Final Report:
Evaluation of Pretrial
Home Detention with Electronic Monitoring

June 1991

Michael G. Maxfield
Terry L. Baumer

School of Public and Environmental Affairs
Indiana University
Bloomington, Indiana 47405

This research was supported by grants 86-IJ-CX-0041 and 89-IJ-CX-0025 from the National Institute of Justice, Office of Justice Programs, U.S. Department of Justice. Points of view in this document are those of the authors and do not necessarily represent the official position of the U.S. Department of Justice.
I. INTRODUCTION

Ball, Huff, and Lilly (1988) note that home detention, or house arrest, had its American origin with juvenile populations in the 1970's. During the early 1980's several jurisdictions developed intensive supervision programs for adult populations which included a "curfew," or home detention, as one component of the program (Erwin 1984; Pearson 1988). Monitoring for these programs was performed manually through telephone calls and field visits from program staff. In late 1984 the first electronic monitoring equipment became commercially available prompting a significant change in the technology of home detention.

The availability of this equipment promised to be the technological "fix" needed to "... solve a series of complex and interrelated problems associated with appropriate and effective offender supervision" (Blomberg, Waldo, and Burcroff 1987). In December of 1984 Palm Beach County, Florida began an electronic monitoring program for offenders who were completing a work release assignment (Palm Beach County, Florida Sheriff's Department 1987; Schmidt and Curtis 1987). Only a few months later Friel et al. (1987) identified ten different programs which used a variety of electronic equipment. Approximately four years later (February 1989) Renzema and Skelton (1990a) located electronically monitored home detention programs in 37 states with approximately 6,500 individuals being monitored. Preliminary estimates from a survey conducted in February 1990 indicate that over 12,000 individuals are now being monitored with such equipment (Renzema and Skelton 1990b).
This growth in the use of electronic monitoring has been driven primarily by unprecedented growth in prison and jail populations (Vaughn 1987; Blomberg et. al. 1987; Baumer and Mendelsohn 1990). In 1973 prison populations in the United States began a relentless and historic climb (Langan et. al. 1988). These increases were such that between 1980 and the end of 1988 correctional populations in the United States increased by slightly over 90 percent (BJS 1989). Prison overcrowding and judicial pressure to reduce populations generated considerable interest in alternative sanctions as a means to relieve the crowding problem. Electronically monitored home detention proved to be very attractive to policy makers who were looking for safe, secure, and cost effective alternatives to incarceration.

The initial electronically monitored home detention programs were almost exclusively targeted for convicted offenders (Schmidt 1989). These early programs were conceived as alternatives to incarceration. Thus, most of the clients of the initial programs were probationers who were otherwise prison bound (Renzema and Skelton 1990a). As a solution to crowding, the approach was driven by the traditional community corrections philosophy of diversion from incarceration. It was thought that electronic monitoring could best affect prison populations by siphoning marginal offenders into these community programs.

Although electronically monitored home detention for probationers fit well with the community corrections model, the programs did not satisfy the demand for relief from prison crowding. There were several reasons for this situation. Since the programs were designed to divert offenders from prison, any relief from crowding was hidden: nobody was released from
prison, they simply did not enter the system. To the extent that the programs were receiving offenders with enhanced probation, they weren't diverting offenders at all, but only widening the correctional net. Clear and Hardyman (1990) have demonstrated how it is possible for such programs to increase the demand for prison beds. Finally, many of these programs were simply too small to have any noticeable effect on correctional populations (Schmidt 1989).

The above factors have lead criminal justice officials to consider electronic monitoring programs which should have a more direct and immediate impact on correctional populations. These more direct routes to relief have focused on incarcerated individuals. In some cases the programs have targeted certain prisoners for early release while others have focused on pretrial defendants being held in jail pending trial. Renzema and Skelton (1990a) note a significant shift between 1988 and 1989 toward electronic monitoring programs for these incarcerated populations. By 1990 a majority of offenders assigned to electronic monitoring programs were drawn from incarcerated populations (Renzema and Skelton 1990b). With institutional overcrowding as the driving force behind program development, officials are drawn toward programs which directly free a prison or jail bed for each individual placed in the community program.

Many important questions remain to be answered about electronically monitored home detention in general. However, even more remains to be discovered about the delivery and impact of these programs for various populations. While electronic monitoring for probationers and prison releasees share many common goals, the applicability of these programs for pretrial clients remains unclear. Maxfield and Baumer (1990) have noted
some basic differences between electronic monitoring for convicted and unconvicted clients. The purpose of this report is to focus more detailed analysis on a pretrial electronic monitoring program.

This report describes a non-experimental evaluation of the pretrial program. To the extent possible, this report also compares findings on pretrial home detention to those obtained from the experimental evaluation of a postconviction program reported in Baumer and Mendelsohn (1990).

The balance of this introductory section describes sources of data and information, together with a summary discussion of the goals and rationale of the pretrial program. Section II reports on program delivery, focusing on screening potential clients and actually monitoring those who were placed on home detention. The third section examines data on outcome measures, how clients were terminated. More explicit comparisons of pretrial and postconviction home detention are presented in section IV, including the goals and operation of each program. The final section summarizes how well pretrial home detention fulfilled its goals, and presents recommendations for improving the operation of Marion County's program together with guidance for other jurisdictions that might be seeking alternative dispositions for defendants awaiting trial.

Methods

The Marion County Community Corrections Agency assumed responsibility for operating the pretrial program in July 1988. Major changes in the program were made in August 1989, including a shift in responsibility for screening clients and a trial period in which programmed-contact wristlets were replaced with a voice verification monitoring system. These were
significant changes that produced some disruption of operations over several weeks. Accordingly, the evaluation is restricted to clients who began pretrial home detention before 1 August 1989. Our data reflect the 13 month period July 1988 through July 1989, and include information on a total of 224 program clients.

Our approach to this non-experimental evaluation was to obtain information on program operation from staff interviews, observation, and program records. Since the goals of pretrial home detention are different from those of a postconviction program we also sought the views of program staff and other stakeholders in Marion County criminal justice agencies on what they felt the program was trying to achieve, and how successful it was in these efforts. These were obtained through semi-structured interviews with personnel from the Marion County Community Corrections Agency, judges, prosecutors, and staff from the Marion County Justice Agency. The latter organization coordinates pretrial services and later assumed responsibility for screening potential clients for pretrial home detention. Several hours were spent observing the operation of the program, including intake procedures, the day-to-day work of staff in monitoring clients, and the operation computer-driven electronic monitoring equipment.

Information contained in agency files on each client was coded. This included charged offense, criminal history, living arrangements, employment status, and other details from intake documents. Field contact staff maintained logs of each contact with individual clients, including manual telephone calls and field visits to their home or workplace. These logs were to be maintained for all clients, but were absent from about half of client files. Disposition and sentence information was coded for those
persons whose cases were disposed by February 1990. This included the vast majority of program clients, but about 20 cases remained outstanding by April 1990.

As described more fully below, clients were required to comply with various program regulations, and could be cited or terminated for violations. At the discretion of staff, a written report of failure to comply with regulations was placed in a client's file. Slightly more than half of the 224 people on the program were cited for at least one violation, and information from these violations was coded.

Finally, electronic records of programmed computer calls were obtained and translated from the equipment vendor's proprietary data format. These data provide information on the results of computer calls to clients' homes. Because of equipment failures and problems in making recoverable copies of call records, data were not available for 2 of the 13 project months².

Summary of Data and Sources:

Program and other records

- Intake documents
- Criminal history
- Recorded violations
- Field and telephone contact logs (incomplete)
- Court disposition and sentence
- Computer call records (incomplete)

Interviews

- Program staff
- Actors from program task environment

---

1. Call records for January and May 1989 are missing; those for July 1989 are incomplete.
Though electronic monitoring uses relatively new technology, the pressures of crowded jails and prisons have hastened its acceptance by anxious public officials. Some authors have attempted to provide a synthesis of existing knowledge (Petersilia 1987; Hofer and Meierhoefer 1987; Ball, Huff, and Lilly 1988), while others have reported early evaluation results (Jolin 1987; Lilly, Ball, and Wright 1987; Baumer and Mendelsohn 1990). However, most home detention programs were designed for convicted offenders and there has been virtually no consideration of whether home detention and the technology of electronic monitoring are appropriate for an unconvicted population awaiting disposition.

The goals of a pretrial home detention program are complex, in part because the objectives of pretrial incarceration (insure appearance at trial, and protect public safety) are different from post-conviction punishment. Relieving jail crowding is an obvious goal. A variation on this theme is "resource management" which implies more deliberate consideration of who occupies scarce jail beds. Defendants awaiting trial in jail rarely miss a court appearance, but there is some risk of flight among those out on the street; electronic monitoring may reduce this risk for many defendants. Protecting the public is another goal; new arrests of people awaiting trial represent a potential threat to community safety. Finally, release to home detention with electronic monitoring provides an alternative pretrial disposition in addition to the traditional triumvirate of jail, bail, or recognizance. Defendants wearing wristlets and confined
to home or work face more restrictions than do those on bond, but awaiting trial at home for most people is less restrictive than confinement in jail.

In many ways the program may also provide benefits, some indirect, to its clients. Release on home detention is an attractive option for those unable to post bond or meet eligibility criteria for release on recognizance. Home detention is consistent with the traditional community corrections goals of permitting offenders to maintain employment and ties to their families. Program staff in Marion County also cite some rehabilitative effects, though they cannot be viewed as explicit goals of a pretrial program. Being restricted to home and place of employment, with perhaps four free hours per week for shopping, laundry and similar errands, forces clients to plan their daily and weekly activities. This may impose some order on a heretofore disorderly life. Berry (1985) suggests another client-centered benefit is the fact that people awaiting trial in jail generally receive more severe sentences than those on the street. In addition to this potential benefit, a record of responsibility and good behavior among defendants on home detention may be considered by judges when sentencing convicted offenders.

There was not necessarily a consensus on program goals and rationale among the various people interviewed. Some actors felt that home detention represented an opportunity for greater supervision of persons previously released on recognizance. Others believed that more defendants awaiting trial in jail should be released on home detention. All expressed a concern for public safety, but some felt that the program afforded too much freedom for high-risk defendants. Some program personnel were most interested in the rehabilitative potential of pretrial home detention,
despite the fact that the alternative of pretrial detention in jail is not intended to rehabilitate an unconvicted defendant. In part these views on program goals were clouded by general perceptions of program effectiveness, and the varying needs of actors in different organizations. We return to this and related points in section IV, and in the concluding section.

II. IMPLEMENTATION AND PROGRAM DELIVERY

The pretrial program was implemented by a community corrections agency experienced in electronic monitoring of convicted offenders. Nonetheless, certain features of the program were modified for pretrial home detention. Most convicted offenders paid a daily fee while on the program (Baumer and Mendelsohn, 1990). This was not possible for pretrial defendants, since one important eligibility criterion was inability to post bond for relatively minor offenses. The post conviction program was operated from a central location in the Community Correction agency offices. To ease a screening process that involved interviewing people detained in jail, the pretrial program office was located in a dank, roach-infested chamber deep in the jail basement.

Eligibility

The multiple goals of this program produced complex eligibility criteria that cited charged offense, criminal history, living arrangements, and length of stay in jail. The program was initially restricted to persons charged with misdemeanors. Because too few such cases met additional criteria, eligibility was expanded to include those charged with

---

2. As described in the concluding section, all Community Corrections programs and staff have since been relocated into a central facility.
non-violent C and D felony offenses. Over the 13-month period examined here only 28 percent of program clients faced misdemeanor charges. Table 1 shows the variety of offense charges faced by persons accepted into the program. About half were property offenses (theft, forgery, burglary). Driving under the influence (DUI), public intoxication, and habitual traffic offenses accounted for another 30 percent. In contrast, the clients of Marion County's postconviction home detention program were more homogeneous; Baumer and Mendelsohn (1990) report that about two-thirds of offenders with a felony DUI charge.

Program eligibility criteria excluded those arrested on warrants, revoked bonds, or parole violations. Most defendants with a history of violence were also excluded. Nevertheless, some pretrial clients facing non-violent charges boasted a lengthy criminal history that included convictions for violent offenses. Thirteen percent had prior arrests for battery; six percent had been previously arrested on robbery charges.

Since the program was designed for people who could not post bond, defendants were not considered for the program until they had been detained in jail for some specified period. This was initially set at two weeks, but later reduced to five days. The purpose of this criterion was to give defendants the opportunity to raise money bond, and thereby avoid "widening the net" by placing overly restrictive conditions on those who could be released through traditional mechanisms. It was also possible for people to "buy out" of home detention by raising money for bail after they had been placed on the program. This happened infrequently, though it was more common in the early weeks of implementation.
Home detention with electronic monitoring implies certain technical criteria. Prospective clients were required to have a residence with a telephone in Marion County. If the home was shared, consent to the defendant's return was obtained from others in the household.

Finally, program staff responsible for screening clients tried to assess a prospective client's chance of successfully completing the program. They often relied on intuition and, after the program had been operating for some months, their own experiences in making these judgments. Those suspected of mental disabilities were considered bad risks. Staff also tried to screen out people exhibiting patterns of irresponsible behavior, such as a series of arrests for minor offenses in a short time period.

**Screening and Intake**

The pretrial program was implemented under great pressure to reduce the incumbent jail population. Accordingly, at program start-up candidates for release were identified from the jail roster; this was a pre-screening stage. Preliminary criminal history checks were then conducted on defendants held for eligible offenses. Names of those meeting pre-screening criteria were passed on to a program intake officer who conducted a more careful history check, including a search for outstanding arrest warrants. The intake officer also interviewed the prospective client, and sought permission to place the person on home detention from other household members.

If a client cleared these hurdles program staff prepared a court order for conditional release. This was first approved by prosecutors and
defense attorneys before being presented to a judge. Those actually placed on the program were briefed on equipment operation and other procedures; part of this briefing cited regulations and penalties for violations.

These procedures were incrementally modified, but remained essentially intact over the 13 month period. Over time other routes to pretrial home detention emerged. Some judges referred individual defendants to the program from the initial bail hearing; upon receipt of such persons, normal screening and intake procedures were followed. It should also be noted that screening for pretrial release on home detention took place after clients had been considered by other decision makers for other pretrial dispositions. In Marion County these included action by bail commissioners, recommendations by prosecutors, and a bail hearing before a judge. Only defendants who did not qualify for release on recognizance, could not raise bail, and could not enlist the services of a bondsman were considered for home detention.

This process turned out to be highly selective. Most of those screened were ruled not eligible for pretrial release. Table 2 shows that of the 1088 persons reviewed by the intake officer (ie, those surviving prescreening), about three quarters were not placed on the program. About half of all clients considered were rejected because of an extensive criminal history, or because the defendants or some member of his/her household declined. Some were released on bond or through other court order while being considered for the program. A small number of clients recommended by program staff were rejected by judges.
Monitoring Clients

The Marion County program used a "programmed contact" system, one of a variety of electronic monitoring technologies. Clients were fitted with a coded wristlet that matched a base unit attached to their home telephone. Contacts were initiated by a central computer that directed a "telsol" unit to dial telephone numbers. A recorded message announced that the "on-guard system" was calling and instructed clients to state their name, the time of day, and to then place their wristlet in the base unit receptacle. A successful contact between the coded wristlet and base unit verified the client's presence. Various authors (Schmidt and Curtis 1987; Friel et al. 1987) have described this and related technologies in more detail.

 Defendants on home detention were supervised by a field contact officer whose duties included reviewing printed records of computer-generated calls, following up on unsuccessful computer calls, and making periodic field visits to the defendant's home or workplace. Clients were assigned to one of three levels of contact, based on how long they had been in the program. During their first month, clients were supposed to receive 6 to 12 computer calls per day and at least one weekly field visit. If they completed one month on home detention without violations, the number of computer and field contacts could be decreased and clients were permitted to request four hours of errand time per week.

Baumer and Mendelsohn (1990) report that unsuccessful computer contacts were very common in the postconviction program for a variety of reasons. This was true of the pretrial program. Among the 198 clients for
whom computer call data were available, only 43 percent of all computer
calls produced a verified wristlet contact. The pretrial release program
used dated and worn equipment, and staff complained of design problems that
rendered the base unit attached to clients' telephones vulnerable to
accidents and casual abuse. As a result, equipment problems were
relatively common. Counting only "valid" calls, those that did not involve
some equipment or telephone malfunction, 54 percent resulted in a verified
contact.

Clients had to comply with various regulations in addition to the
obvious restriction to home and place of work. These included
miscellaneous rules about telephone use, equipment tampering, violating
pass privileges, and giving false information to program staff. Special
conditions were set for some persons, such as required attendance at
substance abuse counseling sessions. Violation of regulations could
produce an informal warning from program staff, a formal administrative
hearing, or termination.

About half of all pretrial clients were written up for at least one
violation. Over three-fourths of the 388 violations recorded from agency
records cited clients for unauthorized absence from home. Absences were
usually detected from a daily review of printed computer call records, and
unsuccessful computer calls produced manual calls by the field contact
officer to seek some explanation of the clients apparent absence. Missed
calls often occurred during authorized absences, when the client was at
work or on some other legitimate errand. Although computer programs could

3. Because of equipment failures and related problems, recoverable
copies of call records could not be obtained for the remaining clients.
be modified to take such absences into account, this was often not done for temporary changes in a person's schedule. If excuses for unauthorized absences were unconvincing, field officers could and did increase the frequency of calls. Occasional patterns of missed calls appeared to rarely produce any kind of sanction beyond an informal warning. A persistent pattern of missed calls for hours or days on end could result removal from the pretrial release program.

Written records of violations are very much a subjective report of how program staff view a defendant's conduct and how they assess the plausibility of explanations for absences. Whether a client receives a "write up" or more severe sanction depends both on the agency's ability to monitor clients, and on discretionary judgments by staff. Computer call records provide information on client behavior that, although limited, is less contaminated by agency decisions. Comparing these two sources of information provides a rough assessment of the scope and consistency of agency responses to missed electronic calls.

Figure 1 plots the percentage of successful computer calls (vertical axis) against the number of written program violations for each client. Absolute consistency in delivery would be indicated by an unambiguous clustering of cases along the negative diagonal. Such absolutes are seldom obtained in program evaluation, but this figure shows that persons with a higher proportion of verified computer calls are seldom cited for rule violations. As the percent successful calls declines, the number of citations increases. There are exceptions, most notably people with fewer than 40 percent verified calls but no program violations. In general,
however, agency staff appear to have been consistent in detecting and making official records of client absences from home.

Program "Learning Curve"

At the early stages of evaluation planning, personnel in the Community Corrections agency urged that start-up problems in implementing the pretrial program be recognized, in part because the program was initiated under strong pressure to get people out of jail quickly. Initial implementation meant moving from zero clients to the technical capacity of 50 as rapidly as possible. Staff believed the urgent need to release people from jail exacerbated the natural growing pains associated with new responsibilities that differed from their accustomed tasks.

To some extent, our analysis of program records can document some changes in program implementation that may be associated with both reduced pressure after responding to the initial need to remove people from jail, and a natural learning curve. More detail on program outcomes is provided below, but our analysis revealed that many more clients absconded from the program during the first four months of operation by the Marion County Community Corrections agency.

There is also some evidence that program staff may have become more conservative in accepting persons with lengthy criminal history records, and become more strict in citing clients for program violations. Figure 2 plots the average number of criminal history incidents and the average number of program violations per client for different program quarters.

4. Clients were classified into program quarters here according to intake date.
The mean number of prior brushes with the law declined until the fourth quarter, while the average number of recorded violations increased. Similarly, there was some improvement in both the reliability of computer and telephone equipment, and in the proportion of computer calls that were successful. Figure 3 documents a modest improvement in verified phone contacts, and a convergence of percent successful for all calls and only those calls not involving equipment problems (percent valid). This convergence suggests that agency staff became more familiar with the equipment over time, and were better able to explain its operation to program clients. There is other evidence that the pretrial program was plagued by what Baumer and Mendelsohn (1990) term "technoshock," but Figure 3 indicates that some equipment problems diminished over time.

III. PROGRAM COMPLETION

It was initially intended that program clients would serve 90 days on home detention with electronic monitoring, after which they would be released to court; this is considered a successful termination. Most clients whose cases had not yet reached disposition were recommended for release on recognizance. The rationale for this policy was the belief that people who could successfully complete 90 days on home detention presented low risk of both flight and further arrest. In early months of the program some clients served only a few weeks or days before being released. Some of these defendants were able to raise money for bail and be released from home detention. Others were close to their scheduled trial date when placed on the program.

There were two types of unsuccessful program exits, technical violation and absconding. Clients terminated as technical violators
normally exhibited a pattern of rule infractions, almost always being absent from home without permission. Repeated absences that produced write-ups caused staff to seek revocation of pretrial detention from the court. Though initially it was assumed that persons who were violated would be returned to jail, many were simply released, essentially under the same conditions as defendants who were originally released on recognizance shortly after arrest.

If the pretrial staff could not contact a client for more than 2 or 3 days, they could request a revocation of conditional release and seek an arrest warrant thereby terminating the person as an absconder. The precise number of days varied, but three days without contact was a rule of thumb in deciding that a client had absconded. Staff visited absconders' residence to collect the telephone base unit, and requested a warrant for the person's arrest. If a vanished client had not removed and left behind the programmed contact wristlet, the warrant could have included new charges for theft.

Table 3 shows the distribution of clients by termination status, and includes the average number of rule violations and days on the program for each category\(^5\). The bottom half of Table 3 compares successful and unsuccessful terminations from the pretrial and postconviction programs, indicating that unsuccessful exits were more common for pretrial clients. Nineteen percent of convicted clients were listed as "violated exits" compared to 27 percent for the pretrial program. Only 3 percent absconded

---

5. Table 3 excludes 5 clients who were still on pretrial home detention in April 1990; 3 additional clients were released from the program by court order for medical reasons or substance abuse treatment.
from postconviction home detention, compared to 14 percent of all pretrial clients. Terminations for excessive rule violations were similar -- 16 percent of postconviction clients and 13 percent of those on the pretrial program.

As expected, Table 3 also shows that unsuccessful program exits occurred sooner than successful terminations. The average time on the program for those released to court was just under the intended 90-day period, but the mean of 85 days obscures the large variation in how long people awaited trial at home. Thirteen persons spent more than 180 days on the program; this included one client who absconded after 196 days. Most absconders left much earlier; this group averaged about 6 weeks.

The last column of Table 3 shows the average number of rule violation write-ups for each termination type. It is almost tautologous to note that technical violators had the highest number of rule violations; this termination status is caused by rule violations. Absconders were less often cited that violators, but these persons averaged just under three write-ups before taking flight, compared to an average of less than one for clients released to court.

Patterns of Program Success

It is of course not realistic to expect that a home detention program, whether serving convicted or pretrial clients, can successfully monitor all persons to completion. Since discretion is inherent in termination statuses, a perfect or near-perfect record would be immediately suspect. This is because, as Baumer and Mendelsohn (1990) have described, termination status is as much a product of agency decisions and tolerance
as it is a function of client behavior. A program can achieve 100% success by failing to monitor clients and thereby violating no one. On the other hand, being overly tolerant of absences implies that a program may be lax in protecting the public from convicted offenders or those facing criminal charges. Such arguments apply more to the technical violation status than to absconding. The latter is a less subjective indicator of program failure; agency discretion comes into play only in deciding how many days without contact must elapse before it is evident that a client has fled.

In any event, it is important to try to understand why some persons are more likely to succeed on home detention while others exhibit patterns of rule-violating behavior or abscond. Table 4 displays termination status by selected client characteristics: household living arrangement, marital status, and employment status at intake.

About half of clients were employed at program intake, and were more likely to be released as successful exits. The relatively small number of married clients who lived with their spouse had the highest success rate; 92 percent were released to court. Most clients were single and lived with various family members or acquaintances. Among this group, those living with parents or opposite-sex roommates fared best. The "other family" category includes primarily siblings, grandparents, aunts or uncles; 60 percent of clients in this group successfully completed the program. Only four persons lived alone (included in "other"), the category that might be suspect as most conducive to failure. However only one of these people was unsuccessfully terminated. The balance of the "other" category includes "friend," and "roommate" where gender was not specified.
The final portion of Table 4 presents the distribution of termination status by program "quarter," where the first four months of program operation defines the first quarter. Program quarter in this table is based on the quarter in which clients were terminated from the program. This documents clear improvement, or "learning" in later program quarters. The overall increase in percent successful termination is modest, from 69 to 76 percent. Reduction in the percent clients who absconded is more interesting; this declines from over one-quarter of terminations to 5 percent by mid-1989. The concomitant increase in percent terminated for technical violations suggests that program staff were being more attentive to patterns of rule violations by clients, or that they were being less tolerant of such behavior.

It is important to keep in mind that termination status reflects an agency decision about clients. In later program quarters staff may have been better able to recognize behaviors that suggested clients were bad risks for continuing on the program, and decided to terminate them for rule violations. In a sense this part of Table 4 shows mixed success for the program in later quarters. It succeeded in reducing absconders and increasing, slightly, the proportion of successful exits. Staff also "succeeded" in recommending that more people be removed from home detention and returned to jail. We discuss the implications of what might be termed this increasingly conservative decision-making below, in the section comparing pretrial and postconviction programs.

There was virtually no difference in success rates by offense class: 72 percent of persons facing misdemeanor charges were successful exits, compared to 73 percent of felony defendants. Table 5 reveals some
variation in termination status by most serious program offense. The small number of defendants accused of prostitution were the worst risks; only three of the seven were released to court. For all other offense categories including more than a handful of defendants, the success rate ranged between 67 and 76 percent. The "other" category in this table includes 11 persons charged with weapons offenses, resisting arrest, or battery/intimidation, all of whom were successful program exits.

For home detention with electronic monitoring, records of computer calls are usually the first indication that a client has absconded, or is becoming a persistent rule violator. Figure 4 displays boxplot distributions of computer call records for each of the three program outcomes. The asterisk in each box indicates the median percent of valid computer calls that produced a verified wristlet contact. Each box includes 50 percent of cases within a category; the box boundaries are the 25th and 75th percentiles, so each box includes the middle 50 percent. The "tails" of each box show the range of cases within 1.5 box lengths from each boundary, and express the dispersion of computer calls within each termination status.

Figure 4 indicates that clients terminated as violators or absconders have substantially fewer verified computer calls than do persons released

---

6. The total number of cases shown in this figure is 195. The number is lower than the N of 216 for clients terminated from the program because computer call data were not available for all clients.
to court. There is considerable variation in computer calls for absconders, although the 75th percentile for this group (top box boundary) is below the 25th percentile for successful clients (bottom box boundary). The very low tail for absconders is deceptive, and in part due to how absconders are identified. Client absences from home produce, by definition, unsuccessful computer calls. When an unsuccessful call is detected, the computer begins to redial the same person at an increasing rate. As a result, unsuccessful calls tend to multiply until manual intervention disrupts the cycle. It is therefore likely that the extremely low tail of variation for absconders is partially due to the simple fact that their absence tends to increase the number of unsuccessful calls.

This figure does nevertheless offer some information that is useful in evaluating the pretrial program. Staff responded to patterns of unsuccessful calls by terminating clients as violators. Both the central point and dispersion of successful calls for those released to court are above 50 percent; that is, about 75 percent of clients released to court had records of computer calls that were successful at least 50 percent of the time.

Absconders: The Closing Window of Opportunity

We have noted that the rationale and goals of pretrial home detention are different from those underlying such programs for convicted offenders. It is important to keep these in mind in considering some of the empirical differences between the two programs. Most notable is that absconding was

7. Figure 4 displays medians. One-way analysis of variance on means reveals significant differences (F = 27.2, df = 2, P ≤ .001).
rare among postconviction clients in Marion county; about one-fifth of convicted offenders were unsuccessfully terminated from the program, but only 3 percent took flight. That as many clients absconded as were violated from the pretrial program is important since one goal of pretrial detention (at home or in jail) is to ensure that defendants appear in court.

The somewhat different incentives that affect postconviction and pretrial clients on home detention offer a plausible explanation for absconding by the latter. Convicted offenders are serving a sentence at home and see greater freedom on the horizon if they comply with program requirements, creating incentives for continued good behavior that will produce fewer restrictions in the future. In contrast, pretrial clients face a murky future. If they are convicted of charges, time in jail or prison may be in the offing. The possibility of less freedom in the future may create incentives for pretrial clients to "live it up" or flee before their case is adjudicated. For both populations these differing incentives become stronger as individuals near completion of assigned home detention terms. For postconviction clients, time in program is associated with imminent sentence completion, increasing the incentives for compliance. However, pretrial clients may view their approaching disposition date as a closing window of opportunity, weakening the incentives to accept the restrictive conditions of home detention.

Table 6 offers some evidence to support the view that this different incentive structure contributes to the higher rate of absconding by those on the pretrial program, compared to postconviction clients. This table presents three sources of information for the 191 clients whose cases had
reached disposition by April 1990: (1) percentage distribution of program termination status crosstabulated by sentence at disposition; (2) mean criminal history incidents for each category; and (3) mean days on pretrial home detention for each category. The sentence variable category "none executed" includes persons who were acquitted of all charges (3), those whose charges were dismissed (34), and those for whom all sentenced jail or prison time was suspended (62); that is 99 clients who did not do time in jail or prison. Cases in the "jail executed" category received non-suspended sentences up to one year, and the "prison executed" group includes persons receiving sentences of one year or more.

The percentages in Table 6 express what percent of clients in each sentence category were released from pretrial home detention in each termination status. Of those executing no jail or prison time, 86 percent were released to court, and only 3 percent absconded. In contrast, two-thirds of convicted offenders sentenced to prison were successfully terminated from pretrial home detention, while about one-quarter absconded.

This indicates that those clients who eventually received more severe sentences were more likely to be terminated as absconders and suggests that persons facing prison time anticipate their fate. Such an interpretation assumes first that absconders are able to foretell what sentence awaits them, and second that their decision to flee is based at least in part on this prophecy. It is not possible to directly test this proposition, but comparing average criminal history and program days across categories lends some support. Criminal courts in Indiana do not use sentence guidelines,

8. Computing percentages this way assumes that anticipated sentence affects termination status.
but sentencing practices are nonetheless based in part on an offender's prior record. For example, a second unrelated felony conviction carries a mandatory sentence to jail or prison. Table 6 displays a uniform tendency for persons with higher criminal histories to receive more severe sentences. Absconders who receive prison time boast the highest criminal history score of all categories. Furthermore, prison-bound absconders served the lowest number of days on home detention, about one month, before taking flight.

Together, the evidence in Table 6 implies that some portion of defendants with long criminal records anticipate a long sentence and run for it after serving a short time on home detention. Such an interpretation lends tentative support to the "closing window of opportunity" hypothesis. The pattern of results in Table 6 also offer some guidance in screening persons for home detention, a topic to which we return in the section on program recommendations.

IV. COMPARING PRETRIAL AND POSTCONVICTION HOME DETENTION

There were many similarities between these two programs delivered by the same agency in the same jurisdiction with essentially the same technology. However, the pretrial and postconviction programs were different in several ways: variations in clients, variations associated with program rationale, and differences in actual program operation.

Client Differences

The pretrial home detention program served a broader variety of clients. As noted, over two-thirds of postconviction clients were convicted of driving under the influence of alcohol. Many pretrial clients
faced alcohol-related charges, but others were arrested for a large variety of offenses, as shown in Table 1. Differences in offenses are in part related to the stage of criminal proceedings in which clients in the pretrial and postconviction programs emerged with a wristlet strapped to their arm. Persons screened for pretrial release are "upstream," while convicted offenders are beyond even the downstream sentencing stage. The common criminal justice funnel metaphor illustrates this difference: Those arrested and awaiting trial in jail are much closer to the wider intake part of the funnel than the much smaller number sentenced to probation.

In a sense, selected groups of offenders could be targeted in the postconviction program. Targeting was not necessarily systematic or centralized, but rather the product of general patterns of decisions by judges, probation officers, prosecutors, the Community Corrections agency, and the defense bar. Offenders convicted of driving under the influence in Marion County appear to have been targeted for home detention. In contrast, the pretrial program served "leftover" clients, the residuals of negative decisions by various actors who ruled defendants ineligible for other types of pretrial release. Staff in the pretrial program were able to play a more active role in selecting cases, compared to their counterparts who accepted postconviction clients largely as a result of decisions made by other actors. But the nature of the potential client pool precluded targeting pretrial clients by type of charge.

Program Design and Rationale

The general goals and rationale for the pretrial home detention program were different from those of the postconviction program. The latter was viewed as a sentencing alternative between straight probation
and incarceration, and therefore shared goals with other sentencing options. It was intended to help relieve prison crowding, punish, incapacitate, and rehabilitate (cf., Tonry 1990). The pretrial release program sought to relieve jail crowding and insure appearance in court.

While rehabilitation and punishment were at least implied by the restrictive conditions imposed on home detention clients, they could not be explicit goals of the pretrial program. Successful pretrial clients whose cases had not reached disposition were usually released without bond—essentially on recognizance. Releasing defendants without bond after they have spent time on pretrial home detention assumes that the program may "rehabilitate" individuals who were not initially eligible for release on recognizance.

The potential for having user fees offset the costs of program delivery is an attractive feature of postconviction home detention. Baumer and Mendelsohn (1990) report that not all sentenced clients were able to pay, and that some paid less than others, but the majority of Marion County postconviction clients doing time at home paid something. The pretrial home detention program could not charge program costs to its clients because it was designed to release people who were unable to make bail for relatively minor charges. There was some sentiment in the agency that even a partial user fee produced a personal investment by postconviction clients in their own fate, which may have augmented the rehabilitative effects of electronic monitoring by internalizing incentives for good behavior. The extent to which this microeconomic calculus would be present among pretrial clients is unknown, because the lack of even a token fee obviated such incentives.
Personnel costs for screening and identifying clients were higher for the pretrial program. Some of these costs are implied by Table 2, which documents the large number of pretrial cases that had to be screened before eligible persons were found. Agency staff conducted a less thorough review of postconviction offenders and rejected few cases. The initial 90-day rule increased the turnover among pretrial clients, requiring staff to search anew through the jail population to find more eligible defendants. In the early months of the pretrial program, client turnover was greater; many people were placed on home detention for less than one month.

That pretrial clients have fewer resources highlights another general difference between them and offenders on postconviction home detention. Table 2 showed that about 16% of persons screened were rejected because they lacked telephones. Many others did not qualify because they had no permanent residence; they shuttled among various roommates who were amenable to accommodating them temporarily, but who were unwilling to welcome a permanent guest burdened with the restrictive conditions of home detention. Baumer and Mendelsohn (1990) detail the externalities of a programmed-contact system for the housemates of postconviction clients. One pretrial client was terminated from the program because his brother could no longer tolerate frequent calls during the wee hours of the night.

Program Operation and Delivery

Those arrested and awaiting trial in jail are much closer to the wider intake part of the criminal justice funnel than are persons sentenced to probation. Differences in the stage of processing imply differences in the amount and quality of information available about defendants. More information is at hand for convicted offenders than for pretrial cases for
two reasons. First, Marion County probation staff complete a presentence investigation on convicted persons; no counterpart is available for pretrial clients, with the exception of those recently sentenced for other offenses. The second reason concerns the length of time from arrest to consideration for release on home detention. In 1986, the median time from arrest to disposition for felony cases in Marion County was 156 days (Boland et al. 1989, p. 59), providing ample time to obtain a reasonably complete criminal history for postconviction clients, even in a state with notoriously incomplete criminal history records. By contrast, persons screened for pretrial release were often in custody for only a few days, which meant that outstanding warrants or parole violations may not have been disclosed on the criminal history or other records consulted by program staff. An extreme example of the problems this could cause is illustrated by a defendant who faced credit card fraud charges but had no prior criminal record in Indiana. He absconded within days of his release and program staff later discovered that warrants were outstanding on this man in several Southern states. Staff discovered outstanding arrest warrants on two additional persons after they had been released on pretrial home detention. Each was arrested and terminated as a technical violator.

The different position of each program in criminal case flow also produced fundamental differences in the pool of potential clients. "Creaming," the process of selecting cases most likely to respond to treatment, is inherent in making sentencing decisions that include home detention as an option. Agency personnel in the postconviction program actively searched for offenders who were likely to succeed on home detention. This strategy was more difficult in the pretrial program, where
staff sifted among the residuals from other pretrial release options to select the best of what was left.

An additional difference is concealed by the fact that the same agency delivered both programs. Community Corrections agencies in Indiana were created to deliver alternative sentences to convicted offenders. A postconviction home detention program is entirely consistent with the statutory mandate of such agencies, but taking care of persons awaiting trial is a different story. The pretrial program was thrust upon the agency under the assumption that one home detention program with electronic monitoring was like any other; whether someone was awaiting disposition or doing time was assumed to make little difference. Pretrial home detention was very much an ad hoc, add-on program that served as a hasty strategy for getting people out of jail. Some additional organizational and management problems that affected the pretrial program reflect the failure to recognize differences between the operation of pretrial and postconviction home detention programs.

The physical location of pretrial staff with program responsibility was spread over three offices in two buildings. The agency director, with authority over all community corrections programs, worked in an office building while pretrial program delivery staff were located across the street in the jail. Since pretrial clients were recruited from jail, the director of jail programs, located in a secure lockup wing, was given responsibility for overseeing the pretrial release program. Staff actually doing the work of screening and field contact occupied a room two floors below, adjoining the temporary holding cell area. Differences in the physical location of staff for the two programs produced positive and
negative effects. On the positive side, the crowded office conditions that intruded on the privacy of persons on postconviction home detention (Baumer and Mendelsohn 1990) were not a problem in screening and serving pretrial clients. On the other hand, this remote location impeded regular supervision of the pretrial program.

Lipsky (1980) emphasizes the importance of physical location in his general discussion of street-level bureaucrats, describing how geographic decentralization makes it more difficult to supervise them and enhances their ability to exercise discretion. The effects of decentralization were most evident in the limited supervision of pretrial field contact staff. For several months one person conducted both intake screening and field contact for the pretrial program, facilitating idiosyncratic decision making about whom to accept and how to keep track of them. Observation of field contact officers and analysis of program delivery records indicates that staff relied on their detailed experience with individual clients to produce ad hoc and ad hominem program modifications.

These two home detention programs shared some problems in program delivery, most notably what Baumer and Mendelsohn (1990) term "technoshock." Claims by vendors notwithstanding, the technology of electronic monitoring equipment has not been well designed to mesh with the needs of what is essentially a probation services organization. Clients may be absent from their homes for various reasons, all of which are difficult to explain to a computer. Absences produce about as many unsuccessful as successful calls, and require program staff to decide if and how to follow up on records of missed calls.
The Illusion of Control

A fundamental problem in the pretrial program revolved around the lack of any real power among program staff. Despite the written descriptions of regulations and verbal warnings given to clients at program intake, there was little that staff could do to enforce rules. Sanctions for violations ranged from informal warnings to revocation, but field contact officers had no real powers beyond persuasion.

If the pretrial staff could not contact a client for more than 2 or 3 days, they could request a revocation of conditional release and seek an arrest warrant. Absconders could only be arrested by court warrant officers or regular police. Arrests by the latter occurred only if the defendant was picked up for a new charge while listed as an absconder. Largely because of other demands on their time, warrant officers did not begin seeking these missing clients until they missed a scheduled court appearance. Postconviction staff possessed the same array of informal sanctions as did pretrial staff. However, a serious violation could result in a probation violation hearing and possible imposition of the suspended sentence. This threat strengthened the persuasive powers of informal sanctions that could be applied to persons on the postconviction program.

In both the pretrial and postconviction programs there was often a gap between what clients were told to expect while on home detention, and the limited capacity of staff to actually monitor them in the field. The daily review of missed computer contacts produced manual calls and an evaluation of clients' explanations. In most cases verbal warnings were the most severe sanctions that resulted. Clients were told that authorized absences were restricted to work, substance abuse treatment if appropriate, and
planned errand time that had been authorized in advance. But program staff could and did grant informal exceptions to those persons who called in need of some immediate errand time.

Inconsistency in program delivery, together with the inability to follow up on threats, has at least the potential to reduce electronic monitoring to a high-level cat-and-mouse game. If clients begin to second-guess when they may leave their homes without either being caught or punished, the program potentially reinforces behavior that got them into trouble in the first place.

**Mixed Organizational Incentives**

The more direct control in choosing clients exercised by pretrial staff allowed them to be selective in the screening stage. Feeley (1983, p. 61) documents a similar phenomenon in an Oakland pretrial reform project initiated in the early 1970s: "... the unit's staff was so afraid of failure and bad publicity that it contributed to more conservative rather than more liberal pretrial release conditions."

A tendency similar to that identified by Feeley was in part a product of the pretrial program's genesis. Other actors in other organizations responded to demands to reduce the jail population by handing a pretrial release program to the Community Corrections agency. From the perspective of judges and prosecutors, this was an attractive solution to a pressing problem. Responsibility for releasing defendants and ensuring that they appeared in court and did not get arrested again was passed on to a third party. Prosecutors and judges could take credit for aggressive crime control that resulted in full jails, while avoiding blame for both overly-
conservative release decisions and individual mistakes made by a different organization.

Once pretrial clients were released from the jail and placed on home detention, the agency's incentives shifted to become more tolerant of program violations by clients. Since one goal of pretrial home detention was to relieve jail crowding, or better use available resources, returning a client to jail was a costly action. If program staff succeeded in violating clients who did not comply with regulations, the program failed to thin the jail population. Violating clients was also a tacit admission that the screening process was flawed and that public safety had been compromised.

V. SUMMARY, RECOMMENDATIONS, AND CONCLUSION

We have frequently pointed to the mixed goals of the pretrial program, and cited these as potential sources of problems in program operation. At this point we discuss the three most prominent goals of pretrial home detention, and summarize our assessment of how well those goals have been attained. This is followed by recommendations for improving the operation and management of a pretrial home detention program, and a concluding statement about the general viability of such programs.

Program Goals

Ensuring Appearance at Trial. A total of 30 defendants were terminated from the program as absconders, but only 7 of these people remained at large at the end of July 1989. The remaining 23 absconders either appeared in court or were arrested by court warrant officers after missing a court date. Whether a true rate of at-large absconders of 3
percent (7 of 224 clients) is acceptable depends largely on choices that must be made by public officials.

It is not possible to directly compare this figure against failure to appear (FTA) rates for defendants release on bond or recognizance. However, an examination of FTA summary data for defendants who miss preliminary hearing dates indicates that appearance rates for defendants on pretrial home detention are comparable to those for persons released through traditional mechanisms. Summaries of release dispositions for five months in 1989 indicate that an average of 5 percent of defendants released on recognizance, the most appropriate comparison group for pretrial clients, failed to appear at their initial court hearing. The FTA rates for those released on personal or surety bonds were 2 percent and 3 percent, respectively. It is reasonable to assume that FTA rates for court dates after the initial hearing would be higher. This limited evidence therefore suggests that persons on pretrial home detention have slightly higher appearance rates than do those in the most appropriate comparison group, defendants released on recognizance. However, that a substantial number of people were terminated as absconders indicates that the program fell short of insuring that people placed on pretrial home detention did in fact comply with court-ordered requirements to remain at home.

Protecting Public Safety. Our analysis of client files revealed that a total of five clients were arrested while on pretrial home detention. Two of these persons were arrested on warrants, one for a juvenile warrant. Arrest on a warrant after persons have been placed on home detention reflects more on the screening and intake stage than it does on failure to protect the public.
Of the three arrested for new offenses, two were charged with drug-related crimes (one possession and one dealing); neither of these two clients faced drug charges when initially placed on home detention. The third new arrest involved a defendant who was placed on the program for habitual traffic offender charges stemming from repeat drunk driving; this person was arrested for a new drunk driving offense 16 days after release from jail. Again, determining whether 3 new arrests out of 224 clients (1.3%) represents an acceptable record in protecting the public is beyond the scope of this evaluation. Comparison data for defendants released on recognizance or bond are not available, but it is probably reasonable to expect that at least one percent of these persons are arrested on new charges before their final disposition.

A more fundamental, and difficult, question is whether pretrial clients committed new offenses while on home detention. New arrests are limited as an indicator of failure to protect the public since this measure assumes that offenses are reported to police, and a suspect arrested. Absent reliable self-reports of offending, it is not possible to determine whether individuals commit new crimes that do not result in arrest.

We raise this issue because we learned, through circumstance, that one pretrial client appeared to participate in a serious violent crime while on home detention. This person was not charged with the offense until about 11 months later, and the fact that he was on home detention when the crime took place has not been publicly disclosed. A careful check of

9. The client confessed to involvement in the incident. Charges against this person and other defendants were later dropped but the confession was not retracted.
program records indicated that the client had no prior adult arrests before being placed on home detention, was not cited for any program violations, had verified contacts for 60 percent of all computer calls, and was released to the court after 45 days on the program. In short, according to eligibility criteria this person was an excellent candidate for pretrial release, and by all available measures completed the program successfully. We also examined all computer call records for the day and time the offense occurred, and discovered that the computer and dialing unit were not functioning for a 20-hour period that included the estimated time of the offense. This malfunction was either not detected or not reported by program staff at the time of the incident.

The important point here is that home detention with electronic monitoring cannot guarantee to protect the public from further crimes. A programmed contact system does not incapacitate a defendant. It can provide information about when people are at home, but only if electronic monitoring equipment is functioning properly and carefully monitored. Furthermore, electronic evidence of a client's absence does not empower agency staff to effect an arrest, let alone prevent an offense. In the incident described above, even if equipment had been functioning properly, and the client's absence (at 2:00 AM) had been detected, neither program staff nor police could conceivably have intervened.

**Jail Resource Management.** Pretrial home detention shares the goals of protecting the public and assuring appearance at trial with other pretrial dispositions. In the present case, getting people out of jail was the primary impetus for the program, despite the fact that this objective has no legal foundation in determining a person's pretrial status. At the simplest level, the pretrial program appears to have succeeded in this
effort. The 224 clients traced in this evaluation totaled 16,325 person-days on home detention, implying that scarce jail cells were freed for other persons awaiting trial or serving sentences. Furthermore, most of these persons were recruited directly from the jail, rather than routed to home detention in lieu of some other release mechanism. To some extent then, pretrial home detention enabled criminal justice professionals in Marion County to better use available jail resources.

It is important to be cautious in making too much of this claim. Even though most program clients were enlisted from the jail, the initial two-week criterion gave way to expediency. It is likely that some persons placed on home detention may have been able to raise bail after a few more days in jail, but the incentives for doing so were weakened after incarceration in jail gave way to detention at home. We are not able to determine how quickly pretrial defendants' cases were adjudicated. However, it is reasonable to expect that the motivation to accept a plea bargain or press for a speedy trial was weaker among those released to home detention compared to those who remained in jail. Therefore the total number of person days served on home detention no doubt overestimates the number of jail days saved.

Recommendations

Expanding Pretrial Home Detention. If the program was successful in getting some people out of jail, it raises the question of whether more persons could have been placed on home detention. As noted earlier, this view was held by some public officials, though it was not expressed by personnel in the Community Corrections agency. Any resolution of this issue requires a careful consideration of the different components of
Pretrial home detention. Pretrial detention jail seeks to protect the public while bringing defendants to trial. Pretrial release preserves resources by not incarcerating people who will appear in court and who present a low risk of further transgressions. Home detention combines these two activities by placing restrictive conditions on people who are not in jail. On the one hand, more people who are released on recognizance could be placed on home detention, but this widens the net. Or; more people awaiting trial in jail could be released, but this presents a greater risk of failure to protect the public.

Our assessment will focus in the latter alternative, although it is possible that public safety would be enhanced by placing some defendants on home detention rather than releasing them to less restrictive pretrial dispositions. Determining whether the public could be better protected by placing more persons on home detention instead of less restrictive release is beyond the scope of this evaluation. We can, however address the issue of releasing more people from jail to pretrial home detention.

The combined criteria of a suitable residence with a telephone and inability to qualify for other forms of pretrial release are immutable and probably preclude releasing more people from jail. Bail is usually relatively low for defendants facing non-violent charges. If people cannot post bail under such circumstances they are less likely to have a suitable residence with a telephone. Bail will be higher for persons facing non-violent charges if they also have a more extensive criminal history. Such defendants might be released to home detention, but our interpretation of Table 6 indicates that a longer criminal history is more likely to produce a jail or prison term, and persons facing such sentences are riskier bets.
There is a certain symmetry here that is difficult to ignore. Many of the same criteria that are used to assess suitability for pretrial release on recognizance are applied to those being considered for pretrial home detention. Somehow, it is hoped, people who do not quite qualify for recognizance release will be discovered in the jail. When convicted offenders are sentenced, many of the same criteria surface again: those facing serious charges and those with long records get longer time. The risks of flight are greater for defendants facing prison time.

We therefore do not believe that many more defendants awaiting trial in jail would be suitable candidates for home detention. People with no prior record who face more serious or violent charges might be released, but this would entail some political if not public safety risk. The same is probably true of drug offenders. It would be difficult for most public officials to advocate placing small-time dealers or users who cannot make bail on home detention, unless release conditions also included periodic urine tests. But urine testing programs could as easily accompany less restrictive release conditions.

Screening and Intake. Our analysis revealed two factors that are important, if not unequivocal, correlates of program success: living arrangement and criminal history. Living with one or both parents was the modal category, and clients in such households were much better risks than those living with other relatives. This finding is probably confounded by other factors, such as age and the general status of familial relationships. The median age for clients living with their parents was 22, compared to 27 for all cases. It is likely that many defendants who moved into their parents' home after release from jail had stronger, or at
least more recent, family ties that could have contributed to their successful completion of the program. Only 13 defendants lived with a spouse, but they were the most likely to be successful (92%). Clients in known quasi-marital relationships, living with an opposite-sex roommate, also did well.

These findings offer some guidance for the screening function of home detention programs. If potential clients are able to return to a home with some type of "traditional" family structure, they are more likely to succeed. Persons who live with members of their extended family, or unrelated persons are likely to perform less well.

We have discussed the importance of criminal history at some length, and recommend that past record be examined very carefully when screening program clients. The measure used here, aggregate counts of arrests and convictions, is overly crude and conceals some qualitative differences in program outcomes. For example, clients living with their spouse had the highest criminal history count, even though they were most successful on program outcome. For most clients in this category these past incidents were minor offenses that were usually alcohol-related; such a record is less likely to produce a long jail or prison term. The key is for screening staff to anticipate the probable sentence range that a potential client will face if convicted.

Organization and Management. Like virtually all criminal justice agencies that are responsible for dealing with individuals, the Marion County Community Corrections agency was more attentive to recordkeeping on individuals than to aggregate measures of performance. Electronic monitoring equipment produces an astonishing volume of information on
individual calls. But this information was used only on a case-by-case and
call-by-call basis. It is important for field contact staff to conduct
daily reviews of phone logs to detect absences, but the equipment should
also be capable of producing aggregate reports on a weekly basis for
individual clients. Agency staff should routinely consult these reports as
indicators of activity patterns. A declining rate of successful calls
should be considered as early warning that absences may be increasing.

Similarly, program managers should carefully review the written logs
and other records maintained by field contact officers. These were
incomplete and of widely varying quality for the Marion County program.
Unless computer and manual calls, together with field visits, are carefully
documented and reviewed, it is not possible to determine whether the
program is being delivered consistently over time and across clients. If
inconsistency is perceived by clients, it becomes more likely that they
will try to guess when they can leave their homes without being caught.
Furthermore, records of program delivery are required to determine whether
electronic monitoring and other contacts are being implemented as designed.
These are the interventions in a home detention program, and analogous to
doses of medication in a drug therapy regimen. If a treatment is not
reliably implemented as designed, it cannot be expected to have the desired
impact. Therefore, consistency in program delivery is important, and this
cannot be assessed without consistent recordkeeping.

Any electronic monitoring program, whether serving postconviction or
pretrial populations must be subject to regular supervision. The nature of
tasks performed by screening and field contact personnel have the potential
of affording them considerable discretion in program delivery, and such
discretion can undermine the overall program. The remote location of field contact staff in Marion County's pretrial program hindered regular supervision of their activities. In the course of our evaluation we witnessed occasional departures from written practice in granting errand time to clients on request. The nature of tasks shared by the two full-time staff persons precluded keeping regular schedules; computer and telephone equipment was not consistently monitored. Although program staff could be summoned through pagers in the case of equipment malfunctions, they were not able to respond quickly, which further undermined the consistency of monitoring.

Problems associated with location have been addressed in the agency's new centralized facilities. Other jurisdictions considering similar programs must recognize that electronic monitoring is neither automatic nor foolproof. The equipment requires some attention if it is to maintain any semblance of regularity in keeping track of clients. Staff who monitor both equipment and people require some level of direct supervision.

Training is a related issue. Staff in Marion County's pretrial program were not well-versed in operating the equipment. For example, monthly backup copies of computer call records were regularly made onto floppy disks. However, data for two program months were not usable because staff had been copying files onto disks that were not compatible with the computer system. This problem was not discovered until we began to recover call record data for this evaluation because the agency made no use of these data.

Part of Baumer and Mendelsohn's (1990) discussion of "technoshock" applies here. Equipment manufacturers and vendors do not appear to have
integrated electronic monitoring hardware and software into the needs of
criminal justice agencies. Most persons on home detention are employed,
but many have varying schedules. As Baumer and Mendelsohn have noted, many
clients seek overtime work as a legitimate means of staying away from home.
Computer calling schedules can be reprogrammed to take varying working
hours and other legitimate absences into account, but staff do not always
do this. Enhanced supervision, training, and software design would improve
the ability of staff to reliably operate equipment and monitor clients.

Interagency Coordination. Many different actors from different
organizations were involved in the Marion County pretrial program, but the
routines of these organizations were not integrated in any systematic way.
Some judges refused to consider clients for release in the program. Some
deputy prosecutors viewed increased supervision of people now released on
recognizance as desirable. Warrant officers would fetch pretrial
absconders only if they failed to appear in court. The general literature
on criminal courts (eg, Eisenstein and Jacob 1977) and more specific
studies of court reform (Feeley 1983), consistently point to the shared
incentives of actors in different organizations as reasons why changes
imposed from above or outside often fail. In a similar fashion, if a
program delivered by yet another agency is simply grafted on to this
system, it must adapt to the complex and often conflicting goals pursued by
other actors.

When initially implemented, Marion County's program screened
"leftover" defendants from the jail -- those who did not qualify for
release on recognizance and who could not post bail. The screening
function has since been separated from the Community Corrections agency and
moved "upstream," so that defendants were considered for pretrial home detention at the same time they were evaluated for other pretrial dispositions. This change has the potential to widen the net by placing persons previously released through other means on home detention. But unifying pretrial release decisionmaking better integrates the home detention program into the network of organizations processing criminal defendants.

Conclusion

Local governments throughout the nation face the problem of jail crowding. Innovative forms of punishment and pretrial release are no longer simply attractive options; they have become necessary alternative policies for many jurisdictions. Pretrial home detention with electronic monitoring can be a viable alternative to detention in jail. But like most other experiments in innovative criminal justice policy, its utility is limited. Just as some persons are poor risks for release on recognizance or bail, pretrial home detention is not suitable for all defendants. In Marion County's experience, only a relatively small proportion of persons not released through other mechanisms were placed on home detention. We do not believe many additional persons could have been released.

Similar programs may be suitable for other large cities, but a program's viability depends on the makeup of a jail population. If large numbers of persons facing non-violent charges are being detained, many such persons may be released. A stand-alone pretrial home detention program is not suitable for smaller jurisdictions, or larger areas with relatively few minor offenders in jail. Marion County's experience suggests an alternative. In mid-1990, after about two year's experience, the Community
Corrections agency merged the pretrial home detention program with its postconviction program. About 20 wristlets are designated for pretrial clients, and if a waiting list develops for the program additional units may be purchased.

Other cities considering similar merged programs must recognize that pretrial and postconviction clients are different in many important ways. If there is to be a workable program of conditional pretrial release with home detention, it must be designed with these differences in mind. The problems associated with screening and monitoring different groups are not insurmountable. However, the implications and limits of a technology developed for one population emerging at one stage of the criminal justice process must be recognized before being applied to a different group just entering the process.
REFERENCES


Table 1

Most Serious Charge Faced by Program Clients

<table>
<thead>
<tr>
<th>Value Label</th>
<th>Number</th>
<th>Percent</th>
<th>Percent Felony</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theft, conversion</td>
<td>40</td>
<td>17.9</td>
<td>78</td>
</tr>
<tr>
<td>DUI</td>
<td>37</td>
<td>16.5</td>
<td>70</td>
</tr>
<tr>
<td>Forgery, fraud</td>
<td>35</td>
<td>15.6</td>
<td>91</td>
</tr>
<tr>
<td>Burglary</td>
<td>31</td>
<td>13.8</td>
<td>100</td>
</tr>
<tr>
<td>HTO related</td>
<td>20</td>
<td>8.9</td>
<td>100</td>
</tr>
<tr>
<td>Public intox, disorder</td>
<td>12</td>
<td>5.4</td>
<td>0</td>
</tr>
<tr>
<td>Drugs</td>
<td>11</td>
<td>4.9</td>
<td>73</td>
</tr>
<tr>
<td>Prostitution</td>
<td>7</td>
<td>3.1</td>
<td>0</td>
</tr>
<tr>
<td>Misc. Traffic</td>
<td>6</td>
<td>2.7</td>
<td>0</td>
</tr>
<tr>
<td>Weapons</td>
<td>5</td>
<td>2.2</td>
<td>60</td>
</tr>
<tr>
<td>Battery</td>
<td>4</td>
<td>1.8</td>
<td>25</td>
</tr>
<tr>
<td>Violate parole</td>
<td>3</td>
<td>1.3</td>
<td>100</td>
</tr>
<tr>
<td>Resist arrest</td>
<td>2</td>
<td>.9</td>
<td>50</td>
</tr>
<tr>
<td>Warrants</td>
<td>2</td>
<td>.9</td>
<td>50</td>
</tr>
<tr>
<td>Robbery</td>
<td>1</td>
<td>.4</td>
<td>100</td>
</tr>
<tr>
<td>Child molest</td>
<td>1</td>
<td>.4</td>
<td>100</td>
</tr>
<tr>
<td>Other</td>
<td>7</td>
<td>3.1</td>
<td>43</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>224</td>
<td>100%</td>
<td>72%</td>
</tr>
</tbody>
</table>

Source: Coded from agency files.

1. Many defendants were charged with multiple offenses. The primary offense or most serious charge was coded as program offense.

2. Habitual traffic offender.
### Table 2
Pretrial Program Screening
July 1988-July 1989

<table>
<thead>
<tr>
<th>Description</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total clients reviewed</td>
<td>1088</td>
<td>100</td>
</tr>
<tr>
<td>Ruled ineligible at screening</td>
<td>805</td>
<td>74</td>
</tr>
<tr>
<td>Rel. court order, bond</td>
<td>149</td>
<td>19</td>
</tr>
<tr>
<td>No telephone</td>
<td>125</td>
<td>16</td>
</tr>
<tr>
<td>Defendant or HH decline</td>
<td>216</td>
<td>27</td>
</tr>
<tr>
<td>Extensive criminal history</td>
<td>220</td>
<td>27</td>
</tr>
<tr>
<td>Other</td>
<td>95</td>
<td>12</td>
</tr>
<tr>
<td>Reject by court after screening</td>
<td>27</td>
<td>2</td>
</tr>
<tr>
<td>Total Ineligibles</td>
<td>832</td>
<td>76</td>
</tr>
</tbody>
</table>

Source: Compiled and adapted from agency weekly reports.
Table 3
Pretrial Program Termination

<table>
<thead>
<tr>
<th>Termination Type</th>
<th>number</th>
<th>percent</th>
<th>Days on program</th>
<th>Rule violations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Release to Court</td>
<td>157</td>
<td>73</td>
<td>85.0</td>
<td>.85</td>
</tr>
<tr>
<td>Technical violator</td>
<td>29</td>
<td>13</td>
<td>57.9</td>
<td>5.2</td>
</tr>
<tr>
<td>Abscond</td>
<td>30</td>
<td>14</td>
<td>43.3</td>
<td>2.9</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>216</td>
<td>100%</td>
<td>75.6</td>
<td>1.7</td>
</tr>
</tbody>
</table>

Summary of Pretrial and Postconviction Program Termination

<table>
<thead>
<tr>
<th></th>
<th>Pretrial</th>
<th>Post-conviction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Successful</td>
<td>73%</td>
<td>81%</td>
</tr>
<tr>
<td>Total Unsuccessful</td>
<td>27</td>
<td>19</td>
</tr>
<tr>
<td><strong>TOTAL N</strong></td>
<td>216</td>
<td>153</td>
</tr>
</tbody>
</table>

Chi Sq. = 3.45, df = 1
.05 < P < .1

Source: Pretrial data coded from agency records. Postconviction data adapted from Baumer and Mendelsohn (1990).
Table 4
Pretrial Termination by
Client Characteristics and Program Quarter

<table>
<thead>
<tr>
<th>Living arrangement</th>
<th>Success</th>
<th>Tech Viol</th>
<th>Abscond</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spouse</td>
<td>92%</td>
<td>0</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>Parents</td>
<td>78%</td>
<td>16</td>
<td>6</td>
<td>96</td>
</tr>
<tr>
<td>Other family</td>
<td>60%</td>
<td>19</td>
<td>21</td>
<td>52</td>
</tr>
<tr>
<td>POSSLQ1</td>
<td>77%</td>
<td>9</td>
<td>14</td>
<td>22</td>
</tr>
<tr>
<td>Other</td>
<td>68%</td>
<td>3</td>
<td>29</td>
<td>31</td>
</tr>
</tbody>
</table>

Chi Sq. = 20.1, df = 8
.01 < P < .05

<table>
<thead>
<tr>
<th>Marital status</th>
<th>Success</th>
<th>Tech Viol</th>
<th>Abscond</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>69%</td>
<td>17</td>
<td>14</td>
<td>157</td>
</tr>
<tr>
<td>Divorced, sep</td>
<td>81%</td>
<td>6</td>
<td>14</td>
<td>36</td>
</tr>
<tr>
<td>Married</td>
<td>86%</td>
<td>0</td>
<td>14</td>
<td>22</td>
</tr>
</tbody>
</table>

Chi Sq. = 7.0, df = 4
.10 < P < .15

<table>
<thead>
<tr>
<th>Employment</th>
<th>Success</th>
<th>Tech Viol</th>
<th>Abscond</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>employed</td>
<td>77%</td>
<td>12</td>
<td>12</td>
<td>113</td>
</tr>
<tr>
<td>Not employed</td>
<td>68%</td>
<td>16</td>
<td>17</td>
<td>103</td>
</tr>
</tbody>
</table>

Chi Sq. = 2.2, df = 2
.30 < P

<table>
<thead>
<tr>
<th>Program quarter</th>
<th>Success</th>
<th>Tech Viol</th>
<th>Abscond</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jul-Oct 1988</td>
<td>69%</td>
<td>4</td>
<td>27</td>
<td>45</td>
</tr>
<tr>
<td>Nov 88-Jan 89</td>
<td>70%</td>
<td>14</td>
<td>16</td>
<td>57</td>
</tr>
<tr>
<td>Feb-Apr 1989</td>
<td>75%</td>
<td>14</td>
<td>11</td>
<td>56</td>
</tr>
<tr>
<td>May-Jul 1989</td>
<td>76%</td>
<td>19</td>
<td>5</td>
<td>58</td>
</tr>
</tbody>
</table>

Chi Sq. = 13.3, df = 6
.01 < P < .05

TOTAL 73% 13 14 216

Source: Coded from agency records.
1. Persons of opposite sex sharing living quarters.
Table 5
Pretrial Termination by Program Offense

<table>
<thead>
<tr>
<th>Offense</th>
<th>Success</th>
<th>Tech Viol</th>
<th>Abscond</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theft, conversion</td>
<td>75%</td>
<td>13</td>
<td>13</td>
<td>40</td>
</tr>
<tr>
<td>DUI</td>
<td>76%</td>
<td>6</td>
<td>18</td>
<td>33</td>
</tr>
<tr>
<td>Forgery, fraud</td>
<td>71%</td>
<td>15</td>
<td>15</td>
<td>34</td>
</tr>
<tr>
<td>Burglary</td>
<td>68%</td>
<td>16</td>
<td>16</td>
<td>31</td>
</tr>
<tr>
<td>HTO related</td>
<td>70%</td>
<td>15</td>
<td>15</td>
<td>20</td>
</tr>
<tr>
<td>Public intox, disorder</td>
<td>67%</td>
<td>33</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>Drugs</td>
<td>67%</td>
<td>22</td>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td>Prostitution</td>
<td>43%</td>
<td>29</td>
<td>29</td>
<td>7</td>
</tr>
<tr>
<td>Other</td>
<td>87%</td>
<td>3</td>
<td>10</td>
<td>30</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>73%</td>
<td>13</td>
<td>14</td>
<td>216</td>
</tr>
</tbody>
</table>

Source: Coded from agency records.
Table 6
Termination by Sentence

<table>
<thead>
<tr>
<th>Termination status</th>
<th>None executed</th>
<th>Jail executed</th>
<th>Prison executed</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Release</td>
<td>86%</td>
<td>66%</td>
<td>67%</td>
<td>76%</td>
</tr>
<tr>
<td>Mean CH</td>
<td>4.9</td>
<td>6.5</td>
<td>7.7</td>
<td>5.8</td>
</tr>
<tr>
<td>Days on prog</td>
<td>92.9</td>
<td>51.9</td>
<td>91.3</td>
<td>83.4</td>
</tr>
<tr>
<td>Violate</td>
<td>11</td>
<td>18</td>
<td>10</td>
<td>13</td>
</tr>
<tr>
<td>Mean CH</td>
<td>5.6</td>
<td>5.7</td>
<td>6.0</td>
<td>5.7</td>
</tr>
<tr>
<td>Days on prog</td>
<td>63.1</td>
<td>41.3</td>
<td>59.3</td>
<td>54.3</td>
</tr>
<tr>
<td>Abscond</td>
<td>3</td>
<td>16</td>
<td>24</td>
<td>11</td>
</tr>
<tr>
<td>Mean CH</td>
<td>5.0</td>
<td>7.1</td>
<td>9.0</td>
<td>7.7</td>
</tr>
<tr>
<td>Days on prog</td>
<td>43.7</td>
<td>50.4</td>
<td>31.4</td>
<td>40.4</td>
</tr>
<tr>
<td>Total</td>
<td>52%</td>
<td>26%</td>
<td>22%</td>
<td>100%</td>
</tr>
<tr>
<td>CH</td>
<td>4.9</td>
<td>6.5</td>
<td>7.8</td>
<td>6.0</td>
</tr>
<tr>
<td>Days on prog</td>
<td>87.6</td>
<td>49.8</td>
<td>74.8</td>
<td>75.0</td>
</tr>
<tr>
<td>N cases</td>
<td>99</td>
<td>50</td>
<td>42</td>
<td>191</td>
</tr>
</tbody>
</table>

Chi square = 17.2, df = 4
p < .002.

Source: Termination status, criminal history, and program days coded from agency records; disposition and sentence coded from Marion County Justice Information System.
Figure 1

Percent successful computer calls by number program violations
Figure 2
Mean CH incidents, program violations by pretrial program quarter

Crim hist
Prog viol

Mean per client
Jul-Oct Nov-Jan Feb-Apr May-Jul
1988 Program Quarter 1989
Figure 3

Percent Successful Computer Calls by Program Quarter

Pct Calls Successful

Jul-Oct Nov-Jan Feb-Apr May-Jul
1988 Program Quarter 1989
Figure 4
Percent Successful Computer Calls by Type of Program Termination

<table>
<thead>
<tr>
<th>Type of Program Termination</th>
<th>Median pct</th>
<th>N cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Release to court</td>
<td>59</td>
<td>141</td>
</tr>
<tr>
<td>Tech. Violation</td>
<td>42</td>
<td>25</td>
</tr>
<tr>
<td>Abscond</td>
<td>41</td>
<td>29</td>
</tr>
</tbody>
</table>

Symbol Key: * - Median  (O) - Outlier  (E) - Extreme

Source: Call records translated from agency files; termination status coded from agency records.