Report to the Health and Human Services Interim Committee

Medicaid Autism Waiver

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Division of Medicaid and Health Financing

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UTAH DEPARTMENT OF HEALTH MEDICAID

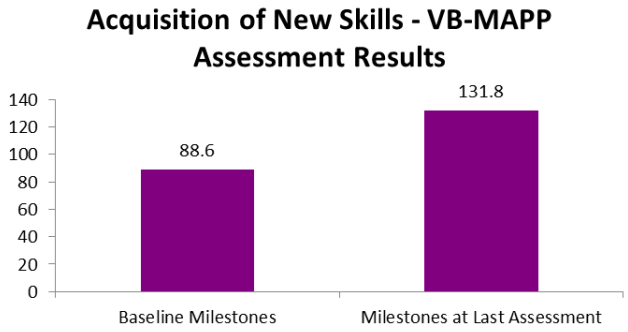
Medicaid Autism Waiver Executive Summary

The Medicaid Autism Waiver (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 approximately 370 children statewide. Nearly 27 percent of the participating children live in counties outside of the Wasatch Front.

The Department of Health (Department) collaborates with the Department of Human Services and multiple stakeholders regarding ongoing Waiver operations. The Department continues to address a variety of policy questions including how waiver services interface with services provided by schools, whether there is a need to develop a social skills group service, and how to address payment rates in rural areas.

Outcomes and Effectiveness

The primary service provided in 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 each 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.

Parental Observations - Vineland Assessment Results

Major Skill Areas	Baseline	At Last Assessment	Percentage Change
Communication	63.6	90.2	41.8%
Daily Living	44.8	64.2	43.3%
Socialization	53.2	74.1	39.3%
Motor	91	110.6	21.5%

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 2014. 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 2014)

Service	Hours/Units Per Month	Cost Per Unit	Monthly Cost	Annual Cost
Intensive Individual Support – Consultation Service (ABA)	5.4	$ 80.00 (Hourly)	$432	$5,184
Intensive Individual Support – Direct Service (ABA)	32.1	$ 28.32 (Hourly)	$909	$10,908
Respite	10	$ 11.48 (Hourly)	$115	$1,380
Financial Management Services	0.7	$ 40.37 (Monthly)	$28	$336
Administrative Cost				
Support Coordination	-	-	$70	$840
Program Administration	-	-	$56	$672
Total			**$1,610**	**$19,320**

Medicaid Autism Waiver – Demographics

Since the inception of the Waiver, the Department has held four open application periods: October 2012, June/July 2013, May 2014 and Nov/Dec 2014. During the first three open application periods, applications for a total of 876 children were received. Approximately 92 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 approximately 370 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
Females	21%	20%
Males	79%	80%
Age at Time of Admission		
Age 2	60 (19%)	65 (19%)
Age 3	94 (31%)	102 (29%)
Age 4	94 (31%)	104 (30%)
Age 5	54 (18%)	66 (19%)
Age 6	5 (1%)	11 (3%)
Children Served by Local Health District		
Bear River (Box Elder, Cache and Rich Counties)	22 (7%)	23 (7%)
Central Utah (Juab, Millard, Piute, Sanpete, Sevier and Wayne Counties)	9 (3%)	9 (3%)
Davis County	38 (12%)	38 (11%)
Salt Lake County	107 (35%)	120 (36%)
Southeastern Utah (Carbon, Emery, Grand and San Juan Counties)	4 (1%)	6 (2%)
Southwest Utah (Beaver, Garfield, Iron, Kane and Washington Counties)	20 (7%)	34 (10%)
Summit County	2 (<1%)	4 (1%)
Tooele County	8 (3%)	8 (2%)
Tri-County (Daggett, Duchesne and Uintah Counties)	5 (2%)	6 (2%)
Utah County	64 (21%)	61 (18%)
Wasatch County	3 (1%)	3 (1%)
Weber-Morgan (Weber and Morgan Counties)	25 (8%)	29 (8%)
Disenrolled from the Waiver by Reason	**Number of Children**	
Moved out of State	2	6
Aged out – Turned 7	0	50
Voluntary Disenrollment	5	8
Failed to Participate on an Ongoing Basis	2	1
Moved to Another Medicaid Waiver	1	0
Miscellaneous Information		
Households with Multiple Children	24 households with 49 children	25 households with 50 children

Waiver Implementation Elements

Enrollment Process

The Department uses 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 allows the Department to fill openings without needing to maintain a waiting list for applicants who exceed the number of available openings.

To assure parity, available openings are allocated 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 for dissemination of information to their respective groups.

Covered Services and Payment Rates

The waiver has four covered waiver services that are paid on a fee-for-service basis:

1) *Intensive Individual Supports – Consultant Level (Applied Behavioral Analysis Service)*
2) *Intensive Individual Supports – Direct Service Level (Applied Behavioral Analysis Service)*
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 three 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 2014. 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 2014)				
Service	**Hours/Units Per Month**	**Cost Per Unit**	**Monthly Cost**	**Annual Cost**
Intensive Individual Support – Consultation Service (ABA)	5.4	$ 80.00 (Hourly)	$432	$5,184
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Administrative Cost				
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Total			**$1,610**	**$19,320**

Overall Program Expenditures

Table 4 shows total service and administrative program expenditures through September 2014

Table 4. Total Waiver Program Expenditures (FY 2014)			
Fee-for-Service Costs	**State Funds**	**Federal Funds**	**Total Funds**
Waiver Service Costs	$1,620,567	$3,781,324	$5,401,891
Administrative Costs	**State Funds**	**Federal Funds**	**Total Funds**
Department of Health – Personnel and Assessment Costs	$35,916	$35,916	$71,832
Department of Human Services Personnel (Excluding Support Coordination)	$78,270	$78,270	$156,540
Support Coordination Services	$141,280	$141,280	$282,560
Total Service and Administrative Costs	**$1,876,033**	**$4,036,790**	**$5,912,823**

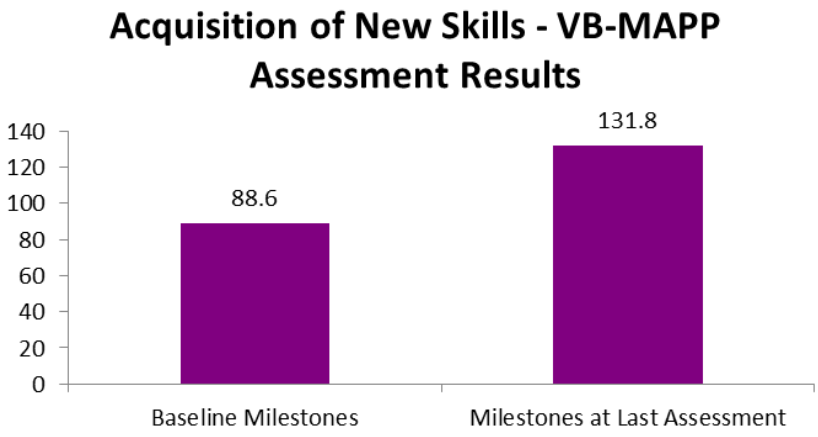
Individual Outcomes

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.

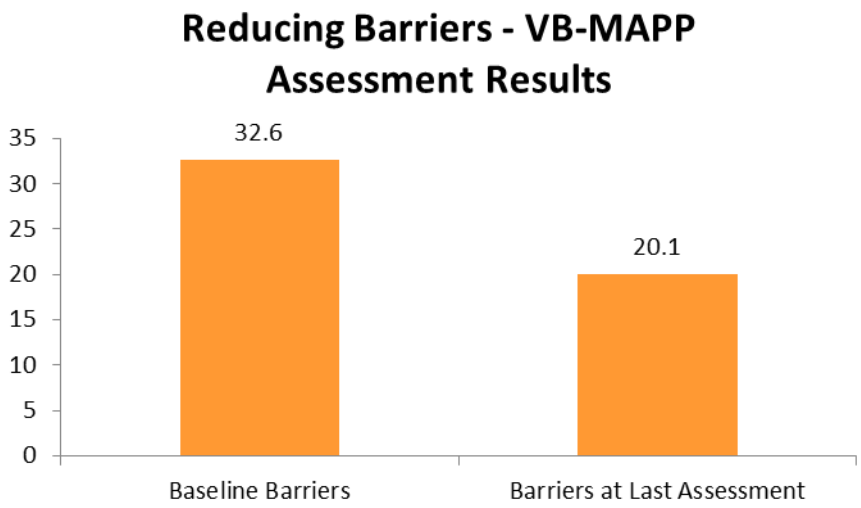
The VB-MAPP assesses three developmental levels/ages, 0-18 months, 18-30 months, and 30-48 months. Some skills span multiple developmental levels such as 'Listener' or 'Social', increasing in complexity with each level. Others such as 'Math', 'Reading' and 'Writing' only appear in higher levels. A child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



For this report, a baseline score was established based on the initial assessment for 236 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 asessment and most recent assessment ranges from 6 months up to 2 years.

The data show an average Milestone increase of 43.2 across all developmental levels—a 49 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.

The data for the cohort shows an average decrease in the barriers score of 12.5 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 four 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 193 children was compared to their 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	63.6	90.2	41.8%
Daily Living Skills	44.8	64.2	43.3%
Socialization	53.2	74.1	39.3%
Motor Skills	91	110.6	21.5%

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. Eldevik et al., 2010).*

Additional Policy Questions

How do waiver services interface with services provided by schools?

The issue of whether Waiver services should be provided in the child's school-based setting has surfaced as a policy question. While, it is acknowledged that there is value in encouraging communication among Waiver service providers, teachers and other staff in school-based settings, it is also recognized that Medicaid services should not supplant services that are intended to be provided through schools or other sources. With these principles in mind, the Department provided policy clarification describing that the Waiver will allow BCBAs to provide services in an extremely limited capacity in school-based settings. The types of tasks the BCBA is allowed to perform include such things as attending Individual Educational Planning (IEP) meetings to discuss the child's goals and progress outside the school setting, or to periodically observe the child in the classroom setting for treatment-plan development purposes. Waiver services in school-based settings are not permitted on a routine and ongoing basis.

Is there a need to develop a social skills group service and corresponding rate?

Providers have approached the Department with questions about the ability to provide services (particularly social skills development) in group settings. Department staff have observed well-structured groups that are intended to address specific goals in the child's treatment plan. During the original reimbursement rate development, the Department contemplated services that were provided on a one-on-one basis rather than in

[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*

group settings. Current program service definitions and rate structures do not appropriately address the group service-delivery concept. The Department believes that the development of a specific social skills group service definition and corresponding rate could be an appropriate method for delivering limited ASD-related services.

How will the recently issued Centers for Medicaid and Medicare (CMS) guidance on Medicaid ASD services impact the current waiver?

On July 7, 2014, CMS issued an Informational Bulletin, *Clarification of Medicaid Coverage of Services to Children with Autism*. The Bulletin clarifies that ASD-related services are covered under Early and Periodic Screening, Diagnosis and Treatment (EPSDT) through the Medicaid State Plan. EPSDT requires Medicaid agencies to "arrange for and cover for individuals eligible for the EPSDT benefit (individuals less than 21 year old) any Medicaid coverable service listed in section 1905(a) of the Act that is determined to be medically necessary to correct or ameliorate any physical or behavioral conditions".

This new CMS guidance is significant because it is a substantial change from previous guidance on the topic of ASD-related services. Services provided in home and community based (HCBS) waivers cannot duplicate services already available through the State Plan. Under the previous CMS interpretation, providing ASD-related services to children through an HCBS waiver was permissible, under the new interpretation, ASD-related services for children will not be allowed to be provided in HCBS waivers. The Department is currently working with CMS to better understand the new guidelines and the options to transition services for those currently served by the Waiver. CMS has stated that they will work with states to implement this change as ASD waivers are amended or renewed.

How will the rural rate enhancement be affected by the CMS guidance?

The Department evaluated the idea of implementing a rural rate enhancement to compensate providers traveling to rural areas outside the Wasatch Front. Development of a rural rate enhancement was discussed with providers, stakeholders and Medicaid rate-setting staff. The distance between waiver participants in rural Utah creates a challenge for providers to hire, train and retain staff. In some situations, travel time between appointments is in excess of an hour, which has caused several providers to serve rural waiver participants at a loss. The Department determined that it would be appropriate to implement a rural rate enhancement for providers who serve rural areas. At this time, a change to the rate would require an amendment to the Waiver and approval from CMS. CMS has described that it will require Utah to implement the EPSDT guidance (referenced above) if/when the Department amends the Waiver. Because the Department is still exploring options and planning how the CMS guidance will be implemented, an amendment to incorporate this change has been postponed.

Conclusion

The Medicaid Autism Waiver has successfully provided services to approximately 370 children with ASDs 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.