



Bigger isn't always better:

managing with statistical data from forensic psychiatric centers



Bigger isn't always better: managing with statistical data from forensic psychiatric centers

How does a highly professionalized organization, spread across 20 remote locations, improve the way it gathers and uses management information? The Central New York Psychiatric Center chose modest changes in existing processes and technologies.

- Introduction
- The project
- Building on existing infrastructure
- Process changes offered many benefits
- Planning and budgeting for modest change
- Fitting the tools to the task

Introduction

Central New York Psychiatric Center (CNYPC) provides psychiatric care and treatment of the inmate population of the State's prisons and county jails. The Center operates 22 mental health units located in state correctional facilities. At any point in time, the staff are treating approximately 200 inpatients and 5,800 outpatients. The inpatient caseload is fairly steady, but the outpatient load is ever-changing.

The CNYPC Operations Department, housed at the central office in Marcy, NY, oversees the operations of the outpatient programs. The central staff make frequent staff deployment decisions to deal with the dynamic pattern of admissions, discharges, and turnover within the mental health units. These include overtime authorizations, staff re-allocations, and hiring authorizations. Although these organization-wide staffing decisions rely heavily on the data collected at each facility, delays in data entry and aggregation mean the decisions are often made with incomplete or out-of-date information.





The patient intake process and patient record generation take place at each of the mental health units. Quarterly, staff in the unit enter 98 data elements, including such items as "total census" and "total on medication" into a local database. After the data is entered, several reports are generated including case records, logs, and spreadsheets which make up the set of Quarterly Outpatient Statistics. These documents are then mailed, via the U. S. Postal Service, to CNYPC.

Most units send a disk along with a hard copy of the data. When the data is received at CNYPC it is either re-entered from the paper or re-loaded from the disks into the central database. The data is then manually checked for accuracy. This process, multiplied by 22, takes an enormous amount of time for the six-person central staff. After the data is entered, aggregate reports are generated which the Operations Director uses to make staffing decisions across the units. These aggregate reports are also mailed back to the units. This mostly manual process takes a considerable amount of time, is repeated every quarter, and can sometimes lag for weeks.

The project

CNYPC staff worked with the Center for Technology in Government's Using Information in Government program to develop a plan to better meet the management information needs of the Operations Department. The CNYPC staff wanted to link, integrate, and coordinate data flow and information systems throughout the geographically dispersed organization. They began by developing a business case for investments that would enable them to take better advantage of technology for sharing data and information electronically among CNYPC and satellite offices. They wanted to streamline the process and increase access to this information so that all unit directors as well as CNYPC could make use of it.

The CNYPC team included professionals from both the central and satellite offices. The team's first task was to develop a shared business objective for the project. Each team member had their own vision of what the project should accomplish, but after working together they agreed on the following statement:

To provide good aggregate and summary reports to middle and top management on unit activities, by transmitting quarterly report data electronically from satellite locations throughout the state to the central database in order to provide:

- 1. a data resource for unplanned executive level requests for information
- 2. data and information for objective resource allocation decisions



3. data for operational planning

With this business objective in mind, the project team began to look at the current processes of data collection and reporting and investigated ways that technology could improve them.

Building on existing infrastructure

CNYPC had already begun an organization-wide upgrade of desktop technologies in all of the satellite units. A network was in place which could be used to communicate among the different locations. In addition, the staff at the unit locations were already participating in technology training. CNYPC took advantage of these developments by exploring how intranet technology could be used.

Process changes offered many benefits

The process of reporting information for the CNYPC Operations Division is divided into two sub processes. The first part takes place at the 22 satellite units and the second at CNYPC. In order to determine how well intranet technologies would work, the team spent time looking at how data entry, data transmission, and report generation could be improved.

The Web-based intranet application would reduce the workload (and number of steps in the process) at both the unit locations and the central office. The data entry would be much more efficient for the central offices and the unit locations. Each unit could enter the data into a standard form via the intranet. Built-in data quality steps would be automated, saving the significant amount of time previously spent manually checking for errors.



The information would then be automatically sent to the main database via an intranet application. This would reduce the time to get the data into the central database. This method would also eliminate errors due to duplicate entry. Report generation then could be done directly from the central database and produce then a series of predetermined reports. Each unit manager would be able to access their data, with the capability to produce a wide variety of reports almost immediately.

Overall, the staff could see many benefits from rather minimal changes to a process that could be standardized across all the unit locations.



Planning and budgeting for modest change

When the CNYPC decided to take on this project, they knew that they wanted to streamline the information flow between the mental health units and the central office. Their focus was to decide how to accomplish this. The data content they collected met their needs well and did not need to be changed in any significant way. Because the satellite units are all part of the same organization doing the same kind of work, there was much uniformity from place to place.

All followed similar work processes and had the same kind of relationship with CNYPC. CNYPC also had both the responsibility and the authority to set standards and policies that would apply to all the units. The technologies were mostly familiar ones. As a result of these conditions, the project envisioned only modest changes in the way work is done—a different form of data entry and manipulation, more access to information, and quicker reporting and retrieval.

The existence of so many similarities and known factors made it fairly easy to estimate project costs. Resource needs included staff time to do development and system maintenance and to develop business rules for the new process. Software licenses were needed for both developers and users. The staff could map out a straightforward design and implementation process that would increase functionality in three stages from modest, to moderate, to more elaborate levels. Overall, the price tag to reach the moderate level was fairly low (about \$47,000) and easy to justify.

Fitting the tools to the task

CNYPC has an important and demanding mission, but very limited staff and resources. While many technical solutions to their reporting problem were possible, this project demonstrated that quite modest changes in process and technology could bring substantial benefits in productivity and information-based decision making. By recognizing and preserving the effective parts of the existing system, CNYPC captured the value of a small, but high leveraged investment in better performance.