OFFENDER SUPERVISION WITH ELECTRONIC TECHNOLOGY

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FOREWORD

PROJECT OVERVIEW

In May 1999, the American Probation and Parole Association (APPA) was awarded a grant from the National Institute of Justice (NIJ) to assist manufacturers, service providers, and product and service users in the field of electronic technology to enhance their use of technology for effective community-based supervision of offenders through research, education, and training. The primary objective of the project was to develop and deliver an information package for users of electronic supervision tools. A 21-member Working Group[1], comprised of equipment manufacturers, electronic supervision services providers, and representatives of programs using electronic supervision technologies, was formed to assist project staff in the development of this document. The Working Group met twice for one and one-half day sessions to deliberate the contents of this document and to discuss other initiatives such as testing procedures for electronic supervision equipment. Further, the members of the Working Group contributed materials and considerations for inclusion in the document and met periodically in conjunction with APPA's training institutes to review materials and assist project staff with the preparation of the document. The document was written by APPA staff members and reviewed by Working Group members.

OBJECTIVES OF THIS DOCUMENT

This document is designed to help readers understand and appreciate the process needed to incorporate and implement electronic supervision strategies within justice system programs. It was developed for agency staff who want either to introduce electronic supervision as a new program component or enhance the use of electronic supervision that has already been implemented. The document is divided into five sections, and by reading each of these sequentially, the steps for developing or enhancing electronic supervision strategies will be apparent. However, sections or chapters may be read independently if program staff need additional information about a particular topic. After reading this document, justice system professionals will be able to:

- Conduct preliminary assessment and planning tasks necessary for developing an electronic supervision program component.
- Explore and acquire needed resources for electronic supervision.
- Make technical decisions about the equipment and services needed and undertake the procurement process.
- Design effective offender supervision strategies using electronic technologies.
- Engage in program accountability tasks.

[1] Please see the Acknowledgments page of this document for a list of the members of the Working Group.

Chapter 1
AN OVERVIEW OF SUPERVISION WITH ELECTRONIC TECHNOLOGY

Electronic supervision of offenders evokes a variety of images among people. Some see it as punitive, others as lenient. Some view it as a means to improve supervision, others as a way of saving correctional dollars. Some feel it is best used for offender accountability, while others believe its best use is for treatment compliance and behavioral shaping of unstructured lives. Some are intrigued by the technological tools, but others are baffled by them. This document is designed to assist justice system professionals and other stakeholders in assessing the potential use of electronic supervision technologies, and if they determine these are appropriate for their needs, to implement these technologies as an effective part of their overall approach to implementing justice system programs.

This chapter first describes some foundation elements, terminology, and principles that guided the development of the document. A brief discussion of the evolution of electronic supervision follows. Finally, this chapter introduces some of the issues and questions surrounding the implementation of electronic supervision and provides examples of its use in a variety of programs for criminal defendants and offenders who are being supervised in the community. It sets the stage for an indepth discussion of electronic supervision in the remainder of this document.

THE FOUNDATION OF THIS DOCUMENT

For the purposes of this document, the term electronic supervision technologies refers to an array of processes employing several technological innovations that provide information to achieve a variety of purposes in offender supervision. Reporting kiosks, remote substance use detection devices, ignition interlock systems, identity verification systems, and monitoring equipment to detect offenders' compliance with restrictions or track their locations are among the variety of electronic technologies considered in this document. Besides this extensive assortment of technologies, within each type, various features may be found.

Terminology

A range of terminology is presently used when discussing electronic supervision. One of the most frequently used terms is electronic monitoring, which generally is associated with technologies that determine whether an offender is at home (or other locations) as stipulated by his or her conditions of supervision. It also may refer to location tracking technology in which offenders' locations in real time can be tracked. However, in this document, the broader term, electronic supervision, is used to include a larger array of technologies that assist with the supervision of offenders in other ways, particularly those that can monitor alcohol use remotely and technologies that streamline routine reporting tasks for both offenders and agency staff. Although electronic supervision is used primarily in this document, it also is interchangeable with the term electronic monitoring.

Another set of terms that are frequently used when discussing electronic supervision include home detention, house arrest, and home confinement. Infrequently do programs using electronic monitoring require that defendants or offenders remain confined within their homes, while full custody of the individual often is the case under arrest and detention conditions. Rather, in most cases, electronically supervised offenders must abide by curfews and must be within their homes except for approved activities such as work or school and medical or treatment appointments. In this document, program procedures requiring defendants and offenders to observe curfews and restricting their freedom to leave their homes are referred to as home monitoring or curfew monitoring.

Principles Guiding This Document

Three overarching principles of electronic supervision have guided the development of this document:

- Electronic supervision technologies provide a tool to gather information that enhances supervision. Electronic supervision technologies — in and of themselves — do not constitute a program within the justice system; they are merely one mechanism that can enhance the effectiveness of a program.
- Although there are several purposes for which electronic supervision technologies may be used, an overriding consideration in the employment of such devices should be public safety. Therefore, the careful selection of program goals and defendants or offenders with

whom to use these tools is among the most important decisions to be made.

- The needs of the justice system should mold the electronic supervision industry. Too frequently a tool has been created and a need for it has been found. Instead, the justice system should define its needs and convey how electronic supervision equipment and services should be employed to meet these needs.

While this document attempts to be as inclusive and general as possible to promote the potential use of an array of supervision technologies, it generally focuses on the use of electronic supervision among adult defendants and offenders. Although much of the information would also apply to juveniles, some differences are apparent, especially the fact that juveniles usually are dependent and live with their parents; thus, greater family involvement is required to implement electronic supervision successfully.

Electronic supervision technologies provide a tool to gather information that enhances supervision.

This document is based on "best practices" that currently can be found among a variety of justice system programs. One of the difficulties that has been encountered throughout the preparation of the document is the lack of evaluative data on the implementation of electronic supervision technologies. Few evaluation studies have been completed, and in many cases where these have been conducted, the samples are very small or there are other methodological problems that limit their usefulness. Therefore, agencies that are developing or enhancing a program that includes electronic supervision are encouraged to include an evaluation component from the beginning. It is crucial that more evaluation data be gathered and analyzed to fully understand the significance of electronic supervision technologies and to assist in molding more effective implementation efforts in the future.

THE EVOLUTION OF ELECTRONIC SUPERVISION

Electronic supervision of criminal justice defendants and offenders is not a new idea. The first use of electronic technology for this purpose was recorded in 1964. An experimental system was used to monitor the whereabouts of parolees, mentally ill patients, and research volunteers in Cambridge and Boston, Massachusetts. The participants in this first endeavor wore what now seems like cumbersome equipment weighing about two pounds. Participants were monitored within a prescribed monitoring area where repeater stations were located. When these repeater stations were activated by a participant's transceiver, the location of the person was recorded on a strip recorder and displayed on a lighted map at the base station (Gable, 1986). The developers of this system said that "when specific offending behaviors can be accurately predicted and/or controlled within the offender's own environment, incarceration will no longer be necessary as a means of controlling behavior and protecting society" (Schwitzgebel, Schwitzgebel, Pahnke, & Hurd, 1964, p. 237, as cited by Gable, 1986, p. 167). Apparently, the originators of the electronic supervision concept and earliest equipment had high expectations for its effectiveness.

The Honorable Jack Love, a District Court Judge from Albuquerque, New Mexico, developed the electronic supervision concept to the next level. In the late 1970s, Love developed the idea of using an offender's telephone to report his or her presence or absence at home. The now familiar combination of a home monitoring unit and a transmitter worn by the offender emerged. In 1983, the first offenders were placed under this form of "house arrest" in Albuquerque (Burks, 1989).

In 1986, the U.S. Parole Commission developed an experimental "Curfew Parole Program" for the early release of some inmates. This program began by using telephone calls and in-person contacts to monitor home curfews of offenders between 9:00 p.m. and 6:00 a.m. However, because of limited resources and concerns about the enforcement of curfews, a pilot study was developed and implemented in 1988 to evaluate the use of electronic equipment to monitor the offenders in the curfew program. The following year the program was expanded to include probationers and pretrial defendants. By 1991, the Federal system was implementing electronic supervision nationally (Gowan, 2000).

Parallel efforts began in State and local jurisdictions in the mid- to late-1980s with enthusiastic anticipation by many justice system professionals. Corbett (1989) reports that the *Wall Street Journal* described electronic supervision as the "hottest new

technology in crime control" (p. 74). He goes on to report the prediction by Bennett (1989) that electronic monitoring would be the "dominant means of probation and parole supervision within the next 20 years" (Bennett, 1989, as cited by Corbett, 1989, p. 74). Corbett further notes that between 1987 and 1988, the use of electronic supervision increased three-fold. Clearly, the early use of electronic supervision technologies was met with enthusiasm and anticipation. Electronic supervision was heralded as a solution for many prevailing problems, including large caseloads, crowded jails and prisons, and the high costs of incarceration and supervision.

Today, the use of electronic supervision appears to be an established component of some programs that supervise criminal defendants and convicted offenders in the community. However, it has not yet proven to be the panacea that early advocates of the technology predicted. Only approximately three percent of the correctional population is currently supervised with electronic technologies.

Paparozzi and Wicklund (1998) prepared an editorial (repeated in part in table 1a) that illustrates the intersection of justice system needs and electronic supervision technology, pointing out some of the events and circumstances that have curtailed the proliferation of electronic supervision. Their discussion sets forth some of the issues that must be addressed for the future success of programs using electronic supervision technologies and, in large part, indicates the deliberations that are undertaken in the remainder of this document.

APPLICATIONS OF ELECTRONIC SUPERVISION

The following examples of electronic supervision illustrate some of the ways in which electronic

Table 1a

ELECTRONIC SUPERVISION TOOLS: LESSONS LEARNED

by Mario Paparozzi and Carl Wicklund

Recent national television broadcasts — on *60 Minutes* and *20/20* — as well as editorials and newspaper articles sensationalized seeming failures of community-based electronic monitoring programs and technologies. Moreover, during last year's legislative session various state policymakers seriously questioned the efficacy of funding and supporting electronic monitoring programs designed to allow community corrections agencies to monitor and track criminals. Community corrections budgets and programs have suffered throughout the years from knee-jerk responses to uninformed journalism. Therefore, it is essential that corrections professionals not allow what is reported in the media to unfairly taint public attitudes about electronic monitoring programs as a whole. It is our responsibility to take a leadership role in shaping the discourse, and hence public opinion, about electronic monitoring programs.

While it is true that there have been incidents, some with tragic consequences, perpetrated by criminals supervised in community-based electronic monitoring programs, it should be remembered that appropriately designed and well implemented electronic monitoring programs result in fewer tragedies. For example, an electronic monitoring program implemented in a northeastern state in the early 1990s reported a re-arrest rate for participants of less than two percent; failure rates for nonelectronically monitored criminals were ten times higher. Nevertheless, the program experienced a tragic event when a program participant committed manslaughter. Negative media attention and confusion regarding the efficacy of the program resulted in termination of the program within six months of the incident. Two years later, after much discussion with key stakeholders regarding the program's purposes and expectations, the program was resurrected. State administrators recognized that residents are safer with properly administered electronic monitoring programs than without them.

It is unfortunate at best, and misleading at worst, that isolated tragedies — not routine successful outcomes associated with electronic monitoring — have fostered skewed media coverage, and consequently myths, that often result in the pursuit of policies that ultimately make us all less safe! Indeed, this kind of media coverage has long been a fact of organizational life for community corrections agencies. Anticipating and addressing misleading press coverage can result in complete stories that link our business to public safety in obvious ways.

Recent publicity of the failings of electronic moni-

toring programs focuses first on the technology and second on program policy. By association, the negative publicity directed at the technology has had adverse consequences for community corrections programs, and negative publicity about programs adversely affects the technology. In fact, analysis of the media coverage reveals that much of the public discontent regarding electronic monitoring programs derives from the design and implementation of the program and not the technology. Indeed, electronic monitoring technology is a vital tool that provides equipment and monitoring services in order to enhance public safety.

The providers of the technology and the practitioners that use them cannot ignore the down side to partial or misleading information presented in the media. Until the public information problem is adequately addressed, preferably through a joint effort, the public is at greater risk than it would otherwise be. The future development and implementation of cost-effective public safety strategies as well as the business climate for the electronic monitoring industry depends on successful resolution of the public relations dilemma.

Beginning in the mid-1980s, electronic monitoring emerged as one solution to burgeoning prison and jail populations and spiraling correctional costs. The design of the programs as well as technologies used varied widely. Anxious to show that something was being done to assure cost-effective expenditures of tax dollars, policymakers quickly embraced electronic monitoring of criminals — sometimes as a panacea for managing correctional populations and public safety concerns. Elevated by the excitement emanating from the field of criminal justice regarding the applications for electronic monitoring, entrepreneurs involved in the manufacture of technologies and operators of electronic monitoring case management centers moved quickly to provide new and improved equipment and services at reduced costs.

The convergence of criminal justice need for cost-effective alternatives to incarceration and the business opportunities available within this environment resulted in grandiose promises and expectations. Industry manufacturers and practitioners shared purveyance of the message equally. It all sounded so right. Perhaps more importantly, it was what we wanted — even needed — to hear. With the technological hopes and promises of electronic monitoring, community corrections seemed to be moving into the next millennium retooled with the latest technological advances. However, as is the case with life in general, when something appears too good to be true it probably is.

Often we in the business hear and vociferously contend that technology is only as good as the framework of policies and procedures within which it functions. Overconfidence in, and ignorance about, the limitations of technology result in an over-reliance and over-selling of technology to do that which it was never intended to do in the first place. In instances where under-funded and/or poorly designed programs rely on technologies to produce results that are impossible to achieve, the fragile public image of community corrections is jeopardized. In the final analysis, electronic monitoring technology in and of itself makes more information readily available to practitioners without the need for an exorbitant commitment of human labor. In other words, taken out of a programmatic context, the technology makes us more efficient in that it assures that we do things better. Effectiveness, which assures that we do better things, however, is yet another matter. And here we must rely on well thought out and implemented program designs, programs that will process and react to efficiently delivered information in ways that are relevant to the public. Technological progress should not, as stated by Aldous Huxley in his book entitled *Ends and Means*, "merely provide us with more efficient means of going backwards."

Recognizing the negative impact of technologies that are mismatched to programs, and the relevance of program design to the ability to maximize public safety, the manufacturers of electronic monitoring technology and providers of monitoring services have advocated for standards as well as the maintenance of amicable relationships across the industry. The general standards that have been developed thus far fall far short of the mark in terms of their ability to link technologies and program practices to results that are valued by the public. At the same time, the sought after amicable relationships that would foster working together for the collective good of the industry, has been constrained by competitive product and service distinctiveness. Such competitiveness too often leads to an overselling of products and services in order to "win a bid." Under such circumstances, the public becomes confused, if not misled, about realistic purposes and expectations of electronic monitoring programs. In the end, both the industry and the profession lose credibility.

. . .

— *Perspectives* (Spring 1998), pp. 8-9

technologies can enhance the supervision of defendants or offenders in the community. It is not an exhaustive set of examples. Every program has its own particular features that meet the needs of the jurisdiction and the agency within which it is located. However, these examples were selected to indicate the array of needs that may be addressed with electronic technologies.

Pretrial Supervision

Some programs are using electronic technologies for pretrial release of defendants into the community. In some cases, the technology is applied as an additional strategy with other methods (e.g., bail / bond, drug testing) for ensuring lawful behavior and return to court. In other situations it is used in lieu of these more traditional approaches.

A research study sponsored by the National Institute of Justice and conducted by Indiana University assessed the use of electronic supervision for pretrial defendants in Marion County (Indianapolis), Indiana. The defendants included in the study were those who otherwise would not have been released on their own recognizance or could not raise bail or secure a bondsman. Of those who did not qualify for release in these ways, fewer than 25 percent actually were released with electronic supervision. In some cases defendants were considered too great a risk to public safety or to flee before trial to be released. In other cases, defendants may not have had "suitable residence with telephone" that was required for participation in electronic supervision.

The goal of this program was to ensure that defendants return to court for trial and also to relieve jail crowding. The most frequent charges made against defendants in the program were theft, DUI, forgery, burglary, habitual traffic offenses, disorderly conduct, and drug offenses. Seventy-three percent of defendants were supervised successfully with electronic technologies; 13 percent incurred technical violations; and 14 percent absconded. The researchers found that defendants most likely to complete the program successfully were those living with a spouse or an opposite-sex roommate (Gowdy, 1993).

Jail Release Programs

A variety of conditions may occur through which offenders serving time in jail or prison are released in the community while still under correctional supervision (other than parole), and some of the programs incorporate electronic supervision. In Oakland County (Detroit), Michigan, work-release inmates may be supervised electronically while they serve part of their sentences at home. Work release is a typical part of many jail programs. However, in most cases the offenders return to the jail when they are not working. Offenders in Detroit must first serve at least 30 days in the traditional work-release program, and then they may qualify for work release with electronic supervision (Gray, 2001).

In Waldo County, Maine, jail inmates are being supervised electronically while they are on furlough for medical care, substance abuse treatment, funerals, and other emergencies. In many of these situations, without electronic technologies, offenders would be accompanied by sheriff's deputies when leaving the jail. The program uses a combination of electronic equipment that tracks offenders' movements, verifies their presence at home or in a medical facility with a video monitor, and tests them remotely for alcohol consumption. Only minimum-security inmates are considered for this program. Offenders released with this system must pay the cost for installing the equipment and a daily supervision fee (Griffin, 2001).

Probation and Parole Supervision

Electronic supervision is most widely used with offenders released to the community on probation or parole or as an alternative to incarceration. One community corrections program using electronic supervision is Project Spotlight in Dallas, Texas. It is a joint project of the Dallas Police Department, the Dallas County Juvenile Department, and the Dallas County Community Supervision and Corrections Department. This program focuses on younger offenders between the ages of 14 and 24. It is limited to youth and young adults who have committed serious offenses, violent offenses, or both and live within a specific high-crime area. The three agencies involved have developed a team approach to supervision and have a community-based office located in a neighborhood storefront in the area where the program participants live. The program includes curfew restrictions, substance abuse evaluation and counseling, educational programs, and community service hours. Professional staff in the program supervise only 10 to 15 offenders on their caseloads, but they also work with family and community members. They have a minimum of five face-to-face contacts per week with the offenders they supervise. The primary purpose of the program is to improve public

safety through enhanced supervision and reductions in crime. Electronic supervision is used by this program in several ways. It can be used as a sanction for an offender who violates curfew or other program conditions. Electronic technologies also are used to assist staff with their fieldwork. The program uses field monitoring devices (drive-by detection equipment) to determine if the youthful offenders are at home or if they are in parks, schools, and other gathering places for youth (Johnston, 2000).

The Alabama Department of Youth Services (DYS) began using electronic supervision technologies in 1993. The program has a two-fold purpose: to reduce the number of committed youth placed in DYS facilities and to reduce recidivism rates for youth who were diverted from placement. The targeted youth for this program are low-risk, nonviolent status and misdemeanor offenders. DYS funds and administers electronic supervision services for county juvenile probation departments. Juvenile probation officers select the youthful offenders to be supervised electronically. Criteria used for selection of youth include current and previous charges, home environment, family involvement, availability of a touch-tone phone in the home, and the probation officer's judgement about the potential success of the youth in the program. In most cases, without the availability of electronic supervision, the youth selected would be committed to DYS and placed outside their homes. Program administrators estimate that electronic supervision saved DYS about $700,000 in less than three years (Duke & Hassen, 2000).

Michigan also operates a statewide electronic supervision program for adult offenders including probationers, parolees, and community-based prisoners (living in correction centers or halfway houses). The program began in 1987, and more than 100,000 offenders had been supervised electronically through April 2001, and about 3,000 offenders presently are supervised electronically. The Michigan Department of Corrections not only runs the supervision component of the program, it also operates its own monitoring center. The program provides a higher level of supervision of offenders, therefore holding them more accountable. At the same time, the Department of Corrections has saved about three-fourths of the cost of sending these offenders to minimum-security facilities.

Further the department wants to enhance public safety with the use of electronic supervision, so it has developed guidelines for the offenders who may be selected for the program. Prisoners must be eligible for custody in Michigan's lowest custody level facilities. Sex offenders and those with an extensive history of assaultive behavior are not eligible. Parolees often are placed on electronic supervision when they commit technical parole violations. Offenders released from Michigan boot camps are placed on intensive parole or probation supervision, and usually electronic supervision is included. The DOC uses electronic technologies to monitor compliance with program rules and to introduce structure and discipline in offenders' lives. An offender's profile determines specific program restrictions such as where they may go, when they can be away from home, and with whom they may associate.

The department has a zero tolerance policy for program rule violations, and if an offender cannot be accounted for, the monitoring center operator enters an escape warrant into the system that sends an administrative message to police agencies and the Absconder Recovery Unit. Program administrators feel electronic supervision is extremely effective because of the definite consequences for violations. Program evaluation efforts indicate that fewer than eight percent of offenders escape or abscond, and fewer than three percent commit new felonies. Program administrators state, "Reducing recidivism and protecting the public are goals that can be aided by electronic supervision technology, but are achieved through the people responsible for enforcing the entire program" (Irrer, 2001, p. 6).

Treatment Enhancement

A Boston, Massachusetts area substance abuse treatment program for women has implemented electronic supervision as part of the program. The Suffolk County Women's Resource Center opened in January 2001 with a goal of maximizing opportunities for substance abuse treatment for female offenders and increasing their participation in education and life skills training. Only female offenders with substance abuse problems may participate in this program, which was developed through the collaboration of the Suffolk County Sheriff's Department, the Massachusetts Office of Community Corrections, and the Office of the Commissioner of Probation. Both public safety and offender accountability are the stated purposes of the program. A four-level system was developed for the program;

- Level IV — 24-Hour Restriction.
- Level III — Daily Accountability.

- Level II — Standard Supervision.
- Level I — Financial Accountability.

Electronic supervision technologies are employed in Levels IV, III, and II as well as other supervision strategies including random drug and alcohol testing and community service. Additional services include classes in addiction education, life skills, parenting education, relapse prevention, introduction to 12-Steps, communicable disease prevention, victims of violence, healthy relationships, women's health, stress management, and GED preparation. Women may enter the program through referrals from Probation, Parole, and the Department of Corrections if the primary basis of their offenses is substance abuse. This program focuses on the gender-specific substance abuse treatment of female offenders but also addresses family, housing, health, relationships, education, and job training issues (Johnston, 2001).

These program examples do not provide an exhaustive or even representative summary of the types of programs and agencies that use electronic supervision technologies. However, they do illustrate some of the variety of program purposes, sponsorship, and approaches being used. As discussed in future chapters, each jurisdiction or agency must assess its own needs to develop electronic supervision strategies that meet local needs.

CONCLUSION

This chapter provided an overview for this document including a discussion of some of the terms and concepts used and some of the issues that will be explored in later chapters. A brief description of the evolution of electronic supervision was provided, and several examples of programs including an electronic supervision component were highlighted. These program descriptions were provided as a means of illustrating a variety of ways in which electronic supervision may be used rather than as a prescription for program development. Each agency or jurisdiction must work to develop strategies that are appropriate for its needs.

Chapter 2
AGENCY CONSIDERATIONS FOR IMPLEMENTING ELECTRONIC TECHNOLOGY TO SUPERVISE OFFENDERS

Developing or enhancing electronic supervision of offenders requires thoughtful consideration of a variety of issues. A systematic planning approach is the best way to achieve success. Although planning is time consuming, and sometimes tedious, it is well worth the initial investment of time and effort. If a thorough planning process is not undertaken, agencies and professionals may pay a greater price in the future through unsuccessful program implementation and unproductive use of resources.

This chapter outlines a development process to help agency and community planners think through a variety of issues. The overall development process is shown in figure 2a. Several parts of the process are addressed in this chapter, while future chapters are devoted to other issues. Although the development process is presented in a linear fashion, in reality, it is unlikely to proceed effortlessly from one step to the next. Rather, as decisions are made, it may be necessary to return to issues addressed earlier to ensure that all aspects of the plan are consistent.

Figure 2a

Development Process

LEADERSHIP FOR CHANGE

Whether planning to use electronic supervision technologies for the first time or assessing whether current strategies need to be enhanced, leadership for the process is essential.

> Leadership requires the capacity to set a course toward a goal and then draw others along the same path through persuasion, influence, and power.
> (*Reconnecting Youth & Community: A Youth Development Approach*, 1996, p. 8).

Effective change requires the leadership of someone (or a small group of individuals) who will step forward to provide guidance and direction. Strong, confident leaders draw on others' talents and skills and empower them to question and think creatively *(Reconnecting Youth & Community. . .*, 1996, p. 7).

A designated person who will coordinate the process of developing or enhancing the use of electronic technologies for offender supervision is essential. It is fortunate if the person has an interest in electronic technologies or is already knowledgeable about them, but these are not the most important characteristics of an effective leader. An effective leader must have both organizational and "people" skills (Imel & Hart, 2000). He or she should be able to build strong partnerships and get things done (Fulton, 1996). Table 2a provides a list of several characteristics needed for leadership.

Besides the personal qualities needed for good leadership, organizations must be willing to give leaders the following (Imel & Hart, 2000):

- Responsibility and accountability for the project's success or failure.
- Authority to make sure necessary project tasks are accomplished.
- Time to do the job, which may mean adjusting other work responsibilities.
- Management support to back the leader in what he or she has to do.
- Resources, such as space, support services, and financial resources.

Table 2a

CHARACTERISTICS FOR LEADERSHIP

Leadership requires courage. Most truly challenging situations demand not only imaginative solutions but also the tenacity to carry them out.

Leadership is not easy, although the results of true leadership make future efforts easier over time.

Leadership requires the ability to listen, as well as an openness to, and respect for, diversity and difference of opinion.

Leadership can feel demanding and isolating but results in a sense of belonging and community.

Leadership requires the ability to put aside personal bias or desires in decisionmaking.

Leadership is the ability to make decisions, live with the consequences, accept the blame, share the credit, and learn from the experience.

Source: *Reconnecting Youth & Community: A Youth Development Approach*. (1996). Washington, DC: Family and Youth Services Bureau U. S. Department of Health and Human Services. P. 7.

FORMING IMPORTANT PARTNERSHIPS FOR CHANGE

The Value of Involving Stakeholders

Although leadership is an important component of developing or enhancing strategies using electronic technologies to supervise offenders, "going it alone" by the leader can be counterproductive if any real work is to be accomplished. There are several key reasons for involving a variety of stakeholders in partnerships to consider electronic supervision development or enhancement issues. First, a variety of participants will bring different viewpoints about electronic supervision technologies to the decisionmaking process. Because of this diversity in perspectives, more ideas are likely to be generated. This can seem cumbersome and problematic initially, as different stakeholders lobby for their particular convictions. However, if processed effectively, these varied ideas can provide a wealth of substantive proposals that can be honed into a final plan that best meets the needs of the agency and the community.

Another reason for involving stakeholders from the beginning is to identify issues, problems, and barriers that may occur in developing strategies to supervise offenders electronically. If such concerns are recognized from the outset, valuable time can be saved in the planning process. Nothing is more frustrating to all involved than to spend a great deal of time in development, just to have a previously uninvolved stakeholder thwart the process by bringing up issues or problems that are obvious to him or her but were overlooked by others.

Involving stakeholders from the initiation of the process helps win their investment in seeing the project through. Those who have not had an opportunity to share their ideas and hear others' views are more likely to find fault, or perhaps even sabotage the program component, when it is implemented.

Finally, involved stakeholders are likely to be good ambassadors for the selected electronic supervision strategies. A well-chosen group of stakeholders can have far-reaching effects within an agency and beyond. They are more likely to promote the program and come to its defense if problems are encountered.

Composition of a Stakeholder Group

Several criteria should be considered when selecting stakeholders to participate in the planning process, including positions held within the agency or community and skills and knowledge needed within the working group. Table 2b provides a list of some of these variables.

The specific stakeholders selected to comprise the planning group will depend on where in the justice system the electronic supervision strategies will be implemented and the most advantageous grouping to accomplish the tasks required. It will be important to select the appropriate representatives from the first column in table 2b and also to be sure that the range of skills and knowledge needed, including those areas in the right column, are represented to the extent possible.

Strong, effective partnerships require mutuality — give and take. Each person must feel like and be viewed as an equal member of the group. Members need to be able to work both independently and in concert with each other. Partnerships are built on respect for one another's ideas and suggestions (Fulton, 1996). Although it is tempting to select only those whom we believe will agree with us when inviting stakeholders to participate, this is not necessarily the best strategy. It is important to select those who will be affected by the electronic supervision strategies, those who have essential background knowledge, those who are most likely to support the implementation of the approach, and also those who are likely

Table 2b

POTENTIAL STAKEHOLDERS AND THEIR CONTRIBUTIONS

Representatives From

- Judiciary
- Legislators / Policymakers (e.g., State, county, local)
- Law Enforcement
- Jail / Juvenile Detention / Corrections Administrators
- Probation and Parole (juvenile and / or adult)
  - Administrators
  - Line personnel
  - Clerical Staff
  - Union representatives
  - Purchasing and Legal Department representatives
- Prosecution
- Defense Bar / Public Defender
- Pretrial Services Personnel
- Public / Taxpayers / Citizens
- Funding agencies
- Victims and Victims' Advocates
- Offenders and their families
- Service providers
- Employers
- Others, based on jurisdiction
- Vendors (if already selected)
- Media Representatives

Skills and Knowledge

- Technical knowledge
- Legal knowledge
- Knowledge of budget and financing
- Experience working with offenders
- Knowledge of community values and needs
- Planning / program development skills
- Program evaluation skills
- Public relations experience

to oppose it. Knowing the objections of those opposed to a particular course of action may help planners mold the strategies so they are more acceptable. It is also possible that, when involved in the process, persons opposed to a change will modify their opinions.

Stakeholder Tasks

Stakeholders may be involved in considering a variety of issues about developing or enhancing electronic supervision technologies. Several of the tasks include:

- Assessing needs and resources.
- Developing policies and procedures.
- Identifying and securing financial and in-kind support.
- Providing needed services for the program and its clients.
- Marketing and promoting awareness.

Strategies for Successful Stakeholder Involvement

A balance between inclusiveness of important stakeholders and manageability of a working group must be reached. It may be difficult to accomplish tasks with extremely large groups. On the other hand, omission of key stakeholders may doom the planning process to failure. Usually, the best size group to accomplish tasks is ten or fewer members. However, there are options for including more people and still accomplishing tasks. A larger group may be formed, but smaller working subcommittees may be assigned to work on specific tasks. Another alternative is a small decisionmaking group whose members reach out to involve other representatives on certain tasks or to request their expertise on particular matters. Imel and Hart (2000) suggest that it may be effective to have both a project steering committee and an implementation team. The steering committee usually tackles higher-level planning

and policy decisions, while the implementation team works out the operational details.

CONDUCT A NEEDS AND RESOURCES ASSESSMENT

The Assessment Process

The next step in the process of developing or enhancing strategies for electronically supervising offenders is to take a close look at the community, the agency, and programs within which the supervision will occur. An assessment of needs and resources provides valuable information for the rest of the planning process. Determining the need for electronic supervision technologies requires asking and finding answers to several questions. Although the following is not exhaustive, it represents several of the questions that might be addressed through a needs assessment:

- Is the jurisdiction experiencing a jail or prison crowding problem? If so, what types of and how many offenders presently are incarcerated who might be released to the community with electronic supervision? Could these offenders be managed successfully in the community with electronic supervision?
- Are there offenders already being supervised in the community who need more restrictive supervision? How many of these offenders are there? What are the demographics and other characteristics of the offender population?
- What are community attitudes toward the possible use of electronic supervision technologies? What is the agency's and community's attitude about correctional services for offenders? Do they see it as public protection, offender punishment, or offender rehabilitation? Do they think these goals can be achieved with electronic supervision?
- Are there victims (e.g., domestic violence victims, sexual assault victims) in the community who could benefit from the use of electronic technologies to alert them to the approach of their offender?
- Can the agency obtain enough resources (e.g., funding, personnel) to deal effectively with the additional information about offenders' behavior that will be generated through electronic supervision technologies?
- Can the agency and other parts of the justice system adequately respond to violations by offenders being electronically supervised? (Electronic technologies may actually increase technical violations as well as the identification of new crimes.)
- Can related personnel issues be resolved effectively and economically (e.g., union issues, need for overtime and weekend work)?

These questions will yield two types of information surrounding issues of offender supervision with electronic technologies: factual data, and opinions and viewpoints. Agencies should gather information from various sources, attempt to verify its accuracy, and explore the perceptions of community members and justice professionals to compile a balanced, comprehensive overview of the need for implementing an electronic supervision program and the resources available to support it (Crowe & Schaefer, 1992).

Generally, needs and resources assessment data are obtained through four methods (Crowe & Schaefer, 1992):

- Gathering existing data.
- Reviewing records.
- Administering surveys and questionnaires.
- Engaging in interviews and informal communication.

To gather and use the information effectively, the agency will need to engage in a six-step process (Crowe & Schaefer, 1992):

1. Determine the types and sources of information needed.
2. Design the data collection process.
3. Determine procedures for collecting and recording data.
4. Analyze results.
5. Report results.
6. Use results for making decisions about developing or enhancing the supervision of offenders with electronic technologies.

Data collection and analysis procedures should be unbiased to enhance the integrity of the outcome. For example, planners should include respondents from varied backgrounds and those whose viewpoints might be quite disparate. Sufficient questions should be asked to collect a range of information. Response options should be varied enough to elicit an array of viewpoints. Any anticipated outcome should be acknowledged, but other possibilities should be actively pursued (Crowe & Schaefer, 1992).

After the data are collected, analyzed, and reported, the agency must decide on developing or enhancing the supervision of offenders with electronic technologies. The level of need for the program should be balanced against the level of resources available to implement it. A strong need for the program may be evident, but resources may be scarce.

Thus, resource development may be required before the program can be implemented adequately (Crowe & Schaefer, 1992). For example, electronic supervision may identify more technical violations and new crimes, requiring sanctions, including incarceration. If jail crowding is a problem, what additional resources will be needed to accommodate the discovery of increased crimes and violations?

Deciding Where Electronic Supervision Technologies Will Be Used

Electronic supervision strategies may be appropriate at several points within the criminal and juvenile justice systems. Part of the needs and resources assessment process should include looking at the entire system to assess all the areas in which electronic supervision might be beneficial. In some cases, if electronic technologies could be used in more than one program, cooperative development might result in economies of scale and more efficient program operation. Figure 2b shows multiple points at which electronic supervision can be considered. The rectangular boxes represent different parts of the justice process, and the hexagonal boxes indicate programs in which electronic supervision might be used at these points. The use of electronic supervision within each of these programs is discussed elsewhere in this guide.

Another important step in the assessment process may be taking a look at other programs and reviewing their policies and procedures. If possible, leaders and / or stakeholders should visit comparable jurisdictions that are implementing electronic supervision technologies successfully. After reading this guide several issues to observe and question about these programs will become evident.

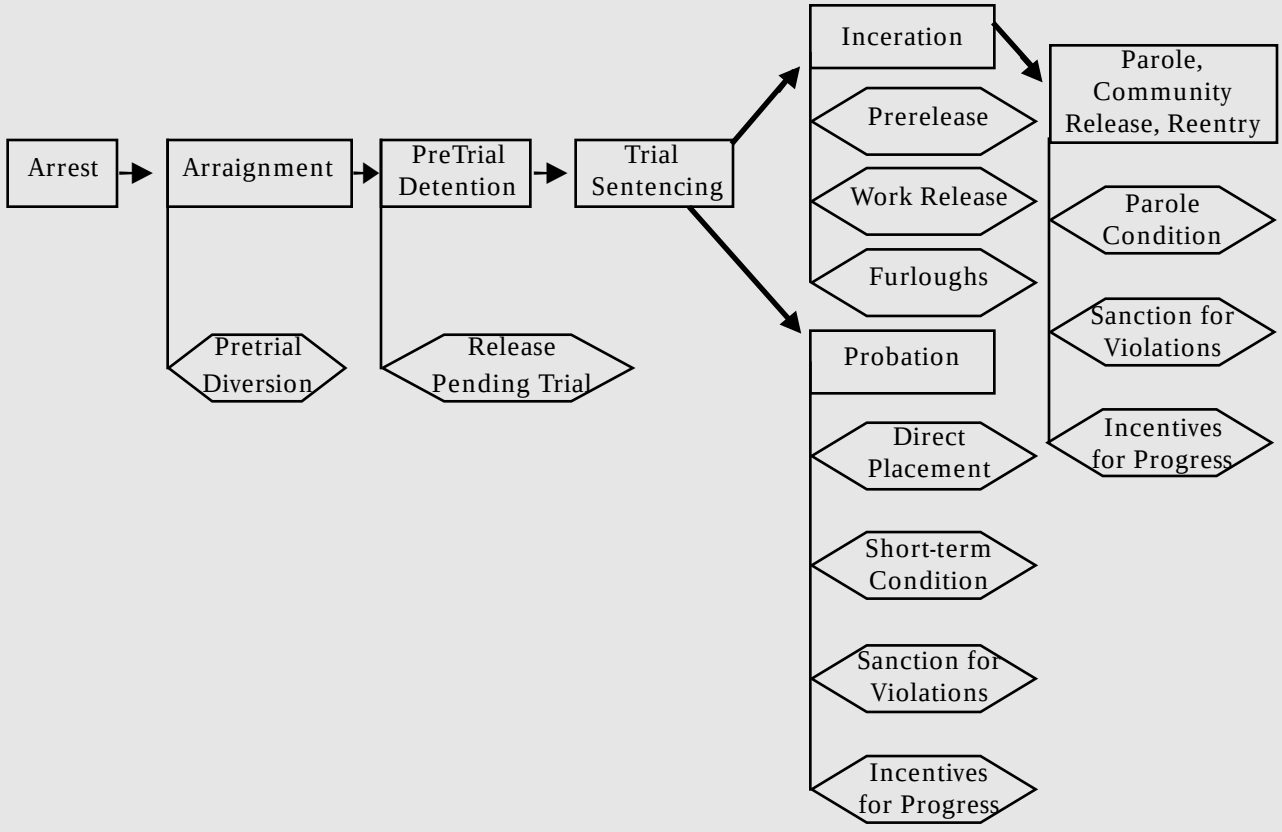
DETERMINE THE PURPOSE AND GOALS FOR ELECTRONIC SUPERVISION

Consistency with Agency Values, Vision, and Mission

There is a tendency, when new technologies become available, to think we must have them. (Re-

Figure 2b

EXAMPLES OF WHERE ELECTRONIC SUPERVISION MAY BE USED IN THE JUSTICE SYSTEM



Adapted from: *Electronic Monitoring in Intensive Probation and Parole Programs*, 1989.

member eight-track tapes? How many of those are sitting in storage somewhere, never being used?) Many agencies reason, if other jurisdictions are using electronic supervision technologies, they probably should be using them also. However, not every technological or program development is the right choice for each agency. Like hand and glove, it must fit well with the agency's values, vision, and mission.

If the agency has documented its values, vision, and mission, these should be reexamined before any other steps are taken regarding implementation of electronic supervision strategies. If these are not yet documented for the agency, that should be the first step taken.

Community and Agency Values

Values are the fundamental beliefs upon which the agency bases its practices. They shape all other decisions and actions the agency takes and motivate agency policies and practices. Values affect the work of all organizational levels, from the way resources are allocated by administrators to the way line personnel interact with offenders, victims, and the community (Boone & Fulton, 1995).

Examples of agency values might include:

- We believe that the public deserves the opportunity to live in a safe community.
- We believe that victims of crime should be restored, to the extent possible, to their precrime condition.
- We believe that offenders can change and that corrections personnel have a vital role in guiding that change process.
- We believe that justice system personnel should be well trained and have the necessary tools to do their jobs efficiently and effectively.

Agency values cannot be developed and sustained in a vacuum; they also must consider the community's values. For example, if an agency places most importance on the belief in offender rehabilitation, while the community is most interested in public protection, there may be a disconnect. Work must first be done to learn what is important to individuals and groups within the community and how that intersects with agency values.

Agency Vision

The agency's vision provides a snapshot of what stakeholders would like the agency to be doing in the future. It must be consistent with the agency's values, but it need not (and probably should not) be based on current operations. It is a dream, a wish list, and a guide for agency development. The vision statement of the American Probation and Parole Association is displayed in figure 2c.

Figure 2c

APPA'S VISION

We see a fair, just, and safe society where community partnerships are restoring hope by embracing a balance of prevention, intervention, and advocacy.

Agency Mission

A mission statement should succinctly set forth the philosophy and intentions of the program while reflecting the agency's values. It states what will be accomplished by the agency without spelling out how it will be done. Mission statements steer agency's plans and operations toward the desired outcomes (Boone & Fulton, 1995). For example, an agency's mission statement may include aims to "protect the community and rehabilitate offenders." This could be achieved through a variety of strategies, including the use of electronic supervision technologies, but these would not be included in the mission statement.

In considering the use of electronic technologies, it is vital that agencies develop or review their mission statements to ensure that plans for use of these supervision strategies will be consistent with the agency mission. If the mission does not support such approaches, it will need to be changed, or plans for implementing the new techniques should be scrapped.

If the agency's values, vision, and mission are consistent, and if they support one or more of the reasons for using electronic technologies for supervising offenders — e.g., victim alert, community — protection, offender behavior change, treatment compliance — then the agency should work toward implementing electronic supervision technologies to accomplish specific program purposes.

Purpose for Electronic Supervision

Delineating a clear statement of the purpose for offender supervision with electronic technologies is the fulcrum upon which all the rest of the program development process rests. Without a clear purpose statement, the development process is apt to be like taking a trip without a destination in mind. One may have interesting experiences along the way, but may never complete the trip. Without a clear statement of purpose, there is a greater risk of getting diverted in the process.

The purpose statement should be consistent with the agency's values, vision, and mission discussed previously. A purpose statement may be a simple narrative of a few sentences or several paragraphs that include more detailed information. The purpose statement needs to contain (Crowe & Schaefer, 1992):

- What should be accomplished through the implementation of an electronic supervision program component.
- A brief summary of the methods for accomplishing the purpose.
- The agencies or individuals responsible for various elements of the program and how they will interact to achieve the ultimate agency mission through the goals of this program component.
- The general time frame within which certain tasks or events are to occur.
- Any objectives or activities that are not to be pursued through this program.

There are a variety of purposes for which agencies may contemplate the use of electronic supervision technologies. Some common purposes are listed below, many of which may be interrelated.

- Public safety (e.g., identifying higher risk offenders for more intensive surveillance when released in the community).
- Safety of individual victims (e.g., victims of domestic violence or sexual assault who may be alerted if their perpetrator approaches them).
- Accountability of offenders (e.g., part of an offender's sentence, conditions of release, or sanctions for technical violations).
- Behavior change of offenders and recidivism reduction (e.g., provide structure and close supervision, enable offenders to obtain or maintain employment, and support and reinforce rehabilitation and treatment);
- Complying with mandates to reduce jail or prison populations.
- Providing correctional services in the most economical way.

As well as outlining in the purpose statement what the electronic supervision program component is planned to accomplish, any objectives or activities that are not to be part of the program should be articulated. For example, if the primary purpose for electronically supervising juvenile offenders is to promote positive behavior change, rather than to punish them, this distinction should be explained.

Program Goals

If the purpose statement describes the destination, goals provide the road map for getting there. Goals translate the intentions of the agency mission and program purpose into organizational activities.

Developing clear goals can bring the mission and purpose into focus and break it down into manageable, achievable components.

Developing clear goals can bring the mission and purpose into focus and break it down into manageable, achievable components (Fulton, 1996). Goals are also important for, and the first step in, evaluating the program. Therefore, goal statements should contain at least the following four components:

- What will be accomplished as a result of the electronic supervision component.
- How it will be done.
- How well it should be done or how much change will result from it.
- The time frame for achieving the desired result.

For example, the following illustrate possible goals for some of the purpose areas suggested in the previous section.

- Through the use of electronic supervision strategies for eligible offenders, the jail population in this jurisdiction will be reduced by 15 percent within five years.
- Within three years of the initiation of electronic supervision of drug-using offenders, substance abuse treatment completion rates will increase by 50 percent.
- Victims of domestic violence or sexual abuse whose perpetrators are placed on electronic supervision will report a 50 percent increase in their perceptions of personal safety after the first year of operation as measured by a telephone-administered questionnaire.
- High-risk youth who are supervised electronically will have a 30 percent reduction in recidivism rates after three years when compared with a control group of similar youthful offenders who are not supervised electronically.

It is important to think carefully about the goals for an electronic supervision program component. Overly ambitious or conflicting goals can create

confusion (Boone & Fulton, 1995). For example, if a program has goals to hold offenders accountable (or punish offenders) for technical violations, and it also hopes to reduce recidivism rates, the two goals may be at cross purposes. Electronic supervision tools are likely to identify more technical violations than traditional supervision, and thus increase recidivism rates. Similarly, if the program purposes are to reduce jail crowding and punish offenders for violations, the result may be increasing, rather than decreasing jail populations. It may be helpful to view some goals as long term and others as short term (Fulton, 1996). For example, a short-term goal might be holding substance-abusing youth accountable with graduated sanctions up to and including detention, while a long-term goal would be their successful completion of substance abuse treatment. In another example, a short-term goal might be detecting violations and new crimes as quickly as possible, while the long-term goal could be a reduction in crime rates in the community.

DEVELOP POLICIES AND PROCEDURES

Policies and procedures for supervising offenders electronically must be integrated and consistent with other program and agency policies and procedures. Policies are the general course of action for a program, and they determine the way specific decisions are made. Procedures provide the specific "how to" for implementing a program.

Much agency policy is informal. Consider agency norms for beginning the work day. Most agencies have an official start time or a specified number of hours to be worked each day. However, in some agencies, it is acceptable for people to arrive within 15 minutes of their designated starting time. In other agencies, as long as employees are in the building at the starting time, everything is fine. In still other agencies, employees are expected to arrive and be at their desks working at the appointed starting time. Variations from the official policy may be acceptable for starting the work day, but when operating an electronic supervision program component, it is important to have all policies and procedures written clearly and followed by all involved staff.

Written policies and procedures are the result of conscious decisionmaking. The lack of clear policies results in uncertainty on the part of staff. Sound policies help protect the agency and staff from possible legal liability resulting from improper actions on the part of staff (Crowe & Schaefer, 1992).

Within the written policies and procedures, staff roles must be defined, and responsibilities must be specific so they can be carried out consistently. Continuity from one staff member to another in the implementation of the program can be achieved only through clearly written policies and procedures (Crowe & Schaefer, 1992).

Carefully considered written policies and procedures are crucial for program credibility, replication, and support.

Carefully considered written policies and procedures are crucial for program credibility, replication, and support. If the program is called into question, written policies will indicate that a careful decisionmaking process was undertaken before it was implemented. Effective policies and procedures are also important for generating funding support for a program. A funding source that can view the purpose and operational guidelines of a program in written form is more likely to want to invest in the program (Crowe & Schaefer, 1992).

There are several essential elements that should be incorporated in a policy document, including:

- The purpose of the program.
- 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.

These areas will be addressed in more detail in subsequent chapters of this guide. The information provided will assist agencies in considering various policy and procedural options for an electronic supervision program component.

CONCLUSION

This chapter laid the groundwork for getting started on developing or enhancing a program component to supervise offenders electronically. A series of nine decisions in the development process were shown in figure 2a. This chapter provided information on identifying and engaging leaders and stakeholders, conducting needs and resources assessment, determining the program purpose and goals, and developing policies and procedures. The following chapters will provide detailed information on each of the other decision points suggested, including legal issues, funding, selecting and procuring technology and services, supervising offenders, developing a public relations plan, and evaluating the program.

Chapter 3
LEGAL ISSUES

Before going any further in the development and implementation of an electronic supervision strategy, agencies must investigate legal issues including legislation, regulations, and case law. This chapter summarizes key points to consider when examining legislation and case law[1].

NOTE: This chapter and other parts of this document are intended to provide reference information to guide program development, but they do not give legal advice. The legislation and legal citations in this chapter were compiled during 2000 but do not necessarily represent an exhaustive search of legislation and case law. Agencies should consult local legal counsel for further guidance about legislation and legal issues in a particular locality. Regular reviews and updating of legislation and case law affecting a given jurisdiction should be included as part of the agency's policies and procedures.

LEGISLATION

When developing or enhancing a program component for supervising defendants or offenders electronically, agencies must examine State legislation and regulations that may enable or restrict the use of electronic technologies for offender supervision.

The following is derived from research that was conducted in 2000 into State legislation relating to electronic supervision[2]. The research was done through a Web site operated by the Graduate School of Library and Information Science at the University of Illinois, Urbana-Champaign (www.prairienet.org/~scruffy). The statutes of each of the 50 states and the District of Columbia were searched using this site; however, such limited research cannot be characterized as exhaustive. The information offered here is intended only to provide a general idea of the kinds of electronic supervision legislation presently on the books. Agencies should research legislation and regulations applicable to their own jurisdictions thoroughly before proceeding with program development. It also may be useful to research public policies from other jurisdictions when considering legislative solutions for specific issues.

Authorization for Electronic Supervision

The use of electronic supervision as a correctional option is authorized in the statutes of at least 40 states. Although each state has worded its legislation differently, below are examples from Florida, Kansas, New Hampshire, and New York.

1. Florida Statutes, Title XLVII, 948.03(2): (a) The court shall require intensive supervision and surveillance for an offender placed into community control, which may include but is not limited to . . . supervision by the Department of Corrections by means of an electronic monitoring device or system. (b) For an offender placed on criminal quarantine community control, the court shall require . . . electronic monitoring 24 hours per day.

2. Kansas Statute 21-4603b: (a) The court or the secretary of corrections may implement a house arrest program for defendants or inmates being sentenced by the court or in the custody of the secretary of corrections . . . (b) House arrest is an individualized program in which the freedom of an inmate is restricted within the community, home or noninstitutional residential placement and specific sanctions are imposed and enforced. House arrest may include: . . . electronic monitoring which requires a transmitter to be strapped to the defendant or inmate which broadcasts an encoded signal to the receiver located in the defendant's or inmate's home. The receiver is connected to a central office computer and is notified of any absence of the defendant or inmate . . .[3]

3. New Hampshire Title 62, Criminal Code 651:2-V(b): In cases of persons convicted of

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[1] A variety of resources are available for updating legislative and case law information. Among these are *The Journal of Offender Monitoring* and *Probation and Parole Law Reports*. Both state and national criminal justice associations also may be able to provide assistance with updated information.

[2] Throughout this book, the phrase "electronic supervision" is used to better represent the array of technological options. However, most legislation uses the phrase "electronic monitoring" as a generic phrase.

[3] Although the Kansas legislation provides an example of enabling legislation for electronic supervision, the prescriptive language used at the end of the quotation limits the specific technology that can be used. It may be better to word legislation more generally to accommodate the rapid changes in technology.

felonies or class A misdemeanors, or in cases of persons found to be habitual offenders within the meaning of RSA 259:39 and convicted of an offense under RSA 262:23, the sentence may include, as a condition of probation, confinement to a person's place of residence for not more than one year in case of a class A misdemeanor or more than 5 years in case of a felony. Such home confinement may be monitored by a probation officer and may be supplemented, as determined by the department of corrections or by the county department of corrections, by electronic monitoring to verify compliance.

4. New York State Consolidated Laws: Penal, Article 65, Section 10(4): When imposing a sentence of probation the court may . . . require the defendant to submit to the use of an electronic monitoring device and/or to follow a schedule that governs the defendant's daily movement. Such condition may be imposed only where the court, in its discretion, determines that requiring the defendant to comply with such condition will advance public safety, probationer control or probationer surveillance. Electronic monitoring shall be used in accordance with uniform procedures developed by the division of probation and correctional alternatives.

As can be seen in these examples, authorizing legislation may take the form of a mandate requiring the use of electronic monitoring as in Florida, or it may take the form of enabling legislation, as seen in the other examples above. The different entities that are authorized to implement electronic supervision, including the court (Florida, Kansas, and New York) and corrections agencies (Kansas and New Hampshire), are also represented here.

Several states specifically prohibit certain uses for electronic supervision and/or restrict the types of devices that may be used. For example, in KRS 532.200(5) Kentucky mandates that "No monitoring device capable of recording or transmitting: (a) visual images other than the defendant's face; (b) oral or wire communications or any auditory sound other than the defendant's voice; or (c) information as to the prisoner's activities while inside the home; shall be approved." Similarly, Nevada specifies in NRS 213.124 that "The [electronic supervision] device must be minimally intrusive and limited in capability to recording or transmitting information concerning the parolee's presence at his residence, including, but not limited to, the transmission of still visual images which do not concern the parolee's activities while inside his residence. A device which is capable of recording or transmitting: (a) oral or wire communications or any auditory sound; or (b) information concerning the parolee's activities while inside his residence, must not be used." Section 1203.016(b)(3) of the California Penal Code specifies that "[electronic supervision] devices shall not be used to eavesdrop or record any conversation, except a conversation between the participant and the person supervising the participant which is to be used solely for the purposes of voice identification." In Section 24-13-1520 of its Home Detention Act, South Carolina defines an approved electronic monitoring device as one that is "primarily intended to record and transmit information as to the defendant's presence or nonpresence in the home. . . . An approved electronic monitoring device may be used to record a conversation . . . solely for the purpose of identification and not for the purpose of eavesdropping or conducting any other illegally intrusive monitoring."

Other states specify characteristics of electronic supervision equipment that may be used, as was the case with the Kansas legislation cited earlier in this chapter. A less prescriptive example is found in Arkansas' home detention legislation (16-93-708(a)), which allows the use of "any electronic device approved by the board of correction which meets the minimum Federal Communications Commission regulations and requirements, and which is limited in capability to recording or transmitting information as to the criminal defendant's presence in the home."

Contracting for Services/Devices

Some state legislation authorizes departments of corrections to contract for equipment or services to implement electronic supervision. Under s. 938.533(2), Wisconsin authorizes the Department of Corrections to "purchase or provide electronic monitoring for the intensive surveillance of [corrective sanctions] program participants." Wisconsin also provides that "the department may contract with counties to provide electronic monitoring services relating to criminal offenders. The department shall charge a fee to counties for providing these services," under s. 301.135(1).

The Wyoming Department of Corrections is authorized under 7-13-1102(c) to contract, with or without competitive bidding, "with any governmen-

tal or nongovernmental entity to provide services required to carry out the provisions" of their intensive supervision program, which includes electronic monitoring.

State regulations may further define policies and procedures for contracting specifications. Florida stipulates in Title XLVII (948.11) that "the department [of corrections] shall issue a request for proposal for electronic monitoring devices to be utilized by the department for purposes of electronic monitoring under this section or any other section of law which authorizes electronic monitoring. Electronic monitoring devices certified for use by the department must be licensed by the FCC, must be capable of maintaining full operation on a backup power source for 8 hours, and must meet such other necessary and vital specifications as may be set by the department for tamper-alert, efficient, and economical usage. The provisions of this section do not apply to passive devices."

Certification of Electronic Supervision Equipment/Services

Only one example of legislation was found that required certification of equipment and services for electronic supervision. In Ohio, 2929.23(C)(1) provides that the superintendent of the Bureau of Criminal Identification and Investigation "shall certify for use in cases of electronically monitored house arrest, electronically monitored house detention, and electronically monitored early release specific types and brands of electronic monitoring devices and electronic monitoring systems that comply with the requirements of this section, section 5120.073 of the Revised Code, and those rules. Any manufacturer that, pursuant to this division, seeks to obtain the certification of any type or brand of electronic monitoring device or electronic monitoring system shall submit to the superintendent an application for certification in accordance with those rules together with the application fee and costs of certification as required by those rules."

Requirements of Offenders

Some state legislation addresses issues related to offender participation in electronic supervision. As seen in the examples cited, legislation often diverges on these issues, as is also the situation with case law that addresses these topics.

Custody/Credit for Time Served

Arkansas provides that "the length of time the defendant participates in a home detention program and any good-time credit shall be credited against the defendant's sentence" (16-93-708). In Indiana, IC 35-38-2.5-5 (e) provides that "A person confined on home detention as a condition of probation earns credit for time served."

However, in Texas, Article 42.035(d) states that "A defendant who submits to electronic monitoring or participates in the house arrest program under this section discharges a sentence of confinement without deductions, good conduct credits, or commutations."

In 973.03(4)(a), Wisconsin allows the court to "impose a sentence of detention at the defendant's place of residence or other place designated by the court" in lieu of imprisonment in the county jail. This statute further provides: "The length of detention may not exceed the maximum possible period of imprisonment. The detention shall be monitored by the use of an electronic device worn continuously on the defendant's person and capable of providing positive identification of the wearer at the detention location at any time." In addition, 973.155-Annot. states: "When a sentence has been withheld and probation imposed, sub. (2) gives the court exclusive authority to determine sentence credit in imposing a postprobation sentence. A person subject to electronic monitoring, but not locked in the home at night, was not in custody and not entitled to sentence credit. *State v. Olson*, 226 Wis.2d 457, 595 N.W.2d 460 (Ct. App. 1999)."

Escape

Most state legislation is consistent on issues related to an offender's tampering with equipment or leaving the area to which they are confined without permission. These acts are often treated similarly to prison or jail escapes. California Penal Code 4532(a)(1) states that every prisoner who is "a participant in a home detention program . . . and who thereafter escapes or attempts to escape from . . . the place of confinement in a home detention program . . . is guilty of a felony and, if the escape or attempt to escape was not by force or violence, is punishable by imprisonment in the state prison for a determinate term of one year and one day, or in a county jail not exceeding one year." When such escape or attempt to escape is committed by force or violence, it is "punishable by imprisonment in the state prison for two, four, or six years to be served consecutively, or in a county jail not exceeding one year. When the second term of imprisonment is to be served in a county jail, it shall commence from the time the prisoner otherwise would have been

discharged from jail" (4532(a)(2)). Part 3 of 4532(a) provides that "A conviction of a violation of this subdivision . . . that is not committed by force or violence, shall not be charged as a prior felony conviction in any subsequent prosecution for a public offense."

Indiana's IC 35-38-2.5-6 requires that an order for home detention of an offender must include "notice to the offender that violation of the order for home detention may subject the offender to prosecution for the crime of escape under IC 35-44-3-5," which states that, "A person who knowingly or intentionally violates a home detention order and intentionally removes an electronic monitoring device commits escape, a Class D felony."

Nevada provides for penalties for absence without authorization or tampering with an electronic device under NRS 212.220, which states that a person being electronically supervised for an arrest, charge, or conviction of a felony or gross misdemeanor who "(a) is absent or attempts to be absent [without authorization] from his residence, employment, or other activity authorized by the supervising agency; or (b) removes or disables or attempts to remove or disable the electronic device used to supervise the person, is guilty of a gross misdemeanor." This constitutes a misdemeanor offense for those being electronically supervised after being arrested for, charged with or convicted of a misdemeanor. NRS 212.220 further states, "A sentence imposed pursuant to this section must run consecutively with the sentence imposed for the original offense."

Violation/Revocation/Sanctions

Legislation varies on the responses that may be made when escapes or tampers occur. In Arizona, if the court "finds that the prisoner left the premises without permission of the court or supervising authority during a time the prisoner is ordered to be on the premises," the court "shall terminate a prisoner's participation in the home detention program and require the prisoner to complete the remaining term of the jail sentence by jail confinement" (9-499.07(P)).

According to California's Penal Code 9006(d), "Whenever a parole or probation officer, or any other peace officer supervising a participant has reasonable cause to believe that the participant is not complying with the rules or conditions of a continuous electronic monitoring program, or that any electronic monitoring devices are unable to function properly, the peace officer may, under general or specific authorization of the Director of Corrections, chief probation officer, or correctional administrator, and without a warrant of arrest, take the person into custody."

In Indiana, IC 35-38-2.6-5 covers offender violation of the terms of placement in a community corrections program, which includes electronic supervision. This statute reads: "If a person who is placed under this chapter violates the terms of the placement, the court may, after a hearing, do any of the following: (1) change the terms of the placement. (2) continue the placement. (3) revoke the placement and commit the person to the department of correction for the remainder of the person's sentence."

Payment for Electronic Supervision

Many states (at least 28) include statutory provisions as to how electronic supervision programs are to be funded. Public monies are allocated for the electronic supervision programs in at least six of these states. In addition, at least 26 states require the offender to pay a portion of the costs involved; however, none of these states exclude offenders who are unable to pay from participating in the program.

LEGAL STATUS OF PERSONS BEING SUPERVISED ELECTRONICALLY

The rights of convicted offenders are diminished, but still they retain many of the rights afforded by the Constitution of the United States. Youthful offenders' rights may be restricted even further because of their age (e.g., they may not legally use alcohol, purchase cigarettes, drive a car). On the other hand, defendants who are arrested but not convicted of a crime enjoy most of the rights and privileges of any citizen. When examining legal issues, it is important to distinguish the legal status of those who may be supervised with electronic technologies and to plan program goals, strategies, and responses to violations accordingly.

Prior to trial and adjudication, defendants are considered legally innocent, and their rights are protected from the power of the State even though they may be confined to ensure they appear for trial or to protect the public. Supervision with electronic technology may be substituted for pretrial confinement to achieve these same purposes (Mullendore & Ballard, 2000).

Once a defendant is found guilty (through a plea or adjudication) or granted deferred adjudication in a criminal case, the response of the justice system may include goals of punishment and rehabilitation of the offender as well as the protection of

the public. Electronic supervision technologies may be used to accomplish any or all of these goals (Mullendore & Ballard, 2000).

CONSTITUTIONAL ISSUES

Del Carmen and Vaughn wrote a ground breaking article about legal issues in the use of electronic surveillance of probationers in 1986 when the use of electronic supervision technology was relatively new and before any relevant court cases had been decided. However, their examination of constitutional issues provides a valuable framework for exploring legal issues. With it, examples of some recent challenges and appellate decisions will be provided.

Del Carmen and Vaughn (1986) identified four general elements needed for a probation condition to be valid. With minor variations, these also would apply to pretrial and parole conditions for community release. Conditions must be:

- Reasonably related to the protection of society and / or the rehabilitation of the individual. (As pretrial defendants are legally innocent, the condition related to rehabilitation generally would not apply to them.)
- Clear.
- Reasonable.
- Constitutional.

Protection of society and the rehabilitation of offenders are such strong and broad justifications for a condition of release that almost any condition meets this requirement. Program goals that use electronic technology to limit offenders' movements in the community or restrict access to psychoactive substances or undesirable associates could be justified as protecting the public. Similarly, goals for electronic supervision strategies that could be viewed as rehabilitation might include holding offenders accountable, helping them develop more structured lifestyles, and keeping them from using mood altering substances or committing new crimes. Clear conditions mean the offenders must understand them. To ensure that conditions are clear, justice system personnel (e.g., pretrial, probation, parole officers) should explain them fully and ensure the defendants or offenders know what would constitute a violation of the condition. Reasonable conditions must be fair and achievable by the individual (Del Carmen & Vaughn, 1986).

Potential constitutional challenges to the use of electronic technologies for supervision of offenders might center around several constitutional amendments. Although few cases have been brought or won using these challenges, program administrators should be aware of them when using electronic technologies. Table 3a provides a list of the constitutional amendments that might be used to challenge electronic supervision.

Table 3a

RELEVANT CONSTITUTIONAL AMENDMENTS

Fourth Amendment

The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no Warrants shall issue, but upon probable cause, supported by Oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized.

Fifth Amendment

No person shall be held to answer for a capital, or otherwise infamous crime, unless on a presentment or indictment of a Grand Jury, except in cases arising in the land or naval forces, or in the Militia, when in actual service in time of War or public danger; nor shall any person be subject for the same offence to be twice put in jeopardy of life or limb; nor shall be compelled in any criminal case to be a witness against himself, nor be deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use, without just compensation.

Eighth Amendment

Excessive bail shall not be required, nor excessive fines imposed, nor cruel and unusual punishments inflicted.

Fourteenth Amendment

All persons born or naturalized in the United States, and subject to the jurisdiction thereof, are citizens of the United States and of the State wherein they reside. No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any State deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws.

Unreasonable Searches

In general, courts have held that rights of offenders on community supervision are not vio-

lated by the requirement that they submit to warrantless searches (e.g., *Griffin v. Wisconsin*, 107 S.Ct. 3164, 1987). Skelton (1999a, p. 13-14) concludes:

> If the Supreme Court will authorize the warrantless, unannounced entry and search of a probationer's home by his probation officer accompanied by police officers (as was the case in *Griffin*), then the invasion of privacy incident to an unobtrusive electronic monitoring device is minor indeed.

In reality, electronic technologies only enhance the ability of justice system personnel to accomplish the same objectives that ordinary visual surveillance could achieve (Del Carmen & Vaughn, 1986). No challenges to electronic supervision technologies have thus far been brought using the constitutional protection against unreasonable searches, and most legal opinions to date do not expect that such challenges would be successful.

Double Jeopardy

One appellate decision has addressed the issue of double jeopardy in a case involving electronic supervision (*State* v. *Kovari*, 1997 Wash. App. LEXIS 718; Wash. Ct. App. 1997). In the case, the offender who was supervised electronically violated his probation conditions by leaving without permission, going to an unapproved destination, and drinking alcohol. The court imposed an additional 30 days of his sentence to be spent in jail. The prosecutor also charged him with escape. He was convicted and sentenced for the escape. He appealed claiming double jeopardy. However, the appellate court determined that "[r]evocation of a suspended sentence is not a new prosecution but a continuing consequence of an earlier prosecution" and determined that double jeopardy did not exist (Skelton, 1999b). The offender could be sanctioned for violation of probation conditions and simultaneously face new charges of escape.

Right Against Self-Incrimination

The constitutional protection against self-incrimination applies to testimony given orally rather than physical evidence. Although the information gleaned from electronic supervision can provide evidence of a person's noncompliance with conditions of release, the offender is not required to confess regarding his or her actions. Thus, electronic technology evidence would fall outside this domain of constitutional protection. The type of legal proceeding in question largely determines whether a constitutional claim is upheld. In criminal trials, challenges against testimonial self-incrimination are more often upheld, because guilt must be proved beyond any reasonable doubt. In revocation hearings, they usually fail, because the question of guilt relies upon the preponderance of evidence (Del Carmen & Vaughn, 1986).

Due Process

Certain procedures must be followed before persons can be deprived of their freedom. In the case of *United States* v. *Enjady* (1996 WL 80453, 10th Cir. 1996), the offender had been charged with aggravated sexual abuse and was denied pretrial release on electronic supervision based on his further potential threat to public safety. The court is responsible for determining by clear and convincing evidence that a defendant is a danger to the community and this should be based on consideration of various factors. Due process rights are not violated when a court uses such factors and makes a determination to deny pretrial release on electronic supervision (Legal Spotlight, 1996).

In another case (*Long* v. *State*, 1999 WL 974429, Ind. App. Oct. 27, 1999), the court found in favor of the plaintiff who claimed his due process rights were violated while he was being supervised with electronic technology. The State claimed Long had tampered with his electronic monitoring transmitter and failed to wear it at all times. Therefore, his probation was revoked. Long's Home Detention Order stipulated that he not "tamper with, attempt to fix, or allow anyone else to tamper with the transmitter equipment." Long maintained he had tripped and fallen, damaged the unit, and had attempted to fix it. The appellate court overturned Long's revocation on the basis of due process violations. The State had charged him with tampering, while the misdeed in question was attempting to fix the transmitter. The court found that being notified of the wrong charge was the same as not being notified at all. Being notified of the wrong charge compromised the defendant's ability to prepare his defense (Mr. Fix-It . . ., 2000).

Neither of these cases imply that use of electronic technology for supervising offenders, in and of itself, is likely to be challenged on due process grounds. However, agencies implementing electronic supervision technologies must have policies and procedures in place that protect offenders' due process rights. As with other types of technology used in criminal and juvenile justice cases (e.g.,

urine drug testing), the technology must be accurate and meet scientific standards acceptable to courts. Should a revocation be based solely on the technological evidence, the methodology used must have a high degree of accuracy (Del Carmen & Sorensen, 1988).

Cruel and Unusual Punishment

Electronic technologies might be challenged on the basis of the constitutional protection against cruel and unusual punishment if release conditions are excessively harsh or an offender is unlikely to have the ability to comply with them. It can be assumed that an offender released to the community has the choice (albeit not an attractive one) to remain incarcerated. Therefore, release and compliance with related conditions can be considered voluntary. Del Carmen and Vaughn (1986) stated that electronic devices do not appear to violate the standard against cruel and unusual punishment, as it is less restrictive and more humane than incarceration. They concluded that the effects of electronic supervision are not oppressive nor humiliating to the offender.

Equal Protection

The fourteenth amendment guarantees all people equal protection of the law. It is in this area that some writers believe challenges to electronic supervision might occur and where program administrators must plan carefully. It is common for agencies to charge offenders some or all of the cost of the electronic supervision. This usually includes equipment costs and also may include the costs for monitoring and staff time. When indigent defendants, who otherwise would be eligible for release on electronic supervision, are incarcerated because they cannot afford to pay, the program may face legal challenges (Del Carmen & Vaughn, 1986).

One mechanism for avoiding this type of challenge is to establish a sliding fee scale that will allow offenders of all income levels to be supervised electronically. However, in some cases, when sliding fees are used, those with the ability to pay may be admitted immediately, while those who are indigent may be placed on waiting lists for a limited number of free or low-priced program openings. When electronic supervision is administered by a private agency that depends on client fees, a requirement for enrollment may be employment of the offender, but this also is likely to eliminate low-income offenders from participating (Petrucci, 2000). Another strategy is to limit the program to certain geographic areas where offenders are more likely to have the resources to pay for electronic supervision. Offenders receiving government benefits, such as Social Security, may have income sufficient to pay the cost for electronic supervision and, therefore, may have an advantage over other offenders with similar qualifications but no such benefits (Mullendore & Ballard, 2000).

Besides direct payment for electronic supervision, offenders may be required to maintain other services with fees attached. For example, in the case of *State* v. *Byrd*, 2000 Tenn. Crim. App. LEXIS 670, Byrd was revoked from community supervision because he failed to abide by his curfew and to maintain an operational telephone for electronic supervision at his residence. Byrd claimed the telephone was disconnected for nonpayment of the bill. The appeals court remanded the case to the trial court to determine if Byrd willfully refused to pay for the services or failed to make an effort to obtain the means to pay. The conclusion of the appeals court was that if an inability to pay is not the fault of the offender, then that inability should not be used as the basis for incarceration (Kozlowski, 2000b).

These examples illustrate administrative program decisions that might result in equal protection challenges. Eligible participants should be defined in terms other than their financial resources, and funding mechanisms should not unduly limit access to electronic supervision by any particular group of offenders. If agencies want to consider a sliding scale that charges some offenders more than the actual cost of their electronic supervision in order to provide additional funds for indigent clients, State and Federal statutes and case law should be researched. Another option for agencies to consider is supplementing offender fee payments with jurisdictional funds that can be used to offset costs for offenders who are unable to pay for services.

OTHER LEGAL ISSUES

Besides the constitutional challenges just discussed, several appellate case law decisions have been made, and program planners should consider these issues.

Custody

Courts have been divided on whether time spent on electronic supervision is comparable to physical confinement in jail or prison. The decisions on this question may be viewed differently depending on

whether electronic supervision is used pretrial or post-adjudication. They also have important ramifications for how courts view subsequent issues such as credit for time served and escapes.

Several courts have determined that electronic supervision is not equivalent to custody. In *United States* v. *Compton* (Ill 1996 WL 207351, 7th Cir. 1996, April 29, 1996), the court held that (Legal Spotlight, 1996, p. 17):

> [T]his circuit has recently clarified and determined that electronic home detention is not a form of "imprisonment" for purposes of the Federal Sentencing Guidelines... "[I]mprisonment," at least in the context of the Guidelines, denotes time actually spent in a penal institution. 68 F.3d 159, 162 (7th Cir.1995). Specifically, the court noted that "'home detention' differs from 'imprisonment' throughout the imprisonment."

Similarly, in *State* v. *Swadley* (526 N.W.2d 778, Wis. Ct. App. 1994), the Wisconsin Court of Appeals determined that an offender was not in custody while living in his parents' home on electronic supervision. In Nebraska (*State* v. *Jordan*, 485 N.W.2d 198, Neb. 1992) the Supreme Court ruled that (Skelton, 1999b, p. 20)

> "[I]n custody" means judicially imposed physical confinement in a governmental facility authorized for detention, control, or supervision of a defendant before, during, or after a trial on a criminal charge.

Additional cases that have found electronic supervision is not equivalent to being in custody include *State* v. *Truesdale*, 1995 Ohio App. LEXIS 5457 (Ohio Ct. App. 1995); *Fraley* v. *U.S. Bureau of Prisons*, 1 F.3d 924 (9th Cir. 1993); *United States* v. *Speas*, 1991 U.S. App. LEXIS 11317 (4th Cir. 1991) (Skelton, 1999b); *State* v. *Hughes*, 476 S.E.2d 189 (W. Va. 1996); *Ex parte Bailey* v. *Change*, 1998 Ohio App. LEXIS 4401 (1998) (Skelton, 1999b); and In re Sheree M., 2000 Ariz. App. LEXIS 61 (Kozlowski, 2000a).

Other courts have ruled differently, claiming that time spent on electronic supervision is equivalent to time spent in custody. In *People* v. *Granquist*, the Michigan Court of Appeals determined that electronic supervision in the defendant's home was comparable to imprisonment:

> The escape statute defines "prison" liberally to include any grounds under control of any person authorized by the Department of Corrections to have an inmate under care, custody or supervision, either in an institution or outside an institution, whether for work, medical care or otherwise. We believe defendant's place of residence fit the definition of a "prison" under the escape statute (State of Michigan Court of Appeals, April 16, 1990, p. 2).

Similarly, in a Maryland case (*Dedo* v. *State*, 680 A.2d 464, Md. Ct. App. 1996), the court relied upon a 1991 opinion of the State's attorney general that home detention is the same as being held in a local detention center because the prisoner's home is an extension of the detention center (Skelton, 1999b). In a Washington case (*State* v. *Speaks*, 829 P.2d 1096, Wash. 1992), the State Supreme Court ruled that "confinement includes partial confinement, and partial confinement includes home detention" (Skelton, 1999b).

Credit for Time Served

Pretrial

States often grant offenders credit for time served prior to sentencing. The rationale for this practice is the need to provide equitable treatment for lower income defendants who are likely to remain in jail until trial because they cannot afford bail. Because of their economic, rather than their legal status, they are likely to be incarcerated longer for the same crimes (Mullendore & Ballard, 2000). Again, courts are divided as to whether pretrial time spent on electronic supervision makes an offender eligible to have that time applied toward his or her sentence. The question of whether supervision with electronic technology is considered custody, as discussed previously, is often the pivotal issue in making this determination. In *Reno* v. *Koray* (515 U.S. 50, 1995), the U.S. Supreme Court ruled that (Skelton, 1999b, p. 19)

> [O]nce a person is released on bail to a treatment center (no matter how onerous the conditions of confinement), he is no longer under Bureau of Prisons' control, and thus is not in official detention and not entitled to credit time.

Other Federal courts have also determined that pretrial time spent on electronic supervision does not entitle an offender to credit for time served. These cases include *Fraley* v. *U.S. Bureau of Prisons*, 1 F.3d 924 (9th Cir. 1993); *United States* v. *Speas*, 1991 U.S. App. LEXIS 11317 (4th Cir. 1991); and *United States* v. *Herrera*, 913 F.2d 761 (11th Cir. 1991) (Skelton, 1999b).

Several State courts have ruled similarly that pretrial release on electronic supervision cannot be

used as credit toward sentencing. A Pennsylvania case illustrates this practice. In *Commonwealth* v. *Shartle*, 652 A.2d 874 (Pa. Super. Ct. 1995), a defendant sought credit for time he spent being electronically supervised in home confinement. The Pennsylvania Supreme Court upheld the trial court's decision that house arrest was not the same as imprisonment, saying imprisonment would require confinement in an institutional setting. Therefore, credit time was denied. A recent Wisconsin Supreme Court decision (*State* v. *Magnuson*, 2000 WI 19, 606 N.W.2d 436) made a similar decision with a somewhat different rationale. Magnuson sought credit for time he spent in home detention before his trial. The court established a "bright-line" rule for determining if an offender was in custody. They ruled that ". . . for sentence credit purposes an offender's status constitutes custody whenever the offender is subject to an escape charge for leaving that status" (Kozlowski, 2000a). Other cases refusing offenders credit on their sentences for pretrial time spent on electronic supervision include *People* v. *Shaw*, 64 Cal. App. 4th 492 (Cal. Ct. App. 1998); *State* v. *Climer*, 896 P.2d 346 (Idaho Ct. App. 1995); *Franklin* v. *State*, 685 N.E.2d 1062 (Ind. 1997); *State* v. *Mastapeter*, 674 A. 2d 1016 (N.J. Super. Ct. App. 1996); and *Tagorda* v. *State*, 977 S.W.2d 632 (Tex. Ct. App. 1998) (Skelton, 1999b).

An interesting variation on the question of credit for pretrial release on electronic supervision is found in *State* v. *Truesdale*, 1995 Ohio App. LEXIS 5457 (Ohio Ct. App. 1995). In this case, the defendant was granted pretrial release in August, and was scheduled for trial the following January. A Speedy Trial statute in Ohio requires a person charged with a felony to be brought to trial within 270 days of arrest when held in jail in lieu of bail. The defendant claimed that time spent on home confinement under electronic supervision entitled him to the benefit of the 3-for-1 provision of the statute, and he asked that the charges be dismissed. The appellate court refused, reasoning that home confinement with electronic monitoring was not comparable to being held in jail.

However, some courts have ruled differently, saying that offenders are entitled to credit for pretrial release time spent on electronic supervision. In *Dedo* v. *State*, 680 A. 2d 464 (Md. Ct. App. 1996) the defendant requested credit for time served on home detention. The trial court did not allow the credit based on the incomparability between home detention and jail. However, the Maryland appellate court relied on two opinions from the State's attorney general's office to determine that in the case of a prisoner confined on home detention, the home is an extension of the detention center and the person is in the custody of the Division of Corrections. Therefore, the appellate court found that the offender should be given credit for time served (Skelton, 1999b).

Similarly, the Washington State Supreme Court (*State* v. *Speaks*, 829 P.2d 1096, Wash. 1992) held that a defendant was entitled to credit against his sentence for presentence time served on home detention while being electronically supervised. The justices ruled that the statute "provides for credit for 'all' confinement, and since confinement includes partial confinement, and partial confinement includes home detention, it is evident that the Legislature intended to afford a defendant credit for time served on home detention prior to sentencing." The Washington appellate court later applied this ruling to a juvenile case, *State* v. *Ashbaker*, 919 P.2d 619 (Wash. Ct. App. 1996) (Skelton, 1999b).

Post-Adjudication

Some post-adjudication cases regarding credit time rest upon whether a person could be charged with escape from custody. For example, the Wyoming Supreme Court, in *Kupec* v. *State* (835 P.2d 359, Wyo. 1992) said the defendant would not be charged with escape from a treatment program that included electronic monitoring, and thus, was not eligible for credit for time served in the program. The ruling, in part, states (Skelton, 1999b, p. 19):

> While certain similarities may exist between home detention and a particular community correctional facility, Wyoming grants credit for the time spent in those environments from which a charge of escape would lie, and a charge of escape would not lie in this case.

In the case of *Barton* v. *State*, 598 N.E.2d 623 (Ind. Ct. App. 1992), an offender was given a four-year suspended sentence and placed on probation. He was ordered to serve one year on electronically supervised home detention. After he completed his home detention, the offender violated probation, and it was revoked. The original sentence was imposed without credit for time served in home detention. The court's reasoning in refusing the credit was that home detention is a benefit to offenders. They denied that refusing credit for time served on home detention amounted to cruel and unusual punishment as the offender claimed (Skelton, 1999b).

Another case that concurred that post-adjudication time spent on electronic supervision does not entitle the offender to credit for time served is *State* v. *Jordan* (485 N.W.2d 198, Neb. 1992). The court decided that the offender was not in custody because he was not physically confined in a government facility and was not qualified for credit (Skelton, 1999b).

In other instances, courts have agreed that offenders should receive credit for time spent on electronic supervision. In *State* v. *Rohde*, 492 N.W.2d 189 (Wis. Ct. App. 1992), the court credited the offender for time spent in a community residential confinement program because he would have been subject to escape charges if he had absconded from the program. Therefore, they reasoned, such confinement is the same as "custody" for purposes of granting credit for time served (Skelton, 1999b).

In a Wisconsin case (*State* v. *Pinkowski*, 514 N.W. 2d 56 Wis. Ct. App. 1993) the court found the offender was entitled to credit for time served, but the credit could be applied only for one of his two concurrent sentences of probation. He was originally sentenced to two concurrent sentences of probation including 120 days of electronic monitoring. Almost two years later, his probation was revoked and he was sentenced to consecutive terms of nine and six months in jail. Although he argued that he should be given credit against both these sentences for the time he served on electronic monitoring, the court refused, and credit was given only for one of the sentences.

Cook, a California offender (*People* v. *Cook*, 14 Cal. App. 4th 1467, Cal. Ct. App. 1993) was placed on probation with electronic monitoring. When his probation was later revoked for violations, he was credited for 212 days served on electronic monitoring. However, he asserted that he should also receive "good time" credit for an additional 106 days. The appellate court refused this argument based on the determination that good time in prison is to ensure good conduct, and that rationale is absent in community supervision under electronic supervision. They reasoned that the threat of removal from the program was sufficient to deter misbehavior in community programs using electronic monitoring (Skelton, 1999b). The Indiana Court of Appeals arrived at a similar conclusion in *Dishroon* v. *State*, 722 N.E.2d 385 (Ind. 2000) when they gave Dishroon credit for time served on home detention but disallowed "good time" credit for the same days (Kozlowski, 2000b).

Violations and Escapes

How cases of violations of electronic supervision conditions are decided often depends on State statutes. In some States they are treated as other violations of probation or parole conditions, and in others, they may be prosecuted as escapes. In large part, this depends on how the statutes or courts have interpreted the issue of whether electronic supervision constitutes being in custody as well as the intended purpose of the supervision and at what point it occurs in the justice system.

Revocations for Violations

Several cases illustrate that offenders' behavior, either directly or indirectly related to electronic supervision, can properly result in revocation of community release.

Refusal to Cooperate. An offender convicted of aggravated robbery was placed on electronic monitoring for 90 days in the case of *Fields* v. *State*, 1997 Tex. App. LEXIS 34, 1997. He was required to remove the call waiting feature from his telephone and to disconnect his answering machine. He did not comply with these requirements and also left his home at an unauthorized time. Because of this, his probation was revoked and the appellate court affirmed the revocation (Skelton, 1999a).

In another Texas case (*Medlock* v. *State*, 1996 Tex. App. LEXIS 1375, 1996), the probationer complained the electronic monitoring did not fit his schedule and he did not want to be on the monitor. The probation officer told the probationer that he could not force him to be monitored. To this, the probationer replied, "Well, I'm going to take this thing off," whereupon he took scissors and cut the device off his leg. At his revocation hearing the probationer claimed that he had told his probation officer the unit was defective and asked that a technician check it. The probationer said the probation officer responded by throwing a pair of scissors at him and telling him to cut off the device. The court believed the probation officer and revoked the probation, which was upheld by the appellate court.

In *State* v. *Kelly*, 644 A.2d 454 (ME. 1994), the probationer was placed on intensive supervision and received written warnings for violations. He was also informed that he was going to be placed on electronic monitoring. The offender came to the probation office and stated he could not wear an electronic monitoring device because it would be visible to his clients and, therefore, would interfere with his business. Although the probation officer indicated that the device was not visible under pants, the proba-

tioner stated he wore shorts during the summer. Later, the probationer offered to submit to the monitoring, but his probation was revoked on the grounds that he refused to cooperate, and his original sentence was executed (Skelton, 1999a).

A Pennsylvania offender also refused to submit to electronic monitoring (*Commonwealth* v. *Rice*, 721 A.2d 1119, Pa. Super. 1998), and in this case, his refusal led to new charges. The offender was on parole after serving a jail sentence for narcotics charges. He failed to appear for a mandatory employment group session and was informed that he would be placed on electronic monitoring. The offender was told to go home and wait for instruction. However, he became belligerent and demanded to speak to a supervisor, and he refused to submit to electronic monitoring. As a supervisor was not available, the offender was placed in custody. While being searched, a bag of crack cocaine was found in his possession. He was then convicted on the crack cocaine charge, which was affirmed by the appellate court (Skelton, 1999a).

Curfew Violations. After repeated warnings about curfew violations while being supervised electronically, the offender was returned to jail in the case of *Zeplin* v. *State*, 1998 Tex. App. LEXIS 3022, 1998. His appeal was based on his assertion that the electronic monitoring provision of his probation was "impermissibly vague and ambiguous" and did not justify a revocation. The appellate court found that electronic monitoring was a condition of probation specifically authorized by Texas statute and the beginning and ending dates for probation were clearly specified. The authority for supervising probation was properly delegated to the Community Supervision and Corrections Department, and the revocation was upheld (Skelton, 1999a).

Violations Involving Electronic Supervision Equipment. A New Mexico probationer (*State* v. *Archie*, 939 P.2d 1065, N.M. 1997) had his probation revoked and also was prosecuted for embezzlement for destroying electronic supervision equipment. He removed the electronic monitoring device, damaged it, and threw it into a field. He was charged with a fourth degree felony and was convicted of felony embezzlement, which was affirmed by the appellate court (Skelton, 1999a).

In the Federal case *United States* v. *Unkel*, 7 F.3d 1043 (8th Cir. 1993), the offender admitted committing technical violations, including moving his electronic monitoring equipment to a new residence without permission. He claimed that he gave notice and reasonable explanations for the violations and otherwise substantially complied with the conditions of release. Nevertheless, the court imposed a three-month sentence, which was affirmed by the Eighth Circuit Court (Skelton, 1999a).

Violations Prosecuted as Escapes

Basically, two types of violations have been tested — being absent from the home without authorization, and tampering with electronic supervision equipment. In most (but not all) instances, when charges for escape have been brought, revocation or new charges have been upheld.

Unauthorized Absences. In *Cienfuegos* v. *Superior Court*, 837 P.2d 1196 (Ariz. Ct. App. 1992) the Arizona appellate court ruled that persons under "home arrest" were in a correctional facility. When absent from home (which is converted to a correctional facility by court order) without permission, they have committed escape (Skelton, 1999b).

In a Washington State case (*State* v. *Kovari*, 1997 Wash. App. LEXIS 718 (Wash. Ct. App. 1997), the probationer left home without permission, went somewhere that was not approved, and drank alcohol. The trial court imposed an additional 30 days to be spent in jail. The prosecutor also filed escape charges, and the offender was sentenced for this new charge. However, the defendant claimed he was subjected to double jeopardy because he was already being punished for leaving home by the imposition of jail time for his previous conviction. The appellate court found that double jeopardy did not occur in this instance because revocation of a suspended sentence is not the same as a new prosecution. Rather revocation is a consequence of an earlier prosecution and the double jeopardy claim does not apply (Skelton, 1999b).

In *People* v. *Sheets*, 56 N.W. 2d 478 (MI 1997), the offender was placed on electronic monitoring after being incarcerated for part of his sentence. Sheets was authorized to leave his home for work and two hours of shopping weekly. He was advised of program rules and signed an acknowledgment that he could be charged with escape if he left without permission or failed to return as scheduled. Sheets did have unauthorized leaves and admitted going on personal excursions with his family. When convicted of escape, Sheets appealed on the grounds that, as he had not intended to escape, there was no escape. The Michigan Court of Appeals found that Sheets had willfully violated the terms of the supervision agreement, and he was returned to prison (Cook, 1998).

A somewhat similar case occurred in Texas (*Choice* v. *State*, 819 S.W.2d 864 (Tex. Ct. App. 1991). An offender was released on pre-parole status with the condition that he not leave his home unless authorized and that he submit to electronic monitoring. He violated the leave condition several times and was placed on 24-hour home curfew. He left his apartment (although he claims to have stayed within 100 feet of it), and when the parole officer arrived to investigate his absence, he had returned to the apartment. The prosecutor charged the offender with felony escape. Because he had two prior felonies, this charge carried a 25-year minimum sentence. Although Texas statutes exclude violations of conditions of probation or parole from the definition of escape, the charge was upheld because the offender was on pre-parole status rather than on parole. Therefore, the court found that he did escape from custody of the Department of Criminal Justice (Skelton, 1999b).

At least one case (*State* v. *Martinez*, 957 P.2d 68, N.M. Ct. App. 1998) found that the accused was not guilty of escape for not returning home at the required time while on jail release and being monitored electronically. The detention services agency filed charges of escape, but the appellate court ruled that as the defendant was not obligated to be in jail in the first place, the absence from home did not constitute an escape (Skelton, 1999b).

Equipment Tampers. An Arizona offender (*State* v. *Williams*, 925 P.2d 1073, Ariz. Ct. App. 1996) was found to have committed escape by removing his electronic monitoring device and then departing without authorization. The appellate court found that the defendant clearly understood he was not permitted to remove the monitoring device or leave his home without permission, and they upheld the conviction for escape. Similarly, in the case of *State* v. *Holliman*, 509 N.W.2d 73 (Wis. Ct. App. 1993), the court held that an offender who cut off his electronic monitoring bracelets was guilty of an escape.

Another case for which an appellate court upheld a lower court conviction of escape regarding both an unauthorized absence and tampering with equipment was *State* v. *Duke*, 1999 Ohio App. LEXIS 498 (Ohio Ct. App. 1999). The offender was convicted of domestic violence and placed on electronic monitoring. He violated all of his conditions of release, including leaving home without authorization, contacting his girlfriend, and drinking alcohol. He also cut off his electronic monitoring bracelet. The appellate court concurred that the definition of detention included persons confined at home with electronic supervision, and therefore, an escape conviction was upheld (Skelton, 1999b).

Challenges to the Authority to Sentence Offenders to Electronic Supervision

As discussed previously, it is better to have the use of electronic supervision authorized through State statutes. This provides stronger encouragement for its use and greater protection for those administering programs. In at least two States, court challenges to the use of electronic supervision were upheld until State laws were passed. In the New York case of *People* v. *McNair*, 665 N.E.2d 167 (N.Y. 1996), the Court of Appeals struck down the use of electronic monitoring because the courts were not statutorily authorized to impose it as a condition of probation. The court believed that, unless specifically authorized, trial courts could not impose conditions of probation that were not rehabilitative in nature. The New York Legislature then passed an amendment to the penal law authorizing the use of electronic monitoring as a condition of probation (Skelton, 1999a).

Similarly, in Texas, the use of electronic monitoring as a condition of deferred adjudication was challenged in *Ex Parte Gingell*, 842 S.W.2d 284 (Tex. App. 1992). The court reasoned that, statutorily, a trial court could impose electronic monitoring as a condition of probations, but in cases of deferred adjudication, where the court could not incarcerate, it also could not impose electronic monitoring. The Texas Legislature amended the statute to allow judges to use electronic monitoring in cases of deferred adjudication (Skelton, 1999a).

In the case of *State* v. *Macemon*, 561 N.W.2d 779 (Wis. App. 1998), the authority of the Wisconsin Department of Corrections to require inmates who were eligible for mandatory release to be electronically monitored was challenged. The appellate court determined that the department was so empowered and the conditions of release were proper and reasonable (Skelton, 1999a).

LIABILITY ISSUES

Because of jail and prison crowding, the justice system is continually looking for alternative methods of sanctioning offenders that will meet the goals of public safety, offender accountability, and offender rehabilitation. Increasingly, offenders with more serious criminal backgrounds are being re-

leased for community supervision. If an offender who is being supervised electronically commits further crimes while released in the community, victims may initiate suits for damages caused. Those subject to such liability may include government or private agencies and their personnel charged with supervising the offenders, those who actually conduct the monitoring (e.g., computer verification of offenders' whereabouts), and equipment manufacturers. So far, no appellate cases have been decided, so it is difficult to predict how such cases might be viewed.

Situations from which Liability Might Arise

As noted previously in this chapter, some courts have determined that electronic supervision is equivalent to the offender being in custody. In other situations, electronic supervision of offenders is viewed as a more restrictive form of release in the community. Therefore, the general public, as well as identified victims of the offender, may have an expectation of greater protection from offenders who are being supervised electronically.

Programs using electronic supervision technologies should be careful not to convey a false sense of security to the public or to specific victims. While it is important to convey confidence in the program and in the technology (see chapter 12 on Public Relations), it is equally important to be honest about the real and possible limitations of the technology.

Liability suggests a legal responsibility for one's professional conduct. Professionals involved with the use of electronic supervision technologies are subject to the same criminal laws that affect any other citizen. For example, theft of company property or driving under the influence of alcohol would make the individual subject to the same criminal charges and prosecution as anyone else. However, civil liabilities may result from actions (or inaction) related to one's job or professional performance. Three conditions must be present for a civil wrong to be substantiated (National Center for Juvenile Justice [NCJJ], 1991):

- The defendant owed a duty or had a legal obligation to the plaintiff.
- The defendant breached this duty.
- The plaintiff suffered some damage as a direct or proximate consequence of the breach of the defendant's duty.

There are three ways a professional might breach a duty or obligation owed a plaintiff (NCJJ, 1991):

- Misfeasance — taking the wrong action.
- Malfeasance — performing an action the wrong way.
- Nonfeasance — doing nothing when an action is required.

In programs using electronic supervision technologies, liability may accrue especially from the following situations, and these are discussed further in the next section:

- Failure to adopt or follow agency policies and procedures.
- Failure to conform to accepted standards for program implementation.
- Failure to know the limitations of the equipment, failure to use equipment according to manufacturer's recommendations, or both.
- Failure to act appropriately on additional information available about offenders.

Approaches for Diminishing Liability

Develop Sound Policies and Procedures

Agencies implementing programs with an electronic supervision component must develop sound policies consistent with their State's laws. These policies, at minimum, should include the following:

- Eligibility criteria for offenders who will be supervised electronically (this should be specific as to the types of offenders who will be accepted and the level of risk they pose).
- Information that must be provided to offenders when they are placed on electronic supervision.
- Information that should be provided to any identified victims of the offender.
- How equipment works and how to install it properly.
- Responsibilities for inspecting and repairing or replacing defective equipment.
- Establishing schedules for absences from the home or designating restricted areas in the community.
- How to respond to alerts.
- Steps that should be taken to notify the community or specific victims if an offender absconds, and procedures for attempting to locate the offender.
- Staffing requirements.

Conform to Accepted Standards

The American Bar Association has adopted the following "Principles for the Use of Electronically

Monitored Home Confinement as a Criminal Sanction." The organization does not approve nor disapprove of home confinement but outlined these limitations for its use. Agencies should consider these when developing policies and procedures (Legal Issues, 1989, p. 12).

1. A sentence may include home confinement monitored by an electronic monitoring device if the judge finds, on the record, that such electronic monitored home confinement is the least restrictive alternative which should be imposed consistent with the protection of the public and the gravity of the offense.
2. In no event should a court or probation officer automatically require electronic monitoring as a condition of probation.
3. The ability of an individual to pay for the use of an electronic monitoring device should not be considered in determining whether to require the use of such a device when imposing sentence.

The American Correctional Association also has issued *Standards for Electronic Monitoring Programs* (1995). By assuring that a correctional program meets the criteria outlined by this publication, it can become accredited. The standards are related to:

- Program administration.
- Fiscal management.
- Personnel training and staff development.
- Case records.
- Information system and research.
- Building and safety codes.
- Offender supervision.
- Safety and emergency procedures.
- Rules and discipline.
- Reception and orientation of offenders.
- Classification.
- Release.

Know the Limitations of Equipment and Follow Manufacturer's Instructions for Use of Equipment

All electronic supervision technologies have their limitations, and none are foolproof. It is vital that program planners understand the operation of the selected technology (e.g., range options, leave windows, cellular telephone interference) and develop program policies and select offenders accordingly.

Ensuring that equipment is installed properly and functioning accurately is vital as well. Agencies should select equipment with care so that it meets their program needs. Once particular equipment has been chosen, the manufacturer's directions for installation and operation should be followed precisely. In the event of an equipment malfunction, then, program personnel can attest to its proper use.

Act Appropriately on Information Gathered through Electronic Supervision

Finally, electronic supervision provides justice system personnel with much more information about the offender and his or her behavior than would be available under usual conditions when offenders are released to the community. Having this information may heighten justice system personnel's responsibilities for responding proactively. Program personnel must follow all procedures for responding to notification that offenders are not where they are supposed to be or they are in areas from which they are restricted. This is especially important when agencies are working with offenders who have histories of endangering others, including sex offenders and domestic batterers. If there is information that high-risk offenders have tampered with the electronic supervision equipment, left the area to which they are confined, or entered an area from which they are restricted, agency personnel should be especially vigilant about notifying potential victims as quickly as possible. Procedures for locating absconders also should be followed carefully to reduce the risk of liability if the offender commits new crimes.

Defenses Against Liability

If agencies or personnel are sued for harm to victims caused by program participants being supervised electronically, there are three types of defenses to liability. Absolute immunity bars suit, regardless of the culpability of the defendant's conduct, when such conduct occurred while acting in an official capacity. It is extended to judges, prosecutors, and legislators to promote fearless decisionmaking in government. For this reason, it is best to have the use of electronic supervision authorized by State legislation and/or court orders. Quasi-judicial immunity is provided officials when performing judicial-type functions but not when performing other job-related functions (Del Carmen & Louis, 1988). Therefore, quasi-judicial immunity protects an officer when acting pursuant to court orders. However, the supervision of the offenders may be classified as an administrative function not covered by such immunity. Qualified immunity may be extended under two different circumstances. First, it may be applied to discretionary acts of an officer performed as part of his or her job responsibilities.

Second, qualified immunity may shield an officer who acted in good faith while performing official functions. Qualified immunity covers most community corrections personnel.

Immunity is a legal question to be decided by a judge considering State statutes and case law; it is not applicable to Federal claims. All community corrections officers should have some understanding of their State's decisions on this issue (Collins, 1994). In the event an officer is not covered by immunity, or when making a determination of whether qualified immunity will be extended, the question arises: Did the officer act in good faith? The good faith defense applies as long as the officer's "conduct does not violate clearly established statutory or constitutional rights of which a reasonable person would have known" (*Harlow* v. *Fitzgerald*, 1982, as cited by Del Carmen & Louis, 1988, p. 8). A determination of good faith is subjective and generally not statutorily defined. A judge may decide whether the officer acted with an honest belief that she or he was acting lawfully and without malice. The burden to show the officer acted in bad faith is on the person bringing the complaint. Generally, one must act with total indifference to a person's safety or disregard clearly established constitutional rights to be found acting in bad faith.

All parties involved in electronic supervision should have written contracts that protect their interests and reduce the risk of liability. Specific responsibilities should be delineated in areas such as equipment installation, repairs, notification of alerts, responding to alerts, and the like.

CONFIDENTIALITY

Programs should carefully consider when and what types of information will be released, both about the program generally and about specific offenders or situations. These should be articulated in program policies and procedures

One appellate court case should be noted. In *Copely Press* v. *Admin. Office of the Courts*, 648 N.E.2d 324 (Ill. Ct. App. 1995), the plaintiff requested disclosure of documents about the electronic supervision system operated by a pretrial services agency. The Administrative Office of the Courts was required to disclose nonconfidential portions of the records. However, drawing on an earlier case (*United States* v. *Corbitt*, 7th Cir. 1989, 879 F.2d 224), which said the press did not have a right to access presentence reports, the court ruled that the information sought by Copely Press was similar to the presentence reports in the Corbitt case. The court went on to say (Skelton, 1999b, p. 22):

> Moreover, the present case can even be viewed as more compelling than Corbitt because the instant case is controlled by a statute which exempts the information from disclosure. Furthermore, the EMS program was admittedly an incarceration system. Thus, there is a possibility that information regarding the specialized techniques of the system would jeopardize the security of the system itself if disclosed. Accordingly, we hold that the plaintiff did not have a common-law or first amendment right to the documents.

Agencies should investigate statutory requirements within their own States that apply to confidentiality regarding offenders who might bring suits for defamation because of wrongful publication of their electronic supervision status or release of confidential information (Skelton, 1999b). Agency policies should delineate what information about offenders can be shared and to whom it may be released. Many agencies have release of information forms for offenders to sign before any information can be shared.

INSURANCE AND INDEMNIFICATION

When working with high-risk offender groups, agencies may want to consider whether additional insurance and indemnification are needed. Personnel would need to consider State laws and local ordinances, whether the agency is public or private, and the risk level of offenders being supervised, among other issues, when making decisions about this concern. Insurance might be useful in situations where the offender causes injuries to others or damages property, or in cases of staff negligence. Often, private and public agencies specify a cross indemnification clause in their contracts.

CONSULT LEGAL COUNSEL

Agencies should confer with State or local legal counsel during the process of program development and implementation. The possible legal ramifications of the use of electronic technologies must be deliberated carefully. It is important that policies and procedures for electronic supervision are consistent with other program policies and conform to relevant State and Federal laws. It is far more cost effective and much less time consuming to avoid a legal challenge than to respond to a law suit that

arises because the legal aspects of the policies and procedures were not researched adequately.

CONCLUSION

This chapter provided a brief summary of some legal issues that are related to the development and implementation of electronic technologies for offender supervision. Legal issues and concerns should be researched carefully during the development of program policies and procedures. Legal challenges still may occur. However, if these issues have been reviewed, and decisions have been based on the best legal advice available, the agency and staff can proceed with greater confidence.

Many concerns and questions were addressed in this chapter, but definitive answers were not given in all cases, nor are all legal issues explained here. It is imperative that agencies research these areas carefully for laws and regulations specific to State and local jurisdictions.

Chapter 4
TYPES OF OFFENDERS TO BE SUPERVISED WITH ELECTRONIC TECHNOLOGIES

Determining which offenders will be included in a program component to supervise offenders electronically is an important early decision to make. Engaging stakeholders and conducting a needs assessment, as described in chapter 2, and State legislation discussed in chapter 3 provide some of the information needed to reach this conclusion. In turn, the types of offenders to be supervised will influence the selection of technologies and the development of supervision policies and procedures. This chapter provides some additional key information for considering the types of offenders to be supervised.

PUBLIC POLICIES AND PREVALENT OPINIONS

When developing or enhancing a program component to supervise offenders electronically, planners must review public policies that may mandate, enable, or prohibit its use for various types of offenders. (For a summary, please refer to Chapter 3.)

At the same time, planners must be tuned in to public sentiment about using electronic supervision on various offender groups. Sometimes the decision to place certain types of offenders on electronic supervision can be controversial. Therefore, it is important to include in the needs assessment process, an attempt to gather and consider the viewpoints of a variety of community members. Not much formal research has been done on citizens' attitudes about the use of electronic supervision. It is likely that such attitudes would vary from one community to another. However, in a 1993 study conducted with 1,000 households in Oneida County, New York, researchers found a high level of public support for electronic monitoring with certain contingencies regarding the categories of offenders for whom it is used. Their findings included the following (Brown & Elrod, 1995):

- 94 percent did not believe house arrest violates an offender's privacy.
- 92 percent favored using electronic house arrest as a criminal sanction.
- 54 percent thought electronic house arrest could be used after an offender has served time in jail or prison.
- 31 percent felt electronic house arrest should be used instead of incarceration.
- 15 percent believed "serious" offenders should be placed on electronic house arrest (with "serious" crime defined as stealing or damaging property worth more than $1,000 or committing a personal crime requiring medical attention).

In the area where this research was conducted, planners might conclude that the public generally favored electronic supervision for offenders committing less serious types of crimes after a period of incarceration.

Political rhetoric often indicates that the public wants tougher penalties for criminals, including prison sentences. However, national public opinion polls and other studies have shown that citizens often favor community-based correctional options for nonviolent criminal offenders (Boone, 1996).

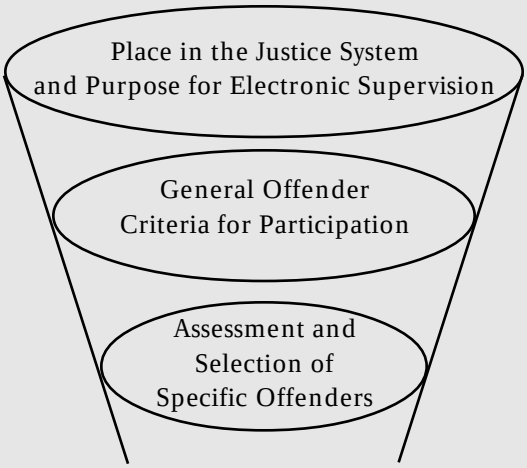
Diverse opinions prevail regarding the use of electronic supervision technologies for various types of offenders. Public perceptions often are molded by news media reports, and most of these focus on problem situations or tragedies that have occurred while offenders were being supervised electronically. Another reason these differing persuasions persist is that little definitive research has been reported that supports or refutes the effectiveness of electronic supervision with various types of offenders. As more programs implement electronic supervision technologies, a vital component of those programs must be quality evaluation. This will be invaluable in assessing the effectiveness of electronic supervision and determining its most appropriate use in community corrections.

OFFENDER SELECTION POLICIES AND PROCESS

When selecting offenders for community supervision with electronic technologies, the program's purpose (discussed in chapter 2) must guide the process. The types of offenders who will be supervised with electronic technologies must be carefully considered during the planning process. Figure 4a depicts a three-level, funnel-like decisionmaking process where each determination leads to the next, more specific one.

Figure 4a

DECISONMAKING FOR TYPES OF OFFENDERS TO BE MONITORED



Place and Purpose of Supervision

Both the place and purpose of electronic supervision were discussed in chapter 2. For thinking about offender selection, it may be useful to develop a matrix similar to the example in table 4a. By selecting the intersection of the place in the justice system and the selected purpose of electronic supervision, the potential candidates begin to be narrowed.

Pretrial Release

Although defendants are guaranteed to be considered innocent until proven guilty, many are held in custody pending trial because the court believes they present a danger to the public or will flee the jurisdiction before trial. Electronic supervision has grown as an option for the pretrial release of defendants who otherwise would remain in detention (Renzema, 1992).

Renzema (1992) offers some cautions when considering the release of pretrial defendants on electronic supervision. The assessment for release often must be made quickly without the benefit of all necessary information. Therefore, mistakes may be made either in determining the dangerousness of an defendant or his or her likelihood of flight. Persons under the influence of psychoactive substances often are detained. If they have an addiction, their ability to adhere to the requirements of electronic supervision may be jeopardized. If persons who abuse alcohol or other drugs are released on electronic supervision, they should be drug free at the time of release and also should be subject to frequent and random drug and alcohol testing while in the community. Programs should be cautious not to overuse electronic supervision at this point in the justice process. Many offenders are released routinely on their own recognizance or with bail. If the person ordinarily would be released on this status, they probably do not need to be electronically supervised. For those who do need to be supervised more closely, they are more likely to comply with program conditions if they have ties to the community and would experience losses if they were detained (e.g., loss of employment, family relationships).

In addressing public safety in pretrial release programs, electronic supervision may be used to

Table 4a

DECISIONMAKING MATRIX FOR SELECTING PLACE AND PURPOSE OF ELECTRONIC SUPERVISION

	Public Safety	Victim Alert	Offender Accountability	Offender Behavior Change	Reduce Facility Crowding	Save Money
Pretrial						
Probation						
Incarceration						
Parole						

deter witness intimidation as well as other behavior that might create a public safety risk. Some defendants, such as domestic batterers, may be released with electronic supervision systems that notify the victim if the defendant approaches. Accountability also may be a goal; for defendants who cannot afford bail, release on electronic supervision is another method of holding them accountable for their behavior and return to court. Another program purpose may include reducing populations in crowded facilities. Defendants released with electronic technologies can be supervised more closely to deter their absconding before trial. If they do flee before trial, their absence can be reported and court calendars can be cleared, thus avoiding the expenditures associated with failure to appear for court.

Probation

Electronic supervision technologies have been used extensively by probation agencies in some areas. The rationale for using it with probationers might fit all of the purposes for using electronic supervision shown in table 4a. An offender who otherwise might be incarcerated may be sentenced directly to probation with conditions for electronic supervision to ensure public safety, alleviate facility crowding, or both. A domestic batterer or sex offender might be monitored to alert specific victims if the offender tries to approach them or to detect their encroachment into areas where possible victims might be found (e.g., pedophiles often are prohibited from going near schools and parks). Various electronic technologies may be appropriate to monitor offenders' compliance with court orders and treatment requirements (e.g., curfews, home detention, home incarceration, sobriety, employment). Electronic supervision strategies also can be a facilitator for offender treatment. In preparation for entry into treatment programs, offenders supervised electronically may be able to adjust to more structured lifestyles and avoid situations that would exacerbate their problems. Electronic supervision also assists in monitoring treatment attendance and compliance with treatment program expectations. Probationers may be placed on electronic supervision as a sanction for violating various conditions of probation. For example, a probationer who repeatedly tests positive for illegal drugs might be placed on home detention for a period of time in lieu of revocation of probation or parole, or as an enhanced sanction for continued drug use as well as to limit his or her access to illegal drugs. Finally, using electronic supervision to release offenders on probation supervision can be economically advantageous, as offenders in the community are able to maintain employment, pay taxes, and support their families.

If probation agencies use electronic technologies for supervising offenders, it is important that they have policies and procedures to respond appropriately to the information generated by the electronic supervision. Because of high caseloads, many probation agencies have difficulty providing just basic supervision contacts and responses to blatant violations. The electronic supervision component of a probation program will generate a significant amount of information about the offender's behavior (Renzema, 1992). With this additional knowledge comes the responsibility to respond to it and possible consequences (e.g., liability for negligence) if appropriate reactions are not made.

Incarceration

Release of some incarcerated offenders can be an effective way to reduce facility crowding and foster public safety simultaneously. It may save on correctional costs and also can be used as a means of offender accountability. Some ways incarceration programs use electronic supervision include monitoring offenders on work furloughs or those on prerelease status as they are making the transition to less restrictive forms of supervision. Some jurisdictions have replaced traditional work furlough programs with electronic supervision because, in essence, they provide the same function. Offenders are allowed to work and attend treatment during the day, but they must spend the night under supervision. Electronic supervision requires a curfew and provides surveillance to ensure offenders do not leave their residences during specified hours, thus saving the cost of 24-hour staff to do the same thing.

When used in these ways, programs should respond quickly to all violations. One advantage incarceration programs have in selecting candidates for electronic supervision is that generally they have had ample time to observe the offenders and assess their potential for successful release with electronic supervision (Renzema, 1992).

Parole

Offenders granted parole may be released with a condition of electronic supervision as a means of monitoring their behavior and helping them make adjustments to life outside an institution. In some cases, earlier release of parolees with electronic supervision may be a way of reducing facility crowding, saving correctional dollars, or both. Parolees who have histories of domestic violence or sexual

abuse may be monitored so their victims can be alerted if they are in danger. Electronic supervision also may be used as a sanction for parolees who violate other conditions of their release.

Criteria for Offender Participation in Electronic Supervision

The authority for determining eligibility and placing offenders in programs with electronic supervision may derive from legislation, court orders, or agency decisions. It is crucial that those responsible for making such decisions have clear criteria for selecting offenders to participate. Criteria for both including and excluding offenders from electronic supervision should be considered. Table 4b lists some of the inclusion and exclusion criteria that may be examined for selecting offenders for electronic supervision. These criteria are provided only as examples. There is no right or wrong set of criteria. Decisions for placing defendants and offenders in programs using electronic supervision must be made on a case-by-case basis with safety of the offender and the community guiding the ultimate decision.

There are no conclusive research studies or national guidelines that recommend consistent criteria for including or excluding offenders in programs using electronic supervision. Each offender must be examined carefully for participation in electronic supervision. The most important consideration is whether offenders are a threat to themselves or the community. For example, it may be unwise to release a misdemeanant domestic violence offender to live in the same home with the victim. However, a woman convicted of murdering her husband in self-defense may be assessed as posing a low risk to the safety of her family and the community. Further, her family would benefit from her staying at home under electronic supervision so her children are not sent to foster care.

Some jurisdictions view electronic supervision as an important tool to supervise serious violent offenders who are released from prison or jail on parole or under mandatory release conditions. This can provide an extra level of supervision for offenders who may otherwise pose a greater risk to the community.

On the other hand, some jurisdictions may choose to apply electronic supervision strategies to lower risk offenders. Some criteria should be established, however, that differentiates between offenders who would most likely serve time in the community safely without strict supervision, and those for whom electronic supervision would provide an added

Table 4b

EXAMPLES OF INCLUSION AND EXCLUSION CRITERIA

Inclusion Criteria

- Lack of serious criminal history.
- Willingness and motivation to comply with program requirements.
- Offender is primary caregiver for children or other family members.
- Pregnant offenders.
- Offender provides financial support to family.
- Offender has medical needs that can best be managed in the community.
- Victim agrees to community release.
- Offender can receive treatment (e.g., alcohol/drug, sex offender, batterers treatment) in the community.
- Reasonable expectation for victim/public safety.

Exclusion Criteria

- Significant criminal history.
- Current or prior violent or sex offenses (unless as a condition of release to the community).
- Inappropriate behavior while in jail or prison.
- Failure in previous alternative correctional programs.
- Offender will reside in the community with the victims (e.g., domestic violence or child abuse victims).
- Severe substance abuse or mental illness that limits offender's ability to control his or her behavior.
- Victim does not agree to community release.
- Offenders with advanced technical knowledge or who work for an electronic technology company.

Sources: APPA Electronic Monitoring Working Group; Connelly, 1999; V. Dominguez, personal communication, April 11, 2000.

measure of offender accountability and safety to the community. Overusing electronic supervision for low-risk offenders may result in "net widening." The technology may be used for its own sake rather for a rationally defined purpose such as increasing public or victim safety or holding offenders accountable.

Individual offender assessment and the program purpose for employing electronic supervision should be the most persuasive criteria used for determining whether to use electronic technology with a given offender.

Individual offender assessment and the program purpose for employing electronic supervision should be the most persuasive criteria used for determining whether to use electronic technology with a given offender. However, assessment and program criteria are likely to vary from one jurisdiction to another.

Another issue that must be considered is the type of offense committed. In some cases, legislation specifies types of offense categories for which electronic supervision may or may not be considered. Offenders never should be placed on electronic supervision based solely on the type of offense with which they are charged or for which they have been adjudicated. Within each offense type, there will be a range of offenders, and several other criteria must be considered. Further investigation is required also, because offenders often enter guilty pleas for offenses less serious than the initial charges. However, given these caveats, there are some offense types that may be more appropriate than others when considering the offender's placement on electronic supervision.

Connelly (1999) lists the following types of offenses as those for which electronic supervision is commonly used or considered:

- Welfare or housing fraud.
- Drug possession or sales.
- Driving under the influence.
- Driving on a suspended license.
- Driving without a license.
- Petty theft.
- Credit card fraud.
- Embezzlement.
- Weapons charges without injuries.
- Minor assaults and batteries, with no past history.
- Theft or grand theft with no injuries.

Several types of offenses for which electronic supervision may be used or contemplated are considered in more detail below.

Driving Under the Influence (DUI)

Using electronic supervision as a means of both sanctioning and supervising DUI offenders can contribute to goals of offender accountability and behavior change as well as reducing facility crowding and saving money. According to Renzema (1992), DUI offenders usually are not high risks for escape, so release to the community under controlled circumstances can be defended. Further, they often do not necessarily fit well in jail or prison populations, and for those with addictions, treatment resources may be limited or nonexistent while they are incarcerated. Thus, when they are released after a period of incarceration, they may not be able to maintain sobriety, and may again become a danger to the public. Alternative sentencing in the community with conditions of electronic supervision may be an especially good use of this technology.

Drug Offenses

Community release for substance-abusing offenders may or may not be effective, depending on several factors as well as individual offender dynamics. As mentioned in the previous section, substance abuse treatment often is limited or nonexistent in confinement facilities. Therefore, release of offenders to the community provides a better opportunity for treatment of their addictions. Conditions of release for substance-abusing offenders placed on electronic supervision also should include drug and alcohol testing. The testing will identify those who return to drug or alcohol use, while the electronic supervision will provide information on their observation of curfews and their whereabouts.

Domestic Violence Offenses

Electronic supervision technologies used with domestic batterers can provide the ability to alert a specific victim if the offender approaches and can be used as a mechanism to hold offenders accountable for staying at home and for promoting behavior change. Domestic violence cases must be carefully assessed because all the electronic technology can do is provide an alert for a victim and law enforcement when the offender comes within a set distance

of the victim. If the offender is determined to contact the victim or to harm her, the technology itself will not stop him. Many domestic violence offenders are relentless in their determination to exert power and control over their victims, and their release in the community under any conditions may imperil their victims' safety.

Sex Offenses

Sex offenders also must be assessed individually. Re-offense rates vary markedly among the diverse types of sex offenders. In some cases, electronic supervision technologies could be used, much like they are with domestic violence offenders, to alert specific victims of the offender's approach. However, in many cases, sex offenders have multiple victims. Their release in the community may provide better opportunities for sex offender treatment as long as they can be supervised effectively to avoid their committing further offenses. Electronic technologies can enhance supervision following periods of incarceration or when it is deemed appropriate to release offenders directly to the community. Recent technologies allow the monitoring of offenders' movements in and out of restricted areas such as schools and parks. Renzema (1992) advises, "Our suggestion for using EM [electronic monitoring] with sex offenders is that it be imposed on a case by case basis with neither universal inclusions nor exclusions" (p. 14).

Violent Offenses

Violence may occur because of emotionally-charged conflict between two or more individuals. It also may provide an emotional release for some individuals who assault strangers. Further, violence may be related to profit motives or other types of individual gains (e.g., beating someone, such as a witness, to obtain his or her compliance or assaulting someone who cannot repay a debt). Electronic supervision technologies may be effective in limiting an individual's movement in the community and, therefore, keeping him or her away from situations that might erupt in violence (e.g., bars). On the other hand, just as with domestic violence and sex offenses, the electronic technology will not prevent a person from committing a violent act if he or she is determined to do so. Offenders with violent histories are released to the community. Once release is inevitable, electronic supervision may be the best option for providing consistent surveillance of his or her whereabouts and compliance with release conditions. However, in these cases, it is vital that the supervising agency is able to respond immediately and with effective consequences to any violations discovered (Renzema, 1992).

Assessment and Selection of Specific Offenders

Regardless of the types of offenders a jurisdiction selects for electronic supervision, individual offenders within that classification must be assessed for their appropriateness for the program. Case assessment and classification, as well as individual case planning are important aspects of pretrial and post-adjudication corrections programs. Gottfredson (1987, pp. 10-11) states:

> Decision-making applications in criminal justice can be said to be of two kinds, namely, institution policy decisions and individual decisions. . . . Planning problems often require estimates of outcomes of criminal justice decisions, including predictions of the persons who, in a given category, will have their probation or parole revoked, or who will not commit crimes at a high rate after release from confinement, or who may reasonably be expected to be paroled at first eligibility. Administrators may require estimates of the incarceration rates…of various categories of offenders. And in the long run they often require… estimates…[of the] effects…of differential handling for purposes of treatment or control.

Gottfredson (1987) goes on to discuss decisions about individual offenders, especially those judgments that may involve the person's confinement or determine the context of supervision and interventions. Through this discussion, he explores the complex reasons for case assessment, classification, and management. Assessment and classification address multiple levels of decisionmaking, ranging from the individual offender, to the program or agency, and even to the wider jurisdictional level.

Palmer (1984) asserts that the purpose of justice system intervention includes both socially-centered and offender-centered goals. Socially-centered goals aim to modify an offender's behavior so it conforms to the law and, therefore, promotes the protection of society. To accomplish this, however, offender-centered goals must be achieved, resulting in modification of the offender's behavior and a better adjustment between the offender and his or her environment.

A process of assessment and classification is essential for matching offenders' risks and needs with the appropriate type of services along a continuum of justice alternatives. Two fundamental reasons for using a formal assessment and classification system are (National Council on Crime and Delinquency [NCCD], 1997, p. 4; Wiebush, Baird, Krisberg, & Onek, 1995, p. 174):

- Providing greater validity, structure, and consistency to the assessment and decision-making processes.
- A more efficient allocation of limited system resources by targeting the most intensive/intrusive interventions on the most serious, violent, and chronic offenders.

Resources are always limited, and classification systems help channel offenders into the least restrictive, least intrusive, and usually least expensive program resources that reasonably can be expected to control and change their behavior and protect the public. Offender classification systems also help agencies organize staff and other resources.

Assessment instruments are standardized tools comprised of a limited set of factors that are most relevant to the type of decision being made (e.g., treatment, incarceration, supervision). For effective case classification, these instruments should be administered to all offenders, and the results should be used to classify offenders according to pre-set criteria (Howell, 1995; NCCD, 1997; Wiebush et al., 1995). Effective classification requires prediction through which knowledge of past events and current circumstances are used to form expectations of future behavior. Prediction is really a summary of the past to guide future decisions, assuming there will be a degree of consistency over time (Gottfredson, 1987). Therefore, assessments use demographic, criminal, and behavioral characteristics to "sort" offenders according to their anticipated level of misconduct (Wright, 1988).

Actuarial methods of offender classification rely on probabilities to discriminate among potential rates of future behaviors or events, while clinical methods depend on the experience and more subjective judgments of the individual assessor. Predictions are based on objective, standardized, and empirical risk measures, including historical data on offender characteristics and outcomes (Boone & Fulton, 1995; Clear & Gallagher, 1983; NCCD, 1997). In other words, an offender's future behavior is forecast based on the known outcomes of a similar group of offenders. This is why evaluation of outcomes for offenders in programs using electronic supervision are so vital for the field.

Assessment instruments are effective in predicting that most offenders within a certain classification group will act in anticipated ways (e.g., recidivate, successfully complete treatment). However, they will not always accurately predict an individual offender's behavior (Clear & Gallagher, 1983). Nevertheless, they provide an effective tool for classifying and managing caseloads of offenders.

There are many types of risk and needs assessment instruments being used today. Traditional assessments typically looked only at static factors, such as the number of arrests, age at first arrest, education level, employment, and the like. While this is valuable information, research has shown it does not provide predictive information concerning the risk of placing an offender in a community program nor does it provide guidance for case planning. Several assessment tools now include dynamic factors such as neighborhood, types of friends, employment stability, and family relationships that help with predictions and case planning. These more comprehensive assessments identify programming such as chemical dependency treatment, education, vocational training, or employment options that will assist the offender with behavior change.

Agencies should use risk and needs assessment tools validated for the population with which they are used. If one has not already been selected, existing instruments can be adopted for a specific program. If necessary, the points or weights assigned to certain items may be changed to more accurately reflect the characteristics correlated with recidivism. Additional items also may be added to a tool if they are found to occur with substantial frequency among the sample population (NCCD, 1997).

Program policies and procedures always should allow mechanisms for overriding the case classification structure if personnel believe an offender to be more or less of a risk than is indicated by the risk assessment instrument. Criteria should be set in written policies for making such departures from the classification protocol.

Some jurisdictions have also developed a process using selection panels consisting of representatives from criminal justice agencies as well as residents. They feel this method better ensures both criminal justice system personnel and public buy-in.

Other Selection Factors

Beyond the issues discussed previously in this chapter, offender selection must consider the individual's living situation.

Residence Requirements. First, the offender must have a stable home in which to live while being supervised electronically. Stable residences may include his or her home with partners and children, living with parents, residing with roommates, or living singly. Whatever the configuration of those residing in the home, it should be a stable setting

so the offender will be able to remain there throughout the electronic supervision period. If a living situation becomes unstable, authorities must act quickly to facilitate change to another stable living situation (Connelly, 1999).

The physical location must have consistent electrical service (Connelly, 1999). There are some electrical and home conditions that may interfere with some electronic technologies, and the home must be assessed for these. Frequent power surges or poor household wiring could disrupt the signals of the technology as could interference from radio waves. Metal in the home (e.g., mobile homes constructed of metal or metal furniture) also may limit the range of the transmitter (Connelly, 1999).

Telephone Services. Many in-home electronic supervision systems — such as some automated reporting, programmed contact, continuous signaling, and victim alert systems — rely on the use of a telephone, so the offender must have access to phone service. Additional telephone services, such as call waiting, call forwarding, answering machines, and modems often must be disabled during the electronic supervision period, as they may interfere with the technology used. Some technologies make automated calls periodically. Phone lines must be free enough that these calls can go through. Extensive use of the Internet using telephone lines or lengthy telephone conversations may have to be prohibited.

Some technologies do not require telephone services. With continuous signaling systems, the offender has a receiver in the home that monitors and records each time he or she enters and leaves the home. However, rather than this information being automatically downloaded to a 24-hour monitoring center as it occurs, the offender may bring the receiver to the supervision agency on a scheduled basis (e.g., daily, weekly) to download the information. This "passive" monitoring is recommended only for low-risk offenders when immediate notification of program compliance is not required. Other technologies also are available that do not rely on household telephone service, such as those using cellular telephones or systems in which supervisory personnel determine the offender's presence or absence as they drive near where he or she is supposed to be (Renzema, 1992). More information on the requirements of various technologies will be provided in chapter 7.

Cooperation of Household Members. Supervision of offenders using electronic technologies will affect others living in the same household. As mentioned in the previous section, electronic supervision will demand cooperation with telephone requirements and may limit the use of phone lines and services by all members of the household. This can cause frustration by the offender and all others in the home, so a high level of understanding and motivation to cooperate is needed (Renzema, 1992).

As most electronic supervision program components require the offender to spend most of his or her time (other than working) in the home, there are ramifications for others living at the same residence. If there is animosity or resentment between household members, it may be exacerbated because of increased contact with the offender. On the other hand, some studies have indicated that electronic supervision did not affect family relations negatively, and may even have a positive influence (Renzema, 1992).

CONCLUSION

This chapter examined a range of issues related to the selection of defendants and offenders to participate in electronic supervision program components. It emphasized the need to set selection criteria that correspond to public policies and community and professional views. The selection policies and process may vary according to the part of the justice system in which electronic supervision is being implemented and the purpose for electronic supervision that is adopted. Criteria should be developed by the program for both inclusion and exclusion of offenders. Offense types to be accepted for or prohibited from program participation must be considered carefully and based on State laws and local issues. Each offender should be assessed for appropriate placement in a program using electronic supervision strategies. Besides personal factors, including risks and needs, the offender must have a stable residence that will accommodate the electronic supervision equipment and telephone service, if needed. Other members of the household also must be cooperative with the restrictions required for use of the equipment.

Chapter 5
FUNDING

Criminal and juvenile justice systems always work in an environment of limited resources. This requires setting priorities, using existing resources wisely, and obtaining additional revenue when possible. The development or enhancement of a program component to supervise offenders electronically will often require funding that must come from existing program resources or as yet untapped funding sources. This chapter examines cost and benefit issues to consider when making decisions to develop or enhance an electronic supervision program component. It then considers a variety of sources of funding for the use of electronic supervision technologies.

COST-BENEFIT CONSIDERATIONS

Determining the relative costs and benefits of a program that incorporates an electronic supervision component is a complex undertaking, but a cost-benefit analysis will assist decisionmakers in determining whether or not such an endeavor is financially practical. All potential costs and benefits should be considered before a final decision is made. Although funds may be limited, in some cases, it may be considerably more costly not to implement electronic supervision technologies.

Four cost and benefit issues should be explored (Crowe & Schaefer, 1992):

- Tangible costs are based on information that feasibly can be gathered and represented in dollar amounts.
- Intangible costs are expenses incurred in the event of some predictable, yet immeasurable occurrence.
- Tangible benefits are actual dollars an agency can save by implementing electronic supervision processes.
- Intangible benefits are predictable, yet immeasurable savings that may occur as a result of electronic supervision.

Tangible Costs of Electronic Supervision

To calculate the tangible costs of electronic supervision, a variety of types of information are needed including the following:

- Number of offenders eligible for electronic supervision based on decisions made about the place and purpose of electronic supervision (see chapter 4).
- Estimated frequency and length of use of electronic supervision technology with these offenders.
- Cost of equipment, supplies, and monitoring services including the possible provision of telephones for indigent clients.
- If the criminal or juvenile justice agency implementing the program is also monitoring the electronic devices, there will be added costs for computers, telephone lines, office space, and the like.
- Equipment maintenance costs.
- Shipping costs.
- Secured storage area for unused equipment and supplies.
- Additional communication equipment for staff (e.g., pagers, cellular phones, fax machine).
- Number and salary of staff required to implement the technologies adequately, including additional costs for overtime pay when needed.
- Salaries and other costs for managers, administrators, accounting, and support staff with responsibility for the program.
- Required office space and its maintenance for additional employees needed.
- Transportation costs for field work required for effective electronic supervision.
- Cost of training needed by staff who will operate or use the electronic supervision program component, including costs for staff turnover due to reassignments, retirement and other factors.
- Costs of incentives and sanctions used as consequences for compliance or noncompliance.
- Costs of other services needed by offenders being supervised electronically.

Figure 5a provides a fictitious example of the computation of these costs for a probation agency that plans to use home confinement with electronic technologies as a sanction for offenders who test positive for alcohol or illegal drugs. The agency has 200 offenders for whom the court has ordered drug testing. Of these, about 30 percent, on average, have tested positive during the past year. Staff have estimated that one home detention sanction would likely be sufficient for approximately half of these offenders to curtail their illegal alcohol and drug

Figure 5a

Example
TANGIBLE COSTS FOR ELECTRONIC SUPERVISION

This fictitious example of cost estimates for an electronically supervised home confinement program using continuously signaling radio frequency equipment is provided for illustrative purposes only. Costs will vary according to the number of offenders involved and the type of equipment used as well as the length of time offenders are supervised. Agencies will differ significantly in the types and costs of services that may be provided offenders in various programs. Further, some costs, such as office space, are not included in this example that may be budgeted in an agency setting. Information in chapter 9 on the procurement process will provide more details about costs and requirements for electronic supervision equipment and services.

Number of offenders potentially eligible for electronically supervised home confinement	60
Frequency and length of use of electronic supervision	
60 offenders x 30 days = 1,800 days of supervision	
30 offenders x 60 days = 1,800 days of supervision	
15 offenders x 90 days = 1,350 days of supervision	
4,950 days of supervision	
Average daily quantity (4,950 days of supervision / 365 days)	14
Equipment, supplies, and monitoring services	
Lease of 25 RF units for year @ $2.50 per day (extra units allow for spares and uneven intakes)	$ 22,813
Purchase of consumable supplies (e.g., straps, batteries) @ $5/offender use	525
Contracted monitoring services @ $5.00 per day for 4,950 days of supervision	24,750
Telephones for indigent offenders	900
Shipping and maintenance of equipment	750
Vehicle use for supervision (13,000 miles x $.35/mile)	4,550
Secured Storage Area (2 locked storage cabinets @ $200 each)	400
	$54,688
Office furniture, supplies, and communication equipment for staff	
Fax machine	$300
Pager & Service (purchase of pagers and monthly service)	700
Cell phone (purchase of phones and monthly service)	1,100
Computer, printer, yearly Internet service	2,360
Office furniture	750
Office supplies	300
	$5,510
Staff	
1 FTE staff member @ $35,000 + benefits	$43,750
Administrative & support staff @ 20% FTE + benefits	12,500
Staff Training (Attendance at two conferences)	1,000
	57,250
Incentives and Sanctions	
45 offenders x $25 (e.g., tickets to ballgame, movie passes)	$1,125
15 offenders x $200 (e.g., weekends in jail)	3,300
	$4,425
Other Services	
Substance Abuse Treatment ($1,000 for outpatient treatment x 60 offenders)	$60,000
Employment Training ($500 x 20 offenders)	10,000
	$70,000
Total Estimated Costs for Electronically Supervised Home Detention	
Without Treatment and Employment Training	$121,873
With Treatment and Employment Training	$191,873

use. They believe another fourth of the population would respond appropriately to a second home detention, and for the final fourth of the group, a third experience would be necessary. They propose that the first home detention last for one month, the second for two months, and the third for three months.

When electronic supervision strategies are used to enhance supervision of offenders who would be released in the community anyway, they may result in increased costs for supervising offenders in the community. Agencies have to assess whether the potential improvement in supervision is worth the additional cost of electronic technologies.

Intangible Costs

Expenses that might occur under certain conditions, but cannot be predicted accurately, are considered intangible. An example of an intangible cost for an electronic supervision program component would be a lawsuit arising during its implementation. For example, program staff might be alerted that an offender being electronically supervised has violated his or her curfew or has gone to areas from which he or she is prohibited (depending on the type of electronic supervision employed). If the staff fails to respond to those alerts in an appropriate and timely way, and the offender commits another offense resulting in physical harm or monetary loss to the victim, the program and staff might be subject to a lawsuit.

Chapter 3 described several legal issues that should be considered when developing policies and procedures for the use of electronic supervision. Once legal issues have been researched and policies are developed in accordance with them, it is vital that staff be trained and supervised in performing their duties in accordance with the program's policies and procedures. Implementation of thoroughly researched, comprehensive, and clearly written policies and procedures governing programs minimizes the risk of intangible costs to an agency. At the same time, having program policies, but failing to conduct the program in accordance with them, leaves the program and staff vulnerable to lawsuits.

Some program start-up costs are intangible, in that they cannot be predicted accurately. These include the staff time involved in educating and "marketing" the concept of electronic supervision to various stakeholders and the investment in the planning process for including electronic supervision among the agency's programs. These activities often require a considerable initial investment of staff time that cannot be recouped. Yet, their existence should be acknowledged and anticipated.

Net widening is another immeasurable cost that may occur with the implementation of electronic supervision. As the technology becomes available, more uses for it are likely to be found, and offenders may be placed in this program component even though they previously would have been supervised successfully without the technology. This net-widening effect can increase, rather than minimize, correctional costs.

Another type of intangible cost is lost opportunity costs. When funds are used for electronic supervision, they may not be available for other program options. The potential benefits of various program options should be weighed. Program personnel should carefully consider where funds for electronic supervision will come from and other programs or needs that may be sacrificed to implement this program component (Friel & Vaughn, 1986).

Still another predictable, but immeasurable, cost associated with some uses of electronic supervision results from increased rates of technical violations. Electronic technologies allow corrections personnel to gather much more information about offenders' activities than is possible using traditional supervision strategies. Chapter 10 on supervising offenders stresses the need to respond appropriately to both compliant and noncompliant behavior. A variety of graduated sanctions can be employed, but technical violations sometimes lead to court hearings, reincarceration, or both, resulting in additional costs to the justice system that might not have been incurred without the knowledge of these infractions.

Tangible Benefits

Savings resulting from the implementation of an electronic supervision program component can be estimated by using information from agency budgets, budgets of other agencies, and case management records. Although precise dollar amounts are difficult to calculate, savings may occur through the use of electronic supervision practices. Whether savings will be realized, and the amount and type of savings, depend on the purpose for electronic supervision and where it is conducted within the criminal or juvenile justice system. Some examples of electronic supervision applications that may result in savings include the following:

- Pretrial release of offenders who otherwise would be detained at a higher cost.
- Early release of offenders from incarceration, reducing the total cost of their confinement.
- As an adjunct to treatment that ensures greater offender compliance with and completion of treatment, thus reducing costs for repeated treatment enrollments.
- As a supervision and sanctioning tool that reduces recidivism rates and the costs of future crime.

When electronic supervision technologies are used to divert or release offenders from incarceration, cost savings are likely to occur. Figure 5b contains information about the average costs of incarceration and the range of costs related to various types of electronic supervision. Depending on the type of electronic supervision used and the daily cost of incarceration, modest to significant daily savings can be realized by diverting offenders from prison or jail or releasing them before they serve their entire sentence. For example, more than 50 percent of jail and prison populations are comprised of nonviolent substance abusers. Placing many of these offenders in the community where they can receive treatment would save significant incarceration costs and likely stem recidivism rates.

The cost example shown in figure 5a is continued in figure 5c to illustrate the potential cost savings. For this example, the costs of using incarceration versus electronically supervised home confinement as a sanction for offenders who test positive for drug use are compared.

Actual cost savings realized would depend on the cost of incarceration in a particular jurisdiction and the actual costs for the electronic supervision program component. This example uses continuous signaling technology, but some technologies will cost more, and others may cost less.

In most instances, electronic supervision is likely to result in substantial savings over offender incarceration. However, to determine the amount of savings all related costs must be factored into the analysis.

Another saving that may be realized with electronic supervision of offenders is in new construction of custody facilities. Because of growing offender populations, aging facilities that must be replaced, or both, new construction has been necessary; however, if offenders can be diverted successfully from adult prisons and jails and juvenile detention and custody facilities, the amount of new construction can be reduced, saving millions of dollars (Friel & Vaughn, 1986).

Intangible Benefits

Predictable but immeasurable savings that may occur as a result of electronic supervision are intangible benefits. It is not possible to accurately predict the potential savings an agency can offer the justice

Figure 5b

COMPARISON OF COSTS FOR INCARCERATION VERSUS ELECTRONIC SUPERVISION

Incarceration Costs
1999 average costs per inmate per day ranged from $30.36 in Louisiana to $97.62 in Alaska (based on data from 47 States; Camp & Camp, 1999).

General Costs of Electronic Supervision*

Type of Equipment	Daily Cost Range
Continuously Signaling (RF)	$ 3.00 - $ 4.50
Breath Alcohol Testing	$ 6.00 - $ 7.50
Voice Verification	$ 2.00 - $ 4.00**
Global Positioning	$15.00 - $25.00
Intermittent Global Positioning using cell phone and Voice Verification to locate and identify the offender	$ 4.00 - $ 6.00**

*These cost estimates were provided by Linda Connelly in material prepared for an Audio Conference on Electronic Monitoring presented October 13, 1999. The following statement accompanied the cost information:
The. . .expenses are to give a general idea of costs of equipment. Costs will vary depending on type of equipment, quality of equipment, number of units, and level of service being required.
**These costs were provided by John Gallagher, a member of the Working Group that guided the development of this document.
NOTE: The above costs do not reflect additional expenses, such as supervision personnel and other amounts shown in Figure 5a. These additional charges must be factored in to make a valid comparison for a given jurisdiction.

Figure 5c

Example
POTENTIAL SAVINGS WITH ELECTRONIC SUPERVISION

This fictitious example of cost saving estimates for an electronically supervised home confinement program using continuously signaling radio frequency equipment is provided for illustrative purposes only. Costs will vary according to the number of offenders involved and the type of equipment used as well as the length of time offenders are supervised. Agencies will differ significantly in the types and costs of services that may be provided offenders in various programs.

Number of incarcerated offenders potentially eligible for electronically supervised home confinement	60
Frequency and length of incarceration and/or use of electronic supervision	
60 offenders x 30 days = 1,800 days of incarceration/supervision	
30 offenders x 60 days = 1,800 days of incarceration/supervision	
15 offenders x 90 days = 1,350 days of incarceration/supervision	
4,950 days of supervision	
Average daily quantity (4,950 days of supervision/365 days)	14
Estimated cost of incarceration (4,950 days x $56.46 average daily inmate costs (Camp & Camp, 1999))	$279,477
Estimated cost of electronic supervision (refer to figure 5a for itemized costs)	
Equipment, supplies, and monitoring services	$45,593
Office furniture, supplies, and communication equipment for staff (fax machine, pager, cell phone)	5,510
Staff	57,250
Incentives and Sanctions	4,425
Other Services	70,000
Total Estimated Costs for Electronically Supervised Home Detention	
Without Treatment and Employment Training	$112,778
With Treatment and Employment Training	$182,778
Savings over incarceration costs	
Without Treatment and Employment Training	$166,699
With Treatment and Employment Training	112,778

system and society through effective electronic supervision. However, if realized, such savings may be significant and warrant consideration in the final cost-benefit analysis.

A possible intangible benefit from electronic supervision is a reduction in recidivism rates. Recidivism may be defined in several ways and, therefore, produce statistics that vary according to what is measured. Definitions of recidivism may include any new arrest, new felony arrests only, any new conviction, new felony convictions only, a new prison commitment, and new technical violations as well as other meanings or some combination of meanings (Boone & Fulton, 1995). Electronic supervision accompanied by incentives and sanctions and appropriate treatment and other services needed by offenders may divert some offenders from committing additional crimes. Such an eventuality would save significant future justice system costs including law enforcement, legal representation, court costs, incarceration, and community supervision.

Savings in social costs are another potential benefit of electronic supervision aimed to reduce recidivism. If future thefts, assaults, substance abuse, and similar crimes can be averted, the costs to victims and the rest of society will be significantly diminished.

Further, if offenders can remain in the community under electronic supervision rather than being incarcerated, they are more likely to be able to maintain jobs, support their families, pay restitution, and pay taxes. This benefits the offender, his or her family, and society in general. Costs such as foster care, public assistance, and other costs related to family dissolutions may be avoided if offenders remain in the community.

Money saved in justice system and societal costs

can be used in a variety of more productive ways, such as education, health care, housing, and family supports. As Friel and Vaughn (1986) state, "[I]t is neither humanistically nor economically beneficial to hold people in prison or jail who do not need to be there."

FUNDING

Once the costs and benefits of electronic supervision technologies have been analyzed, and stakeholders have decided to proceed with implementing one or more program components using these strategies, the issue of funding must be considered. There are a variety of options for funding an electronic supervision program component including:

- Agency budgets.
- Grants.
- Private donations.
- In-kind resources.
- Resource sharing.
- Offender fees.

Likely, a combination of these funding mechanisms will be necessary to fully support the use of an electronic supervision program component. Each of these areas will be discussed briefly.

Agency Budgets

Agencies rarely have spare funds in their budgets, so usually the funding that comes from an agency budget must be reallocated from other agency resources. In the example of electronic supervision program component costs shown in figure 5a, some of the required costs may be appropriated from other parts of an agency's budget. For example, the staffing, communication equipment, storage, and staff training expenses might already be in the agency's budget and could be directed toward this program component. However, if the agency has decided to include higher risk offenders in electronic supervision than might otherwise be released in the community, it may be necessary to hire additional staff who would also require more equipment, office space, and training. In such a case, additional funds for the program component would be required.

Although it would be difficult to negotiate, if the purpose of implementing electronic supervision is to alleviate jail or prison crowding, reallocation of resources from one agency to another may be appropriate. Even though there is often an effort to diminish institutional populations and increase the number of offenders supervised in the community, there is almost never a redistribution of funds from jails and prisons to community corrections agencies to assist with the additional costs of this shift.

Grants and Government Funding

At local and State levels it may be possible to request additional funds for new programs. Such money is generally available through local and State tax revenues. The process for obtaining such funds may be through the usual budget process, or it may involve a special request, such as a grant application or special appropriations.

State or Federal grants are usually either block (or formula) grants or discretionary (or categorical) grants. Block grants are usually distributed to States by the Federal government based on a formula that is usually mandated through legislation. In turn, States may allocate these funds to local jurisdictions or agencies. Discretionary grants provide funds for a specific purpose, and money usually is provided directly from a Federal or State agency to a local jurisdiction or agency. The most likely place to find such grants for correctional purposes is the Office of Justice Programs (OJP) within the U.S. Department of Justice (DOJ). Within OJP, there are several agencies that may offer discretionary grant opportunities related to offender supervision or victim safety, including (Imel & Hart, 2000):

- The Bureau of Justice Assistance (BJA).
- The Corrections Program Office (CPO).
- The National Institute of Justice (NIJ).
- The Office of Juvenile Justice and Delinquency Prevention (OJJDP).
- The Office for Victims of Crime (OVC).
- The Violence Against Women Office (VAWO).

Federal or State asset forfeiture laws also may provide funding for some corrections-related programs. These laws are enacted to require offenders to relinquish certain money and possessions, particularly those received through illegal activities. In turn, the revenue from these seizures can be used to fund justice system enterprises (Imel & Hart, 2000).

Private Donations

Private foundations and corporations sometimes offer financial support for programs that address public concerns. They often require a grant process similar to those of government agencies. Often these funds are limited by locality or interest area. Various directories and Web sites can be helpful in finding appropriate private funders.

In-Kind Resources and Resource Sharing

Some grant applications require matching funds that may be actual money or in-kind resources. In-kind resources that an agency might pledge as matching funds might include office space and equipment, storage space, staff time, and similar resources that are already available. Similarly, other agencies may provide in-kind resources to assist with the development or enhancement of electronic supervision strategies. For example, law enforcement agencies might provide personnel or computer resources to assist corrections agencies with the electronic supervision of offenders.

Agency collaboration is another effective way to obtain resources for a program component. Through a joint agreement, agencies can share space and supplies, engage in interagency training and staffing, or develop relational computer systems.

Offender Fees

Requiring offenders to pay for various aspects of their supervision in the community is an increasingly prevalent practice. Many agencies charge a supervision fee beyond offenders' financial obligations for restitution, fines, court costs, and similar responsibilities. Compelling offenders to pay part of their supervision costs is another way of holding them accountable for their unlawful behavior.

As discussed in chapter 3 on legal issues, while it is acceptable to charge offenders a fee for use of electronic supervision technologies, programs should not disqualify offenders from the program solely because of their inability to pay a fee. To do so would be discriminatory. Therefore, offenders should be selected for the program based on other eligibility criteria, and then their financial resources should be investigated. If they are unable to pay any or all of the electronic supervision fee, other resources should be made available. However, it may be acceptable to expect indigent offenders to perform community service in lieu of program fees.

Most agencies that charge offenders fees develop a sliding scale and assess payments based on offenders' income.

As with other fees and fines owed by offenders, payment processes should be clearly articulated and monitored during the course of electronic supervision. At the beginning of the supervision period, offenders should receive an explanation of the fee process including the amount he or she will be required to pay. This should be provided both orally and in writing, and the offender and supervising corrections personnel should sign the agreement. Among the information that should be included in the agreement are the following:

- The amount of payment.
- When payments are due.
- Acceptable types of payment mechanisms (e.g., money orders, credit cards, cash).
- How payments can be made (e.g., in-person, mailed).
- How receipts will be given.
- Identifying information that must be included with the payment (e.g., name, address, identification number).
- Consequences for delinquent payments (e.g., late fees, being dropped from electronic supervision).
- What to do if problems arise that prevent payment.

Further, offenders may be required to pay for any equipment or consumable supplies that they willfully damage or lose.

During supervisory sessions, corrections personnel should emphasize the importance of timely payments and reinforce the offender's financial obligations. When an outside organization is used for monitoring the offender, these agencies may assume fee collection responsibilities as well, often requiring the payment of fees in advance. Management of fee payments by a service provider alleviates community corrections personnel from this responsibility and allows them to focus their attention on other issues with the offender (BI Incorporated, 1998). However, if a service provider manages fee payments, the corrections agency must retain oversight that assures program integrity. It would be inappropriate for a service provider to minimize violations by an offender who is making regular payments in order to maintain paying clients in the program. The corrections agency should be advised of all violations and should maintain control of offender participation. At the same time, service providers should not fail to provide services because an offender is not paying fees. As mentioned in chapter 3, agencies also should consider alternative sources of funding for indigent participants.

CONCLUSION

This chapter has provided an overview of the economic factors that should be considered when contemplating the initiation of electronic supervision. Tangible and intangible costs and tangible and intangible benefits were discussed. Several sources of funding for the implementation of electronic supervision were identified as well.

Chapter 6
HUMAN RESOURCES

The preceding discussions of the types of offenders to be supervised and funding resources, as well as topics that will be discussed in future chapters, including the selection of electronic technologies and the supervision of offenders with it, are all important areas. However, the most important aspect of any program using electronic supervision strategies is its staff. The people employed to implement this program component will largely determine its success or failure. Therefore, it is important during the planning process to give ample consideration to a variety of staffing issues.

This chapter will raise several questions for program planners to consider and will make recommendations where possible. Much will depend, however, on the purpose of the electronic supervision program component and other decisions about how it will operate. This chapter discusses:

- Obtaining staff support for electronic supervision.
- Staff organizational issues that are particular to electronic supervision.
- Competencies and qualifications staff need.
- Staff training and development needs.

STAFF SUPPORT FOR ELECTRONIC SUPERVISION

A new program component brings change to an organization, and change can be disruptive. The idea of electronic supervision of offenders may not be greeted by line personnel with enthusiasm. An electronic supervision program component may be viewed as increasing already heavy workloads or as threatening to job satisfaction and security. Conversely, administrators may resist changes recommended by staff or feel the challenges of funding and administering new program components are not warranted by their perceived benefits. Further, professional unions may object to changes in staff job requirements that are necessary for effectively implementing electronic supervision strategies.

Effective organizational change requires the empowerment of staff including the following tactics (Belasco, 1990):

- Vision — A clearly stated agency mission and purpose can help focus and motivate staff toward the achievement of a common goal.
- Participation — Involving large numbers of staff in drafting the vision, and the program strategy to accomplish it, will unify and energize staff. Enthusiasm and interest are aroused for a program that one has helped to create.
- Organizational systems — Employees must be empowered with the means to accomplish the agency's goals. Training, communication, and reward systems give employees the tools to achieve the agency's vision and mission. These systems tell the staff what is expected of them; they provide opportunities to measure and report progress; they open channels for feedback; they motivate; and they reinforce efforts.
- Exemplary leaders — Visionary action must begin with those who introduce the program to their staff. Administrators of the program must exhibit the same dedication and commitment to the new program that is expected of all employees.

Despite careful planning, organizational change efforts often encounter obstacles. Four types of obstacles may interfere with change efforts. Possible ways of overcoming these are suggested:

- Slowness of the change process — Change always takes longer than expected. People want to see results immediately. Planners can help quell dissatisfaction and maintain enthusiasm by reporting short-term progress to staff at regular intervals as the program is developed.
- Exaggerated expectations — Frustration and disappointment may result from inflated expectations. While it is commendable to establish high goals, administrators must be aware of the limitations of resources at the agency's disposal. Throughout the process, mistakes should be acknowledged, not hidden. Some agencies may be able to make great strides through organization-wide problem-sharing. It is not necessary to create mythical heroes. People will feel most comfortable with honesty and humanness.
- Skepticism — Critics of the plan can throw the entire agency off course. However, negative comments should be neither squelched nor ignored. Some may represent valid criticism. Negative comments should be addressed directly. Sometimes through approaching skep-

tics personally, an effective leader can transform them into avid supporters. Administrators may also allay the negativity in critics by placing them in key roles to help facilitate the new program. Administrators must keep optimism alive by accentuating the positive while acknowledging imperfections. In the face of well-publicized short-term progress, pessimism will have a much harder time surviving.

- Procrastination — A new program component should be fragmented into several workable pieces. Each step should be clearly outlined for those expected to implement it. Success is the cure for procrastination. Through the agency's communication system, the message of success should constantly be reported. Staff should be given opportunities to share their accomplishments and experiences with others in the organization.

Five processes are recommended for streamlining organizational change. These include (Scott & Jaffe, 1989):

- Preparation — Anticipate key elements, such as staff resistance. Describe accurately and thoroughly how the new program component may affect staff. If possible, implement only one major change within the organization at a time.
- Planning — Encourage staff input in the development of policies and procedures. Anticipate potential problems and develop contingency plans to deal with situations that might cause setbacks. Prepare goals and objectives and a timeline for achieving them.
- Transition Structures — Establish ways for staff to work together to accomplish goals. For example, a transition management group might be appointed to oversee the change, or a new communication mechanism might be developed to encourage staff to share ideas and provide feedback.
- Implementation — During initial implementation of the program component, administrators should remain flexible and continue to welcome feedback. Ongoing provision of information to staff remains important. Training that provides staff with knowledge and skills, and helps mold their attitudes, is crucial for successful implementation.
- Rewards — People who make the program component work successfully should receive acknowledgment for their contributions. Rewards can be personal and private (e.g., an oral or written statement of appreciation or a salary increase), or they may be public, such as an award or mention in a newsletter. Other rewards for staff may include status and esteem in the eyes of peers as well as the opportunity to develop additional expertise and skills. In some cases, staff will have reduced caseloads as a result of working with electronic supervision technologies; however, this may mean that caseloads will increase for other staff.

To foster and maintain employee enthusiasm for the program, staff should be kept informed of all ongoing accomplishments and developments and any credit or support the agency receives as a result of the program.

STAFF ORGANIZATIONAL ISSUES

Several important questions will have to be considered when determining the staffing needs and design for an electronic supervision program component. The answers to these questions — and the final staffing plan — largely will depend on decisions made about other aspects of the electronic supervision plan such as its purpose and the types of offenders who will be assigned to supervision with these technologies. Following are some of the questions program planners need to consider; others likely will arise during each agency's planning process:

- **Will the offenders and staff supervising them be grouped into specialized caseloads for electronic supervision or integrated into pre-existing general or special caseloads?** If specialized electronic supervision caseloads are planned, a core group of staff with significant expertise about electronic supervision will be needed, and they also may need to be able to manage other aspects of offenders' supervision. If offenders who are electronically supervised will be assigned to various types of caseloads, a few staff may need extensive training in electronic supervision and be responsible for tasks such as installing and checking the equipment, but may not manage these offenders' cases. Usually, it is not practical to have all agency staff equally trained and proficient in electronic supervision tasks.
- **Will it be necessary to have staff coverage to monitor and respond to alerts 24 hours per day?** The answer to this question will depend

on the risk level of offenders assigned to electronic supervision as well as decisions about using in-house or contracted monitoring services. If the program's purpose and the offenders involved are low-risk offenders — for example, youth who have shoplifted and are being sanctioned with a few weeks of home confinement — it is not likely to be crucial to know and respond to the fact that they have broken curfew until the next day or Monday morning if the violation occurs on a weekend. Often, when the program's purpose is offender accountability or behavior change, violations can be used as a case management tool at any time in the supervision process. However, if the program's purpose is victim safety, public safety, or both — for example, if the program's clientele are predatory sex offenders being monitored by global positioning systems — then an alert that such an offender has entered an exclusion zone around an elementary school should be known and responded to immediately by staff. While these examples are extreme, program planners must consider each offender's risk to public safety or specific victims as well as community attitudes toward offenders' potential violations. How would the program and agency be affected if a moderate- to high-risk offender being supervised electronically had the opportunity to commit a serious crime and no efforts to intervene could be documented for several hours or days? Would the decision on staffing be different if the program was using electronic supervision as an alternative to incarceration versus an intermediate sanction?

If agency staff have been accustomed to a five-day per week, 8:00 a.m. to 5:00 p.m. work schedule, changing some or all staff to a 24-hour per day, seven days a week schedule may present challenges. Morale problems and union contracts requiring overtime pay are among the considerations in switching to a 24/7 staffing plan. Recommendations in the previous section of this chapter on managing organizational change may be helpful in getting the cooperation of staff for such a change.

- **What size caseloads, or how many staff will be needed for an electronic supervision program component?** Again, program planners will need to consider the program purpose and offender risk level as well as staffing organization decisions (e.g., specialized or general caseloads) to answer this question. If electronic supervision staff will specialize only in the mechanics of the technology by performing such tasks as installing and removing equipment and ensuring that contracted monitoring services are being performed properly (e.g., work release programs, monitoring in lieu of short-term incarceration), then the number of dedicated electronic supervision staff will be limited, and caseloads may be higher. If dedicated electronic supervision staff are handling both the technical and case management aspects of supervision (e.g., installing equipment, responding to alerts, and providing case management services), more staff are needed, and caseloads should be smaller. Some agencies have divided staff into surveillance officers who respond to alerts on a 24-hour per day basis and case management staff who handle all other aspects of the offender's supervision. If this staffing option is used, effective communication mechanisms among staff supervising the same offenders must be in place. If the agency will be performing its own monitoring services, then additional staff for this purpose will be required.

Additional staff organization issues that are addressed by Renzema (1992) include:

- Violations are likely to be more frequent in the beginning phases of an electronic supervision program component. If alerts are responded to consistently, offender violations are apt to decline.
- The length of time offenders are supervised electronically is one factor affecting staffing levels. If many offenders are supervised for a short time, more staff will be needed for installing and removing equipment and responding to alerts than if fewer offenders are supervised for longer periods. However, another factor that affects staff-client ratios is the amount of casework needed for each offender. If staff are seeing each offender regularly and attending to other case management tasks (e.g., referring to and monitoring treatment, verifying collateral information, counseling clients) then smaller caseloads are needed.
- It may be possible to prioritize offenders for responding to alerts, especially if a variety of offenders with different risk levels are being supervised electronically. Staff who monitor

the alerts will receive a great deal of information and need a framework for processing and responding to it.
- If an agency performs its own monitoring services, qualifications of monitoring staff may be different from those of staff who manage the offenders. Monitoring software is menu driven and staff such as clerks can become proficient in using it with minimal training.

STAFF RESPONSIBILITIES AND QUALIFICATIONS

As with other topics discussed in this chapter, staff qualifications and responsibilities will vary according to the purpose of the program, where it is located within the justice system, the types of offenders being supervised, and the technology selected. Therefore, rather than trying to provide very specific information, this section discusses general qualifications and responsibilities of four types of staff:

- Program component managers.
- Equipment specialists.
- Monitoring technicians.
- Offender supervision staff.

These four categories are used to group the major types of responsibilities needed for an electronic supervision program component. However, more than one of these may be performed by the same staff; it is not necessary for programs to have separate staff for each of these functions.

Program Component Manager

Each program using electronic supervision should designate a manager or administrator to lead the program. Depending on the size of the electronic supervision caseload, these duties may or may not consume all of this person's time. However, it is crucial that the staff leader be knowledgeable about the technology and the role the technology will play in the local system, and he or she must have the authority to make significant decisions. The program component manager is the guardian of the program's vision and mission. The areas for which the designated staff leader will need to take responsibility encompass the following, and, in some cases, more than one person or one level of staff may share these responsibilities:

- Policies and procedures for the electronic supervision program component, including general operational procedures, staff safety strategies, and crisis management processes.
- Procurement of equipment and contracted services.
- Selection, supervision, and scheduling of staff.
- Relations with other agency staff, public policymakers, the media, and the public.
- Regularly monitoring the operation of the program component (e.g., daily, weekly) for compliance with policies and procedures.
- Directing the evaluation of the program component.
- Managing the program component's budget and other resources.
- Assisting staff with individual offender case decisions, approving case decisions, or both.
- Determining staff training and development needs and obtaining or providing needed training.

Managers will need to be capable leaders who have administrative and supervisory experience.

Managers will need to be capable leaders who have administrative and supervisory experience. They will need a fundamental knowledge of the technology used in their program. They also should be effective managers of staff and be able to interact productively with agency staff, the media, and the public. They must maintain an overall view of the electronic supervision program component and how it fits within the entire agency while attending to program details when necessary. They must understand the benefits of evaluation, be able to implement or direct the implementation of a program evaluation, and have the capacity to use evaluation findings to improve the program. They must be fiscally responsible and creative in obtaining and using program resources wisely. Finally, they must understand the offender population served by the program and be able to assist staff in making appropriate decisions about case management.

Equipment Specialists

Program staff will need to be knowledgeable and skillful about using electronic supervision equipment. As discussed previously in this chapter, it may be the responsibility of all staff who work with offenders to install, remove, and maintain equipment, or

designated staff may perform only these functions while others work directly with offender supervision issues. Even if specialists are employed to handle most of the equipment procedures, all staff coming in contact with offenders should check equipment for apparent tampering attempts. Therefore, even if staff have different duties, offender supervision staff should be able to perform some of the following duties as well. Examples of responsibilities that should be performed by equipment specialists include:

- Installing equipment.
- Removing equipment.
- Inspecting equipment for tamper attempts.
- Maintaining the necessary inventory of equipment and consumable supplies.
- Preparing returned equipment for subsequent use.
- Recovering lost or damaged equipment, if possible.
- Troubleshooting equipment problems or malfunctions.
- Performing maintenance on equipment or obtaining needed repairs or replacements from the manufacturer.

Besides the electronic supervision equipment, equipment specialists or other staff (depending on how the agency is organized) may need to perform many of the above tasks for other equipment needed as part of the electronic supervision program component as well. This may include cellular telephones, two-way radios, pagers, computer equipment, general office equipment, self-defense items such as pepper spray, and, if used in the program, agency vehicles, weapons, and body armor.

Equipment specialists should have a full knowledge of the equipment and its use, and a basic understanding of how the technology operates. They should be able to interact appropriately with offenders and other household members when they are installing, removing, inspecting, maintaining, or repairing the equipment. They also should be able to communicate effectively with equipment vendors/manufacturers and with offender supervision staff about any issues or problems they observe.

Monitoring Technicians

Monitoring technicians will manage the data produced by computers that receive information from the electronic supervision equipment. Responsibilities that are typical of monitoring technicians include:

- Entering the necessary information in the computer program to enroll a new offender in the electronic supervision program component.
- Entering changes in schedules, inclusion and exclusion zones, and the like into the computer for individual offenders as directed by the offender supervision staff.
- Reviewing, logging, and processing incoming offender alert information.
- Responding to alerts according to agency policies, such as attempting to telephone the offender or otherwise verify his or her whereabouts.
- Keeping accurate notes on all attempts to followup on alerts (i.e., calls made, information obtained from or about offenders).
- Keeping accurate notes on any "false alerts" generated by the computer (i.e., cases in which an alert occurs even though the offender is where he or she is supposed to be).
- Notifying or dispatching appropriate staff for offender alerts that cannot be disposed of according to agency policies.
- Maintaining required databases of offender violations and other information.
- Compiling information as needed for reports.
- Terminating files for offenders who have been removed from the electronic supervision program component.

Monitoring technicians must have a basic understanding of computer operations and must be able to use the monitoring software with speed and proficiency. They must be organized and attend to details in the processing of alerts and notification of offender supervision staff so that potential violations do not fall through the cracks. They must be able to write accurate notes about activities related to verifications of violations, and they must be able to communicate verbally in a clear and effective manner. They also should be skilled in interacting with offenders and/or other household members or employers when they must check on a possible violation. They must be able to make discretionary decisions about which offenders to report to supervisory staff and how quickly to do so. Finally, they must be able to function well in a fast-paced environment that, at times, will be hectic and distracting.

Offender Supervision Staff

While offender supervision staff may perform some of the functions discussed under other staff categories, their primary responsibilities include interacting with and making decisions about offend-

ers who are being supervised electronically. The following are among the specific duties of offender supervision staff:

- Screening offenders for eligibility for the electronic supervision program component.
- Determining offenders' ability to pay for electronic supervision services.
- Receiving and processing offender payments, if applicable.
- Obtaining necessary information to enroll offenders and victims in the electronic supervision program component.
- Conducting comprehensive offender and family orientations.
- Determining or approving changes in curfews, schedules, and inclusion and exclusion zones and ensuring that those operating the monitoring computers receive this information in a timely manner.
- Responding to violations according to agency policies.
- Filing violation reports.
- Conducting other supervisory tasks such as counseling, home visits, job site visits, and referrals for services for offenders, victims, or both.
- Ensuring that offenders are complying with requirements such as school and work attendance, abstinence from alcohol and other drug use, and involvement in treatment programs.
- Observing equipment for signs of tampering.
- Observing offenders for signs of drug or alcohol abuse or criminal activities.
- Working with victims, if applicable (such as domestic violence or sexual offense victims).
- Observing household members for indications of abuse.
- Keeping accurate records of all work with offenders and victims.
- Observing agency safety procedures.
- Keeping program management staff apprised of any potential problems.
- Completing tasks necessary for the termination of offenders or victims from the electronic supervision program component.
- Interacting as needed with other justice system personnel (e.g., law enforcement, prosecutors, judges) about specific offenders.
- Handling crises and emergencies properly.

Offender supervision personnel must have knowledge and skills to work successfully with both adult and juvenile offenders and their victims. They will need case management skills and should be able to respond calmly in crisis situations. They must use good judgment about processing alerts, referring cases for followup action by agency supervisors or the courts, and assessing their personal safety risks. They need to have a fundamental understanding of the electronic technology and is applications so they can understand the validity of alerts they investigate. They should work in an organized manner and be meticulous about completing reports and submitting information on curfew or other changes to monitoring staff or service providers. Based on agency policies, staff who investigate violations may need peace officer status, or they may need to work closely with law enforcement personnel if arrests are required.

While the preceding duties and responsibilities were presented in separate categories, in many programs — especially smaller ones — the same staff member will perform more than one set of functions. For example, the duties of equipment specialist and monitoring technician might be performed by the same individual.

STAFF TRAINING AND DEVELOPMENT FOR ELECTRONIC SUPERVISION

Staff training regarding the electronic supervision of offenders should occur on multiple levels within agencies providing these services. All staff should receive general training about the purpose and goals of the program component and offenders who are appropriate to refer to the program (Friel, Vaughn, & del Carmen, 1987). Training about the program should also extend beyond the agency to other criminal justice agency personnel (e.g., law enforcement officers, prosecutors, judges) who may interface with the program in some fashion. They also need to understand electronic supervision purpose and goals, the basics of how the technology works, the reliability of the technology, and criteria for selecting offenders to participate in this program component.

Staff responsible for the implementation of electronic supervision need indepth training about their responsibilities. Staff training at this level is aimed at ensuring that policies are implemented as intended and staff are operating the program component in a consistent manner (Cohn, 1999).

Training of electronic supervision personnel should consist of a combination of knowledge, skills, and values or ways of thinking about their work that they will need to conduct the program successfully.

Table 6a

TRAINING TOPICS FOR ELECTRONIC SUPERVISION

Knowledge

- Program purpose and goals
- Fundamentals of the electronic technology used — system equipment and capabilities
- Electronic supervision program component policies and procedures
- Offender selection criteria
- Reliability of electronic supervision equipment and potential ways of tampering with it
- Meanings of alerts and violations (with information on grace periods, acceptable excuses, etc.)
- Community and case management resources

Skills

- Offender screening procedures
- Case management and supervision
- Completion of required forms, reports, and other written materials
- Proper installation and removal of equipment
- Inspection of equipment for tampering, malfunctions, or other problems
- Reading computer-generated reports
- Responding to alerts and violations
- Appropriate applications of incentives and sanctions for compliant and noncompliant behavior
- Crisis management
- Staff safety procedures
- Correct entry of data in computers
- Data collection for program evaluation

Values / Attitudes

- Benefits and disadvantages of using electronic supervision strategies
- Importance of public and victim safety
- Electronic supervision as an adjunct to other case management approaches and part of a larger approach to working with offenders and victims
- Importance of program evaluation
- Offender accountability

Sources: Cohn, 1999; Cook County Sheriffs Electronic Monitoring Unit, n.d.; Friel & Vaughn, 1986; Friel, Vaughn, & del Carmen, 1987.

Table 6a contains a list of some of the topic areas in each of these categories that may be needed in a staff training program. These may apply to any or all of the categories of staff discussed in the previous section of this chapter.

Equipment manufacturers usually will provide training to staff on how the equipment functions and how to operate it appropriately. Contracted monitoring service providers also may be able to provide training about the way their services operate.

Whether staff training is provided by program supervisors or a training specialist, it is important to gear training methods to the type of content being conveyed to trainees. Thus, one would approach the presentation of knowledge, skills, and values / attitudes in different ways. Table 6b provides a summary of some practical ways to present each of these areas.

Beyond the professional training just discussed, electronic supervision programs will need to design training for offenders and victims using the equipment and for household members living with them. These individuals will need to understand the purpose of the electronic supervision program component, how the equipment operates, how to care for the equipment, procedures to take if equipment fails or if a crisis occurs, and procedures that will be taken if alerts or violations occur (Friel & Vaughn, 1986).

CONCLUSION

This chapter provided an overview of some of the human resource issues related to implementing a program with electronic supervision. Ways of managing organizational change to gain staff support were discussed. Several important considerations regarding program staffing also were addressed. Finally, staff responsibilities, qualifications, and training and development needs were presented.

Table 6b

CONTENT PRESENTATION METHODS

Knowledge

- Presentations, lectures
- Audio-visuals
- Demonstrations
- Texts, handouts
- Panels
- Discussions
- Debates
- Observations
- Questioning
- Field or site visits

Skills

- Demonstrations
- Simulations
- Case examples
- Role playing
- Games
- Texts
- Audio-visuals
- Structured tasks
- Coaching
- Modeling
- Clinical practice

Values / Attitudes

- Values clarification activities
- Discussions
- Debates
- Audio-visuals
- Articles / handouts
- Evocative questioning
- Role playing
- Opinion papers
- Case studies
- Experience sharing
- Modeling
- Games
- Field or site visits

Source: Crowe & Schaefer, 1992

Chapter 7
SELECT APPROPRIATE ELECTRONIC SUPERVISION TOOLS

Section One of this document presented several issues that must be considered when developing, rectifying, or enhancing supervision of offenders with electronic technologies.

However, decisionmaking is not complete when purpose, goals, and objectives have been determined, nor when legal issues are investigated, nor when the appropriate types of offenders for electronic supervision have been selected. There are still numerous decisions to make. This section considers another set of important considerations — the selection and procurement of appropriate equipment and services to support the purpose of an electronic supervision component of a community supervision program.

As with any other major acquisition — such as a car, a computer, or a fax machine — many factors need to be considered before making a final decision. What type of equipment will best meet your program needs and purpose? Do you want to own or lease? What services will you need to fully deploy the equipment? These are just a few examples of issues to consider.

It is the people using the electronic tools, not the tools themselves, that will accomplish program goals.

To reiterate an important point made elsewhere in this document, it should be stated again that electronic supervision tools are just that — tools. In and of themselves they will accomplish little. In the hands of skilled corrections professionals they can provide valuable information for supervising offenders effectively. It is the people using the electronic tools, not the tools themselves, that will accomplish program goals. No technology is without drawbacks; all technologies can be thwarted. Therefore, corrections professionals should select the technology they use with care and with awareness of both its pros and cons.

In this chapter, the selection of electronic supervision tools is discussed. No recommendations are made as to brands or types of equipment, as those choices depend on program needs. However, this chapter will discuss fundamentals about equipment and services.

An array of electronic technologies are available today that can provide information to achieve a variety of purposes in offender supervision. Reporting kiosks, remote substance use detection devices, ignition interlock systems, identity verification systems, and monitoring equipment to detect offenders' compliance with restrictions or track their locations are among the variety of electronic technologies presently in use. Besides this extensive assortment of types of equipment, within each category, various brands and types have different features. Wading through the specifications and claims for each can be a daunting task.

STRATEGIES FOR SUCCESS

Electronic supervision technologies are rapidly expanding and becoming more sophisticated. It is not unusual for manufacturers to introduce new or improved products annually. Vendors are likely to claim their equipment and services are superior to others. What's a consumer to do?

First, be a savvy consumer! Don't rely solely on the information provided by vendors. Rather, conduct necessary background research as part of the procurement process (to be discussed in chapter 9). Select the equipment and services that are right for your program — no more and no less. Don't buy a station wagon with all the extras, when what you need is a bicycle — or vice versa.

Second, realize that equipment alone does not make an effective program. The most important part of electronic supervision is what is done with the information it generates, not the latest bells and whistles that are available. Agencies must have a clearly defined purpose for using electronic supervision and sound strategies for responding appropriately to offenders being supervised. The equipment selected should support these purposes and strategies. Graduated responses should be used to reward offender compliance or penalize noncompliance. As Todd McCormack, Director of Hendricks County Probation Department notes, "... new equipment and technology changes the way we work, but it doesn't replace us" (Conway, 1998a, p. 11).

Third, develop real partnerships between your agency and suppliers of equipment and services. Make sure, when selecting vendors, that everyone involved has a stake in the success of the program. This also will be discussed further in chapter 9.

ELECTRONIC SUPERVISION TECHNOLOGIES

The following discussion of electronic supervision tools will progress from those that generally are considered less restrictive to those that ordinarily are thought to provide greater restraints. However, this is not necessarily an all-inclusive listing of electronic supervision tools.

Automated Reporting Systems

Community corrections agencies typically supervise pretrial defendants or convicted offenders who represent a broad array of risks and needs. It is common to find an offender who has committed a relatively minor nonviolent misdemeanor and an offender who has committed a serious violent felony being served by the same agency. Some offenders present a significant risk to public and victim safety, while others do not. Some offenders may need daily intensive supervision if they are released in the community as an alternative sentence or jail diversion, while others will satisfy their obligations with minimal monitoring.

Providing all pretrial defendants and convicted offenders, regardless of risks and needs, with the same services is not a wise use of public resources. Therefore, for offenders on the low-risk, low-need end of the continuum, some agencies employ minimal supervision strategies. Limited (e.g., quarterly) personal reporting or the use of mail-in forms to provide updated information on offenders has been a common practice in some large agencies. Occasional office visits or mail-in forms usually require offenders to report changes in their status, and sometimes their progress toward meeting conditions of release (e.g., payment of restitution or fines). However, both office visits and mail-in systems require staff time to review, record, process, and verify this information.

Automated reporting systems can minimize the need to see low-risk, low-need offenders face-to-face and can streamline the collection and processing of offender data, while still holding offenders accountable. Automated reporting systems also can be used as an additional supervision tool or sanction for higher risk offenders or as a reward for compliance as offenders have earned the opportunity for less restrictive supervision. Some systems also provide an automated method for collecting fees.

There are currently two types of technology used for automated reporting. One type allows offenders to report from remote locations using a telephone; the other requires them to go to a computerized reporting location. With telephone-based systems, offenders are instructed to call a designated number and respond to verbal questions that are electronically generated. The schedule for the offender to call in can be general, such as during the first week of each month, or specific, such as every Thursday. The calling schedule also can be established for the entire supervision period or specified and changed from time to time. The offender only needs access to a telephone to use this reporting system. The enrollment process includes instructions to the offender about his or her responsibilities for using the system and provision of information to the monitoring service. A means of identifying offenders when they check in is also part of the enrollment process. After that, the offender is responsible for calling at the designated times and correctly answering the required questions.

Call-in systems can verify an offender's identity and location through several technologies. For example, the voice of the person calling can be matched to a voice sample taken during enrollment, and the number from which the offender calls can be documented with a caller ID system. Other verification methods are discussed later in this chapter. Programs using this type of system should ensure that technologies are in place for confirming the offender's identity and location.

The questions to which the offender responds may be predetermined and the same or similar for all offenders, or they may be individualized for specific offenders. Two methods may be used for the offender to respond to the questions: He or she may select from given responses and press the corresponding number on a telephone keypad, or he or she may respond by speaking into the telephone. For example, the first method, much like many automated telephone systems may ask, "Has your address changed during the past month?" and instruct the offender to press 1 for yes or 2 for no. For the second method, the instruction may be, "If your address has changed during the past month, say your new address clearly into the telephone. If it has not changed, say 'No'." The first method records responses directly into the computer system, while the

second may require some transcription.

A telephone-based automated reporting system also has the capability of providing individualized messages for an offender through a system similar to a typical voice mail system. After calling in, the system can provide a message such as, "You have one message from your probation officer," followed by a message the probation officer has left on the system. Then the identity of the offender is verified to ensure that the appropriate offender called in and received the intended message.

A telephone-based automated reporting system is relatively inexpensive. Often, overall costs are lower than methods requiring offenders to confirm and update information using a written form that requires further processing by the agency. Costs may be borne by either an agency, through direct billing by the service provider, or the offender, through the use of 900 numbers that apply charges to the offender's telephone bill. It provides the advantage of convenience for offenders who generally have latitude as to the time of day at which they must call. If they are employed, for example, they can make their calls to the reporting service in the evening or early morning hours. Another advantage of the telephone-based system is that for offenders who do not have good reading skills, only oral communication is necessary.

The second technology for automated reporting systems is the use of computers at specific locations — often referred to as kiosks — where offenders must go to check in. These computer systems often look and work much like automated bank teller machines (Groves, 2000; Geiger & Shea, 1997). The process used is similar to the telephone-based systems. Questions are posed on the computer screen, and offenders must use a keypad or touch screen to enter their responses. This technology may require a minimum reading level and the ability to operate an ATM machine. Some systems may also require basic familiarity with computer keyboarding; however, newer equipment is able to ask questions and give instructions orally. Otherwise, the two types of automated reporting systems are about the same. Both address information about offenders such as (Groves, 2000):

- Current residence.
- Employment information.
- Attendance at counseling.
- New arrests or legal developments.

When exceptions occur, the offender may be able to enter updated information, or the record may be flagged for followup by practitioners to obtain the updated information.

The computer-based system can also provide information to the offender through personalized messages from his or her probation, parole, or pretrial officer. The computer system can generate printed forms, letters, and receipts the offender may need (Geiger & Shea, 1997).

For both telephone and computer-based technologies, offenders' responses are collected by the monitoring service and reported to the agency. These automated reporting systems and agencies' automated case management systems can be interfaced so that reports on each offender are recorded directly in their case files. More common methods include e-mailed, faxed, or mailed copies of reports. The monitoring software for these systems should be capable of identifying and reporting offenders who do not report in as required using the automated systems. The agency must decide how such exceptions should be handled. The computer may generate a call or letter to remind the offender to call in, or the report may be forwarded to agency personnel for followup action. The software program also should be capable of generating aggregate reports about all offenders who are on the automated reporting system. Many agencies using these systems find they are better able to maintain up-to-date information on offenders, streamline their accounting systems for collection of fees, and experience higher rates of compliance for on-time reporting.

Identity Verification Components

Most automated reporting systems, as well as other types of electronic supervision technologies discussed later, require some form of identification to ensure the person responding is the intended offender. These identity verification measures can be as simple as a personal identification number (PIN) or a unique password that the offender keys into the telephone or computer, or a barcode or magnetic strip on a card that is swiped or run through an optical scanner. However, much more sophisticated biometric verification technologies also are available or in the development process. Using particular biological aspects of the human body, biometric identification technologies can recognize or confirm a person's identity (Office of Justice Programs & Office of Community Oriented Policing Services, 2001). Possible biometric identification technologies that may be paired with other supervision technologies may include:

- Handprint, hand geometry, nailbed, and fingerprint identification.
- Eye, iris, and retina identification.
- Facial recognition.
- Voice verification.
- Signature / handwriting verification.

Most of these biometric technologies are well developed and used for various industrial and government purposes, and they have been adapted for use in the criminal justice system. Fingerprint identification, facial recognition, and voice verification are used in offender supervision and reporting systems today. Other technologies are still in the development, testing, or application process and have not been "proven" in the criminal justice arena.

Remote Alcohol Detection Devices

The use of alcohol and other drugs and criminal behavior are strongly linked. Courts and criminal justice agencies usually try to monitor and limit the use of mood altering chemicals by pretrial defendants and convicted offenders. Courts may prohibit the use of alcohol and other drugs as a condition of community release, and agencies often monitor use through alcohol and drug testing. Technology now exists to conduct alcohol testing from remote locations — without the offender and agency staff having to be in the same place.

Remote alcohol detection systems have five basic technological components:

- A means of engaging the offender to take the test. (With some systems, tests are invoked during normal operating of the equipment and the offender may not be aware of when a test is underway).
- A process for identifying the person taking the test as the correct offender.
- Technology to detect or measure alcohol use.
- Security measures.
- Communications and reporting.

Notification to Take a Test

Remote alcohol testing can be used as a standalone technology, or it can be combined with other technologies used to supervise the offender. Most systems require equipment that is placed in the offender's home, and he or she is engaged to take the test by an automated phone call or a beeper. If the offender is also being supervised with other equipment (e.g., for curfew monitoring), that equipment may transmit the message when a test is required. Testing should be done on a random basis so the offender does not discern a pattern and schedule his or her drinking accordingly. Sometimes a combination of random and scheduled testing is used, so that the offender is tested whenever he or she returns home and then randomly during times he or she is staying at home (National Law Enforcement and Corrections Technology Center [NLECTC], 1999).

Identification of the Person Taking the Test

Most remote alcohol testing devices are equipped with a technology to ensure that the person taking the test is the offender. This has to be considered carefully to avoid having someone else take the test for the offender. Some technologies use an image transmission device so the offender must stand at the alcohol testing equipment and transmit his or her picture while taking the test (NLECTC, 1999). In most visual systems, a reference picture appears at the monitoring center with the test picture to accurately verify the identity of the offender. Voice verification is another technology used to ensure the identity of the person taking the test. Voice verification uses mathematical algorithms to analyze speech and compares the results with those of a prerecorded sample of the offender's voice. Another type of system requires the offender to insert a personal identification verifier in the home monitoring device (*An Agency Guide to Implementing an Alcohol Testing Program* [Agency Guide], 1995; Conway, 2001a). One system combines voice verification with an internal proximity sensor to ensure the device remains over the offender's mouth during testing (Conway, 2001a).

Using identification techniques is vital to ensure the most reliable test possible. However, some of these techniques require human review and, therefore, are subject to human error. Techniques that use automated verification processes also can be subject to small margins of error in measurement or mechanical difficulties (*Agency Guide*, 1995). Voice verification systems are particularly vulnerable if the subject is intoxicated. Most systems that use voice identification will proceed with alcohol testing even if the subject fails to verify his or her identity. Some of these systems can record and store all calls so that a corrections professional can listen to calls at his or her convenience and make a determination as to whether a person sounds as if they are under the influence of alcohol or drugs (J. Gallagher, personal communication, October 10, 2001).

All breath alcohol equipment should be tested thoroughly by agencies prior to deciding what type of equipment to use. Efforts should be made to fal-

sify identification so agency staff are fully aware of the weaknesses in the equipment. Using identification techniques is vital to deter test subject imposters and ensure the most reliable tests possible (L. Connelly, personal communication, September 7, 2001) .

Technology to Detect Alcohol Use

The equipment used for remote alcohol testing can either indicate that alcohol is present or measure the participant's actual breath alcohol level, which is basically the same as a blood alcohol level as measured by a breathalyzer. These units can provide an accurate breath alcohol content reading. When taking the test, the offender must blow into the device for a long enough period that deep lung air is expelled. This allows for accurate testing of blood alcohol content.

Breath alcohol testing devices use different forms of cells to measure the presence or absence of alcohol on the breath. It is important to ascertain what type of cell device is used and its certification by the Department of Transportation (DOT) as a determination of reliability for such use. The most common cells in use are either the Toguchi (T) Cell or the Fuel Cell, with the latter typically being accepted as the most reliable and qualified under the DOT certification (V. Dominquez, personal communication, September 14, 2001).

All breath alcohol testing devices require some form of scheduled calibration procedure to be considered reliable. This calibration can vary from a wet solution to a compressed gas application, and the method should be determined by the required frequency of such a procedure and the method used to meet this requirement (V. Dominquez, personal communication, September 14, 2001).

Another technology records a voice sample and uses software algorithms to match it against a prerecorded sample. Intoxication changes some aspects of voice quality which are noted during the comparison. Yet another method employs the use of a carbon sensor device in a telephone receiver (Conway, 2001a).

Security Measures

Systems for remote alcohol testing should have tamper-resistant features to ensure the integrity of the tests and results. Besides the features mentioned previously to ensure that the person taking the test is the appropriate offender, other tamper-resistant features may be needed in some cases. These may include tamper evident components in the hardware (e.g., evidence that the unit has been opened) and automatic processes requiring second tests and verification if results are questionable.

Communications and Reporting

The results of remote alcohol tests are transmitted via telephone lines and processed through computers at the monitoring center. If the test registers alcohol content, at least two additional tests should be requested to ensure a valid positive test. Fifteen minutes should be allowed to elapse between each of these two tests. If, in fact, alcohol was not used, testing in this manner ensures the causes of a positive result will dissipate within 15 minutes should the offender claim food, mouthwash, or some other substance resulted in a positive alcohol content result. This allows the person reviewing the test to determine accurately whether or not the offender was consuming alcohol. This also minimizes the games offenders may play about using, or not using, alcohol. When a positive test result is reported to the agency, corrections professionals will be confident the test was indeed positive (L. Connelly, personal communication, September 7, 2001). Final results are then transmitted to the staff supervising the offender. In the case of negative results (no alcohol use), these may be accumulated and transmitted on a scheduled basis, such as daily, weekly, or monthly. For positive results, monitoring centers transmit the results as directed by the agency. They can be transmitted immediately, or on the next business day, depending on how the agency plans to use the results. Some agencies, upon receiving notification of a positive test, will go immediately to the offender's home and administer a field sobriety test to verify the remote testing results. As alcohol stays in one's system only a few hours, if this approach is used, staff must be available to respond on a 24-hour-a-day basis.

Ignition Interlock Devices

A special type of remote alcohol testing is a device that is installed in vehicles and requires the driver to take a breath alcohol test before the vehicle will start. Although program criteria can vary according to State laws and local patterns, this technology may be used for drivers with first-time arrests or convictions for driving under the influence (DUI) with a high blood alcohol level or drivers with repeat arrests or convictions for DUIs. Ignition interlock devices may be used instead of, or in addition to, some of the traditional responses to drunk driving, such as prosecution, fines, driver's license suspensions and revocations, jail, probation, and treatment.

It has the advantage of allowing some offenders to remain in the community working and providing for their families while impeding their ability to drive while drinking.

Ignition interlocks are small devices that connect directly to a vehicle's electrical ignition system. The driver must blow a deep lung sample into the device. If the blood alcohol level exceeds a predetermined level, the device prevents the person from starting the vehicle. Most current devices use fuel cell technology that is specific for alcohol. Other types of technologies may result in false positives from other substance such as cigarette smoke, foods, carbon monoxide, and other fumes. Besides requiring a breath sample to start the car, the devices can randomly signal the driver to take additional tests while driving. This is intended to prevent the driver from drinking while driving or stopping to drink but leaving the car idling (Coffey & Jennings, n.d.; Longest, 1999, 2000).

Ignition interlock systems should have anticircumvention measures to prevent the driver from having someone else blow into the device or using artificial air samples (e.g., compressed air, balloons) to bypass the device. Various biometric identification processes, such as voice matching, can be used to prevent circumvention (Coffey & Jennings, n.d.).

To support the proper use of ignition interlock systems, ensure that policies, procedures, and personnel are in place to properly install the devices, monitor their use, and calibrate and repair them. This is often done through a contract with a qualified service provider. Whether staff or a contracted service provider performs these functions, they will need to be available on a 24-hour-per-day basis (Longest, 1999). Drivers usually must take their vehicles to service centers periodically for routine service and recalibration of the ignition interlock device (Coffey & Jennings, n.d.).

As with all electronic supervision technologies, no equipment is foolproof. Offenders could beat the interlock system by simply driving someone else's car or having someone take the breath test for them (if anticircumvention methods are not used or do not prevent tampering). Further, there are emergency overrides in some interlock systems that allow the offender to drive without proving he or she is alcohol free. It is important to know the fallibility of all electronic technologies and make decisions about their use according to the risk level of the offender and public safety in the community (L. Connelly, personal communication, September 7, 2001).

The ignition interlock devices are manufactured with a memory chip that gathers and records driving activity. When the unit is serviced, data from the device can be downloaded into a computer. Information that can be recorded includes:

- Results of vehicle start attempts.
- Rolling retest results.
- The blood alcohol level of the offenders at each test.
- Attempts to tamper with the device.
- Total number of vehicle starts during the supervision period.
- Total hours of vehicle operation.
- Dates of service and calibration.

From this downloaded data, reports are generated for the supervision agency (e.g., pretrial, probation, treatment program) (Coffey & Jennings, n.d.; Longest, 2000).

Research studies have found ignition interlock devices to be effective in diminishing drinking and driving. A Maryland study found up to a 65 percent reduction in recidivism among offenders with prior drunk driving convictions who used the device (Beck, Rauch, & Baker, 1997). A study in Calgary, Canada found that among offenders using the ignition interlock device, the proportion of warnings and failed start attempts declined over time, indicating the technology can assist with behavior modification (Marques, Voas, Tippetts, & Beirness, 1999). Longest (1999) cited Coben and Larkin's (1999) review of ignition interlock studies that concluded that interlock programs are between 15 percent and 65 percent effective in reducing recidivism among chronic drinking drivers.

Programmed Contact Systems

Devices that determine whether a person is at an assigned location are some of the most widely used types of electronic supervision tools. However, they do not all work alike. Indeed, there are a wide variety of technologies involved. Programmed contact systems use various methods to contact and verify the location of an offender in his or her home or in multiple locations. They may be used with offenders who are placed on home monitoring and must stay at home virtually at all times, or they may be used for offenders who are restricted to their homes at various times (e.g., have curfews) but can come and go for approved activities.

Programmed contact systems are automated calling systems. The backbone of these systems is a central computer that either receives telephone calls

from or makes calls to the offender in one or more locations. The calls may be made either on a scheduled or random timetable, or both scheduled and random calls can be made (Conway, 2001a).

Computer-generated calling systems are those in which the central computer makes telephone calls to the offender's number(s) at scheduled or random times. The offender is expected to answer the calls according to a predetermined record of where he or she is to be at given times. Usually, these calls come to the offender's home to ascertain that he or she is at home when required. Random calls can be generated at any time of the day or night to ensure the offender is at home when expected to be and not at home when expected to be at work, treatment, or other obligations. Several systems have the ability to generate calls to other locations or multiple telephone numbers — for example, to ensure the offender's presence at work (Renzema, 1992).

Call-in systems require the offender to call the central computer either at scheduled times or when he or she is signaled to call based on random notification generated by a computer during designated curfew hours. Signals may be received through pagers or similar devices worn by the offender. When the offender calls in, the computer verifies the telephone number from which he or she is calling and compares it to the approved number(s) from which the offender may call at that time or stores it for subsequent review and location determination (Conway, 2001a).

The most reliable voice verification systems have calls generated to the offender from a central computer system. This keeps the offenders from defeating the system by using call forwarding and conference calling features that allow them to call from virtually anywhere, even though it appears they are calling from their scheduled location. For systems that require the offender to call in at random or scheduled times, agencies should mandate a procedure whereby the offender is immediately called back from the central computer (L. Connelly, personal communication, September 7, 2001). Figure 7a depicts the basic components of a programmed contact system.

All of the automated calling systems include some type of technology to verify that the person responding to the computer is really the offender. Three basic types of verification technology are used (Conway, 2001a).

Voice Verification

With these systems, the offender either receives a call from the computer or is signaled to call in. Individuals have unique voice prints just as they have distinctive fingerprints. A voice template is recorded during system enrollment and used for a computerized comparison with future calls. These systems are designed to process the voice sample from any telephone to the centralized computer where it is compared to the original template (Conway, 2001a).

Video Verification

Using a camera installed in the offender's home, a picture is transmitted to the central computer and compared with a photograph on file (Conway, 2001a).

Device Verification

Some systems require that the offender wear a tamper-resistant device, usually on his or her wrist or ankle. When calling in or responding to calls from the central computer, the offender is required to activate the device which then transmits a unique code for that offender over the telephone. The code is then verified by the computer (Conway, 2001a).

Fees for programmed contact systems are often based on the number of contacts per day or week and, therefore, can be relatively inexpensive, espe-

Figure 7a

ELECTRONIC MONITORING TECHNOLOGY PROGRAMMED CONTACT DEVICES

Computer generates telephone calls to offender or signals offender to call in

Offender responds and is verified through voice, video, or other technology

Computer makes a report of the results of the call

Supervision staff receive reports and followup on violations

cially if they do not require any equipment to be placed in the offender's home. The offender must have or have access to a telephone to be able to use a programmed contact system, and a telephone is the only type of equipment necessary for offenders to use a voice verification system. However, both video verification and device verification require additional equipment that is either placed in the offender's home or worn by the offender.

The enrollment process is usually quick and simple. Programmed contact is often used as an intermediate sanction for lower-risk offenders, such as short-term detention or curfew monitoring. It can also be useful for an intermediate form of supervision following more highly structured and restrictive types of monitoring. For the offender and his or her family, these systems can be quite intrusive.

Electronic technology uses the telephone in the home to communicate information to a central monitoring center. When information needs to be transmitted, most systems will warn persons in the home, if they are using the telephone, that the phone line needs to be clear. Some systems may seize the line. In any case, others living in the home should be made fully aware of how the system operates and that they may be inconvenienced periodically (L. Connelly, personal communication, September 7, 2001). Phone lines should be free of advanced calling features such as call waiting and call forwarding. Computers and answering machines are also usually prohibited. Some offenders choose to install a second phone line for monitoring as a means to ensure the line remains open and complies with restrictions (P. Conway, personal communication, September 10, 2001). Systems that randomly signal the offender to call in can be disruptive, especially when calls occur during the night (Renzema, 1989, 1992).

Continuous Signaling Devices

Continuously signaling devices require the offender to wear a battery-powered transmitting device that emits a radio frequency signal two or more times a minute. These are placed on the offender's wrist or ankle with a tamper-resistant strap, and they must be worn all the time.

All manufacturers have incorporated tamper resistant and alert features in their transmitters. The technology for this varies, and many of the transmitters have more than one technology to detect tampering. Some tamper resistant features work better than others. The importance of testing equipment thoroughly to determine its fallibility cannot be overemphasized. The risk level of the offenders in the program should determine the type of equipment used. Further, frequent and close visual observation of the strap will detect even the most minor efforts to tamper and will avert future tampering efforts. This is an imperative procedure (L. Connelly, personal communication, September 7, 2001).

Most transmitters in use today are quite small and light, ranging from less than one ounce to about four ounces. Depending on the brand, transmitter batteries can last from one to two years, and all current models indicate when battery power is getting low (Conway, 2001b).

A receiver is installed in the offender's home and is attached to the telephone. The receiver detects the transmitter's signals and conveys a message via telephone report to a central computer when it either stops receiving the radio frequency or the signal resumes again. Receivers can detect transmitter signals from a range of up to, and in some cases exceeding, 150 feet when installed in a typical home environment. The range on some systems can be programmed for individual offenders from as little as 35 feet to more than 500 feet, depending on the type of equipment used. The range for any setting can vary significantly due to a variety of factors including location and building characteristics.

Receivers also have tamper-resistant features to avoid offenders moving or disabling them. They have battery back-up systems that can maintain operations, from eight to 48 hours — depending on the type of unit — if electrical service is interrupted. Most units can also store data if power is depleted so that information can be retrieved from the unit later (Conway, 2001b).

Most agencies require the offender to have telephone service to use a continuously signaling monitoring system so the agency can receive violation notifications on a "real time" basis. Some may use the systems without telephone line access and require the offender to bring the receiver in each time they report so the monitoring data it stores can be downloaded and processed to determine whether or not the offender remained compliant since the last time he or she reported. There are several telephone services that may interfere with the operation of the system. Call forwarding and call waiting should always be disabled to avert offender manipulation of the system. Depending on the particular receiver in use, cordless phones, cellular phones, answering machines, and call blocking may need to be restricted (Conway, 2001b).

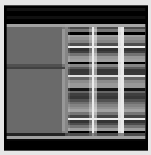
The central computer is programmed with the offender's schedule, and this is compared to messages transmitted from the receiver in the offender's home. For example, if an offender is authorized to leave for work at 8:00 a.m. and return at 5:30 p.m., the receiver would transmit the information that the signal was not detected when the offender leaves its range at 8:00 a.m. and would again transmit a message when the signal is detected as the offender returns at 5:30 p.m. If the signal is lost during a curfew period or resumes at a time when the offender is prohibited from being in the home, the computer generates a report that alerts the monitoring staff of the discrepancy. The monitoring staff then follow predetermined procedures to ascertain the reason for the alert. Figure 7b illustrates the components of a continuously signaling system.

Figure 7b

ELECTRONIC MONITORING TECHNOLOGY CONTINUOUSLY SIGNALING DEVICES

Transmitting device

Radio transmission



Receiving device

Telephone communication between receiver and computer

Computer deteccts when transmissions begin or end; Monitoring staff notify supervision officers

Supervision officers follow up on violations

Victim Alert/Notification Systems

A variation of the continuously signaling devices has been developed for victim alert and notification and offender compliance with stay-away orders. It is most often used for domestic violence victims. A receiver is placed in both the victim's and the offender's residences. Both the victim and offender wear transmitters. The victim's transmitter is similar to a pendant and is removable, while the offender wears a tamper-resistant bracelet or anklet that is not removed. The offender's receiver detects his[1] presence in his home to be sure he is there when he is supposed to be there. If he approaches the victim's home, his transmitter signal will be detected by the victim's receiver. The victim also may press a button on the pendant transmitter device she wears and can alert the monitoring staff should the offender approach or enter her home after removing or disabling his transmitter device (NLECTC, 1999). Some systems also provide the victim with a field monitoring device (described below) that they can carry with them and will detect the offender's transmitter should he approach the victim when she is away from her home. Some systems also include a recording device in the receiver installed in the victim's home. The device is activated if the offender's transmitter is detected and records all the sounds in the home while the offender is in range. While these systems do provide an alert to the victim, they generally are not considered to be a means of protecting the victim from the offender. However, they are very useful in recording evidence of restraining order violations and (for systems that record surrounding noise) can be useful in confirming events that occur during a restraining order violation (P. Conway, personal communication, September 10, 2001).

Victims must be made fully aware that victim notification systems do not provide protection from a perpetrator. These are only tools that will act as warning devices when the offender has not tampered with the equipment. Clearly, the device provides better information and warning than if the perpetrator is free in the community without electronic supervision technologies, but the victim must not be lulled into thinking she cannot be harmed. Agencies should ensure the victim signs a statement of understanding about just what the equipment will

[1] The masculine gender pronoun is used here in recognition that the overwhelming majority of domestic violence offenders are male. However, it is acknowledged that there are a small number of female domestic violence offenders.

and will not do (L. Connelly, personal communication, September 7, 2001). Victims should be counseled to continue taking safety precautions and to remain vigilant.

Field Monitoring Devices

Field monitoring devices or "drive by" units are another type of continuous signaling technology. Probation or parole officers or other authorities use a portable device that can be hand held or used in a vehicle with a roof-mounted antenna. When within 200 to 800 feet of an offender's ankle or wrist transmitter — and sometimes more than 1,000 feet depending on the location and the use of special antennas — the portable device can detect the radio signals of the transmitter. It can also determine the tamper status and battery status of the transmitter. Officers can conduct field surveillance of offenders even when they are away from the receiver units in their homes. The device is especially useful to verify the offender's attendance at 12-step meetings and school, work at construction sites, and presence at other public or confidential locations. Further, the field monitoring device can alert surveillance personnel that an offender is in an unauthorized location. One probation officer found one of his clients, who was supposed to be at work, on a golf course the officer happened to drive by.

Most field monitoring devices display the transmitter number of the offender detected, although some models have only an audible verification of a transmitter, and some display the name of the offender. Field monitoring devices operate with an internal battery. Most batteries are rechargeable by plugging the unit into a regular power outlet. Some include adapters to run from a car battery. Internal battery life can range from about four to twelve hours, depending on the unit, and most batteries also can be recharged in the vehicle. Most units can store messages about the transmitters it detects for future downloading and reporting. The field monitoring devices are especially useful in cases of violations or suspected violations to confirm an offender's presence or absence at a location (Conway, 2001b; NLECTC, 1999). They also are used in sweep operations. Some agencies use them in their offices to alert them when offenders come in to report or to pay fees.

Group Monitoring Units

Sometimes programs will want to supervise several offenders in the same location using electronic technology. This might be appropriate for tasks such as verifying attendance of multiple offenders in a day-reporting program or monitoring offenders confined in a residential group setting. Each offender in a group setting wears a transmitter, and all transmitters are monitored by one group monitoring unit, much like a field monitoring device. The group monitoring unit reports an exception when an offender's transmitter signal is not picked up (i.e., the offender has left the area) or attempts to tamper with the transmitter. Additional information is received and stored by the group monitoring unit and can be downloaded to a computer to generate reports at a later time (L. Connelly, personal communication, September 7, 2001).

Location Tracking Systems

Some of the most recent technological developments provide the ability to track an offender's movements and location in real time. Current location tracking systems — referred to as global positioning systems, or GPS — rely on 24 satellites that orbit the earth thousands of miles away. These satellites

Table 7a

How Global Positioning Systems Work

GPS is a worldwide radio-navigation system. The 24 satellites orbit Earth every 12 hours at 11,000 nautical miles above Earth. The satellites are positioned so that signals can be received from six of them at any given place on Earth at nearly any time. Each satellite is equipped with a precise clock, and the satellites emit radio signals encoded with precise time messages and their positions in orbit; these signals travel at the speed of light. The location of each satellite is tracked and monitored by ground control stations.

The receiver carried by the offender contains several channels to receive messages from different satellites and computer circuitry that detects, decodes, and processes GPS satellite signals. Each location on Earth has already been mapped based on the distance of the satellites from those positions at various times. Thus, the location of the receiver on Earth can be calculated by how long it takes the radio signals from the satellites to reach the receiver, the positions of the satellites at a particular time, and where the signals from four satellites intersect simultaneously at the receiver. The receiver's position can be plotted accurately to within a few feet.

(Renzema, 1998; The Aerospace Corporation, 1999; Trimble Navigation Limited, 2001)

were originally designed by the U.S. military for navigation, mapping, and weapons delivery purposes. However, they are now used in a variety of nonmilitary applications including personal car and boat navigation and electronic supervision of offenders (Rosica, 2000).

Victims must be made fully aware that victim notification systems do not provide protection from a perpetrator. These are only tools that will act as warning devices when the offender has not tampered with the equipment.

The hardware for this system consists of a transmitter worn by the offender, a portable tracking device that the offender must carry or be near at all times, and a charging unit for the portable tracking device that stays in the offender's home (Renzema, 2000a). The battery-operated transmitter is small (about the size of a watch or small pager), light weight (about two to four ounces), and is usually worn on the offender's ankle. As with other types of electronic supervision devices, the transmitter has built-in tamper-resistant features to avert the offender from removing the transmitter and to send an alert if he does interfere with it. Batteries can last from one to three years before replacement. Like the continuous signaling devices, the transmitter emits a radio signal two or more times a minute that is received by the portable tracking device. In an open unobstructed area, the transmitter can send signals to the portable tracking device as much as 100 to 150 feet away. However, the range can be programmed for some models ranging from 35 to 150 feet (Conway, 2001b).

If the portable tracking device no longer receives a signal from the transmitter, it sends an alert to notify the monitoring center. The portable tracking device must be within range of the offender's transmitter at all times to track the offender. (Some agencies allow the offender to go out of range of the transmitter while at work, depending on their work environment, responsibilities, and the reasonable assurance of their continuous presence at their work site during working hours.) Portable tracking devices are small boxes that weigh approximately two to four pounds. The offender carries the device by hand, with a shoulder strap, or worn around the waist. The portable tracking device contains several types of technology: a receiver that detects signals from the transmitter, the GPS signal receiver, a computer, and cellular telephone circuits (Renzema, 2000a, 2000b). The radio receiver, like the stationary ones used in continuous signaling systems, simply detects whether the transmitter worn by the offender is within range. The GPS unit receives constant signals from several of the satellites. Receivers detect signals from the satellites that include the exact time the signal is sent and the identity of the satellite sending the signal. This information is processed to determine the person's location. The cellular phone system in the portable tracking device can then communicate information about the person's location to the central monitoring system. The computer in the portable tracking device continually stores the information about the offender's location. These systems use mapping technology to track the offender's actual movements throughout the day by downloading the information from the receiver's computer. While it is also possible to follow the offender constantly in real time, the cellular telephone charges involved make this unrealistic in some circumstances. Downloading and studying data about the offender's movements can provide information about his or her activities. It can be especially useful to determine whether an offender may have been near the location of illicit activity at a given time. Some offenders have been cleared of criminal involvement because their location tracking systems showed they could not have been in the area where the crime was committed at the time it occurred.

A shortcoming of the technology is that in some cases, the GPS signals may be interrupted by certain kinds of construction blocks. For example, when the offender is inside buildings, especially in basement areas, the signals may be blocked. Most systems send an alert when this occurs, and the portable tracking device can still detect and transmit signals from the transmitter.

Most location tracking systems communicate through cellular phone technology, and one of the pitfalls of cellular telephones is "dead spots." This means that offenders will momentarily not be tracked in real time. If this occurs, the receiver's

computer continues to store information about the offender's location. Although the information can be retrieved, it cannot be reported until the portable tracking device is out of the problem area. Thus, the information will not be in real time. Users should test the equipment in their locality to know where the dead spots are (L. Connelly, personal communication, September 7, 2001; Renzema, 2000b).

Using a GPS system, criminal justice professionals can determine inclusion and exclusion zones for each offender. Exclusion zones are areas the offender is not permitted to go, such as parks and schools for a pedophile, a former partner's home or place of employment for a domestic batterer, or bars for an alcoholic. Depending on the brand of equipment used, exclusion zones can range from a 300 to 2,000 foot radius, and from 20 to an unlimited number of exclusion zones can be selected for each offender. Inclusion zones are areas the offender is expected to be at various times, such as his workplace during the day and home at night. Depending on the equipment used, the number of inclusion zones can range from 100 to an unlimited number, and the size of inclusion zones is unlimited (Conway, 2001b). The inclusion and exclusion zones are entered by using mapping software that usually requires only entering the address or pointing to the location on a computer map. The computer can be programmed to send an alert any time the offender enters an exclusion zone or leaves an inclusion zone at the wrong time. If an alert registers, it is then possible to follow the offender's movements to determine whether he is clearly violating his restrictions or has accidentally gone in the wrong zone temporarily. Real time tracking can allow law enforcement to be dispatched to the offender's exact location.

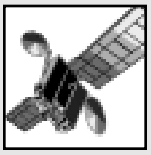
The portable tracking device carried by the offender is also battery-powered and must be recharged regularly — currently, usually every 16 to 24 hours. The charging unit for the portable tracking device is placed in the offender's home and uses household electricity. It takes about five hours for the battery to fully recharge (Conway, 2001b). Figure 7c portrays the basic operation of a location tracking system.

Location tracking systems are usually most appropriate for higher-risk offenders. Sex offenders and domestic violence offenders have been placed on these systems. Renzema (2000b) lists other types of offenders or defendants who may be appropriate for this technology including pretrial releasees in high-profile cases and parolees with histories of violent crime. Location tracking systems also can be used for offenders who do not have household telephone service needed for continuously signaling technologies. Because of the cellular phone system used with location tracking systems, they can sometimes be used in remote rural areas (Renzema, 2000b).

Figure 7c

ELECTRONIC MONITORING TECHNOLOGY LOCATION TRACKING SYSTEMS — GPS

Offender wears transmitter and carries receiver



Signals from four satellites are received by the receiver

Cellular phone communicates between receiver and monitoring computer

Supervisor follows up on violations

Global positioning systems are about three to five times more expensive than continuously signaling systems, reflecting both more costly equipment and the added cost of cellular telephone service; however, costs for this technology are expected to decline. Global positioning systems also generate a significant amount of information, because it is possible to track the location of the offender continuously. This increases the work for staff to review the information produced and respond to any infractions found, thus also potentially increasing the cost.

Emerging Technologies

Electronic supervision technologies have developed during a short time span and are changing rapidly. Many companies have refined their prod-

ucts to make them easier to use and less susceptible to tampering by offenders. Existing technologies are very reliable.

Electronic supervision technologies have developed during a short time span and are changing rapidly.

However, manufacturers constantly are looking toward improvements or new technologies. One system now being developed will be a location tracking system that will use receivers mounted on radio towers, rather than satellites, to determine the location of the offender's transmitter (Conway, 2001a; Gaseau, 2000). Another is a system that continuously monitors an offender for alcohol consumption through technology in a body-worn band (P. Conway, personal communication, September 10, 2001). Experiments also are ongoing that may result in telemetry of blood levels of illicit drugs measured by adhesive skin patches with embedded microchips (M. Renzema, personal communication, October 14, 2001).

CONCLUSION

This chapter focused on the selection of appropriate electronic supervision tools stressing the need to carefully review the capabilities of equipment considered and to make sure it can perform the functions needed to achieve program goals. Eight types of electronic supervision equipment were described, ranging from those appropriate for very low-risk offenders to those that might be employed to supervise the highest-risk offenders in the community. The characteristics of each type of supervision system were described with caveats for agency personnel to consider when implementing each.

Chapter 8
ESTABLISHING MONITORING SERVICES FOR ELECTRONIC SUPERVISION SYSTEMS

Whether a program is supervising low-risk offenders through the use of automated reporting systems or is managing higher-risk offenders using remote alcohol detection, continuously signaling devices, or location tracking, electronic supervision technologies are a tool to hold offenders accountable for their behavior in the community. However, these technological capabilities also require accountability of the agency. Regardless of the type of electronic supervision technology employed, the purpose of the equipment is to generate information about the offender using it. The crucial part of an electronic supervision system is how that information is used. This chapter explores the processes and necessary decisions for managing data between the time it is generated by the equipment offenders use in the field and the time a criminal justice agency professional makes decisions about how that information will affect his or her supervision of the offender and other job responsibilities. Although data transmission is automated, human decisionmaking is the most vital part of the process. Without sound policies in place and trained professionals responding to the information generated, electronic supervision technologies are a waste of time and money!

Regardless of the type of electronic supervision technology employed, the purpose of the equipment is to generate information about the offender using it.
The crucial part of an electronic supervision system is how that information is used.

As discussed in chapters 4 and 7, electronic supervision technologies may be used on a range of offenders with an array of risks and needs. Risk levels may vary from extremely low-risk offenders who require only administrative supervision to very high-risk offenders who otherwise would be incarcerated or are being released from incarceration. Electronic supervision technologies also target some specific types of offenders' problem behaviors, such as offenders with alcohol problems or the monitoring of domestic violence or sex offenders. In determining policies for monitoring services, there are several important decisions to keep in mind, including:

- Managing information to achieve the program's purpose and goals.
- Matching offender risk level with appropriate use of data.
- Understanding the capabilities of the equipment, software, and personnel who manage the information.
- Responding appropriately to offenders based on the information received.
- Using data for program management.

MATCHING OFFENDER RISK AND PROGRAM PURPOSE AND GOALS

Possible purposes of programs using electronic supervision technologies were discussed in chapter 2. Briefly, these included:

- Public safety.
- Safety of victims.
- Accountability of offenders.
- Behavior change of offenders/reduction of recidivism.
- Complying with mandates to reduce jail or prison populations.
- Providing correctional services in the most economical way.

The way in which information generated by electronic supervision equipment is used must correspond with the stated purpose. For example, if the program supervises high-risk offenders and the program purpose is public safety or safety of victims, then, depending on the type of technology used, information about offenders' violations of curfews, use of alcohol, or entry into exclusion zones should receive close scrutiny and appropriate response to ensure that they are not engaging in activities that risk public safety or the safety of victims. On the other hand, if the program purpose is to reduce supervision costs for low-risk offenders, a monthly review of reports generated by automatic reporting systems may be

sufficient. If medium-risk, nonviolent offenders are being held accountable by the program and being rewarded or sanctioned for compliant or noncompliant behavior, then regular, but not necessarily immediate, review of data and responses by personnel may be appropriate. All violations should result in a response of some kind, whether it be immediate or not. Additionally, there should be protocol established for responses to violations based on their level of severity.

MANAGING THE INFORMATION

Whitfield (1997) writes that electronic supervision equipment "produces an extraordinary amount of data that has to be organized into ordinary, checkable, understandable patterns. This requires a high degree of accuracy and organization in terms of both input and output scrutiny" (p. 89). There are an amazing number of "moving parts" and an incredible volume of information that must be organized for effective use of electronic supervision systems.

At its most elementary level, equipment worn or used by the offender produces particles of information that are transmitted to a central monitoring computer. The computer is programmed to receive, organize, and respond to the information based on data that has already been entered about individual offenders. The information then is accessed by people who are responsible for making decisions about how these data should be interpreted and used. Sometimes, additional computers are involved in this information management process, including computers at agency offices or portable computers used in the field that receive information from the central computer. The monitoring computer also may send information using telephone, pager, or fax communication systems.

Agency staff should familiarize themselves with the protocol of the monitoring center so they know how all this information is processed and reviewed. Agencies should require they review and approve a quality control and auditing plan from the monitoring agency.

Initial Data Collection

Knowing the type of offenders to be supervised and the program purpose, the next phase of program decisionmaking is what data will be collected. Data collection begins long before the equipment is installed on the offender or in his or her home, and several important decisions must be made at this beginning point. Not only is the initial data collection important for later processing of and responding to information generated electronically about offender activities, it is also important for program evaluations (a topic that is discussed in greater detail in chapter 11).

Program personnel must determine what basic information is needed about each offender. Much of this information is already collected during program intake processes. However, a decision must be made about what information will be entered in the monitoring computer and in what format. This often necessitates designing forms (both paper and for the computer) for entering the data. In some cases, agency personnel enter data about program participants directly into a computer, and it is conveyed to the central monitoring computer. In other cases, the information is hand-written on a form and sent to the monitoring center[1] where it is entered by monitoring center personnel. However it is done, the enrollment process should make swift and easy completion possible. It is vital that information be entered on a timely and accurate basis so no delays or mistakes cause problems in the operation of the system. Basic identifying data on each offender should be collected and entered in the computer, including but not limited to: name, age, sex, race, address, telephone number, legal history, present offense, and the like.

Conditions of Supervision

Agency personnel must also make decisions about the electronic supervision rules or restrictions for offenders. Sometimes these will be standardized for all offenders in the program and other times they will be individualized based on each offender's situation. For example, rules and restrictions for different types of electronic supervision equipment might include:

- The frequency with which offenders must report using automated reporting systems (e.g., weekly, monthly, quarterly) and the type of information they are required to supply when they report (e.g., change of address or employment, attendance at treatment).
- The frequency with which offenders undergoing remote alcohol detection must use the test devices and whether this will be on a sched-

[1] In this document, a monitoring center may refer either to a contracted service center that provides computer monitoring or to similar monitoring services located within the agency.

uled basis (e.g., every time they return home) or on a random basis (e.g., periodically during the day they are alerted to take a test), or both.
- Schedules for offenders placed on home curfews, including times they may leave home for work, treatment, and other authorized activities and when they must remain at home.
- Inclusion and exclusion zones for offenders using location tracking devices.

In many cases, combinations of these last three areas may be applied to the same offender, as blends of equipment may be able to perform several functions. While the identifying information on each offender described previously is static (unchanging information), the rules and restrictions may be changed according to program and offender needs. For example, schedules often must be changed to accommodate fluctuating work hours, changes in treatment schedules, and the like. Exclusion zones also may be changed if, perhaps, an offender's victim changes residences or jobs. Programs also may want to increase or decrease the frequency with which offenders on home curfews are checked as rewards or sanctions based on their compliance or noncompliance with program rules.

The central monitoring computer must be programmed to receive the data transmitted by the equipment the offender wears or uses and organize it and compare it to the rules and restrictions that have been entered for each offender. As long as the information received from the equipment the offender is using shows compliance with the schedules, sobriety, and inclusion / exclusion zones for the offender, the central monitoring computer records and stores the information and generates routine reports (daily, weekly, or monthly, as preferred by agency personnel) that indicate the times data were collected and the results (i.e., compliance) for each. The most crucial issue for decisionmaking for electronic supervision systems, however, is how information about exceptions to or violations of the rules and restrictions are to be handled.

Exception/Violation Verification, Investigation, and Notification[2]

Exception events occur when the computer detects information from the equipment used by the offender that does not agree with the information entered in the computer for that offender (e.g., unauthorized leaves, entering an exclusion zones, use of alcohol) as well as information about equipment functioning (e.g., tampers, power loss, disconnected telephone). These are sometimes referred to as "alerts." The reporting of exception events, methods of verifying or gathering additional information about those exception events, and notification of suspected violations are all important considerations when planning a program that uses electronic supervision technologies. The program plan affects the choice of electronic supervision equipment and services provided to best accomplish the program purpose. Most vendors offer standard verification and notification procedures, but usually they also can provide modified processes designed to meet specific program needs. However, it is absolutely necessary to specify program needs prior to procuring electronic supervision services and to make sure potential vendors can meet those needs. There are several steps and methods for exception event processing discussed in the following sections.

Exception Event Processing

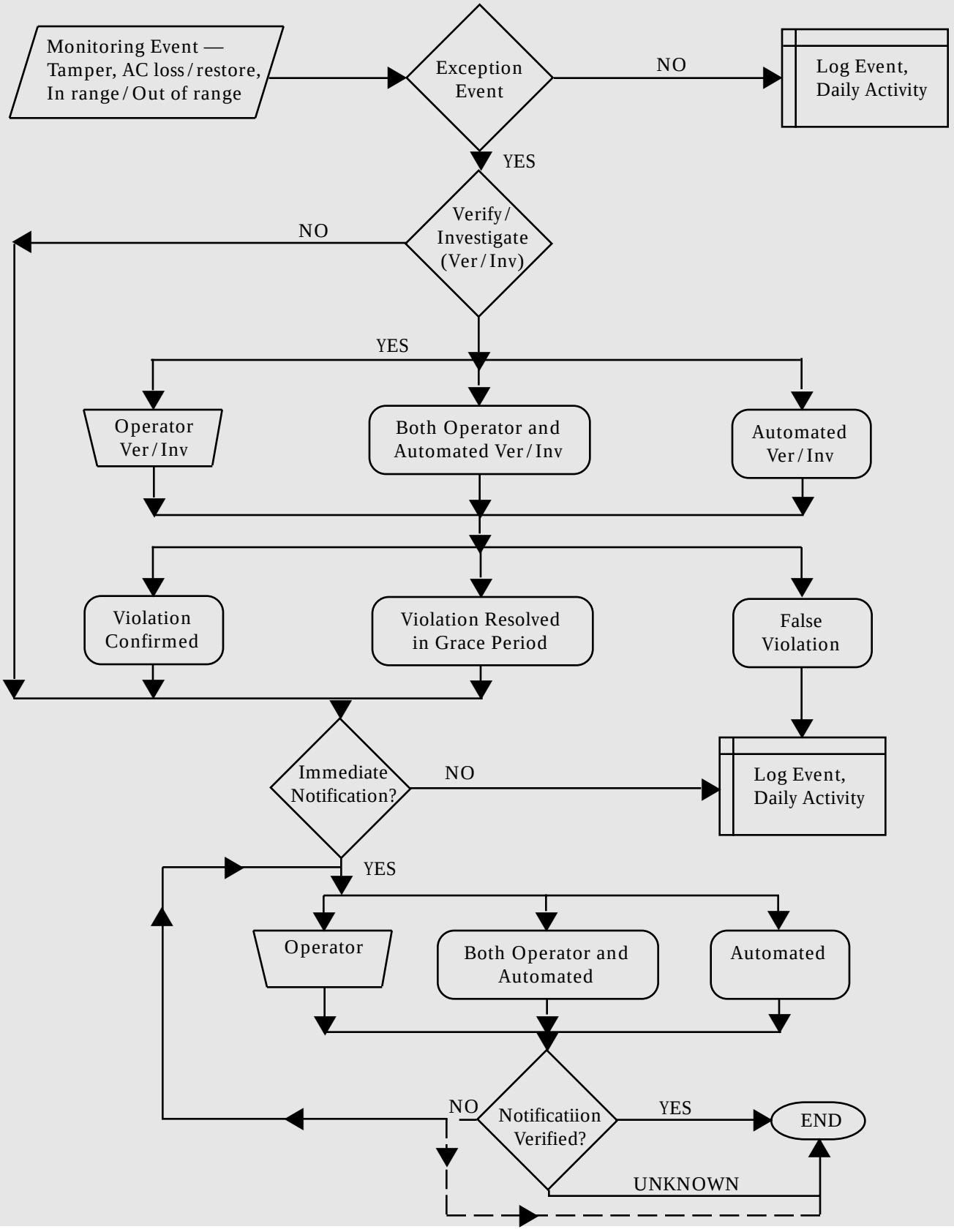
The most frequent exception events for continuously signaling electronic supervision equipment (the most commonly used) are equipment tampers, unauthorized leaves (out of range), and unauthorized returns (in range). Others include, but are not limited to, failure to return (out past curfew), AC power loss, and phone disconnect/reconnect. Figure 8a illustrates the various exception event processing possibilities. References to verification and investigation refer to actions performed by the monitoring center computer or staff.

The first phase in processing exception events is verification (investigation) of the event. Verification methods and capabilities vary from system to system and by type of event. Depending on the program purpose, policies, staff, and other resources, all exception events may not need to be verified. However, it is a good practice to have at least one investigation phone call made by the monitoring center to determine what is happening. If the violation involves the offender being out of range, the fact that he or she answers the phone means he or she is back in range. This preliminary investigation takes just moments, and it can save an officer significant time and energy required to go to the offender's home for a false alarm because the offender just went to his or her garage for a few minutes and was out of range.

[2] The information in this section was provided primarily by Peggy Conway, a member of the Working Group that guided the development of this document.

Figure 8a

EVENT PROCESSING



The agency should establish the protocol it wants for all violations based on the seriousness of the violation. Some monitoring centers recommend automatically resetting after transmitter strap tamper alerts. While this may be appropriate for a proximity tamper (the transmitter is not in contact with the skin), for the strap tamper, automatically resetting may be a problem. If the equipment is reset automatically, it is virtually impossible to know the real reason for strap tampers. Staff should always inspect the strap and reset it themselves to determine the exact nature of the problem. It is important for electronic supervision staff to minimize games and guessing (L. Connelly, personal communication, September 7, 2001).

Today, many requests for proposals for electronic supervision monitoring services include the requirement that unauthorized leaves be verified prior to notification of agency personnel. Most vendors indicate that verification by a monitoring center operator and notification of unauthorized leaves will occur within 15 minutes; that is, 15 minutes from the time the exception event is reported. All field equipment using radio frequency has a built-in programmed delay from the time of the first missed transmission to the time the equipment considers the transmitter to be out of range. This can be as little as one minute and as much as 30 minutes. In most cases, the delay is ten minutes or less. This means, with operator verification taking up to 15 minutes, agencies are notified approximately 25 minutes after the person has left. Agencies can specify in their contracts what they want this time window to be for offenders based on risk level or for the agency as a whole.

Operator verification and notification estimates are based on usual timeframes for completing tasks. However, monitoring systems do have peak periods of activity, and they can have unexpected staffing shortages, so verifying exception events can become backlogged, causing further delays in notification. Therefore, it is important for agencies to ascertain the monitoring center's procedures for handling peak activity periods and staff shortages. Another issue that can affect notification of violations is the number of modems per client available in the monitoring center. If a monitoring center is trying to minimize costs, it may have too few modems for the number of offenders monitored, thus limiting its monitoring and notification capacity. Agency planners should find out exactly what the ratio of modems to offenders is and what delays can be expected during peak times (L. Connelly, personal communication, September 7, 2001).

Some electronic supervision systems monitoring high-risk offenders immediately radio a law enforcement officer to apprehend an offender or defendant for whom an unauthorized leave notice is received. These programs tend to use field equipment with short programmed delays before reporting an out-of-range event.

Most systems require the offender/defendant to respond by telephone and then verify his or her identity — either biometrically or through an additional technology incorporated into the transmitter device that generates an identification code that is transmitted over the phone line. For this reason, it is generally accepted that verification is extremely accurate. Conversely, it would be virtually impossible for a monitoring center operator to accurately verify the identity of an offender on the telephone. However, this is not necessary since the offender's transmitter will indicate he is at home, if in fact he is. Therefore, if a transmitter in range is reported at the same time as this message, then this verification method should be considered reliable. Additionally, if a call is placed by the monitoring center immediately upon receiving an out-of-range, or left- home violation, then if the offender answers the phone, it is only a matter of moments before monitoring center staff know if the transmitter is back in range. This is why telephone verification is so important on major violations prior to notifying law enforcement of a problem. Law enforcement personnel would likely prefer to know there is a problem than respond to a false alarm (L. Connelly, personal communication, September 7, 2001).

Supervision agency personnel need to think carefully about how violations are handled. The "window" for the monitoring center to notify supervision staff of violation verifications can be varied depending on the risk level of the offender (usually from one minute to 20 minutes). During the time the agency is receiving notification about a violation, a phone call can be made by the monitoring center and verification of the violation can be known immediately. Notification before verification, rather than saving time, potentially takes the officer away from other important duties unnecessarily (L. Connelly, personal communication, September 7, 2001). Part of this evaluation should include some understanding of the frequency of "false" out-of-range events reported. This does vary by product, by the installation environment, and in the ability

of installers to determine an optimal location for equipment that has a greater tendency to report out-of-range events. It should be noted that agencies that respond to unauthorized out-of-range events on the next business day are likely to find information provided by operator verification valuable.

The Urgency of Exception and Suspected Violation Event Notification

From the preceding section, the importance of answering the following question is accentuated:

When staff are notified of a potential violation, what must they do and when should they do it?

The answer to this question indicates whether immediate notification is beneficial. Some agencies with limited staff or without the need to respond immediately to violations question the value of immediate notification and consider it to be more of a liability than a benefit. First, why disrupt the sleep of on-call staff by paging them with information that they will not act upon until the next business day? Second, is there a liability in knowing about a violation and not doing anything about it?

The response to notification of a violation can depend on the defendant / offender and can range from discussing the violation with the offender during the next scheduled office visit to increasing their sanctions by decreasing noncurfew hours to dispatching a probation, parole, or law enforcement officer immediately with authorization to take the offender into custody. A good rule of thumb is that the more severe the sanction, the more information needed about the violation. This information can be gathered by the monitoring center staff during verification, by the case officer, or by the nearest law enforcement officer patrolling the area and dispatched for immediate response.

Methods of Notification

Notification methods vary and may be automatically generated by the monitoring computer system, processed by the monitoring computer system operator, or included in a combination of automated and manual processing procedures. One example of combined automated and manual processing is when the computer system has automated fax or paging capabilities but the operator has to invoke a command or select a menu item to initiate a faxed transmission. Common notification methods include printed reports, faxed transmissions, and pager alerts. E-mails are beginning to be used by some companies as well. While telephone calls to designated staff are less common, agencies may want to insist that pages and faxes be followed with a telephone call to an on-duty or on-call staff member for confirmed major violations. Programs can be individualized based on the risk level of the offender. If agencies know they will respond immediately to a major violation on a high-risk offender, then it makes sense to receive a phone call so the margin for error is reduced. On the other hand, if agencies do not respond to violations until the next business day, then a phone call may not be necessary. Major violations, however, by any offender, should receive priority action and should be handled differently than less serious violations (L. Connelly, personal communication, September 7, 2001).

Manually generated and automatically generated notifications are both subject to potential pitfalls or delays. Manual notification can be delayed due to unexpected peak workloads and the nature of manual processing; staff are unable to keep up with the workload. However, it is the responsibility of the monitoring center to have protocols in place to manage peak hours within the time guidelines established by the agency. Obviously, there is also a potential for human error whenever a procedure requires manual processing except for phone calls to staff for person-to-person notification. Some monitoring systems print notifications that monitoring staff then have to fax. It is not difficult to imagine an operator setting up a fax, hitting send, walking away, and not realizing that the fax has not gone through until an hour later.

Automatic notification is also subject to delays. What happens when a telephone line is busy or a printer or fax at the receiving end runs out of paper? Regardless of whether notification is automatic or manual, it is important to find out whether there is a manual or automatic process to make multiple notification attempts if previous ones are not successful. It is also important to find out whether the system can use a back-up machine or method after several unsuccessful attempts. It is essential for agencies to look closely at violation notification procedures and tailor them to meet their needs. Agencies need to ensure that auditing and confirmation procedures are in place to assure that they receive timely notification of violations — especially for major violations.

A system that offers unlimited flexibility to agency staff for providing written instructions for programming changes that appear on the screen for a monitoring center operator probably should be avoided. Such changes may include schedule changes and exception event verification. While

such instructions about changes may be clear to the sender, they may be subject to different interpretations by monitoring center staff. Therefore, confusion and mistakes may result. A menu for selecting changes may be a better option in most cases.

When using pager notification, it is important to find out whether the system works with two-way paging so that the system is able to confirm that paged notifications are received. Until two-way digital paging became available in the late 1990s, there was no way of knowing whether a page was received unless the monitoring center (or computer) kept a log and required agency staff to call the center when they received a page about a violation.

There are other functions worth considering when selecting monitoring services, some of which are relatively new and not always readily available. For example, some systems that automatically generate a report to agency personnel may also be capable of sending a letter or report to a judge and a copy to the offender. Another capability to explore is whether the monitoring system can interface with agency case management software and directly record case notes on electronic supervision.

Verification and notification often are considered simple tasks, but a closer look reveals the complexity of capabilities and considerations. While most agencies specify system capabilities, they also should include a description of how and when violations will be responded to and the necessary resources for doing so. Vendors can then describe how their systems can support these operational requirements.

RESPONDING TO OFFENDERS

The integrity of any electronic supervision system and its ability to help meet program goals hinges upon the response given to offenders for their compliance or noncompliance. This is the point at which technology ends and human interaction begins. Agencies must develop a clear policy of how staff will respond to offender behavior, including graduated sanctions and incentives. This is discussed in greater detail in chapter 10.

USING DATA FOR PROGRAM MANAGEMENT

Besides the primary supervision purposes of monitoring services, there are some other considerations to be made when determining the type of and arrangements for these services or developing agency-based computer capabilities. These include data storage and equipment inventory.

The integrity of any electronic supervision system and its ability to help meet program goals hinges upon the response given to offenders for their compliance or noncompliance.

This is the point at which technology ends and human interaction begins.

Data Storage

Agencies initiating electronic supervision systems should be aware that large volumes of data will be generated. Decisions must be made about how long data should be kept; when, how, and how much data should be purged; and how archived data will be accessed if needed. Should information be maintained by the monitoring center only while the defendant or offender is being supervised, or should information be maintained much longer? This is an especially important issue for juvenile offenders whose records may be expunged when they reach majority age. Decisions also will need to be made about whether data are maintained by a contracted monitoring service or transferred to the agency for storage. Even electronic storage of a significant amount of data can require additional resources, and this needs to be planned as the program is developing. There also should be procedures in place for authorizing (or not authorizing) data to be purged from monitoring center files. This may be automatic, as in the case of program policies that require purging data at a specific time after the offender is removed from electronic supervision. In other instances, the agency may prefer to be notified by the monitoring center when a case has been inactive for a certain period, and then to have staff authorize that the data be purged or maintained. Further, procedures should be in place for retrieving archived data. For privacy purposes, a method should be in place that protects all parties involved from inadvertent disclosure of confidential information.

Equipment Inventory

Equipment inventory is an important and necessary part of the management of an electronic supervision system. Because of the expense involved and for accountability, agencies should have a system for tracking:

- Equipment assigned to particular staff.
- Specific equipment for each offender.
- Dates of use.
- Defects and repair history.
- Equipment upgrades.
- Retirement / disposal of equipment.
- Battery life / replacement.
- Calibration of alcohol testing units.

Many agencies already have inventory procedures for other types of equipment, and electronic supervision equipment may be added to this. However, if this is not already available, it may be an area to include with other monitoring services software. This type of information could be added to the other data that are gathered and stored by monitoring computers.

SELECTING MONITORING SERVICES

Monitoring services may be arranged in at least three ways: equipment manufacturers can provide monitoring services, private or criminal justice agency monitoring services can be obtained, or agencies can operate their own monitoring services. Regardless of the arrangement for monitoring services, there are several important features that consumers should be sure are available. These include:

- Data backup so data is not lost if the computer goes down.
- Power supply backup so that an alternate power source is available if electrical power is lost.
- Sufficient computer memory and hard disk storage space.
- Multiple methods of sending information to agency supervision staff in case the primary method fails (e.g., pager, phone, fax, and e-mail). Additional telephone lines may be necessary to prevent situations where communication is not possible.
- Computer security to prevent sabotage attempts.
- Ample telephone modems to process information in a timely manner.
- Audit procedures to minimize human error.
- Background checks of employees.

Further, agencies should verify the training and competency of monitoring center staff. As Baumer and Mendelsohn (1995, as cited by Whitfield, 1997, p. 90) say, ". . . computers only follow instructions; if those instructions are incorrect or absent, the computer will persistently and consistently do the wrong thing."

Consideration of how data collected through electronic supervision technologies will be gathered, transferred, managed, and responded to is essential. Without careful study of these issues, the program likely will fail. Indeed, as Whitfield (1997) notes, without proper attention to these issues a system may collapse under the weight of its own data. Human resources are required to manage and respond to all the information generated. Although electronic supervision is often touted as, and very well may be, a means of saving correctional dollars, many agencies have found that these systems are staff-intensive and require additional personnel if they are to be managed appropriately.

CONCLUSION

This chapter reviewed the management of information generated by electronic supervision technologies. It is necessary to have monitoring services in place to receive and handle the massive amounts of data produced. Monitoring services must receive explicit instructions from program staff so that they can set computer programs to process data properly and monitoring center staff can respond as needed to the information they receive. The way monitoring center staff handle exception events and notify program staff can literally be life and death situations. However, monitoring center staff must be instructed about how the agency wants exception events verified and how such information should be transmitted to the agency. Data that is received by the monitoring center can also be used to accomplish other necessary tasks including storage of inactive data files and inventories of equipment.

Chapter 9
THE PROCUREMENT PROCESS

Having made decisions about the purpose, goals, types of offenders, and the best technology to use for supervising offenders electronically, the next step of the process is to procure the equipment and services needed. This chapter examines the procurement process, first providing an overview of the electronic technology industry and then turning to specific procurement strategies.

INDUSTRY OVERVIEW

Understanding the electronic supervision industry is a first step in making good choices about the selection of equipment and services. Although it seems underutilized when compared to the number of offenders being supervised in the community and when compared to its use for offender supervision in other countries, the electronic supervision industry has grown significantly since its inception in the 1980s, and the environment in which it operates is a fiercely competitive one. Each of these issues will be discussed in light of how they affect consumers.

The extent to which electronic technologies are used to supervise defendants and offenders in the community is unknown. There is no national database that tracks and records the use of electronic supervision technologies. There are several sources of information about the number of electronic devices in use or the number of offenders being supervised electronically, but each of these has its drawbacks and none is considered accurate. This section explores the numbers and trends in the use of electronic supervision tools to provide a general picture in the growth of the industry, but readers are cautioned about the possible limitations of these data.

A Growing Industry

The first steps that justice system agencies took into the electronic supervision arena were tentative ones. Isolated agencies here and there decided to try the equipment, and usually employed it with only a handful of offenders. Over time, the numbers of agencies and offenders using the equipment has grown substantially from its beginning applications, even though less than three percent of the criminal justice population are being supervised with electronic technology[1].

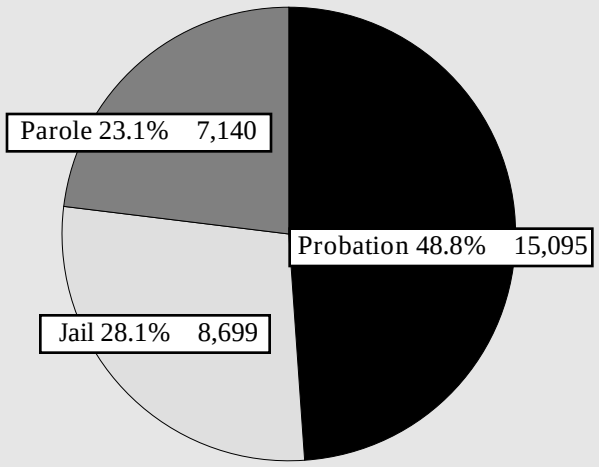
[1] The crminial justice population grew substantially from the 1980s to today, so three percent is relative.

In 1986, only 95 offenders throughout the United States were subject to electronic supervision (Tonry, 1997); today more than 100,000 are supervised with the aid of electronic technologies. However, there is no reliable national data collection source that provides comprehensive information about the use of electronic supervision equipment, and many resources do not include all types of technologies (e.g., automated reporting systems) or do not clearly define the technologies that are included. Growth patterns can be discerned from the statistics that do exist, but a full picture of the extent and types of uses of electronic supervision is elusive. This is only partially due to people assuming electronic monitoring is only radio frequency equipment.

In the Bureau of Justice Statistics' report of correctional populations for 1997 (Bureau of Justice Statistics [BJS], 2000), the most recent year available, 30,934 post-adjudicated offenders were reportedly supervised with electronic supervision devices. These were divided among persons under jail supervision (28 percent), adults on probation (49 percent) and adults on parole (23 percent), as shown in figure 9a. These data do not include pretrial releasees or juveniles who may be supervised electronically. While these data are useful for looking at the distribution of electronic supervision among post-adjudicated adult offenders, they should not be viewed as exact representations. Explanatory notes

Figure 9a

ELECTRONIC SUPERVISION OF JAILED, PROBATED, AND PAROLED OFFENDERS



in the BJS publication indicated that, in a few States, offenders on electronic supervision were counted with those on intensive supervision. However, it is not known whether all those on intensive supervision also are electronically supervised. In a few other cases, notes indicated that several offenders (ranging from 31 in one State to 200 in another) were omitted from these counts.

Data on trends in the use of electronic supervision technology are equally problematic when it comes to trying to get a realistic picture of the industry.

The annual surveys conducted by *The Journal of Offender Monitoring* indicate growth in the number of units in use. Table 9a shows the average number of units in use or clients monitored daily as reported by vendors in 1999 and 2001.

One of the obvious problems with these data is that they are voluntarily reported by vendors, and as shown in the right-hand column, not all of them furnish data on the number of units in service nor clients being monitored. Thus, it is unknown whether the increases in numbers of units/clients is truly a reflection of increasing implementation of electronic supervision or better reporting (fewer nonresponders) by vendors. It is also unclear, and may be inconsistently reported among vendors, as to whether these statistics reflect the total number of electronic supervision units their customers have obtained or the number of offenders being monitored at a particular time.

The only conclusions that can be drawn from present data are that, among adult offender populations, about half of those supervised electronically are probationers, and the others are more or less equally divided among parolees and persons on jail release. Many people in the electronic supervision industry and in the criminal justice system think that there is greater potential for the use of electronic supervision tools, but the industry has not grown at the expected rate in the United States. Linda Connelly[2] cited four possible reasons for slow growth (Connelly, 1998b):

- Electronic supervision was promoted as a panacea — an ultimate solution rather than a tool for supervision.
- Electronic supervision was marketed as an "easy" alternative without acknowledging the additional paperwork and supervision tasks that result from its use. The staff requirements for properly implementing electronic supervision were either not realized or ignored.
- Electronic supervision technologies were introduced before developing adequate support in the market. Initial problems led to general mistrust of the product.
- Media capitalization on a few heinous crimes committed by offenders under electronic supervision sensationalized problems and made them appear to be the rule rather than the exception.

A Competitive Environment[3]

Otherwise respected defense contractors are caught paying foreign politicians. Transport planes have toilet seats 100 times more expensive than those in homes. Highly-touted weapons systems do not work. Retired generals go to work for defense contractors — but not for their technical expertise. Data processing contracts are awarded to political friends. These problems are mentioned to put in perspective some of the cautions that are given below. Despite its relative youth and the shortage of capital that has afflicted many of the equipment manufacturers and service providers, most businesses in the electronic supervision technology industry

[2] Linda Connelly is a member of the Working Group that guided the development of this document.

[3] This section was contributed by Marc Renzema, a member of the Working Group that guided the development of this document.

Table 9a

ELECTRONIC SUPERVISION UNITS IN SERVICE/CLIENTS MONITORED

Survey Year	Number of Units Reported	Number of Companies Included in Survey	Number of Companies Not Reporting Units in Service/Clients Monitored
1999	82,604	15	5
2001	109,302	17	4

maintain ethical business practices and generally responsible behavior, although there have been some exceptions. However, personnel involved in the electronic technology industry may not have first-hand knowledge of the criminal justice system, and agencies need to pay special attention to what is sold to them. Most companies have an understandable interest in their own bottom line; at the same time, they may not fully understand the type of offenders included in various programs nor the practices and equipment required to supervise them effectively. Consumers should take time to make decisions, check references, verify promises, and test equipment for themselves (L. Connelly, personal communication, September 7, 2001). That said, some of the common and uncommon problems that have occurred are discussed in the following sections and are provided to help agencies enter wisely into the procurement process.

Company Stability

No electronic supervision technology companies are known to have suddenly locked their doors and left users in the lurch. More common has been a period of gradually deteriorating service followed by acquisition by another company. Of the 16 electronic monitoring equipment manufacturers listed in the Spring 1989 issue of *The Journal of Offender Monitoring*, only five continued in operation and only two had significant market shares by the spring of 2000. Users need to protect themselves through a combination of pre-purchase investigation, performance bonds, proof of company liability insurance, and exit clauses in contracts. Exit strategies also should be considered before contracting: If the equipment is to be purchased, could it be supported by vendors other than the original manufacturer? How long would it take to ramp-up with an alternative provider?

Low-Balling

Companies may have urgent needs to establish market share or to get new equipment into the field and may cut prices to the point that service cannot be sustained. When maintenance, system upgrades, and additional training are needed, they may not be forthcoming. A particularly troublesome scenario occurs when an agency sloppily draws a contract and awards it to the lowest bidder and then expects the vendor to throw in the elements forgotten in the original contract but necessary to make electronic supervision work. The agency needs to wait until the next fiscal year to obtain money for the forgotten elements, and the vendor is making precious little profit or even taking a loss. Consequently the electronic supervision program component deteriorates or fails.

Dubious Sales Practices

Some companies have personnel who have criminal justice expertise and thus, may have a good sense of what constitutes responsible application of electronic supervision technologies. However, if an agency wants only weekly notification of curfew violations by violent offenders, it is possible that a vendor can be found who will not question this practice and will supply the requested service. Many of the horror stories about heinous crimes committed by offenders being electronically supervised have been exaggerated; yet, they have, nonetheless, had a serious, deleterious impact on all of community corrections. These repercussions might have been mitigated, and in some cases tragedies may have been prevented, if agencies had been more careful about how they receive and use information from the monitoring center. For example, in one California city a violation was faxed to a law enforcement agency noting that a juvenile left his home unauthorized. This information was faxed to the supervision agency over a holiday weekend, and it was four days before the staff found the fax and acted on it. In the interim, the juvenile had committed murder. Who knows whether the murder could have been prevented? However, had the agency established protocols to respond to major violations right away, the juvenile might have been apprehended more quickly. In any case, the agency's practices would not have been subject to public scrutiny had their protocols been more robust. It is always wise to have the monitoring center followup a fax on a serious violation with a phone call to ensure the information has been received by a staff member (L. Connelly, personal communication, September 7, 2001).

"Wiring" Bids

Vendors are generally only too happy to help users develop bid specifications. However, when one accepts help from vendors, the technical specifications may be drawn in a way that would exclude other vendors. Taking the general approach of bidding for a function rather than equipment and relying on the information in this publication, as well as other publications by the American Probation and Parole Association, the American Correctional Association, and the International Community Corrections Association can greatly reduce this problem. *The Journal of Offender Monitoring*, especially its annual electronic

monitoring survey showing common capabilities, is another helpful resource.

Another ploy has been to encourage agencies to write bids for a mix of equipment offered only by a particular vendor, to win the bid on that basis, and then to attend to and service only the core equipment. This is advantageous to the vendor because the way the contract was written, lack of performance by the "supplemental" equipment is not cause for voiding the whole contract.

Lies and Distortions About Company Capabilities

When a company says, "We have 10,000 units in the field" the meaning may be closer to, "Since day one, we've shipped 10,000 units." Of those 10,000, only 5,000 are currently usable and because of spares and program glitches, only 3,000 are currently in use today on offenders. "Free training and free upgrades" may have unspoken qualifications of "when we get around to it" or "when we can." A monitoring center with "back-up power" can mean anything from a $100 uninterruptible power supply good for 15 minutes to a $20,000 diesel generator. Claims of system back-up were not true in one well-known case. The company had back-up hardware but did not run it because of staffing problems; when hardware failed, it took many days to put all of the monitored offenders back onto the system. The ability to maintain continuous operations through backup capabilities has proven to be problematic for more than one vendor.

Other instances of questionable behavior have involved shipping equipment before adequate testing and announcing new kinds of products as much as two years before beta-testing so that users would wait for promised products from an established vendor rather than purchasing from a newer company that was already producing and shipping equipment.

In conclusion, caveat emptor: Let the buyer beware! The problems in buying electronic supervision equipment or services are not significantly different from buying other technology. Specifications need to be set in detail and with care. References need to be checked with line personnel who are operating the equipment, not the head of the agency. The current financial health of the manufacturer and provider also needs to be determined. There may be discrepancies between the viewpoints of agency administrators and the line personnel who are in the field working with the equipment and processing information. Claims need to be verified. Checks and balances and back-up systems need to be in place. There are many well-intentioned and generally ethical people working in the industry, but they are subject to immense competitive pressures.

PROCUREMENT PROCESS

The foregoing section is provided not to discourage nor worry potential consumers, but to recommend that agencies enter into the procurement process wisely. Work is required to ensure that the process operates smoothly and the agency obtains the most appropriate equipment and services for its electronic supervision needs. There are several recommended steps in the procurement process that will be discussed. Following that discussion, examples of elements for requests for proposals are provided.

Procurement Rules, Regulations, and Laws

States and individual agencies operate under laws, rules, and regulations about how purchases may be made and how they may enter into contracts for services. It is extremely important that agency personnel seeking to purchase, lease, or rent equipment or engage in contracts for services become familiar with and follow these procurement policies carefully. If such policies are not adhered to, time, money, and effort may be wasted unnecessarily, and any resulting agreements may be illegal. Agencies or personnel then may be liable for procuring inappropriate equipment or for penalties for breaching contracts when procurement policies are not followed. Further, vendors may suffer losses for work they have done in good faith that is not acceptable at higher agency or State levels.

On the other hand, while the role of purchasing is important to ensure that the procurement process is followed in a legal and fair manner, agencies procuring the equipment and services should make the final decisions. Establishing an electronic supervision system is far different than purchasing a copy machine or telephone system. There is no substitute for public safety, and the lowest bid is not necessarily the best. Too often, a separate purchasing department is shaping the content of a Request for Proposals (RFPs) and selecting the successful bidder, even when its decision is contrary to the desire of the corrections agency. In the best case scenario, agencies should make an effort to have final control over the RFP and the purchasing decision, with input from the purchasing department on the process only (L. Connelly, personal communication, September 7, 2001).

Imel and Hart (2000) suggest the first three of the following four options to investigate for a procurement process:

- Competitive procurement through which the agency develops specifications and issues a Request for Proposals (RFP).
- Noncompetitive procurement through which agency policies may allow for sole source procurement or contracts for operational services. Sole source procurement may be used when a vendor has previously supplied similar goods or services to the agency and the intended procurement is for comparable items. Contracts for operational services, such as telephone service, may not have to go through a competitive bid service. However, each agency has its own requirements, so personnel must check these and adhere to them.
- Cooperative purchasing through which smaller agencies benefit from another agency's competitive procurement process. For example, if a State has a contract with a vendor, a local agency may be able to purchase through the State's contract.
- Finally, agencies may want to go through a pilot process to determine exactly what type of equipment and services work best for their programs. A formal RFP process may result in a contract that does not work for an agency if the agency does not fully understand its needs and the details of the technologies available. Prior to spending the time and money on a formal process, a pilot project will allow agency staff to try different scenarios and equipment and then develop an RFP for its ongoing needs (L. Connelly, personal communication, September 7, 2001).

Of course, many agencies' procurement guidelines require that they obtain equipment and services using an Invitation to Bid. In these instances, great care should be taken to ensure that the specifications used define the minimum requirements without unnecessarily eliminating viable competitors. Further, care must be taken to ensure that all costs are considered in the responses. For example, one vendor's battery might cost $15.00 but is only replaced every two years of operation and can be replaced without destroying the strap or clips. Another vendor's battery may cost $5.00 but needs to be replaced every year, and replacement causes the strap to be destroyed and requires new clips resulting in a cost of $20.00.

The bottom line is to know your agency's purchasing policies and comply with them carefully to avoid potential delays and even legal problems. Armed with this information about the procurement laws, regulations, and policies under which your agency operates, there are two major phases in the procurement process:

- Initial Decisions.
- The Purchasing Process.

The components of these phases are discussed in the remainder of this chapter.

Initial Decision

Define Program Needs

Before thinking about or looking into equipment and other aspects of electronic supervision, agency personnel must clearly define their program needs. Precisely specifying program needs is required to prepare an appropriate request for proposals that will allow vendors to tailor their bids to meet program requirements. It is vitally important that this not be influenced by a particular brand of equipment, a specific vendor, nor other market considerations. Following the recommendations in previous chapters of this document will assist program personnel in thinking through the issues that must be determined. Some of the important areas for consideration include:

- Target population — What type of offenders will be supervised electronically, and based on present and projected populations, how many are likely to be included in the electronic supervision component of the program?
- Type of equipment — What type of electronic supervision will be needed for the selected target population? Do they need programmed contact, continuously signaling equipment, location tracking devices, remote alcohol testing, or other types of electronic supervision?
- Service level — Given the target population and the type of equipment needed, what level of service is required? How should staff be notified of alerts or violations? Should notification be done by phone, fax, pager, e-mail, or other methods? How frequently are reports on individual offenders needed? How often must agency reports be provided?
- Research and evaluation — What type of information does the agency need to track for research and evaluation purposes?
- Upgrades — If a program is already in place, are changes in the program planned or is upgraded equipment needed?

Gain Stakeholder Support

In Chapter 2, the value of involving stakeholders in the planning process for using electronic supervision technologies was emphasized. It is also vital to maintain their involvement during the procurement process. The person(s) preparing the request for proposals and handling other aspects of the procurement process is likely to need the support, expertise — and probably signatures — of others in the agency. The agency's procurement process may require approval of key individuals as various steps are completed. Keeping stakeholders informed of the operation and progress is crucial for a relatively problem-free procurement process.

Determine the Parameters of the Procurement Arrangement

Some basic decisions should be made before proceeding with the rest of the procurement process. These have to do with the combination of products and services needed and the basic processes for obtaining them.

For a program with an electronic supervision component, agencies will need equipment, services, and other products. The equipment consists of the hardware components for operating the monitoring process. Services include the monitoring component — the process of receiving information from offenders, processing it, interpreting it, and acting upon it. Equipment installation and repair services also will be needed. Other products may include software needed by the agency to efficiently interface with the monitoring services.

An important issue to consider is how the monitoring services will be handled. Equipment vendors may supply both equipment and monitoring services in package arrangements. Agencies may obtain only the equipment from vendors and contract with other providers for monitoring services. A third option is for agencies to obtain equipment from a vendor and set up their own monitoring center in-house. This last option usually is only practical in large agencies with a lot of defendants or offenders being supervised electronically.

A variety of arrangements may be contemplated for the procurement of needed equipment, services, and products. These may be purchased, leased, rented, or provided on a pay-per-day-in-use basis. Agencies may have a preference for one procurement approach, or they may be open to considering the benefits and disadvantages of each. When purchasing equipment, the agency receives a static product. What is delivered at the time of purchase is all the agency has to use; however, when renting or leasing, equipment may be upgraded throughout the life of the contract. Purchased equipment, like a home, is the property of the owner once it has been paid for, but leased or rented equipment belongs to the vendor, and payments must continue as long as the equipment is in use. An advantage of leasing or renting is the opportunity to spread payments out over a longer time. Purchased equipment can be used until it is broken, lost, or no longer relevant. Then the agency has the responsibility of storing or discarding it. Leased or rented equipment may go back to the vendor for upgrading or disposal, or the agency may have the option to purchase this equipment at the end of the contract for an attractive price. Purchased equipment also may be depreciated over its lifetime with resulting financial benefits in some cases. Budgets, cash flow, and regulatory restraints may influence which option is best for an agency.

Pay-per-day-in-use contracts are often used by agencies when their funding is tied directly to their use of systems. In these cases, they only pay for use of the equipment and monitoring services when they are in use. Many vendors require that the agency commit to a minimum percentage of utilization, and when they are unable to reach this level, they return equipment that they are not using. For example, an agency may have 100 units with a commitment for 80 percent utilization. The agency may drop to only 50 units in use over a holiday period and return 40 of the units, so they are only billed for the 50 they are using rather than paying for 80 units while receiving funding for only 50.

The Purchasing Process

Obtain Lists of Service Providers/Manufacturers

To ensure the bidding process is competitive, agencies should research the range of vendors that may be able to supply the equipment and services needed. There are several ways of learning about vendors, including attending trade shows held in conjunction with professional conferences, reading professional journals, and seeking information from Web sites.

- *The Journal of Offender Monitoring*'s annual electronic monitoring survey report is a widely used resource.
- The National Law Enforcement and Corrections Technology Center sponsored by the National

Institute of Justice maintains Web links with a variety of manufacturers and product vendors for related technologies at www.nlectc.org.
- Dr. Marc Renzema, Professor of Criminal Justice at Kutztown University in Pennsylvania, maintains a list of electronic supervision technology vendors available online at www.econscience.org.

Requests for Information

Requests for Information (RFI) are an intermediate step used by some agencies. They are a mechanism for gathering information in a structured way that helps in making decisions about what products and services are available and their related costs. A request for information describes the scope of the project, projected timeline, and other information that would be helpful to potential vendors in responding to the request. Vendors are requested to provide information about their products and services and estimated costs (Imel & Hart, 2000).

Gather Sample Requests for Proposals

Requests for proposals (RFP) specify a detailed list of requirements for equipment to be purchased or services to be performed. Often, those who are going to use the equipment and services to implement an electronic supervision program component may not have a great deal of knowledge and experience with either the technology or the procurement process (Dussault, 2000). If that is the case, learning from other agencies can save time and costly mistakes. Many agencies will be happy to share copies of their RFPs with other agencies. By looking through several of these, even an inexperienced purchaser will have a good idea of the range of specifications that need to be included in their own RFP. When gathering sample proposals, it is useful for agencies to gather them from other agencies with needs and characteristics that are similar to theirs.

Develop the Agency Request for Proposals

Requests for proposals generally contain three sections (Imel & Hart, 2000):
- Instructions to the proposers.
- Terms and conditions of purchase.
- Technical specifications.

Usually, the agency has standard material for the first two sections. However, forms or examples for these sections provided by the purchasing department should be reviewed carefully, and necessary additions, modifications, or deletions should be made as appropriate for the current project. The technical specifications must be developed by those who are involved in planning and managing the electronic supervision program component. Specifications must be clear and comprehensive; vendors and agency personnel must know exactly what equipment, services, and other products are needed and what will be expected of the vendor and the agency if a contract is developed (Imel & Hart, 2000).

Imel and Hart (2000) and others recommend including at least the following components in a Request for Proposals:
- The problem being addressed.
- Characteristics of the offender population to be supervised (e.g., geographic dispersion, types of offenses).
- The existing environment, including equipment, operational procedures, agency standards, and constraints.
- Required project outcomes.
- The scope and standard of service required, such as functionality, system response times, delivery schedule, service levels, and training.
- Required and optional features.
- Contractual terms and conditions, including any items the agency is not willing to negotiate.
- Criteria for acceptance and contract completion.

Sample elements of the technical specifications for electronic supervision equipment and services are provided in Appendix 1 for this chapter. Agencies are cautioned, however, not to adopt these specifications without evaluating the applicability of each to their own program needs.

The RFP should be reviewed before it is distributed to potential vendors. A technical review should be provided by the agency's legal and purchasing departments or consultants (Imel & Hart, 2000).

Issue the RFP

The RFP should be distributed to potential vendors for the equipment and services needed. A variety of methods may be used, including sending copies to vendors who were identified during initial decisions and to those that have registered with the agency's purchasing department to receive RFPs for electronic supervision equipment and services. Some agencies place RFPs on their or others' Web pages. Announcements may be placed in trade publications also. Build into the RFP a suitable response time for vendors to prepare their responses. This needs to include time for potential vendors to ask questions. Someone within the agency should be responsible for answering questions posed by vendors, and when the answers are prepared, they also should be distributed to all other vendors who have

received the RFP so everyone will have the same information for preparing their response. Some agencies host a vendors' conference to answer questions publicly and at one general session (Imel & Hart, 2000).

The RFP should include a firm due date and should stipulate the number of copies the vendors are required to submit. Any other requirements — such as requests for sample products or other materials — should be clearly stated. All requirements stated in the RFP should be followed by the agency to maintain impartiality in the bidding process (Imel & Hart, 2000).

The evaluation criteria and process should be clear, fair, and equitable.

Evaluate Responses

The evaluation process should be planned before the RFPs are issued and the basic criteria upon which responses will be evaluated should be summarized in the RFP. The evaluation criteria and process should be clear, fair, and equitable. All potential vendors should be treated equitably, and good records of the evaluation results should be maintained. Imel and Hart (2000) recommend the following categories for evaluation criteria:

- Compliance of the proposal with the specifications in the RFP.
- Value including purchase price, quality, warranties, maintenance costs, training, services, response time, reliability, company stability, delivery time, and contract terms and conditions.
- Company performance and stability, including adequacy of staff, customer support and resources.

Evaluations should be undertaken by more than one person in the agency. Staff who are going to use the equipment and services as well as legal and purchasing personnel should be included in evaluating the proposals (Imel & Hart, 2000).

Agencies may want to request additional information before making final decisions, including checking references the company provides of other agencies using its equipment or services. Product or service demonstrations may be requested as well. Final contenders for the bid also should be asked to submit best and final offers that will allow for equal comparison of all these proposals (Imel & Hart, 2000).

All vendors who submit proposals should be notified in writing about the results of their submission. Those who are unsuccessful should be informed. However, Imel and Hart (2000) recommend that final contenders should not be notified until a final contract has been signed between the agency and the selected vendor. If contract negotiations with the selected vendor fail, then there will be other vendors with whom to make contact and transact business.

Select and Evaluate Equipment and Services

Part of the proposal selection and evaluation process may include demonstrations and testing of equipment and services. This may be done by vendors in the presence of agency staff, or it may be done by the agency staff. Some agencies develop small pilot projects involving just a few offenders before contracting for large-scale programs. This allows them to evaluate the functioning of the equipment and services beyond the claims made in vendors' proposals.

Appendix 2 for this chapter contains ideas for evaluating equipment and services within the agency.

Select the Vendor and Negotiate a Contract

In today's complex business world, written contracts are necessary for the protection and benefit of all involved. Many agencies have standard contract terms and conditions that should be included in the RFP and should be the foundations for negotiating final contracts. Contracts should contain, at minimum, the following (Imel & Hart, 2000):

- Legal terms and conditions.
- Milestones for completion of each project phase and specific responsibilities of the agency and the vendor for tasks.
- A specific payment schedule.
- Procedures for changing the scope of work or project costs and who authorizes such changes.

Contracts should be signed by the person in each organization who is legally authorized to do so.

Control Loopholes

Contracts should be examined for loopholes, particularly when procuring more than one type of equipment. In the past, vendors have been known to respond to such procurement initiatives by pricing their main product high and their products with known performance issues lower. They then win the contract on overall price but include a clause that says nonperformance in one area does not result in cause to cancel the contract for the other areas. This

results in the agency getting less than they want, and paying more for it than if they had requested bids for that item only.

Manage Project Implementation

Having a signed contract is not the end of the procurement process. Agency personnel must monitor vendor performance, contract terms, and payments. A schedule should be in place, and agency staff should oversee the vendor's work to comply with the schedule. Payments should be based on meeting predetermined milestones. Open and frequent communications should occur between the vendor and agency staff, and questions or concerns should be addressed as soon as they arise. Before final acceptance of the equipment and services, the vendor should demonstrate their performance and any deficiencies should be corrected. Final payment should be made only after all equipment and services have been delivered and are functioning properly (Imel & Hart, 2000).

A checklist for the procurement process is included in Appendix 3 for this chapter.

CONCLUSION

This chapter described the process of procuring equipment and services for programs that include an electronic supervision component. An initial overview of the electronic monitoring industry provided background for careful decisionmaking throughout the procurement process. The chapter then delineated the various steps required in the purchasing process.

This chapter is followed by three appendixes that provide additional information including:

- Appendix 1 — Sample elements of technical specifications for electronic supervision equipment and services.
- Appendix 2 — Evaluating technology performance.
- Appendix 3 — Checklist for the procurement process.

Chapter 9
APPENDIX 1
SAMPLE ELEMENTS OF TECHNICAL SPECIFICATIONS FOR ELECTRONIC SUPERVISION EQUIPMENT AND SERVICES[4]

Following are samples of possible technical specifications that might be incorporated in a Request for Proposals for electronic supervision technologies. These are not exhaustive, and agencies must examine them in light of their own program needs, making modifications as needed. However, they provide a starting point for developing new RFPs.

These technical specifications have been gleaned from RFPs developed by several agencies. They apply, primarily, to continuous signaling technologies. However, many specifications are applicable to other types of equipment and services as well. These specifications are not general and should not be considered as an endorsement. They simply provide a framework for agencies' consideration.

General Requirements

All responses considered to contain information regarding system functionality that should be treated as private and confidential should be provided in a separate envelope marked "private and confidential." Responses to these questions should refer to this confidential document.

- The electronic supervision equipment is to be placed on the offender and in the offender's home. The equipment shall be of a technology currently in use by the manufacturer, vendor, or both and must be identified by name. A copy of the manufacturer's specifications and literature must be attached to the proposal. Bidders should also include the name of at least one government entity that has used the equipment in a similar application comprising a minimum of (number) units of the proposed equipment.
- All equipment shall be of the same type and model and from the same manufacturer unless expressly approved by the agency.
- All electronic supervision equipment in offenders' homes shall be installed and removed by agency staff, contractor, or offender, depending on the equipment specifications and security level of the offender. In all cases, however, only staff will install the transmitter. The vendor will provide tools, tool kits, and activators to include one set of each per officer. The vendor shall specify its policy and costs associated with replacement of lost or stolen tools, tool kits, and activators.
- Electronic supervision equipment installed in the offenders' homes shall be capable of communicating with the computer, at a central monitoring center, 24 hours per day and seven days per week.
- The system shall use standard telephone lines, wireless cellular telephones, or both to communicate between the individual transmitter / receiver units and the host central computer.
- Any equipment, consumables, attachments, and supplies must not be available to the public or commercially available if this could compromise the security of the system.
- A one (1) year warranty against manufacturer's defects shall be provided.
- Vendors' employees must be acceptable to the agency. The vendor shall not employ anyone currently under supervision of a local, county, State, or Federal criminal justice agency. The vendor or agency (if the agency prefers) shall be responsible for conducting a criminal background check on each employee (when hired or annually) and providing this information to the agency upon request.
- Vendors and agency understand and agree that the awarded contract can be canceled by the vendor or agency, for cause, in accordance with the following provisions: (List provisions as appropriate).
- The vendor shall have a formal quality control program in place that will provide assur-

[4] Information for this appendix was provided primarily by Doug Blakeway, who was a member of the Working Group that guided the development of this document. Mr. Blakeway analyzed RFPs from 17 agencies requesting continuous signaling electronic supervision equipment during 1999. These included State, county, and local agencies. Additional information was provided by Linda Connelly, Peggy Conway, Annesley Schmidt, and Ray Villa, who were also members of the Working Group.

ance of the services detailed in this contract. A copy of the quality control program for equipment and monitoring services shall be submitted with the proposal. ISO 9000 is the preferred quality program for manufacturing. Certification of the manufacturing operations and provision of services should be included.
- The vendor will submit a bid bond with this proposal issued by a surety authorized to do business in the State of (name of State).
- The vendor awarded the contract shall obtain a performance bond in the amount of ($ amount) within 10 days following contract award. The bond must be issued by a surety authorized to do business in the State of (name of State).
- In the event of noncompliance with the contract, the vendor shall be required to comply immediately or submit a corrective action plan to include steps and time frames approved by the agency no later than ten (10) days after notification by the agency.

Transmitter

- The transmitter must be lightweight, hypoallergenic, sealed, shock resistant, water / moisture resistant, and shall not unduly restrict the activities of the offender. Transmitters shall not pose a safety hazard to offenders. The transmitter must be able to withstand a shower or bath without failure.
- Transmitters must function reliably under normal atmospheric conditions and temperatures of approximately thirty-two degrees (32° F) to one hundred twenty degrees (120° F).
- The transmitter must be FCC approved.
- The vendor shall specify the procedure and associated costs for replacing batteries. Vendors proposing sealed transmitters are to describe procedures for replacing transmitters when batteries are low or depleted.
- Transmitter batteries must have an active life of at least six months and a shelf life of at least two years. Vendors must ensure that the agency has easy access to batteries as needed. The vendor's proposal shall specify the costs for replacement batteries for the entire contract period. Batteries must be stamped with a date to assist in determining remaining battery life.
- Transmitters must have a field replaceable strap, for sanitary reasons, and the strap must be easily sized to the offender's leg or wrist. The vendor shall supply all necessary straps and batteries based on installation of transmitters on (number) offenders per year or they shall provide replacement costs for strap, battery, and any other consumable supplies required to operate and ensure that equipment functions properly. Vendors proposing fixed straps must specify their policy regarding reuse of straps and sanitization process. The method of sizing straps also should be described.
- Field replaceable straps are preferred.
- Transmitters must emit a signal that is unique from similar electronic devices and the emitted signal must be one that can be picked up by the vendor's receiver / dialer.
- The transmitter's signal must not be able to be captured or duplicated by commercially available equipment.
- Transmitters must be easily installed on offenders' ankles or wrists.
- Include a diagram of the proposed transmitter, strap, and attachments and the assembly, installation, and removal processes required.
- The vendor shall include a list of the tools necessary for transmitter installation and their replacement costs. The vendor also shall include a description of any carrying case included for required installation tools and supplies.
- Vendors shall specify the method for resetting transmitters, including whether tamper conditions can be reset automatically, manually, or both. When a tamper has been reported to the monitoring center, the tamper shall not automatically reset without an alarm that must be checked by the supervising officer, and the vendor should specify the timeframe within which automatic reset will occur (24 hours or more).
- Vendors shall specify the ability to pair transmitters with any proposed receiver / dialer. The method of and location where matching of transmitter and receiver will be accomplished shall be specified. Pairing without the need to return equipment to the manufacturer or a service depot is preferred.
- The proposed transmitter must be capable of sending a signal indicating that a low battery condition exists. The number of days or hours of advance notice prior to possible failure shall be specified.
- The transmitter must send a tamper indication upon coming in range of the receiver. The

vendor shall specify whether the time reported for a unit tampered out of range is the time of occurrence or the time that the unit comes within range of the receiver.
- The vendor shall describe how the transmitter is shut off when not in use.
- Transmitters shall be capable of storing and recording a tamper event that occurs out of range of the receiver / dialer and communicating the tamper signal to the receiver / dialer when the transmitter returns within range.
- The vendor shall itemize the cost and any limitations related to the vendor assuming responsibility for all costs associated with damaged, lost, or stolen equipment. This will include the vendor's policies regarding responsibility for prosecution for stolen or damaged equipment. Agency staff will cooperate, however, by assisting in recovering equipment and by testifying at court hearings when subpoenaed. During orientation, clients will sign an agreement indicating their responsibility for the condition and return of the equipment.
- Each transmission from the transmitter to the receive / dialer shall be at fixed or varying intervals not to exceed one (1) minute between transmissions. The vendor shall specify the default interval of missed transmissions prior to the receiver / dialer reporting a leave to the monitoring center. Further, the vendor shall specify whether the system is able, and if so, the method of varying this interval. Only systems able to report within approximately 10 (or fewer) minutes of missed transmissions will be considered acceptable.
- The signal waves sent from the transmitter shall cover an area within a minimum radius of 150 feet (free air).
- The vendor will specify whether the receiver can be programmed to support more than one range setting, and if so, which setting supports a radius of 150 feet (free air).
- The vendor shall specify the recommended working inventory of supply batteries and other disposable items per site based on the following: (List office locations, number of officers, and number of offenders per location).

Straps

- Straps must be designed so that an offender cannot remove the transmitter without having to tamper with the strap. The specific activities that shall initiate a tamper violation include the removal of the strap attachment device, severing of the strap, or sliding the strap off.
- There must be an automatic means of detecting strap tampers. The number of methods and a brief description of the tamper detection technology should be specified.
- The straps should be able to be installed on offenders with small and large ankle circumferences accommodating as small as (# of inches) and as large as 12 inches in length.
- Vendors shall include a picture of the strap offered by the vendor and a description of how straps are to be secured to offenders.
- Vendors should include a description of how attempts to remove the unit without detection, circumventing tamper detection, may be discovered, even if the unit is not removed. Both physical and electronic indications (reported status) should be included in this description.
- A sufficient number of replacement straps shall be provided in case existing straps are damaged or unusable. Nonreplaceable straps are unacceptable without a working inventory of additional transmitters / straps being offered at no additional cost to the agency. If straps are nonreplaceable, this should be specified, as well as planned inventory included at no additional cost to the agency. The cost of additional inventory units should also be specified.
- The vendor's proposal shall specify whether it includes all replacement straps for the entire contract period and whether there are any limitations on the number of replacement straps provided at no cost per year per unit.
- The vendor shall supply straps and other disposable items as requested by the agency so that each supervising officer has a sufficient supply at all times.

Receiver / Dialer

- Vendors shall specify the time required for installation of electronic supervision equipment in offenders' homes.
- Communication should use standard telephone connections and standard 110 volt AC residential current. The vendor should specify units' ability to support rotary / pulse, touch tone telephone lines, or both.

- The receiver / dialer shall not pose a safety hazard to the offender or others and shall function reliably under normal environmental and atmospheric conditions.
- The receiver / dialer shall include an internal clock and memory to store data if communication with the monitoring center is disrupted. Vendors shall specify the number of events that can be stored and communicated later to the monitoring center when monitoring center communications are disrupted.
- The receiver / dialer-transmitter combination shall be capable of informing the officer that the system has begun monitoring the client prior to the officer leaving the client's residence. The vendor shall describe how this is done.
- The receiver / dialer shall notify the vendor's central monitoring computer at any time a tamper is attempted on the receiver / dialer. The tamper detection method(s) shall be described.
- The receiver / dialer will have a phone line annoyance. If the receiver / dialer attempts to call the monitoring center and the telephone line at the offender's home is in use, the receiver / dialer shall notify the telephone user, by audible means, that the receiver / dialer is attempting to call out. The vendor shall describe method(s) and frequency of the "annoyance tones" including the capacity of the unit to emit an audible tone that can be heard by household members, and the capacity for persons using phones that are not directly connected to the unit to hear the annoyance tones.
- The receiver / dialer must have an internal rechargeable battery that will allow for continuous operation in cases of power failures or if power is interrupted. The receiver / dialer must have a battery backup power source that allows for 12 to 24 hours of continuous operation in the event of a power failure. The vendor shall specify the functionality of the receiver while operating under battery power. The vendor shall also specify the number of hours the receiver will function under battery power.
- The unit shall communicate pending shut down of its operation and all statuses stored prior to depletion of the battery. The vendor shall specify the receiver's operation prior to shut down, the timeframe of operation under battery power, and the timeframe of operation after a shut-down warning.
- The vendor shall specify the unit's operation when both communications and power are disrupted. Further, the vendor shall specify the ability of the receiver to store statuses not communicated even if the unit shuts down upon battery depletion. This shall include the number of statuses and types of statuses stored if all statuses (such as multiple power loss and restorations) occur.
- The receiver shall have internal surge protection on both the telephone line and power source.
- The receiver must have internal tamper circuitry to indicate that the receiver has been opened, moved, disconnected from the telephone line, or disconnected from AC power.
- The receiver / dialer must have internal diagnostics that can determine if the receiver / dialer is operating properly and relay the information to the central monitoring computer.
- The receiver / dialer must not lose any events after loss of internal backup battery power. If the unit does lose events, the unit's method of prioritizing events stored versus purging these data should be described.
- The receiver / dialer must be capable of screening out all transmissions other than those from the transmitter attached to it, or the receiver / dialer should have the capabilities to receive more than one transmitter and (1) report the random transmitter (or transmitter not assigned to it) as an unauthorized transmitter entry (giving the transmitter ID and date and time of event) or (2) report an alternate assigned transmitter's status with the transmitter's identity.
- During periods of inactivity, the receiver / dialer must randomly communicate with the central monitoring computer every two (2) to six (6) hours. Vendors should specify the ability to increase or decrease the frequency of communication with the central monitoring computer.

Field Monitoring Devices

- Field monitoring systems must be hand-held and portable, capable of being utilized by agency personnel in the field and in an automobile to receive signals from transmitters.

- Field monitoring devices must be FCC approved.
- Field monitoring devices must receive signals from transmitter units at a minimum range of 150 feet, equivalent to the receiver / dialer.
- Field monitoring devices must have a connector for an external antenna to receive signals from transmitter units while using the field monitoring device inside an automobile.
- The vendor should specify the number of transmitter events that the field monitoring devices are able to store effectively.
- Field monitoring devices must have the ability to distinguish between several transmitters, recognize only one transmitter, or both in a given location. The vendor should describe this capability.
- A field monitoring device should be able to download its log (stored information / events) to a personal computer, host computer, or printer. The vendor should describe this capability.
- The field monitoring device must run on 12-volt automobile current. The vendor should specify the number of hours it can run on its internal, rechargeable battery.
- The field monitoring device shall be equipped with a 110 volt wall adapter to charge the internal battery. The vendor shall specify the number of hours required for full recharge.
- The field monitoring device should be equipped with a digital display that will show transmitter ID number, date, and time of event and transmitter status including any tamper indication and low battery. The vendor shall describe any deficiencies in this area.

Remote Alcohol Detection

- The remote alcohol detection device shall be able to be integrated with other electronic supervision equipment or function as a stand-alone unit.
- The alcohol detection device will contain tamper resistant features.
- The alcohol detection unit will have a back-up battery to allow continued use during a loss of power.

Monitoring Services

- The vendor shall notify the agency staff of any or all of the following events:
  - Unauthorized absences from the residence.
  - Failure to return to residence from a scheduled absence.
  - Late arrivals, early departures from residence.
  - Equipment (including, but not limited to transmitter and receiver / dialer) malfunctions.
  - Entry into exclusion zones or exit from inclusion zones for location tracking equipment.
  - Tampering with equipment.
  - Loss of electrical power or telephone service.
  - Location verification failure.
  - Missed calls from the receiver / dialer.
- Access to the monitoring center and all records it houses shall be restricted to only authorized individuals.
- The monitoring center shall provide a means of secured communication with agency staff to guarantee the security of data.
- The monitoring center must provide a computer database that is programmable for all client information (e.g., demographic data, employment and school information, curfews). The monitoring center should be able to accurately modify offender information when requested to do so by agency staff. The database should be able to export any selected combination of fields in formats readable by standard statistical packages such as SPSS or SAS.
- The agency shall be notified in advance, and in writing, of any change in the location of the monitoring center or any backup center
- The monitoring center shall have contingency plans in place in the event of electrical power loss, telephone service loss, or other events that might compromise the security of information and the operation of the monitoring center. These plans shall be included in the response to this request for proposals.
- The vendor shall describe the redundancy, backup, and restoration hardware, systems, and procedures to minimize disruption of operations in the event of a system failure. The capacity to maintain uninterrupted monitoring should be described.
- The monitoring center shall have multiple options for notifying agency personnel of any unauthorized absences, late arrivals, equipment malfunctions, tampering, loss of power, or other activities indicating a violation or equipment problem for the offender. The center shall be able to develop a schedule for notifi-

cation and use the communication methods preferred by agency staff. This ability should be described in this proposal.

Administration

- Prior to contract award, the vendor, if requested by the agency, shall provide on-site demonstrations of the proposed equipment.
- Contractors shall be able to provide services offered in the proposal and transition plans within thirty (30) working days after a request to do so or they shall specify the lead time within which they are able to do so.
- Within a reasonable timeframe the vendor shall be available to meet with agency staff to discuss and accomplish plans for implementation of electronic supervision services. Items to be discussed shall include, but not be limited to, transition between vendors, training, equipment delivery, acquisition of reports, monitoring center services, and invoicing.
- The vendor shall designate an account manager, stationed at the vendor's monitoring center or other specified location, whose primary responsibilities will be to:
  - Provide an ongoing review of files/computer information regarding the agency and problem resolution.
  - Coordinate activities with agency personnel to achieve computer-connectivity.
  - Provide usage reports on a weekly basis to agency program coordinator.
  - Work closely with agency staff to evaluate the program on a continuous basis and make site visits to the agency center office as conditions dictate or upon request by the agency.
- The vendor shall provide copies of summary reports that will be prepared for agency staff. The vendor shall include information regarding the capacity for electronic transmission of these reports.
- Within 10 days of contract award or issuance of a purchase order after award, the vendor shall cooperate with the agency to develop a written conflict resolution procedure.
- The vendor shall include in this proposal the standard forms for receiving monitoring schedules, offender enrollment data, and other information necessary to provide monitoring services.
- The contractor's facility shall be secured, safe, and grant access only to authorized personnel. It shall be equipped with an operational fire protection system. Security systems and procedures for the monitoring facility shall be described in this proposal.
- The vendor shall state what steps will be taken to ensure that information about program participants will remain confidential and will only be released to authorized agency personnel.
- The vendor shall be able to provide expert testimony in the event of any legal process requiring such testimony. The vendor shall also provide support to the agency in the event a current or past offender is the subject of a criminal investigation.
- The vendor shall not issue news releases, advertisements, articles, or any other information of any kind about the agency and its programs without prior written approval from the agency.

Training

- Within ten (10) working days of contract award or issuance of a purchase order after award, the vendor and agency shall develop the training schedule that will be of sufficient length to thoroughly train all agency staff involved in the electronic supervision project. The vendor shall describe the training program included upon initiation of the program. Further, the vendor shall describe provisions for ongoing education throughout the term of the contract, including the costs for any training beyond what is contained in this proposal.
- Training shall be conducted at (specify number of sites) site(s) in (specify cities and States) selected by the agency.
- Training costs borne by the vendor include all travel expenses for the vendor's trainers, training manuals/handouts, training aids, all equipment and supplies used in training.
- The vendor shall provide one training manual for each person trained. The total number of people to be trained is (specify number).
- The vendor is not responsible for training-related travel of agency staff to include mileage, meals, and lodging or any associated costs.
- The vendor shall describe its programs and associated costs for assisting the agency in promoting its program among stakeholders, the media, and the general public.

Service

- All service calls, repairs, maintenance, and related costs must be borne by the vendor.
- The vendor shall, upon agency request, at no additional charge, and in a timely manner, provide trained technicians for on-site repair and trouble-shooting to alleviate electronic supervision equipment problems.

Shipping

- Shipping time for equipment and supplies to reach field offices shall not exceed three work days from the date the order is placed with the vendor unless the agency approves otherwise. Requests for equipment and supplies shall be made by telephone or fax and confirmed by telephone or fax. The vendor will specify the cost associated with expedited shipments (shipments to be received within 3 days of order date).
- The vendor's bid price shall include the cost of shipping all equipment from the vendor to the agency by the beginning of the contract and from the agency to the vendor at the end of the contract.
- All equipment, including damaged or defective equipment, shall be shipped FOB destination at the vendor's expense.

Chapter 9
APPENDIX 2
EVALUATING TECHNOLOGY PERFORMANCE

How do you know the equipment will do what the manufacturers claim? If you ask that question, you are not alone. No one wants to be in the position of relying on electronic technologies to supervise an offender in the community and then having the equipment fail.

Verification of the performance and reliability of electronic supervision technology is important for public safety. However, no national standards for these tools have yet been established, although this may occur as the industry matures. In conjunction with the American Probation and Parole Association project that produced this document, the National Institute of Justice funded Sandia National Laboratories to develop testing protocols for electronic supervision technologies. The initial protocols apply to continuously signaling devices using radio frequency transmissions, as these are the most commonly used at present.

Until such national standards are adopted, there are still several ways current and potential consumers of electronic supervision technologies can assess their performance. These include:

- Reviewing published information.
- Reviewing manufacturers' information.
- Obtaining information from present users.
- Conducting tests.

Published Information

Increasing amounts of literature are being published about electronic supervision technologies. These range from surveys of electronic equipment manufacturers, to reports of research studies, to agency-based program reports. Although it is not evaluative in nature, each year *The Journal of Offender Monitoring* publishes the results of a survey of manufacturers of electronic supervision equipment. Typically, the survey report provides information about each manufacturer that responds to the survey and a brief description of the various technologies included. Then, in a series of tables, the specifications of each product are provided, making it easy to compare similar products offered by different manufacturers. The tables typically include information on central monitoring computer system services, products, and communications processes; programmed contact devices; transmitters and receivers for continuously signaling devices; alcohol testing equipment; field monitoring devices (drive-by units); and location tracking devices (GPS).

Research studies and technical reports also may be helpful. Research studies often focus on selected outcomes of supervision programs, but they may also describe the equipment used and any problems inherent in it. Dr. Marc Renzema, Professor of Criminal Justice at Kutztown University in Pennsylvania, maintains a bibliography of electronic monitoring evaluation reports. The bibliography is available online at www.e-conscience.org. Another source of literature on electronic supervision is available online at www.library.utoronto.ca/libraries_crim/elecmon.htm.

Local or State agency reports on electronic supervision program components also may be helpful to other agencies. Such reports may specify the types of equipment used, types and number of offenders supervised with it, and program successes or difficulties.

Manufacturers' Information

Manufacturers' marketing materials will usually describe the features and technical capabilities of their equipment. This is readily available by contacting manufacturers, and most maintain Web sites where information is available. Unless material is collected from all manufacturers of similar products, this source of information is less helpful in making comparisons.

Present Users

Staff of most agencies using electronic supervision devices usually are pleased to share their experiences about using various electronic supervision products. They can provide first-hand accounts of both the benefits and problems encountered with a particular type of equipment. They also can report on their experiences with the manufacturers and

[5] Some of the ideas for agency testing of electronic supervision equipment were contributed by Richard Irrer and Ray Villa, members of the Working Group that guided the development of this document.

service providers and how they respond to and resolve problem situations. Talking with or requesting information from several customers is recommended to ensure that their experiences are consistent. When contacting personnel of other agencies, those who are actually using the equipment may be more knowledgeable about how the equipment works than managers and administrators who have broader program responsibilities. However, managers and administrators may be better able to answer questions about the costs of the equipment. It may be helpful to visit the agency and watch the program in operation, observing such procedures as equipment installation and receipt of alert notifications, and perhaps riding along with or shadowing staff who are electronically supervising offenders.

Conducting Tests[5]

A variety of equipment problems can jeopardize the effectiveness of electronic supervision. Agencies need to ensure that the equipment will work as required in their setting. Manufacturers are constantly improving their products to overcome these problems, but it is wise for program planners and stakeholders to review these issues carefully in their localities.

Electronic supervision products depend on communication technology, including conventional telephones, cellular telephones, radio frequency, and satellites, depending on the type of equipment used. As Peggy Conway (2001a, p. 10) states, "These technologies vary in their coverage, 'penetration,' vulnerability to interference, availability, and reliability. This can impact the performance of these systems, particularly as it pertains to continuity in information and response time in notifying agencies of violations." She goes on to state that most products are designed to overcome most of these limitations. Products that rely on radio frequency communication must meet certain standards of the Federal Communications Commission (FCC), which requires that the equipment accept interference of the transmitter signals. Therefore, most systems are designed to miss the receipt of several signals before concluding that the transmitter is out of range and therefore have a delay before reporting an alert (Conway, 2001a).

Telephone communications also may be problematic. Older telephone systems may not be adequate, and cellular telephone coverage may have dead spots and interference at times. Some extra telephone services, such as call waiting, also can interfere with the equipment. Sometimes the wiring in older homes is not adequate for the equipment, and power surges may interfere with operations. With radio frequency equipment, transmitter signals can occasionally be blocked because of "dead spaces," metal that blocks the signal, or even certain sleeping positions that may disrupt transmissions. Further, electronic supervision equipment may be vulnerable to tampering attempts by offenders, and it is imperative to ensure that every effort is made to thwart tampering attempts.

Though most of these problems do not pose difficulties in most situations, in the absence of national testing programs and standards, some agencies have developed their own testing protocols for electronic supervision equipment and services.

Blackburn (2001) summarizes three types of tests that can be administered:

- Technology evaluation is performed in laboratories using standard conditions to test each component of the equipment or service.
- Scenario evaluations evaluate the overall capabilities of the equipment in a specific scenario using conditions like one would find in the field.
- Operational evaluations are performed in the field under conditions that might be found.

In the procurement process for electronic supervision technologies, the agency would want to know and receive documentation of the vendor's or manufacturer's testing of the technology during its development and marketing phases. Scenario evaluation should be much like the procedures outlined below that can be conducted by agency staff. Operation evaluations might entail pilot projects with small numbers of offenders to allow the agency staff to observe the performance of the equipment and services under field conditions.

For the following four areas, expectations of the equipment are listed and then some agency-based testing strategies (scenario testing) are suggested.

- Transmitters.
- Receivers.
- Batteries.
- Computers and software.

Transmitters

Transmitters should be easy to install and should be reasonably comfortable for the offender to wear (e.g., no sharp edges, light weight, contain no substances that cause allergic reactions). They should be resistant to both intentional and accidental destruction. They also must be tamper resistant. The

transmitter should be made of fire-resistant materials that will not produce toxic fumes if burned.

Testing Ideas: Ask manufacturers to furnish a few sample transmitters that can be used by staff or other stakeholders.

- Examine the new transmitters to check for sharp edges, odors, or any other features that might make them uncomfortable.
- After receiving instructions from the manufacturer on installing transmitters, try installing one or more. Check for the amount of time required and the ease of installation. Does installation require extra tools? If so, are they provided? What has to be done to check the transmitter to ensure it is functioning properly?
- Wear the transmitter for several days. Notice whether it causes any chafing or bruising on the wrist or ankle and if it can slide enough on the wrist or ankle to allow for air circulation. Does the weight of the transmitter or its size and bulk cause any discomfort?
- Test the transmitter for durability in several ways:
  - Subject the transmitter to cold temperatures (place in a freezer) and hot temperatures (leave it in a hot car on a sunny day).
  - Drop the transmitter on a hard surface and drop a heavy object on it.
  - Immerse the transmitter in water.
  - Use various chemicals on the transmitter, such as cleaning solvents, bleach, acetone, paint stripper, gasoline, and diesel fuel.
- Check for tamper resistance by:
  - Trying to open the operating part of the transmitter with a small screw driver or other tool.
  - Trying to open the strap.
  - Cutting the strap while immersed in a bucket of water.
  - Using a connecting wire to maintain the current, jumpering the strap, and then cutting it.
  - Stretching the strap to slip it over the hand or foot.
- After tamper attempts be sure:
  - The tamper attempt has been communicated to the monitoring unit.
  - The monitoring unit records the type of tamper attempt.
  - The transmitter continues to work properly after the tamper attempt.
  - There is visible evidence of attempts to pry open plastic covers such as broken pieces or obvious disfigurement.

Receivers

Receivers should be easy to install and should pose no hazards to the offender or family members. They should be resistant to both intentional and accidental destruction. They also must be tamper resistant. The receiver should be made of fire-resistant materials that will not produce toxic fumes if burned.

Testing Ideas: Ask manufacturers to furnish a few sample receivers that can be used by staff or other stakeholders.

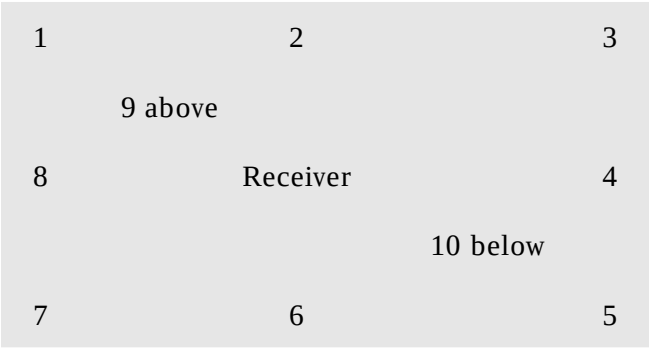
- Examine the new receivers to check for sharp edges, odors, or any other features that might make them unsafe or unattractive.
- After receiving instructions from the manufacturer on installing receivers, try installing one or more. Check for the amount of time required and the ease of installation. Does installation require extra tools? If so, are they provided? What has to be done to check the receiver to ensure it is functioning properly?
- Test the receiver for durability in several ways:
  - Subject the receiver to cold temperatures (place in a freezer) and hot temperatures (leave it in a car on a sunny day).
  - Drop the receiver on a hard surface and drop a heavy object on it.
  - Spill a liquid on the receiver.
  - Use various chemicals on the receiver, such as cleaning solvents, bleach, water, and soda.
- Check for tamper resistance by:
  - Trying to open the receiver with a screwdriver or other tool.
  - Moving the receiver from one location to another.
  - Turning the receiver upside down.
  - Turning it off or unplugging it from the electricity and the phone line.
  - Adding another antenna to increase the range.
  - Trying to operate it with radio frequency equipment other than the transmitter.
- After tamper attempts be sure:
  - The tamper attempt has been communicated to the monitoring unit.
  - The monitoring unit records the type of tamper attempt.
  - The receiver continues to work properly after the tamper attempt.

Transmitter-Receiver Operation

The receiver should recognize the transmitter signals and then send appropriate messages to the monitoring center. One of the important issues to test is the transmitter-receiver range. This can be tested in both unobstructed areas and in usual operating situations.

Ideas for Testing[6]**.** The home monitoring unit and transmitter should be installed according to the manufacturer's instructions (e.g., an ankle transmitter must be worn on the ankle and the console placed in accordance with the manufacturer's instructions). Several variables can affect unit range including some types of building construction, mirrors, large metal objects (e.g., bathtubs, refrigerators), unit position, radio frequency interference, and atmospheric conditions.

Open range testing can be informative, but it does not accurately indicate how the unit will function in normal applications. If testing in an open range, parking lots should be used only if no cars are present, as the cars may interfere with the signals. To conduct open range tests measurements should be taken in ten different directions as shown in the following diagram.



Set the equipment for the range you want to test — for this example, 100 feet will be used. Also set the "leave window" for the amount of time it will take to register that the transmitter is beyond the range of the receiver (usually four to fifteen minutes). For this example, a leave window delay is used. Measure the distance (100 feet) to positions one through eight shown on the diagram. For positions nine and ten, try to arrange for testing conditions that will allow the person wearing the transmitter to be higher and lower than the receiver, respectively.

Have the person wearing the transmitter start at the receiver and walk away from it toward each of the positions marked, in turn, and stop just a few feet beyond the marked location. The person wearing the transmitter will then need to stay in that position until the length of the "leave window" has elapsed. After that time has elapsed, an out-of-range signal should register with the monitoring center. If it does not, continue to walk away from the receiver in 25-foot increments until the unit determines the person is out of range. Next have the person go some distance beyond each of the out-of-range locations. This time, the person will walk toward the receiver until he or she has come inside each of the 100-feet markers. The monitoring center should receive a signal that the transmitter is within range within one to two minutes regardless of the leave window setting. Check for signals at positions above and below the receiver, as shown in the diagram in positions nine and ten, waiting again through the leave window delay period.

Be sure to arrange the testing with the monitoring center and verify the devices are communicating properly before starting the tests. After the range tests, be sure that each time the person wearing the transmitter went beyond the out-of-range radius, and each time he or she entered the radius, the leave or return was communicated properly to the monitoring center. Also evaluate how accurate the stated "range setting" is and be sure that the monitoring records during the testing period accurately record each leave and return.

Next, test the equipment under more typical operating conditions. Have one or more staff members wear the transmitters and place receivers in their homes, offices, or both. Those testing the equipment should be willing to keep notes on their activities during the testing time. Have them draw a diagram of their home or other test site. Using the same example of a 100-foot range and a leave window setting, have the persons testing the equipment try it in many locations throughout their home and other settings as well as outside the buildings where the receivers have been placed. Inside a home, the transmitter should be tested in every room and on each floor if it is a multistory house. The person should use it during all normal activities, such as bathing, doing yard work, and so forth. If the person is unable to remain in range while in his or her home, try lengthening the range setting, increasing the leave window delay, or relocating the unit.

Location tracking systems (i.e., GPS) also should be tested in normal operating situations. The person

[6] The ideas for testing continuously signaling equipment for operational range were contributed by Valerie Pierson, a member of the Working Group that guided the development of this document.

wearing the transmitter and carrying the receiver should try it in several locations within different types of buildings — especially those with metal infrastructures — and in different locations within the buildings. Inclusion and exclusion zones should be set, and the person should spend time in each.

The person conducting the tests for either type of equipment should make the following notations for each location or activity to check against the monitoring reports:

- Beginning and ending time.
- Location.
- Activity.

Those testing the equipment should especially try it in locations where the signal might be interrupted, such as in a bathtub and with a refrigerator between the transmitter and the receiver. Testing positions should also include those outside the home to make sure leaves and returns are recorded at a 100-foot radius from the receivers. It would be advisable to test the equipment in a mobile home and in an apartment building, as well as in single family dwellings of typical construction. If the equipment is likely to be used by offenders living in apartments, also test it in this environment. Install the receiver and then go to the next apartment to see if the receiver still picks up the transmitter. If it does, the range on the receiver should be reduced. This test should also be conducted any time a receiver is installed for an offender living in an apartment. Again, be sure that the monitoring records during the testing period accurately record each leave and return.

Batteries

Batteries are required to operate the transmitter and as a back-up power source in receivers. Batteries should be easy to install and should have a long-enough operating time that transmitter batteries will last for several months without needing to be replaced and receiver batteries can operate for several hours without ceasing receiver/transmitter monitoring and reporting operations. Transmitters in current use have minimum battery lives of from one to three years. Only one is designed for battery replacement while in use; most must be replaced by removing the transmitter and reinstalling it. This sometimes means having to replace the transmitter strap and perhaps some clips. Still others require replacing the entire transmitter unit. Some can be returned to manufacturers for battery replacement and then can be reused for offenders.

Receiver batteries should allow the device to function normally when electrical power is interrupted. Current manufacturers have back-up batteries that will run receivers ranging from 12 to 48 hours. Test the battery back-up system for receivers by unplugging the unit for several hours. Note the time and date it is unplugged, then check the monitoring reports for that time to ensure that a loss of power was detected and the battery continued to operate the equipment and all activities were detected. Note the time(s) that events occur and when they are reported. Compare this to the unit's performance while operating under normal power.

Computers/Software

During agency tests, staff should request that the monitoring computers perform all possible functions that might be required. The monitoring center will be involved in many of the test procedures discussed above. Monitoring staff also should enter enrollment data, verify violations, generate reports, and send messages through all the possible technologies (i.e., fax, phone, pager, e-mail, Internet). Compare the reports generated by the software and determine the ability to download or access monitoring data for statistical analysis.

Chapter 9
APPENDIX 3
CHECKLIST FOR THE PROCUREMENT PROCESS

- ❑ Investigate agency procurement policies
- ❑ Define program needs
  - ❑ Target population — type and project numbers
  - ❑ Type of equipment
  - ❑ Service level
  - ❑ Agency research and evaluation needs
  - ❑ Upgrades needed for existing programs
- ❑ Gain stakeholder support
- ❑ Determine the parameters of the procurement arrangement
  - ❑ Equipment
    - ❑ Purchase
    - ❑ Lease
    - ❑ Rent
    - ❑ Pay per day in use
  - ❑ Services
    - ❑ Operated by equipment vendors
    - ❑ Contract with monitoring service
    - ❑ Operated in-house
    - ❑ Installation services performed in-house or by vendor
    - ❑ Fee collection services performed in-house or by vendor
  - ❑ Other products
- ❑ Obtain lists of service providers/manufacturers
- ❑ Issue requests for information
- ❑ Gather sample requests for proposals (RFP)
- ❑ Develop agency request for proposal
  - ❑ Instructions to proposers
  - ❑ Terms and conditions of purchase
  - ❑ Technical specifications
- ❑ Issue the RFP
- ❑ Evaluate responses
- ❑ Select and evaluate equipment and services
- ❑ Test the equipment
- ❑ Select a vendor and negotiate a contract
- ❑ Manage project implementation
  - ❑ Develop a schedule for project implementation
  - ❑ Monitor vendor's performance
  - ❑ Maintain frequent communication with vendor
  - ❑ Make payments as designated milestones are achieved by vendor

Chapter 10
SUPERVISING OFFENDERS

It is easy to become enmeshed in the technological aspects of electronic supervision and lose sight of its real intent — effective supervision of offenders in the community. Whether a program's goal is victim protection, public safety, relief of crowded jail and prison facilities, or other goals, program planners must not overlook the needs of the ultimate customers of the justice system: victims, the public, and offenders. Rob Watts (1999, p. 5) summarizes this concept.

> The ironic thing is that we're in a people business, and the research tells us that the human connection between case manager and client is still fundamentally important. Technology will increasingly drive us, but we cannot lose sight of our purpose, which is to effect change with offenders. The personal bond between a Corrections staff member and an offender is fundamental to that occurring. The notion of a personal relationship must not be lost in the technology.

In this chapter, discussion focuses on the supervision of offenders using electronic technologies as tools to achieve the selected aims of the program. As in previous chapters, this one will raise several questions for program planners to consider and will make recommendations where possible. Much will depend, however, on the purpose of the electronic supervision program component, the risk level of offenders being supervised electronically, and other decisions about how the program will operate.

MONITORING OPTIONS

Effective monitoring is vital to offender supervision. There must be a process for observing and managing the information received about each offender from the electronic devices. The way monitoring tasks are performed will influence the rest of the supervision process. Therefore, an early decision agencies need to address is how monitoring tasks will be structured. The options fall on a continuum from having agency personnel perform all services to contracting with outside service providers for all services. Among the various options are:

- Agency personnel perform all services including monitoring computer data, supervision of offenders, drug and alcohol testing, verification of offenders' community activities, installation and removal of equipment, violation responses, and other tasks.
- Monitoring of computer data is contracted to a service provider while agency staff perform all other tasks.
- A contracted service provider furnishes services beyond monitoring computer data, such as equipment installation and removal and equipment troubleshooting, while agency staff tend to case management issues.
- All services — including monitoring computer data and providing field services — are performed by an outside contractor. However, the government agency (i.e., probation, parole, law enforcement, pretrial services) maintains legal authority and makes ultimate decisions about responding to violations.

Each of the options has benefits and disadvantages an agency must consider. The best choice for a given agency will depend on several factors, including the number of offenders being supervised electronically and the purpose established for this program component. If an agency has highly computer literate staff available to manage the complex software involved in electronic monitoring, then it may choose to conduct all the monitoring services in-house. However, if staff already are stretched with high caseloads, it may be more effective to contract for some or all of the monitoring services. Monitoring companies can spread the costs of monitoring services across hundreds or thousands of offenders, making it much more cost-effective (L. Connelly, personal communication, September 7, 2001).

The technical work of installing equipment properly and troubleshooting problems is cumbersome and time consuming. Many agencies have chosen to contract for this service, thus freeing their staff to concentrate on the job for which they were trained. Similarly, some agencies choose to contract for case management and field services so their officers are free to work with the more serious, high-risk offenders. On the other hand, some agencies believe that since they are already doing the case management required for electronic supervision, they should do this portion as well (L. Connelly, personal communication, September 7, 2001).

There is no right or wrong approach. It depends solely on agency needs and capabilities, program

goals, and the quality of the service provider with whom the agency may contract (L. Connelly, personal communication, September 7, 2001).

DECISIONS ABOUT SUPERVISION AND MONITORING

As policies and procedures are developed for an electronic supervision program component, a variety of decisions will be required. Many of these decisions will depend on the purpose of the electronic supervision program and the risk level of the offenders included in it. Some of these issues are discussed in other parts of this guide but are reiterated here to provide a thorough discussion of supervision issues.

Staffing and Caseloads

As discussed in chapter 6, several issues about staff involvement in electronic supervision program components must be determined. The number of staff needed to implement electronic supervision and how their time is scheduled will depend on the program's purpose and the number of offenders involved. If high-risk offenders are to be supervised, and there will be immediate followup of every violation, then more staff time will be needed. On the other hand, if violations are not followed up immediately, less staff time may be needed, as they can use the information in their ongoing case work with the offender. Similar issues relate to the scheduling of supervision staff for the program component. If immediate responses will be made to violations, then staff will be needed continuously, and a 24-hour per day, seven days per week schedule will be required.

A variety of caseload options also can be considered including:

- Specialized caseloads of offenders being supervised electronically. In this configuration, the same staff attend to the electronic supervision procedures as well as all other field services required by a group of offenders.
- Specialized caseloads based on other criteria, such as intensive supervision caseloads or sex offender caseloads. In this instance, supervisory staff may provide all services, or specialists, such as surveillance officers, may attend to the duties related to electronic supervision and other staff may perform all other duties.
- Regular or mixed caseloads in which some offenders are supervised electronically. Regular supervision staff would provide needed field services and might also perform electronic supervision responsibilities; on the other hand, electronic supervision responsibilities might be assigned to specialized staff while regular supervision tasks are handled by case managers.

Monitoring Decisions

Whether monitoring is provided within the agency or is contracted to a private vendor as discussed earlier in this chapter, there are several decisions about how monitoring is to be conducted that must be incorporated into program policies and procedures. Monitoring staff must have clear instructions about procedures to follow regarding the information they process from the electronic equipment. Again, risk levels of offenders, types of equipment, and the purpose of the program will influence these decisions. The following issues will need to be deliberated by program planners, discussed with vendors, and enacted through program procedures.

Curfews

Other than for offenders supervised through global positioning system (GPS), whose whereabouts can generally be tracked at various locations in the community, offenders will usually be held accountable for being at specific places at specific times. In some cases, a simple curfew time is established, and offenders, for example, are expected to be at home by a certain time in the evening and are not allowed to leave until a specified time the next morning. In traditional home monitoring programs, offenders usually are given permission to be away from their residences only for certain activities during defined periods. For example, an offender may be allowed to leave his or her home one-half hour before the workday or school day begins and return one-half hour following the end of his or her work shift or school day. Besides this, offenders may be allowed time away from home for scheduled substance abuse treatment, medical appointments, attending religious services, and tending to personal business, such as shopping. Often, the amount of discretionary time offenders are allowed for tending to personal business can be used as a program incentive or sanction. More time can be given for compliance, and discretionary time can be lost for noncompliance.

For an electronic supervision program to work effectively, offenders should be given explicit instructions, both verbally and in writing, about the times they may and may not leave home or other program expectations (e.g., automated reporting, taking alcohol tests, inclusion / exclusion zones) and conse-

quences for violations. It is also vital that monitoring and supervisory staff have effective communication mechanisms for setting up and changing, if needed, the specific activity information about individual offenders. Many false alerts are generated by approved schedule changes for the offender that have not been entered in the monitoring computer program. Supervision staff should be required to promptly complete written information about schedule and other changes and transmit that information immediately to monitoring personnel. Monitoring staff should be required to enter changes within a specified time of receipt. Such policies will make the system operate much more effectively.

Range Options

Electronic supervision equipment that uses radio frequency technology (e.g., continuous signaling and GPS) to know when the signal from the offender's transmitter is picked up by the receiver, may or may not have programmable ranges that can be set to indicate when the offender is within a certain distance of the receiver. However, program planners should understand that range settings are approximate and many factors may cause the range to vary somewhat. If it is possible to set the equipment's range, agencies may want to have a policy for the usual distance the offender will be allowed to go from his or her receiving unit without an alert occurring. The policy also may have provisions for varying the usual range on a case-by-case basis. Individual ranges should be determined based on the characteristics of an offender's residence and lifestyle. For example, an offender living in an apartment building might have a shorter range than someone living in a single family dwelling with a spacious lawn. For electronic supervision devices that are designed to alert victims of the approach of a perpetrator, the greatest possible distance to allow the earliest notice of the offender's approach is probably the best policy. Program rules should be clearly delineated and conveyed to offenders. It is probably better for them to understand that they are to stay within their home (their legal range) rather than explaining that the equipment will allow them to go a certain distance from the receiver (a technical range) before an alert occurs.

Random or Scheduled Contacts

Programmed contact electronic supervision equipment and monitoring services can be programmed in a variety of ways. In some cases, offenders are called at their residences and must respond to verify they are at home. In other situations, offenders may be beeped in any location and are required to call the monitoring center within a specified time. This can be used to verify their attendance at work or school. When computers are used to send signals to the offender to call the monitoring center in programmed contact systems, the monitoring center equipment should generate a call right back to the offender. This will ensure that call forwarding and conference calling features are not being used to hide the true location of the offender (L. Connelly, personal communication, September 7, 2001). With radio frequency equipment, the monitoring computer receives a message when the offender's transmitter signal is within range of the receiver. Most monitoring is not continuous, and program planners should understand that there is always the possibility that offenders may leave the location they are supposed to be in without their absence being detected immediately. Even GPS-based location tracking systems often do not monitor the offender's location constantly because of the high cost of cellular telephone services. However, the location tracking device does record the offender's location continuously, and that data can be reviewed at a later time.

Program personnel need to make decisions about how frequently and in what manner offender monitoring will occur. In some cases, especially with lower-risk offenders, scheduled contacts may be acceptable. For example, with an offender who is basically on a 7:00 p.m. to 7:00 a.m. curfew, a programmed contact system may check that the offender is at home by 7:15 p.m. and check again to see that the offender is still home at 6:45 a.m. Perhaps a third check might be conducted at 7:30 a.m. to make sure the offender has left for work or school. With continuously signaling radio frequency equipment, the monitoring computer is programmed with the offender's schedule and is able to compare the times when the signal is received or not received with times at which the offender is supposed to be within range or out of range.

In other situations, random contact is preferable, especially with higher-risk offenders. Through whatever mechanism random contact is made, there should be no discernible pattern to it, and offenders should have an equal chance of being selected for contact at any time. Computer-generated random contacts should occur several times a day and are matched to the offender's schedule in the computer or his or her inclusion and exclusion zones. If the offender is not detected at home at the ap-

propriate times, or if he or she is found within an exclusion zone, an alert or exception report is generated.

Grace Periods and Leave Windows

Supervision policies and individual offender case plans should clearly establish and communicate schedules, inclusion/exclusion zones, and other program parameters for offenders being supervised electronically. It is important to establish realistic schedules for offenders that take into consideration commute times and other situations. This will save a lot of hassles for everyone when trying to manage schedule problems later.

Electronic supervision products that rely on radio frequency communication must meet certain standards of the Federal Communications Commission (FCC), which requires that the equipment accept interference of the transmitter signals. Thus, most systems are designed to receive several signals that the transmitter is out of range, and there is a delay before reporting an alert (Conway, 2001a). A "leave window" can be set for the amount of time allowed to register that the transmitter is beyond the range of the receiver or has entered the receiver's range. After that time has elapsed, an out-of-range (or in-range) signal should register with the monitoring center. Therefore, there may be a brief lag between the established curfew for an offender and the time that his or her presence (or absence) will be detected. Then, if the monitoring center is to verify an alert, several more minutes may pass. For example, in some situations the offender could be late arriving home but might be home by the time the monitoring center calls to confirm the violation.

Some programs may choose whether they want to allow a grace period. In some cases, this might avoid unnecessary violation reports. For example, with programmed contact systems, if a defendant or offender is supposed to arrive home by 6:00 p.m., but is not there when contacted within 15 minutes after his or her curfew, the monitoring service may be instructed to give the offender a 15-minute grace period and check again no later than 6:30. There are potential problems, such as traffic jams, that could delay an offender's return home. However, if the offender is not at home after the grace period, then an alert would be generated and a violation would be reported to supervision staff. With other offenders, particularly high-risk, violent offenders, the program can be set to allow for no grace periods. Therefore, as soon as an offender's absence is detected or his or her presence in an exclusion zone is determined, an alert would be generated.

Generally, program personnel would not advise offenders of a grace period. They would be given curfew times and be expected to abide by these. The use of leave windows and grace periods may be helpful to program personnel for certain types of equipment used or to avoid excessive violations in low-risk cases. However, offenders should understand that they can be held accountable for any exceptions from their prescribed schedules.

Alerts and Violations

Monitoring programs can be customized to provide alert and violation information in a variety of ways for an agency and can be individualized for particular offenders. When the computer detects an exception (e.g., out of range, entering an exclusion zone, or tampering with equipment), the person operating the computer receives a message to that effect. Agencies can then define the procedures that should occur when such messages are received. In some cases, monitoring personnel will attempt to phone the offender to determine whether he or she is at home (or work). In some cases, false alerts are generated because of equipment glitches, and these can be taken care of through telephone verification.

Agency policy also should determine when agency supervisory or surveillance personnel are to be notified about alerts or verified violations. Timing is likely to be determined based on offender risk level, with immediate notification for the highest risk offenders. Supervisory or surveillance personnel can be notified of alerts and violations in a variety of ways. Telephone, page, fax, or e-mail messages to supervisory staff can be generated automatically by computers or can be sent by monitoring staff according to instructions. The computerized data can be used not only for notification about individual offenders, but summary reports can be generated about specific offenders, a group of offenders, or all offenders being supervised electronically. This allows supervisory and surveillance staff to look for patterns and detect problems.

EMERGENCY/CONTINGENCY PLANS

Supervision program policies must include plans for emergencies. A variety of technical problems can occur including electrical power outages, telephone service interruptions, and computer crashes. Other circumstances beyond the control of staff also may jeopardize program operations, such as extreme weather conditions and significant traffic problems.

These potential problems should be anticipated, and contingency plans should be developed and known by staff. When developing these plans, programs should begin by examining the emergency or contingency plans developed for the agency in general, and then modify or expand these as required for the electronic monitoring system. Planners should focus especially on the types of situations that would be most likely to occur in their locality and also should consider the resources available to address these. For example, agencies might want to develop specific plans for events such as:

- Fire (in the agency, monitoring center, or offender's home).
- Flood (in the agency, monitoring center, or offender's home).
- Destructive weather (e.g., tornados, hurricanes, earthquakes, blizzards, or major snowstorms).
- Terrorist threats (e.g., bombs or bomb threats).
- Riots or civil disobedience.
- Hostage situation.
- Power outage.

Available resources for such events might include the agency staff, law enforcement agencies, emergency management, other government or community agencies, and volunteers. For example, when electrical power and telephone services are lost for several hours because of a major weather incident, the agency's protocol may be to have all field staff do periodic home checks and ask law enforcement for assistance when needed.

If contracted monitoring services are used, program personnel should inquire about their emergency and contingency plans during the contract negotiation phase. In general, monitoring computers should be equipped with back-up features for storing information that might be lost. Back-up batteries and generators should be available in case of power outages. Reserve computer equipment should be available in the event of a system crash. Some monitoring centers have two separate telephone conduits and networks available so the system can be switched immediately if service is disrupted. It is important that in-house or contracted monitoring systems have emergency features so supervisory staff will receive uninterrupted information.

Most equipment used in offender's homes is also equipped with back-up batteries to ensure that no messages are lost during an emergency or power outage. Equipment varies in the length of time the back-up battery will work, and agencies should be sure to check this feature when reviewing the various equipment options (L. Connelly, personal communication, September 7, 2001).

Electricity or telephone service also may be disrupted in areas where offenders live or where supervisory staff work. Staff must have contingency plans in place for such an event. For higher-risk offenders, this usually will entail home visits until the utility problems are corrected. Similarly, there should be staffing plans in place in the event monitoring or supervisory staff are ill, encounter bad weather, or are delayed by traffic problems. On-call staff should be available to assume responsibilities in such an event.

FIELD SERVICES

As noted previously, monitoring of offenders who are participating in electronic supervision technologies may be provided by the agency that has sentencing or releasing authority oversight over the offender, or it may be provided by a private contractor. Private contractors should be required to provide an equivalent standard of service to that required by a justice system provider. The field services to be provided may include:

- Initial investigation of the home placement.
- Offender orientation and installation of equipment.
- Monitoring compliance with established schedules and verifying all activities by reviewing data from the electronic supervision instrument as well as through face-to-face, telephone, and collateral contacts.
- Monitoring compliance with court or releasing authority conditions.
- Documenting and inputting schedule changes as appropriate (e.g., to accommodate changes in hours of employment, counseling or other appointments, or to respond with incentives or sanctions for case management purposes).
- Recording and responding to offender status changes.
- Job placement, referral, and assessment.
- Substance abuse testing.
- Conducting regular counseling sessions.
- Preparing and distributing regular progress reports.
- Responding appropriately to noncompliance (e.g., discipline reports, violations, application of sanctions).
- Collecting, and perhaps disbursing, fees.
- Removing equipment from the offender's possession at the termination of electronic supervision.

Besides the above activities with offenders, agency personnel must maintain an adequate inventory of equipment, develop and implement a system for tracking equipment, test and clean equipment to assure it is working correctly, and return or replace malfunctioning equipment. It is likely that some of these tasks will be performed by the equipment provider, but performance should be specified as part of the contractual agreement. If a private company is providing field services relative only to the electronic supervision, the sentencing or releasing authority oversight agency may still have responsibility for providing case management and other supervision services to the offender.

Recognizing that legally an offender cannot be excluded from an electronic supervision program because of indigence, there are still some basic necessities that must be present for a system to be used. An offender must have appropriate housing that does not inhibit full utilization of the proposed mechanism; that is, the housing must not be of such material or in such a location that it will interfere with the electronic supervision. In most situations, telephone service must be obtainable, and if the service is not in the offender's name or residence, the offender must demonstrate permission to use the telephone for the purposes of electronic supervision. The telephone service must be free of special features, such as call waiting, call forwarding, three-way calling, and answering machines, if the electronic supervision service requires it. Those providing field services to offenders on electronic supervision should routinely review offenders' phone bills to ensure compliance. If an offender does not have telephone service, the agency or company may opt to provide a telephone, use cellular phones, or rely on an electronic supervision system that does not utilize telephone lines such as GPS. Some equipment allows monitoring of offenders without a telephone. In these instances, the receiver in the home monitors and records the offender's entering and leaving activity. However, the information is not downloaded until the offender takes the equipment to a telephone line, typically the agency or monitoring service provider's phone. This type of equipment would not be appropriate for a high-risk offender where immediate information about program compliance is necessary. However, it can work well for a lower-risk offender. Monitoring information is generated; it only varies in when and how often the agency receives the information (L. Connelly, personal communication, September 7, 2001). Finally, the offender must maintain continuous electrical and telephone services (including paying utility bills on time) so there is no interruption of service and corresponding interference with the functioning of the electronic supervision equipment.

Develop Operational Procedures

To ensure field services are performed satisfactorily, an agency must develop operational procedures and, if utilizing a private provider of services, must specify who is responsible for providing each service. Defining and clarifying tasks and those responsible for performing them provides the framework for optimum application of electronic supervision and lessens the likelihood that necessary tasks will be overlooked.

Some areas to address in operational procedures are listed in table 10a. Each locality should develop individualized operational procedures to satisfy their needs, based on local jurisdictional laws and requirements as well as whether field services are provided by the sentencing or releasing authority agency, private provider, or shared between them,

Case Management Resources

Case management services include assessing both the needs and risks an offender presents and developing an individualized plan to reduce the needs and lessen the risk. Electronic supervision supports the provision of case management services by providing both a punitive answer to noncompliance and a vehicle for monitoring an offender's movement in the community.

Offender assessment and eligibility criteria must be accurately and consistently applied so that appropriate selection of offenders for electronic supervision can occur. Then the requisite services as identified by the needs/risk assessment can be implemented with the offender's participation monitored through electronic surveillance, or lack of participation can be sanctioned by instituting electronic supervision. Offenders' counseling sessions and meetings can be monitored and supported, and the offender can be tested for the use of illicit drugs and alcohol, or other prohibited substances. Assisting adult and older youthful offenders in securing and maintaining appropriate employment is an important aspect of case management. Offenders may be referred to job placement services, employment skills classes, or employment opportunities, and electronic supervision can be a useful tool for monitoring offenders' compliance with the referrals. Similarly, youth of school age can be assisted, support-

Table 10a

Operational Procedures

Articulate enrollment process including selecting assessment process, establishing eligibility criteria, and designing forms.

Designate responsibility for installing and removing equipment and tracking inventory, including inspecting and replacing or returning damaged equipment.

Conduct offender and household member orientation by:

- Establishing rules for the offender and family/household members to sign.
- Delineating process for setting the offender's schedule and processing changes.
- Administering offender needs assessment and establishing requirements for offender's participation in the process to address identified needs.
- Explaining need for and establishing access to offender's residence.

Determine how and when visual inspections and unannounced home visits will occur and how they will be documented.

Define process for verifying all community activities and documenting verification.

Establish requirements for responding to compliance and noncompliance.

Establish requirements and protocols for notifying victims, as appropriate (e.g., domestic violence victims, victims of sex offenders, victims of personal attacks) of offender's placement on electronic supervision (unless victim indicates that contact is not wanted) and maintain contact as needed to keep victim apprised of offender's status.

Determine offender and program information that must be recorded and select method for entering, storing, and retrieving data.

Conduct process and outcome evaluation.

ed, and monitored to maintain school attendance.

The offender's willingness to secure a job or participate in job readiness programs may be a determinant of eligibility for electronic supervision, particularly if the offender may be responsible for paying for the service. Additionally, the offender's participation in other case management referrals, such as counseling, substance abuse treatment, cognitive skills classes, and other services, may be both an eligibility requirement for and a result of electronic supervision.

Graduated Responses

A continuum of sanctions and incentives should be available so that offenders can receive the appropriate level of response. This continuum, or graduated response model, is predicated on responding to lesser infractions with lesser penalty and responding to greater infractions (or ongoing lesser infractions) with greater penalty. Similarly, continued compliance would merit increasing reward. Figure 10a provides a graphic representation of a graduated response model.

A cogent, well-designed system of responses can intersect the level of cooperation or resistance evidenced by the offender. Taxman, Soule, and Gelb (1999) examined several research projects to identify the features necessary to a graduated sanctions model. Those features can be applied as well to graduated incentives and are:

- Certainty: respond to every infraction or compliance.
- Celerity: respond swiftly.
- Consistency: similar infractions or levels of compliance receive similar responses.
- Parsimony: respond at the least level that is likely to produce the desired result.
- Proportionality: the level of response should equal the level of the offense or compliance.
- Progressiveness: continued noncompliance results in increasingly severe responses and continuing compliance merits increasing rewards.
- Neutrality: responses are an objective, impartial reaction to an offense or compliance.

Ultimate sanctions include the revocation of electronic supervision resulting in incarceration,

Figure 10a

GRADUATED RESPONSES
A Stair Step Approach

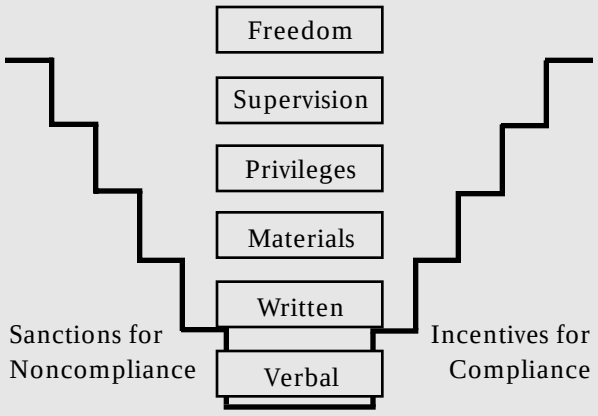


Table 10b

EXAMPLES OF SANCTIONS AND INCENTIVES

Sanctions		Incentives
Incarceration	**Freedom**	Discharge from electronic supervision
Increased supervision contacts; increased drug testing	**Supervision**	Less frequent supervision; decreased drug testing
Further restricted time away from home (e.g., time for shopping)	**Privileges**	Additional time away from home
Monetary fine	**Materials**	Tickets to an entertainment event or certificates for a restaurant
Written reprimand; written report to judge or paroling authority	**Written**	Letter of commendation; positive report to judge or paroling authority
Oral reprimand	**Verbal**	Oral praise

while an ultimate incentive is the successful completion of electronic supervision and pretrial, probation, parole, or other community supervision. However, there are incremental and intermediate responses that can be employed and can serve to guide the offender to behavior change and subsequent successful achievement of supervision goals. Jurisdictions may opt to generate a structured sanctions and incentives menu to delineate responses to noncompliance and compliance. This structured menu can make responses more consistent, more equitable, and more proportional to the seriousness of the violation or the level of compliance, as well as more certain and more swift. Each agency must develop its own menu of sanctions and incentives, and these may need to be modified further for particular offenders on a case-by-case basis. Often, offenders can help define effective sanctions and incentives that are meaningful for them. However, based on the graduated response model shown in figure 10a, the options shown in table 10b are provided as examples of possible sanctions and incentives.

Each jurisdiction must address the timing of the responses to infractions and determine if personnel will be available to respond during normal work hours, after hours, on weekends, or all three. Response times may need to be individualized based on offenders' exhibiting different levels of risk; higher risk offenders may require a more immediate response to infractions. However, both the type and timing of responses may be dependent on an agency's resources.

Responding to offenders' noncompliance through application of sanctions has been the method with which most justice practitioners are familiar, but significant evidence suggests that providing incentives is a more useful, effective tool for changing behavior. Psychological theory advises that to most effectively change behavior, incentives should be delivered in a ratio of four incentives to one sanction (Andrews, Bonta, & Hoge, 1990) because, as cited by the Bureau of Governmental Research, University of Maryland (2001):

- People respond better to positive reinforcement than to sanctions.
- Timely, consistent responses help offenders change to prosocial behaviors.
- Clear expectations and definite boundaries guide offenders toward behavioral goals.

Consequently, as indicated previously, those administering electronic supervision should incorporate a system for providing rewards for compliant behavior if behavior change is among the program's goals.

Effective use of graduated sanctions and incentives is dependent upon the court or issuing agency's willingness and ability to support and follow through with enforcement of the release conditions, as well as amenability to the delivery of sanctions and incentives. Electronic supervision administrators must establish operating procedures with a realistic view of the oversight agent's position, and should neither promise nor threaten what cannot nor will not be delivered.

Electronic supervision field services may be provided for adult or juvenile offenders and by different types of agencies including probation or parole agencies, jails or detention facilities, residential pro-

grams, or private providers. Based on the type of services it offers and the clientele it serves, each electronic supervision services provider must develop sanctions and incentives that it has the resources to deliver and that will be meaningful to the offenders and stakeholders it serves. Each provider should also develop an explicit policy defining the levels of responses that can be administered without notification to the sentencing or releasing authority and the mechanism for supplying notification when action from the sentencing or releasing authority is needed. The policy should also outline the appeals process for an offender who disputes responses administered by the electronic supervision services provider.

There are incremental and intermediate responses that can be employed and can serve to guide the offender to behavior change and subsequent successful achievement of supervision goals.

Absconders

Providers of electronic supervision services need to have a policy for aggressively responding to offenders who violate by absconding. Areas to address in a response policy include:

- Determination of when to involve law enforcement or other arresting authority and how they are to be notified.
- Procedures to follow for filing orders of revocation including when and how to request a warrant for arrest.
- Process for retrieval of equipment from absconder's residence.
- Methods to secure restitution for lost or damaged equipment.

Offenders who abscond from electronic supervision may be subject to new charges such as escape or theft of equipment. Research of local laws can provide information regarding levying new charges in addition to violation or revocation charges on offenders who abscond (see chapter 3 on Legal Issues). Electronic supervision providers need to implement a system to search, apprehend and return offenders who have absconded to the sentencing authority. To provide safety for the community and to maintain the integrity of electronic supervision, absconders must be diligently prosecuted.

Determination/Collection of Fees

If fees for electronic supervision services are to be paid by offenders, policy for determining the amount to be paid must be established (as discussed in chapter 5), and the task of collecting the fees must be assigned. Offenders may bear the entire cost of their supervision, usually calculated on a per diem basis, or they may pay a portion based on their financial ability. An offender's financial obligations must be considered in determining his/her ability and responsibility for paying for electronic supervision, particularly court imposed obligations such as restitution, fines, and child support, and a priority for payment must be established.

If electronic supervision fees are to be collected from offenders, collection procedures must be established, and if the fees are to be distributed to a third party, appropriate accounting procedures for disbursement must be put in place as well. Sanctions for nonpayment must be established and enforced. In the case of juvenile offenders, jurisdictions must research applicable laws regarding collection of fees and comply with any jurisdictionally specific regulations. Authorities may find it financially wise to provide electronic supervision, whether it is for juveniles or adults, even if the offender is unable to pay for any portion of the fees. It may be more cost-effective than incarceration or institutionalization, especially if it allows the offender to maintain employment or provide care for minor children.

Besides regular program fees, agencies may want to hold offenders responsible for damaged or lost equipment, particularly if damage is intentional. Costs and procedures for such events should be established in advance. If offenders — especially juveniles — are unable to pay such expenses out of pocket, they might be required to perform community service instead.

CONCLUSION

This chapter presented important information about the supervision of offenders with electronic technologies emphasizing various options and procedures. The electronic supervision field services provider uses personal and collateral contacts and

the technological data from the instruments to

- Obtain and provide information.
- Perform or acquire assessments of the offender's needs, risks, and strengths.
- Establish efficient provision of services.
- Formulate an individualized case plan with specific goals and objectives for each offender.
- Provide or refer the offender to treatment providers, other agencies, and community resources as needed.
- Advocate, intervene, assist, and track the offender's participation in the services provided.
- Monitor compliance with the conditions of release and the supervision plan.
- Administer appropriate responses to reward compliance and sanction noncompliance.
- Notify the court or releasing authority of status changes.

It is a long list of duties that comprise field services and case management, and the agent who performs these services will draw upon many skills to perform them effectively. Various instruments and tools are available to accomplish the supervision and the agent will want to make judicious use of those, but underlying all the activities is the interpersonal contact that is both integral and essential to effecting offender change.

Chapter 11
INFORMATION MANAGEMENT AND EVALUATION

A program's purpose and the type(s) of evaluation it plans to conduct dictate the information that must be maintained. Thus, each agency must begin planning both its information management system and its program evaluation at the same time that initial planning for the implementation of the electronic supervision system is taking place. Critical to the establishment of both an effective management information system and a useful evaluation process is stakeholder commitment to initiate and support both processes and to obtain and use results in a thoughtful, meaningful manner to effect program improvement.

INFORMATION MANAGEMENT

An agency's management information system (MIS) must yield valid, reliable information, yet must operate within the confines of the agency's resources and expertise. Some factors to consider when developing an MIS include (Crowe & Schaefer, 1992):

- Ease of use — The system should be as uncomplicated as possible and multiple staff should be trained in operating the MIS with updates as needed so that personnel changes will not unduly hamper entering and maintaining information.
- Ease of retrieval — Information should be easily retrievable and should be available in formats to fit the needs of the consumers.
- Speed of compiling information — Ready access to data enables timely reports and allows access to information on demand if needed.

Determine the Information Needed

At its essence a management information system is a mechanism for storing data and producing it as needed to be read, searched, extracted, sorted, compiled, converted to reports, and analyzed. A good information management system provides data to meet the following needs (Torbet, 1997):

- *Operational*. An MIS should offer an efficient way to record case processing transactions related to the initiation, handling, monitoring, and closing of cases. A system should support the core activities of the officer or agent conducting the electronic supervision and have the capacity to record detailed data on specific decisions, events (compliance and infractions), and responses as they occur. Data, if entered punctually, can provide immediate access to those with a need to know.
- *Management*. For decisionmaking, management analyzes the operational activities with a focus on efficiency and effectiveness. An MIS should provide management with information to monitor the provision of services, identify trends, make changes as needed, keep track of costs, and compile reports. The system should support management with a capacity to show interrelationships between data elements and to present aggregate information across many cases or case events.
- *Evaluation/research*. Data must be available to conduct both process and outcome evaluation of the program. Thus, the MIS needs to have the capability to maintain and produce data to support decisionmaking and to assess progress toward achievement of the program's purpose and goals. (Evaluation is more fully discussed in the next section.) To support both evaluation and research activities (e.g., comparison of the performance of a group of offenders who were electronically supervised versus a similar group of offenders who were not or changes in the number of offenders incarcerated after the implementation of electronic supervision), the MIS should have the capability of extracting data for statistical analysis and exporting it in widely readable formats such as those accepted by SPSS, SAS, and other statistical software packages.

A good information system is designed with the knowledge that different people will need different types of information. The officer or agent conducting electronic supervision may be most concerned with accurate information maintained on individual clients and immediacy in the availability of data; managers may be more interested in cost effectiveness, both of the management information system and of the program for which the information is being managed, and access to aggregate information; agents, managers, and others, including funding sources, will be interested in data to assess the success of the program. In the development of an

MIS, it is important to define everyone's information needs, design the system accordingly, and build in flexibility to make changes as needed.

Each agency must begin planning both its information management system and its program evaluation at the same time that initial planning for the implementation of the electronic supervision system is taking place.

Today's technology allows agencies to consider information management beyond their own walls. Integrated information systems[1] are increasingly needed to ensure effective decisionmaking at various levels. For example, line personnel need the capability to access background and current status information about each offender they supervise, and agency managers and administrators need information that lets them evaluate their programs within a larger context. The electronic exchange of information among justice system agencies and related community organizations is increasingly important. When considering the information management system needs of a program for its electronic supervision component, the broader picture must be examined also, including how information about the results of offender supervision can and should be shared with other agencies and what information may be needed from other entities to make effective case management and agency management decisions. When such information sharing tasks can be automated, time and other resources will be saved.

However, important considerations in any management information system are privacy, security, and public access. Although their rights are diminished, offenders, their families, and victims still have basic rights to privacy of some personal information. Therefore, when designing information systems, it is vital to consider precisely what information may be shared and in which situations confidentiality must be maintained. System security is another crucial consideration. If the information system can be compromised by unauthorized users, the credibility of electronic supervision may be called into question. Finally, there is the need to consider public access. Recently, more information about offenders has become publicly available, especially through such mechanisms as sex offender registries that are published on agency Web sites. It may be appropriate for the public to have access to certain information, such as when a violent offender absconds, but it may not be appropriate for the public to know each time a low-risk offender violates his or her curfew. Agencies must give careful consideration to the nuances of information sharing and make decisions that are in the best interest of public safety as well as offenders and their victims.

Develop Information Collection Procedures

Developing appropriate data collection procedures is an important step in implementing a management information system. Agencies must devise forms, software, data storage formats, and data retrieval mechanisms that will facilitate access to information as needed. Agencies must also designate personnel to enter, maintain, and retrieve data and provide appropriate personnel training.

Agencies may depend upon the monitoring service provider to maintain and provide data, they may set up their own system, or the record keeping duties may be shared between the agency and the service provider. Planning at the outset for mutually sharing data electronically and ensuring compatibility of electronic data storage formats with existing record keeping systems will greatly enhance the accuracy and availability of data and allow for prompt information retrieval.

EVALUATION

Evaluation is the systematic collection and analysis of data needed to make decisions, an integral and anticipated element of most well-run programs. Conducting an evaluation of an electronic supervision program is listed as an essential step in the development process that is described in chapter 2, and the effectiveness and utility of the evaluation is inherently dependent on a previous step in the development process: establishing the purpose and goals of the program. The goals should be concrete, measurable, succinct, and written. Without clarity of the program's purpose and goals, an evaluation can only chart activity and cannot measure achievement.

[1] More information on integrated information systems can be found at www.it.ojp.gov.

The second critical need for successful evaluation is to have access to appropriate data. Information should be available to provide quantitative assessment of program activities, i.e., a description and assessment of program participants, materials, and activities. The quantitative assessment, along with other qualitative information, should provide the basis for making judgments about the results and impact of the program. Both quantitative and qualitative information are needed to make a full assessment of the program.

A third aspect of evaluation of an electronic supervision program is a cost-benefit analysis. If the program achieves its goals but does so with excessive expense relative to the usefulness if offers, is it a viable alternative or enhancement to other forms of justice system control?

Process Evaluation

A process evaluation is a quantitative measurement of the participants and activities of a program. It consists of compiling and documenting the "who, what, when, where" activities of the program including:

- Identification information on each offender such as name, date of birth, sex, race, and address.
- The presenting offense and legal history of each offender. It is helpful to code the offenses using the Uniform Crime Reporting (UCR) codes so that data can be compared across sites.
- Number of offenders supervised.
- Length of time each offender was supervised electronically.
- Number of violations.
- Responses to violations.
- Case management activities, (e.g., number of alcohol/drug tests conducted, number and type of referrals to resources, financial payment records).
- When/how supervision was terminated.

For privately run electronic supervision programs, the involvement of the public sector (pretrial release, probation, parole, corrections personnel) and the private sector (program providers) will require an evaluation of the support provided by both sectors and their ability to work cohesively together.

Outcome Evaluation

An outcome evaluation studies the direct actions of the program on the participants and seeks to determine the effects of the program. The outcome evaluation looks at the "how and why" of program activities and can also assess intended results and uncover any unintended results of the program implementation. To make this qualitative assessment of an electronic supervision program, Cohn (2000) suggests including subjective questions such as the following in measuring program results:

- Was the program "true" with regard to the inclusion in the program of only the targeted, at-risk offender population (i.e., did the program accept offenders who did not qualify according to eligibility criteria)?
- Was the response time adequate when there was a report of a violation?
- To what extent were graduated sanctions in place and used?
- Was the level or kind of supervision related to any risk/needs assessment or classification schema?
- Was the monitoring center responsive?
- How well did the equipment work?
- To what extent did coverage by staff address demand?

Additionally, gauging stakeholder satisfaction with the program might be somewhat difficult to quantify, but it can provide constructive information for an outcome evaluation. If stakeholders are fully informed of the electronic supervision program's purpose and goals and are offered a vehicle to provide meaningful feedback, they can be a valuable source of information about the program's goal attainment.

Ultimately, outcome evaluation data can be used not only to determine the results of a particular program but also to provide a broader view of the effect of the program, sometimes referred to as an impact evaluation. Cohn et al. (1996) cited Armstrong, Reiner, and Phillips (1987) in suggesting the following questions be answered to ascertain the longer-term value and impact of electronic supervision:

- Is electronic supervision a viable alternative to address the overcrowding of correctional institutions?
- Does electronic supervision offer a significant enhancement to community supervision?
- Is there a net-widening effect as electronic supervision is implemented?
- What is the relationship of electronic supervision to recidivism?
- What is the overall reliability of programs and equipment?

- What is the appropriate duration for an offender to be on electronic supervision?
- What is the cost effectiveness of electronic supervision as an alternative?
- What are the legal concerns and constraints of an electronic supervision program?

Connelly (personal communication, September 7, 2001) suggests two additional questions that should be included in an impact evaluation:

- Was compliance with probation / program conditions enhanced with electronic supervision?
- Did offenders respond positively to the structure and accountability, and do they feel it helped them maintain structure in their everyday life after being released?

As additional data become available, statistically significant characteristics that are predictive of an offender's performance on electronic supervision can be discerned, and electronic supervision programs can be more effectively designed and implemented to achieve the greatest usefulness.

Evaluation Measures Related to Program Goals

As previously stated, for evaluation to be worthwhile, the purpose for the electronic supervision program must be clearly articulated and understood, the goals and objectives must be measurable, appropriate data must be kept, and the MIS must have the capability of maintaining and producing the required data for analysis. The relationship of the outcome measures to the program goals dictate which data elements must be available for analysis. Program goals for electronic supervision include the following:

- Reduction in incarceration costs / bed avoidance.
- Offender accountability.
- Avoiding new offenses.
- Enhancement of community supervision.
- Public safety.
- Behavior change / early notification of problem behaviors.
- Feedback to stakeholders.

Table 11a lists these possible program goals and appropriate data elements to analyze in assessing progress toward achieving each goal.

Besides having data available to determine progress toward reaching the stated purpose of the electronic supervision, data should be available to determine the impact of the program. Data elements to consider include rates of incarceration before and after implementation of electronic supervision; offender accountability (how are they held accountable without electronic monitoring and how has electronic supervision changed accountability levels); changes in recidivism rates; stakeholders' perceptions of the success of community supervision; and alterations in the timeliness of responses to violations.

Use of Results

Once evaluation results are obtained, they must be put to good use with the ultimate goal to effect service improvement. The results may be limited to internal use and can serve to assess program quality and make decisions about operational changes. Specifically, evaluation results assist in:

- Understanding the strengths and weaknesses of the program.
- Assessing the efficiency of operations.
- Documenting progress toward achieving stated goals.
- Making financial decisions about program service delivery.
- Selecting areas for program improvement.
- Identifying and addressing unintended program results.

If results did not meet expectations, revision of the goals may be appropriate. Not fully achieving the original goal does not equate to failure of the program. Designing and implementing new strategies based on information obtained from the evaluation may result in achieving the intended outcome, or revision of the expected outcome may be warranted, particularly if the evaluation discloses insufficient resources, objectives that are difficult (or impossible) to measure, or there is a lack of data to conduct evaluation successfully.

Evaluation results may be shared externally and can serve to hold program service providers accountable to stakeholders for the quality of the program. Funding providers, stakeholders, and the community have a legitimate interest in how public money is spent, and they have the right to expect a program to be true to its purpose. For example, if an electronic supervision program's stated purpose is to reduce the number of beds required for incarceration and to thus lower incarceration costs, the interested parties should have information available to know if the program did reduce the number of beds required, the savings that resulted from the reduction in beds, and the cost of implementing the electronic supervision. However, sharing of evaluation results to external users is not limited to operational costs and savings. External customers

Table 11a

DATA ELEMENTS FOR ELECTRONIC SUPERVISION GOALS

Electronic Supervision Program Goal	Data Elements
Reduction in incarceration costs/bed avoidance	• Current population vs. capacity. • Electronic supervision program cost. • Daily incarceration cost. • Welfare savings. • Foster care savings. • Payroll taxes paid by offenders. • Monthly income of program. • Medical cost savings. • Court appearance costs; failure to appear costs; arrest costs. • Offender fees.
Offender accountability	• Days worked or in school. • Days in treatment. • Restitution paid to victim(s). • Taxes paid. • Number of violations and types (e.g., alcohol, boundaries, tampers). • Tampers. • Absconders.
Avoiding new offenses	• Re-arrests for various offenses. • Technical violations. • Absconders.
Enhancement of community supervision	• Demographics. • Re-arrest information. • Technical violations. • Duration of electronic supervision. • Length of time before new crime is committed and level of that crime. • Duration of treatment programs. • Officer contacts.
Public safety, behavior change/early notification of problem behaviors, and feedback to stakeholders	• Verified electronic supervision violations (number of times offender left early or returned late). • Number of failed tests (polygraph, alcohol, drugs). • Number of treatment absences. • Number of missed reporting appointments. • Commission of new offenses and level of the offenses. • Number of unauthorized area violations (hot zones). • Compliance with program requirements. • Successful completion of termination.

are likely to be interested in other results of the program offered and the evaluation should be designed to provide that information as well.

Effective presentation of the results can determine the utility of the evaluation for both internal and external users. It is important to know who the audience is, what information they need, and how they will use it (Geary, 2001). Geary suggests using spreadsheets, tables, charts, graphs, and narration to present information. The goal is to place the information in a context that is understandable to the user.

Control Group/Comparisons

Evaluation data for an electronic supervision program are best interpreted with the use of a control group. The control group serves as a reference point for comparison. It is helpful to contrast those who were exposed to the program (experimental group) with those who were not (control group). The control group should be as similar as possible to the experimental group to minimize the possibilities of outside influences on the outcomes (Geary, 2000).

Barriers to Effective Evaluation of Electronic Supervision

Despite the use of electronic supervision since the mid-1980s, researched information about the efficacy of programs is not always readily available. Several factors inhibit evaluation of electronic supervision programs.

Some service providers do not routinely conduct evaluation. From a study he conducted of electronic supervision programs for juveniles, Cohn (1998a) reported that not one of the approximately 150 respondents reported any attempts to measure or evaluate their programs. Cohn said the lack of evaluation in the juvenile programs could be extrapolated to adult programs as well, since many of the respondents reported they also served adult populations. The lack of evaluation protocol is not limited to electronic supervision programs but is often reflected by agencies' lack of evaluation for any of its activities. However, the absence of evaluation precludes the possibility of determining the value of electronic supervision.

The program purpose is unclear. Without a clear sense of what an electronic supervision program is supposed to accomplish, evaluation to assess achievement of the purpose is futile. Too often, a program has been put into place because it is in vogue to have electronic supervision, rather than because the program furthers the agency's mission and goals by addressing a specific articulated purpose. Either the absence of a program purpose, or a purpose that is indistinctly defined, negates valid evaluation.

The data to conduct evaluation is not available. Engaging in planning and designating resources for collecting, compiling, and analyzing data for evaluation is a frequently overlooked area of electronic supervision program implementation. Consequently, while data to conduct some minimal process evaluation may be available, those who wish to assess the effects of a program may have difficulty gleaning the information.

The population that is supervised is not the population that was targeted. An unintended consequence of implementing electronic supervision for a particular segment of the offender population is that other offenders not included in the targeted population are pulled in for supervision also. For example: the purpose of an electronic supervision program is to divert pretrial offenders from incarceration pending resolution of the court process to reduce incarceration costs. However, offenders who prior to the implementation of the electronic supervision program component would have been released on their own recognizance are placed on electronic supervision. Thus, evaluating electronic supervision based on its effectiveness at reducing incarceration costs is impossible unless the participant group can be bifurcated into those offenders who would have been detained and those who would have been released even without electronic supervision.

The single attribute of cost-effectiveness is often the criterion for successful programs. Electronic supervision is often advocated and touted as a cost-effective mechanism for supervising high-risk offenders in the community. This singularity of purpose (reduced expenditure) without acknowledgment of other correctional system goals such as increasing public safety, effecting offender behavior change, and reducing recidivism restricts the definition of a "successful" program to an accounting process and clouds the capacity for evaluating electronic supervision as a corrections system tool to achieve broader goals. Indeed, a variety of variables should be considered when conducting program evaluations.

CONCLUSION

The scarcity and / or ambiguity of evaluation information from electronic supervision program components has hampered efforts toward gauging their effectiveness; evaluation studies often conclude that further evaluation efforts are needed to satisfy remaining unanswered questions. What becomes apparent in reviewing evaluation studies, too, is that familiarity with the program purpose and the targeted population are necessary to understanding the evaluation results. A recitation of the number of offenders being supervised and the length of time on supervision in a given year is rarely helpful to understanding the success of a program.

Engaging in effective evaluation can tell us the degree to which programs are successful and cost-effective. With adequate evaluation information, the value of electronic supervision to the criminal justice system can be realistically assessed.

Chapter 12
PUBLIC RELATIONS

A public relations plan that addresses the concerns and needs of the community stakeholders during program development can counteract negative public perceptions and negative stereotypical images of electronic supervision systems. Fairchild (1998) suggests that agencies conduct research and assess public perceptions using surveys and public opinion polls to identify problems and target public relations and communication strategies to address those problems as they relate to specific social groups, other agencies, and the public.

IDENTIFY STAKEHOLDERS

The successful implementation of any community corrections program that utilizes electronic supervision tools demands the partnership, commitment, and involvement of both the internal and external community stakeholders. Program innovators and correctional leaders must give the public the opportunity to participate in problem solving, policy development, program implementation, and offender supervision (Shall & Neises, n.d.). Any public agency that purports to serve the community must become a part of that community; that agency cannot operate alone as a separate entity without the support of those who are the recipients of its services (Petersilia, 1998). Partnerships between the internal and external stakeholders develop when both entities recognize the need to listen to, understand, and work toward the goals, needs, and concerns of each other for the greatest benefit of all. Evans (1996) found that successful implementation of a correctional program within a community depends on the cooperation and partnership of other agencies, social institutions, and public acceptance and confidence when integrating the offender and the community. Ultimately, the community holds the solution to crime, and all the stakeholders, both internal and external, must be involved (Klein, 1995). For stakeholders to be involved, they must have a voice and take a piece of the action. Stakeholders are more apt to support what they help to create.

Administrators of programs that include electronic supervision must assume the responsibility for educating, informing, and enlisting the support of stakeholders (Boone, 1996). Improving public relations among all the community actors demands increased communication, understanding, and debate among all the groups involved (Fairchild, 1998).

As with all community corrections initiatives, the effectiveness of supervision programs that include the use of electronic technologies depend on (Boone; 1996; Dillingham, 1994; Elrod & Brown, 1996; Evans, 1996; Flanagan, 1996; Immarigeon, 1995; Petersilia, 1996; Renzema, 1992; Sigler & Lamb, 1995):

- The agencies that manage them.
- The community and social service agencies that provide treatment, jobs, and other offender services.
- Educational agencies.
- Judges and elected officials.
- The media.
- Victims services.
- Public support.

Internal Stakeholders

The internal stakeholders are all those persons within an agency who will be managing, supervising, evaluating, and overseeing a program involving electronic supervision. These include program coordinators, agency management professionals, line officers, supervision teams and any and all agency personnel who will maintain a working relationship with the offenders and their communities as well as vendors and service providers for the electronic technologies used. The successful implementation of an electronic supervision system requires communication and cooperation among departments and agencies. According to Nidorf (1996), it is imperative that agencies communicate at all levels and functions of the department and agencies that supervise offenders who reside within the community.

External Stakeholders

The external stakeholders are all those persons outside the correctional agency who are affected by offenders' releases into their neighborhoods and communities. Included are the victims, families, peers, business managers and owners, media, community professionals, social service agencies, treatment facilities and services, judges, prosecuting attorneys, police, and any other public or private agency, po-

litical or social group, or person within a community or neighborhood in which an offender resides while completing court-ordered community supervision obligations.

Political Leaders as Stakeholders

Programs that include electronic supervision components also require the support of policymakers who can build acceptance and support among lead agency professionals and community members. Included are legislators, criminal justice officials such as judges and prosecuting attorneys, and State and local governments. For example, Immarigeon (1995) reports on an intermediate sanctions program initiated by the Center for Effective Public Policy. The Center's recommendations include four key tasks:

- Developing a high-level policymaking group.
- Planning educational opportunities, gathering data, and developing decisionmaking processes to guide the group's work.
- Using local resources for specific policy objectives.
- Implementing the policies and sanctions developed.

The commitment of policymakers to join and remain part of the decisionmaking and implementation process and the availability of the staff, time, and fiscal resources to support the work and decisions of the policy group are vital for the success of this process.

Legislators are influenced by their perceptions of what they believe the public wants. Brown and Elrod (1995) found that policymakers often hold misperceptions of public attitudes toward punishment in general and alternative sanctions in particular. Furthermore, they found that "limited insight to public perceptions could jeopardize fiscal and programmatic needs of the correctional system" (p. 337). The public generally supports alternative sentencing initiatives, believing they make the corrections system more just and responsive to public safety issues and they provide tools to help change criminal behavior. However, too often political initiatives drive public opinion (Mauer, 2001), so educating both policymakers and the public is vital for programs that include an electronic supervision component.

It would be unwise for an administrator to introduce electronic supervision into a community corrections program without some certainty of public acceptance. Funding and operational support will have to be obtained from public officials who may be reluctant to give them. They will have to be convinced that the program is viable and acceptable to the public (Friel, Vaughn, & del Carmen, 1987).

The Community Anti-Drug Coalitions of America (1995) recommends several steps for influencing public policy including:

- Being knowledgeable about facts that support the intended program development or enhancement.
- Informing elected officials of the issues involved through letter writing.
- Alerting program supporters about the program development or enhancement and urging them to take action.
- Meeting with elected officials to urge their support for the program.
- Mobilizing a public response by gathering statements or signatures of support to be sent to elected officials.
- Developing partnerships or collaborative efforts with other organizations.
- Educating the community about the issues.
- Spreading the message through local media.

Meeting with policymakers provide powerful opportunities for them to hear from their constituents and experts involved in program development or enhancements. Policymakers often are eager to hear from their constituents, but they may have different goals from justice system agencies. While agency leaders would like public officials to support their plans, policymakers may be reluctant to endorse approaches that are controversial. If arranging a meeting with elected officials is not possible, welcome a meeting with their staff who are usually responsible for providing information to and educating policymakers on various issues. Table 12a provides some suggestions for successful meetings with policymakers.

Victims as Stakeholders

Within a restorative justice framework, victims are viewed as one of the primary clients of the justice system. Victims who have experienced personal injury, financial loss, trauma, and other results of their victimization deserve both the understanding and attention of the community and the justice system. Crime victims want the following as a result of the harm they have experienced (Reinventing Probation Council, 2000):

- Safety — To be protected from further victimization.
- Knowledge — To be kept informed about what is happening with their case.
- Restitution – To be repaid for their losses.

Table 12a

STRATEGIES FOR SUCCESSFUL MEETINGS WITH POLICYMAKERS

Preparation

- Know the policymaker and be ready to appeal to his or her personal, professional, and legislative concerns. Learn about the person's district and voting record.
- Furnish information about the purpose and agenda for the meeting. Provide summary information and a list of people who will attend the meeting.
- Speak with a unified voice by enlisting the support of constituents who back the program's purpose and goals.

During the Meeting

- Work toward clear but limited goals by keeping the discussion focused on one or two key points. Be specific about what is needed from the policymaker.
- Provide written materials and visual aids that are clear and succinct and summarize key points.
- Make use of "small talk" during introductions and other appropriate times to create rapport and develop a relationship with the policymaker.

After the Meeting

- Evaluate the meeting immediately. Appoint a note taker during the meeting and have that person prepare a written summary and distribute it to meeting participants.
- Send a thank you letter that is gracious and polite, even if the meeting was not as successful as desired. Recount statements made and suggest ways the policymaker can help achieve program goals.
- Let agency members and other stakeholders know the results of the meeting by providing a written summary.

(Community Anti-Drug Coalitions of America, 1995)

- Services — To receive services and resources that address the harm they have suffered.
- Meaning — The outcome of the justice process to be meaningful for them (e.g., receiving an apology from the offender, punishment that fits the crime, knowledge about the justice process).
- Involvement — To be included in the justice process through providing victim impact statements, participation in plea bargaining and sentencing recommendations, and, in some cases, involvement in mediation with the offender.

Victims are a key constituency group for community corrections agencies to consider and inform about the development and implementation of electronic supervision systems. Electronic supervision strategies that include victims as stakeholders can help meet many of the victim needs stated above, especially those related to safety, knowledge, meaning, and involvement.

Another target population for support of community sanctions is agencies (both private and public) and individuals who provide victim support services. Agencies that provide advocacy, restitution, reparation, treatment, and other victim's services can be instrumental in garnering support for programs that utilize electronic supervision. The input from these groups can provide valuable information on which program features can help to instill comfort and reduce fear for victims and ensure offender compliance with court-ordered sanctions.

Media as Stakeholders

The media is one of the most valuable and effective tools available to corrections professionals to inform and educate the public. However, the media is often considered the enemy — a negative force to be avoided. Corrections professionals must change their perceptions of the press and recognize that the media can be instrumental in gathering support for various programs and policies, supplying information to stakeholders, and relating good news. The reporter's job is to gather information and then relate it to the public via television news programs, newspapers, radio, and other media. According to Immarigeon (1995), political leaders compete to be the toughest on crime, while little media attention focuses on how criminal justice agencies operate or what they need to accomplish their mission.

The media must be supplied with valid and reliable information about electronic supervision strategies and equipment so the foundation is laid for trust and confidence among the press, community agencies, and the general public. The corrections professional is instrumental in ensuring that accurate information is given to the press, thereby ensuring that it is a credible source of information for the public (Sigler & Lamb, 1995). The media can be instrumental in ensuring that the purpose and methods of electronic supervision systems are reported accurately (Nicholl, 2000). Corrections professionals who fail to report their successes and ignore the opportunity to report what is positive and what is working feed the stakeholders' notions that electronic supervision tools are ineffective (Cohn, 1998b; Wittenberg, 1997). Table 12b provides some useful information for working with news media representatives.

Table 12b

TIPS FOR ATTENDING AN EDITORIAL BOARD MEETING

These tips focus on meeting with the editorial board of a newspaper but may be equally applicable for meeting with representatives from other types of news media.

- Know the newspaper's position on the issue to be discussed by researching recent relevant editorials and news stories.
- Request a meeting with the editorial board. Ask that a reporter attend the meeting or schedule a separate meeting with a reporter. If the editorial board does not support the issue of the meeting, a reporter may want to write a news story.
- Distribute short fact sheets about the program's position or needs and the names and contact information for people who can be reached for more information.
- Invite others to attend if they have particular expertise on the issue, but keep the group small. Prominent community stakeholders in the discussion may increase the credibility and importance of the message.
- During the meeting, briefly summarize the program's position, evidence supporting the position, anticipated criticisms, and appropriate responses to those criticisms. Be prepared to respond to questions and criticisms at a later time during the meeting.
- Defend the program's position if arguments are presented. Some questions may be intended to test the validity of the program's position.
- Respect the opinions and constraints of the editorial board. If they are unable or unwilling to support the program's position, they may be willing to print a letter from the agency.

(Community Anti-Drug Coalitions of America, 1995)

Community stakeholders who are informed and share in decisionmaking that addresses their fears and needs are more receptive to alternative sanctioning programs (Boone, 1996; Flanagan, 1996). Garnering public support for such programs is a daunting task for community corrections professionals who must continuously perform numerous tasks that keep both the internal and the external stakeholders informed and educated about a program's electronic supervision policy and goals, program features, evaluations of successes and failures, program and equipment costs, recidivism rates, and other issues (Boone, 1996).

The Public as Stakeholders

Members of the community are important stakeholders of the justice system, and as such, should be informed and involved when electronic supervision strategies are designed and implemented. Generally, the public wants the justice system to recognize and address the following needs (Reinventing Probation Council, 2000):

- Safety from violent offenders.
- Accountability of offenders for the crimes committed.
- Repair of the damage done.
- Education and treatment for the offender.
- Involvement in making decisions.
- Truth.
- Sentences that fit the crime, the offender, and the circumstances.
- Some good to come of justice.

Members of the community want to have influence on the system and they want to know how well it is working, its shortcomings, needs, and program mistakes and successes. Programs that are developing or enhancing electronic supervision strategies should address these needs from a program's inception throughout its implementation. Otherwise, they are likely to be misinformed and more reactive in their response to the program and offenders' unlawful actions while being supervised electronically.

Other Stakeholders

Other external stakeholders also must be considered when assessing public relations developments and electronic supervision. These include:

- Other criminal justice system officials such as judges, defense attorneys, prosecuting attorneys, and law enforcement.
- Industry representatives such as technology experts and manufacturers and distributors who promote and sell electronic supervision equipment.
- National associations such as the American Probation and Parole Association, American Correctional Association, International Community Corrections Association, and other organizations that offer insight and assistance in planning, developing, and implementing alternative sanctions programs.

USING A PROACTIVE VERSUS REACTIVE APPROACH

Forward-thinking correctional agencies, anticipating public moods and trends, are proactive rather than reactive in addressing them (Wilkinson, 1996). A key strategic factor for correctional officials is to find ways to encourage a public deliberation about correctional policy, not just a public reaction (Moore, n.d.).

Procedures for the effective flow of information requires a spokesperson who is qualified to address program issues including program policy and procedures, the advantages and disadvantages of the

Table 12c

TIPS FOR WRITING NEWS RELEASES

There is no single way to prepare a news release. However, generally accepted practices include the following:

Content

- Tell the reader all the major facts in the first paragraph:
  - Who
  - What
  - When
  - Where
  - Why
  - How
- Each paragraph should be more important than the paragraph that follows it.
- Make sure all information is accurate and timely.
- Check names, spelling, numbers, and grammar.
- Use short sentences.
- Write with active verbs; avoid fancy, stilted wording; avoid jargon and technical terms.
- Provide a short summary or news memo covering the major points of the story.
- If the story is complex, provide background information as a separate fact sheet.

Length

- Keep it short — limit to one double-spaced page, if possible.
- Write "more" at the bottom of each page if the release exceeds one page.

Title

- You may title the release as a summary of the content. However, news organizations are likely to select their own headlines.

Release Date

- For most releases write "immediate" or "for use upon receipt" at the top.
- If there is a specific reason to stipulate a release time, make this clear. Reasons a release might be held include a need to coordinate it with a speech by someone else, have it appear with another news announcement, or to release it during a meeting.

For More Information. . .

- Be sure to include the name, address, and phone numbers of the person who can provide additional information on the story.

(National Institute of Corrections [NIC], 1999)

technology being employed, offender violation policy and procedure, program costs, and effectiveness ratings. Houston (1999) recommends that an agency appoint a public information officer (PIO) to answer requests for statistics and other information. Smaller agencies can appoint agency staff such as the director, chief probation officer, or anyone who can effectively address issues and deal with reporters. The PIO should be responsible for arranging press conferences and distributing all press releases. (Some tips for writing press releases are provided in table 12c.) The PIO protects the agency from charges of being uncooperative with the media, especially during disturbances and unusual events, and leaves agency professionals free to work on the task at hand.

Houston (1999) also suggests that to ensure accurate and effective media coverage, the PIO should:

- Screen all inquiries. Routine requests can be handled by the PIO, but all inquiries of a policy nature can be routed to the appropriate staff member.
- Provide news releases in a timely manner to accommodate media deadlines.
- Know the local lead reporters in both the print and electronic media and give assistance wherever possible so that they are knowledgeable about the agency and its functions.
- Be the single point of contact with the media to eliminate conflicting information.
- Avoid playing favorites with reporters, as other reporters may perceive this bias and fail to attend future press conferences or ignore press releases.

Public relations issues must be addressed proactively. A good public relations strategy should "sell" the program to the top decisionmakers and effectively elicit public support. The program designers will need to develop press kits[1] (suggested contents are provided in table 12d), conduct public information forums and education seminars, and hold press conferences to effectively communicate program benefits and limitations honestly and fairly. The public often has negative perceptions because of the lack of information. It is much more difficult to put a different "spin" on negative perceptions once they are formed. Information should be available to help the public understand the program, and questions should be met with credible answers.

The public must be given opportunities to work through the issues and reach resolutions both intellectually and emotionally before some disturbance or event causes misperceptions that are difficult if not impossible to change. Program designers who address any successes or difficulties that can and do occur, can help the public overcome resistance to electronic supervision options. According to Shall & Neises (n.d.), policy innovators — interested citizen groups, politicians, high level appointees, foundations, and others — can have an impact on the

[1] Service providers and/or manufacturers may be able to assist with developing materials for the media, or they may have materials already available.

Table 12d

SUGGESTED CONTENTS OF A PRESS KIT

- Fact sheets and background information about the electronic supervision industry.
- Fact sheets and background information about your agency or program.
- Biographies of any spokesperson for the organization or industry.
- Potential story topics.
- Photographs.
- News releases.
- Brochures or annual reports.
- News clippings and advertising reprints.

Be sure all materials in a press kit are:

- Clearly written.
- Accurate.
- Current.

(Johnston, n.d.)

barriers that block progress in the resistance and evaluation stages, thereby increasing stakeholders' capacity for reasoned risk, full understanding of the goals sought, and the terms of accountability with which they must contend.

Public relations issues must be addressed proactively.

PUBLIC EDUCATION

According to Wilkinson (1996), knowledge is power, but only if it is given away. Community corrections professionals must educate and inform the public of the policies, goals, advantages and disadvantages, costs, recidivism rates, and other issues related to electronic supervision systems. Orientation and educational programs should include all interested parties such as the judiciary, prosecutors, defense attorneys, probation, parole, medical / health services, family support services, law enforcement, victims, community, media, and other interest groups (American Probation and Parole Association, 1989).

Manufacturers, distributors, service providers, community corrections agencies, and the judiciary share in the responsibility of understanding how electronic supervision technologies work to varying degrees. The amount of information needed by various persons usually depends on the roles of those involved. However, one should not hold back requested information based on another's predetermined role. Conway (1998b) suggests there are three groups to consider in relating information:

- Those involved in any aspect of managing electronic supervision caseloads or programs who are responsible for formulating and carrying out the policies and procedures of the equipment should know all the details of the equipment and the program.
- Those responsible for sentencing, referring, or authorizing offenders' participation in programs using electronic supervision need basic information to assess the level of risk and whether the offender can be supervised adequately, but they do not need the level of detail required by program personnel.
- The public needs to know some of the basics about how the devices work to protect society such as the range of the transmitter, if and how the transmitter can be removed by the offender, and whether tampering can be detected.

In a study conducted by Sigler & Lamb (1995), the authors found that community stakeholders who were informed and had accurate knowledge of community corrections had more positive attitudes toward the use of community correctional alternatives. Their findings concluded that community education should be a part of any effort to establish and maintain community corrections programs.

What electronic supervision systems do varies with the jurisdiction in which they are being used and the technologies employed. Electronic supervision is used as an alternative to probation / parole revocation, an enhancement of probation / parole supervision, a tool for work release, and a part of pretrial and post conviction jail diversion and diversion from prison (American Probation and Parole Association, 1989). The devices are employed at all levels of the justice system to supervise both juveniles and adults. Electronic supervision devices do provide increased surveillance, control, and supervision of offenders, but they do not replace personal supervision and treatment services. Immarigeon (1995) warns that no intervention, however well designed and implemented, is appropriate for everyone.

Effective community sanctions programs cost money. Corrections professionals must be honest with the community stakeholders about what it costs to ensure public safety. Funding for community corrections programs depends on whether programs can prove to the public that they are efficient and effective in bringing about behavior change. Therefore, needed resources depend on program results that are accurately measured and honestly reported. Some programs offset the cost of electronic supervision to the community by setting up systems in which offenders who are employed are responsible for paying a daily amount or a percentage of their salary. Members of the public often want to know offenders are being held accountable in this way.

There are several obvious reasons to adopt electronic supervision for offenders that appeal to the public. Humaneness requires that, whenever possible, the correctional administrator take actions that improve, or at least maintain, the life and potential of the offender while he or she is under the control of the State (O'Leary & Clear, 1984). When the

Table 12e

CRISIS MANAGEMENT PLAN

- Have a designated public relations spokesperson who will take charge of handling communication during a crisis situation.
- Seek all available information about the situation.
- Make arrangements for and maintain contact with the press and other stakeholders. For example, separate designated areas may need to be set up for victims or family members and the press.
- Have a designated agency administrator who will approve the text of press releases and with whom the public relations spokesperson can consult for answers to questions.
- Respond with appropriate speed. Maintain close contact with media representatives and be willing to help them meet print, radio, or television deadlines.
- Maintain composure even in tense situations.
- Disseminate the same information to all sources. Keep a log of information released and the times at which it was released to avoid duplications and conflicting reports.
- Maintain contact information for those who receive information in case it is necessary to provide them with followup information.
- Always provide truthful information; never lie or minimize when answering questions.
- When answering questions provide or confirm only information that is known; never speculate. Attempt to find out answers that are not yet known.
- Accentuate the positive when possible. For example, although this crisis has occurred, in general, electronic supervision technologies work well and have benefits.
- Prepare general information about the program and the technologies used that can be distributed to stakeholders if a crisis occurs.

(National Institute of Corrections, 1999)

offender is maintaining employment while under community supervision, electronic monitoring devices allow the offender to continue working, receive a salary, and pay taxes. The employed offender may not need public assistance funds to support himself/herself, may only need partial assistance for family support, and is responsible for his or her own medical care. Usually, coerced treatment services are a condition of the offender's release into the community. Those under corrections supervision stay in treatment longer, thereby increasing positive treatment outcomes (Petersilia, 1996).

Community supervision also helps families stay together, enhancing cohesiveness and increasing the chance for program success. The forced discipline, structure, and schedule may help advance long-term behavior change.

HAVE A CRISIS MANAGEMENT PLAN

It is likely that some offenders will commit crimes while under electronic supervision. Corrections officials must approach the implementation of any new corrections program with the understanding that things do go wrong. Any type of crisis situation must be addressed during program development. It is wise to consider what can go wrong and address policy issues to deal with adverse events before they happen.

Every agency should have a crisis management plan in place well before any untoward event occurs. The crisis management plan should spell out the steps to be taken to notify both internal and external stakeholders about the event. Other justice system personnel, victims, the public, and the media will need to be given information. They will want to know:

- What happened — Describe the situation with as much detail as needed (without breaching confidentiality) for the appropriate audiences to understand the situation.
- Who was involved — Provide specific information except where doing so would jeopardize a criminal investigation, in situations where

relatives of victims have not yet been notified, when a juvenile offender is involved, or in cases involving rape or sexual abuse.
- When the event occurred.
- Where the event occurred.
- How the situation developed.

The National Institute of Corrections (1999) suggest the steps in table 12e for handling an emergency. Having a crisis management plan can avert many problems including inaccurate stories from the media, rumors, criticism, and diverting the attention of staff from their most important job of supervising offenders. Failing to manage crises effectively can cost the agency prestige, community standing, and good will (National Institute of Corrections [NIC], 1999).

CONCLUSION

This chapter reviewed the important role of a variety of stakeholders in the implementation of a successful system to supervise offenders electronically. It then discussed the necessity for taking a proactive approach in public relations around issues relating to electronic supervision. Tips for preparing and managing various public relations tasks as well as the importance of having a crisis management plan also were addressed.

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