

## Disability Waiver Rate System Absence Factor in Day Services Study

**Disability Services Division**

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Minnesota Statutes, Chapter 3.197, requires the disclosure of the cost to prepare this report. The estimated cost of preparing this report is \$8,000.

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# I. Executive summary

This report to the legislature summarizes research on the cost of unplanned recipient absences in day services paid for under the Medicaid disability waivers. It recommends an appropriate evidence-based value for the cost component in service-rate methodologies.

Legislation enacted in 2013 required the Minnesota Department of Human Services (DHS) to create DWRS. DHS began to use the system in January 2014. As required by the federal government, DWRS transitioned the state from a variable negotiated rate methodology to a standard statewide methodology based on research. DWRS establishes service rates through a formula comprised of cost components. DHS established the values of the cost components from research on the average costs incurred by providers across the state.

The absence and utilization factor is one cost component in DWRS. It is intended to cover the costs incurred by the provider when the recipient has an unplanned absence from services and the provider cannot bill for services as planned. The current value for this factor in day services is 3.9 percent, a value determined through research conducted in 2010. The 2017 legislature authorized a change to this value in 2019 to 9.4 percent and required DHS to conduct another study on this cost.

The findings in this report conclude that the appropriate factor for this cost in Minnesota is between 3 percent and 5 percent. Research findings include the following:

- The 2010 research conducted by an independent research firm, Navigant Consulting Inc., recommended a value of 3.9 percent for this cost in most DWRS services.
- The 2016 research conducted by an independent research firm, Truven Health Analytics, recommended a value of 3.1 percent for this cost in day services, based on a provider cost survey conducted with Minnesota day providers in 2016.
- The 2017 research evaluating the factors used in other states found a range of 0 percent to 15 percent, with many states also placing caps on the number of units allowed for billing.
- The 2017 research conducted by DHS based on Minnesota claims data from 2016 found a value of 4.5 percent for this cost in day services.

DHS recommends that the legislature adjust the absence factor for day services to 4.5 percent to align it with the findings in the most recent study outlined in this report.

Failure to change this factor will result in the cost component not reflecting research and evidence. This change will help ensure that the rate methodologies accurately reflect the cost of providing services and that Minnesota maintains compliance with federal guidance by appropriately setting cost components over time.

## II. Legislation

[Minnesota Statutes, section 256B.4914, subdivision 10](#)

The legislature required the Department of Human Services to conduct this study and provide recommendations to the legislature. DHS conducted this analysis and drafted the resulting report in accordance with Minnesota Statutes, section 256B.4914, subdivision 10, which states:

(i) The commissioner shall study the underlying cost of absence and utilization for day services. Based on the commissioner's evaluation of the data collected under this paragraph, the commissioner shall make recommendations to the legislature by January 15, 2018, for changes, if any, to the absence and utilization factor ratio component value for day services.

## III. Introduction

The Department of Human Services (DHS) submits this report to the Minnesota Legislature as required in Minn. Stat. §256B.4914, subd. 10(i). The statute directs DHS to study the cost of recipient absences in day services and submit recommendations to the legislature on the appropriate value for absence costs in day service rate formulas.

Day services provided under the Medicaid disability waivers in Minnesota have rates determined by the Disability Waiver Rate System (DWRS). DWRS establishes service rates through a formula comprised of cost components. The values of the cost components are set in statute and are based on data and research on the average costs incurred by providers across the state. Cost components in the formulas consist of provider costs, such as staff wages, employee benefits, program costs and administrative costs. The absence factor is a component in the DWRS frameworks intended to cover the costs incurred by the provider when the person has an unplanned absence from services and the provider cannot bill for services as planned.

This report summarizes the methodology and findings from the study conducted on recipient absences and utilization in day services. This report also recommends a change to the absence factor in the DWRS rate frameworks based on research results.

DHS conducted this study and prepared this report. In the process, DHS consulted with the DWRS Advisory Committee and the lead agency Fiscal Policy Workgroup on the study's methodology development. DHS also reviewed the study's research findings and recommendations with stakeholders at the DWRS Advisory Committee.

## Background

In 2007, the Centers for Medicare & Medicaid Services (CMS) informed Minnesota that its four disability waivers were out of compliance with federal requirements for uniform rate-determination methods and standards. The disability waivers are the:

- Brain Injury (BI) Waiver
- Community Alternative Care (CAC) Waiver
- Community Access for Disability Inclusion (CADI) Waiver
- Developmental Disabilities (DD) Waiver.

CMS issued a corrective action plan to Minnesota. It required Minnesota to establish statewide rate-setting methodologies. DHS built the plan, which led to the DWRS.

In January 2012, Navigant Consulting Inc., an independent research firm, presented recommendations to DHS. Navigant based its recommendations on complex and extensive research on the cost of providing disability waiver services in Minnesota. This research included a review of national and local independent data sources as well as a Minnesota disability service provider cost and wage survey.

Since 2009, workgroups that include service providers and lead agency staff have met and provided input in this process. DHS also established a stakeholder advisory committee that has met monthly since 2011.

After stakeholder input and legislative negotiations, the legislature finalized the Disability Waiver Rate System during the 2013 session. This system transferred the responsibility of setting service rates from counties and tribal nations to the state. The system made renewal of the Minnesota disability waivers possible.

The DWRS was a significant change for the state, lead agencies and providers. It required extensive work and thousands of hours of training in order to learn the new rate-setting system.

Because of the significance of this change, legislation was careful to allow for a five-year transition plan for full implementation of the new system. This process allowed time to adjust the system and ensure that we maintained service quality.

In January 2014, the system went live on a rolling basis as recipients renewed their service agreements. Lead agencies used the Disability Waiver Rate System to calculate a framework rate for each recipient and service. From 2014 through 2019, rates calculated by DWRS are “banded” to their historic rate. Banding protection limits the amount rates can change for people who had services in 2013.

## How the system works

An application, known as the Rates Management System, calculates rates. These calculations include component values outlined in statute and variable inputs based on individual needs. The component values are based on average provider costs in Minnesota. The values consist of direct care staff wages, employee benefits, taxes, program costs, absence costs and other business costs. Variable inputs are based on people’s needs as indicated in their service plans. They include factors such as the number of hours and the level of service intensity or staffing ratio required to meet the needs of the person. The system multiplies direct wages and component values by the required service units to compute service rates reflecting the needs of the person.

## System goals

The goals of the system were to create statewide rate-setting methodologies that:

- Are transparent, fair and consistent across the state
- Comply with federal requirements for administration of waiver programs
- Establish rates based on a uniform process of structuring component values for service
- Promote quality and participant choice
- Recognize a person’s assessed need for particular components within each service



## Federal oversight

CMS oversees Minnesota's four disability waivers. All changes to the rate structures are subject to federal approval. CMS requires states to outline and justify cost components used to calculate rates. CMS requires rebasing of all service rates at least once every five years. Rebasing requires DHS to identify service access issues that may result from rate payment structures and to ensure that current rates appropriately reimburse the cost of providing the service. CMS requires rebasing to include a consistent methodology that reflects the cost to provide services. In addition to rate rebasing, CMS requires annual system compliance reporting to ensure states maintain a consistent rate methodology.

## DWRS services and the day service bucket

Most services provided under the disability waivers have rates set by DWRS. In rate-setting statute, these services are categorized into four service buckets: residential services, day services, unit based services with programming, and unit based services without programming.

The analysis in this report is specific to day services. Day services include the following services provided under the disability waivers:

- Adult day services
- Day training and habilitation services
- Prevocational services

In fiscal year 2016, day services accounted for 13 percent of total DWRS spending, approximately \$227 million per year.

## Absence and utilization factor

The absence and utilization factor is a component in the DWRS frameworks intended to cover the costs incurred by the provider when the person has an unplanned absence from service and the provider cannot bill for services as planned. The current absence and utilization factor is 3.9 percent for all DWRS service frameworks, except for family foster care, which has a factor of 1.7 percent.

## Previous research on the cost of recipient absences

During the period of DWRS implementation, DHS has conducted comprehensive analyses on the cost of providing disability waiver services throughout the state. DHS has used these analyses to recommend and implement evidence-based changes to the rate structures.

The current absence and utilization factor in day services is 3.9 percent. This factor was recommended by an independent research firm, Navigant Consulting Inc., as a result of its research conducted in 2010.

Truven Health Analytics, an independent research firm, also researched this cost as part of its 2016 Non-wage Component Value Study. In its study, Truven worked with service providers and stakeholders to develop and conduct a provider cost survey that assessed costs incurred by disability waiver service providers in Minnesota. As a result of data collected, Truven recommended a component value of 3.1 percent for the cost of absences in day services. For the full Truven report, see the [2017 Disability Waiver Rate System Legislative Report \(PDF\)](#).

The 2017 legislature authorized the absence and utilization factor to change from 3.9 percent to 9.4 percent for day service frameworks in January 2019. This future value is not reflective of any previous or current research findings. The legislature simultaneously required DHS to study the underlying costs of absences and provide recommendations on the appropriate value of this factor to the legislature in January 2018. This report details the updated study findings.

# IV. Study design

## Research objective

This study analyzes the underlying cost to service providers of recipient absences in day services and provides a recommended value to incorporate this cost in DWRS rate calculations appropriately.

## Research questions

We developed the following research questions to study the underlying costs of the absence and utilization factor for day services effectively and to make a recommendation to the legislature on any changes, if any, to the factor:

- What is the range of absence factors used in the rate methodologies of other states?
- For Minnesota disability waiver day services, what is the average number of days that a person plans to attend day services but is absent?
- What should the appropriate component value be to compensate providers for unplanned absences?

## Methods

To answer the study questions, DHS used the following research methods:

- Literature review: We reviewed absence factors used in the rate methodologies of other states.
- Claims analysis: We analyzed data from Minnesota's paid service claims to determine the incidence of unplanned absences in day services.

## Study specifications

The absence factor is a component in the DWRS frameworks, which are meant to calculate rates for most people receiving home and community-based services on the disability waivers. DHS has a rate-exceptions process to meet the needs of people who have exceptional service needs that cannot be met through DWRS frameworks.

Consistent with the current Disability Waiver Rate System and rate-exceptions process, this study seeks to recommend an absence factor that reflects the needs and corresponding provider costs for most service recipients. The exceptions process will continue to serve people who have exceptional needs that cannot be met through the frameworks.

## Stakeholder feedback

DHS solicited feedback from a variety of stakeholders in the development and completion of this study. In the development of the study methodology, DHS assessed the data required and available to answer the study research questions. We solicited feedback on data availability and analysis design with lead agency staff in the Fiscal Policy Workgroup in June 2017. We also solicited feedback on the methodology and analysis design with service providers, lead agency staff and other interested stakeholders in the DWRS Advisory Committee in July 2017. We reviewed the final study design, analysis and research findings with the DWRS Advisory Committee in November 2017.

# V. Study methodology

We used two methods to conduct this study: a literature review and a claims-data analysis. The methodologies for each method are below.

## Literature review

DHS conducted a literature review to answer research question No. 1: What is the range of absence factors used in the rate methodologies of other states?

The literature review sought to determine the range of absence factors in HCBS waiver day services nationwide and to gather information about how other states developed their absence factors. As part of this literature review, we gathered available published rate methodology information from other states. We also consulted with director-level staff in other states to gather additional information not publicly available. In addition, we reviewed the previous research done by DHS and research consultants on the absence and utilization component value.

The review explored the following questions:

- How do other states incorporate the cost of unplanned absences into their rates, if at all?
- What is the value used in other rate-setting methodologies for similar services?
- How was the absence factor determined?
- Is there an interaction between the absence factor and other factors in the framework, such as billing limits and other cost components?

## Claims data analysis

In addition to reviewing available literature and documentation, DHS also analyzed Minnesota paid claims data. In this analysis, we sought to answer research question No. 2: For Minnesota disability waiver day services, what is the average number of days that a person plans to attend day services but is absent?

### Data

We analyzed MMIS claims data for day services paid under the disability waivers from January to June 2016. We chose this date span to ensure the data were complete and accurate, as providers may submit claims up to one year after services are provided.

In this analysis, day services included adult day, day training and habilitation and prevocational services. The paid claims data for DWRS day services during this period included 13,075 people in the data analysis population, with the majority (71.5 percent) receiving day training and habilitation services, followed by prevocational services (16.4 percent) and adult day (12.1 percent).

**Table 1: Fiscal year 2016 – Number of recipients by day service type (n=13,075)**

Type of day service	Number of people	Percentage
Adult day	1,583	12.1%
Day treatment and habilitation (DT&H)	9,345	71.5%
Prevocational services	2,147	16.4%

## Definitions

This analysis determines the average “percent absent” by considering people’s planned attendance compared to their actual attendance. This analysis has the following definitions:

- **Actual attendance:** The number of days that the person has at least one paid claim for a planned day service
- **Planned attendance:** The number of days that the person planned to attend, determined through a pattern of attendance in claims data
- **Average percent absent:** Average percentage of days attended compared to the days of planned attendance. Average percent absent = 100 percent - (actual attendance / planned attendance)

## Analysis

DHS conducted three analysis steps to calculate the average absence percentage across all of the included waiver recipients receiving day services.

### *Step 1: Determining “planned attendance”*

This analysis determines each person’s “planned attendance” by establishing a pattern of attendance for each person, based on his or her day service paid claims.

Other than paid claims, there is no other available data source that accurately determines planned attendance. Service units are commonly over-authorized or authorized at a standard number of units across all individuals. This will not provide the necessary data to establish actual planned attendance for each person. DHS consulted with county staff on using recipient service plans. They told us that service plans do not provide the necessary data on planned schedules or attendance in a specific, consistent or practical enough way to be used in a statistical analysis.

DHS calculated planned attendance independently for each person by each day of the week for each month. In other words, each person had a planned attendance pattern for Mondays through Fridays in each of the six months included in the analysis. To establish a pattern of attendance, a person must have had at least 50

percent attendance for that weekday in each month. The 50 percent threshold sets a low threshold for pattern of attendance, erring on the side of counting too many unplanned absences rather than too few absences. For example, if a person attended day training and habilitation only one Monday out of the four Mondays in January, he or she would not have a pattern of attendance for Mondays in January. However, if the person attended two out of the four Mondays in January, he or she would have a pattern of attendance for Mondays in January, and the analysis would assume that the person planned to attend ALL Mondays in January. DHS calculated this attendance rate for each weekday in each month for each person.

### *Step 2: Actual attendance*

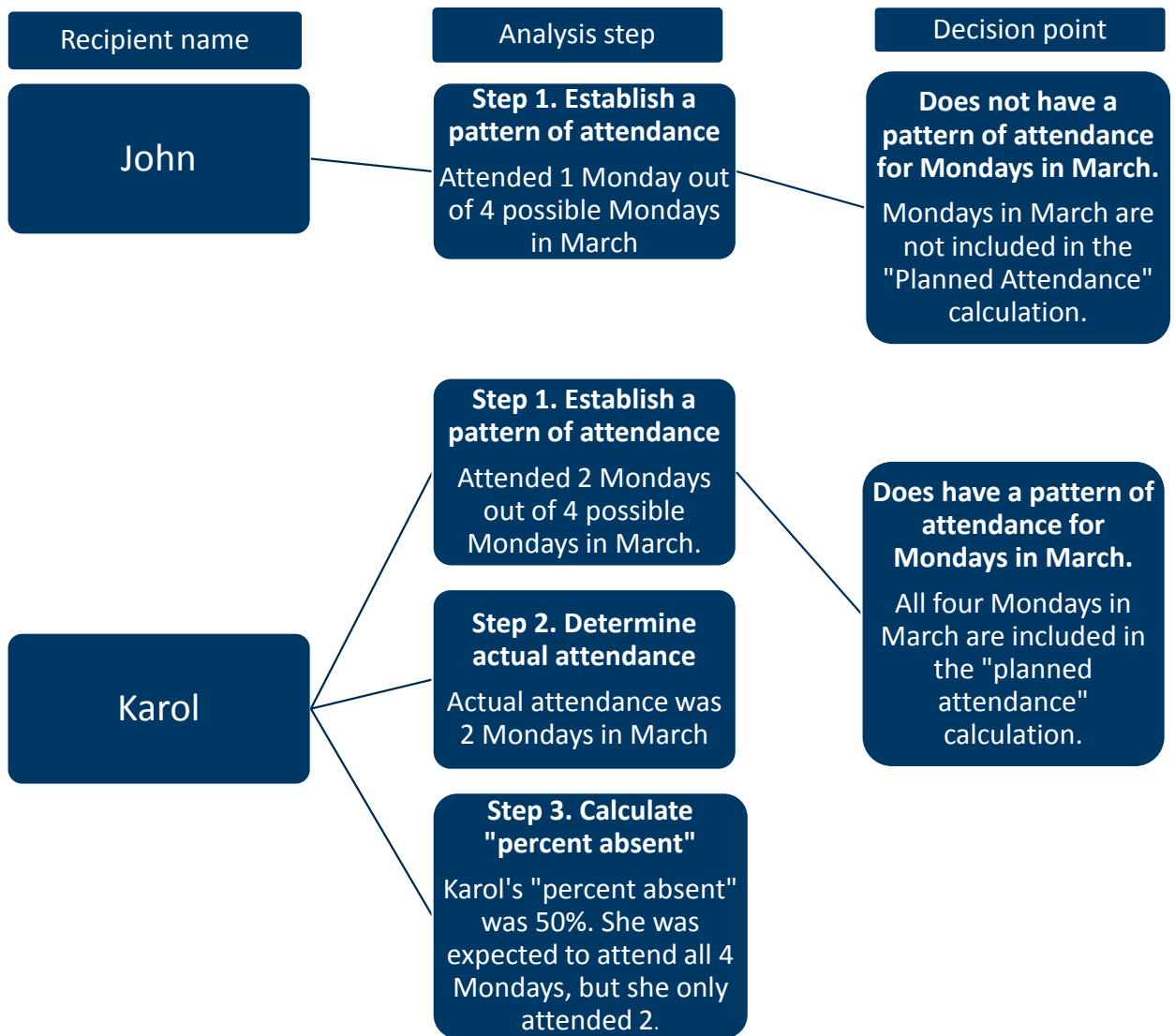
The second analysis step calculated the number of weekdays for each month that a person actually attended when they planned to attend. DHS determined this number from the days with paid claims for those people with a pattern of attendance.

### *Step 3: Percent absent*

The third step in the analysis included calculating the “percent absent,” or the average percent of planned service days that people were absent. DHS calculated this across all people with a pattern of attendance on any weekday from January to June 2016. The formula to determine this was: *“Percent Absent” = 100 percent - attendance rate (actual attendance / planned attendance)*. So, if a person attended three out of four planned days, he or she would have a 75 percent attendance rate and a 25 percent absent rate.

The figure below illustrates the analysis steps with two examples, including a person who did not establish a pattern of attendance for a specific weekday and a person who did.

Figure 1: Analysis decision steps illustrated with examples





# VI. Study findings

## Literature review

DHS determined through the literature review that absence factors nationwide are not consistent and interact with many other variables, making it very difficult to apply to Minnesota's Disability Waiver Rate System services. Just as DHS has done, other states have conducted studies to determine the appropriate figures for all of the cost components for their specific populations, laws, services and more. In essence, the literature review emphasized the need to obtain Minnesota-specific data to recommend an appropriate absence factor.

In our review, we found:

- 1. Nationwide, a wide range of absence factors exist from 0 percent to 15 percent, with most states having no published absence factor rate for day services.** Published refers to publicly available, accessible information. The literature review demonstrated that states do not apply the absence factor consistently nationwide, especially in waiver day services. From available documentation and consultation, DHS determined that only a third of states have a published absence factor figure included in their day service rates.
- 2. The complexity of the absence factor's interaction with other cost components and limits, such as billing caps, makes it difficult to draw conclusions from national data.** Each state has many additional factors that interact with the absence factor. For example, some states with absence factors also have billing caps for day services or only allow it to be applied to full-time participants. In addition, these states also have several different cost components, such as administrative percentages, that differ from Minnesota's frameworks because they are based on each state's specific population and costs. Where one state might have a higher absence factor rate, it applies a lower administrative percentage to the overall rate.
- 3. Previous studies of Minnesota's absence factor for day services found the rate to be between 3 percent and 4 percent.** Two separate studies done by two different research firms in 2010 and 2016 determined the absence factor for day services to fall between 3 percent and 4 percent. The firms based their findings on provider survey submissions and literature review findings. Specifically, in 2010, the research firm recommended a value of 3.9 percent (current value); in 2016, a different research firm recommended a value of 3.1 percent for day services based on a provider cost survey. These research firms used a literature review of other states' absence factors and provider surveys.

## Claims data analysis

Through the analysis steps outlined above, DHS calculated the "percent absent" with claims data. Claims data found that the average attendance percentage from January to June 2016 was 94.3 percent, which means there was an average absence of 5.7 percent across more than 13,000 people using day services.

Consistent with the current absence and utilization factor methodology, the full absence factor is multiplied by 80 percent to take into account the percentage of a provider’s total costs that are fixed regardless of program attendance. Not all business costs are fixed; some costs are variable and scalable, dependent on the volume of service provided. Examples of variable costs include supplies, consumable goods, participation costs and transportation. Within the rate methodologies, this includes the client programming and support, program plan support and transportation values. If DHS were to pay providers 100 percent of the average absence rate, the rate methodologies would be overpaying for this cost. DHS multiplied the average absence of 5.7 percent by 80 percent to arrive at the absence factor of 4.5 percent. For a breakdown of the analysis steps with the actual numbers, please see Table 2.

**Table 2: Day services absence factor calculation**

<b>Steps in calculation</b>	<b>Percentage</b>
<b>Average attendance of day services by person</b>	94.3%
<b>Absence percentage</b>	5.7%
<b>DHS fixed costs policy</b>	80%
<b>Total absence factor</b>	4.5%

## VI. Report recommendations

To account for absences in day services accurately, DHS recommends setting the absence factor component value for day services at 4.5 percent in the DWRS frameworks, to be effective Jan. 1, 2019. This figure comes directly from the claims data analysis and is representative and applicable to Minnesota's day services waiver recipients.

CMS requires states to outline and justify cost components used to calculate rates. Minnesota must provide a basis for how cost components are derived. Failure to change this factor according to data findings will result in the cost component not reflecting research and evidence. This recommendation will help ensure that the rate methodologies accurately reflect the cost of providing services and that Minnesota maintains compliance with federal guidance by appropriately setting cost components over time.

## VII. Implementation language

In 2017, the Minnesota Legislature authorized a delayed change (effective Jan. 1, 2019) in the component value for absences in day services. The legislation increases the component value from 3.9 percent to 9.4 percent. This value did not reflect research findings. The legislation also required DHS to complete research and analysis to verify this component value and provide this report, with recommendations, to committee chairs.

This report recommends changing the component value to 4.5 percent effective Jan. 1, 2019, to reflect updated research. This recommendation will require legislative changes to Minnesota Statutes, section 256B.4914, subdivision 5, paragraph d.