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analysis to advance the health of vulnerable populations

Autism Waiver Rate Methodology Study for the Centers for Medicare and Medicaid Services

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Autism Waiver Rate Methodology Study for the Centers for Medicare and Medicaid Services

Introduction

The Maryland Department of Health and Mental Hygiene (DHMH) has asked The Hilltop Institute to complete a rate methodology study for the Waiver for Children with Autism Spectrum Disorders (Autism Waiver). A complete list of all the services with rates to be reviewed for the waiver is in Appendix A.

Hilltop is following a similar approach to the one used by the Virginia Department of Behavioral Health and Developmental Services (DBHDS). Virginia worked with Burns and Associates (B&A), who developed and administered a provider cost survey, which gathered information on wage costs, benefit costs, productivity assumptions (amount of time not spent with participants, trainings for example), mileage costs, capital and equipments costs, and agency administrative costs. B&A also relied heavily on wage information from the Bureau of Labor and Statistics (BLS) as a comparison for what providers reported regarding wages. Hilltop also analyzed similar rate studies prepared by Arizona and Maine.

Hilltop will follow a simplified version of the model employed by Virginia and using wage, staffing ratios, capital cost, and administrative overhead rates from Maryland. The service-level rates are based on the following formula:

$$\text{Rate} = \text{Labor} + \text{Capital} + \text{Admin}$$

Where:

Labor is the product of the following components:

- **Wage:** The average wage for each job classification relevant to each service, weighted based on the assumed skill mix.
- **Benefit Rate:** Employment-related expenditures as a percentage of wage.
- **Productivity Adjustment:** A factor that accounts for non-direct care time necessary for the provision of the service.
- **Staffing Ratio:** Adjustment for services without a one-to-one provider to client ratio.

Capital and equipment costs for facility-based services.

Transportation: If appropriate, mileage costs for non-facility-based services, including purchase, upkeep, and fuel for an automobile may be included.

Administrative overhead or indirect costs.



Each cost center will be described in detail in the rest of this memo. In addition, assumptions for all cost centers except for wage and staffing ratios will be split into four groups based on both the qualifications of the service providers (Licensed Professional or Licensed Professional and Unlicensed Direct Care) and the location of the service (In-Home or Facility-Based). The classification of each waiver service using those criteria can be found in the table below.

Autism Waiver Services	In-Home	Facility
Licensed Professional Only	Adult life planning	
	Family consultation	
	Respite	
Licensed Professional/ Unlicensed Direct Care	Intensive individual support services	
		Therapeutic integration, regular and intensive
		Residential habilitation, regular and intensive

Wage

Estimates for wages will be determined by first cross-walking each waiver’s service and provider qualification descriptions¹ with job classifications retrieved from the BLS.² In order to accurately reflect each waiver service, most of the services require the use of several job classifications. Appendix B contains the definitions of each BLS job classification that will potentially be used for each waiver service.

Base hourly wages will then be computed to help determine the rate for each service. The base hourly wages will use the median hourly salaries for Maryland³ for each BLS job classification, taking into account the weighted job classifications that will be performed. A completed weighted matrix has been included Appendix C.⁴

¹ Retrieved from the most recent waiver applications sent by DHMH in October 2014 and appropriate COMAR regulations.

² Bureau of Labor and Statistics (BLS) associated job classification and definitions retrieved from Standard Occupation Classification-SOC 2010: <http://www.bls.gov/soc/2010/soc310000.htm>.

³ Salaries based on median income BLS job classifications in MD for May 2014, retrieved from http://www.bls.gov/oes/current/oes_md.htm.

⁴ MSDE designated the weighted percentages and specific job classifications at their request.



Benefit Rate

The benefit rate represents the cost of federal and state taxes, health insurance, paid time off, and other common work benefits. An estimated average benefit rate for private industry workers (30.6 percent) will be used from the Bureau of Labor and Statistics.⁵

Productivity Adjustment

The productivity adjustment accounts for time relevant to the service but not spent with the participant, including travel time, planning, training, and other time not directly billable. As with benefit rates, productivity adjustments will be applied based on the qualifications of the service providers. We propose using the average productivity adjustments from Virginia, Arizona, and Maine, grouping their nursing and therapy services into the Licensed Professional category and all other direct care services into the Licensed Professional/Unlicensed Direct Care category.

Staffing Ratio

While the in-home services offered through the Autism Waiver have a one-to-one provider-to-client ratio, regulations for most of the facility-based services allow more than one client to be served by each provider. Those services will include the staffing ratio in the following table to account for the amount of direct staff time provided to each client, taken from the Code of Maryland Regulations (COMAR)⁶ and the Autism Waiver application⁷:

Waiver	Service	Staffing Ratio
Autism	Residential Habilitation: Regular	1 to 3
	Residential Habilitation: Intensive	1 to 1
	Therapeutic Integration: Regular	1 to 3 1 to 2 ⁸
	Therapeutic Integration: Intensive	1 to 1

⁵ News release from the BLS on March 11, 2015.

⁶ See 10.09.56.05, 10.09.56.06-1, 10.09.56.11, and 10.09.56.14 <http://www.dsd.state.md.us/COMAR/searchall.aspx>

⁷ See the July 2014 waiver application https://www.medicaid.gov/medicaid-chip-program-information/by-topics/waivers/waivers_faceted.html

⁸ The 1 to 2 ratio was added at the request of the Maryland State Department of Education (MSDE), the state operating agency for the Autism Waiver.



Capital

A capital cost center will be included in order to account for the operation of appropriate facility-based services. This could include purchase and upkeep of the building and grounds, modifications to comply with ADA requirements, or the installation of necessary medical equipment. We propose using 9.0 percent for capital costs.⁹ This 9.0 percent is based on reconciled cost reports for Maryland long-term-care facilities. The capital costs include taxes, insurance, interest, and return on equity.¹⁰

Transportation

Transportation costs will be calculated at 12.2 percent of the total operating costs for Residential Habilitation (regular and intensive), and Therapeutic Integration (regular). The 12.2 percent is a figure from a study done by Zelman, Elston, and Weissart¹¹ which was derived from a national survey of adult day care centers. The study involved a two-stage sampling process of day care centers to ensure a representative sample that accounted for population size as well as centers not included on the National Directory of Adult Day Care Centers.

The focus of the study was on how adult day care centers are funded in the United States and identifying their major operating expenses. Researchers focused their data collection efforts on:

1. Mailing data collection forms to the centers
2. Follow-up one day visits and phone calls to centers to assist staff in completing the forms
3. Checking returned forms for reliability and completeness, with follow-up questions sent to centers as necessary
4. Rechecking the follow-up returned forms for reliability and completeness

Due to the diversity of the accounting and reporting procedures of the centers, month by month adjustments were made using the Consumer Price Index and Employment Cost Index to bring the data into conformance for the fiscal year beginning July 1, 1985 for all centers with complete revenue, expense, and staffing data.

The study determined an industry profile of the centers' expenditures. Findings included that direct labor accounted for 54.4 percent of total operating costs, while transportation costs were the second most expensive item—at 12.2 percent of operating costs. Transportation costs

⁹ Milligan, C. (2009, September 2). *Nursing facility payment policy: Comparing Maryland to other states*. Presentation to the LTC Payment Workgroup. Baltimore, MD.

¹⁰ 2009, July 22. *Maryland Medicaid Nursing Home Reimbursement*. Presentation.

¹¹ Zelman, W., Elston, J., & Weissart, W. (1991). Financial aspects of adult day care: National survey results. *Health Care Financing Review*. Spring 1991, Volume 12, Number 3.



include costs incurred in providing transportation services to and from the center, field trips, medical appointments, or errands. They also include costs such as vehicle maintenance, labor, and gas.

Administrative Overhead

The administrative overhead or indirect costs percentage reimburses providers for costs related to their participation as a provider but not necessarily the provision of the particular service, as well as any non-billable supplies. We propose including the figure of 10.0 percent used in the 1915(i) HCBS benefit for children and youth: state plan amendment rates and methodologies.¹²

Rate Estimates

Rate estimates for the Autism Waiver services using the methodology outlined above can be found in Appendix D.

Conclusion

In general, the rate estimates in this analysis are close to the current rates offered in Maryland, with some variation among the different services. A previous study of Maryland's rates for its Autism Waiver demonstrated the rates for each of its services are comparable to similar Autism waiver services in other states. This study can be found in Appendix E. Maryland updates its rates annually, based on the medical consumer price index.

¹² The Institute for Innovation and Implementation. (2012, March 22). *1915(i) HCBS benefit for children and youth: State plan amendment rates and methodologies*. Baltimore, MD: The University of Maryland School of Social Work.



Appendix A. Autism Waiver Service Definitions and Provider Qualifications*

Waiver Service	Service Definition	Provider Qualifications
Family Consultation	<p>Family consultation shall be provided as specified in the family treatment plan, and:</p> <ol style="list-style-type: none"> (1) Shall be based on family-oriented goals to benefit the participant (2) Shall be provided to one family at a time (3) May not include advocacy regarding a participant’s Individualized Education Plan (IEP) (4) May not include training and supervision of direct care workers <p>A participant's family shall be trained (in-person) by a qualified licensed or certified professional to provide intensive one-on-one interventions with the participant and may be instructed in the treatment regimens, behavior intervention and modeling, skills training, and use of equipment including communication devices specified in the participant's plan of care.</p> <p>The participant's family shall receive instruction to assist the participant, as appropriate, in:</p> <ol style="list-style-type: none"> (a) Dressing (b) Eating (c) Personal hygiene (d) Functional communication (e) Self-administration of medications (f) Proper use of appliances and adaptive or assistive devices; (g) Home safety (h) First-aid (i) Emergency procedures (j) Engaging in activities of interest (k) Mobility in the house and community (l) Money management 	<p>In accordance with COMAR 10.09.56.08 (Autism Waiver, Specific Conditions for Participation, Family Training) the individual rendering services must:</p> <ol style="list-style-type: none"> (1) Be certified in accordance with COMAR 13A.12.01 as a psychologist, special educator, or speech therapist OR (2) Be licensed as a psychologist, certified social worker, speech therapist, professional counselor, marriage and family therapist, or an OT OR (3) Be a nationally certified board certified behavior analyst OR (4) Have a master’s or doctorate degree from an accredited university in special education or a related field and have at least five years experience providing training regarding autism AND (5) Have two years of experience that: <ul style="list-style-type: none"> Is relevant to the family’s needs Is related to behavior intervention Involves working with children who have autism



Waiver Service	Service Definition	Provider Qualifications
<p>Adult Life Planning</p>	<p>The adult life planner (ALP) works with the participant in their home environment to identify skills related to independence, community integration, self-advocacy, self-direction, natural supports, and the adult service system's employment options. The treatment plan is developed to incorporate federal and state supports with generic and natural supports, including parents, siblings, and others for increased independence, choice, and the participant's need for services and supports once they exit the Autism Waiver.</p> <p>Adult life planning treatment programs will include Autism Waiver participants, their families, Autism Waiver service coordinators, and others as needed to:</p> <ol style="list-style-type: none"> (1) Increase the use of generic services and natural supports (2) Prepare for transition out of the waiver (3) Include principles of self-determination, person-centered planning, and circles of support (4) Direct and support the waiver participant with planning and decision-making (5) Include specific, measurable, goals and objectives for the participant, parent, and ALP within identified time frames (6) Provide the assistance and support needed by the participant and family to complete their responsibilities in specific measurable goals (7) ALP incorporates individual and family responsibility to complete the treatment plan as a primary responsibility <p>Additionally, as specified in COMAR 10.09.56.10D-E (Autism Waiver, Specific Conditions for Participation, Adult Life Planning Services):</p> <ol style="list-style-type: none"> (1) At the completion of each year of adult life planning services, the provider shall provide a report of documented evidence of progress towards self-determination, community integration, and coordination of adult services (2) The provider shall maintain adult life planning contact logs 	<p>In accordance with COMAR 10.09.56.10 (Autism Waiver, Specific Conditions for Participation, Adult Life Planning Services) the individual rendering services must:</p> <ol style="list-style-type: none"> (1) Have a master's degree in human services AND (2) Have five years of full-time experience serving adults with autism



Waiver Service	Service Definition	Provider Qualifications
	<p>completed on the same day the service is provided and reflective of the adult life planning treatment goals and activities</p>	
<p>Intensive Individual Support Services</p>	<p>Intensive individual support services (IISS) provide intensive, one-on-one assistance based on the child's need for interventions and support. IISS is goal and task-oriented and intended to prevent or defuse crises; promote developmental and social skills growth; provide the child with behavior management skills; give a sense of security and safety to the child; assist the child with maintaining self-sufficiency and impulse control; improve the child's positive self-expression and interpersonal communication; improve the child's ability to function and cooperate in the home and community; reverse negative behaviors and attitudes; and foster stabilization. These services use the home and community environment as a learning experience and as an opportunity to illustrate and model alternative ways of behaving for the child. Additionally, data are collected on interventions and used to modify treatment.</p> <p>The specific services include: one-on-one support, assistance, oversight, and intervention; time-structuring activities; immediate behavioral reinforcements; timeout strategies; crisis intervention techniques; and additional services as prescribed in the child's individualized treatment plan. The services may include providing transportation and accompanying the child to non-Medicaid services, as necessary and consistent with the waiver plan of care. IISS providers are required to collaborate with the child's family, providers of other waiver services, and other appropriate professionals working with the child in the home or other community settings.</p> <p>Additionally, per COMAR 10.09.5606L-M (Autism Waiver, Specific Conditions for Participation, Intensive Individual Support Services) the provider must:</p>	<p>MSDE verifies the qualifications of potential providers prior to Medicaid enrollment. In accordance with COMAR 10.09.56.10 (Autism Waiver, Specific Conditions for Participation, Intensive Individual Support Services) the individuals rendering services must include:</p> <ol style="list-style-type: none"> (1) A director: <ul style="list-style-type: none"> Who holds a Maryland certificate as a special education supervisor, principal, or special educator and has at least three years of teaching experience OR Has at least three years of relevant experience with counseling or supervision (2) Direct care workers in accordance with 10.09.56.04E (Autism, Conditions for Participation, General): <ul style="list-style-type: none"> Who have at least a high school diploma or degree Have received adequate and appropriate training within 60 days of employment and annually thereafter, pertaining to care for children with autism Have volunteered or have employment experience working with children with autism (for a minimum of 100 hours) (3) Individuals to train and supervise direct care workers, which include: <ul style="list-style-type: none"> Licensed psychologists, certified school psychologists, certified special educators, licensed certified social workers, licensed professional counselors, board certified behavioral analysts OR Individuals with a master's or doctorate degree in special education or a related field and who have at least five years experience in providing training in the area of autism or other developmental disabilities (4) Employ or contract with certain professionals for consultation as needed in accordance with COMAR 10.09.56.04G(1-2), which include: <ul style="list-style-type: none"> Board certified behavior analysts, certified school psychologists, certified special educators, individuals with a master's or doctorate degree in



Waiver Service	Service Definition	Provider Qualifications
	<p>(1) Maintain daily contact logs completed on the same day the service is provided and reflective of treatment plan goals and activities</p> <p>(2) Maintain and make available for review by the State, documentation of the six-month review and update of each participant’s status relative to each goal in the IISS treatment plan</p>	<p>special education or related field and five years of experience in providing training in the area of autism or other developmental disabilities, licensed certified social workers, licensed professional counselors, nurse psychotherapists, physicians, psychologists, OTs, PTs, RNs, or speech therapists AND</p> <p>Have experience providing services to children with autism or developmental disabilities and have a background in behavior management</p>
<p>Therapeutic Integration (regular and intensive)</p>	<p>Therapeutic integration (TI) services are based on the child's individualized treatment plan that identifies the goal of specific therapeutic activities provided. TI focuses heavily on expressive therapies and therapeutic recreational activities. TI services are therapeutic and habilitative. TI providers must be able to provide therapeutic intervention and recreation services, behavioral management, and planning for crises with the child during a session. The child's TI program shall include socialization groups and one or more of the following expressive therapies as appropriate: art therapy, music therapy, dance therapy, and activity therapy. Individual or group counseling as well as activities for building self-esteem may also be included. Transportation services to and from the TI location may be provided, with the time of the transportation included as part of the allowable two to four hours daily. Additional reimbursement is not available for transporting the child.</p> <p>TI services are of two types, depending on the needs of the child: one-on-one or intensive TI services are available as a structured program of therapeutic activities. Intensive TI focuses heavily on expressive therapies and therapeutic recreational activities with fewer competing distractions.</p> <p>A daily session is a minimum of two hours and a maximum of four hours for those children who are identified to need an intensive therapeutic program in their waiver plan of care.</p>	<p>In accordance with COMAR 10.09.56.06-1 (Autism Waiver, Specific Conditions for Participation, Therapeutic Integration Services) the individuals rendering services must include:</p> <p>(1) A director: Who holds a Maryland certificate as a special education supervisor, principal, or special educator and have at least three years of teaching experience OR Has at least three years of relevant experience with counseling or supervision</p> <p>(2) Direct care workers in accordance with 10.09.56.04E: Who have at least a high school diploma or degree Have received adequate and appropriate training within 60 days of employment and annually thereafter, pertaining to care for children with autism Have volunteered or have employment experience working with children with autism (for a minimum of 100 hours)</p> <p>(3) Individuals to train and supervise direct care workers on site, which include: Licensed psychologists, certified school psychologists, certified special educators, licensed certified social workers, licensed professional counselors, board certified behavioral analysts, licensed or certified music, art, drama, dance, or recreation therapists OR Individuals with a master’s or doctorate degree in special education or a</p>



Waiver Service	Service Definition	Provider Qualifications
	<p>Additionally, per COMAR 10.09.56.06-1 O-P (Autism Waiver, Specific Conditions for Participation, Therapeutic Integration Services) the provider must:</p> <ol style="list-style-type: none"> (1) Maintain daily contact logs completed on the same day the service is provided and reflective of treatment plan goals and activities (2) Maintain and make available for review by the State, documentation of the six-month review and update of each participant’s status relative to each goal in the TI treatment plan 	<p>related field and who have at least five years experience in providing training in the area of autism or other developmental disabilities</p> <ol style="list-style-type: none"> (4) Employ or contract with certain professionals, as specified in COMAR 10.06.56.04G(1-2) and noted above <p>At least one professional must be on call at all times for crisis intervention in accordance with COMAR 10.09.56.04G(1-2), as noted above</p>
<p>Residential Habilitation (regular and intensive)</p>	<p>Residential habilitation services are received in facilities located in Maryland that are Developmental Disabilities Administration (DDA) licensed group homes, licensed alternative living units, or residential facilities approved for special education.</p> <p>A therapeutic living program of treatment, intervention, training, supportive care, and oversight is provided. Services are designed to assist children in acquiring, retaining, and improving the self-help, socialization, and adaptive skills necessary to reside successfully in home and community-based settings. These services are offered at a regular or intensive level and reimbursed at one of two rates. The intensive level of service for the child involves awake overnight and one-on-one staffing.</p> <p>All Residential Habilitation programs must provide a 24-hour therapeutic environment and coordinate with the child's providers of clinical treatment services, educational services, and health and medical services. The residential habilitation provider must assure that the child's needs are met for shelter, food, clothing, and furnishings, although these are not included in the Medical Assistance reimbursement rate. Provided are the following services: habilitation, behavior shaping and management, daily living skills, functional living skills training, socialization, mobility, community mobility, transportation, crisis intervention and planning, and</p>	<p>Services provided in a facility must do so in accordance with COMAR 10.22.02 and 10.22.08 (DDA) or COMAR 14.31.06 (Governor’s Office for Children).</p> <p>In accordance with COMAR 10.09.56.05 (Autism Waiver, Specific Conditions for Participation, Residential Habilitation Services) facilities must have eight or fewer beds, unless approved by MSDE to have up to 16 beds due to special needs of children</p> <p>In accordance with COMAR 10.09.56.05, staff must consist of:</p> <ol style="list-style-type: none"> (1) A director: <ul style="list-style-type: none"> Who holds either a Maryland certificate as a special education supervisor, principal, or special educator, and has at least three years of teaching experience OR Has three years of relevant experience with counseling or supervision (2) A designated supervisor for the direct care workers who is on call 24 hours a day who: <ul style="list-style-type: none"> Has a bachelor’s degree in a human services field plus three years of experience in the area of autism or other developmental disabilities, or an associate’s degree in human services plus five years of experience (3) Direct care workers in accordance with 10.09.56.04E: <ul style="list-style-type: none"> Who have at least a high school diploma or degree



Waiver Service	Service Definition	Provider Qualifications
	<p>medication management/monitoring/training.</p> <p>Additionally, per COMAR 10.09.56.05P-Q (Autism Waiver, Specific Conditions for Participation, Residential Habilitation Services) the provider must:</p> <ol style="list-style-type: none"> (1) Maintain daily contact logs completed on the same day the service is provided and reflective of treatment plan goals and activities (2) Maintain and make available for review by the State, documentation of the six-month review and update of each participant’s status relative to each goal in the residential habilitation individual plan 	<p>Have received adequate and appropriate training within 60 days of employment and annually thereafter, pertaining to care for children with autism</p> <p>Have volunteered or have employment experience working with children with autism (for a minimum of 100 hours)</p> <p>(4) Employ or contract with certain professionals, as specified in COMAR 10.06.56.04G(1-2) and noted above</p> <p>At least one professional must be on call at all times for crisis intervention in accordance with COMAR 10.09.56.04G(1-2), as noted above</p> <p>Other standards which are consistent with COMAR 10.09.56 include round-the-clock staffing which:</p> <ol style="list-style-type: none"> (1) Includes at all times at least one direct-care staff person on site for every three children, with more staffing as necessary based on participants' needs; and (2) May be less than 7 days a week, such as without weekend services
<p>Respite</p>	<p>Respite care offers appropriate care and supervision to protect the child's safety in the absence of a family member(s). Respite care services include assistance with activities of daily living that are provided to children unable to care for themselves.</p> <p>Respite care can be provided in the child's home or place of residence, a community setting, or a Youth Camp certified by the Department of Health and Mental Hygiene (DHMH) under COMAR 10.16.06, or a site licensed by the Developmental Disabilities Administration (DDA) to accommodate individuals for respite care.</p> <p>The respite provider may accompany the recipient on short outings for exercise, recreation, shopping or other purposes while providing respite</p>	<p>MSDE verifies the qualifications of potential providers prior to Medicaid enrollment. In accordance with COMAR 10.09.56.07 (Autism Waiver, Specific Conditions for Participation, Respite Care) the individuals providing services or supervising and training direct care workers rendering services must:</p> <ol style="list-style-type: none"> (1) Be certified in accordance with COMAR 13A.12.01 as a psychologist or special educator OR (2) Be licensed as a psychologist, social worker, nurse, professional counselor, or OT OR (3) Be a qualified developmental disabilities professional in accordance with COMAR 10.09.26.01B(28) OR (4) Be certified nationally by the behavior analyst certification board as a board certified behavior analyst OR (5) Be an individual with a master’s or doctorate degree in special education



Waiver Service	Service Definition	Provider Qualifications
	<p>care. Transportation time with the recipient is part of respite care when taking the recipient out of the home. Respite care may be provided 24 hours a day to enable the family to leave the home as needed.</p> <p>Limits on the amount, frequency, or duration of this service: Federal financial participation is not to be claimed for the cost of room and board except when provided as part of respite care furnished in a facility approved by the State that is not a private residence. The service does not reimburse for transportation costs such as gasoline, maintenance, or other vehicle operating expenses.</p>	<p>or a related field and a least five years experience in providing training or consultation with the area of autism or other developmental disabilities</p> <p>In accordance with COMAR 10.09.56.04E, an agency that provides respite care services shall employ direct care workers:</p> <ul style="list-style-type: none"> Who have at least a high school diploma or degree Have received adequate and appropriate training within 60 days of employment and annually thereafter, pertaining to care for children with autism Have volunteered or have employment experience working with children with autism (for a minimum of 100 hours)

* Waiver service definitions and provider qualifications were taken from the most recent waiver application provided by DHMH and COMAR regulations; both were shortened when possible.



Appendix B. Autism Waiver Services with Probable Scheme of Bureau of Labor and Statistics Job Classifications*

Waiver Service	Comparable BLS Job Classifications
Family Consultation	<p>Education administrators, elementary and secondary (11-9032): Plan, direct, or coordinate the academic, administrative, or auxiliary activities of public or private elementary or secondary level schools.</p> <p>Psychologists, all other (19-3039): All psychologists not listed separately.</p> <p>Marriage and family therapists (21-1013): Diagnose and treat mental and emotional disorders, whether cognitive, affective, or behavioral, within the context of marriage and family systems. Apply psychotherapeutic and family systems theories and techniques in the delivery of services to individuals, couples, and families for the purpose of treating such diagnosed nervous and mental disorders. Excludes "Social Workers" (21-1021 through 21-1029) and "Psychologists" of all types (19-3031 through 19-3039).</p> <p>Special education teacher, all others (25-2059): All special education teachers not listed separately.</p>
Adult Life Planning	<p>Education administrators, elementary and secondary (11-9032): See above.</p> <p>Education administrators, all other (11-9039): All education administrators not listed separately.</p> <p>SW all other (21-1029): All social workers not listed separately.</p> <p>Psychologists, all other (19-3039): See above.</p> <p>Marriage and family therapists (21-1013): See above.</p> <p>Clinical, counseling, and school psychologists (19-3031): Diagnose and treat mental disorders; learning disabilities; and cognitive, behavioral, and emotional problems, using individual, child, family, and group therapies. May design and implement behavior modification programs.</p> <p>Special education teacher, all others (25-2059): Please see above.</p>



Waiver Service	Comparable BLS Job Classifications
<p>Intensive Individual Support Services</p>	<p>Psychiatric aides (31-1013): Assist mentally impaired or emotionally disturbed patients, working under direction of nursing and medical staff. May assist with daily living activities, lead patients in educational and recreational activities, or accompany patients to and from examinations and treatments. May restrain violent patients. Includes psychiatric orderlies.</p> <p>SW all other (21-1029): See above.</p> <p>Psychiatric technicians (29-2053): Care for individuals with mental or emotional conditions or disabilities, following the instructions of physicians or other health practitioners. Monitor patients' physical and emotional well-being and report to medical staff. May participate in rehabilitation and treatment programs, help with personal hygiene, and administer oral or injectable medications.</p> <p>Special education teacher, all others (25-2059): Please see above.</p>
<p>Therapeutic Integration (regular and intensive)</p>	<p>Psychiatric aides (31-1013): See above.</p> <p>Psychiatric technicians (29-2053): See above.</p> <p>Special education teacher, all others (25-2059): See above.</p>



Waiver Service	Comparable BLS Job Classifications
Residential Habilitation (regular and intensive)	<p>Registered nurse (29-1141): Assess patient health problems and needs, develop and implement nursing care plans, and maintain medical records. Administer nursing care to ill, injured, convalescent, or disabled patients. May advise patients on health maintenance.</p> <p>Social and Community Service Managers (11-9151): Social and Community Service Managers: Plan, direct, or coordinate the activities of a social service program or community outreach organization. Oversee the program or organization's budget and policies regarding participant involvement, program requirements, and benefits. Work may involve directing social workers, counselors, or probations officers.</p> <p>Psychiatric technician (29-2053): See above.</p> <p>Health care social worker (21-1022): Provide individuals, families, and groups with the psychosocial support needed to cope with chronic, acute, or terminal illnesses. Services include advising family care givers, providing patient education and counseling, and making referrals for other services. May also provide care and case management or interventions designed to promote health, prevent disease, and address barriers to access to healthcare.</p> <p>Psychologists, all other (19-3039): See above.</p> <p>Psychiatrist (29-1066): Physicians who diagnose, treat, and help prevent disorders of the mind.</p>
Respite	<p>Psychiatric aides (31-1013): See above.</p> <p>Psychiatric technicians (29-2053): See above.</p> <p>Recreation worker (39-9032): Conduct recreation activities with groups in public, private, or volunteer agencies or recreation facilities. Organize and promote activities, such as arts and crafts, sports, games, music, dramatics, social recreation, camping, and hobbies, taking into account the needs and interests of individual members.</p>

* Bureau of Labor and Statistics (BLS) associated job classification and definition retrieved from Standard Occupation Classification-SOC 2010: <http://www.bls.gov/soc/2010/soc310000.htm>



Appendix C. Autism Waiver Wage Assumptions*

		Respite	Adult life planning	Family consultation	Intensive individual support services	Therapeutic integration regular	Therapeutic integration intensive	Residential habilitation regular	Residential habilitation intensive
Bureau of Labor and Statistics Title and Code	BLS Median Hourly Wage MD								
Nursing Services									
29-1141 Registered nurse	\$34.30							10.0%	10.0%
29-2061 Licensed practical nurse	\$24.05								
31-1014 Nursing assistants	\$13.25								
Therapy services									
29-1122 Occupational therapist	\$41.13								
29-1123 Physical therapist	\$41.71								
31-2021 Physical therapy assistant	\$27.71								
31-2022 Physical therapy aide	\$10.65								
29-1127 Speech and language pathologist	\$40.09								
Assistance with Activities of Daily Living									
31-1011 Home health aide	\$11.33								
39-9021 Personal care aide	\$10.92								
31-1013 Psychiatric aides	\$13.79	30.0%			30.0%	30.0%	30.0%		
21-1093 Social and human service assistants	\$14.02								



		Respite	Adult life planning	Family consultation	Intensive individual support services	Therapeutic integration regular	Therapeutic integration intensive	Residential habilitation regular	Residential habilitation intensive
Bureau of Labor and Statistics Title and Code	BLS Median Hourly Wage MD								
29-2053 Psychiatric technicians	\$17.17	50.0%			50.0%	60.0%	60.0%	60.0%	60.0%
Special educators and education administrators*									
25-2059 Special education teacher, all others	\$46.23		10.0%	10.0%	10.0%	10.0%	10.0%		
25-2051 Special education teacher, preschool	\$34.22								
25-2052 Special education teacher, kindergarten and elementary school	\$34.24								
25-2053 Special education teacher, middle school	\$42.51								
25-2054 Special education teacher, secondary school	\$40.39								
11-9032 Education administrators, elementary and secondary	\$49.25		5.0%	50.0%					
11-9036 Education administrators, all other	\$43.48		10.0%						
Behavioral/Social/Psychological/Psychiatric and Crisis Intervention Services									
21-1022 Health care social worker	\$26.62							10.0%	10.0%
21-1029 All other social workers	\$31.57		20.0%		10.0%				



		Respite	Adult life planning	Family consultation	Intensive individual support services	Therapeutic integration regular	Therapeutic integration intensive	Residential habilitation regular	Residential habilitation intensive
Bureau of Labor and Statistics Title and Code	BLS Median Hourly Wage MD								
19-3031 Clinical, counseling, and school psychologists	\$34.76		20.0%						
19-3039 Psychologists, all other	\$49.10		30.0%	35.0%				5.0%	5.0%
21-1013 Marriage and family therapists	\$22.58		5.0%	5.0%					
29-1066 Psychiatrists	\$90.00							10.0%	10.0%
11-9151 Social and Community Service Managers	\$33.71							5.0%	5.0%
Activity Programs									
29-1125 Recreational therapist	\$22.98								
39-9032 Recreation workers	\$11.07	20.0%							
21-1015 Rehabilitation counselors	\$13.90								
Total Percentage		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Base Hourly Wage		\$14.94	\$40.56	\$47.56	\$20.50	\$19.06	\$19.06	\$29.53	\$29.53

Bureau of Labor and Statistics (BLS) associated job classification and definition retrieved from Standard Occupation Classification-SOC 2010 <http://www.bls.gov/soc/2010/soc310000.htm>

Salaries based on median income BLS job classifications in MD for May 2014, retrieved from http://www.bls.gov/oes/current/oes_md.htm

*Percentages represent the proportion of that job's salary that makes up the base hourly wage.



Appendix D. Autism Waiver Rate Assumptions and Calculations

Service	Current Rate	Rate Component	Assumptions
Respite	\$11.94/30 minutes	(Licensed professional/unlicensed direct care/facility)	
		Base hourly wage	\$14.96
		Percent benefits	30.6%
		Productivity assumptions	1.13
		Administrative costs	10.0%
		Rate Calculations	
		Rate for 30 minutes	\$12.13

Service	Current Rate	Rate Component	Assumptions
Adult Life Planning	\$50.17/30 minutes	(Licensed professional/in-home)	
		Base hourly wage	\$40.56
		Percent benefits	30.6%
		Productivity assumptions	1.38
		Administrative costs	10.0%
		Rate Calculations	
		Rate for 30 minutes	\$40.21

Service	Current Rate	Rate Component	Assumptions
Family Consultation	\$50.17/30 minutes	(Licensed professional/in-home)	
		Base hourly wage	\$47.56
		Percent benefits	30.6%
		Productivity assumptions	1.38
		Administrative costs	10.0%
		Rate Calculations	
		Rate for 30 minutes	\$47.14



Service	Current Rate	Rate Component	Assumptions
Intensive Individual Support Services	\$15.28/30 minutes	(Licensed professional/unlicensed direct care/in-home)	
		Base hourly wage	\$20.50
		Percent benefits	30.6%
		Productivity assumptions	1.13
		Administrative costs	10.0%
		Rate Calculations	
		Rate for 30 minutes	\$16.64

Service	Current Rate	Rate Component	Assumptions
Therapeutic Integration Intensive	\$15.28/30 minutes	(Licensed professional/unlicensed direct care/facility)	
		Base hourly wage	\$19.06
		Percent benefits	30.6%
		Productivity assumptions	1.13
		Capital costs	9.0%
		Administrative costs	10.0%
		Staffing ratio	1 to 1
		Rate Calculations	
Rate for 30 minutes	\$16.74		

Service	Current Rate	Rate Component	Assumptions
Therapeutic Integration Regular	\$12.23/30 minutes	(Licensed professional/unlicensed direct care/facility)	
		Base hourly wage	\$19.06
		Percent benefits	30.6%
		Productivity assumptions	1.13
		Capital costs	9.0%
		Administrative costs	10.0%
		Transportations costs	12.2%
		Staffing Ratio	1 to 3 1 to 2
		Rate Calculations	
		Rate for 30 minutes*	\$10.48

*Based on 60% 1 to 2 staffing ratio and 40% 1 to 3 staffing ratio per MSDE



Service	Current Rate	Rate Component	Assumptions	
Residential Habilitation Intensive	\$403.42/day	(Licensed professional/unlicensed direct care/facility)		
		Base hourly wage	\$29.53	
		Percent benefits	30.6%	
		Productivity assumptions	1.13	
		Administrative costs	10.0%	
		Transportation costs	12.2%	
		Staffing ratio	1 to 1	
		Rate Calculations		
		Daily Rate	\$426.04	

Service	Current Rate	Rate Component	Assumptions	
Residential Habilitation Regular	\$201.70/day	(Licensed professional/unlicensed direct care/facility)		
		Base hourly wage	\$29.53	
		Percent benefits	30.6%	
		Productivity assumptions	1.13	
		Administrative costs	10.0%	
		Transportation costs	12.2%	
		Staffing ratio	1 to 3	
		Rate Calculations		
		Daily Rate	\$193.61	



Appendix E. Autism Waiver Rate Comparable Analysis Study

MEMORANDUM

To: Marc Blowe and Rebecca VanAmburg
From: MaryAnn Mood and Ian Stockwell
Date: August 19, 2014
Re: Updated Autism Waiver Rate Comparable Analysis

The Hilltop Institute was asked by the Maryland Department of Health and Mental Hygiene (DHMH) to study autism waiver service rates across multiple states to determine where Maryland's Waiver for Children with Autism Spectrum (Autism Waiver) rates fall in comparison. We found that of the seven services that are the focus of Maryland's Autism Waiver, Maryland's rates appear comparable to similar services in the comparison states. The methodology, comparison of service definitions, findings, and rate tables for this request are discussed below.

Methodology

To accomplish this task, Hilltop analyzed Maryland's Autism Waiver to determine the characteristics of the population served and the services provided. Hilltop then documented the definitions of the services using the most recent waiver application sent from DHMH. The service rates used for the study were from fiscal year (FY) 2014 and were retrieved from the DHMH website.¹³

Next, Hilltop conducted a search using the Centers for Medicare and Medicaid Services (CMS) website¹⁴ to determine which states have waivers that serve the same population as Maryland's Autism Waiver. A few issues arose during this process, the first being that many states have waivers that do not serve the same ages as Maryland's Autism Waiver (1 to 21 years of age). For example, Arkansas's Autism Waiver only serves children ages one to six years. Another issue was that some states have multiple waivers that serve individuals with an autism spectrum diagnosis. Connecticut has two such waivers: the Early Childhood Autism Waiver, which serves children who are three and four years old; and the Home and Community Supports for Persons with Autism Waiver, which serves individuals with autism who are three and older, with no maximum age limit. Because some of the services are different on these Connecticut waivers,

¹³ <https://mmcp.dhmh.maryland.gov/MCOupdates/SitePages/Home.aspx>

¹⁴ http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/Waivers_faceted.html



both are included in this study. A final issue was that some states have waivers that serve not only those with autism, but also those with developmental disabilities (DD), intellectual disabilities (ID), or mental retardation (MR), often because different waivers have been combined into one waiver to serve multiple populations. Indiana's Comprehensive Integration and Habilitation Waiver is a good example of this as it combines the previous Autism Waiver and DD Waivers. All of these states are included in this study to provide as many comparison service rates as possible.

Once a state was determined to have a waiver(s) that served individuals with autism, an online search was conducted for the rates/fee schedule for the waiver services. Many states do not post their fee schedules online, and even among those that do, some service rates may be missing, as was the case with California, Delaware, Louisiana, and Massachusetts. Only states that posted their fee schedules online are included in this study. It is important to note that the effective dates for the posted fee schedules often vary by state.

Hilltop then conducted an analysis of service definitions on the states included in this study to determine if the services were comparable to Maryland's services. The service definitions were taken from the waiver applications submitted to CMS.

Finally, states included in this study met the following criteria:

The targeted waiver population was individuals with an autism spectrum disorder diagnosis aged 1 to 21.

- Inclusion of with an autism spectrum disorder diagnosis was mandatory, though individuals with other diagnoses could also be served by the waiver.
- The 1 to 21 age group had to be included, though subsets of these ages could be included as well—for instance just three and four year olds, or older individuals. Waivers *only* serving those 18 and older, however, were not included in this study.

Service rates/fee schedules were posted online.

- States were included that had rates posted online, even if not all service rates were posted.

Below is Table 1, which highlights all the states and their waivers that are included in this study.



Table 1. States and their Autism Waivers

State	Name of Waiver	Target Population	Date of Fee Schedule
Arkansas	Arkansas Autism Waiver	Children with autism, ages one to six	June, 2014
California	California Home and Community-Based Services (HCBS) for Californians with DD	Individuals with autism, DD, and ID, ages zero-no maximum age	June, 2013
Connecticut	Early Childhood Autism Waiver	Children with autism ages three-four	August, 2013
	Home and Community Supports for Persons with Autism	Individuals with autism ages three-no maximum age	August, 2013
Delaware	Delaware Renewal Division of Developmental Disabilities Services (DDDS)	Individuals with autism, ID, and DD, ages four-no max age	FY 2014
Idaho ¹⁵	Children's Developmental Disabilities Waiver	Individuals with autism, MR, and DD, ages 0-17 years old	July, 2013
Indiana	Indiana's Community Integration and Habilitation Waiver	Individuals with autism, ID, and DD, ages zero-no maximum age	February, 2014
Kansas	Kansas Autism Waiver	Children with autism ages zero-five years old	January, 2011
Louisiana	Louisiana's Children's Choice Waiver	Individuals with autism, ID, and DD, ages 0-18 years old	January, 2014
	Louisiana's New Opportunities Waiver	Individuals with autism, ID, and MR, ages three-no maximum age	May, 2014
Maine	Children with Intellectual Disabilities or Pervasive Developmental Disorders	Individuals with autism and ID, ages 5-21	April, 2014
Maryland	Maryland's Waiver for Children with Autism Spectrum Disorder	Children with an autism spectrum disorder diagnosis, ages 1-21 years old	FY 2014
Massachusetts	Massachusetts Children's Autism Spectrum Disorder HCBS Waiver	Children with autism, ages zero-eight years old	January, 2009
North Carolina ¹⁶	Comprehensive Waiver	Individuals with autism, DD, and ID, ages zero-no maximum age	July, 2012

¹⁵ Idaho has two waivers serving autistic children; the waiver most similar to Maryland's is the focus for this study.

¹⁶ North Carolina has two waivers that serve individuals with autism ages zero-no maximum age, the Comprehensive Waiver is the focus of this study because it has more comparable services and more recent posted rates.



Comparison of Service Definitions

As stated previously, to ensure that all services that were comparable to Maryland’s Autism Waiver services were included, Hilltop gathered service definitions from each state’s waiver application, which were then submitted to CMS and analyzed to determine likeness. It is important to note that not all comparable services have the same service name. The names that the other states use are included in Table 2, which summarizes the services from the states that offer similar services to Maryland (and that provided rates for comparison). Definitions for Maryland’s Autism Waiver services are provided below and important points from the analysis are highlighted.

Residential Habilitation

Maryland defines residential habilitation services as community-based residential placements for children who cannot live at home because they require highly supervised and supportive environments. Placements provide a therapeutic living program of treatment, intervention, training, supportive care, and oversight. Services are designed to assist children in acquiring, retaining, and improving the self-help, socialization, and adaptive skills necessary to reside successfully in home and community-based settings. These services are offered at a regular or intensive level and reimbursed at one of two rates. The intensive level of service for the child involves awake overnight or one-on-one staffing.¹⁷

Only two other states—Maine and North Carolina—distinguish different levels of residential habilitation services. Maine defines its home support/residential habilitation service as medically necessary treatment designed to ameliorate or preserve functional abilities that have been negatively impacted by cognitive impairments. Treatment is focused on behavior modification and management, social development, and acquisition and retention of developmentally appropriate skills. The location of the service and staffing level may vary, allowing for a mix of individualized and group services.¹⁸ North Carolina’s residential support services provide assistance with acquisition, retention, or improvement in skills related to activities of daily living, and the social and adaptive skills necessary to enable the individual to reside in a non-institutional setting. The residential support service provides four different levels of service based on the level of the participant’s identified need for direct contact hours.¹⁹ Levels one and two were assumed to be most similar to Maryland’s regular level of service, and levels three and four were assumed to be most similar to Maryland’s intensive level of service.

¹⁷ From Maryland’s most recent waiver application

¹⁸ From Maine’s most recent waiver application

¹⁹ From North Carolina’s most recent wavier application



The three other states providing residential habilitation services—California, Delaware, and Indiana—did not distinguish different levels of service and were therefore assumed to provide the same as Maryland’s regular residential habilitation services, as there was no indication a higher level of service was being provided.

Respite Care

Maryland defines respite care as offering appropriate care and supervision to protect children’s safety in the absence of family members. Respite care services include assistance with daily living activities provided to children unable to care for themselves. In addition, respite offers relief to family members from the constantly demanding responsibility of providing care and attending to basic self-help needs and other activities. Respite care can be provided in the child’s place of residence, a community setting, a Youth Camp certified by DHMH, or a site licensed by the Developmental Disabilities Administration to accommodate individuals for respite care.

Nine other states offer respite care services: California, Connecticut, Idaho, Indiana, Kansas, Louisiana, Maine, Massachusetts, and North Carolina. The majority of the states offer respite in the home of the waiver participant or in a facility, as Maryland does. Exceptions are Louisiana, Kansas, and Massachusetts. Louisiana only offers center-based respite care on both of its waivers and Kansas specifies that respite is only offered in the home, after school, or at night. Massachusetts offers respite care in the home of the participant or the home of an individual care provider. Finally, Connecticut’s Home and Community Supports for Persons with Autism Waiver offers respite care, but doesn’t specify the location in the service definition.

Adult Life Planning

Maryland defines adult life planning (ALP) as transitional supports focused on shifting from the child-centered developmental model to an adult-oriented self-determination system of services and supports for the family. The service is focused on educating and supporting the family in accessing adult community resources on behalf of the participant. Information on community services, social services, and parks and recreation are provided. A plan is developed which incorporates self-determination, independence, choice, and community integration. An emphasis is placed on natural supports, self-direction, self-advocacy, and employment options.

There were no other states that provided this service under this name. Three states do offer similar services: Connecticut’s Home and Community Supports for Persons with Autism Waiver offers a life skills coach, Louisiana’s New Opportunities Waiver offers community integration and development, and North Carolina offers home and community supports. Connecticut’s life skills coach on the Home and Community Supports for Persons with Autism Waiver does focus on providing the individual with skills to be able live and work in the community, including basic consumer skills such as banking, budgeting, and shopping as well as how to access other community resources.. Louisiana’s community integration and development focuses on the



development of natural supports and how to become involved with the community. An emphasis is placed on working towards membership in civic, neighborhood, church, and leisure groups. Lastly, North Carolina's home and community supports include services that help a participant engage in various community activities of interest to them. Participants are supported in learning how to utilize transportation and how to manage their money. All of these services share the common goal of Maryland's adult life planning service—providing support and skills to help waiver participants actively participate in their communities as adults.

Environmental Accessibility Adaptations

Maryland defines environmental accessibility adaptations as physical adaptations to the home required by the child's plan of care which are necessary to ensure the health, welfare, and safety of the individual or which enable the child to function with greater independence in the home, and without which the child would require institutionalization.

Four other states provide this service: Indiana, Louisiana,²⁰ Maine, and North Carolina. The name of the service differs slightly for three of the states, but the service is the same—Indiana's service is environmental modifications, Maine's is home accessibility adaptations, and North Carolina's is home modifications.

Family Consultation

Maryland defines family consultation as training provided to the participant's family by a qualified licensed or certified professional to provide intensive one-on-one interventions with the participant. Family consultation may include instruction in the treatment regimens, behavior intervention, modeling, skills training, and use of equipment (including communication devices) specified in the participant's Autism Waiver plan of care. The family shall be provided with updates as necessary to maintain the participant living safely at home and shall be present to receive family consultation services.

The training to be provided:

- Shall be based on family-oriented goals to benefit the participant

- Shall be provided to one family at a time

- May not include advocacy regarding a participant's individualized education plan (IEP)

- May not include training and supervision of direct care workers

²⁰ Both of Louisiana's waivers offer this service, but only the New Opportunities Waiver provides a rate.



Six other states provide a similar service: Arkansas, Idaho, Indiana, Kansas, Massachusetts, and North Carolina. In five of the states (Arkansas is excluded), the name is very similar and the services provided appear to be the same. Idaho and Massachusetts both refer to the service as family training, while in Indiana it is family and caregiver training, and in Kansas it is parent support and training. North Carolina refers to the service as individual caregiver training and education.

In Arkansas the service is consultative clinical and therapeutic services, which are services to assist unpaid caregivers and paid support staff in carrying out the individual treatment plan. This service differs slightly from Maryland's in that it provides training to paid support staff.

Intensive Individual Support Services

In Maryland, intensive individual support services (IISS) provide intensive one-to-one assistance based on the child's need for interventions and support, as documented in the treatment plan.

Goal- and task-oriented, IISS is intended to:

- Prevent or defuse crises,
- Promote developmental and social skills growth
- Provide the child with behavior management skills
- Give a sense of security and safety to the child
- Assist the child with maintaining self-sufficiency and impulse control
- Improve the child's positive self-expression and interpersonal communication
- Improve the child's ability to function and cooperate in the home and community
- Reverse negative behaviors and attitudes
- Foster stabilization

These services use the home and community environment as a learning experience and as an opportunity to illustrate and model alternative ways of behaving for the child. This waiver service is for children ages one to two.

Seven other states provide similar services, although the name is different in all but one of the states (Kansas): Arkansas, Connecticut, Idaho, Indiana, Kansas, Massachusetts, and North Carolina. The service is not limited to one- and two-year-olds in any of the other states. The state closest to that requirement is Connecticut due to the Early Childhood Autism Waiver which only serves three- and four-year olds. The other states offer similar services to all individuals on the waivers.

Arkansas provides line therapy and Connecticut's Early Childhood Autism Wavier provides a life skills coach. Both are similar to Maryland's IISS in that the focus is the on-site



implementation of the treatment plan. Idaho offers habilitative intervention for individuals and Massachusetts offers expanded habilitation. In both cases the focus is on providing individuals with interventions to assist in improving social and communication skills minimizing problem behaviors. These services are consistent with Maryland's IISS because of the focus on an individual's behavioral, social, and communication issues and skills. Indiana offers behavioral supports and North Carolina offers a behavior consultant. Both of these services are similar to Maryland's IISS because of the focus on the minimization of problem behaviors. Finally, Kansas offers intensive individual support services which focus on assisting the child in acquiring, retaining, and improving social skills, communication skills, and appropriate behaviors, all of which are consistent with Maryland's service.

Therapeutic Integration

Maryland's therapeutic integration (TI) services are available as a structured program of therapeutic activities based on the child's need for intervention and support. TI services are based on the child's individualized treatment plan that identifies the goal of specific therapeutic activities provided. TI focuses heavily on expressive therapies and therapeutic recreational activities. Development of the child's communication and social skills, enhancement of self-esteem, improved peer interaction, and management of behavior are important components. A daily session is a minimum of two hours and a maximum of four hours for those children who are identified as needing a therapeutic program in their waiver plan of care. The services are provided at a location outside of the child's home.

The child's TI program shall include socialization groups and one or more of the following expressive therapies as appropriate: art therapy, music therapy, dance therapy, and activity therapy. Individual or group counseling as well as activities for building self-esteem may also be included.

Seven other states provide a similar type of service: Connecticut, Delaware, Idaho, Indiana, Louisiana, Massachusetts and North Carolina. The name is not the same in any of the states; however, in Delaware, Idaho, Massachusetts, and North Carolina respectively it is referred to as a day habilitation program, habilitative supports program, habilitation/community integration, or day supports. Connecticut has a social skills group service, while both Indiana and Louisiana²¹ offer different types of therapy including music, art, and recreation. It is important to note that if the service offered is just an expressive therapy such as music or art the service time is one hour, while Maryland's TI service must be offered for a minimum of two hours.

²¹ Louisiana's New Opportunities Waiver offers day habilitation, but it is only offered to those 18 and over, so was not included as a comparable service.



Services in other states were considered similar if they were provided outside of the home, focused on socialization and behavior management, and offered any of the expressive therapies noted by Maryland. Connecticut's Home and Community Supports for Persons with Autism Waiver has a social skills group service, so this service was used as a comparison. Delaware's day habilitation, Idaho's habilitative supports, Massachusetts's habilitation/community integration,²² and North Carolina's day supports all focus on community integration and providing support for activities outside of the home to ensure improved socialization skills. Indiana²³ offers recreational and music therapy. Recreational therapy includes organizing and adapting different sports, dramatics, arts and crafts, and other social activities to help rehabilitate the individual. It is important to note this is still consistent with Maryland's TI service because the focus of recreational therapy is to rehabilitate the individual. Indiana's music therapy is designed to improve the individual's communication skills, reduce problem behaviors, and enhance emotional expression and adjustment, which are consistent with the intent of Maryland's TI service. Finally, Louisiana's Children's Choice Wavier offers art and music therapy, which are both noted as expressive therapies offered under Maryland's TI service.

²² Massachusetts's habilitation/community integration may be provided outside of the home or in the home.

²³ Indiana does also offer a facility-based habilitation service, but its recreation and music therapies are closer fits to Maryland's TI service and are therefore the focus here.



Table 2. Summary of Services by Eleven Comparison States²⁴

State	Regular Residential Habilitation	Intensive Residential Habilitation	Respite Care	Adult life Planning	Environmental Accessibility Adaptations	Family Consultation	Intensive Individual Support Services	Therapeutic Integration
Arkansas						Yes Consultative clinical and therapeutic services	Yes Line Therapy	
California	Yes Community living arrangements		Yes					
Connecticut			Yes ²⁵	Yes Life skills coach ²⁶			Yes Life skills coach ²⁷	Yes Social skills group ²⁸
Delaware	Yes Residential habilitation							Yes Day habilitation

²⁴ Services are only included if the rates were available

²⁵ Connecticut’s Home and Community Supports for Persons with Autism

²⁶ Connecticut’s Home and Community Supports for Persons with Autism

²⁷ Connecticut’s Early Childhood Autism Waiver

²⁸ Connecticut’s Home and Community Supports for Persons with Autism



State	Regular Residential Habilitation	Intensive Residential Habilitation	Respite Care	Adult life Planning	Environmental Accessibility Adaptations	Family Consultation	Intensive Individual Support Services	Therapeutic Integration
Idaho			Yes			Yes Family training	Yes Habilitative intervention (individuals)	Yes Habilitative supports (individual or group)
Indiana	Yes Residential habilitation & supports		Yes		Yes Environmental modifications	Yes Family & caregiver training	Yes Behavioral support services	Yes Recreational & Music therapy
Kansas			Yes			Yes Parent support & training	Yes	
Louisiana			Yes Center-based respite ²⁹	Yes Community integration & development ³⁰	Yes ³¹			Yes Art & music therapy ³²

²⁹ On Louisiana’s Children’s Choice and New Opportunities Waiver

³⁰ Louisiana’s New Opportunities Waiver

³¹ Louisiana’s New Opportunities Waiver provides a rate for this service. The Children’s Choice Waiver also has this service, but no limit is set.

³² Louisiana’s Children’s Choice Waiver



State	Regular Residential Habilitation	Intensive Residential Habilitation	Respite Care	Adult life Planning	Environmental Accessibility Adaptations	Family Consultation	Intensive Individual Support Services	Therapeutic Integration
Maine	Yes Home support/residential	Yes Home support/residential	Yes		Yes Home accessibility adaptations			
Massachusetts			Yes			Yes Family training	Yes Expanded habilitation	Yes Habilitation community integration
North Carolina	Yes Residential supports/levels one and two	Yes Residential supports/levels three and four	Yes	Yes Home and community supports	Yes Home modifications	Yes Individual caregiver training & education	Yes Behavior consultant	Yes Day supports
Total Services	5	2	9	3	4	6	7	7



Findings

Regular Residential Habilitation

The average rate of the services was \$271.37/day, with Maryland's rate being \$196.78/day, which is a difference of 31.9 percent. Of the five comparison states, only North Carolina was below Maryland, with a rate of \$103.62/day. Four other states had higher rates than Maryland: Indiana, Delaware, Maine, and California (in that order). The range in daily rates was \$383.58, with California having the highest daily rate of \$487.20/day. California's rate may be higher due to registered nurses being able to provide the service.

Intensive Residential Habilitation

Only two other states indicated an intensive level of residential services similar to Maryland, North Carolina and Maine. Maryland fell in the middle of these two states, at \$393.58/day. North Carolina had the lowest fee at \$150.73/day, while Maine had the highest rate of \$502.79/day. The range in the fees was \$352.07. The average rate of the services was \$349.03/day, which is a 16.4 percent difference from Maryland's rate.

Respite Care

Nine other states provided respite care services. Five states had rates lower than Maryland: Idaho, Louisiana, Kansas, Maine, and Massachusetts. Four states—Indiana, North Carolina, California, and Connecticut—had higher rates, placing Maryland roughly in the middle. The average rate was \$18.94/hour, with a range of \$14.67. Maryland's rate was \$23.30, which is a 20.6 percent difference from the average rate.

Adult Life Planning

Maryland had the highest rate for this service, at \$97.90/hour. Three other states had similar services: Louisiana, North Carolina, and Connecticut. The average rate was \$25.22/hour, with a range of \$84.66. The state with the lowest rate was Louisiana for its community integration and development service on its New Opportunities Waiver, which was \$13.24/hour. North Carolina's home and community supports had a fee of \$20.96/hour, followed by Connecticut's life skills coach on its Home and Community Supports for Persons with Autism Waiver, which was \$41.46/hour.

There is a 118.1 percent difference between Maryland's rate and the average rate, which may be due to no other state having this exact same service, so the comparison rates are for services that are close to ALP but are not precisely the same. For instance, ALP is not skills training, and the intervention is more than life skills coaching according to the Maryland State Department of Education (MSDE). Maryland's ALP is intended to prepare families for issues concerning



guardianship, power of attorney, federal entitlements, and accessing the state's adult service delivery system. Maryland does not provide direct training to participants on money management, transportation, etc.

As such, ALP is a highly specialized service requiring a level of expertise in a variety of areas, including planning for health care, transitioning to independent living, career readiness, and providing assistance regarding community resources and federal entitlements. MSDE has noted that this is a very limited and focused service provided by highly qualified professionals. Providers must have a master's degree in a human service field with experience in the adult service delivery system in Maryland. The service is limited to 15 hours per year and only offered to participants who are 16-21 years of age.

Environmental Accessibility Adaptations

Four other states provided this service, but only three of them provided rates that could be used for the comparison: Maine, Louisiana, and North Carolina. Because Indiana provided a lifetime cap of \$15,000.00 and a yearly maintenance fee of \$500.00, it was not possible to compare it with the other states.

That being said, the average rate was \$2,075.00/year. Maryland was below this with the lowest rate of \$666.67/year (\$2,000.00 over three years), which was a 102.7 percent difference from the average. Maine, Louisiana, and North Carolina were all very close in their fees at \$2,300.00/year, \$2,333.33/year, and \$3,000.00/year respectively. The range in fees was \$1,408.33/year.

Family Consultation

Six other states provided this service: Kansas, North Carolina, Massachusetts, Idaho, Arkansas, and Indiana. However, only five can be used for comparison because the sixth state, Indiana, provided a yearly maximum which could not be adjusted to an hourly rate for comparison purposes. Of the remaining five states, four have titled the service almost the same as Maryland. The exception is Arkansas, which calls it consultative clinical and therapeutic services, and reimburses for training paid staff in addition to the family, while the other states, including Maryland, only provide this service to family members or caregivers.

Four states had rates lower than Maryland's rate of \$97.90/hour: Kansas, North Carolina, Massachusetts, and Idaho. One state, Arkansas, was higher than Maryland, with a rate of \$104.40/hour. This may be because Arkansas provides this service to families and paid staff as noted above. The average rate for family consultation was \$57.11/hour, which when compared to Maryland's rate, is a difference of 52.6 percent.

The difference in rates may be due to Maryland's family consultation providers being charged with developing a professionally recognized treatment plan for families to implement in the



home regarding toilet training, applied behavior analysis, and nonverbal communication techniques that include augmentative communication.

Family consultation professionals may be licensed psychologists, board-certified behavior analysts, or speech therapists. Providers must have a master's or doctorate degree, as well as five years of experience working with children who have autism as stated in the Code of Maryland Regulations (COMAR) 10.09.56.17 and Maryland's Autism Waiver application. This service requires a higher level of skill to help children and adolescents with autism and their families to reduce social problems and serious behavior disorders. MSDE has stressed that the providers work closely with parents, providing vital support and training that will help them manage stress and reinforce the skills necessary for continued progress and growth.

Intensive Individual Support Services

Seven other states provided similar services: Arkansas, Kansas, Indiana, Connecticut, Idaho, Massachusetts, and North Carolina. Kansas is the only state that calls its service by the same name as Maryland.

The average rate of service was \$45.46/hour. Maryland's rate was \$29.82/hour, with two states having lower rates, Arkansas for its line therapy and Kansas for its intensive individual supports services. The other five states all had higher rates than Maryland; Indiana, Connecticut, Idaho, Massachusetts, and North Carolina for their similar services. The range in rates was \$69.08. North Carolina had the highest rate at \$87.08/hour, which may be due to it being a behavioral consultant service, which while IISS does focus on behavior management, it is not the sole focus of the service in Maryland. The difference between Maryland's rate and the average rate was 41.6 percent.

Therapeutic Integration

The average rate for this service was \$30.80/hour. Seven other states provided a similar service to this: Idaho, North Carolina, Connecticut, Delaware, Massachusetts, Indiana, and Louisiana. Maryland's rate was \$23.84/hour which was a 25.5 percent difference from the average rate for the service. One state had a rate lower than Maryland, Idaho's habilitative supports at \$14.32/hour.

Five other states had rates higher than Maryland: North Carolina, Connecticut, Delaware, Massachusetts, Indiana, and Louisiana. Of these states, it is important to note that North Carolina, Connecticut, and Delaware were within \$1.01/hour of Maryland's rate. The other two states, Indiana and Louisiana, provided rates for specific therapies, which may explain their higher rates of \$43.12/hour and \$55.00/hour respectively.



Conclusion

Of the seven services that are the focus of Maryland’s Autism Waiver, Maryland’s rates appear comparable to similar services in other states. There were two services for which Maryland fell at either extreme: adult life planning and environmental accessibility adaptations. Maryland had the highest rate for adult life planning, but this may have been because this service was novel to Maryland and the services that were used for comparison were more varied than they appeared in their service definitions. Maryland did have the lowest rate for environmental accessibility adaptations, but these services did all appear to be defined the same way.

Rate Tables

Table 3 shows the regular residential habilitation rate comparison. Table 4 shows the intensive residential habilitation rate comparison. Table 5 shows the respite care rate comparison. Table 6 shows the adult life planning comparison. Table 7 shows the environmental accessibility adaptations comparison. Table 8 shows the family consultation comparison. Table 9 shows the intensive individual supports services comparison. Table 10 shows the therapeutic integration comparison.

Table 3. Autism Waiver Service Comparison: Regular Residential Habilitation³³

State	Regular Residential Habilitation Rate	Alternate Name of Service (if different from Maryland’s)	Daily Service Rate (Day = 12 hours)
North Carolina	\$84.78/day level 1 \$22.46/day level 2	Residential Supports	\$103.62
Maryland	\$191.99/day		\$196.78
Indiana	\$23.70/hr (less than 35 hrs a week) \$19.91/hr (more than 35 hrs a week)	Residential Habilitation and Support	\$261.66
Delaware	\$22.06/hr - large agency \$22.31/hr - medium agency \$22.84/hr - small agency \$22.84/hr - specialized \$22.06/hr - apartment/CLA		\$269.06
Maine	\$265.83/day (family) \$353.91/day (agency)	Home Support/Residential Habilitation	\$309.87

³³ All rates were converted to a base hourly rate and then a daily rate was calculated; when multiple rates were given, an average of the rates was used.



State	Regular Residential Habilitation Rate	Alternate Name of Service (if different from Maryland's)	Daily Service Rate (Day = 12 hours)
California	\$11.36/15 min (Home Health Agency (HHA)/Registered Nurse (RN), professional corporation; non-profit proprietary agency) \$8.94/15 min (HCBS RN; HCBS benefit provider)		\$487.20
Average			\$271.37

Table 4. Autism Waiver Service Comparison: Intensive Residential Habilitation³⁴

State	Intensive Residential Habilitation Rate	Alternate Name of Service (if different from Maryland)	Daily Service Rate (Day = 12 hours)
North Carolina	\$141.31/day level 3 \$160.14/day level 4	Residential Supports	\$150.73
Maryland	\$383.98/day		\$393.58
Maine	\$502.79/day (family increased level of support)	Home Support/Residential Habilitation	\$502.79
Average			\$349.03

Table 5. Autism Wavier Service Comparison: Respite Care³⁵

State	Respite Care Rate	Alternate Name of Service (if different from Maryland's)	Hourly Service Rate
Idaho	\$3.36/15 min (\$6.92/30 min) (individual) \$2.05/15 min (\$4.10/30 min) (independent respite provider)		\$10.82
Louisiana	\$2.57/15 min - Children's Choice Waiver \$3.19/15 min - New Opportunities Waiver	Center Based Respite	\$11.52
Kansas	\$12.00/hr		\$12.00

³⁴ When multiple rates were given, an average of the rates was used.

³⁵ All rates were converted to an hourly rate; when multiple rates were given, an average of the rates was used.



State	Respite Care Rate	Alternate Name of Service (if different from Maryland's)	Hourly Service Rate
Maine	\$3.00/15 min or \$90.00/day		\$12.00
Massachusetts	\$25.00/hr (Agency) \$18.00/hr (individual rate)		\$21.50
Maryland	\$11.65/30 min		\$23.30
Indiana	\$23.70/hr	Respite Services	\$23.70
North Carolina	\$3.47/15 min (non-institutional care) \$8.64/15 min (licensed practical nurse (LPN)/RN care)		\$24.22
California ³⁶	\$10.14/ 15 min - home health aide \$7.35/15 min - home health aide \$4.72/15 min/home health aide \$7.98/15 min/ HCBS RN \$6.10/15 min/HCBS licensed vocational nurse (LVN) \$3.62/15 min/personal care agency \$3.82/15 min/employment agency		\$24.87
Connecticut	\$24.92/hr or \$299.000/day - in home respite \$26.05/hr or \$326.00/day - out of home respite		\$25.49
Average			\$18.94

Table 6. Autism Waiver Service Comparison: Adult Life Planning³⁷

State	Adult Life Planning Rate	Alternate Name of Service (if different from Maryland)	Hourly Service Rate
Louisiana	\$3.31/15 min - individual ³⁸	Community Integration and Development - New Opportunities Waiver	\$13.24

³⁶ It was noted that rates are for out of home.

³⁷ All rates were converted to an hourly rate; when multiple rates were given, an average of the rates was used.

³⁸ Rates for two and three clients not used since this service is specific to an individual and their family in Maryland.



State	Adult Life Planning Rate	Alternate Name of Service (if different from Maryland)	Hourly Service Rate
North Carolina	\$5.24/15 min - individual ³⁹	Home and Community Supports	\$20.96
Connecticut	\$46.38/hr - agency \$36.53/hr - direct hire	Life Skills Coach - Home and Community Supports for Persons with Autism Waiver	\$41.46
Maryland	\$48.95/30 min		\$97.90
Average			\$25.22

Table 7. Autism Waiver Service Comparison: Environmental Accessibility Adaptations⁴⁰

State	Environmental Accessibility Adaptations Rate	Alternate Name of Service (if different from Maryland)	Yearly Amount Allowed
Maryland	\$2,000.00 over three years		\$666.67
Maine	\$10,000.00 over five years and up to an additional \$300.00/year for repairs	Home Accessibility Adaptations	\$2,300.00
Louisiana	\$7,000.00 over three years ⁴¹		\$2,333.33
North Carolina	\$15,000.00 max per five years	Home Modifications	\$3,000.00
Indiana	\$15,000.00 max lifetime plus \$500.00/year maintain	Environmental Modifications	\$15,000.00 lifetime +\$500.00/year to maintain ⁴²
Average			\$2,075.00⁴³

³⁹ Rates for two and three clients not used since this service is specific to an individual and their family in Maryland.

⁴⁰ Rates converted to an estimated yearly amount based on cap for specific time period.

⁴¹ Once recipient reaches 90 percent or greater of the cap and the account has been dormant for three years, recipient may access another \$7,000. This cap only applies to the New Opportunities Waiver; the Children's Choice Waiver has this service but there is no cap.

⁴² No yearly breakdown due to lifetime maximum being given.

⁴³ Indiana not included in average due to no yearly amount.



Table 8. Autism Waiver Service Comparison: Family Consultation⁴⁴

State	Family Consultation Rate	Alternate Name of Service (if different from Maryland)	Hourly Service Rate
Kansas ⁴⁵	\$25.00/hr (individual rate)	Parent Support and Training	\$25.00
North Carolina	\$8.36/15 min	Individual Caregiver Training and Education	\$33.44
Massachusetts	\$48.00/hr (agency) \$25.00/hr (individual)	Family Training	\$36.50
Idaho	\$11.35/15 min	Family Training	\$45.40
Maryland	\$48.95/30 min		\$97.90
Arkansas	\$26.10/15 min	Consultative Clinical and Therapeutic Services	\$104.40
Indiana ⁴⁶	\$2,000/year	Family and Caregiver Training	
Average			\$57.11⁴⁷

⁴⁴ All rates were converted to an hourly rate; when multiple rates were given, an average of the rates was used.

⁴⁵ Group rate not used since this service is specific to an individual's family in Maryland.

⁴⁶ No hourly breakdown because only a yearly cap was provided.

⁴⁷ Indiana not included in average because of yearly rate provided.



Table 9. Autism Waiver Service Comparison: Intensive Individual Supports Services⁴⁸

State	Intensive Individual Supports Services/Day Habilitation	Alternate Name of Service (if different from Maryland)	Hourly Service Rate
Arkansas	\$4.50/15 min	Line Therapy	\$18.00
Kansas	\$25.00/hr		\$25.00
Maryland	\$14.91/30 min		\$29.82
Indiana	\$18.20/30 min	Behavioral Support Services	\$36.40
Connecticut ⁴⁹	\$46.38/hr - agency \$36.53/hr - direct hire	Life Skills Coach	\$41.46
Idaho	\$11.35/15 min	Habilitative Intervention (individual)	\$45.40
Massachusetts	\$125/hr (up to for Agency, senior level therapist) \$110/hr (up to for individual, senior level therapist) \$100/hr (up to for Agency, therapist level) \$75/hr (up to for individual, therapist level) \$48/hr (up to for Agency, direct support staff) \$25/hr (up to for individual, direct support staff)	Expanded habilitation, education	\$80.50
North Carolina	\$18.23/15 min - level 2 \$25.31/15 min - level 3	Behavioral Consultant	\$87.08
Average			\$45.46

⁴⁸ All rates were converted to an hourly rate; when multiple rates were given, an average of the rates was used.

⁴⁹ Connecticut's life skills coach on their Early Autism Waiver for three- and four-year-olds.



Table 10. Autism Waiver Service Comparison: Therapeutic Integration/Day Habilitation⁵⁰

State	Therapeutic Integration/Day Habilitation	Alternate Name of Service (if different from Maryland)	Hourly Service Rate
Idaho	\$2.14/15 min - group \$5.01/15 min - individual	Habilitative Supports	\$14.32
Maryland	\$11.93/30 min		\$23.84
North Carolina	\$6.01/15 min - individual \$3.57/15 min - 2 or more clients	Day Supports	\$24.04
Connecticut ⁵¹	\$30.92/person (each session has 4 to 6 individuals, session is 1.25 hours)	Social Skills Groups	\$24.74
Delaware	\$24.85/hr or \$6.21/15 min (facility based)	Day Habilitation	\$24.85
Massachusetts	\$48.00/hr - agency \$25.00/hr -individual	Habilitation, Community Integration	\$36.50
Indiana	\$10.78/15 min recreational therapy \$10.78/15 min - music therapy	Music Therapy & Recreational Therapy	\$43.12
Louisiana ⁵²	\$13.75/15 min - art therapy \$13.75 15 min - music therapy	Art Therapy & Music Therapy	\$55.00
Average			\$30.80

⁵⁰ All rates were converted to an hourly rate; when multiple rates were given, an average of the rates was used.

⁵¹ An hourly rate for one individual is presented. This is on the Home and Community Supports for Persons with Autism Waiver.

⁵² On Louisiana's Children's Choice Waiver.





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