

Report to the Health and Human Services Interim Committee

Medicaid Autism Waiver

Prepared by

Division of Medicaid and Health Financing

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Medicaid Autism Waiver Executive Summary

The Medicaid Autism Waiver (the Waiver) has been in operation since October 1, 2012. The Waiver serves children ages 2 through 6 years of age. Since its implementation, the Waiver has provided services to over 400 children statewide. Nearly 22 percent of participating children live in counties outside of the Wasatch Front.

In fiscal year 2015, the Centers for Medicare and Medicaid Services (CMS) issued significant policy guidance to state Medicaid programs regarding the provision of autism related services. The new CMS directive requires states to provide autism spectrum disorder (ASD) related services to children under 21 as part of the Early Periodic Screening, Diagnosis and Treatment (EPSDT) program rather than through home and community based (HCBS) waiver programs. The directive has resulted in significant changes to the Medicaid Autism Waiver. These changes are detailed in the *ASD-Related Services Policy Changes* section of this report.

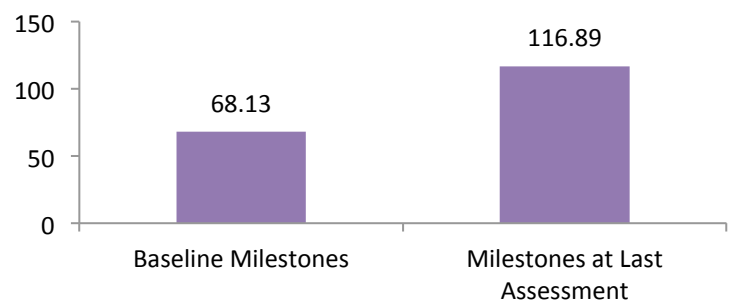
Outcomes and Effectiveness

The primary service provided under the Waiver is Applied Behavioral Analysis (ABA). ABA involves breaking a skill into smaller parts and teaching one sub-skill at a time until mastery is achieved. To evaluate effectiveness of ABA services, the Department used two evaluation tools to establish baseline proficiencies before services began and compared them to the child's most recent assessments. The *Verbal Behavior Milestones Assessment and Placement Program* (VB-MAPP), was used by Board Certified Behavior Analysts (BCBAs) to evaluate each child's verbal and other associated skills across 16 major areas.

The *Vineland-II Parent/Caregiver Rating Form* (Vineland-II), was used by parents to report their child's progress as they observe it. The Department evaluated questions across 4 main areas: Communication, Daily Living Skills, Socialization, and Motor Skills.

Outcome results from both evaluation tools were positive and showed the acquisition of new skills during the child's participation in the program.

Acquisition of New Skills - VB-MAPP Assessment Results



Parental Observations - Vineland Assessment Results

Major Skill Areas	Baseline	At Last Assessment	Percentage Change
Communication	63	94	49%
Daily Living	46	69	49%
Socialization	55	77	40%
Motor	93	112	21%

Waiver Service Costs - Typical Service Utilization for an Individual Child

Per member per month expenditures (PMPM) were calculated based on claims paid for services rendered during fiscal year 2015. PMPM represents an average of the monthly waiver expenditures for each child during that time period. The analysis included claims for all children enrolled in the program.

Typical Service and Administrative Cost per Child (FY 2015)				
Service	Hours/Units Per Month	Cost Per Unit	Monthly Cost	Annual Cost
Intensive Individual Support – Consultation Service (ABA)	5.75	\$ 80.00 (Hourly)	\$460	\$5,520
Intensive Individual Support – Direct Service (ABA)	30.25	\$ 28.32 (Hourly)	\$857	\$10,280
Respite	8.0	\$ 11.48 (Hourly)	\$92	\$1,102
Financial Management Services	1.0	\$ 40.37 (Monthly)	\$40	\$480
Administrative Cost				
Support Coordination	-	-	\$89	\$1,066
Program Administration	-	-	\$62	\$745
Total			\$1,600	\$19,193

Medicaid Autism Waiver – Demographics

Since the inception of the Waiver, there have been four open enrollment periods: October 2012, June/July 2013, May 2014, and Nov/Dec 2014. A combined total of 1,233 applications were received during the open enrollment periods. Approximately 98 applicants were ineligible because they did not meet the age requirements, lacked a valid ASD diagnosis or ultimately decided not to participate. The Waiver has served over 400 children, 80 percent of whom were boys. Detailed demographic information is found in Table 1 below.

Table 1. Medicaid Autism Waiver Demographics of Children Receiving Waiver Services			
Waiver Enrollee Information	Children Served		
	Nov 2013	Nov 2014	Nov 2015
Females	21%	20%	20 %
Males	79%	80%	80%
Age at Time of Admission			
Age 2	60 (19%)	65 (19%)	73 (18%)
Age 3	94 (31%)	102 (29%)	108 (30%)
Age 4	94 (31%)	104 (30%)	112 (28%)
Age 5	54 (18%)	66 (19%)	71 (18%)
Age 6	5 (1%)	11 (3%)	15 (4%)
Children Served by Local Health District			
Bear River (Box Elder, Cache and Rich Counties)	22 (7%)	23 (7%)	26 (7%)
Central Utah (Juab, Millard, Piute, Sanpete, Sevier and Wayne Counties)	9 (3%)	9 (3%)	12 (3%)
Davis County	38 (12%)	38 (11%)	47 (12%)
Salt Lake County	107 (35%)	120 (36%)	147 (37%)
fSoutheastern Utah (Carbon, Emery, Grand and San Juan Counties)	4 (1%)	6 (2%)	7 (2%)
Southwest Utah (Beaver, Garfield, Iron, Kane and Washington Counties)	20 (7%)	34 (10%)	28 (7%)
Summit County	2 (<1%)	4 (1%)	5 (1%)
Tooele County	8 (3%)	8 (2%)	9 (2%)
Tri-County (Daggett, Duchesne and Uintah Counties)	5 (2%)	6 (2%)	6 (1%)
Utah County	64 (21%)	61 (18%)	77 (19%)
Wasatch County	3 (1%)	3 (1%)	3 (<1%)
Weber-Morgan (Weber and Morgan Counties)	25 (8%)	29 (8%)	35 (9%)
Disenrolled from the Waiver by Reason			
Number of Children			
Moved out of State	2	6	15
Aged out – Turned 7	0	50	159
Voluntary Disenrollment	5	8	18
Failed to Participate on an Ongoing Basis	2	1	3
Moved to Another Medicaid Waiver	1	0	0
Miscellaneous Information			
Households with Multiple Children	24 households with 49 children	25 households with 50 children	33 households with 66 children

ASD-Related Services Policy Changes

On July 7, 2014, CMS issued an Informational Bulletin, *Clarification of Medicaid Coverage of Services to Children with Autism*. The Bulletin clarifies that for individuals under 21, ASD-related services must be covered through the Early Periodic Screening, Diagnosis and Treatment (EPSDT) program.

Prior to this directive CMS allowed states to provide ABA services as an HCBS waiver benefit. With the new guidance, CMS no longer permits states to provide ABA services as a waiver benefit, with the understanding that the services must already be available through the EPSDT program. While a deadline for compliance with the guidance was not issued, CMS made clear that as HCBS waivers were scheduled for renewal, states would be required to remove ASD-related services from waivers serving individuals under 21.

Because the Waiver was due for renewal in October 2015, the Department recognized it must: 1) Evaluate what the immediate and long-term impact would be, and 2) Implement ASD-related services policy for EPSDT eligible individuals.

- 1) Since ASD-related services would now be covered for all EPSDT-eligible clients, the Department evaluated whether it was necessary to continue operating the Waiver. An important consideration was that HCBS waiver eligibility requirements rely only on the child's income and assets whereas typical Medicaid eligibility requirements rely on the income and assets of the household. To ensure Medicaid eligibility was maintained for current Waiver participants, the Department determined to continue to operate the Waiver, with its existing eligibility criteria, until current enrollees age out of the program.

Effective October 1, 2015, the Waiver was amended to remove ABA services. The Waiver will continue to provide Respite Care, Financial Management Service and Case Management. The Department anticipates the vast majority of enrollees will age out of the program by the end of fiscal year 2018 with a few remaining until 2020. After all enrollees age out of the program, the Department plans to sunset the Waiver.

- 2) In July 2015, the Department implemented the ASD-related services program for EPSDT-eligible individuals. This benefit opens ABA services to all EPSDT-eligible individuals who meet the ASD-related services requirements. These services are provided on a fee-for-services basis and must be prior authorized by the Department.

Waiver Implementation Elements

Enrollment Process

The Department used open enrollment periods to admit children into the Waiver. This process is defined in administrative rule *R414-509 Medicaid Autism Waiver Open Enrollment Process*. Use of an open enrollment process allowed the Department to fill openings without needing to maintain a waiting list for applicants who exceed the number of available openings.

To assure parity, the Department allocates available openings on a statewide basis using Utah population distribution information from the 2010 U.S. Census. For example, approximately 37 percent of the State's population resides in the Salt Lake County area; therefore, about 37 percent of available waiver openings are available to children residing in Salt Lake County.

The Department used a variety of methods to publicize the commencement of open enrollment periods including issuing press releases, posting flyers in Spanish and English in pediatrician offices, sending listserv emails, posting announcements on the Medicaid Autism Waiver website, and working with known ASD advocates and stakeholders to disseminate information to their respective groups.

Due to the CMS policy clarification discussed previously, the Department will not hold any additional open enrollment periods, or enroll any new participants. The Department intends to serve all current participants until they age out of the program. CMS has approved the phase out plan described in the Waiver renewal document.

Covered Services and Payment Rates

Prior to October 1, 2015, the Waiver included four services that were paid on a fee-for-service basis:

- 1) *Intensive Individual Supports – Consultant Level (Applied Behavioral Analysis Service) (Effective October 1, 2015, this services was removed from the Waiver).*
- 2) *Intensive Individual Supports – Direct Service Level (Applied Behavioral Analysis Service) (Effective October 1, 2015, this services was removed from the Waiver).*
- 3) *Respite Services – Either Traditional Provider or Self-Administered by Family*
- 4) *Financial Management Service – Supportive Service to Complete Employer-Related Functions for Self-Administered Services*

The waiver has one service that is provided as an administrative function:

- 5) *Support Coordination Services – Service to Enroll Children, Educate Families about available Services, Develop Service Plans and Coordinate and Oversee the Child’s Waiver Services).*

Intensive Individual Supports – Consultant Level (ABA Service)

Consultant Level services are provided by a BCBA or psychologist. The provider serves as the treating professional who evaluates the child’s needs, writes the treatment plan to meet specific goals, supervises direct services and evaluates the effectiveness of treatment.

The Consultant Level service rate was developed by surveying Utah companies providing ABA services through contracts with private insurance companies and through a pilot program offered to children of Veterans Administration employees. The consistent response was that private insurance rates ranged from between \$100-\$125 per hour. Providers confirmed that this service rate was typically a “bundled” rate that included a combination of both the consultant’s time and the direct service worker’s time.

In addition to surveying private insurance rates, the Department reviewed rates being paid for similar services within Utah’s other Medicaid home and community based waiver programs. *Behavior Consultation* is a service offered in the Community Supports Waiver for Individuals with Intellectual Disabilities which requires a similar level of education and credentialing. This service is paid at a rate of \$55 per hour. *Behavior Consultation* is typically provided at a residential services provider setting in which the provider can provide services to multiple waiver participants during a single visit to the residence. In the Medicaid Autism Waiver, providers are required to travel from one waiver participant’s home to another and are not able to treat multiple clients in a single visit or in an office setting. In addition to the in-home services/travel considerations, the providers are also required

to purchase copyrighted evaluation instruments in order to complete baseline and periodic assessments of waiver participants.

Based on the wide disparity between the private insurance rate (\$100-\$125 per hour) and the Community Supports Waiver service rate (\$55 per hour), the decision was made to pay 80 percent of the lowest rate paid under the private-insurance rate, \$80 per hour.

To more accurately track the time spent providing Consultant Level services, in FY2014, the billing unit was changed from a per-hour unit to a 15-minute unit, paid at \$20/unit.

Intensive Individual Supports – Direct Service Level (ABA Service)

In the initial waiver submitted to CMS, the Department proposed a payment rate that was patterned after the *Supported Living Services* rate that is offered in the Community Supports Waiver. Upon attempting to recruit new providers, the Department recognized that the approved rate was not sufficient to attract enough providers to assure access to the service. The Department also became aware that patterning the Autism Waiver direct service rate after the Supported Living Services rate neglected to account for some unique characteristics of this new service. For example, the direct services workers who are providing ABA services to children with ASD utilize a significant amount of teaching supplies (educational items, games, puzzles, flashcards etc.) and there is significant training that the providers must give to the direct service workers to assure they are competent to complete the discrete trials and other facets of the service. The Department did not take these types of administrative costs into account in its original modeling.

In response, the Department disseminated a cost survey to the provider community and requested that interested providers submit detailed information about the costs that they proposed be included in the rate. Medicaid's rate setting staff reviewed the survey responses and recommended an increase to the previously established rate. The rate was ultimately set at \$28.32 per hour.

Respite Services – Provided through either a Traditional Provider or Self-Administered Services

Respite Services are available to give relief to the child's primary care givers. Respite services are limited to an average of 3 hours per week. The rate paid for this service is the same as the *Respite* rate offered in the Community Supports Waiver, \$11.48 per hour.

Financial Management Service

Financial Management Services is offered in support of the Self-Administered Services delivery option. Services rendered under this definition include those to facilitate the employment of respite service providers by the child's parent including:

- a) Provider qualification verification;
- b) Employer-related activities including federal, state, and local tax withholding/payments;
- c) Medicaid claims processing and reimbursement distribution, and
- d) Providing monthly accounting and expense reports to the consumer.

The rate paid for this service is the same as the *Financial Management Services* rate offered in the Community Supports Waiver, \$ 40.37 per month.

Support Coordination Services

States have the discretion to determine whether Support Coordination (Commonly referred to as Case Management) will be provided as a direct waiver service or as an administrative function. Because the program

was originally developed as a pilot program and because the Department wants to assure consistency in enrolling children, establishing service plans and assuring that providers completed required assessments prior to services beginning, the State offers Support Coordination as an administrative service. Support Coordination is provided by DSPD staff. Information about the administrative cost associated with this service is described in Table 4.

Table 2. Waiver Service Payment Rates	
Service Title	Payment Rate
Intensive Individual Supports – Consultant (ABA)	\$80.00/hour
Intensive Individual Supports – Direct Service (ABA)	\$28.32/hour
Respite Services	\$11.48/hour
Financial Management Services	\$40.37/month
Support Coordination Services (Provided as an Administrative Service)	See Table 4

Waiver Service Utilization and Cost

Typical Service Utilization for an Individual Child

Per member per month expenditures (PMPM) were calculated based on claims paid for services rendered during fiscal year 2015. PMPM represents an average of the monthly waiver expenditures for each child during that time period. The analysis included claims for all children enrolled in the program.

Table 3. Typical Service and Administrative Cost per Child (FY 2015)				
Service	Hours/Units Per Month	Cost Per Unit	Monthly Cost	Annual Cost
Intensive Individual Support – Consultation Service (ABA)	5.75	\$ 80.00 (Hourly)	\$460	\$5,520
Intensive Individual Support – Direct Service (ABA)	30.25	\$ 28.32 (Hourly)	\$857	\$10,280
Respite	8.0	\$ 11.48 (Hourly)	\$92	\$1,102
Financial Management Services	1.0	\$ 40.37 (Monthly)	\$40	\$480
Administrative Cost				
Support Coordination	-	-	\$89	\$1,066
Program Administration	-	-	\$62	\$745
Total			\$1,600	\$19,193

Overall Program Expenditures

Table 4 shows total service and administrative program expenditures for state fiscal year 2015.

Table 4. Total Waiver Program Expenditures (FY 2015)			
Fee-for-Service Costs	State Funds	Federal Funds	Total Funds
Waiver Service Costs	\$1,815,314	\$4,235,734	\$6,051,048
Administrative Costs	State Funds	Federal Funds	Total Funds
Department of Health – Personnel and Assessment Costs	\$38,367	\$38,367	\$76,733
Department of Human Services Personnel (Excluding Support Coordination)	\$76,386	\$76,386	\$152,773
Support Coordination Services	\$164,280	\$164,280	\$328,559
Total Service and Administrative Costs	\$2,094,347	\$4,514,767	\$6,609,113

Individual Outcomes

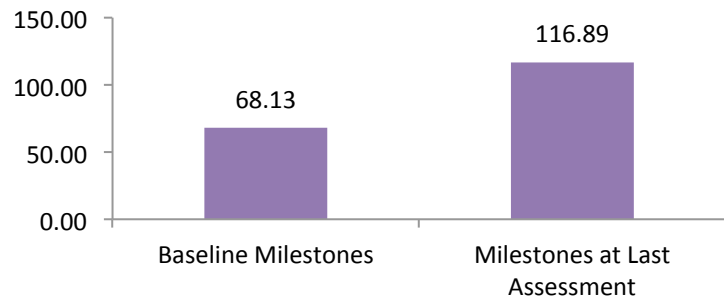
To gauge the progress of children receiving services through the Medicaid Autism Waiver, the Department used two instruments to establish baseline proficiencies and progress made at six-month intervals. The *Verbal Behavior Milestones Assessment and Placement Program* (VB-MAPP) was the tool the BCBA or psychologist used to evaluate each child from a clinical perspective and the *Vineland-II Parent/Caregiver Rating Form* (Vineland-II) was the tool that parents completed to assess the child's progress from the family's perspective.

Information and Results of VB-MAPP Assessment

The VB-MAPP involves a Milestones Assessment which evaluates the child's existing verbal and other associated skills across 16 major areas and displays their progress over time. Repetition of various tasks, either when prompted or observed during testing, are used to gauge the child's mastery of skills.

The VB-MAPP assesses 3 developmental levels/ages: 0-18 months, 18-30 months, and 30-48 months. Some skills span multiple developmental levels such as 'Listener' or 'Social', increasing in complexity with each level. Others such as 'Math', 'Reading' and 'Writing' only appear in higher levels. A child with mastery of all 170 measurable Milestones would have the ability to demonstrate the skills of a typical 4-year old child.

Acquisition of New Skills - VB-MAPP Assessment Results



For this report, a baseline score was established based on the initial assessment for 298 children and compared to their most recent assessment to show the skills advancement during their time on the program. Because the program has had several open enrollments since its inception, the time period between the baseline assessment and most recent assessment ranges from 6 months up to 3 years.

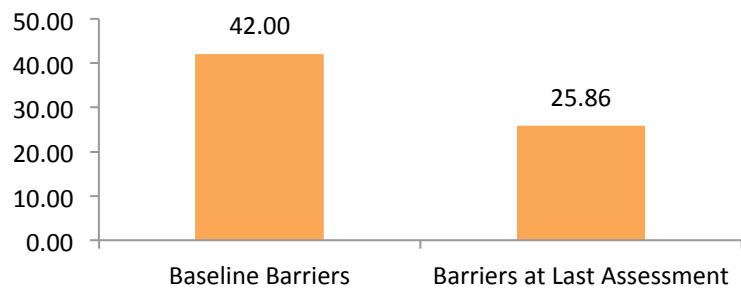
The data shows an average Milestone increase of 48.8 across all developmental levels—a 72 percent increase from the baseline competency.

In addition, the VB-MAPP evaluates 24 barriers regularly faced by children with developmental delays. Barriers are

behaviors that prevent or delay the child's

developmental progress. By evaluating barriers, the BCBA can develop a treatment plan with goals to reduce the number and impact of the child's identified barriers.

Reducing Barriers- VB-MAPP Assessment Results



The data for the cohort show an average decrease in the barriers score of 16.14 points—a 38 percent improvement from the baseline performance.

Information and Results of Vineland Assessments

The *Vineland-II Parent/Caregiver Rating Form* (Vineland-II), was used by parents to report their child’s progress as they observe it. The Department evaluated questions across 4 main areas: Communication, Daily Living Skills, Socialization, and Motor Skills

Questions in each category progress from relatively easy tasks such as “Identifies one or more alphabet letters as letters and distinguishes them from numbers” to more advanced items like “Follows instructions with two actions (for example, “Bring me the crayons and the paper”)”. This tool allows for the evaluation of real-world skills through the parent/caregiver’s observations.

For this report, the baseline data for 258 children were compared to those children’s most recent assessment. The results show that parents/caregivers observed meaningful increases in their child’s ability to function in various areas of daily living.

Parental Observations – Vineland Assessment Results			
Major Skill Areas	Baseline	At Last Assessment	Percentage Change
Communication	63	94	49%
Daily Living Skills	46	69	49%
Socialization	55	77	40%
Motor Skills	93	112	21%

Treatment Effectiveness - Empirical Studies related to Treatment of ASD

The Department reviewed reports completed by the National Autism Center, *The National Standards Report, 2009 and 2012*. These reports are the result of the *National Standards Project* which addresses the need for evidence-based practice guidelines for ASDs.¹ The Reports compiled findings from a variety of empirical studies and categorized different treatment modalities to fit into one of three categories: “*Established Treatments*”, “*Emerging Treatments*”, and “*Unestablished Treatments*”. Overwhelmingly, treatments categorized as *Established Treatments* included concepts of ABA.

A recent study, *Narrowing the Gap: Effects of Intervention on Developmental Trajectories in Autism*², reports:

Our analysis shows that Early Intensive Behavioral Intervention (EIBI) helps children acquire skills faster, thus moving their level of functioning closer to their typically developing peers, narrowing the gap between them. Children in EIBI exhibited significantly faster learn rates, both in IQ (75% faster) and in adaptive behaviors (38% faster), compared to children in a control group. This finding is consistent with previous research using standard scores as the dependent variable (e.g.

¹ <http://www.nationalautismcenter.org/pdf/NAC%20Standards%20Report.pdf>

² Klintwall, L., Eldevick, S. & Eikeseth, S. (November 2013) *Narrowing the gap: Effects of Intervention on Developmental Trajectories in Autism*. *Autism: International Journal of Research and Practice*. DOI: 10.1177/1362361313510067

² Klintwall, L., Eldevick, S. & Eikeseth, S. (November 2013) *Narrowing the gap: Effects of Intervention on Developmental Trajectories in Autism*. *Autism: International Journal of Research and Practice*. DOI: 10.1177/1362361313510067

Eldevik et al., 2010).

Conclusion

The Medicaid Autism Waiver has successfully provided services to over 400 children with ASD statewide. Outcome results from standardized evaluation tools were positive and showed the acquisition of new skills. The Department appreciates the opportunity to report on the Medicaid Autism Waiver and the ASD-related services now available through the EPSDT program.