Introduction

Navigant Consulting is completing work on behalf of the State of Minnesota Department of Human Services Disability Services Division (DSD) and as part of the Division’s Rate Setting Methodologies Initiative (RSMI) to develop a new rate setting methodology (or methodologies) that will be used for determining rates for all of the services administered by DSD and provided through its home and community-based services waiver programs:

- Community Alternative Care (CAC) Waiver for chronically ill and medically fragile persons who need the level of care provided in a hospital.
- Community Alternatives for Disabled Individuals (CADI) Waiver for persons with disabilities who require the level of care provided in a nursing facility.
- Developmental Disabilities (DD) Waiver for persons with developmental disabilities who need the level of care provided in an Intermediate Care Facility for Persons with Developmental Disabilities (ICF/DD).
- Traumatic Brain Injury (TBI) Waiver for persons with acquired or traumatic brain injuries who need the level of care provided in a nursing facility that provides specialized (cognitive and behavioral supports) services for persons with brain injury or neurobehavioral hospital level of care.

As part of our work with DSD, we have participated in a number of meetings with the RSMI Intensive Work Group (IWG) assembled specifically for this project. This Data Analysis Plan, which outlines the processes and timeline for collecting and evaluating data for use as inputs for the recommended rate setting methodologies, stemmed from discussions facilitated during meetings of the RSMI IWG.

Purpose of Data Analysis Plan

The purpose of this Data Analysis Plan for Minnesota’s DSD Rate Setting Methodologies Project is three-fold:

1) Outline a process for collecting and evaluating primary and secondary data that will inform the payment methodology design process, and ultimately, the rate setting process for DSD-administered services in Minnesota. Both primary data sources and secondary data sources are required to ensure optimal results from the State’s selected rate setting methodology/structure design.
• Primary data is inclusive of all information, statistics, facts, figures and numbers obtained from national sources; as an example, the Bureau of Labor Statistics website.
• Secondary data is inclusive of all responses accrued through a scheduled Cost Survey and Wage Survey that will be distributed to Minnesota’s DSD service providers.

2) Identify the national sources for relevant data, such as websites, journals, other publications and interviews with subject matter experts, which will be used to obtain primary data.

3) Identify a timeline for the completion of primary and secondary data collection and evaluation processes.

Methodology

The process used to collect and analyze primary data is very different from that used to collect and analyze secondary data. Therefore, the Navigant Consulting team will employ separate yet concurrent processes for primary and secondary data collection.

To collect and analyze primary data to be used in the rate setting methodology, the following process and timeline will be utilized by the Navigant Consulting team, in conjunction with DSD and IWG members along with a variety of stakeholders:

Step 1: Define data elements that will support component rates (February – July 2010)

Step 2: Define all potential state & national resources (March – July 2010)

Step 3: Develop evaluation criteria for assessing resources (July 2010)

Step 4: Define data collection methods, with timeline (July 2010)

Step 5: Collect Data (May – July 2010, with Additional Follow-Up as Necessary)

Step 6: Apply evaluation criteria to refine list of resources (August 2010)

Step 7: Validate data and vet with stakeholders (August 2010)
**Step 8:** Describe how data will be used in Framework (*September 2010*)

**Step 9:** Describe how each resource will be updated/how often (*September 2010, and Ongoing*)

To collect and analyze secondary data that will be used in the rate setting methodology, the following process and timeline will be utilized by the Navigant Consulting team, in conjunction with DSD and IWG members along with a designated set of stakeholder representatives:

**Step 1:** Determine sample and how often the survey will be completed (*May 2010*)

**Step 2:** Develop Provider Cost and Wage Survey and instructions (*March – May 2010*)

**Step 3:** Notify providers of Survey process and required training (*May 2010*)

**Step 4:** Develop and implement required training for participating providers (*June 2010*)

**Step 5:** Send forms, instructions, etc. to providers (*June 2010*)

**Step 6:** Collect data and answer provider questions (*July – August 2010*)

**Step 7:** Analyze survey non-responses (*August 2010*)

**Step 8:** Follow up with providers who did not respond (*August – September 2010*)

**Step 9:** Analyze responses (*September – October 2010*)

**Primary Data Process**

1. **Define Data Elements that will Support Rate Inputs**

   To begin Step 1, we will develop a list of all inputs that factor into the setting of rates for Minnesota’s home and community-based services. We will develop this list through collaboration and discussion with DSD staff and the RSMI IWG.
Fundamental to creating rates for Minnesota’s home and community-based services is that the rates abide by the principles of transparency and equitability across the state; there is a uniform process of structuring rates for each service; the methodology for rate setting meets Federal requirements for the administration of waiver programs; and the rates promote quality and participant choice. Accordingly, a rate setting methodology that incorporates these fundamental ideas will need to consider the following rate inputs, a list that was developed through collaboration and discussion with DSD staff and the RSMI IWG:

- Wage rates by Type of Employee
- Employee Hours Paid/Week
- Employee Wage Customizations
- Types, Hours and Costs for Employee Benefits
- Transportation Costs
- Client Programming & Support Costs
- General/Administrative Costs

The development of a finalized list of rate inputs will allow our team to move to Step 2 of this process.

2. Define All Potential State & National Data Resources for Each Data Element

Once we have determined the list of rate inputs that will be required to generate the HCBS rates, our team will set to work defining the most relevant state and national data resources to pull from to populate each input.

Initially, it will be necessary to define a very comprehensive list of resources, one that considers resources that may not generate the depth or accuracy of data that is needed for the functionality of the rate setting methodology. We will use this approach as it ensures there are a number of data resources and “back-up” data resources identified for each rate input. Using this strategy, in case one resource does not provide the requisite depth or accuracy of data for rate setting purposes, another resource can be selected by the team and data that fulfills the needs of the methodology can be pulled from that resource.

A draft list of the rate inputs with associated potential data resources, as developed through collaboration and discussion with DSD staff and the RSMI IWG, is shown below:
Employee Wage Rates (Annual, Weekly and/or Hourly Wage Amounts, plus Averages) and Wage Customizations (Type and Amount)
- Bureau of Labor Statistics (BLS) data
- Jobs NOW Coalition data
- ARRM survey
- Other state data to validate BLS data
- ANCOR
- MN Council of Nonprofits survey
- MN Nurses Association data
- State Plan rates

Employee-to-Client Hours Provided/Week (Number and Dollar Amount)
- COMPASS
- Other assessment tool
- Service authorization compared to actual billed units

Types (Health Insurance, Dental, Vision, Life Insurance, Short- and Long-Term Disability, Retirement, Tuition Reimbursement) and Costs (Dollar Amount) for Employee Benefits
- MN State sources
- MN County sources
- AARM survey
- MNDACA survey
- National sources, such as the Employee Benefit Research Institute and the Kaiser Family Foundation, etc.

Transportation Costs (Mileage, Dollar Amounts for Fuel and Maintenance, Depreciation, Purchase of Vehicles, Reimbursement Variation among Locations)
- Miles traveled from interviews with/surveys of providers
- Demographic differentials
- DHS transportation rates by zip code
- Jobs NOW
- National data or studies

Client Programming & Supports (Dollar Amounts for Supplies, Training, Travel, Meetings)
- Other states’ data or studies
- National data or studies
• Market prices
• CDCS cost data
• MN county policies
• Dakota County model
• Interviews with/surveys of providers
• Assessment data
• Service authorization compared to actual billed units

General/Administrative Costs (Dollar Amounts for Equipment, Property-Related Costs, Insurance, Subscriptions, Other)
• National data or studies
• Other states’ data or studies
• Guidelines from funders

Other Factors
• MMIS hospitalizations (partial data)
• GRH billings

3. Develop Evaluation Criteria for Assessing Each of the Resources

Our team will then set to work developing a set of “evaluation criteria” that will weigh the depth and accuracy of the data collected from each resource against project goals and anticipated outcomes, requirements of the rate setting methodology, and Navigant Consulting professionals’ and DSD staff experience and knowledge with rate setting data. Example evaluation criteria for the resources could include, but not be limited to, the following:

• Is the data source considered a reliable source nationally?
• Is the data used for similar purposes by other entities?
• Can the data be applied statewide?
• Was the methodology for developing the data a uniform, objective and reliable methodology?
• Is the data source and the data it produces un-biased?
• Does the data source provide multiple years of data?
• Is the source expected to be available in future periods?
• Would using the data source generate results that are significantly different from circumstances observed in Minnesota?

When applying the evaluation criteria to the identified data sources, we understand that they must be considered in a way that will allow for a reasonable amount of judgment. In other words, once evaluation criteria are established, they will not be
applied in all instances as if to indicate that a data source “passes” or “fails.” We anticipate that, in many instances, data sources will either not meet all of the established criteria, or that it will only partially meet the established criteria, but the data source will still be valuable for informing the rate setting methodology or establishing rates.

4. Define data collection methods with timeline for each resource
Once we have refined the list of data resources that will be utilized to gather data for the rate setting methodology, we will be able to clearly identify, for each resource:

- Data to be collected (for example, number and dollar amount for employee-to-client hours provided per week)
- Methodology for collecting the data (for example, downloading from website, completion of an interview, etc.)
- Responsible staff person for collecting of data
- Timeframe to have data collected (proposed timeframe is currently May-July 2010)

5. Collect Data
During this step of the process, our team will collect the data, as identified in step 4.

6. Apply Evaluation Criteria to Potential Resources to Narrow to a Refined List of Resources
During this step, we will apply the evaluation criteria developed in step 3 to the list of resources identified in step 2 to refine the list of resources so that Navigant Consulting team members pull data from only those resources most likely to generate data that will be utilized in the rate setting methodology.

7. Validate Data / Vet with Stakeholders / Quality Assurance of Data
In order to utilize the highest possible quality of data within the rate setting methodology, step 7 involves the validation and quality assurance of all data collected from national and state resources. We will complete this effort through the following activities:

- Facilitation of meetings with the RSMI IWG to review collected data
- Comparison of national data against state (including MN) data
- Comparison of other state data against MN data
- Example rate calculations with the data
The use of these activities will allow our team to ensure the most updated, relevant and accurate national and state data is used for each input of the rate setting structure.

8. **Describe How Data will be Used in Framework for Each Input**

It is likely that the “raw” data collected by this Primary Data Process will not be in the format required to populate a data input in the final rate models. As such, there will be some “translation” required to convert the data into a usable input or element. This step will involve the development of step-by-step documentation by the Navigant Consulting team that describes how each data input (citing the resource for each data input) could be used within the rate setting methodology, including any data translation or conversion that will be required. More than likely, this will involve a mark-up of the actual rate setting structure documentation, whether it’s a Microsoft Excel spreadsheet, a Microsoft Word document, or other format, and indicating specifically where each data element is pulled into the structure through the use of notes, text boxes and comments.

9. **Describe How Each Resource will be Updated and How Often (Annually, Etc.)**

Our last step in the primary data process is to indicate a method for updating each data resource used in the rate setting methodology and how often the updating should occur. For example, does the national data resource update the data on a quarterly basis, and if so, should that updated data be pulled into the rate setting methodology on a quarterly or annual basis? Also, will the data update require a manual refresh, which means an individual accessing the national or state website and pulling the data or conducting a new set of interviews, or will the data update be automatic, and if so, by what mechanism?

**Secondary Data Process**

1. **Determine Sample, How Often the Survey will be Completed (Ex: Annually, One-Time Event)**

Step 1 of the secondary data process involves determining the appropriate number of residential and non-residential HCBS providers to collect cost and wage data from through a survey process. We will randomly select approximately 1,200 HCBS waiver service provider numbers out of the approximately 2,500 provider numbers statewide. For this random sample, all provider numbers will have an equal chance of being selected, regardless of size or location. We will request that the agencies for the selected provider numbers submit cost and wage data related to the entire operations for that provider number. If a selected provider number is part of an umbrella organization
with multiple provider numbers, we will not request that the agency report the costs and wages of the operations of all of their provider number.

The goal is to achieve an approximate response rate of between 30 and 50 percent; as such we believe the survey responses will yield a statistically valid sample size.

We will also identify how often the survey process will be completed (ex: annually, bi-annually, one-time event, etc.) and whether the sample size will need to be reevaluated over time.

2. Develop Provider Cost and Wage Survey, with instructions

The Navigant Consulting team will develop a Provider Cost and Wage Survey and instructions, using the survey developed in the Day Services Payment Structure project as a starting point. The Provider Cost and Wage Survey will include the following sections:

- Provider Information
- Total Provider Costs
- Residential, Hourly Service and Day Service Wages - Fiscal Year Total
- Residential, Hourly Service and Day Service Snapshot - Number of Direct Service Employees and Wage Ranges, and Participant Information
- Employee Benefits
- Employee Retention
- Transportation Data

The Provider Cost and Wage Survey will be developed in Microsoft Excel version 2003. The same “universal” Survey Excel file will be made available to each selected provider. However, the Survey Excel file will contain functionality that will tailor the requested data based on the provider type entered by the provider in the “Provider Information” section.

We will also develop an accompanied set of survey instructions in Microsoft Word version 2003. These instructions will provide descriptions of the terms used in the survey, detailed step-by-step directions for providers to fill out the requested data and the protocol for submitting completed surveys.

We will create a project website that will allow participating providers to login and download the Survey Excel file onto their local computer or network. Once providers have completed the survey, they will log back into the project website and upload the
Survey Excel file. The project website will then import the uploaded Survey Excel file into a database for future data analysis.

To ensure that providers who do not have Excel or Word software are able to participate in the survey, we will also create a version of the Provider Cost and Wage Survey and accompanied instructions in PDF format. For these providers, we will request that they enter their data electronically into the PDF file, print the survey, and either scan and e-mail the survey or mail a hard copy of the survey.\footnote{In order to limit data entry, we do not propose to make the PDF version of the Provider Cost and Wage survey an option for those providers that have Excel software.}

3. **Notify Providers in Advance of Cost and Wage Survey and Required Training for These Processes**

Each provider selected to participate in the survey process will be required to participate in one of four training sessions. During Step 4, we will announce via DSD’s website and e-mail a “save-the-date” notice specifying the time and location for the on-site training sessions for providers in St. Paul. We will also notify providers who are unable to attend these in-person training sessions the schedule for subsequent Web-Ex training sessions.

4. **Develop Required Training Materials for Providers Participating in Survey Processes**

While constructing the Cost and Wage Survey tool and instructions, the Navigant Consulting team will develop three-hour training sessions for providers that will be facilitated on-site in St. Paul. The required training will introduce providers to the survey process, provide the rationale behind the surveys, walk providers through the tools and instructions, and offer a chance for questions. While the training session materials will be made available for all providers after the training sessions, we will strongly encourage providers to attend one of the training sessions either in person or via Web-Ex prior to completing the survey.

5. **Send Forms, Instructions, Etc. to Providers**

In the week before the first training session, we will notify via e-mail the providers that have been selected for the survey. This e-mail will include a link to a project website where providers can logon and download the Provider Cost and Wage Survey and instructions. The e-mail to providers will contain contact information for both Navigant
Consulting and DSD for the purpose of answering questions, along with a deadline for submitting survey responses.

6. **Collect Data / Answer Provider Questions**

We have established a 6-week timeframe within which providers may electronically or manually submit completed cost and wage surveys. We believe this is an appropriate amount of time for providers to access the survey forms and instructions, collect the requested data, ask any questions through contacting the Navigant Consulting team, and submit the completed survey.

7. **Analyze Survey Responses Vs. Non-Responses**

At the conclusion of the 6-week timeframe, we will analyze the submitted surveys to ascertain a list of which providers have not responded.

8. **Follow Up with Providers Who Did Not Respond**

As previously mentioned, we anticipate an approximately 30 to 50 percent response rate to the Provider Cost and Wage Surveys. We will follow up with all providers who attended or accessed the training session and were e-mailed the survey tools and instructions, but did not respond to the survey. We will give providers receiving a follow-up phone call 10 additional business days to fill out and submit their survey responses. Any surveys from providers received after this 10-day grace period may not be included in the subsequent analysis.

9. **Analyze Responses**

Step 9 involves the majority of work for the secondary data collection process. During this step, we will first analyze the data collected through the provider cost and wage survey process. To analyze this data, we will:

- Test the data for clerical accuracy, where possible. In other words, we will make sure the data submitted sums to appropriate subtotals and totals, etc.
- Analyze individual types of costs reported relative to a benchmark value, such as direct care salaries and wages, total salaries and/or wages or total costs. For example, if we calculate employee benefits costs for one provider to be 20 percent of total costs, we could compare this value against similar values for all reporting providers to determine potential “outliers”.
- As we identify “outliers” in the data, we will follow-up with providers to determine if errors in reporting occurred, and give the provider an opportunity to correct or update their submitted data.
- We will also consider removing data points if it is obvious that the data point is not reliable.
We will document this process as it unfolds, and provide summaries of all adjustments made to data to DSD and the RSMI IWG.

Finally, we will prepare an analysis comparing the potential data elements from this Secondary Data process to the elements identified in the Primary Data process. We will:

- Determine how the Secondary Data Source data should be measured (simple average, median, etc.)
- Compare the elements identified from Secondary sources to those identified from the Primary sources
- Provide an analysis of the pros and cons of using one data source over others
- Provide a recommendation for which data source to use going forward

We will prepare a report for DSD and the RSMI IWG summarizing this analysis in a matrix format that can be used to inform the final decision as to which options best meet the needs for the process.