



COLORADO
Department of Health Care
Policy & Financing

Department of Health Care Policy and Financing
1570 Grant Street
Denver, CO 80203

October 1, 2019

The Honorable Dominick Moreno, Chair
Joint Budget Committee
200 East 14th Avenue, Third Floor
Denver, CO 80203

Dear Senator Moreno:

In accordance with C.R.S. § 25.5-6-409.3 (4), The Colorado Department of Health Care Policy & Financing (the Department) respectfully submits our quarterly status report on the redesign of a consolidated Home and Community-Based Services (HCBS) waiver for Adults with Intellectual and Developmental Disabilities (IDD).

Since the July 2019 update, the Department has held stakeholder meetings and completed an actuarial analysis contract to project the fiscal impact of a consolidated waiver. For the complete analysis, please see the attached report: Bolton Health Actuarial, (2019) *Intellectual and Developmental Disabilities Waiver Redesign Project Cost Modeling*.

The Department continues to engage stakeholders to inform the development of a consolidated waiver. Over the past three months the Department has met with stakeholders on several occasions to closely review and revise drafts of services proposed for a consolidated waiver, and to review and collect stakeholder input on the Bolton Health actuarial analysis. Background information and meeting materials are available on the Waiver Redesign Stakeholder Engagement [website](#).

If you require further information or have additional questions, please contact the Department's Legislative Liaison, Nina Schwartz at Nina.Schwartz@state.co.us or 303-866-6912.

Sincerely,

A handwritten signature in black ink, appearing to read 'K Bimestefer'.

Kim Bimestefer
Executive Director

KB/mab

Enclosure(s): Bolton Health Actuarial. (2019). *Intellectual and Developmental Disabilities Waiver Redesign Project Cost Modeling*.

Cc: Representative Daneya Esgar, Vice-chair, Joint Budget Committee
Representative Chris Hansen, Joint Budget Committee
Senator Bob Rankin, Joint Budget Committee
Representative Kim Ransom, Joint Budget Committee
Senator Rachel Zenzinger, Joint Budget Committee
Carolyn Kampman, Staff Director, JBC
Eric Kurtz, JBC Analyst
Lauren Larson, Director, Office of State Planning and Budgeting
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Parrish Steinbrecher, Health Information Office Director, HCPF
Stephanie Ziegler, Cost Control and Quality Improvement Office Director, HCPF
Rachel Reiter, External Relations Division Director, HCPF
Nina Schwartz, Legislative Liaison, HCPF

Intellectual and Developmental Disabilities Waiver Redesign Project Cost Modeling

June 26, 2019

Bolton

Prepared For;
**The Department of Health Care Policy and Financing
Community Living Office**

Prepared By:
**Zach Smith, ASA, MAAA
Michelle Hoffner**

The cost estimate within the report should be considered draft only. There are a number of factors that could change the total cost to implement waiver consolidation including changes on assumptions, administrative costs, and programmatic changes. The service and unit limitations outlined in the cost estimates are for purposes of cost modeling only. The limitations used in this report are not reflective of proposed service or unit limitations. The Department worked collaboratively with the Adult Intellectual and Developmental Disabilities (IDD) Waiver Redesign Stakeholders to inform the content of this draft report and would continue to do so if the initiative moves forward.

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Purpose

The Colorado Department of Health Care Policy and Financing (the Department) engaged Bolton Health Actuarial, Inc. (Bolton) to complete cost impact analyses associated with combining the current Home and Community Based Services Supported Living Services (SLS) and Developmental Disabilities (DD) waivers into a single waiver serving individuals with Intellectual and Developmental Disabilities (IDD). This report summarizes the results of the analyses and describes the assumptions underlying each scenario modeled.

Scope and Limitation

The Excel-based models contain Protected Health Information and will not be distributed.

The contents of this report rely on utilization and eligibility information provided by the Department. While Bolton did not audit the data, we did review summaries for reasonableness. If the source data is found to be incomplete or inaccurate, then the contents of this report and supporting analytics may also be incomplete or inaccurate.

Use of this report and supporting analytics requires a certain minimum level of Home and Community Based Services (HCBS) waiver program and data analytic knowledge. Any conclusions or interpretations formed based on the contents of this report should be evaluated by the Department's staff.

Finally, any structural changes to the waiver program, to the scenarios described later in this report, or changes to the current fee schedule pose a financial risk. If any changes to the program, scenarios, or fee schedules are implemented subsequent to this report the Excel models should be updated to reflect these changes.

Guidelines issued by the American Academy of Actuaries require actuaries to include their professional qualifications in all actuarial communications. Zach Smith is a member of the American Academy of Actuaries and meets the qualification standards for performing the analyses in this report.

Executive Summary

The goals of the Adult IDD Waiver Redesign are to:

- Consolidate the Home and Community-Based Services (HCBS) Developmental Disabilities (DD) and Supported Living Services (SLS) waivers into a single HCBS waiver for Adults with IDD.
- Include an array of broad, flexible services and a spectrum of service delivery options that enhance individual choice, autonomy and community engagement.
- Employ Person-Centered Planning and service delivery that provides for health and safety assurances and sound stewardship of public funds.

The Department provided the following guiding principles for combining the HCBS-SLS and DD waivers:

1. People getting the right service, right amount, at the right place, and right time.
2. Minimizing member disruption.
3. Improving the current waiver where possible. For example, self-direction options, more flexible additional services, or enhanced provider qualifications.
4. The waiver redesign work will not result in a reduction of resources available to people currently receiving services.

Bolton created a model that allows the Department to categorize members by Support Level and identify Daily Supports Needs. This model utilizes responses from the Supports Intensity Scale (SIS) assessment to assign each member a Support Level and Daily Supports Needs indicator. Given the goal of minimizing member disruption and transitioning to a new assessment tool, the Department decided to maintain the existing framework for determining each member’s Support Level. Utilizing the fiscal year starting July 1, 2017 ending June 30, 2018 (FY17/18) eligibility and SIS assessment data for the combined SLS and DD waiver populations results in the distribution by Support Level shown in Table 1 (note, individuals with exceptional needs as identified in the existing data are categorized as Support Level 7).

Table 1						
Support Level						
1	2	3	4	5	6	7
2,746	2,898	1,450	1,369	1,601	1,184	249

In addition to determining each member’s Support Level, the Daily Supports Needs criteria is used to identify which individuals have a need for Residential Habilitation Services and Supports (ResHab) that will allow these members to live and participate successfully and safely in the community. In order to define Daily Supports Needs utilizing currently available data, the

Department selected a methodology modeled after the residential algorithm used in the Developmental Disabilities Assessment in Washington¹. To be eligible for ResHab, an individual must meet the minimum criteria for a subset of responses in the SIS assessment. See the “Support Level Module” section below for details regarding the Washington residential algorithm.

Applying the methodology to the FY17/18 members underlying the existing waiver populations results in 74% of current SLS waiver participants and 92% of current DD waiver participants being eligible for ResHab. The “Support Level Module” Section, below, details the approach and assumptions used to define Support Level and Daily Supports Needs.

Cost Modeling Results

Bolton modeled four scenarios for the Department to estimate the impact of waiver redesign:

- **Do Nothing (Baseline):** The SLS and DD waivers are maintained with no change in services.
- **Combine Waivers:** The SLS and DD waivers are combined with no change in services. Both populations would gain access to all services covered under both waivers.
- **Combine Waivers Added Services:** The SLS and DD waivers are combined as described above, and will offer additional services (Acupuncture, Behavioral Risk Assessments, Caregiver Education, Chiropractic, Home Maintenance Services, Electronic Support Systems, Intensive Supports, and Medication Reminder Systems).
- **Combine Waivers Added Services and Remove Service Limits:** The SLS and DD waivers are combined as described above, offer the above added services, and remove service limits on Behavioral Counseling, Consultations, Line Staff, Assessments, and Transportation.

The model Bolton created analyzes the FY17/18 eligibility and claims data underlying the SLS and DD waiver population. In total, Bolton evaluated the experience for 11,248 members totaling \$478,717,123 in claims paid through October 2018. Repricing the utilization to reflect the most current rates underlying the baseline data period and adding completion for estimated incurred claims that had not been paid at the time of the data extraction increases the claims total to \$489,314,871.

The next step in the model adjusts the data to reflect the current rates as of March 1, 2019, resulting in an estimated increase of \$32,550,290. To account for the potential increase of available qualified providers due to the increase in rates, Bolton applied an Own-Wage elasticity assumption to the utilization. The Own-Wage adjustment reflects a 0.5% increase in utilization for every 1% increase in provider rates. This adjustment was limited to services where there is a

¹ <https://apps.leg.wa.gov/wac/default.aspx?cite=388-828-9500>

perceived shortage of providers as identified by the Department. The total impact of the Own-Wage adjustment is \$3,786,456. Finally, before evaluating the scenarios, Bolton incorporated estimates for services not included in the FY17/18 data (Consumer-Directed Attendant Support Services (CDASS), Transition services, and Dental) resulting in the addition of \$6,225,435.

To evaluate the impact of each scenario, the model categorizes members and their associated claims by Support Level and whether they meet the Daily Supports Needs criteria. The model includes assumptions that all individuals currently receiving 24-hour services will continue to receive 24-hour services. Costs are incorporated for access to services currently limited to only the SLS or DD waivers, new services, and the removal of service limits as applicable within each scenario.

To ensure adequate resources are available to members and maintain fiscal sustainability, Individual Support Plan Budget (ISPB) limits are developed at the Support Level for members who meet the Daily Supports Needs criteria and those that do not. These budget limits are similar to the current Service Plan Authorization Limits (SPALs) utilized in the SLS waiver. To determine the budget limits, Bolton relied on the Prior Authorization Request (PAR) data to adequately capture an individual’s need for services. The budget limits are currently set at the 90th percentile of all members’ PAR data within a given Support Level. These limits are adjusted to reflect any additional services or changes to service limits within each scenario. The “Do Nothing (Baseline)” scenario does not follow this approach and maintains the existing SPALs under SLS with no limits set for the DD population. Finally, the cost of incorporating members currently on the DD waiver waitlist is evaluated. The DD waiver waitlist population consists of 1,795 current SLS members and 744 members not currently enrolled in either waiver. Table 2 summarizes the impact of each scenario modeled.

Table 2 Summary of Scenarios				
	Do Nothing	Combine Waivers	Combine Waivers Added Services	Combine Waivers Added Services Remove Service Limits
Starting Costs	\$531,877,051	\$531,877,051	\$531,877,051	\$531,877,051
Access to services from each waiver	\$0	\$151,623,826	\$151,623,826	\$151,614,887
New Services	\$0	\$0	\$15,551,999	\$15,551,999
Remove Service Limits	\$0	\$0	\$0	\$4,309,347
<u>ISPB Impact</u>	<u>(\$2,296,685)</u>	<u>(\$943,219)</u>	<u>(\$1,227,555)</u>	<u>(\$1,234,862)</u>
Total Cost for Existing Population	\$529,580,366	\$682,557,658	\$697,825,321	\$702,118,422
<i>Difference</i>	<i>n/a</i>	<i>\$152,977,291</i>	<i>\$168,244,955</i>	<i>\$172,538,056</i>
<u>DD Waitlist Estimated Cost</u>	<u>\$132,291,643</u>	<u>\$52,471,912</u>	<u>\$53,719,355</u>	<u>\$54,114,407</u>
Total Cost for All Populations	\$661,872,009	\$735,029,570	\$751,544,677	\$756,232,829
<i>Difference</i>	<i>n/a</i>	<i>73,157,560</i>	<i>89,672,668</i>	<i>94,360,820</i>

Details of the model and underlying assumptions are described in detail throughout the remainder of this report.

Cost Modeling

Research

As part of this engagement, Bolton researched existing IDD HCBS waiver programs across various states. This research included program parameters, covered services, benefit limits, provider reimbursement rates, and caseloads. The Department was provided a summary of Bolton’s findings which covered Florida, Hawaii, Kansas, Missouri, North Carolina, Pennsylvania, Texas, Washington, and Wisconsin.

To provide estimated costs for new services, Bolton also reviewed IDD waiver programs in Idaho, Ohio, Minnesota, and Utah. Utilization statistics as well as provider reimbursement rates for services provided in the Colorado HCBS Children’s Extensive Support (CES) and Colorado Spinal Cord Injury (SCI) waivers were summarized for this analysis. Data and estimates for the Colorado Cross-System Response for Behavioral Health Crises Pilot Program were also analyzed to inform cost estimates.

Finally, Bolton collaborated with Ms. Mary Sowers, the CMS technical assistance consultant with New Editions and the National Association of State Directors of Developmental Disabilities Services, as well as representatives from the Human Services Research Institute (HSRI) to identify resources and statistics relevant to this initiative.

The information utilized from research performed is identified throughout the remainder of this report.

Support Level Module

To assist the Department in evaluating the impact of various approaches to defining member characteristics for use in setting budgets, Bolton developed the Support Level Module. This module combines member level data and detailed SIS assessment scores. The SIS assessment is the current tool used by the Department to measure each individual’s support needs in personal, work-related, and social activities. “The SIS is a standardized assessment tool designed to measure the pattern and intensity of supports that a person aged 16 years and older with intellectual disability requires to be successful in community settings. First launched in 2004, the assessment tool was developed by AAIDD over a five-year period from 1998 to 2003 and normed with over 1,300 culturally diverse people with intellectual and developmental disabilities aged 16–72 in 33 states and two Canadian provinces.

The psychometric properties of the tool are strong: research published in peer-reviewed journals around the world continuously demonstrates the reliability and validity of the SIS.² The Department currently captures the SIS assessment scores for each member in the IDD waiver programs.

The Support Level Module has sufficient flexibility to allow the Department to define up to seven Support Levels using any combination of the SIS assessment responses. For the purposes of our analysis, it was determined that utilizing the existing Support Level definitions as currently applied would result in the smallest amount of member disruption. The Department intends to further evaluate meaningful improvements to the Support Level definitions as they pursue the transition to a new assessment.

The second component of the Support Level Module is defining the criteria for Daily Supports Needs. The Daily Supports Needs criteria is utilized to determine an individual's need to access ResHab services. Conversations held between Bolton, the Department, HSRI, and Ms. Sowers in conjunction with the research performed narrowed our focus to the Washington Residential Algorithm³ as a model for determining Daily Supports Needs. The Washington Residential Algorithm utilizes SIS assessments as well as a protective supervision acuity scale, behavioral acuity scale, medical acuity scale, program and services panel, seizure acuity scale, and sleep panel. The Department recognizes they do not currently have the ability to measure each of the additional components utilized in the Washington Residential Algorithm, however, the main component of the algorithm accesses responses from the SIS assessment. These responses were deemed to be a reliable source for determining the Daily Supports Needs criteria.

The Washington Residential Algorithm classifies members into seven Support Levels:

- Support Level 1 – Weekly or less (*support on a weekly basis or less frequently*)
- Support Level 2 – Multiple times per week (*support multiple times per week*)
- Support Level 3A – Intermittent daily-Low (*daily support*)
- Support Level 3B – Intermittent daily-Moderate (*daily support and may receive nighttime checks*)
- Support Level 4 – Close Proximity (*support in close proximity 24 hours per day*)
- Support Level 5 – Continuous day and continuous night (*support 24 hours per day*)
- Support Level 6 – Community Protection (*24 hours per day supervision*)

A decision tree is utilized based on the SIS assessment responses in conjunction with responses to each of the additional scales and panels (referenced above) to determine a member's Support Level. A primary component of this algorithm is the Daily Support Needs score which assigns a member a minimum of Support Level 3A (*daily support*) when achieved.

² <https://aaidd.org/sis>

³ <https://apps.leg.wa.gov/wac/default.aspx?cite=388-828-9500>

The member is assumed to have daily supports needs if at least one of the following SIS activities meets the stated minimum threshold:

Table 3 Washington Daily Supports Needs			
SIS Activity	Minimum Type Score	Minimum Frequency Score	Minimum Daily Support Time
A2: Bathing and taking care of personal hygiene and grooming needs	2 Verbal /Gesture Prompt	3 At least once a day, but not hourly	1 Less than 30 minutes
A3: Using the toilet	2 Verbal /Gesture Prompt	3 At least once a day, but not hourly	1 Less than 30 minutes
A4: Dressing	2 Verbal /Gesture Prompt	3 At least once a day, but not hourly	1 Less than 30 minutes
A6: Eating food	2 Verbal /Gesture Prompt	3 At least once a day, but not hourly	1 Less than 30 minutes
A9: Using currently prescribed equipment or treatment	2 Verbal /Gesture Prompt	3 At least once a day, but not hourly	1 Less than 30 minutes
E1: Taking medication	2 Verbal /Gesture Prompt	3 At least once a day, but not hourly	1 Less than 30 minutes
E2: Ambulating and moving about	3 Partial Physical Assistance	3 At least once a day, but not hourly	1 Less than 30 minutes
E3: Avoiding health and safety hazards	1 Monitoring	3 At least once a day, but not hourly	1 Less than 30 minutes

In addition to meeting at least one of the above criteria, if a member needs assistance for any combination of three or more of the above services at least once a day (regardless of the type) they are considered to have Daily Supports Needs. The need for daily supports combined with scores from the remaining panels and scales places a member within one of the Support Levels between 3A (*daily support*) and 6 (*24 hours per day supervision*).

The Washington Residential Algorithm also considers mid-frequency supports needs to determine whether a member qualifies for Support Level 3A (*daily support*). The mid-frequency supports needs are met if an individual meets the minimum criteria in either Table 4a, Table 4b or Table 4c (shown on the following pages) and has been scored at a “Medium” level of behavioral or medical support needs. To determine the behavioral and medical support needs, the additional panels and scales outside of the SIS assessment are utilized.

Table 4a
Washington Mid-Frequency Supports Needs

Member has midfrequency support needs if s/he meets or exceeds all of the qualifying scores for one or more of the following activities:

SIS Activity	Minimum Type Score	Minimum Frequency Score	Minimum Daily Support Time
A5: Preparing food	2 Verbal /Gesture Prompt	2 At least once a week, but not daily	2 30 minutes to less than 2 hours
A8: Housekeeping and cleaning	3 Partial Physical Assistance	3 At least once a day, but not hourly	2 30 minutes to less than 2 hours
B2: Participating in recreational/leisure activities in community settings	3 Partial Physical Assistance	2 At least once a week, but not daily	2 30 minutes to less than 2 hours
B7: Interacting with community members	3 Partial Physical Assistance	2 At least once a week, but not daily	2 30 minutes to less than 2 hours
G3: Protecting self from exploitation	2 Verbal /Gesture Prompt	2 At least once a week, but not daily	2 30 minutes to less than 2 hours

Table 4b
Washington Mid-Frequency Supports Needs

Member has mid-frequent support needs if s/he meets or exceeds the qualifying scores for four or more of the following activities:

SIS Activity	Minimum Type Score	Minimum Frequency Score	Minimum Daily Support Time
A2: Bathing and taking care of personal hygiene and grooming needs	1 Monitoring	2 At least once a week, but not daily	1 Less than 30 minutes
A3: Using the toilet	1 Monitoring	2 At least once a week, but not daily	1 Less than 30 minutes
A4: Dressing	1 Monitoring	2 At least once a week, but not daily	1 Less than 30 minutes
A5: Preparing food	1 Monitoring	2 At least once a week, but not daily	1 Less than 30 minutes
A6: Eating food	1 Monitoring	2 At least once a week, but not daily	1 Less than 30 minutes
A8: Housekeeping and cleaning	1 Monitoring	2 At least once a week, but not daily	1 Less than 30 minutes
A9: Using currently prescribed equipment and medications	1 Monitoring	2 At least once a week, but not daily	1 Less than 30 minutes
B2: Participating in recreational/leisure activities in community settings	1 Monitoring	2 At least once a week, but not daily	1 Less than 30 minutes
B7: Interacting with community members	1 Monitoring	2 At least once a week, but not daily	1 Less than 30 minutes
E1: Taking medications	1 Monitoring	2 At least once a week, but not daily	1 Less than 30 minutes
E2: Ambulating and moving about	1 Monitoring	2 At least once a week, but not daily	1 Less than 30 minutes
E3: Avoiding health and safety hazards	1 Monitoring	2 At least once a week, but not daily	1 Less than 30 minutes
G3: Protecting self from exploitation	1 Monitoring	2 At least once a week, but not daily	1 Less than 30 minutes

Table 4c			
Washington Mid-Frequency Supports Needs			
<i>Member has mid-frequent support needs if s/he meet the qualifying scores for the following activities & a total weekly critical support time exceeding 10 hours:</i>			
SIS Activity	Minimum Type Score	Minimum Frequency Score	Minimum Daily Support Time
A7: Taking care of clothes, including laundering	1 Monitoring	2 At least once a week, but not daily	<i>Total critical support time exceeds 10 hrs.</i>
B5: Using public services in the community	1 Monitoring	2 At least once a week, but not daily	
B6: Shopping and purchasing goods and services	1 Monitoring	2 At least once a week, but not daily	
F2: Participating in recreation/leisure activities with others	1 Monitoring	2 At least once a week, but not daily	
F8: Engaging in volunteer work	1 Monitoring	2 At least once a week, but not daily	
G7: Managing money and personal finances	1 Monitoring	2 At least once a week, but not daily	

The Support Level module incorporates the above definitions of daily support and mid-frequency support needs. Note, the SIS assessment currently used by the Department does not incorporate question A9: *Using currently prescribed equipment or treatment* so this component has been omitted. The Support Level module contains sufficient flexibility to allow the department to replace any of the above questions with alternate items from the SIS assessment. It also allows the type, frequency, and minimum daily support time to be adjusted.

To maintain the integrity of the algorithm, Bolton did not replace any of the existing criteria for the Daily Supports Needs. However, insights found in the case studies or additional information obtained through the transition to a new assessment tool may demonstrate the need to refine the thresholds for the Daily Supports Needs criteria. This model will allow for easy incorporation of those changes and the Department will be able to use this model as they transition to a new assessment tool.

The Department does not currently capture the information found in the additional panels and scales utilized in Washington. Because this information is not available to determine which members with mid-frequency support needs might require daily supports, the Department has determined that utilizing the Daily Support Needs component is the most appropriate path for this analysis. Therefore, Bolton identified members with Daily Supports Needs only as those who meet the criteria described in Table 3 (above). Using this algorithm identifies that 92% of all DD waiver participants and 74% of all SLS waiver participants have Daily Supports Needs.

Table 5 demonstrates the percent of SLS and DD members that meet each of the individual daily supports criteria. Note, a member may meet more than one of the criteria below and is counted within each of the assessment areas where they meet the minimum qualifications.

Table 5 Number and % of Total Population Meeting Minimum Requirements				
SIS Activity	DD	DD	SLS	SLS
Using toilet	2,947	51.4%	1,644	30.3%
Eating food	2,839	49.5%	1,690	31.1%
Dressing	3,375	58.9%	2,111	38.9%
Bathing, personal hygiene, grooming	4,017	70.1%	2,534	46.6%
Taking meds	4,838	84.4%	3,039	55.9%
Avoiding health & safety hazards	1,736	30.3%	936	17.2%
Ambulating & moving	4,199	73.3%	2,788	51.3%
Any combination of 3 min score	4,482	78.2%	2,916	53.7%

To further demonstrate the needs of the population, Bolton summarized the percent of members who qualify for Daily Supports Needs by the number of criteria met (as described in Table 3 above). Table 6 shows the percent of members by the number of criteria met as well as the percent of members that qualify for daily supports solely by meeting the additional requirement of needing three services once daily.

Table 6 % of Daily Support Eligibles Meeting 1 or more Requirements		
# of Requirements	DD	SLS
1	10.4%	21.5%
2	11.8%	16.7%
3	11.2%	12.4%
4	10.7%	11.2%
5	13.1%	10.4%
6	18.9%	13.0%
7	23.7%	14.2%
Combination of 3 Only	0.1%	0.5%

Cost Impact Module

Bolton developed the Cost Impact Module to allow the Department to model the financial impact of changes in the Support Level algorithm, combining the SLS and DD waivers, adding new services, and adjusting current unit limits. This is an Excel-based model that reads in results from the Support Level Module and projects estimated costs using the corresponding member claims. The Cost Impact Module aggregates data to calculate average utilization per thousand and cost estimates by Support Level and Daily Supports Needs criteria.

The remainder of this section describes the Cost Impact Module and the assumptions currently underlying the four scenarios that have been produced for the Department. Note the Department has prepared a crosswalk of the existing SLS and DD waiver services into newly defined services for the combined population. For ease of interpretation, Bolton has identified services

utilizing their existing nomenclature. These services are referred to as such throughout this document.

Baseline Data

The Department provided SLS and DD waiver incurred claims by member for FY17/18 paid through October 2018. Bolton grouped the claims data into service categories reflective of the existing SLS and DD waiver services (e.g. Assistive Technology, Personal Care, Group Residential Services and Supports, Personal Emergency Response System, Vision, etc.). The resulting data by member and service category was summarized and imported into the Cost Impact Module for use in developing cost estimates. The starting claims totaled \$478,717,123.

The Department also provided PAR data for the FY17/18 members. Bolton summarized the PAR utilization estimates by the same service categories as the claims and priced the total dollar estimate of the PAR for each member using the FY17/18 provider reimbursement rates. The PAR data is tracked through the model for the purpose of estimating the ISPBs. This is discussed in more detail in the “Scenarios” section, below.

Completion

The first step in the Cost Impact Module is to assign completion for Incurred But Not Paid (IBNP) claims. Bolton utilized an internal model to develop estimates of outstanding claims to be paid by service category using the Department’s historical payment patterns. Due to a change in claims/billing systems (transitioning to the InterChange system), there were some abnormal payment patterns underlying the data. To ensure the cost estimates were accurate, Bolton reviewed historical claims payment patterns from FY15/16 and FY16/17 as well as the Department’s summary of claims paid between November 1, 2018 and February 14, 2019 to validate the IBNP estimates. Applying the completion factors results in an increase of 1.4% or \$6,585,572 additional dollars expected to be paid.

Rate Changes

The model then accounts for changes in provider reimbursement rates. For purposes of estimating the impact of each scenario, Bolton utilized the current rates effective March 1, 2019⁴. The current rates reflect increases over the reimbursement rates in effect for FY17/18 ranging from 1.0% to 9.1%. Updating the rates results in an increase of 6.7% or \$32,550,290.

The Department raised concerns surrounding the lack of providers for certain services resulting in lower utilization and claims reflecting levels significantly below their current SPAL in the SLS waiver. This was also brought up by stakeholders as a concern during the meeting held on November 28, 2018.

⁴ <https://apps.leg.wa.gov/wac/default.aspx?cite=388-828-9500>
02018-2019%20Rate%20Schedules%20v7.pdf

Bolton worked with the Department to identify the services where access to providers may be limited:

- Personal Care
- Basic and Enhanced Homemaker
- Supported Community Connections
- Behavioral Line Staff
- Individual and Group Respite
- Non-Medical Transportation *excluding Other (Public Conveyance) and Mileage Not In Day Program*

To account for the potential increase of available providers, Bolton researched the Own-Wage elasticity of Labor Demand. “Own-wage labor supply elasticities: variation across time and estimation methods” by Olivier Bargain and Andreas Peichl⁵ researches multiple labor supply elasticity models across 17 European countries and the US. While the research shows a broad range of results, Bolton narrowed our estimate of Own-Wage elasticity to a 0.5% increase in utilization for every 1% increase in reimbursement. This assumption was applied to the narrowed list of services above resulting in an estimated potential increase of 0.7% or \$3,786,456.

Before moving on to the scenario assumptions, please note the above-mentioned adjustments (completion, rate changes, and own-wage elasticity) apply to each of the four scenarios described below.

Scenarios

The model currently evaluates the following four scenarios:

- **Do Nothing (Baseline):** The SLS and DD waivers are maintained with no change in services.
- **Combine Waivers:** The SLS and DD waivers are combined with no change in services. Both populations would gain access to all services covered under both waivers.
- **Combine Waivers Added Services:** The SLS and DD waivers are combined as described above, but will offer additional services (Behavioral Risk Assessments, Chiropractic, Acupuncture, Intensive Supports, Medication Reminder Systems, Electronic Support Systems, Home Maintenance Services, and Caregiver Education).
- **Combine Waivers Added Services and Remove Service Limits:** The SLS and DD waivers are combined as described above, offer the above added services, and remove service limits on Behavioral Counseling, Consultations, Line Staff, Assessments, and Transportation.

The “Do Nothing (Baseline)” scenario reflects that the SLS and DD waivers would remain

⁵ <https://izajole.springeropen.com/articles/10.1186/s40172-016-0050-z>

independent and serves as the baseline for comparison purposes. Bolton assumed no change in the utilization of existing services for the members underlying this population. The claims data underlying the baseline does not include costs for CDASS, Transition services, or Dental. These costs were added based on estimates provided by the Department. CDASS was estimated to be \$5,064,972 and is distributed equally across the entire SLS population. Transition service estimates of \$15,098 for the SLS population and \$19,305 for the DD population were assumed to apply to individuals categorized as Support Level 6. Dental expenditures of \$1,126,060 for FY17/18 were split between the SLS and DD populations based on the FY16/17 distribution of claims between the two waivers.

The current SLS waiver includes a SPAL and overall waiver cap. The model does not consider the SPAL or waiver cap when estimating increases in utilization due to own-wage elasticity, new services, or removing service limits. These amounts are added to the average cost for a given Support Level. To account for the potential overstatement, an adjustment must be made to reflect the impact of the SPAL. To estimate the impact of individual SPALs, the Cost Impact Module relies on claims probability distributions (CPDs). The CPDs are developed using the underlying FY17/18 claims for the services that have been flagged as applicable to the SPAL or waiver cap. A credible CPD is automatically selected for the SPAL and scales the underlying claims to reflect the projected utilization. Note, Bolton reviewed historical claims starting with FY15/16 and found that approximately 1% of claims paid are in excess of a given member’s SPAL limit. To ensure the SPAL is accurately estimated, Bolton adjusts the scaling of claims to reflect the amount paid over the SPAL and assumes this will be consistent going forward. The model then calculates the claims projected to be over the selected SPAL or waiver cap.

For the “Do Nothing (Baseline)” scenario, Bolton utilized the existing SPALs and waiver cap (see Table 7) resulting in an adjustment of \$2,296,685 for the SLS population. Table 8, on the following page, shows the resulting SPAL impacts by Support Level.

Table 7						
Existing ISPBs						
SL 1	SL 2	SL 3	SL 4	SL 5	SL 6	SL 7
\$14,379	\$19,207	\$21,607	\$24,831	\$29,905	\$39,226	N/A

The final component of this scenario is the estimated cost associated with the elimination of the DD waiver waitlist. The As Soon As Available (ASAA) FY19 HCBS DD waiver waitlist provided to Bolton for the purposes of this analysis contains 2,539 individuals. Of those individuals, 1,795 are currently classified as SLS members in the FY17/18 data underlying the model. Bolton utilized the SIS data to categorize each of the SLS individuals on the waitlist by Support Level and to determine whether they meet the criteria for Daily Supports Needs. Of the 1,795 SLS members, 1,423 met the Daily Supports Needs criteria (79%). For this scenario, we have assumed that all members on the waitlist would move to the DD waiver regardless of their Daily Supports Needs determination.

From the remaining 744 individuals, we were able to obtain SIS scores for 239 members and have 505 unscored individuals. Bolton assumed the 505 unscored individuals would be distributed across Support Levels consistent with the existing DD waiver population. The remaining individuals were summarized by Support Level and assumed to have average costs equal to those underlying the same Support Level in the existing DD waiver population. Finally, reductions were made to the SLS population estimates to reflect the reduction in members for those individuals transitioning to the DD waiver.

Table 8a summarizes the total projected spend for the SLS population under the “Do Nothing (Baseline)” scenario.

Table 8a								
SLS Do Nothing Scenario								
	SL 1	SL 2	SL 3	SL 4	SL 5	SL 6	SL 7	Total
Members	2,056	1,733	547	403	430	314	0	5,483
Starting Costs	\$17,960,910	\$21,607,103	\$8,196,827	\$6,800,214	\$8,678,447	\$7,479,797	\$0	\$70,723,298
Completion	\$251,095	\$308,473	\$127,467	\$101,740	\$250,919	\$159,396	\$0	\$1,199,090
New Rates	\$1,083,164	\$1,394,594	\$541,714	\$447,322	\$592,954	\$493,183	\$0	\$4,552,930
Own Wage Adj	\$369,613	\$531,782	\$215,982	\$185,122	\$233,005	\$195,430	\$0	\$1,730,935
CDASS	\$1,886,291	\$1,590,869	\$509,141	\$377,043	\$405,793	\$295,835	\$0	\$5,064,972
Transition Svcs	\$0	\$0	\$0	\$0	\$0	\$15,098	\$0	\$15,098
Dental	\$292,304	\$246,525	\$78,898	\$58,428	\$62,883	\$45,843	\$0	\$784,880
<u>SPAL Impact</u>	<u>(\$586,666)</u>	<u>(\$748,374)</u>	<u>(\$317,613)</u>	<u>(\$236,273)</u>	<u>(\$310,378)</u>	<u>(\$97,381)</u>	<u>\$0</u>	<u>(\$2,296,685)</u>
Total Cost for Existing Population	\$21,256,711	\$24,930,972	\$9,352,414	\$7,733,596	\$9,913,623	\$8,587,203	\$0	\$81,774,518
<u>DD Waitlist Elimination</u>	<u>(\$5,728,160)</u>	<u>(\$8,776,944)</u>	<u>(\$3,410,303)</u>	<u>(\$3,156,482)</u>	<u>(\$3,587,981)</u>	<u>(\$3,144,995)</u>	<u>\$0</u>	<u>(\$27,804,865)</u>
Total Cost for All Populations	\$15,528,550	\$16,154,028	\$5,942,111	\$4,577,113	\$6,325,641	\$5,442,208	\$0	\$53,969,653

Table 8b summarizes the total projected spend for the DD population under the “Do Nothing (Baseline)” scenario.

Table 8b								
DD Do Nothing Scenario								
	DD 1	DD 2	DD 3	DD 4	DD 5	DD 6	DD 7	Total
Members	588	1,096	884	948	1,148	852	249	5,765
Starting Costs	\$20,928,352	\$55,215,768	\$52,459,531	\$66,567,750	\$91,959,009	\$84,232,610	\$40,642,980	\$412,006,000
Completion	\$273,590.06	\$670,767.46	\$634,781.30	\$813,244.93	\$1,283,760.98	\$1,243,891.75	\$466,446.09	\$5,386,483
New Rates	\$1,480,513.10	\$4,015,093.15	\$3,840,458.07	\$4,886,351.84	\$6,807,546.61	\$6,264,344.38	\$703,052.37	\$27,997,360
Own Wage Adj	\$114,229.16	\$307,833.32	\$283,369.75	\$348,441.63	\$497,118.48	\$432,343.23	\$72,185.97	\$2,055,522
Transition Svcs	\$0	\$0	\$0	\$0	\$0	\$19,305	\$0	\$19,305
Dental	\$35,136	\$65,193	\$52,217	\$56,262	\$67,680	\$50,152	\$14,539	\$341,179
Total Cost for Existing Population	\$22,831,820	\$60,274,655	\$57,270,358	\$72,672,050	\$100,615,115	\$92,242,646	\$41,899,203	\$447,805,848
DD Waitlist Elimination	\$25,991,822	\$43,100,618	\$19,853,878	\$20,332,743	\$24,480,962	\$22,667,489	\$3,668,995	\$160,096,508
Total Cost for All Populations	\$48,823,643	\$103,375,274	\$77,124,236	\$93,004,793	\$125,096,077	\$114,910,136	\$45,568,198	\$607,902,356

The combined total cost for the existing SLS and DD populations is \$529,580,366. Eliminating the DD waiver waitlist increases the total estimated cost to \$661,872,009.

The “Combine Waivers” scenario assumes the two waivers are consolidated and existing services will be accessible to both the SLS and DD populations. There are considerations for mutually exclusive services, for example: members receiving Residential Habilitation Services and Supports (IRSS, IRSS-Host Home, and GRSS) may not access Personal Supports - Personal Support Attendant, Health Maintenance Services; Transition Services -Transition Independent Living Skills Training; Caregiver Supports - Short-Term and Maintenance Support (Respite); Caregiver Supports - Caregiver Education and Training; or Assistive Technology - Personal Support Technology (Personal Emergency Response System).

To evaluate the services that each member is likely to receive under the combined waiver, the model projects costs separately by current waiver, Support Level, and whether the individual meets the Daily Supports Needs criteria. We do not have data to accurately predict whether an SLS member who meets the Daily Supports Needs criteria will opt to move to a ResHab setting, so we have conservatively assumed all SLS members that meet the Daily Supports Needs criteria will move to the ResHab setting. To do this, we replaced the current SLS utilization and cost with the average DD utilization and cost for the corresponding Support Level for the following services:

- Personal Care
- Basic & Enhanced Homemaker
- Respite (Individual, Group, and Camp)
- Personal Emergency Response Systems
- Mileage Not In Day Program (SLS-additional 4 trips per week, not for home-to-Day Program)

In addition, we removed the CDASS costs associated with the SLS population that meets the Daily Supports Needs criteria.

To estimate the impact of consolidating the waivers on the DD population, we have assumed the utilization of Hippotherapy, Massage, and Movement therapy will be the same as the SLS population by Support Level. Bolton has assumed none of the current DD population will choose to move from the ResHab setting.

The Department stated that it anticipates the continued use of budget limits to assist in allowing members to select the services that best fit their needs, while maintaining a fiscally sustainable service system. These limits are currently reflected as SPALs under the SLS waiver. The Department has labeled the proposed budget limits as Individual Support Plan Budget (ISPB), that is what Bolton will utilize throughout the remainder of this report.

The Cost Impact Module was built to allow the Department to select the services that will be subject to an ISPB. In addition, within a given Support Level, up to four ISPB groupings can be created. To ensure the ISPB is developed in a manner that captures the needs of a given population, ISPBs are set separately for the populations that meet the Daily Supports Needs

criteria and those that do not.

Bolton collaborated with the Department to develop two ISPB groupings which allow for separate limits on Core and Ancillary services. While the Department may eventually utilize only one ISPB for each Support Level, the use of separate limits for Core and Ancillary services provides flexibility for the Department to consider sustainable ways to further support members that remain in their own home when possible. Core and Ancillary services are defined as follows:

Core

Personal Care
Basic & Enhanced Homemaker
Mentorship
Supported Community Connections
Specialized Habilitation
Prevocational Services
Job Coaching, Placement, and Development
Residential Habilitative Services
Behavioral Supports
Respite (Individual, Group, Camp)
Non-Medical Transportation
Transition Services

Ancillary

Assistive Technology
Hippotherapy
Massage
Movement Therapy
Recreational Facility Fees/Passes
Personal Emergency Response Systems
Specialized Medical Equipment/Supplies
Disposable Supplies
Vision
Dental
Hearing

To address concerns with setting the ISPB using claims data that may be understated due to a lack of available providers or capped due to existing waiver limits, Bolton chose to evaluate the PAR data when setting the ISPB limits. The PAR data produces a more accurate picture of an individual's need for supports. Bolton set the ISPBs for Core and Ancillary at the 90th percentile of the PAR data for each Support Level. The ISPB estimate is adjusted to reflect the increase in provider reimbursement rates, changes to unit limits on individual services (not applicable to this scenario), and access to new services. While the Department may choose to ultimately define the ISPB for the Ancillary services separately for the population meeting the Daily Supports Needs criteria, Bolton has set the ISPB equal for both populations. The ISPBs resulting from the methodology described above and used in the "Combine Waivers" scenario are shown in Table 9. Note, Support Level 7 reflects individuals with exceptional needs and therefore, has not been assigned a limit.

Table 9 Combine Waivers Scenario Individual Service Plan Budget Limits (aka ISPBs)								
ISPB	Daily Supports Needs	SL 1	SL 2	SL 3	SL 4	SL 5	SL 6	SL 7
Core	No	\$17,455	\$23,161	\$28,383	\$24,373	\$22,637	\$44,225	N/A
<u>Ancillary</u>	<u>No</u>	<u>\$1,632</u>	<u>\$2,379</u>	<u>\$3,869</u>	<u>\$9,436</u>	<u>\$15,763</u>	<u>\$17,224</u>	<u>N/A</u>
Total	No	\$19,087	\$25,540	\$32,252	\$33,809	\$38,400	\$61,449	N/A
Core	Yes	\$64,907	\$90,251	\$104,200	\$122,092	\$137,545	\$180,389	N/A
<u>Ancillary</u>	<u>Yes</u>	<u>\$1,632</u>	<u>\$2,379</u>	<u>\$3,869</u>	<u>\$9,436</u>	<u>\$15,763</u>	<u>\$17,224</u>	<u>N/A</u>
Total	Yes	\$66,539	\$92,630	\$108,069	\$131,528	\$153,308	\$197,613	N/A

Finally, the cost of eliminating the DD waiver waitlist under this scenario is incorporated. Because a large portion of the individuals on the waitlist are current SLS members, the number of individuals reflected in this estimate is reduced to the remaining 744. Table 10 (on the following page) summarizes the results of the “Combine Waivers” scenario separately for members that meet the Daily Supports Needs criteria and those that do not.

Table 10
Combine Waivers Scenario

	SL 1	SL 2	SL 3	SL 4	SL 5	SL 6	SL 7	Total
<i>No Daily Supports Needs</i>								
Members	1,516	225	60	XX	60	XX	XX	1,902
Starting Costs	\$23,283,069	\$6,112,914	\$2,295,786	\$1,200,273	\$3,770,762	\$1,724,530	\$302,611	\$38,689,946
SLS Shift to ResHab	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
DD Additional Services	\$11,611	\$13,556	\$6,131	\$6,902	\$13,941	\$21,390	\$3,056	\$76,586
<u>ISPB Impact</u>	<u>(\$68,956)</u>	<u>(\$22,223)</u>	<u>(\$4,822)</u>	<u>(\$1,560)</u>	<u>(\$947)</u>	<u>(\$1,210)</u>	<u>\$0</u>	<u>(\$99,718)</u>
Total Cost for Existing Population	\$23,225,724	\$6,104,247	\$2,297,095	\$1,205,615	\$3,783,756	\$1,744,710	\$305,667	\$38,666,813
<u>DD Waitlist Elimination</u>	<u>\$1,242,920</u>	<u>\$386,423</u>	<u>\$128,943</u>	<u>\$56,529</u>	<u>\$120,244</u>	<u>\$78,888</u>	<u>\$46,198</u>	<u>\$2,060,145</u>
Total Cost	\$24,468,644	\$6,490,670	\$2,426,037	\$1,262,143	\$3,904,000	\$1,823,598	\$351,866	\$40,726,958
<i>Daily Supports Needs</i>								
Members	1,128	2,604	1,371	1,326	1,518	1,152	247	9,346
Starting Costs	\$21,392,127	\$79,841,087	\$64,644,599	\$79,441,647	\$107,068,353	\$99,202,700	\$41,596,591	\$493,187,105
SLS Shift to ResHab	\$16,540,316	\$50,664,021	\$20,236,536	\$18,598,758	\$22,193,229	\$20,611,623	\$0	\$148,844,484
DD Additional Services	\$20,127	\$159,730	\$159,147	\$365,368	\$409,099	\$1,228,255	\$361,031	\$2,702,756
<u>ISPB Impact</u>	<u>(\$124,096)</u>	<u>(\$258,629)</u>	<u>(\$208,432)</u>	<u>(\$114,924)</u>	<u>(\$37,829)</u>	<u>(\$99,590)</u>	<u>\$0</u>	<u>(\$843,501)</u>
Total Cost for Existing Population	\$37,828,474	\$130,406,208	\$84,831,851	\$98,290,848	\$129,632,853	\$120,942,987	\$41,957,622	\$643,890,844
<u>DD Waitlist Elimination</u>	<u>\$2,441,631</u>	<u>\$8,888,636</u>	<u>\$6,738,145</u>	<u>\$7,654,438</u>	<u>\$10,831,147</u>	<u>\$10,182,383</u>	<u>\$3,675,386</u>	<u>\$50,411,767</u>
Total Cost	\$40,270,105	\$139,294,845	\$91,569,996	\$105,945,286	\$140,464,001	\$131,125,371	\$45,633,008	\$694,302,612
Total Cost All Populations	\$64,738,749	\$145,785,515	\$93,996,033	\$107,207,430	\$144,368,001	\$132,948,968	\$45,984,873	\$735,029,570

The "Combine Waivers Added Services" scenario builds on the previous scenario with additional services. The Department identified the following Core and Ancillary services to improve on the existing waiver and provide more flexibility for members to access the right services to fulfill their needs:

Behavioral Risk Assessments (Core)
Caregiver Education & Training (Core)
Home Maintenance Services (Core)
Intensive Supports (Core)
Acupuncture (Ancillary)
Chiropractic (Ancillary)
Electronic Support Systems (Ancillary)
Medication Reminder Systems (Ancillary)

Bolton utilized research from other states, information from the Department, and data provided by Ms. Sowers to provide high-level estimates of the costs for these services. Should the Department move forward with the addition of these services to the existing or consolidated waivers, the estimates may need to be refined to reflect actual reimbursement rates and/or changes to the definition of the service. The remainder of this section describes the assumptions for each service and their resulting cost estimate.

Behavioral Risk Assessments: Risk Assessments are professional evaluations of violent, stalking, sexually violent, predatory, and/or opportunistic behavior to determine the need for psychological, medical, or therapeutic treatment.

The services are estimated to cost \$1,200 per assessment based on current rates utilized in the state of Washington. Approximately 6.3% of the current SLS and DD waiver populations have been flagged as a Public or Self Safety risk through the SIS assessment. Bolton utilized this indicator as a proxy for the percent of individuals that would receive a Behavioral Risk Assessment. The total cost estimated for this service is \$852,000.

Caregiver Education & Training: Caregiver Supports include Education and Training services for the unpaid primary caregiver of the participant. Education and Training includes:

- 1) Education on supporting the development and delivery of a Person-Centered Support Plan;
- 2) Conferences for disability specific or caregiver supports;
- 3) Instruction about treatment regimens and other services included in the Person-Centered Support Plan;
- 4) Updates as necessary to safely maintain participant at home.

To estimate the cost of Caregiver Education, Bolton utilized statistics from the Colorado CES

Waiver. The Department provided statistics that showed approximately 4% of the participants utilized this service with an average cost of \$371.80 per participant. Bolton applied those estimates to the 1,902 members that are not projected to be in a Residential Habilitation setting which results in \$28,287 for 76 utilizers.

Home Maintenance Services: Home Maintenance Services are those needed to maintain the member's primary residence in a clean, sanitary, and safe environment. Services include house and yard maintenance, snow removal, pest eradication services, washing floors, windows and walls, securing loose rugs and tiles, and moving heavy items or furniture to provide safe access and egress.

To estimate the cost for Home Maintenance Services, Bolton relied on information reported in Idaho, Minnesota, and Utah from their approved Appendix J submissions. The Home Maintenance Services included in each of the three waivers do not contain limits and report 0.1%-1.4% of the population utilizing the service at average costs ranging from \$500-\$2,000. Bolton used an average of the utilization and cost statistics for the three states resulting in 0.6% of the population would utilize the service at an average cost of \$1,433. This results in an estimated cost of \$89,284 for Home Maintenance Services.

Intensive Supports: Intensive Supports offer a continuum of intensive, individualized behavioral health supports including intensive therapeutic, diagnostic, stabilization, assessment and treatment formulation; symptom monitoring preventative, step-down, or reevaluation supports.

The Department recently implemented the Cross-System Response for Behavioral Health Crises Pilot Program covering Intensive Supports. The pilot covered two sites with a budgeted cost of \$422,500 per site (\$845,000). Actual utilization and cost statistics resulting from the pilot will be available in July 2019. For the purposes of this analysis, Bolton utilized the \$845,000 estimate and worked with the Department to estimate the factor needed to provide access to the entire population. The Department estimates a factor of 10 would need to be applied to expand the pilot across the entire state. Bolton distributed the \$8,450,000 across all individuals in Support Levels 3-6.

Acupuncture: Acupuncture means the stimulation of anatomical points on the body by penetrating the skin with thin, solid, metallic, single-use needles that are manipulated by the hands or by electrical stimulation for the purpose of bringing about physiologic and/or psychological changes.

To estimate the cost for Acupuncture, Bolton utilized the Colorado Spinal Cord Injury (SCI) Waiver approved reimbursement rates adjusted for the IDD population. The current rate for massage in the SLS waiver is 35% higher than the reimbursement rate under the SCI waiver. Bolton increased the SCI rate for Acupuncture (\$18.46) by 35% resulting in an estimated

reimbursement rate of \$24.83. To estimate utilization, Bolton reviewed statistics comparing the use of Complementary and Alternative Medicine (CAM) across the US. A recent study of utilization in New Mexico⁶ showed utilizers of Acupuncture were approximately 30-35% of the number of utilizers of other services (massage, reflexology, and other similar practices). Bolton reviewed the utilization per thousand estimates for Massage and assumed 30% of that utilization as a basis for acupuncture. The resulting cost estimate for the current population is \$840,568.

Chiropractic: Chiropractic care means the use of manual adjustments (manipulation or mobilization) of the spine or other parts of the body with the goal of correcting alignment and other musculoskeletal problems.

Chiropractic costs were projected in a manner similar to Acupuncture. Bolton utilized the 35% difference in Massage reimbursement rates between the SCI and SLS waivers which increases the current SCI Chiropractic rate of \$23.76 to \$31.96. The CAM utilization rates in New Mexico showed Chiropractic utilizers were slightly less than the utilizers of other services. For this analysis, Bolton assumed Chiropractic utilization would be equal to the existing Massage utilization per thousand underlying the baseline data. This results in an estimated cost of \$3,606,337 for the existing population.

Electronic Support Systems: Electronic Support Systems (ESS) including equipment such as video, web-cameras, motion-sensors, GPS tracking devices, or other technology as required to support that members safely remain in a home or community-based setting.

The introduction of ESS has seen very little utilization to date in the current states where it is offered. With the adaptation of “Technology First” initiatives in several states, there is potential for a significant increase in utilization. However, those states are implementing a variety of programs to subsidize or cover the costs of the technology and have put forth a large amount of resources to educate the members regarding the benefits of ESS. Bolton has assumed the Department will not have similar dedicated resources for this service and has relied on historical utilization from Ohio and Missouri who reported approximately 1% of members have utilized ESS. This results in an estimate of 112 utilizers from the existing DD and SLS population.

The cost of equipment reported in Ohio, Missouri and Minnesota ranged between \$2,000-\$5,000. Bolton utilized the mid-point of \$3,500 as a best estimate for the equipment component of cost. Note, Bolton has assumed the member will be responsible for obtaining necessary services (i.e. phone and/or internet) and the Department will not cover these expenses. To estimate monitoring fees, Bolton rounded the monitoring costs provided by Sengistix to the Ohio Technology First Council to estimate reimbursement rates:

- Monthly monitoring fees of \$170

⁶ <https://pdfs.semanticscholar.org/2375/612697ed7e7617be9e468f855a02cb1a1ac2.pdf>

- \$6.50 per hour for active monitoring
- \$10.00 per hour for active monitoring with back-up

There are several case studies provided for the Technology First states that show a broad range of hours used for active monitoring. Bolton used an average of 10 hours per week of active monitoring and 10 hours per week of active monitoring with back-up to estimate the cost of ESS. There are no assumed offsetting reductions for personal supports. Current research has shown that individuals have not reduced existing Support Levels upon the implementation ESS. While we may expect reductions over time as familiarity with the devices improves, we do not expect this to happen immediately. The estimated final cost per utilizer is \$14,210 which results in a total cost of \$1,588,218.

Medication Reminder Systems: Medication Reminder System (MRS) means an electronic device that is programmed to provide a reminder to a member when medications are to be taken. An MRS may also dispense controlled dosages of medication and transmit a message to a caregiver or monitoring agency if a medication has not been removed from the dispenser. Medications must be setup by a registered nurse or other professional qualified to set up medications in the State of Colorado.

To estimate the cost for MRS, Bolton assumed 1% of the population would utilize the service (similar to the percent of individuals that utilize ESS). There are several free or inexpensive options to provide reminders such as smart phone applications or watches. To estimate the cost for MRS, Bolton focused on the cost of smart pill boxes used to dispense medications. Using data published in Minnesota, we assumed an average set-up cost of \$85 per utilizer. The monthly cost for dispensing varies based on the number of dispenses per day (\$40 for 1-2 times per day and \$60 for 3-4 times per day). Bolton assumed an average monthly cost of \$50. In addition, there is a \$15 per month charge for the automated calls or text message reminders. In total, we assumed \$865 per utilizer for 112 utilizers resulting in \$97,295.

The ISPBs were reset for both Core and Ancillary services to account for the addition of new services described above. Table 11 (on the following page) shows the resulting ISPB estimates developed using the same methodology described under the “Combine Waivers” scenario (above).

Table 11 Combine Waivers Added Services Scenario Individual Service Plan Budget Limits (aka ISPBs)								
ISPB	Daily Supports Needs	SL 1	SL 2	SL 3	SL 4	SL 5	SL 6	SL 7
Core	No	\$17,644	\$23,351	\$32,444	\$30,650	\$26,630	\$52,025	N/A
Ancillary	No	<u>\$2,732</u>	<u>\$3,728</u>	<u>\$6,226</u>	<u>\$14,711</u>	<u>\$27,399</u>	<u>\$39,283</u>	<u>N/A</u>
Total	No	\$20,376	\$27,079	\$38,670	\$45,361	\$54,029	\$91,308	N/A
Core	Yes	\$64,907	\$90,251	\$107,065	\$124,953	\$140,366	\$183,463	N/A
Ancillary	Yes	<u>\$2,732</u>	<u>\$3,753</u>	<u>\$6,226</u>	<u>\$14,711</u>	<u>\$27,399</u>	<u>\$39,283</u>	<u>N/A</u>
Total	Yes	\$67,639	\$94,004	\$113,291	\$139,664	\$167,765	\$222,746	N/A

The cost of eliminating the DD waiver waitlist under this scenario is incorporated using the average cost of the existing DD population adjusted for the new services. Table 12 summarizes the results of the “Combine Waivers Added Services” scenario separately for members that meet the Daily Supports Needs criteria and those that do not.

Table 12
Combine Waivers Added Services Scenario

	SL 1	SL 2	SL 3	SL 4	SL 5	SL 6	SL 7	Total
<i>No Daily Supports Needs</i>								
Members	1,516	225	60	25	60	14	2	1,902
Starting Costs	\$23,283,069	\$6,112,914	\$2,295,786	\$1,200,273	\$3,770,762	\$1,724,530	\$302,611	\$38,689,946
Combine Waiver Svcs	\$11,611	\$13,556	\$6,131	\$6,902	\$13,941	\$21,390	\$3,056	\$76,586
New Services	\$471,133.06	\$65,124	\$109,679	\$46,494	\$124,284	\$59,396	\$5,343	\$881,453
<u>ISPB Impact</u>	<u>(\$90,706.82)</u>	<u>(\$35,037.00)</u>	<u>(\$7,764.56)</u>	<u>(\$2,283.84)</u>	<u>(\$825.74)</u>	<u>(\$351.82)</u>	<u>\$0.00</u>	<u>(\$136,970)</u>
Total Cost for Existing Population	\$23,675,106	\$6,156,557	\$2,403,831	\$1,251,384	\$3,908,162	\$1,804,965	\$311,010	\$39,511,015
<u>DD Waitlist Elimination</u>	<u>\$1,265,980</u>	<u>\$391,597</u>	<u>\$145,146</u>	<u>\$68,791</u>	<u>\$138,766</u>	<u>\$93,523</u>	<u>\$46,666</u>	<u>\$2,150,468</u>
Total Cost	\$24,941,086	\$6,548,154	\$2,548,976	\$1,320,176	\$4,046,928	\$1,898,487	\$357,677	\$41,661,483
<i>Daily Supports Needs</i>								
Members	1,128	2,604	1,371	1,326	1,518	1,152	247	9,346
Starting Costs	\$21,392,127	\$79,841,087	\$64,644,599	\$79,441,647	\$107,068,353	\$99,202,700	\$41,596,591	\$493,187,105
Combine Waiver Svcs	\$16,560,442	\$50,823,751	\$20,395,684	\$18,964,126	\$22,602,329	\$21,839,878	\$361,031	\$151,547,240
New Services	\$229,608.62	\$636,204	\$2,521,068	\$2,595,515	\$3,510,601	\$4,548,808	\$628,742	\$14,670,546
<u>ISPB Impact</u>	<u>(\$136,515.09)</u>	<u>(\$411,484)</u>	<u>(\$312,407)</u>	<u>(\$168,243)</u>	<u>(\$32,986)</u>	<u>(\$28,950)</u>	<u>\$0</u>	<u>(\$1,090,585)</u>
Total Cost for Existing Population	\$38,045,663	\$130,889,558	\$87,248,944	\$100,833,045	\$133,148,297	\$125,562,436	\$42,586,364	\$658,314,306
<u>DD Waitlist Elimination</u>	<u>\$2,455,341</u>	<u>\$8,919,608</u>	<u>\$6,923,050</u>	<u>\$7,847,285</u>	<u>\$11,124,972</u>	<u>\$10,568,170</u>	<u>\$3,730,462</u>	<u>\$51,568,888</u>
Total Cost	\$40,501,004	\$139,809,166	\$94,171,994	\$108,680,330	\$144,273,268	\$136,130,606	\$46,316,826	\$709,883,194
Total Cost All Populations	\$65,442,090	\$146,357,319	\$96,720,971	\$110,000,505	\$148,320,196	\$138,029,093	\$46,674,502	\$751,544,677

The final scenario, “Combine Waivers Added Services and Remove Service Limits” provides additional flexibility by incorporating the new services from the prior scenario and removes service specific limits currently in place under the SLS and DD waivers. The services under the SLS and DD waivers with utilization limits are: Behavioral Counseling, Consultations, Line Staff, Assessments, and Transportation.

Through our research, we were unable to locate utilization statistics for the above-mentioned services under an unlimited benefit structure. In several cases, the unit limits placed on these services in other states are lower than the existing unit limits currently applied in the SLS and DD waivers. To estimate the potential impact of increasing or eliminating the unit limits, Bolton developed an elasticity factor for each service type in the Cost Impact Module.

Elasticity measures an anticipated change in demand for a service when another economic factor changes, in this case unit limits. Bolton developed the elasticity factor for each service type by performing a linear regression analysis using the detailed PAR and claims data underlying the Cost Impact Module. The PAR data serves as a proxy for the unit limit value in determining the elasticity. The resulting elasticity factor represents the anticipated utilization change associated with each 1% change in the unit limits. Because the scenario proposes to remove the unit limits all together, Bolton also studied the data to determine the maximum percent change where we would not expect additional shifts in the average utilization. This maximum was determined to be 15%.

The utilization for the Behavioral Counseling, Consultations, Line Staff, Assessments, and Transportation services was increased at a rate of 15% multiplied by the corresponding elasticity factor. The ISPBs were adjusted to reflect the removal of the service limits and are shown in Table 13.

Table 13 Combine Waivers Added Services and Remove Service Limits Scenario Individual Service Plan Budget Limits (aka ISPBs)								
ISPB	Daily Supports Needs	SL 1	SL 2	SL 3	SL 4	SL 5	SL 6	SL 7
Core	No	\$17,982	\$23,914	\$33,077	\$30,955	\$27,040	\$53,795	N/A
<u>Ancillary</u>	<u>No</u>	<u>\$2,732</u>	<u>\$3,728</u>	<u>\$6,226</u>	<u>\$14,711</u>	<u>\$27,399</u>	<u>\$39,283</u>	<u>N/A</u>
Total	No	\$20,714	\$27,642	\$39,303	\$45,666	\$54,439	\$93,078	N/A
Core	Yes	\$65,301	\$90,712	\$107,538	\$125,456	\$140,847	\$183,838	N/A
<u>Ancillary</u>	<u>Yes</u>	<u>\$2,732</u>	<u>\$3,753</u>	<u>\$6,226</u>	<u>\$14,711</u>	<u>\$27,399</u>	<u>\$39,283</u>	<u>N/A</u>
Total	Yes	\$68,033	\$94,465	\$113,764	\$140,167	\$168,246	\$223,121	N/A

Table 14 (on the following page) summarizes the results of the “Combine Waivers Added Services and Remove Limits” scenario separately for members that meet the Daily Supports Needs criteria and those that do not.

Table 14								
Combine Waivers Added Services and Remove Service Limits Scenario								
	SL 1	SL 2	SL 3	SL 4	SL 5	SL 6	SL 7	Total
<i>No Daily Supports Needs</i>								
Members	1,516	225	60	25	60	14	2	1,902
Starting Costs	\$23,283,069	\$6,112,914	\$2,295,786	\$1,200,273	\$3,770,762	\$1,724,530	\$302,611	\$38,689,946
Combine Waiver Svcs	\$11,611	\$13,556	\$6,131	\$6,902	\$13,941	\$21,390	\$3,056	\$76,586
New Services	\$471,133	\$65,124	\$109,679	\$46,494	\$124,284	\$59,396	\$5,343	\$881,453
Remove Limits	\$280,290	\$66,298	\$19,270	\$4,998	\$34,882	\$11,438	\$1,776	\$418,952
<u>ISPB Impact</u>	<u>(\$93,565.37)</u>	<u>(\$35,037)</u>	<u>(\$7,765)</u>	<u>(\$2,284)</u>	<u>(\$826)</u>	<u>(\$352)</u>	<u>\$0</u>	<u>(\$139,828)</u>
Total Cost for Existing Population	\$23,952,538	\$6,222,855	\$2,423,101	\$1,256,382	\$3,943,044	\$1,816,403	\$312,786	\$39,927,109
<u>DD Waitlist Elimination</u>	<u>\$1,284,879</u>	<u>\$399,140</u>	<u>\$147,495</u>	<u>\$69,357</u>	<u>\$140,479</u>	<u>\$96,084</u>	<u>\$46,822</u>	<u>\$2,184,257</u>
Total Cost	\$25,237,416	\$6,621,995	\$2,570,596	\$1,325,740	\$4,083,524	\$1,912,486	\$359,608	\$42,111,366
<i>Daily Supports Needs</i>								
Members	1,128	2,604	1,371	1,326	1,518	1,152	247	9,346
Starting Costs	\$21,392,127	\$79,841,087	\$64,644,599	\$79,441,647	\$107,068,353	\$99,202,700	\$41,596,591	\$493,187,105
Combine Waiver Svcs	\$16,560,442	\$50,823,751	\$20,395,684	\$18,964,126	\$22,602,329	\$21,839,878	\$361,031	\$151,547,240
New Services	\$229,609	\$636,204	\$2,521,068	\$2,595,515	\$3,510,601	\$4,548,808	\$628,742	\$14,670,546
Remove Limits	\$287,454	\$875,374	\$581,030	\$647,034	\$769,375	\$614,980	\$115,147	\$3,890,395
<u>ISPB Impact</u>	<u>(\$143,100)</u>	<u>(\$415,177)</u>	<u>(\$313,616)</u>	<u>(\$169,501)</u>	<u>(\$33,379)</u>	<u>(\$29,198)</u>	<u>\$0</u>	<u>(\$1,103,972)</u>
Total Cost for Existing Population	\$38,326,532	\$131,761,238	\$87,828,766	\$101,478,821	\$133,917,279	\$126,177,167	\$42,701,511	\$662,191,313
<u>DD Waitlist Elimination</u>	<u>\$2,481,495</u>	<u>\$8,998,369</u>	<u>\$6,977,453</u>	<u>\$7,904,570</u>	<u>\$11,197,958</u>	<u>\$10,629,756</u>	<u>\$3,740,549</u>	<u>\$51,930,150</u>
Total Cost	\$40,808,027	\$140,759,607	\$94,806,219	\$109,383,391	\$145,115,236	\$136,806,924	\$46,442,059	\$714,121,463
Total Cost All Populations	\$66,045,443	\$147,381,602	\$97,376,815	\$110,709,131	\$149,198,760	\$138,719,410	\$46,801,667	\$756,232,829

Conclusion

The scenarios in this report represent the estimated costs of consolidating the SLS and DD waiver populations, adding new services, and removing service unit limits. As demonstrated above, the transition of SLS members to a ResHab setting is the largest component of the additional cost (\$148,844,484).

The Department should utilize case studies that will allow them to further refine the Daily Support Needs requirements, if appropriate. This may also assist in the identification of SLS members that would choose the ResHab setting. In addition, the Department should consider collecting additional data or metrics regarding caregiver capacity, exceptional medical and behavioral support needs, and living arrangements.

The Department may wish to consider pursuing avenues that incentivize members to maintain their current living arrangements or move from a ResHab setting. This could include expanded services or increased Ancillary budget limits. Alternatively, the Department may find through case studies or other analyses, including examining EPSDT and State Plan home health care costs, that the Daily Supports Needs criteria needs additional refinement.

The Support Level Module and Cost Impact Module have been developed in a manner that will allow the Department to adjust any of the scenarios above to reflect changes in Support Level methodology, Daily Supports Needs criteria, provider reimbursement rates, new services, service limits, and the Individual Support Plan Budgets. Bolton believes we have successfully developed a tool that will allow the Department to continue to work with vendors, stakeholders, and internal teams to refine the estimate to best reflect a program that meets the needs of the individuals they serve as well as maintain fiscal sustainability.