placed on an unauthorized leave list (UNL) and Protocol staff will work to clear offenders from this list by reviewing the issue every 30-60 minutes (Handling Procedures; email communication with Henry Conforti, July 9, 2013). This review includes notification to officers that the alert has occurred and placing outbound calls to the offenders on the list to

<sup>7</sup> Offenders convicted for a sex offense typically will be on electronic supervision for longer periods of time.

<sup>8</sup> Only sex offender cases and those on GPS are to escalate when an officer is not reached (see Alert Notification).

resolve the violation. If Protocol operators contact the offender and establish that the notification still needs to be investigated by the officer, the offender is moved to the Client Confirmed In (CCI) list. This moves the alert to a lower level, but the offender remains on this list until the violation is cleared within the equipment vendor's software or the equipment is repaired. While on the CCI list, offenders and officers are to be contacted once per shift (i.e., three times daily) until they reach the officer or it is verified that the offender has contacted the officer.

Protocol is in charge of handling all data reporting, contacting, and refreshing of the CWISE database related to electronic supervision issues. Alerts are reported by Protocol to officers through email and telephone contact with offenders and officers until clearing the alert. All alert notifications must result in a verbal or email response from an officer before Protocol has fulfilled their obligation.

Many staff had not been trained on the types of alerts nor are they trained on response protocols. Staff is not trained on specific response protocols, nor are they trained on the specific definitions or different types of alerts. There is no training informing officers of what to expect from Protocol and how to interact with this service when responding to alert notifications. This issue is further discussed later in this report.

#### **Part 4:**

#### **Best Practices: Electronic Supervision for Community Corrections Agencies**

Up to this point, this report has described the development of electronic supervision, research findings related to offender outcomes, and outlined Colorado's administration of electronic supervision. In this section, best practices for using electronic supervision technologies will be reviewed. This discussion is adapted from DeMichele and Payne's (2009) *Electronic Supervision: A User's Guide*.<sup>9</sup>

For most people that have worked in or around the community corrections field, the notion of best practices is a common phrase. It is used here to refer to a general set of guidelines, ideas, and basic direction for agencies using electronic supervision technologies. Best practices typically identify the most efficient and effective ways for achieving organizational goals – in this case, using electronic supervision to monitor offenders in the community. What is said in this section is not meant to be exhaustive or definitive, but rather is proscriptive and suggestive. These ideas are generated from review of the research around electronic supervision as well as experiences working with community corrections staff in this area. This

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<sup>9</sup> This monograph was supported by the Department of Justice and can be download for free on the American Probation and Parole Association's webpage. [http://www.appa-net.org/eweb/Dynamicpage.aspx?webcode=IV\\_ProjectDetail&wps\\_key=6f28bf88-aa1b-42f6-9cb1-74ac41f83ec5](http://www.appa-net.org/eweb/Dynamicpage.aspx?webcode=IV_ProjectDetail&wps_key=6f28bf88-aa1b-42f6-9cb1-74ac41f83ec5)

discussion will focus on the importance of clearly defining the purposes, goals, and expectations for using electronic supervision technologies.

Best Practice #1: Integrate electronic supervision component purposes with the agency's values, vision, and mission.

As the research above makes clear, electronic monitoring on its own is unlikely to bring about long-term behavioral modification (Bonta et al., 2000; Gendreau et al., 2000; Bales et al., 2010). But, when used appropriately and in conjunction with other interventions demonstrated to be effective in changing offender behavior, they can be effectively integrated to support the achievement of an agency's mission.

Best Practice #2: Delineate a clear statement of the purpose(s) for offender supervision with electronic technologies as the fulcrum upon which the rest of the program component development processes rely.

This will require clearly defining the purpose(s) for using electronic technologies. Agencies are more likely to have effective electronic supervision tools if they have clearly articulated purpose statements.

Many organizational scholars and advisors suggest developing mission and purpose statements to move an organization along an efficient path to achieve the desired results. This statement can be a simple narrative of only a few sentences or several paragraphs that includes more detailed information.

To paraphrase Crowe & Schaefer (1992), a purpose statement needs to outline:

- The procurement and implementation of electronic supervision components
- Summarize the staffing, funding, and operation of electronic supervision components
- Identify the roles/individuals responsible for various elements of the electronic supervision components
- Specify how different roles/individuals will work together to reach the agency's mission with the electronic components
- Identify external stakeholders and how collaborations will be established to reach goals

DeMichele and Payne (2009) (as well as other researchers) have identified a set of purposes for electronic supervision components for community supervision. Below are a few potential purposes that serve as a framework for agencies either currently using, or considering implementation, of electronic supervision components.

- Public safety

- Victim safety
- Offender accountability
- Jail and prison population reduction
- Treatment compliance

Best Practice #3: Develop clear goals to bring the mission and purposes into focus and reduce them to manageable, achievable components.

After detailing purpose(s) for electronic supervision components, agencies need to identify their specific goals. One can think of the purpose statement as laying out the destination, whereas the goals articulate a road map to get to this destination. Goals translate the intentions of the agency mission and program purpose into organizational activities.

Below are the three elements of a possible goal statement:

1. Detail what will be accomplished as a result of the electronic supervision component
2. Specify how these things will be done
3. Identify a time frame for achieving the desired result

For example, agencies could have a goal of reducing gang-affiliated offender new arrests for violence over the next three years. This will be accomplished, for instance, by integrating GPS technologies into an overall cognitive-behavioral approach designed to reduce criminal thinking and antisocial values. In a jurisdiction with several gang-affiliated offenders fitted with GPS, stay away parameters could be included to notify offenders if gang-affiliated members wearing GPS are associating. This simple example provides some detail of what is hoped for with the electronic component – i.e., contributing to reduce gang violence – as part of an assortment of specific practices designed to bring about long-term behavioral change. And, lastly, there is a definitive time frame included to put a deadline for when results are to be achieved.

A central point here is that electronic supervision goals should not be in conflict with broader agency missions and values, nor can there be multiple goals for the electronic monitoring components that conflict with one another. For example, if a program has goals to hold offenders accountable (or to punish offenders) for technical violations, and it also hopes to reduce recidivism rates<sup>10</sup>, then the two goals may be at cross purposes. Electronic supervision tools are likely to identify more technical violations than traditional supervision, and thus may increase recidivism rates. Here, these best practices are to identify realistic goals that fit the agency's needs as well as the technological capabilities of the equipment.

Best Practice #4: Define policies on various aspects of the use of electronic supervision.

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<sup>10</sup> As defined by revocation from supervision.

Similar to defining mission and purpose statements, agencies need to articulate a series of policies on electronic supervision. Policy and procedures detail the general course of action for a program and its components, tell staff specifically how things are to be done, and frame staff decision making. Procedures provide the specific “how-to” for implementing and operating a program and its components.

When operating an electronic supervision program component, it is important to have all policies and procedures written clearly and followed by all involved staff. These policies and procedures are the result of pre-planning and thinking about how staff should make decisions regarding selecting between equipment, responding to alerts and notification, interacting with vendors and the central reporting center, among other considerations. Crowe and Schaefer (1992) suggest that clear policies reduce uncertainty among staff, protect the agency and staff from potential legal liability, and define staff roles and responsibilities.

Crowe and Schaefer (1992) go further to provide some important features to consider when developing policies (found in DeMichele and Payne, 2009: 85-86):

- The program and component purpose.
- The legal authority and limitations of the program.
- The offenders who will be included in the program.
- The specific procedures that will be used.
- Staff duties and responsibilities.
- Selection and procurement of equipment and services.
- Operational costs and funding.
- How offender compliance or noncompliance will be addressed.
- Roles and relationships with other agencies/organizations (e.g., treatment providers, vendors, equipment manufacturers).
- Documentation and program evaluation.
- Dissemination of information and public relations.

Best Practice # 5: Provide clear rules regarding the enrollment and selection process to establish definitive criteria for inclusion in the electronic supervision components.

Staff decisions about which offenders are appropriate for electronic supervision or which type of equipment should be used, should be structured by clearly articulated rules. These rules should ensure that equipment is administered in a way that fits the agency’s funding capabilities, goals and expectations for using electronic supervision. DeMichele and Payne (2009: 166) provide a few issues to consider when detailing the enrollment and selection process. They suggest discussing several issues with offenders and involved household members:

- Establish rules for the offender and family/household members to sign.

- Delineate process for setting the offender’s schedule and processing changes.
- Determine how and when visual inspections and unannounced home visits will occur.
- Establish requirements for responding to compliance and noncompliance.
- Establish requirements and protocols for notifying victims.

**Part 5:**

**Recommendations for CDOC**

In the previous section, five general best practices were suggested for community corrections agencies using electronic supervision. In this final section, policy recommendations are offered to CDOC based upon the interviews conducted with CDOC staff and others, and a review of CDOC electronic supervision related policies and procedures.

**Recommendation #1: Define why electronic supervision is being used**

Based upon interviews with CDOC staff and a review of CDOC policies and procedures, CDOC appears to lack clarity regarding the intended use of electronic technologies. Before anything else can be achieved with electronic supervision in Colorado, the organization<sup>11</sup> should determine why it is using electronic supervision. This should be done as a collective, not simply top-down. All levels of staff should be brought together to discuss why electronic supervision is being used in Colorado. This sort of discussion could address the following types of questions:

- What are realistic expectations for electronic supervision?
- How will electronic supervision impact workload?
- What offenders should be on electronic supervision?
- How should equipment selection be made?
- How long should offenders be on electronic supervision?

Obviously, this is not an exhaustive list, but rather, before CDOC can move to accomplish the more refined and targeted recommendations to follow, they must, first, conduct some serious thinking about why electronic supervision technologies are being used. Simply, these tools are expensive, they are time-consuming, and they are limited in what they can accomplish, and without clear understanding of why they are being used very little will be accomplished with these tools.

Further, this sort of organizational “soul searching,” if you will, should be highly nuanced to identify why certain tools are being used with certain types of offenders. For instance, the use of GPS with sex offenders may have a certain purpose, whereas the use of GPS for domestic violence offenders might have an entirely different purpose. Electronic supervision

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<sup>11</sup> The use of the term organization here is not intended to reify a non-human entity. Rather, it is meant to signify a group of people that operate within a shared set of rules and meanings.

technologies will be most effective if they are integrated with an overall agency mission and incorporated into a strategic web of practices, tasks, and actions that focus on reaching that mission. CDOC should consider specifying why they are investing resources and energy into electronic supervision.

Recommendation #2: Identify specific roles and tasks for staff to move CDOC toward reaching the “why” of electronic supervision.

If the first thing CDOC needs to do is identify the “why” of electronic supervision, then, the second thing CDOC needs to do is identify the how and what.

- How will the things staff do each day advance this goal?
- How will staff work together to reach this goal?
- How will staff not perform redundant activities, but complement each other?
- How will staff respond to alerts?
- How can the central monitoring agency be used in a more effective manner?
- How can electronic supervision be used to improve offender outcomes?
- How will management ensure that officer workload related to electronic supervision will be ethical and effective?

These are just a few specific questions that CDOC needs to address to make electronic supervision more effective.

Recommendation # 3: Develop policies and procedures that stipulate direct oversight and contact with the central monitoring center.

A significant component of electronic supervision missing from CDOC is oversight of the central monitoring center. Currently, in Colorado, Protocol is handling the monitoring and reporting of electronic supervision data. Line staff appears to work with operators from Protocol, but there does not appear to be any oversight of this service to ensure that they are meeting all contractual obligations. Supervisory level staff should at a minimum:

- Conduct routine reviews of the central monitoring agency
- Interview parole officers to understand how the central monitoring agency is doing
- Review sample case logs to determine if the appropriate response protocols are met
- Determine if the definition of alerts and violations is too broad or narrow
- Implement contractual obligations for any monitoring agency to comply with evaluations

#### Recommendation # 4: Review equipment vendor services

Similarly, CDOC should conduct reviews of the equipment vendor. Indications are that CDOC has been doing this as they have changed vendors over the years and, most recently, selected BI as their contractor through a competitive bidding process. Nevertheless, routine competitive bidding processes are a way to ensure best pricing and competitive services

The Protocol contract was established through a sole-source agreement.

#### Recommendation # 5: Develop nuanced response protocols.

Responding to alerts is one of the most time consuming and important aspects of electronic supervision, yet a review of CDOC policies and procedures reveals that few procedures regarding responding to alerts have been developed. The need for response protocols cannot be over stated. Response protocols must at least spell out:

- A hierarchy of alerts
- Appropriate response based upon this hierarchy
- Detailed timelines for responses
- Back-up and escalation plans
- Potential collaboration with law enforcement
- Handling multiple alerts simultaneously
- Define victim notification responsibilities

Developing a hierarchy of alerts means that CDOC, along with both the equipment and central monitoring vendors, need to identify a list of alerts that clearly identify the differences between issues that are most likely to be related to equipment (including all installation and fitting issues) and those that may be indicators of tampering and removal of the device. For instance, strap tampers – if not associated with a recent installation – often means the offender is trying to manipulate the strap with potential plans of fleeing. These alerts, then, should be treated with the highest level of priority. It is beyond the scope of this technical assistance to lay out a clear matrix of alert seriousness. Instead, this needs to be developed through a collaborative process between staff and vendors.

Once alerts are rated according to seriousness, response protocols should be established according to this criterion. These protocols should address minimum and maximum response times, how to clear alerts initially, what to do when alerts cannot be cleared as a result of an inability to reach an offender or officer, and protocols for escalating responses under these circumstances. These types of issues need to be considered according to the type of alert and the defined level of seriousness associated with each alert. As indicated previously, these policies should be developed collaboratively by staff and vendors.

Generally speaking, with the exception of sex offenders, CDOC's current policies lack escalation protocols. As described earlier, escalation protocols define response procedures when alerts cannot be cleared quickly. For instance, in the case of sex offenders and GPS supervision, CDOC escalates responses to a supervisor when the supervising officer cannot be reached. Similar escalation protocols are not in place for non-sex offenders. It is recommended that CDOC revisit this policy to include comprehensive escalation plans for all types of offenders. Protocols do not necessarily have to include escalation to a supervisor (although they may); alternative escalation agreements could be developed that include other staff.

There are times when officers will receive multiple alerts simultaneously. How are officers to decide which offender to address first? Currently, there is not direction on the decision making criteria for such an issue. It is recommended that CDOC define decision making procedures for staff in such cases. This would include utilizing the alert matrix to prioritize alerts by seriousness, and to have escalation and back-up plans in place to address multiple alerts at the same time.

Recommendation # 6: Establish partnerships with other law enforcement agencies to assist with responding to alerts.

CDOC should draw support from other law enforcement agencies in a systematic way in responding to alert notifications. Currently, parole officers can request other law enforcement support, but this resource appears to be used minimally and on an ad hoc basis. Instead, CDOC should engage other law enforcement in discussions to determine their level of interest and ability to respond to alerts. This will allow them to contribute to a systematic 24-hour response team.<sup>12</sup>

Recommendation # 7: Develop, deliver, and refresh training.

As indicated previously, CDOC staff have received very limited training with regard to electronic technologies. Heretofore, training has been limited to a briefing on the equipment itself. It is recommended that a comprehensive training schedule be developed for all staff involved in making decisions about, or working with, offenders who are placed on electronic supervision. This training should include topics such as the purposes and goals of electronic supervision, how electronic supervision advances the department's mission, and the alert protocols and response matrix (see DeMichele and Payne, 2009: Chapter 9 and table 9a for additional training information and detail).

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<sup>12</sup> For those interested in additional information establishing police-probation partnerships, see Adam Matz' work around PSN at the American Probation and Parole Association. <https://www.appa-net.org/psn/care.html>

Recommendation # 8: Conduct routine process and outcome evaluations.

CDOC should consider incorporating regular research on their use of electronic supervision. This could involve an external or internal researcher to determine if CDOC goals are being reached.

**Conclusion**

Community supervision is challenging. Historically, research suggested mixed support for electronic supervision as a way to improve offender outcomes. More recently, two large research studies lend support to electronic supervision contributing to reductions in various measures of failure. This is not to suggest that electronic supervision tools are a panacea . Electronic supervision tools can enhance officer knowledge of offender behavior and provide offenders with a stronger sense of surveillance. The potential advantages stemming from electronic supervision technologies require many agency decisions about officer workload, alert verification, and response protocols, to name a few. This report provides a set of recommendations to assist CDOC to obtain their objective of public safety when incorporating electronic supervision tools.

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