

**REVIEW RATE STRUCTURE  
FOR  
DEVELOPMENTAL DISABILITIES SERVICE  
IN KANSAS**

Recommendations for a Rate Methodology

**Prepared for the  
State of Kansas  
Department of Social and Rehabilitation Services**

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## **Executive Summary**

Myers and Stauffer has been engaged by the Department of Social and Rehabilitation Services (SRS) to study the algorithms used to establish rates for services provided to individuals with developmental disabilities and to make recommendations for potential changes to the rate methodology.

SRS intends that this study and analysis fulfill the requirements contained in the Developmental Disabilities (DD) Reform Act of 1995. These provisions contained in K.S.A. 39-1801 through 39-1810 require an independent, professional review of the rate structures on a biennial basis, which results in recommendation to the legislature regarding proposed rate adjustments.

### **Issues Concerning the Current Rate Structure**

- The current rate structure is a pricing system based on a 1991 study, which evaluated ten providers and 245 unduplicated consumers.
- Prices (rates) were developed using a hypothetical model of assumed needs per tier level. The main determinants of the input prices were the wage rates for an MR trainee with three years experience, the wage rate for an MR specialist and an estimate of the average hours of direct service per tier level.
- The differential among the various tier levels has not been re-evaluated since the rate structure was originally put in place.
- In addition to being dated, the tier level weighting in the current system appears to over reimburse for services at higher Tier levels and under reimburse for the lower Tier levels.

### **The 2007 Rate Study**

This rate study is intended to build upon the analysis performed in the 2005 study and to

- Validate the results and findings by performing the same analyses on newly collected data, and
- Develop recommendations for a proposed methodology to potentially replace the existing rate formula

Using basically the same data tool as used in the 2005 study, Myers and Stauffer collected cost and day information for each tier level at each service setting for both residential and day services. An allocation methodology was used to distribute and determine per diem costs, which were then used to evaluate cost coverage and assist in preparing our recommendations.

The 2005 and earlier rate studies relied on the voluntary submission of data to be used in the analyses. The 2007 Kansas Legislature adopted a proviso that required all developmental disability community service providers to furnish information for the biennial independent rate study conducted by the SRS as required by the DD Reform Act.

There were 128 providers that met the criteria requiring completion of the data collection tool. In order for the rate study to yield the most complete and accurate information, Community

Developmental Disabilities Organizations (CDDO) and Community Service Providers (CSP) completing the tool were encouraged to provide as much detailed information as possible.

Areas of particular interest were the tier levels, hours, and salary information including benefits, wages and overtime. In dividing costs among service types or service settings actual direct costing was requested whenever available.

### **Recommendations**

The development of a new reimbursement methodology should be based on knowledge of the factors that affect reimbursement, a detailed analysis of current conditions, and a clear understanding of the state's goals and objectives.

Our recommendation for both residential and day services is a prospective pricing system. However unlike the Deloitte & Touche methodology which developed prices using a set of hypothetical models, we recommend that prices be linked to actual costs and be set using a measure of the central cost tendencies such as the mean or median. The cost analyses performed through this rate study and validated by comparison to the 2005 analyses provides the necessary data to establish new prices.

Evaluation of the costs and rates for in-home supports presented very different challenges given the definition of units of service and the reporting of costs. We understand there have been recent changes to the definition of units of service. For this reason, our recommendation includes both a short-term and a long-term component. In the short term, we recommend inflating current rates. We then recommend standardizing the reporting of service-unit costs in any future study to provide better information on which to base a potential change in rate methodology.

### **Key Points of the Recommendations**

- The data collected during the 2005 and the 2007 rate studies represent a bigger, more current and, we believe, better base for rate development, than the 1991 study. The two recent studies analyzed data from 70 providers in 2005 and 96 providers in the 2007 study.
- Our recommended prices are based on actual reported costs rather than a hypothetical model.
- Our 2005 rate study was the first to attempt to evaluate the cost differential of providing services to the various tier levels without using the rate formula to first allocate the costs.
- Using allocations based on costs and tier level days reported by setting, to distribute costs to the tier levels produces a much smaller differential among tier level costs.
- Prices based on reported costs, as allocated above, create prices with much smaller differentials among the tier levels than are built into the old rate structure.

The implementation of a new reimbursement system, without additional funding, generally produces "winners" and "losers". We recommend a phase-in methodology to ease the transition between the old and the new rate structures.

## Introduction

### ***Current rate study***

Myers and Stauffer was engaged by the Department of Social and Rehabilitation Services (SRS) to study the algorithms used to establish rates for services provided to individuals with developmental disabilities and to make recommendations for potential changes to the rate methodology. Myers and Stauffer, a certified public accounting firm established in 1977, has provided cost report verification, rate setting and consulting services to state and federal agencies for over 30 years. Our staff have extensive knowledge and hands-on experience performing audits, desk reviews and a wide array of rate setting, data management, analyses and consulting services.

Previously Myers and Stauffer performed the 2001 rate study for SRS. This engagement covers the current 2007 study, as well as a prior study completed for 2005. The results of the 2005 rate study were presented to SRS in a final report dated October 10, 2006. In performing that study, Myers and Stauffer met with state staff, the oversight committee and various providers, we developed and tested a data collection tool, collected, aggregated and analyzed cost data and then provided both general and rate specific recommendations to SRS.

For the current study we have been directed to build upon the analyses performed in the 2005 study and to:

- Validate the results and findings by performing the same analyses on newly collected data, and
- Develop recommendations for a proposed methodology to potentially replace the existing rate formula

SRS intends that this study and analysis fulfills the requirements contained in the Developmental Disabilities (DD) Reform Act of 1995. These provisions contained in K.S.A. 39-1801 through 39-1810 require an independent, professional review of the rate structures on a biennial basis, which results in recommendation to the legislature regarding proposed rate adjustments.

### ***CDDO/CSP program***

The DD reform act directs that individuals with developmental disabilities be afforded the same dignity and respect as individuals without disabilities. SRS contracts with Community Developmental Disabilities Organizations (CDDO), who, by working with affiliated community service providers, coordinate services and supports for these individuals. The CDDO are the primary gatekeepers of DD services and:

1. Provide a single point of entry for people seeking services
2. Determine eligibility for services
3. Maintain a list of persons waiting to receive services
4. Assist people in accessing needed services

5. Provide information and referral services
6. Coordinate the transition of people living in state hospitals who wish to return to their home community
7. Work with affiliate agencies to ensure consumer-driven, quality services

### ***Prior analyses and findings***

The development of recommendations for either rate adjustments or a new rate methodology requires an understanding of cost coverage under the existing rate structure. Since rates are established at the tier level, cost coverage should also be evaluated at that level. Costs records, however, are typically not maintained in that detail and must be allocated.

### **Per-diem costs per tier level**

Studies performed before 2005, including the 2001 Myers and Stauffer study, used the ratio of hours contained in the rate formula to allocate or distribute the costs among the tier levels in order to evaluate rate to cost coverage. The use of the rate formula in the allocation, although perhaps the best information available at the time, assumes that the hours in the rate formula are accurate. It also establishes a self-validating calculation and it seems problematic to test the adequacy of the rate formula using the rate formula to define the test.

As discussed in our prior report, using the rate formula to allocate costs for the comparison introduces bias. It appears that rates for the higher-need tiers are not covering costs and rates for the lower-need tiers are over funded. However a quartile analysis of provider specific covered costs does not support that conclusion. In fact the quartile analysis shows just the opposite. Providers with high concentrations of Tier 1 and Tier 2 clients had better rate to cost coverage than those with higher concentrations of individuals in Tiers 4 and 5.

To create an allocation methodology independent of the rate formula, the cost tool developed during the 2005 study collected both tier level days and costs at the individual service setting. We hoped this detailed cost and day information would produce the most accurate, best available distribution of costs among the tier levels.

When we distributed costs in this detailed manner, we saw very different cost coverage results than when using the rate formula to allocate costs. The results were supported by the quartile analyses and we believe the allocation using reported cost and day information by tier level and by service setting was, therefore, more accurate in determining cost coverage.

Using the detailed cost and day data by tier level by setting produced different results for residential services as shown in the following table, which was originally included in our report of the 2005 study.

**Table 1: Per Diem Costs per Tier Level Using Detail Reported by Setting from 2005 Rate Study**

<b>Tier Level</b>	<b>Expenses</b>	<b>Days</b>	<b>Per Diem</b>
<b>Tier 0</b>	4,150,319	79,053	52.50
<b>Tier 1</b>			
Regular	18,329,749	175,278	104.58
Individual	351,016	2,819	124.52
Super	3,278,418	27,706	118.33
<b>Tier 2</b>			
Regular	12,451,790	133,566	93.23
Individual	289,675	2,398	120.80
Super	1,149,941	9,511	120.91
<b>Tier 3</b>			
Regular	16,107,584	194,093	82.99
Individual	176,022	1,774	99.22
Super	520,785	4,088	127.39
<b>Tier 4</b>			
Regular	10,506,971	137,673	76.32
Individual	184,269	1,448	127.26
Super	167,888	1,219	137.73
<b>Tier 5</b>			
Regular	12,350,231	198,070	62.35
Individual	49,434	796	62.10
Super	80,304	729	110.16

These numbers suggest the rates for Tier Levels 1 and 2 may be overstated. Tier 1 rates, effective July 2006, were \$138.69 compared to the above allocated cost of \$104.58 and \$113.61 compared to 93.23. They further suggest that Tier Levels 3-5 may be understated, with rates of \$82.12, \$53.03 and \$38.32 compared to allocated costs of \$82.99, \$76.32 and \$62.35 respectively. The quartile analysis of cost coverage comparison for residential services supports this finding. Similar findings were also found for day services.

### **Hypothetical Example**

To help explain the mechanics of three potential allocation methods that could be used in the analyses of costs and to show the various impacts they have on the resulting findings, we offer the following example. This example assumes a provider with ten service settings that have separately maintained cost data and tier level day information. The hypothetical data used to perform these allocations are listed in the following table.

**Table 2: Hypothetical Data for Cost Allocation Example**

ALLOCATION OF COSTS TO TIER LEVEL - SIMPLE EXAMPLE								
Assume the following tier level days and provider costs per setting								
Setting	Costs	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5	Total Days	
Setting 1	\$120,000	600			500		1,100	
Setting 2	\$100,000	300	200	500			1,000	
Setting 3	\$135,000				300	1,200	1,500	
Setting 4	\$136,000	1,100	100				1,200	
Setting 5	\$102,000		300		200	500	1,000	
Setting 6	\$100,000	400	400				800	
Setting 7	\$105,000			1,000			1,000	
Setting 8	\$97,000		500		500		1,000	
Setting 9	\$71,000				200	500	700	
Setting 10	\$74,000				700		700	
<b>Total Provider Costs</b>	<b>\$1,040,000</b>	<b>2,400</b>	<b>1,500</b>	<b>1,500</b>	<b>2,400</b>	<b>2,200</b>	<b>10,000</b>	

One simple allocation method would be to equally distribute the costs across all days regardless of the tier level. This would be appropriate if the rate methodology used produced only one average rate that would be paid for all days of service without consideration for tier levels. The evaluation of aggregate cost coverage would then be as simple as dividing total costs by total days to get an average cost per day, as shown in Table 2. This average cost per day would then be compared to the rate per day to determine cost coverage.

This calculation, although simple and straight forward does not provide sufficient information to evaluate cost coverage at the tier level.

**Table 3: Simple Average Allocation**

Simple Average Allocation	
Total Provider Costs	\$1,040,000 a
Total Days All Tier Levels	\$10,000 b
Per Diem Costs	\$104 a/b

A second method, the one that has been used in all studies prior to the 2005 study, allocates costs using the hours from the rate formula. Illustrated in the example below, hours assigned to a tier level in the rate formula are multiplied by the number of days of service at that tier. Once all days are weighted by assigned hours, they are summed to determine the total of weighted days. Each tier levels weighted days are divided by the total weighted days to determine its percentage of the total. This percentage is then multiplied by total costs to determine the portion allocated to each tier level. The allocated costs are then divided by total days to get a weighted per tier level per diem.

Applying those steps to the Tier 1 data below, the 2,400 reported days would be multiplied by the 5.94 hours from the rate formula. The resulting 14,256 weighted days would be divided by the

total weighted days for all tier levels or 34,943. The total costs of \$1,040,000 would be multiplied times the resulting 40.80% to determine the costs to be allocated to Tier 1, 40.80% of \$1,040,000 is \$424,298. This total is then divided by 2,400 days to determine the weighted per diem costs. For Tier 1, in this hypothetical example, we would allocate \$176.79 per day. Even with the hypothetical data, the self-fulfilling influence of weighting the calculation by the formula can be seen.

**Table 4: Allocation of Costs Using the Rate Formula**

Allocation of Costs Using the Rate Formula						
Tier Levels	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5	Total
Days at Tier Level	2,400	1,500	1,500	2,400	2,200	10,000
Hours Per Day Per Rate Formula	5.94	4.75	3.4	2.16	1.49	
Days Weighted by Hours of Direct Care	14,256	7,125	5,100	5,184	3,278	34,943
Per Cent of Weighted Days to Total	40.80%	20.39%	14.60%	14.84%	9.38%	100.00%
Total Costs Allocated by Tier Level	\$424,298	\$212,060	\$151,790	\$154,290	\$97,562	\$1,040,000
Per Diem Costs	\$176.79	\$141.37	\$101.19	\$64.29	\$44.35	

The final potential method uses the detailed cost and day information reported by setting. This allocation procedure was used in the 2005 study and distributes cost data without allowing the rate formula to impact the results. This example helps illustrate the process we followed.

Using the data from the assumption listed above, we determine the percentage of costs that should be attributed to each tier level for each setting. To illustrate for Setting 1, there were 1,100 total days, 600 at Tier 1 and 500 at Tier 4. Dividing each by the 1100 total we get 54.55% and 45.45% respectively. Once all the tier level percentages have been determined for each setting it looks like the first grid in the table below.

For each setting the reported cost would be allocated to the tier level based on the percentage of days at that level to total days in service setting. Again focusing on Setting 1, 54.55% of the reported cost of \$120,000 would be allocated to Tier 1 and 45.45% would be allocated to Tier 4. After doing the math, we assign \$65,455 to Tier 1 and \$54,545 to Tier 4. Due to rounding of the percentages, results could vary slightly.

After each setting's costs are allocated to the appropriate tiers, the total allocated cost per tier level is determined by summing the allocated costs. For Tier 1, we have \$65,455 dollars from Setting 1, \$30,000 from Setting 2, \$124,667 from Setting 4 and \$50,000 from Setting 6 for a total of \$270,121. Once all tier levels are summed, the totals are divided by days at that tier level to determine the allocated per diem costs. For Tier 1 the \$270,121 total would be divided by the 2,400 days for a per diem of \$112.55.

**Table 5: Allocation of Costs Using Detailed Costs and Days by Tier Level by Service Setting****Allocation of Costs Using Tier Level Days Per Setting****Determine Percent of Days at Each Tier Level for Each Setting**

Setting	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5
Setting 1	54.55%			45.45%	
Setting 2	30.00%	20.00%	50.00%		
Setting 3				20.00%	80.00%
Setting 4	91.67%	8.33%			
Setting 5		30.00%		20.00%	50.00%
Setting 6	50.00%	50.00%			
Setting 7			100.00%		
Setting 8		50.00%		50.00%	
Setting 9				28.57%	71.43%
Setting 10				100.00%	

**Allocate Cost of Each Setting to the Tier Levels Based on the Percentage. Determine Total Allocated Costs Per Tier Level and Divide By Total Days Per Tier Level to Calculate Per Diem Costs.**

Provider Cost	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5
120,000	65,455			54,545	
100,000	30,000	20,000	50,000		
135,000				27,000	108,000
136,000	124,667	11,333		0	
102,000		30,600		20,400	51,000
100,000	50,000	50,000			
105,000			105,000		
97,000		48,500		48,500	
71,000				20,286	50,714
74,000				74,000	
1,040,000	270,121	160,433	155,000	244,731	209,714
	\$112.55	\$106.96	\$103.33	\$101.97	\$95.32

It is easy to see the impacts of the various allocation methods on the evaluation of cost coverage and the subsequent findings. The per diem costs for Tier 1 using the overall simple average would be \$104.00, using the rate formula hours to allocate would be \$176.79 and using the days and costs per tier level would be \$112.55.

A potential shortcoming of this allocation method is that absent an acuity index, other than the hours in the rate formula, service setting costs must be allocated equally across any days at that setting. Evenly divided data flattens the recognition of cost differences. Detailed time studies would need to be performed to develop the needed acuity adjuster. However, the large volume of reported days helps to mitigate the impact of this shortcoming.

Given the above findings, our recommendation in the 2005 study was that the rate formula at a minimum be recalibrated or redesigned.

As with any allocation methodology, the results are only as good as the assumptions and the underlying data used. Since the 2005 rate study was the first in which data was collected at this level of detail, we also recommended that further evaluation be completed before any major change to the reimbursement algorithm.

A subsequent round of data analysis using new cost data and the same methodology was recommended for the current study. To provide the recommended evaluation, the current rate study was structured in a way to replicate data collected from the prior study and the compare findings.

## **Rate Study Methods**

### ***Over-site committee***

A committee composed of three representatives from SRS and three from the provider community provided advisory services to the contractor during the current and prior rate study. The Advisory committee was a component of the rate study newly added in 2005. A listing of Advisory Committee members is included in Appendix A.

The following recommendations from the Advisory Group for the prior study were incorporated into this study to produce comparable results.

1. Include any enrolled Medicaid provider serving five or more people.
2. Do not include children's residential, self-determination or limited license providers in the study. Note: Statistics on children's residential and self-determination were collected for completeness of records and comparison to source documentation.
3. Allow the providers to report data from their fiscal year rather than the state fiscal year.
4. Use the most recent fiscal year end or those ending in calendar year 2006.
5. Hold training sessions on use of the data collection tool.

### ***Data collection tool and instructions***

During the 2005 study we developed and refined a financial, staffing and service delivery data collection instrument for Community Developmental Disabilities Organizations (CDDO) and Community Service Providers (CSP). The tool collected information concerning

- The provider's ownership structure, fiscal year cycle and demographic information.
- Detail of expenses incurred during the fiscal year, separated into applicable cost categories.
- Statistical information necessary to perform applicable cost allocations and other cost finding algorithms.
- A declaration by the owner and/or preparer that all information reported is accurate and complete.
- Any other information that may be relevant to develop accurate calculations of the cost of providing services.

An updated 2005 study tool was used in the current study to collect and compile the financial and statistical data needed to complete the analysis. The tool is an EXCEL workbook with separate tabs or worksheets designed to collect general provider data, units of service, by service category and revenues and expenses. The tool included a macro to, when necessary add additional columns to the schedules. Formulas used to simplify the completion and cost allocation process were embedded in the tool. Copies of the tool and instructions are included in Appendices B and C.

The tool covered the twelve consecutive months of the provider's fiscal year ending in 2006. New providers not having twelve months of operation completed the tool from the beginning date of operation through the fiscal year ending in 2006.

### ***On-line training***

Training this year was conducted using Microsoft Live Meeting, which allows individuals to join a meeting on-line and see the computer of the meeting leader. This allowed for real time demonstration and review of the data collection tool and eliminated the need for providers to travel to obtain training. The Live Meeting was augmented with a telephone conference call. Sessions were held for CDDO only, CDDO/CSP and CSP and In-Home Supports providers. Only one provider experienced technical problems, which were resolved. This seemed to be a very effective method to complete the training.

### ***Data submission, review and inclusion in the database for analyses***

The 2005 and earlier rate studies relied on the voluntary submission of data to be used in the analysis. The 2007 Kansas Legislature adopted a proviso that required all developmental disability community service providers to furnish information for the biennial independent rate study conducted by SRS as required by the Developmental Disability Reform Act.

In order for the rate study to yield the most complete and accurate information, CDDO and CSP completing the tool were encouraged to provide as much detailed information as possible.

Areas of particular interest were the tier levels, hours, and salary information including benefits, wages and overtime. In dividing costs among service types or service settings actual direct costing was requested whenever available.

Completed forms were sent electronically to Myers and Stauffer. Additional hard copy information was received by mail including the Provider Data signature page. All providers required to participate in the rate study complied. The submitted forms were reviewed for internal consistency and comparability to supporting documentation, such as audited financial statements, working trial balances, or tax returns, in an attempt to maintain the integrity of the rate study.

After a detailed review, 96 providers were determined to have useable data for the analyses. An excluded provider's data was either incomplete, or based on our review of the submitted data appeared unreasonable or incorrect, for example per diem costs in a cost center of less than one dollar.

## **Analysis and Findings**

### ***Validation of prior year findings***

Using basically the same data tool, we collected cost and day information for each tier level at each service setting for both residential and day services. An allocation percentage was then determined for each tier level at each service setting and service setting costs were distributed based on this percentage. After distributing all service setting costs, tier level totals were determined. These totals were divided by total days at each tier level to determine the per diem costs.

The results of the current study's analysis followed a similar pattern to the 2005 study with cost differentials among the Tier levels but at a much lower percentage than would be suggested in the Deloitte & Touche rate structures.

We believe that given two distinct data sets both resulting in compressed rate differentials among the tier levels, validates its use in a rate setting methodology. The cost data used in the analysis represents the majority of providers, costs and days and appears to be a reasonable base for a new reimbursement methodology.

## **Recommendations**

The development of a new reimbursement methodology should be based on knowledge of the factors that affect reimbursement, a detailed analysis of current conditions, and a clear understanding of the state's goals and objectives. Included in Appendix D is a brief discussion of some of the important rate setting concepts, including provider-independent rates, provider-dependent rates, prospective and retrospective systems, inflation and rebasing, that may assist in the recommendation discussion.

### ***Current rate formula***

In 1991 Deloitte & Touche performed a rate study that was used to develop the rate formula for residential and day services, which is still used to determine rates. Prior to the Deloitte & Touche study, waiver services were reimbursed with rates established based on estimated average costs of services.

The study sample included 245 unduplicated individuals or approximately 50% of the 485 Home and Community Based Services (HCBS) waiver recipients at the time. It evaluated the then current service program costs, staffing patterns, service delivery characteristics, state and federal licensing standards and other applicable data. The service categories evaluated were Day Habilitation, Residential Habilitation, Supported Employment and Supported Family Living.

The main components needed to develop a case mix rate structure include a methodology to assess consumer needs, a system that groups consumers with similar resource needs, and a method to link reimbursement to the predicted resource usage. The decision was to use the Developmental Disabilities Profile (DDP), a tier level grouping methodology and rate models developed through cost study.

The DDP was selected as the tool to assess consumer needs. It is an instrument designed by New York's Office of Mental Retardation, over a two-year period finalized in 1990, to record important characteristics of individuals with developmental disabilities. The information collected via the DDP includes a broad range of adaptive functioning skills as well as behavioral challenges and health factors.

The instrument yields a score in each of three indexes: adaptive functioning, maladaptive behavior and health needs. Because the indexes are not equivalent numerically (unequal number of questions in each index) the index scores are converted, thus the maximum possible converted score is 300. The higher the score, the greater (more severe) is the disability of the individual.

In the Deloitte & Touche study, individual scores were converted to percentiles and ranked against the identified population set. These percentiles were divided into levels, which corresponded to consumer's service level needs. The highest percentile ranking corresponded to the highest level of need.

The rate system resulting from the Deloitte & Touch study was a provider independent, prospective pricing model. Prices were established through the creation rate model representing a hypothetical provider and the determination of anticipated inputs and market prices.

All settings of Day Habilitation were treated as one service and all settings of Residential Habilitation were treated as one setting. Rate models were then developed for each service category. The models assumed inputs for direct personnel costs, direct administration costs, non-personnel operating costs, transportation costs, facility related costs and indirect administration costs based on data and observations from ten providers. The models included staffing ratios and hours of direct service delivered per day per consumer in the various service programs.

The models used wage rates for an MR trainee with three years experience for direct service staff with a benefits ratio of 20% of gross; a 15% relief factor to account for vacation, sick leave, holidays, training and meetings; a holiday coverage or client sick/snow day coverage factor; the wage rate for an MR specialist for the direct personnel supervision with a benefits ratio of 20% of gross; non-personnel operating, transportation and indirect administration based on a percentage of total unit cost; a vacancy factor; and an amount for over night awake staff.

The day service rates did not include the holiday coverage factor or the over night awake staff amounts. It did include a facilities related cost, based on a fixed dollar amount per consumer per year.

The basic rate structure has changed little from the original recommendation. When transportation was removed from the rate structure, the dollars were left in and renamed "other reimbursement." Dollars were added for staff training and medical and therapeutic consultation. The benefit factor was increased to 25%. Wage rates and hours per tier level have also been increased and the vacancy factor has been reduced.

### ***Proposed Rate Methods***

The data collected during the 2005 and the 2007 rate studies represents a bigger, more current and, we believe, better base for current rate development, than the Deloitte & Touche study on

which the current model is based. The 1991 study evaluated ten providers and 245 unduplicated clients in 1991. The two recent studies analyzed data from 70 providers in 2005 and 96 providers in the 2007 study.

From the 1991 study, Deloitte & Touche developed provider-independent prices using hypothetical models. Our recommendation for both residential and day services is a prospective pricing system. However unlike the Deloitte & Touche methodology which developed prices using a set of hypothetical models, we recommend that prices be linked to actual costs and be set using a measure of the central cost tendencies such as the mean or median. The cost analyses performed through this rate study and validated by comparison to the 2005 analyses provides the necessary data to establish new prices.

We did no further evaluation of the acuity adjustment portion of the rate methodology. Our recommendation in the prior study suggested some additions to the DDP to assist in evaluating needed supports. The evaluation of supports could help to better assess and predict resource needs. The cost data as allocated using costs and days reported by tier level by setting in residential services demonstrates, although not to the degree of the current rate model, the differences in costs based on differences in tier level assignment. We saw very minor differences in the day services, but this could be being impacted by the limited number of service settings used to distribute day services costs.

Evaluation of the costs and rates for in-home supports presented very different challenges given that there are different measures of service units ranging from days, to hours, to 15-minute units, yet costs were all aggregated. Attempts to define all units in terms of days presented some interesting results. We understand there have been recent changes to the definition of units of service.

### ***Residential rates***

Residential services are provided in the residence of persons who are not living in the family home and are designed to assist individuals to live successfully in a community setting they have chosen and can afford. They help with daily living needs, which vary depending on the individual receiving services.

**Table 6: Current Residential Rates**

<b>Current Residential Rates</b>		
	Regular	Super Tier
Tier 1	157.07	188.28
Tier 2	128.65	168.00
Tier 3	93.00	149.57
Tier 4	60.06	131.75
Tier 5	43.40	112.30

Our proposed rates are developed using the cost categories defined on the data collection tool of indirect administrative, consumer related cost and risk management. The costs reported in each category by service setting were allocated to the tier levels based on a percentage of tier level days at each setting compared to total days at each setting. Once all costs were allocated, we then calculated average and median per diems. The average and median per diems in each tier level by cost category were used in subsequent rate modeling.

Although 96 providers had costs that were included in the data base, a few providers reported costs with no associated days or conversely days with no costs. Providers without sufficient data were excluded from the calculation of average and median per diems. Also removed from the analysis were providers with per diems that were determined to be unreasonable. For example, the range of per diems for consumer related costs ranged from \$1,800 per day to \$11 per day. Although a few instances of unreasonably high per diems were removed, the majority were removed for being unreasonably low. Table 7 and Table 8 show the average costs by tier level for both regular and super tiers.

**Table 7: Residential Services Regular Tiers  
Calculated Average with Outliers and Undistributed Day/Cost Removed**

	Indirect Administrative			
	Reported Cost	Reported Days	Per Diem	Average
Tier 1	4,637,990	181,707	25.52	23.31
Tier 2	3,356,474	151,576	22.14	22.29
Tier 3	3,662,563	182,571	20.06	20.88
Tier 4	2,303,510	120,164	19.17	20.86
Tier 5	2,562,467	133,177	19.24	21.07
	Consumer Related Costs			
	Reported Cost	Reported Days	Per Diem	Average
Tier 1	17,957,611	218,952	82.02	71.84
Tier 2	13,861,902	194,239	71.37	66.98
Tier 3	15,930,034	243,122	65.52	62.43
Tier 4	10,833,373	169,847	63.78	62.07
Tier 5	12,028,104	225,653	53.30	58.52
	Risk Management			
	Reported Cost	Reported Days	Per Diem	Average
Tier 1	593,618	203,787	2.91	2.95
Tier 2	492,950	176,608	2.79	3.01
Tier 3	527,050	204,102	2.58	2.79
Tier 4	359,071	150,516	2.39	2.82
Tier 5	393,565	180,837	2.18	2.60

**Table 8: Residential Services Super Tiers**  
**Calculated Average with Outliers and Undistributed Day/Cost Removed**

Indirect Administrative				
	Reported Cost	Reported Days	Per Diem	Average
Tier 1 Super	1,018,838	44,563	22.86	22.25
Tier 2 Super	273,686	12,951	21.13	21.86
Tier 3 Super	144,593	5,936	24.36	27.48
Tier 4 Super	33,322	2,265	14.71	15.77
Tier 5 Super	4,180	360	11.61	11.61
Consumer Related Costs				
	Reported Cost	Reported Days	Per Diem	Average
Tier 1 Super	4,576,370	45,771	99.98	90.89
Tier 2 Super	1,385,990	13,530	102.44	100.95
Tier 3 Super	751,028	7,489	100.28	101.51
Tier 4 Super	163,444	2,265	72.16	70.54
Tier 5 Super	42,975	360	119.38	119.38
Risk Management				
	Reported Cost	Reported Days	Per Diem	Average
Tier 1 Super	159,153	43,835	3.63	3.60
Tier 2 Super	47,811	12,951	3.69	3.48
Tier 3 Super	19,994	6,759	2.96	3.01
Tier 4 Super	5,546	2,265	2.45	2.54
Tier 5 Super	1,457	360	4.05	4.05

Although the current rates adjust all costs based on the assumed hours per tier level we observed that in several of the categories the average or median costs did not vary in any significant way across the tier levels including all regular and super tiers (individual tier rates were excluded as they are calculated outside of the rate structure.) In cost categories where costs were very similar or did not follow the tier level scheme (for example Tier 5 average per diem costs that were higher than Tier 3 average per diems.), we recommend a price component consistent across all tier levels. Both indirect administration and risk management price components are recommended at levels based on the average costs of all tier levels.

The prices we propose for residential services are calculated as follows and are included in Table 9 below. Prior to implementation of new rates, it will be important for the various stakeholders to review and understand the various assumptions used in the rate calculations.

To calculate the consumer related portion of the rate, we used average costs plus 18% adjusted by the cost differentials between the tier levels. The percentage above the average was selected to maintain budget neutrality in the fiscal impact analysis. We used Tier 3 level costs as our “base” set at a level between the average and median costs for all the tier levels, to establish the price

component. Other tier level price components were then established using the cost differential between the calculated average cost for tier level 3 and each of the other tiers.

The price for the super tier was set at 130% of the Tier 3 level base, which approximates the average per diem for the super tiers.

**Table 9: Proposed Residential Services Prices**

Residential Rate	Tier 1	Tier 1	Tier 2	Tier 2	Tier 3	Tier 3	Tier 4	Tier 4	Tier 5	Tier 5
	Regular	Super	Reg	Super	Regular	Super	Regular	Super	Regular	Super
Indirect Administrative	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00
Consumer Related	94.40	106.80	88.25	106.80	82.00	106.80	77.90	106.80	73.75	106.80
Risk Management	3.00	4.00	3.00	4.00	3.00	4.00	3.00	4.00	3.00	4.00
	118.40	131.80	112.25	131.80	106.00	131.80	101.90	131.80	97.75	131.80

**Day service rate calculation methodology**

Day services are provided away from the person’s home, typically during working hours to increase the person’s independence, integration, inclusion and personal accomplishment. These day time services are structured activities, which may include workplace training, socialization, recreation and community inclusion.

**Table 10: Current Day Service Rates**

Current Day Rate		
	Regular	Super Tier
Tier 1	97.58	118.50
Tier 2	72.16	108.94
Tier 3	58.03	100.35
Tier 4	42.70	91.48
Tier 5	36.64	83.64

Our evaluations and recommendation for day service prices also used the collection tool categories of indirect administrative, consumer related and risk management. Facility costs would be the final cost center. As with the residential rates, the cost for each individual setting were allocated to the tier levels in each the setting. The allocated costs per tier level were then divided by the total number of days reported at each tier level to arrive at a per diem cost. We then calculated the average and median per diem by tier level and cost category.

As with the residential service, some providers reported costs with no associated days and days with no costs. These providers were excluded from the calculation of average and median per diems. We also removed the outlier per diems that were unreasonably low and in fewer instances per diems that were unreasonably high.

**Table 11: Day Services Regular Tiers**  
**Calculated Average with Outliers and Undistributed Day/Cost Removed**

Indirect Administrative				
	Reported Cost	Reported Days	Per Diem	Average
Tier 1	945,638	63,365	14.92	17.39
Tier 2	876,310	62,004	14.13	16.27
Tier 3	928,734	67,004	13.86	15.85
Tier 4	582,032	44,590	13.05	17.67
Tier 5	798,499	61,730	12.94	15.28
Consumer Related Costs				
	Reported Cost	Reported Days	Per Diem	Average
Tier 1	4,001,133	94,883	42.17	41.97
Tier 2	3,794,670	96,323	39.40	41.40
Tier 3	4,674,346	117,491	39.78	40.77
Tier 4	3,483,210	90,771	38.37	39.03
Tier 5	4,669,735	126,939	36.79	39.32
Risk Management				
	Reported Cost	Reported Days	Per Diem	Average
Tier 1	200,665	83,498	2.40	2.61
Tier 2	181,648	76,656	2.37	2.41
Tier 3	217,272	94,101	2.31	2.39
Tier 4	157,939	72,012	2.19	2.12
Tier 5	187,943	78,415	2.40	2.19
Facility Costs				
	Reported Cost	Reported Days	Per Diem	Average
Tier 1	592,153	83,465	7.09	7.00
Tier 2	554,114	82,831	6.69	6.86
Tier 3	655,239	103,324	6.34	6.74
Tier 4	568,640	86,160	6.60	6.59
Tier 5	718,158	122,460	5.86	6.78

**Table 12: Day Services Super Tiers**  
**Calculated Average with Outliers and Undistributed Day/Cost Removed**

Indirect Administrative				
	Reported Cost	Reported Days	Per Diem	Average
Tier 1 Super	56,411	4,233	13.33	14.13
Tier 2 Super	13,623	1,069	12.74	12.59
Tier 3 Super	11,965	883	13.55	12.80
Tier 4 Super	2,027	187	10.84	10.84
Tier 5 Super	none	none		
Consumer Related Costs				
	Reported Cost	Reported Days	Per Diem	Average
Tier 1 Super	190,876	4,379	43.59	43.80
Tier 2 Super	82,282	1,535	53.60	52.08
Tier 3 Super	71,264	1,525	46.73	45.37
Tier 4 Super	6,965	187	37.25	37.25
Tier 5 Super	none	none		
Risk Management				
	Reported Cost	Reported Days	Per Diem	Average
Tier 1 Super	11,126	4,795	2.32	2.74
Tier 2 Super	4,052	1,535	2.64	2.65
Tier 3 Super	3,053	1,349	2.26	2.43
Tier 4 Super	395	187	2.11	2.11
Tier 5 Super	none	none		
Facility Costs				
	Reported Cost	Reported Days	Per Diem	Average
Tier 1 Super	33,256	4,697	7.08	6.76
Tier 2 Super	9,273	1,340	6.92	6.60
Tier 3 Super	9,930	1,460	6.80	6.26
Tier 4 Super	435	187	2.33	2.33
Tier 5 Super	none	none		

When evaluating the average and median costs we saw much less differentiation in the costs assigned to the various tier levels in all of the cost categories. The prices we propose for day services are calculated as follows and are included in Table 13 below. For consistency, we recommend setting the indirect administration day services price component at the average for all tier levels including regular and super tiers. The risk management price component was also established at the average for all tier levels.

The consumer related portion of the rate, we used average costs adjusted by the cost differentials between the tier levels. We used Tier 3 level costs as our “base” set at a level between the average and median costs for all the tier levels to establish the price component. Other tier level price components were established using the cost differential between the calculated average cost for tier level 3 and each of the other tiers. The super tier levels 1-5 were set at the consumer related per diem of all tier levels.

We used a simple average to set the facility cost price component of the rate for all tier levels including regular and super tiers. Prior to implementation of new rates, it will be important for the various stakeholders to review and understand the various assumptions used in the rate calculations.

**Table 13: Proposed Day Services Prices**

<b>Proposed Rate Day Services</b>										
	Tier 1	Tier 1	Tier 2	Tier 2	Tier 3	Tier 3	Tier 4	Tier 4	Tier 5	Tier 5
	Regular	Super	Reg	Super	Regular	Super	Regular	Super	Regular	Super
Indirect Administrative	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00
Consumer Related	45.40	45.00	43.65	45.00	43.00	45.00	41.50	45.00	40.00	45.00
Risk Management	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40
Facility	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20	6.20
	69.00	68.60	67.25	68.60	66.60	68.60	65.10	68.60	63.60	68.60

### ***In-Home Supports***

These services are designed to defray the cost and stress of supporting a family member with a developmental disability who lives in the family home and may include direct subsidy, respite care, in-home supports and assistance in purchasing durable equipment and supplies. The service could include assistance with health care needs, such as taking medications, therapy service continuation, health observation and evaluation, household maintenance and self care activities.

We understand there have been recent changes to the definition of units of service. For this reason, our recommendation includes both a short-term and a long-term component. In the short term, we recommend inflating current rates. We then recommend standardizing the reporting of service-unit costs in any future study to provide better information on which to base a potential change in rate methodology.

### ***Non-HCB Services – Tier 0***

Tier 0 rates are reimbursed outside of the waiver and current rate structure with state general funds. Services for individuals reimbursed at this rate either do not meet the Medicaid eligibility requirements or the acuity level requirements.

Tier 0 rates were calculated for both Residential settings and Day service settings. We used the same cost categories including indirect administrative, consumer related, risk management, and facility costs for day services.

The costs in these cost categories were divided by the number of days reported by the providers at each tier level to arrive at a per diem cost. We then calculated an average and the median per diem by tier level and cost category. The following table shows the calculated rates proposed for Tier 0.

**Table 14: Proposed Residential and Day Prices for Tier 0**

<b>Proposed Rate Residential Service</b>		<b>Proposed Rate Day Services</b>	
	<b>Tier 0 Rate</b>		<b>Tier 0 Rate</b>
Indirect Administrative	13.60	Indirect Administrative	12.00
Consumer Related	49.40	Consumer Related	38.50
Risk Management	1.90	Risk Management	2.00
	<b>64.90</b>	Facility	5.60
			<b>58.10</b>

## Fiscal Impact Evaluation

### ***Overall budget***

Rate methodology changes can be implemented with various budget levels, including increased costs, budget neutrality or even with reduced costs. In an attempt to evaluate the impact of our recommendations we performed fiscal impact analysis on each potential model. For comparison purposes we multiplied current rates times report days at each tier level. This total is then compared to our modeled prices multiplied times reported days at each tier level.

Our current recommended prices were set attempting to maintain budget neutrality with inflation. Spreadsheets containing the fiscal impact analysis of our recommended rates for residential services, day services, and the impact of a potential phase-in methodology are included in the appendix.

### ***Individual providers***

All previous rates have been established using the rate formula and its assumption that costs for Tiers 1 and 2 are significantly more than costs for the other tiers based on our analyses. The recommended price structure reflects much less differential among the tiers than what has previously been reimbursed. Although, with the exception of inflation, we attempted to assume budget neutrality in the aggregate individual providers will be affected differently. With reductions in the price rates for Tier 1 and Tier 2 days and increase in those for Tier 4 and Tier 5 this new pricing structure will create “winners” and “losers” in regards to payments. Providers with high numbers of days in Tier 1 and 2 could see a decrease in reimbursement. The opposite is true for the providers with high numbers of Tier 4 and 5 days. They could see increased payments with this rate structure.

## Transition Issues

### *Rate phase-in discussion*

The intent of implementing a new rate structure is to distribute available state and federal dollars for the developmentally disabled program in the most efficient manner to ensure needed services are provided. Since there are going to be differences in the payments expected by the providers especially for those providers with high Tier 1 and 2 days, we recommend a phase in of the rates over a four year period (see phase in chart).

There are many ways to structure a rate phase-in. One common method is combining a decreasing percentage of the rates established using the current method with an increasing percentage of the rates established using the new method, until the calculation is 100% of the new rate. This can be done over a varying number of years and percentage rates. A phase- in methodology could phase-in the, “winners” faster than the “losers”. There could be various “stop loss” or “hold-harmless” provisions.

We selected a fairly typical phase-in structure to use in our modeling and recommendations. The first year would use a rate that is 25% of the new rates and 75% of the current rates, the second year would be 50% new and 50% current, the third year 75% new and 25% current and year four at 100% new rates.

We developed the following table of potential phase-in rates using the method described above

**Table 15: Proposed Phase-In Rates Residential Services**

		Tier 1 Regular					Tier 2 Regular					Tier 3 Regular				
		Target Rate	Current Rate	Phase-In Rate	Inflation Factor	Inflated Rate	Target Rate	Current Rate	Phase-In Rate	Inflation Factor	Inflated Rate	Target Rate	Current Rate	Phase-In Rate	Inflation Factor	Inflated Rate
Year 1	25/75	118.40	157.07	147.40	3.27%	152.22	112.25	128.65	124.55	3.27%	128.62	106.00	93.00	96.25	3.27%	99.40
Year 2	50/50	118.40	157.07	137.74	3.53%	142.60	112.25	128.65	120.45	3.53%	124.70	106.00	93.00	99.50	3.53%	103.01
Year 3	75/25	118.40	157.07	128.07	2.24%	130.94	112.25	128.65	116.35	2.24%	118.96	106.00	93.00	102.75	2.24%	105.05
Year 4	100	118.40	157.07	118.40	2.76%	121.67	112.25	128.65	112.25	2.76%	115.35	106.00	93.00	106.00	2.76%	108.93

  

		Tier 4 Regular					Tier 5 Regular				
		Target Rate	Current Rate	Phase-In Rate	Inflation Factor	Inflated Rate	Target Rate	Current Rate	Phase-In Rate	Inflation Factor	Inflated Rate
Year 1	25/75	101.90	60.06	70.52	3.27%	72.83	97.75	43.40	56.99	3.27%	58.85
Year 2	50/50	101.90	60.06	80.98	3.53%	83.84	97.75	43.40	70.58	3.53%	73.07
Year 3	75/25	101.90	60.06	91.44	2.24%	93.49	97.75	43.40	84.16	2.24%	86.05
Year 4	100	101.90	60.06	101.90	2.76%	104.71	97.75	43.40	97.75	2.76%	100.45

  

		Tier 1 Super					Tier 2 Super					Tier 3 Super				
		Target Rate	Current Rate	Phase-In Rate	Inflation Factor	Inflated Rate	Target Rate	Current Rate	Phase-In Rate	Inflation Factor	Inflated Rate	Target Rate	Current Rate	Phase-In Rate	Inflation Factor	Inflated Rate
Year 1	25/75	131.80	188.28	174.16	3.27%	179.86	131.80	168.00	158.95	3.27%	164.15	131.80	149.57	145.13	3.27%	149.87
Year 2	50/50	131.80	188.28	160.04	3.53%	165.69	131.80	168.00	149.90	3.53%	155.19	131.80	149.57	140.69	3.53%	145.65
Year 3	75/25	131.80	188.28	145.92	2.24%	149.19	131.80	168.00	140.85	2.24%	144.01	131.80	149.57	136.24	2.24%	139.29
Year 4	100	131.80	188.28	131.80	2.76%	135.44	131.80	168.00	131.80	2.76%	135.44	131.80	149.57	131.80	2.76%	135.44

  

		Tier 4 Super					Tier 5 Super				
		Target Rate	Current Rate	Phase-In Rate	Inflation Factor	Inflated Rate	Target Rate	Current Rate	Phase-In Rate	Inflation Factor	Inflated Rate
Year 1	25/75	131.80	131.12	131.29	3.27%	135.58	131.80	112.30	117.18	3.27%	121.01
Year 2	50/50	131.80	131.12	131.46	3.53%	136.10	131.80	112.30	122.05	3.53%	126.36
Year 3	75/25	131.80	131.12	131.63	2.24%	134.58	131.80	112.30	126.93	2.24%	129.77
Year 4	100	131.80	131.12	131.80	2.76%	135.44	131.80	112.30	131.80	2.76%	135.44

**Table 16: Proposed Phase-In Rates Day Services**

Day Service Rate Phase-In						
Tier 1 Regular						
		Target Rate	Current Rate	Phase-In Rate	Inflation Factor	Inflated Rate
Year 1	25/75	68.55	97.58	90.32	3.27%	93.28
Year 2	50/50	68.55	97.58	83.07	3.53%	86.00
Year 3	75/25	68.55	97.58	75.81	2.24%	77.51
Year 4	100	68.55	97.58	68.55	2.76%	70.44
Tier 2 Regular						
		Target Rate	Current Rate	Phase-In Rate	Inflation Factor	Inflated Rate
Year 1	25/75	67.90	72.16	71.10	3.27%	73.42
Year 2	50/50	67.90	72.16	70.03	3.53%	72.50
Year 3	75/25	67.90	72.16	68.97	2.24%	70.51
Year 4	100	67.90	72.16	67.90	2.76%	69.77
Tier 3 Regular						
		Target Rate	Current Rate	Phase-In Rate	Inflation Factor	Inflated Rate
Year 1	25/75	67.25	58.03	60.34	3.27%	62.31
Year 2	50/50	67.25	58.03	62.64	3.53%	64.85
Year 3	75/25	67.25	58.03	64.95	2.24%	66.40
Year 4	100	67.25	58.03	67.25	2.76%	69.11
Tier 4 Regular						
		Target Rate	Current Rate	Phase-In Rate	Inflation Factor	Inflated Rate
Year 1	25/75	65.60	42.70	48.43	3.27%	50.01
Year 2	50/50	65.60	42.70	54.15	3.53%	56.06
Year 3	75/25	65.60	42.70	59.88	2.24%	61.22
Year 4	100	65.60	42.70	65.60	2.76%	67.41
Tier 5 Regular						
		Target Rate	Current Rate	Phase-In Rate	Inflation Factor	Inflated Rate
Year 1	25/75	63.05	36.64	43.24	3.27%	44.66
Year 2	50/50	63.05	36.64	49.85	3.53%	51.60
Year 3	75/25	63.05	36.64	56.45	2.24%	57.71
Year 4	100	63.05	36.64	63.05	2.76%	64.79
Tier 1 Super						
		Target Rate	Current Rate	Phase-In Rate	Inflation Factor	Inflated Rate
Year 1	25/75	68.75	118.50	106.06	3.27%	109.53
Year 2	50/50	68.75	118.50	93.63	3.53%	96.93
Year 3	75/25	68.75	118.50	81.19	2.24%	83.01
Year 4	100	68.75	118.50	68.75	2.76%	70.65
Tier 2 Super						
		Target Rate	Current Rate	Phase-In Rate	Inflation Factor	Inflated Rate
Year 1	25/75	68.75	108.94	98.89	3.27%	102.13
Year 2	50/50	68.75	108.94	88.85	3.53%	91.98
Year 3	75/25	68.75	108.94	78.80	2.24%	80.56
Year 4	100	68.75	108.94	68.75	2.76%	70.65
Tier 3 Super						
		Target Rate	Current Rate	Phase-In Rate	Inflation Factor	Inflated Rate
Year 1	25/75	68.75	100.35	92.45	3.27%	95.47
Year 2	50/50	68.75	100.35	84.55	3.53%	87.53
Year 3	75/25	68.75	100.35	76.65	2.24%	78.37
Year 4	100	68.75	100.35	68.75	2.76%	70.65
Tier 4 Super						
		Target Rate	Current Rate	Phase-In Rate	Inflation Factor	Inflated Rate
Year 1	25/75	68.75	91.48	85.80	3.27%	88.60
Year 2	50/50	68.75	91.48	80.12	3.53%	82.94
Year 3	75/25	68.75	91.48	74.43	2.24%	76.10
Year 4	100	68.75	91.48	68.75	2.76%	70.65
Tier 5 Super						
		Target Rate	Current Rate	Phase-In Rate	Inflation Factor	Inflated Rate
Year 1	25/75	68.75	83.64	79.92	3.27%	82.53
Year 2	50/50	68.75	83.64	76.20	3.53%	78.88
Year 3	75/25	68.75	83.64	72.47	2.24%	74.10
Year 4	100	68.75	83.64	68.75	2.76%	70.65

## **List of Appendices**

- A. Advisory Committee Members
- B. Data Collection Tool
- C. Instructions
- D. Rate Setting Parameters
- E. Residential Fiscal Impact
- F. Day Service Fiscal Impact
- G. Phase-In Fiscal Impact – Residential and Day Services

## Appendix D Rate Setting Parameters

### Provider-independent rates

Rates that are not based on a particular provider's costs are *provider-independent rates*. Both flat rate and pricing systems are provider-independent rates. In these systems, providers are reimbursed according to a set flat rate or an established price regardless of their individual cost experience.

*Flat rate systems* were fairly common in the early years of the Medicaid program. In this type of system, reimbursement rates are established by determining available dollars within the state budget for a particular service and dividing by a projection of case load or anticipated units of service.

*Prices* may be established in a variety of ways. Prices may be developed through the creation of a hypothetical provider and determining necessary inputs and market prices for those inputs. Prices can also be developed based on benchmarks, such as means, medians or percentiles of the cost experience of the provider group.

### Provider-dependent rates

A common feature of a *provider-dependent* rate system is that the reimbursement to each provider is linked in some way to its particular costs, whether projected or historical. There is considerable variability in the design of provider-dependent rates. Provider-dependent rates can either be retrospective or prospective in nature.

*Retrospective systems* establish an interim rate, using cost estimates, which will be used to make payments during the rate period. After the rate period ends and actual cost experience is determined, there is an adjustment made from interim rates to actual cost experience. Given the need to settle to actual cost, it is important to closely estimate the actual cost experience in order to minimize the settlement amount. Interim rates can be established using either budget projections or historical costs of a prior period. In recent years, there has been a trend by both state and federal governments to move away from retrospective reimbursement systems.

*Prospective systems* typically use past costs trended forward to establish reimbursement rates. Budget projections or some combination of budgeted and historical costs can also be used. Whatever the basis for establishing rates, they are not settled to actual costs at the end of the rate period.

The rates for most of these systems are based on cost reports submitted by the providers. The rate calculation uses allowable costs, as defined by the state, frequently divided into cost centers or cost components. Examples of typical cost centers include direct service costs, indirect costs and general and administrative costs.

### Inflation and rebasing

Once set, rates are normally in place for a specified period of time. Following this pre-determined payment period, rates should be evaluated and potentially adjusted for inflation. Without rate

increases to account for the impact of inflation, providers would need to reduce costs by the amount of inflation in order to maintain an even status. Some of the more widely used indices to determine the inflation adjustment include the Consumer Price Index or various “market basket” indices designed to measure changes in prices paid for a fixed bundle of goods and services that are cost inputs to a given segment of the health care industry.

Not only are there inflationary increases that impact the cost of providing services, but also methods of service delivery may change. It is important to periodically evaluate the reasonableness of rates and rebase rates as indicated. Several states have established a set rebasing schedule for specific services, such as annually or every three years. Other states have set the maximum amount of time that can pass before rates are rebased, such as no less often than once every five years.