

agency been helpful in this situation? What features of the new technology make it especially difficult to define policy for the new technology? Should information policy be technology-specific or should the agency be able to develop policies that are general enough to survive several generations of new technology?

#### THE USER POINT OF VIEW

From the point of view of clinicians, delay in adopting VOODS simply means lost time, money, and opportunity. The technology has been proved effective in a pilot trial. Even by conservative estimates the technology will pay for itself in less than four years and thereafter provide improved client services at literally no cost.

Should the leading edge of technology be held up due to bureaucratic caution and technological myopia? From the clinician's point of view, argue why the state should be buying in early to the leading edge of this new technology. What sort of coalition could be developed to advocate for this point of view?

#### Further Reflections

1. In this case, three important perspectives interact in the active policy discussions surrounding acquisition of the VOODS technology—the control agency point of view, the information professionals point of view, and the user point of view. As discussed in Chapter 1, these three perspectives continually shape government information management and policy. After reading Chapter 1, discuss how the issues treated in the VOODS case are similar to or different from issues that arose when government agencies made the transition from a mainframe computing environment to a mixed mainframe and micro environment in the late 1970s and 1980s.

2. Chapter 5 discusses the companion issues of personal privacy and freedom of information rights that grant access to government collected and held data. After reading Chapter 5, discuss how the issues of personal privacy and rights of access interact with the VOODS acquisition decision.

## CASE STUDY 2

# A FORENSIC MENTAL HEALTH DATABASE TO IMPLEMENT A SUICIDE PREVENTION PROGRAM

*This case analyzes a hypothetical, but quite possible, set of events. It illustrates how information communicated between organizations shapes perceptions, decisions, and actions. The case is not meant to refer to any similarly detailed real event. The characters are fictional.*

Trouble has been brewing for the past year within the state's correctional system. A series of inmate suicides in state prisons and in county detention centers has drawn adverse publicity about the provision (or lack) of mental health services to inmates. These incidents most often occur in minimum security prisons or in detention centers while prisoners are awaiting trial. The Legislative Commission on Program Audit and Review has issued a special report on the subject charging that the absence of reliable screening and identification procedures is a root cause of failure to prevent suicides.

More recently, an audit by the State Auditor General revealed that the data systems necessary to support such services in most facilities were nonexistent. That is, where forensic mental health units did exist, clinical personnel did not have access to the information that they needed to perform their jobs well. Caught in a cycle of adverse publicity and critical audits, personnel within both Corrections and the Department of Mental Health Services (DMHS) redoubled their efforts to deal effectively with what they candidly admitted was a problem statewide.

For some time, the State Budget Office (SBO) has been concerned

about the ability of DMHS fiscal analysts to systematically relate client levels, staff levels, and expenditures through the budget process. Typically, DMHS could present client, staff, and budget data at the facility level, but a finer-grained analysis of these data, including staffing levels per client by type, had been difficult to achieve. For years, SBO had been pressuring DMHS to create a data system that would allow a first-class programmatic analysis of its overall budget request. This recent spate of bad press, centering on the audited inability of the DMHS's data systems to track clients (much less relate them to dollars and staff), was the proverbial "straw that broke the camel's back." The leadership within SBO called for a full-scale review of the budgeting and data management procedures of the mental health agency.

However, the critical catalyzing event took place last month when a spectacular suicide occurred in a minimum security upstate correctional facility. The press had a field day with the event, and shortly thereafter a court order mandated an overhaul of forensic mental health services, with specific emphasis on a suicide prevention program. The court ordered a minimal screening program for all inmates in minimum security facilities with a subsequent program of follow-up. The legislature immediately began to consider a series of bills that would replace the provisions of the court order with new language in both the Penal Code and the Mental Health Law.

To implement the court order, DMHS's Forensic Units would be required to maintain a minimal data profile on all inmates identified through the screening procedure as being "at risk." This group would receive top priority for treatment services. A report to the court on progress toward a permanent screening and treatment program is scheduled in ninety days.

### **THE DMHS PROGRAM PERSPECTIVE**

The DMHS program perspective on this problem is best told by Susan Miller, assistant commissioner for Forensic Mental Health Services. Miller has been in her post for four and a half years. Her previous experience included working as an active and knowledgeable user of information systems with the Division for Youth. Ironically, one of Miller's priorities in recent years has been exactly the kind of information systems for her treatment units that might have helped avert the suicide incident.

From Miller's point of view, those information systems have been problematic partly because the systems and the staff who need them are not physically located within DMHS facilities. By and large, the systems development efforts within her own agency have focused on information needs within mental health facilities. The needs of her units, located in correctional facilities, have been left unsupported.

With the assent of the commissioner, Miller has created self-standing information systems within her treatment units. Since the primary data on corrections inmates is maintained by the Corrections Department, Miller's

objective has been to put up a complementary clinically oriented system. Her staff defined a standard data record (see Appendix A) to be kept on all clients statewide. They had then sought and received budgetary approval to purchase microcomputers and software to support the system.

From the beginning, Miller has wanted to coordinate the development of her data system with the central system within Corrections, but the Corrections staffer assigned to consult on the project missed several key meetings and, in any case, offered little assistance even when present. Working with a consultant from State Central Services (SCS), Miller's task force settled on a CPM-based machine that was on state contract. (At that point in time, SCS was still providing consultation services on the acquisition of micros and approving their purchase.) To get the project under way, Miller assigned one DMHS program analyst with special expertise in microcomputing to pilot the new system in one third of the Forensic Units.

Within a year and a half of a strong start, things began to unravel. The state dropped its contract on the CPM machine they had selected. In any case, it soon became clear that IBM was becoming the informal industry standard with its DOS operating system. Furthermore, dBase was emerging as a more powerful and widely accepted software package than the one they had piloted. Nonpilot sites began to move toward a DOS and dBase configuration. In the midst of this transition, Civil Service held a new exam and issued an appointment list for DMHS program analysts. The vast majority of the analysts who had developed and were now maintaining the forensic mental health database were not on the new list. The exam had concentrated on program design and treatment theory, but Miller's people were specialized in program operations and small-scale systems development. Civil Service suggested they be replaced by systems analysts, not program analysts. Miller, of course, had no access to lines in the systems title series and, in any case, disagreed that technical experts would fit the bill.

The SBO has now rescinded its approval for additional microcomputers pending its review of the entire information systems development effort within DMHS. Her unit and commissioner are under attack in the press, she has little internal support from the department's data processing professionals, and the bureaucratic constraints of the state system seem to be making a difficult task at best, virtually impossible.

### **THE DMHS DATA PROCESSING PERSPECTIVE**

Once the Forensic Units had begun to get such bad publicity, Calvin Tyler, director of DMHS's Systems Development Group, had been called in to review the situation. Several years ago, the Systems Development Group made a strategic decision to concentrate on the mainline function of providing a coherent and comprehensive system of financial, client, and staff data for the agency as a whole. DMHS has been under perpetual attack by SBO

and other control agencies because of its fragmented information bases. In the past, the Systems Development Group's energies had been diverted from solving this critical issue because numerous program units had been absorbing staff time with localized requests to deal with emergencies. As a result, Tyler's staff had continually been deployed to "fight fires" while the important and long-term work of developing a comprehensive data system was deferred.

Over time, Tyler's major objective had become protecting his staff from these diversions so the long-range goal of designing and installing a comprehensive system could move forward. The advent of micros had been both a blessing and a curse for Tyler. With every unit now purchasing its own microcomputers, his staff was under increasing pressure to build interfaces with numerous, uncoordinated groups of new users. On the other hand, many users were now beginning to solve their own information needs, decreasing the demand on his staff to support stand-alone systems with no design relationship to the comprehensive data systems so desperately needed by the agency as a whole.

While he at first opposed vigorously the creation of self-standing "information islands," Tyler has come to realize this trend is inevitable. Program managers who acquired micros allegedly to handle word processing almost immediately began to amass their own databases. With the relaxation of SCS controls over the purchase of micros, the entire world was breaking loose. Helpless to turn the tide, Tyler had come to take a more or less permissive attitude toward these systems, redoubling the efforts of his own group to create the comprehensive integrated database that would lend coherence to the overall information environment.

The bad publicity around the forensic data system was one of Tyler's worst dreams come true. In fact, his group had not really participated in the development of that system (or fragment of a system), and now they were being drawn into the controversy as if they should have somehow been involved all along.

### **THE CORRECTIONS PROGRAM PERSPECTIVE**

Bill Petersen, director of Highmountain, the upstate facility where the suicide took place, best represents the Corrections' program perspective. Corrections is not primarily in the business of providing mental health services. While he welcomes the presence of these units within his facility, he makes it clear (when spoken to off the record) that these services are not "mainline" from his agency's point of view.

Petersen has worked over the years to maintain a good neighbor relationship between his staff and the forensic mental health personnel assigned to Highmountain. When questions of space or support (such as the use of limited computing resources) have come up, he has worked to address these

as fairly as possible. He has always known that these DMHS personnel were a drain on his central support resources, and in a period of declining resources overall, tensions had emerged between them and his own staff. However, with the public attacks on both Corrections and Mental Health, Petersen understood that now was the time to stand together and to work toward a common solution to this problem. Cooperation was the password of the day.

### **THE CORRECTIONS DATA PROCESSING PERSPECTIVE**

Quite frankly, when this fracas broke out, Ellen Farley, director of Data Processing Operations for Corrections, was unaware of the existence of a separate forensic mental health database in any correctional facility. Being relatively new in the job, Farley requested and received a file several years old pertaining to that system's development. The file was incomplete. Apparently DMHS had not maintained good liaison with Corrections staff in developing this proposal.

In an after-the-fact way, Farley could lament this as another example of lack of interagency cooperation. Here DMHS had moved forward with yet another micro-based system when probably a better solution would have been to integrate their needs with the statewide data system within Corrections. After all, access to the statewide system existed in every correctional facility. Why not just share access to that system rather than build a new micro-based system? But apparently those questions were now so much water over the dam. The micro-based system was in place, and its performance (or lack of performance) was creating problems for all of them. Farley viewed this as a perfect example of what happens when non-EDP types try to develop systems on their own. Hardware was not standardized (some CPM, some DOS machines with differing software packages). Furthermore, no one in the facilities seemed to know how to modify the system. It was developed by staff who had by now moved on and virtually no documentation had been left behind.

Farley was glad primary responsibility for this debacle rested with DMHS. Nevertheless, the bad publicity reflected poorly on Corrections, and she was prepared to cooperate in any way possible to rectify the situation. She would assign a staff liaison to work closely with the DMHS team looking into the problem.

### **THE CASE ASSIGNMENT**

As new actors and program responsibilities place new demands on our information processing capabilities, problems of coordination almost always develop. As in any really complicated situation, there are several sides

to this story. In this case, at least three important perspectives exist: those of the users (Miller and Petersen), those of the data processing professionals (Tyler and Farley), and those of the control agencies overseeing statewide operations. Working from their own points of view, managers strive to create "best" situations all around. However, and ironically, problems can and do arise precisely from people striving for the best as they individually see it. Diagnose this situation from the point of view of data processing managers, program managers, and control agencies. Try to suggest how agency or statewide policies, or their absence, contributed to the problem. What different policies might help solve it?

#### **VIEW THE PROBLEM FROM A TECHNICAL DATA PROCESSING PERSPECTIVE**

Examine closely Appendices A and B, which compare the data records on each inmate/client maintained by the Forensic Units and Corrections, respectively. Can you design a technical solution to this problem? That is, can you design a system that would draw elements from both files to create a new forensic mental health database? View this as a technical problem in merging databases from two separate systems involving different hardware, software, and data element definitions. How difficult is this problem from a purely technical point of view?

To what degree have history and the positions taken by the program managers and users complicated the development of a technical solution to this problem? List and discuss the user-generated impediments to a sound technical solution.

To what degree do the additional complications of dealing within state government impede a sound technical solution to this problem? List and discuss the specific actions and policies of various control agencies that inhibit the attainment of a sound technical solution.

#### **VIEW THE PROBLEM FROM A USER PERSPECTIVE**

Put yourself in Miller's shoes when she first began this project four and a half years ago. Critique the strategy that she pursued. With the advantage of hindsight, could you recommend a different course to her? What forces might have led her away from the course you are now recommending? Would you characterize any of her decisions as flawed or obviously bad ones given the situation that she faced at the time?

Miller was working within constraints imposed by the internal policies of the data processing shops in both agencies. How might these policies have contributed to a difficult situation for Miller? Could Farley's predecessor or

Tyler have acted at that early stage to avoid the present set of difficulties? If they had followed different operating policies in order to help Miller four years ago, what impact would those changes have had on their shops' abilities to meet their own systems development and support objectives?

How have the various control agencies contributed to Miller's difficulties? List and discuss the policies that caused problems in this case. List and discuss possible changes in state and agency policies that could have prevented the problems sketched in the case.

#### **VIEW THE PROBLEM FROM A CONTROL AGENCY PERSPECTIVE**

It is easy for users and data processing professionals alike to agree that restrictions placed on them by control agencies such as the State Budget Office, the Auditor General, Civil Service, and State Central Services create unnecessary complexities.

For a moment, take the point of view of each of these control agencies. Why did they act as they did in this case? How could they respond to the all-too-common accusation that they were blocking the efforts of well-intended public servants to get an important job done? List and discuss any changes in agency-specific or statewide policy that might have made this situation better but still allowed the control agencies to execute their legitimate oversight functions.

## Appendix A

**Department of Mental Health Services  
Forensic Mental Health Information System**

## Data Dictionary

Data Element Name	Type	Field Size	Definition/Codes
Name	A/N	25	Legal name
SSN	N	9	Validated Social Security Number (primary identifier)
Corrections ID	A/N	10	
Sex	A/N	1	M-male F-female
Race	N	1	1-White, not Hispanic 2-Black, not Hispanic 3-Hispanic 4-Asian 5-American Indian 6-Other
Screen date	N	6	Date of initial screening in DMHS unit (MMDDYY)
Education	N	2	Highest grade: 00-none 01-08 elementary 09-12 high school 13-16 college 17 postgraduate
County of origin	N	2	Standard county codes (01-57)
Clinical class	A/N	1	N-not violent S-dangerous to self D-dangerous to others
Primary diagnosis	A/N	2	2-digit standard psychiatric diagnosis code (e.g., depression)
Height	N	2	Height in inches
Weight	N	3	Weight in pounds
Substance Abuse Indicator	N	1	1-Drug Abuse 2-Drug Addiction 3-Alcohol Abuse 4-Alcohol Addiction 5-Both Drug & Alcohol Abuse/Addiction 6-None

These files are updated weekly by clerical (data entry) staff in the Forensic Units.

There are twenty local units, each with its own database in the above format. There is no established communications network, nor any central data file other than summary statistical reports prepared quarterly. Each local database contains between 200 and 1,500 records.

## Appendix B

**Department of Correctional Services Information System**

## Data Dictionary

Data Element Name	Type	Field Size	Definition/Codes
Last Name	A/N	15	
First Name	A/N	10	
Middle Initial	A/N	1	
Alias Indicator	A/N	1	1-no aliases 2-has used aliases (see paper files)
Corrections ID	A/N	10	Primary identifier within state correctional system
Facility Code	N	2	2-digit correctional facility identifier
SSN	N	9	Social Security Number given by inmate
DOB	N	8	Date of Birth (MMDDYYYY)
Sex	A/N	1	M-male F-female
Race	A/N	1	A-Asian B-Black C-Caucasian H-Hispanic I-American Indian X-Other
Conviction Type (current sentence)	N	1	2-digit code denoting offense for last conviction (murder, armed robbery, etc.)
Felony Class (current sentence)	A/N	1	A-Class A Felony B-Class B Felony C-Class C Felony D-Class D Felony E-Class E Felony
Starting date of current sentence	N	8	MMDDYYYY
Length of current sentence	N	7	Years and months (YYMM)
County where convicted	N	2	Standard county codes (01-62)
Past convictions	N	2	Number of previous felony convictions
Past incarcerations	N	2	Number of previous state prison sentences

This is an on-line central system covering all twenty correctional facilities in the state. Records are updated daily on an overnight batch basis. Each facility and central administration has access to the entire file for inquiry. Changes can be made to a facility's records only by central administration and staff in the facility itself. The system contains a total of 50,000 records.