Status Report: Unit Cost System For Services

June 1998

Prepared by
The Center for Applied Research and Analysis
The Institute for Social Research
University of New Mexico

Prepared for
Community Corrections Probation & Parole Division
New Mexico Corrections Department
Robert J. Perry, Cabinet Secretary, NMCD
Kevin H. Dooley, Director, Probation & Parole Division
Erma Sedillo, Community Corrections Administrator

Status Report: Unit Cost System For Services

Introduction

The Institute for Social Research (ISR) was contracted by the state of New Mexico to determine a standard unit pricing system for program services. Unit costing is a method for allocating and controlling costs that has become increasingly popular over the years. Having accurate unit cost information allows one to see where resources are being used and can be used in determining the fiscal responsibility of various program elements. The Community Corrections Department does not have an accurate unit cost system in place and determined that it would be in their benefit to devise one. This was deemed necessary by the State because the current system of cost reporting was not adequate and it was determined that it would be useful to have an accurate unit cost system so that audits of service providers could be done more efficiently and accurately. Without accurate unit cost information it is not possible to adequately audit a program to ensure fiscal responsibility or determine if a provider is inadvertently over or undercharging the State for services provided. Our agreement stated that at the end of the contract period we would deliver a report that contains a standard unit pricing system. As per our contract, the unit cost study would occur in stages, the stages are:

- Search for existing unit cost systems and guidelines in New Mexico, other states, and the federal government.
- Search for existing literature pertaining to unit cost systems.
- Acquire a menu of services provided by service providers.
- Acquire any current pricing information from service providers.
- Search public and private agencies for unit pricing information and guidelines.

Search for Unit Cost Information

The first stage of our contract was to search "existing unit pricing systems and guidelines for the state of New Mexico, other states and federal government agencies." In the process of conducting this search we found that there was a lack of unit cost information in service areas. We contacted thirty-nine different state probation and parole offices and found that none of them have a unit cost system in place, all though several expressed interest in the idea.

Upon learning that we would not be able to locate any unit cost information from any probation offices, we then attempted to acquire some basic unit cost information so that we could have baseline information from which we could then proceed. We contacted several agencies, both private and public, to inquire as to whether or not they currently had a unit cost system in place. We were informed that none of these agencies had a unit cost system that could be used for our purposes. None of the private agencies that we contacted were willing or able to furnish us with any unit cost information with the exception of Mesilla Valley Hospital who sent us

some very basic, and virtually useless information on some of their costs. Joanne LoPorto, senior program manager at the Center on Alcoholism, Substance Abuse, and Addictions, explained that it would be difficult to get the necessary information from any of the public agencies because of the switch to managed care. She informed us that Medicaid is no longer using the old system of fee schedules and had switched to a compensatory system. She also informed us that there was still some baseline unit cost information and forwarded that information to me. The information that we received was inadequate for our purposes because it contained cost information on medical services and procedures, but did not contain any information on unit cost for services such as those offered under the Community Corrections Department in New Mexico.

Our next step was to conduct a search of all available literature pertaining to unit costing or unit cost systems. This was accomplished by searching Zimmerman Library at the University of New Mexico. We searched several relevant databases for unit cost information. Again we found that there is not much in the way of useable unit cost information pertaining to service delivery. The majority of the information that we were able to procure was designed for use in manufacturing or production areas. We also searched the databases for any economic journals that could be useful for our purposes. Although we were not able to find any information that was specific to our search we were able to find basic information about constructing a unit cost system. This information was very useful because it gave us the baseline information with which to proceed. We then conducted an exhaustive search of the Internet and again met with little success. We found unit cost information on everything from manufacturing of compact disks to producing automobiles but we were unable to find any information that was particularly relevant to service providers. At this point we contacted several federal agencies that were, directly or indirectly, in the business of providing services. We contacted several departments that are under the supervisory umbrella of The Department of Health and Human Services and again found, to our frustration, that none of these agencies had the type of unit cost information that we were searching for. Dr. Karl White, Director of the Center for Substance Abuse Treatment Program Evaluations, informed us that his office is currently working on several program evaluations and that unit cost information would be part of the final evaluation. He informed me that these studies would be completed sometime late in 1998 or early in 1999 and that he would forward the results of these studies to us upon their completion. Not only will these reports contain the unit cost information that we are looking for but they also will contain details of the methods that were used to determine these unit costs. Lea Wilson, Program Director for the Center for Substance Abuse Prevention, sent me all of the information that she felt would be useful in devising a unit cost system, unfortunately this information was not detailed enough to help us with our study.

Our search for relevant literature would seem to have been fruitless except for the fact that we were able to learn about the basics of unit cost systems which later became very useful when we attempted to devise a unit cost system from scratch. We learned about direct and indirect costs, how properly to allocate these costs to specific service areas, and some of the pitfalls to attempt to avoid (ie. Failure to properly measure and allocate indirect costs).

One of the elements in our contract that was implicitly stated was that we would require the cooperation of various state agencies and all of the service providers to develop an accurate unit cost system. The most basic, and vital, cooperation that was required was that the service providers give us accurate and detailed information concerning their costs for services. The information that we received was lacking in detail and could not be used for our purposes. The budget information that we collected from the service providers showed all of the services costing the same amount. This was a result of the service providers simply taking their budgets and dividing them by the total number of services offered, regardless of the service. The result of this was that instead of showing detailed pricing information we were seeing that all services appeared to cost the same. Common sense would tell us that volunteer services, which should cost the State little or nothing, should have a dramatically different cost than would drug testing or counseling. Without having baseline information from which to proceed it would be impossible for us to devise a unit cost system.

Rethinking the Unit Cost System

When it became evident that we would not be able to furnish the State with a unit cost system due to a lack of baseline information, as we were contractually obligated to do, we contacted Erma Sedillo, Community Corrections Administrator, to inform her of our dilemma. It was decided in a meeting with Ms. Sedillo, Roy Safford, and Sherry Helwig that we would first devise a system for collecting detailed unit cost information. In order to do this we discussed and agreed that we would hire an outside consultant to help us devise our record keeping system. We hired Dr. Mike McKee, an Economics Professor at the University of New Mexico, to work as our consultant on this program. Additionally, we met with the Community Corrections Advisory Panel (CCAP) in February to discuss the problems that had arisen in our attempt to devise a unit cost system. In the course of this meeting we were informed that some of the reporting difficulties that the service providers had were due to the fact that all of the services contained elements that could be described as case management. This created difficulties for the providers because they were not certain how to separate the case management functions from the other service elements. This situation also resulted in a system that was inefficient because of the overlapping of the service elements. In addition, we learned during this meeting that all services were measured in fifteen minute blocks, this situation was dangerous because it allowed service providers to bill for a unit of service even when that service actually took only a few minutes. This created problems for the state because a service provider could bill for time that was far in excess of the actual time that they spent providing services.

Dr. McKee offered several suggestions as to how to proceed with our unit cost study. One of his suggestions was that we remove the elements of case management from all of the services so that all case management functions would be under the heading of case management instead of spread throughout all of the services (See Appendix A). One of the innovations that we discussed was to change how units of service are being measured. The current system is that all service units are measured in fifteen minute blocks. It was decided that by changing some of the services so that they are measured in five minute blocks it would be more accurate and easier to audit. The majority of the service elements can easily be measured in five minute blocks, only those elements which include some elements of counseling or training will be measured in fifteen minute blocks. All of the other service elements have been changed to be measured in five minute blocks. Another of Dr. McKee's suggestions was that we collect demographic data on clients in Community Corrections so that we could categorize clients by the amount of services that they would require. This would allow the State to classify clients upon their entry into the

Community Corrections Department so that the State would have a ballpark estimate of what that inmate would cost to supervise. We envision that there will be three, or more depending on the results of a cluster analysis, different categories- High Maintenance, Medium Maintenance, and Low Maintenance. The State would then have a certain dollar figure that would represent the particular client's maintenance fees. These fees would primarily cover the service of Case Management, this being the largest and most inclusive service, and the State would then pay a bulk fee to the service provider dependent upon the classification of the client. This system would be more efficient than the current system and be less prone to abuses. Service providers then would be given an incentive to work with high maintenance clients and would have the ability to request further funds if a particular client exceeded the original estimation of services.

Future Tasks

After meeting again with Erma Sedillo, Roy Safford, and Sherry Helwig we determined that we would pilot our system for a period of three or four months so that we could have the information necessary to do a cluster analysis. Before we pilot our data collection instruments it was suggested that we meet with a couple of the service providers to get their input. At the end of this pilot period we can make revisions to collection instruments if necessary and if no revisions are required we will be ready to start constructing the actual unit cost system. Indirect costs will be allocated by taking the total number of reported unit of service and assigning the indirect costs proportionally by the amount of time that the individual service is actually taking the providers. Additionally, at the end of the pilot period we would have accurate unit cost information that could be used to provide the State with accurate unit costs for services. As per a discussion with Roy Safford we were informed that administrative costs are budgeted by the State to be no more than ten percent of their total budgets, we envision that we can use this budgeting information to help us allocate the indirect costs.

The Institute for Social Research then devised the forms that would be necessary for collection of the data. First we designed a Client Information Form (See Appendix B) which will capture the necessary demographic information for the study. This form captures such variables as a client's current charge, criminal history, and employment status. The second form, entitled Individual Service Components, captures information about the actual services that were offered a client in a given month. This form, as well as the form entitled Case Management Components, provides a space in which the provider of the service will designate their classification, such as Counselor or Supervisor, and their initials so that auditors can determine if a particular person is billing the State for more than the hours that they are actually working. Additionally, we devised the form entitled Case Management Components which captures all of the paperwork functions that service providers are offering. In both of the afore mentioned forms we used the language that appears in the contacts that the provider signed with the State so that if there is a question about the new record keeping forms one can refer to the original contracts. The last form that we designed is entitled *Indirect Cost Monthly Reporting Form* and, as the name implies, is designed to capture all of the indirect cost information, other than the previously mentioned administrative costs, so that these costs can be properly allocated to the individual services.