Autism Navigator

(FY2019 Appropriation Bill - Public Act 207 of 2018)

September 30, 2019

- **Sec. 1920.** (1) From the funds appropriated in part 1 for autism navigator, the department shall require any contractor receiving funds from this line item to comply with performance-related metrics to maintain eligibility for funding. The organizational metrics shall include, but not be limited to, all of the following:
- (a) Each contractor shall have accreditations that attest to their competency and effectiveness in providing services.
 - (b) Each contractor shall demonstrate cost-effectiveness.
- (c) Each contractor shall ensure their ability to leverage private dollars to strengthen and maximize service provision.
- (d) Each contractor shall provide quarterly reports to the department regarding the number of clients served, units of service provision, and ability to meet their stated goals.
- (2) The department shall require an annual report from any contractor receiving funding from the autism navigator line item. The annual report, due to the department 60 days following the end of the contract period, shall include specific information on services and programs provided, the client base to which the services and programs were provided, and the expenditures for those services. The department shall provide the annual reports to the senate and house appropriations subcommittees on the department budget, the senate and house fiscal agencies, and the state budget office.
- (3) From the funds appropriated in part 1 for autism navigator, the department shall fund an independent evaluation of the services provided by contractors paid from the autism navigator line item in fiscal year 2017-2018. This evaluation, which shall examine cost effectiveness of services, avoidance of duplication of services, and outcomes, shall be completed by June 1 of the current fiscal year and shall be provided to the senate and house appropriations subcommittees on the department budget, the senate and house fiscal agencies, and the state budget office.



Section 1920(2) of PA 207 of 2018

The Department of Health and Human Services issued a grant agreement to the Autism Alliance of Michigan (AAoM) to execute the requirements of Section 1920(2) of PA 207 of 2018. The contents of the report are found in three attachments: Attachment A: AAoM Fiscal Year 2019 State Grant Final Program Report, Attachment B: Supplemental Project, and Attachment C: Final Expenditures.

AAOM FY19 State Grant Final Program Report

<u>Objective #1</u> - Autism Navigator - Autism Support Services program support provided across the lifespan and in all ten (10) Prosperity Regions of Michigan reaching 2,000 families in one year.

FY19 (All Four Quarters: 10/1/18 - 9/30/19)

- 2643 new contact/families across all ten (10) Michigan Prosperity Regions
 - ➤ Closed/Resolved 1310
 - Open/Ongoing 1220
 - Closed/Unresolved 113
 - Closed/Unresolved (Family Contact Unavailable) 100
 - Failed three-attempt protocol
 - Closed/Unresolved (Resource Unavailable) 4
 - Closed/Unresolved (Other) 6
 - Closed/Unresolved (Unable to Continue Legal/Policy) 3

Quarter #1 (10/1/18 – 12/31/18)

- 600 new contact/families
 - Closed/Resolved 258
 - ➤ Open/Ongoing 337
 - ➤ Closed/Unresolved 5
 - Closed/Unresolved (Family Contact Unavailable) 5
 - Failed three-attempt protocol

Quarter #2 (1/1/2019 - 3/31/2019)

- 670 new contact/families
 - ➤ Closed/Resolved 325
 - Open/Ongoing 318
 - ➤ Closed/Unresolved 27
 - Closed/Unresolved (Family Contact Unavailable) 25
 - Failed three-attempt protocol
 - Closed/Unresolved (Resource Unavailable) 2

Quarter #3 (4/1/2019 - 6/30/2019)

- 713 new contact/families
 - ➤ Closed/Resolved 322
 - ➤ Open/Ongoing 356
 - Closed/Unresolved 35
 - Closed/Unresolved (Family Contact Unavailable) 27

- Failed three-attempt protocol
- Closed/Unresolved (Resource Unavailable) 1
- Closed/Unresolved (Other) 4
- Closed/Unresolved (Unable to Continue Legal/Policy) 3

Quarter #4 (7/1/2019 - 9/30/2019)

- 660 new contact/families
 - ➤ Closed/Resolved 405
 - ➤ Open/Ongoing 209
 - ➤ Closed/Unresolved 46
 - Closed/Unresolved (Family Contact Unavailable) 43
 - Failed three-attempt protocol
 - Closed/Unresolved (Resource Unavailable) 1
 - Closed/Unresolved (Other) 2

<u>Objective #2</u> - Collaborate with providers and agencies to create a monthly statewide newsletter to disseminate across the state of Michigan.

Twelve (12) newsletters were distributed during FY19 (10/1/2018 - 9/30/2019).

- October 2018 Insurance Special Edition Open Enrollment, Autism Insurance Benefit Overview and Child-Only Policies
- November 2018 Selecting College Programs for Students with Disabilities

 Parents' Role in the College Search, Advice/Tips for Student Success,
 Considerations for both Students and Parents During the College Transition
- 3. **December 2018** Deconstructing the term "Ausomizm/Awesomism/Ausomism", its history and what it means to the Autism Community; introducing "Chalk Wild", which is a new product offering "Portable Art Therapy and Art Gallery" in an interactive backpack; introducing "Happy to be an Aspie", a children's book written by a mother/daughter team that share their experiences with autism.
- January 2019 Human Trafficking and Disabilities Prevalence in Michigan, Notable Examples and Recommendations to Combat Human Trafficking Pertaining to those with Disabilities
- 5. **February 2019 ADHD, Autism or Both? -** How Autism and ADHD Can Look Similar, Autism and ADHD Comparison Chart and Strategies for Students with ADHD in the School Setting

- 6. March 2019 Protecting The Vulnerable: Justice For Allie Special Edition A personal account by the mom of Alexandra Hope, who was taken advantage of online by an internet sex predator; *Call To Action in support of House Bill 4076*; and *A.W.A.R.E. Tips for Caregivers*.
- 7. April 2019 A Warm Welcome to the Library AAoM Interviews Jen Taggart, Assistant Department Head, of Youth Services with the Bloomfield Township Public Library, about (1) the library's efforts to include children with special needs, (2) what children with autism or other special needs seem to enjoy most when engaging with library materials and (3) how to keep the attention of children by incorporation more technology and electronic options; *Developing Early Literacy Skills in Children with ASD* explains how to visit early literacy skills and suggests activities to promote literacy as well as apps and websites for literacy.
- 8. May 2019 Mother's Day Edition Just for Me provides an introduction to the Just For Me Social Club as well as a profile of the mom that founded the club for her daughter and others on the spectrum; *Mom-to-Mom Insights* offering helpful tips from AAoM staff and board members who are honored to be mothers of individuals with disabilities; and *Authentic Voices* in which several adults with ASD have offered their thoughts and messages to their own moms as well as others raising and/or supporting loved ones with ASD.
- 9. June 2019 Father's Day Edition Finding Our Balance An introspective look by a dad into his relationship and handling of his young son with autism and how to balance his hopes and expectations as a dad to best support the special needs of his son; *Dad-to-Dad Insights* offering helpful tips from AAoM staff and board members who are honored to be fathers of individuals with disabilities.
- 10. July 2019 Swimming Safety & Wandering Safety are discussed in this issue, including helpful tips to keep kids safe, especially during the summer months when they are home from school.
- 11. August 2019 Aging Autism Caregivers A research-based as well as a personal introspective look at elderly parents in their roles as caregivers for their adult children with autism; *Health and Aging with Autism* A look at medical and psychiatric comorbidities in adults with autism and how to address it.
- 12. September 2019 Are IQ Tests Really Useful When Evaluating a Child with Autism? Analyzing the validity of standardized testing on children with autism; tips on *Preparing your Child for a Psychological Assessment in School*.

<u>Objective #3</u> - Participate in Autism Collaborative Meetings as one of the lead agencies in conjunction with the Michigan Department of Health and Human Services, Michigan Department of Education, Michigan Department of Insurance/Financial Services and Michigan Rehabilitation Services.

FY19 (All Four Quarters: 10/1/18 – 9/30/19)

- One (1) official Autism Collaborative Committee Meeting held
- Five (5) other relevant meetings held

Quarter #1 – (10/1/18 – 12/31/18)

One (1) meeting was scheduled this quarter.

> Attended the meeting on December 11, 2018.

Quarter #2 - (1/1/19 - 3/31/19)

No (0) actual Autism Collaborative Committee meetings were scheduled this quarter, but two (2) meetings were held with MDHHS this quarter.

- ➤ February 15, 2019 Autism Services Legislative Workshop w/MDHHS
- ➤ March 14, 2019 AAoM/MDHHS meeting regarding the MiNavigator grant

Quarter #3 - (4/1/19 - 6/30/19)

No (0) Autism Collaborative Committee meetings were scheduled by the department this quarter.

- Michigan Autism Insurance Council met on June 13, 2019; this meeting including members of the Autism Collaborative Committee.
- Attended two (2) Michigan Autism Council meetings on April 26, 2019 and June 28, 2019.

Quarter #4 - (7/1/19 - 9/30/19)

No (0) Autism Collaborative Committee meetings were scheduled by the department this quarter.

Attended Michigan Autism Council Meeting on August 23, 2019; this meeting including members of the Autism Collaborative Committee.

<u>Objective #4</u> – Provide ten (10) Michigan Autism Safety Trainings statewide to First Responders.

FY19 (All Four Quarters: 10/1/18 – 9/30/19)

There were sixty-two (62) total first responder safety trainings conducted in FY19.

- > Fire 1
- ➤ Medical 3

- Other 1
- ➤ Police 28
- > Transportation 29

Quarter #1 - (1/1/2019 - 3/31/2019)

Twenty (20) safety trainings were conducted during the first quarter.

- Police 1
- > Transportation 19

Quarter #2 - (1/1/2019 - 3/31/2019)

Nine (9) safety trainings were conducted during the second quarter.

- ➤ Police 3
- > Transportation 6

Quarter #3 - (4/1/2019 - 6/30/2019)

Nineteen (19) safety trainings were conducted during the third quarter.

- Fire 1
- Police 14
- > Transportation 4

Quarter #4 - (7/1/2019 - 9/30/2019)

Fourteen (14) safety trainings were conducted during the fourth quarter.

- Medical 3
- > Other 1
- > Police 10

<u>Objective #5</u> - Increase knowledge and collaboration of families and service providers to increase care and quality of life by providing 40 Outreach Educational Trainings to the Parent and Provider communities regarding Autism Topics.

FY19 (All Four Quarters: 10/1/18 - 9/30/19)

There were forty (40) total educational outreach trainings conducted in FY19.

- > 7 Adult Autism Support
- 1 Advocate Caregiver Training
- ➤ 8 Autism 101
- ➤ 1 Autism Education

- ➤ 1 Becoming a Teacher for Autistic Children
- ➤ 1 Bullying & ASD
- ➤ 1 Clinical Advocacy
- ➤ 1 Comorbidities of Autism
- ➤ 1 Deep Dive into the ASD Diagnosis
- ≥ 2 ECDD
- ➤ 1 Family Practice Physician & Primary Care Setting Training
- ➤ 1 Foster Parent/Special Education
- ≥ 2 Insurance
- ➤ 1 Insurance How to Fight Denial
- > 3 Intellectual Disabilities
- ➤ 1 MiNavigator Program
- 2 Neurodiversity in the Workplace
- ➤ 1 School/Education
- ➤ 1 Sensory Friendly Training
- 1 Speech & Language Pathology
- 1 Treating Young Adults With Autism What Should We Know?
- ➤ 1 Understanding Home and Community Based Services Using Supports for Community Inclusion

Quarter #1 - (10/1/2018 - 12/31/2018)

Eight (8) training sessions were conducted during the first quarter.

- > 2 Autism 101
- ➤ 1 Bullying & ASD
- ≥ 2 ECDD
- ➤ 1 Insurance
- ➤ 1 MiNavigator Program
- ➤ 1 School/Education

Quarter #2 - (1/1/2019 - 3/31/2019)

Thirteen (13) training sessions were conducted during the second guarter.

- ➤ 1 Adult Autism Support
- > 2 Autism 101
- ➤ 1 Clinical Advocacy
- ➤ 1 Deep Dive into the ASD Diagnosis
- 1 Family Practice Physician & Primary Care Setting Training
- ▶ 1 Insurance How to Fight Denial
- > 3 Intellectual Disabilities
- 1 Sensory Friendly Training
- ➤ 1 Speech & Language Pathology
- 1 Understanding Home and Community Based Services Using Supports for Community Inclusion

Quarter #3 - (4/1/2019 - 6/30/2019)

Twelve (12) training sessions were conducted during the second quarter.

- > 3 Adult Autism Support
- > 1 Advocate/Caregiver Training
- > 2 Autism 101
- > 1 Becoming a Teacher for Autistic Children
- > 1 Comorbidities of Autism
- ➤ 1 Insurance
- 2 Neurodiversity in the Workplace
- ➤ 1 Treating Young Adults With Autism What Should We Know?

Quarter #4 - (7/1/2019 - 9/30/2019)

Eight (7) training sessions were conducted during the second quarter.

- ➤ 3 Adult Autism Support
- ➤ 2 Autism 101
- ➤ 1 Autism Education
- ➤ 1 Foster Parent/Special Education

<u>Objective #6</u>: Supplemental Project include 3 Objectives: Please see attached report already submitted to DHHS.

Supplemental Review of Applied Behavior Analysis Benefit: Diagnostic Process

LEGISLATIVE ABA BENEFIT ANALYSIS: DIAGNOSTIC PROCESS
PREPARED BY THE AUTISM ALLIANCE OF MICHIGAN WITH SUPPORT
FROM MICHIGAN STATE UNIVERSITY & JANESSA H. MANNING, PHD

Table of Contents

| What is Autism? | 2 |
|---|----|
| Michigan Medicaid Autism Applied Behavior Analysis (ABA) Benefit | 2 |
| Overview of the Supplemental Appropriations Grant | 2 |
| Data Collection & Analysis Methods | 3 |
| Michigan ABA Benefit Diagnostic Findings. | 4 |
| Regional Diagnostic Rates | 4 |
| Autism Spectrum Disorder (ASD) evaluations & eligibility for Applied Behavior | |
| Analysis (ABA) services prevalence based upon age at evaluation | 5 |
| Therapeutic Recommendations based upon Diagnosis | 5 |
| Additional WSA Database Findings | 6 |
| Detailed Diagnostic Chart review | 7 |
| State Benchmarking Findings. | 8 |
| Recommendations. | 8 |
| References | 10 |

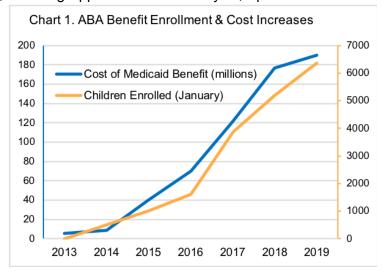
What is Autism?

Autism and Autism Spectrum Disorder (ASD) is a disability of social communication that impacts 1 in 59 children¹. Symptoms range in severity from mild to severe and are present from birth or early childhood. Males are four times more likely to have Autism or ASD than females. The Diagnostic and Statistical Manual of Mental Disorders 5, used for identifying and differentiating psychiatric disorders, does not differentiate between Autism and ASD. However, the Autism Diagnostic Observation Schedule™, the behavioral test required by Michigan during diagnostic testing, differentiates between Autism with more and ASD with fewer autistic symptoms (Appendix A). While there is no cure for Autism or ASD, efficacious treatments exist, including Applied Behavior Analysis, Speech and

Occupational Therapies, and Social Skills training. These high-quality treatments have the potential to improve outcomes, especially when children are identified early, and therapies are started quickly.

Michigan Medicaid Autism Applied Behavior Analysis (ABA) Benefit

The Early and Periodic Screening, Diagnostic and Treatment (EPSDT) benefit provides comprehensive and preventive health care services for children under age 21 who are enrolled in Medicaid^{2,3}. In 2013



the Michigan Department of Community Health (now Department of Health and Human Services (DHHS) established the Applied Behavior Analysis (ABA) benefit with two major components: 1) diagnostic services to determine whether an individual has Autism or ASD through thorough and comprehensive evaluation, and 2) therapeutic services including Applied Behavior Analysis (ABA) to qualifying individuals. Now covering individuals under age 21 (MSA 15-59), the benefit provides coverage for diagnosis and behavioral health services for Medicaid beneficiaries with Autism or ASD. The cost of the ABA benefit has increased substantially since its inception, given greater enrollment of qualified children (Chart 1.)

Prior to FY2016 the benefit provided evaluation and therapeutic services to children under age 6. The expansion to age 21 increased the cost and enrollment for subsequent years. Other factors related to the benefit cost increase are less clear. The Autism Alliance of Michigan was directed by the Michigan Legislature to conduct an analysis to examine possible drivers of cost increases and to identify opportunities for savings.

Overview of the Supplemental Appropriations Grant

The 2018 Supplemental Appropriations grant to the Autism Alliance of Michigan (AAoM) required a retrospective review of Autism evaluations conducted in FY2018 and recommendations based upon that analysis. With increasing enrollment and costs of the Autism ABA Medicaid benefit, the Supplemental Appropriation was designed to gather empirical data and provide fact-based recommendations to ensure appropriate cost and service provision. The grant had 3 primary Objectives:

- Objective 1: AAoM would conduct a retrospective review of objective diagnostic trend & outcome data for 1715 cases completed in FY2018 from 3 Michigan Community Mental Health (CMH) agencies.
- Objective 2: AAoM would conduct qualitative benchmarking analysis comparing Michigan's diagnostic processes and autism services to those of other states with a Medicaid Autism Benefit.
- Objective 3: AAoM would make recommendations to the Michigan Department of Health & Human Services and the legislature regarding additional tools, processes, and resources to increase diagnostic accuracy and treatment recommendations for children receiving Medicaid autism services.

By October 31, 2019 the Autism Alliance of Michigan was required to provide a report of the findings and recommendations of this research. Data were derived from the review of Medicaid records from a minimum of 3 CMH agencies. The review was to include a minimum of 1715 Medicaid cases who were evaluated for Autism during FY2018.

Data Collection & Analysis Methods

In order to conduct an independent 3rd party audit, AAoM contracted autism and statistics experts at Michigan State University (MSU); Joel Greenberg, DO, Chair of the Department of Pediatrics and Dhruv B. Sharma, Ph.D, Senior Statistician at the Center for Statistical Consulting and Training (CSTAT). Dr. Greenberg has over 20 years clinical experience examining, diagnosing, and treating children with Autism Spectrum Disorder and Dr. Sharma has over 7 years of statistical collaborative experience working with health outcomes researchers. The AAoM and MSU team devised a two-stage data collection and analysis plan for the audit. The *first stage* included the surveillance of WSA data for FY2018. WSA is the database utilized to track/ document consumer ABA data across all Pre-Paid In-Patient Health Plans (PIHPs), while the *second stage* included treatment chart audits from a subset of patients from FY2018 (called In-depth Diagnostic Chart Review and Analysis). The plan included collection of data for at least 1715 WSA cases and a random subset of detailed, comprehensive charts for review.

For the first stage of the audit, AAoM contacted all 10 PIHPs that serviced individuals and received reimbursement from DHHS and a database of required audit information was constructed with inputs from experts in the field. All data requests were de-identified and individual patient information was not accessible. PIHPs were sent a template of the requested data fields in the form of an Excel Spreadsheet. Data requested is listed in Appendix B. When PIHPs did not respond to or declined to cooperate with the data request, regional Community Mental Health Organizations (CMHs) were contacted directly with the data request. Detailed PIHP and CMH participation in audit is included in Appendix C. At the end of the stipulated data collection time period, 5 PIHPs and 15 CMHs provided data for 2902 patients for the first stage of the data audit. As data were provided from each regional entity (PIHP or CMH), data were pooled into a master database file. Unique identifiers were provided to each case beginning with their PIHP region. Age at evaluation was calculated when both date of evaluation and date-of-birth were provided. When zip code was provided, US census data⁴ were utilized by county to designate family residence as either rural or urban.

For the second stage of the audit, a detailed list of data fields and audit questions was devised and tested on a preliminary data from diagnostic charts. After studying the quality of these patient charts, a detailed diagnostic chart database was created. The diagnostic chart database was generated using Qualtrics survey software⁵. This diagnostic tool included over 30 questions (see Appendix D). The data extraction was performed by six pediatricians from the Department of Pediatrics at MSU who

underwent training under the direction of Dr. Greenberg with the use of this tool to perform the record review and data extraction consistently. The data extraction tool was designed to evaluate the records for multiple aspects of the diagnostic visit and best practice/ quality indicators that may influence the results, accuracy and costs associated with the diagnosis. An initial plan called for a proportional representative sample of ABA beneficiaries with diagnostic charts from all PIHPs to be compared against the WSA data.

The process to establish the audit, involving the legislative appropriation and grant agreement, led to barriers in obtaining data. Certain of the PIHP and CMH agencies asked for copies of agreements, or raised objections that there was not a detailed services agreement or direction provided to them about the legal authority or requirement to participate and provide data. These included: responses that requests would have to be made under the Freedom of Information Act; responses that the state mental health code required redacting some information from responses; and response that cited HIPAA concerns in providing data. In some cases, but not all, objections were addressed and resolved, or approved following FOIA request to obtain some limited or de-identified data. However overall these responses led to inconsistent or incomplete data requests, which made it difficult to conduct some analyses, including analysis of the age of recipients and whether or not they were rural or urban families. Concerns expressed by agencies should not have applied, or could have been dealt with by detailed requirements and relevant legal authority being provided by the state to the agencies. Several of the agencies confirmed that they would be willing to share anything with MDHHS as stated in their contracts with MDHHS, but that they would not share data with us unless we had a contract with MDHHS specifically authorizing that.

Due to privacy and confidentiality concerns and redactions of chart information by the PIHP and CMHs, this plan was amended and a sample of 150 detailed diagnostic records from 9 of the 10 PIHPs was provided and analyzed. Between 6 and 42 records were obtained from each audit participating PIHP with many of the charts reviewed containing redacted fields. PIHPs 7 (Detroit Wayne Mental Health Authority) and 9 (Macomb County CMH Services) declined to provide diagnostic reports for inclusion in this section of the report. However, diagnostic charts for PIHP 7 were obtained through therapy providers for children who qualified for ABA therapeutic services. All statistical analysis was conducted by Dr. Sharma in R statistical software version 3.6.1⁶.

Michigan ABA Benefit Diagnostic Findings.

From **2902** cases provided for analysis to the Autism Alliance of Michigan (Table 1) from the PIHPs and CMHs across the state, several key factors related to diagnostic cost were examined. Regional differences in the outcome of evaluations, whether age at evaluation impacted diagnosis or treatment recommendation, and whether diagnosis predicted treatment recommendations were all investigated.

1. Regional Diagnostic Rates

The current analysis reviewed the evaluation process (based on requirements outlined in the original DHHS ABA benefit policy), which was designed to include referral from a physician following administration of an autism screening. Next, an autism evaluation administered by a qualified evaluator is administered in order to determine eligibility for the ABA benefit. Individuals found to meet the eligibility requirements through the autism evaluation would receive the diagnosis and thus be eligible to receive therapeutic services through the ABA benefit. Table 1 shows the regional, autism diagnostic rates across the state, by PIHP. Appendix D details PIHP and CMH participation.

| PIHP Region | Number of beneficiaries evaluated for ASD | Percent of evaluated cases diagnosed with ASD | |
|--|---|---|--|
| 1: Northcare Network | 83 | 89.16% | |
| 2: Northern MI Regional Entity | 117 | 52.99% | |
| 3: Lakeshore Regional Entity | 405 | 74.32% | |
| 4: Southwest MI Behavioral Health | 377 | 60.21% | |
| 5: Mid-State Health Network | 301 | 67.11% | |
| 6: CMH Partnership of Southeast MI | 114 | 74.56% | |
| 7: Detroit Wayne Mental Health Authority | 1,065 | 74.65% | |
| 9: Macomb County CMH Services | 208 | 87.98% | |
| 10: Region 10 PIHP | 232 | 54.74% | |
| *Michigan | 2902 | 70.74% | |
| *Data were obtained from all PIHPs except Oakland County Community Health Authority, PIHP 8, | | | |

who declined to provide diagnostic information or data access for this audit.

Table 1. Percentage of Medicaid beneficiaries evaluated for suspected ASD that met diagnostic criteria for ASD or the

- a. Diagnostic rates for evaluated children varied by PIHP. The state average was 70.74% of evaluated children having Autism or ASD, indicating that a majority of children referred for assessment do have a qualifying condition. Although this percentage is consistent with rates reported by DHHS previously, the average obscures the fact that *there was significant variability in rates between regions*.
- b. Unfortunately, when a child does not receive a diagnosis of autism, and assessment protocols do not allow for differential diagnosis, to direct a child into another service, no real benefit is derived from the process, although the expense has already been incurred.
- 2. Autism Spectrum Disorder (ASD) evaluations & eligibility for Applied Behavior Analysis (ABA) services prevalence based upon age at evaluation

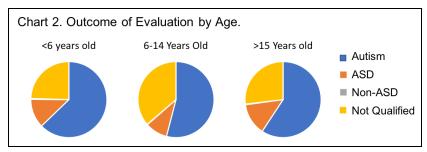
 The average age for Applied Behavior Analysis (ABA) benefit evaluation in Michigan during FY2018

was 7.58 years old. Reliable diagnosis of Autism is possible by 2 years of age¹. The national average is 3.8-5.6 years of age with more severely affected children being identified at younger ages. A number of factors may have led to this finding.

a. The age of a child at evaluation did marginally alter the probability of the child qualifying for

ABA covered therapeutic services (Chart 2.) The youngest and oldest cohorts were most likely to qualify while those between 6-14 years were less likely to receive a diagnosis of Autism or ASD, although a majority of those evaluated still qualified.

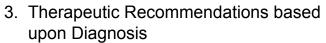
Autism Benefit across various PIHP Regions.



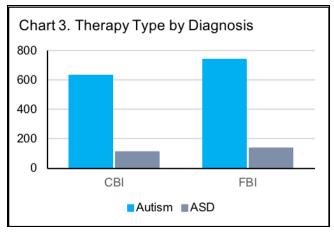
b. Few providers were evaluating for disorders other than ASD. Consequently, the WSA field for "Non-ASD" as a diagnosis was rarely employed. Three CMH agencies of total used the "Non-Spectrum" option and for a limited total of 8 of 2,902 children, supporting the finding that the ABA evaluation was infrequently used as a full differential diagnosis.

c. Utilizing the Autism Diagnostic Observation Schedule™ (ADOS-2™) as required in Michigan, interpretation guidelines suggest that a diagnosis of "Autism" should reflect an individual with more autistic symptoms than "ASD" (Appendix A). Nationally, classically autistic children, those with many symptoms and severe presentations, are expected to be identified earlier and represent

~30% of the entire populations of those affected⁷. In Michigan's WSA dataset, Autism diagnoses outpaced ASD diagnoses in every age band. It is likely that "Autism" and "ASD" score ranges are being misinterpreted by diagnosticians or used interchangeably in the WSA database.



When children qualify for the Autism Benefit, Medicaid covers the cost of therapeutic services. Typically, Comprehensive Behavioral Intervention (CBI) or Focused Behavioral Intervention (FBI)



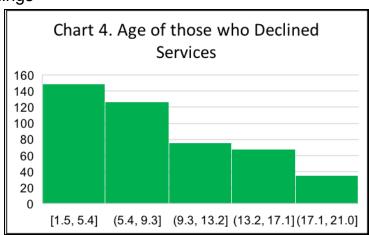
will be recommended based upon what service level would be necessary to meet therapeutic goals and outcomes to reduce impairment in daily functioning⁸. CBI is a more time intensive treatment (16-25 hours/ week) while FBI is a less time intensive treatment program (5-15 hours/ week).

- a. "Autism" was diagnosed more often than "ASD" and there was no relationship between severity/ level of affectedness and therapeutic recommendation. Of the 743 children recommended for CBI, 84.79% were diagnosed with "Autism"; of the 875 children who were recommended to receive FBI, a virtually identical 84.46% were diagnosed with "Autism". The identical ratios of therapeutic recommendation, regardless of diagnostic severity further supports that the labels are being used interchangeably by diagnosticians.
- b. Of the 8 children diagnosed as "Non-Spectrum", 7 were recommended CBI (1) or FBI (6).

4. Additional WSA Database Findings

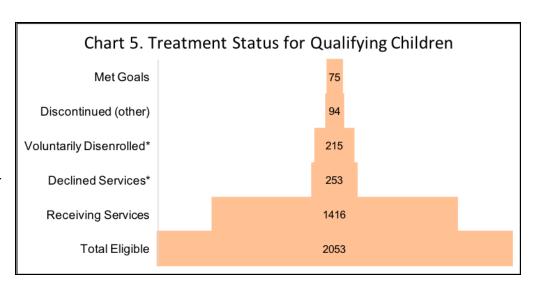
While analyzing the WSA data, additional trends emerged that were important to include in this report.

a. Of the 2902 cases included, 2053 qualified for services. Of those, the majority (1416) were receiving therapeutic services within the Applied Behavior Analysis (ABA) benefit. However, 253 declined the services offered and 215 voluntarily disenrolled from services within the same fiscal year (Charts 4 & 5). This is a substantial minority of cases where costly evaluations resulted in



offers for therapeutic services that were declined or discontinued quickly by the families. While it is beyond the scope of this analysis to investigate the cause of the therapy declinations or discontinuations, possible explanations offered by CMH agency staff during qualitative interviews (Appendix E) included:

- families do not accept the diagnosis
 do not believe that their child would benefit from the treatments model offered
 dissatisfaction with
- 3) dissatisfaction with the provider to which they were referred for treatment
- 4) interim caregiver/ parent training and education deferred the need for treatment



- 5) enrollment or success in other developmental disability, intellectual disability, or mental health services while awaiting ABA therapy.
- 6) natural maturation and development of the child deferred the need for treatment.
- 7) the time commitment is too great and insufficient flexibility is offered in alternative treatment schedules.

Further investigation of the therapeutic benefit utilization of the ABA benefit might provide clearer answers to parent declination and discontinuation.

b. There was variability in the utilization of numerous fields in the WSA database. This may be reflective of a lack of standardization of diagnostic templates, forms, and software systems. Differences in population of WSA database fields and clinical detail make pooling data and third-party evaluation challenging, particularly for a statewide assessment.

Detailed Diagnostic Chart review

Pediatricians reviewed 150 diagnostic charts, in an attempt to more thoroughly investigate observations from the WSA database information. Similarity of age at diagnosis between the WSA and chart data sets was confirmed. Additional similarities were not confirmed since charts provided were not proportionally distributed across the state. Nevertheless, some general trends were identified in the charts that are important to consider. The full analysis, outlined to match Appendix D, can be found in Appendix F.

a. Those administering the Autism Diagnostic Observation Schedule™ (ADOS™) selected the correct module to administer and arrived at the correct diagnosis (Autism or Autism Spectrum Disorder (ASD) vs Non-spectrum) the majority of the time. However, there was a discrepancy between Autism, the diagnosis with more symptoms, and ASD, the variant with fewer symptoms based on ADOS-2 definitions. Project pediatrician reviewers identified higher rates of Autism than the original evaluators when interpreting test scores. The inconsistency may reflect that the evaluators were either using the diagnostic labels interchangeably, failed to accurately interpret standardized test scores, or were influenced by other factors when reporting a diagnosis. This is further supported by the WSA data that indicate no differences in therapeutic recommendation based upon diagnosis, or no correlation between severity rating and treatment intensity. These findings are consistent with provider feedback regarding confidence in diagnosing autism. MDHHS conducted a recent survey in 2018 of 175 evaluators (Appendix G) which indicated 44% of

evaluators did not feel confidently prepared for the ASD specific population and that many had little training or support beyond an initial two-day workshop prior to conducting evaluations independently.

- Charts provided redacted the name of the evaluator (56%) Of the remaining charts that b. did not redact evaluator name and credentials there were opportunities to evaluate the credentials and experience level of those individuals doing the evaluation through Licensing and Regulatory Affairs (LARA). Based upon unredacted credentials, it was possible to determine that Limited License Psychologists (LLPs) did the evaluations 34.7% (40 of 115 available credentials) of the time. Other professionals who did the evaluation included PhDs 19% of the time, MSW 14% of the time and BCBA 8% of the time. Of note is that in only two cases was the evaluation done by a physician. When verifying evaluator credentials with Licensing and Regulatory Affairs (LARA) there were MSW evaluators who did not have the Clinical Designation required by MDHHS policy, as well as a Bachelor's prepared Social Worker who had conducted autism evaluations. According to LARA and the Social Work Scope of Practice⁹ only Master's prepared licensed Social Workers with a Clinical Designation and experience are able to diagnose mental health conditions and proof of license should be posted publicly. We were unable to determine the number of years experience of the remaining evaluators. However, per MDHHS Medicaid Policy as well as the recently (October 2019) released MDHHS Screening, Evaluation, and Treatment Recommendation Best Practice Guidelines, evaluators are required to have a minimum of one-year experience with autism^{2,10}. We were unable to determine years of experience from the majority of charts. However, we also did not find that this qualification was regularly audited by DHHS¹¹.
- c. The MDHHS Provider Manual¹⁰ dictates that in addition to the ADOS-2™, an Autism Diagnostic Interview- Revised (ADI-R) or a clinical equivalent and Developmental Disabilities-Children's Global Assessment Scale (DD-CGAS) should be performed. Only the ADOS-2 was consistently administered across all diagnostic reports. Documentation of an ADI-R being administered was in 76 of the 150 charts and a DD-CGAS was documented in 68 of the 150 charts.
- d. *In only 59 of the 150 chart reviews was there any reference to a differential diagnosis* or another potential etiology for behavior and developmental delay during evaluation. In 2014 MDHHS provided Guidance for Primary Care Physicians making referrals to CMH for evaluation for ABA and other medical/clinical services¹². However, we found only a minority of charts reviewed (59) demonstrated a multidisciplinary early intervention approach. Of the 59 differentials, 40 had behavioral components noted and any of the other types of differential diagnosis were noted in a maximum of 25 of the charts. This likely reflects the focus on the Autism/ASD vs Non-spectrum dichotomy rather than a full evaluation of the etiology of the patient's behavior.

State Benchmarking Findings.

In an effort to better understand approaches to assessment and diagnosis in additional states, staff researched and obtained information from various state documents and stakeholders. This process proved to be difficult. At the Federal level, The Centers for Medicare & Medicaid Services (CMS) does not provide via public publications either aggregated or state level data. This was the case at the state level as well, state Medicaid programs did not publish critical information. Staff turned to various documents that were available, the primary source was state plan amendments (SPAs) and waivers. Full results are reported in Appendix H.

Of interest, Michigan currently recognizes the following professionals to provide an ASD diagnosis; licensed psychologist, limited licensed psychologist, temporary limited licensed psychologist, social workers, limited licensed social workers, and physicians. The allowance of limited licensed

psychologist, temporary limited licensed psychologist, social workers, limited licensed social workers appears to be Michigan specific. Most states restrict diagnosis to licensed physicians, licensed psychologist, psychiatrist, neurologist, developmental pediatrician and nurse practitioners with appropriate training.

Where information was available, the ADOS™ was the most common, required assessment. Following an ASD diagnosis, the most common recommendations included Applied Behavior Analysis, Occupational Therapy, Speech Language Services, and Physical Therapy. Other recommendations included, counseling, habilitation, and psychiatric care.

State benchmarking also included cost per case for ABA treatment where data was available.

Recommendations.

The Autism Alliance of Michigan was asked to provide recommendations to the Legislature for the State of Michigan based upon the results of the data collection and analysis as well as the state benchmarking comparing Michigan to other states providing a Medicaid Autism Benefit. Based upon our findings, the following recommendations to the Michigan Autism Program's Applied Behavior Analysis (ABA) benefit are provided.

- 1. Evaluation procedures and documentation should be standardized and implemented consistently based on best practice/quality criteria across PIHP/ CMH regions. Charts demonstrated substantial variability in measures administered as well as documentation of medical & social history, scores on administered measures, and ABA recommendation. (In-depth Charts) A wide variety of inconsistent software tools, different forms and templates, often with no process for standardization, was encountered, which can affect coordination of patient care including quality, access and cost.
- 2. **WSA** database fields should be populated and shared uniformly for future benefit audits. Data provided from the WSA database was inconsistently populated, likely reflecting differential interpretations of privacy protection statutes. (WSA Database)
- A WSA field should be added to report the terminal degree of the diagnostician. It was
 impossible in these analyses to determine whether diagnostic frequency varied based upon the
 credentials of the evaluator. As Michigan allows more categories of credentials for
 diagnosticians, it is important to understand if qualification impacts evaluation outcome. (WSA
 Database)
- 4. All evaluations conducted by diagnosticians with Master's level credentials should receive a review and sign-off from a physician, psychiatric nurse practitioner, or fully credentialed psychologist. A significant amount of the diagnostic evaluations were provided by Limited License Psychologists (LLPs). This would align Michigan's provider qualifications with those from other states, and the private sector. (In-depth Charts)
- 5. Further investigation of the wide variability in diagnostic rates across regions, local agencies, and providers should be conducted. MDHHS reports a statewide autism diagnostic rate which has thus far obscured the large differences. Given the many potential causes for this variance and to inform future standardized tools and resources or other actionable results, deeper investigation is needed. Data provided by PIHPs & CMHs varied widely in the autism diagnostic rate. This may reflect agency, evaluator, resource, or geographical influence on the diagnostic process or real differences regionally. Given the long struggle for access to care and advocacy for ABA services local CMH providers may be differentially influenced. (WSA Database)

- 6. An investigation into the cause of a high proportion of eligible children not receiving therapeutic services is needed. A substantial minority of families, 22.8%, whose children qualified for services declined or quickly discontinued the offered treatments. These children are missing important developmental interventions while at the same time, costing the state money in expensive, autism diagnostic evaluations without any real benefit. Offering Caregiver Education earlier in the process and by a broader set of professionals may be a consideration for cost-containment. (WSA Database)
- 7. When available/ accessible, Medicaid eligibility should be established through prior evaluations conducted by physicians, psychiatric nurse practitioners, or fully credentialed psychologists. The diagnostic visit is conducted on many children who have previously been diagnosed with Autism or ASD. Currently children are assessed for eligibility for ABA therapeutic services exclusively and not to determine if they have Autism/ ASD or require other supports or services. (In-depth Charts)
- 8. MDHHS should implement the recommended DSM 5 Checklist Referral Form (Appendix I) developed with this study for inclusion in the diagnostic chart to increase the fidelity of the screening process, enhance cost-savings, and ultimately ensure that children with autism spectrum disorders and in need of ABA therapy are able to access the benefit earlier.
 Additional educational processes or materials that clearly establish expectations of the evaluation and ABA treatment should be standardized. There was substantial variability in the detail of clinical evaluations. Many included only the ADOS-2 report or scoring sheet while others offered a comprehensive behavioral evaluation for autism. (In-depth Charts)
- 9. A "Severity Score" field should be added following the "ADOS™-2 Classification" field to reflect severity of symptoms. As Autism and Autism Spectrum are not being used consistently to differentiate number of autistic symptoms, the "ADOS™-2" Classification/Overall Diagnosis" field should include "Autism/ASD" & "Not Qualified" only. A new field should follow that outlines the severity of the symptoms and in the future may be used to design an algorithm for guiding treatment recommendations. (WSA Database)

WSA Database Recommendation notes.

A total of 2902 cases were provided by PIHP and CMH agencies from the WSA database. Substantial variability in the level of detail provided resulted in smaller sub-analyses from which some of these recommendations are derived.

In-Depth Chart Review Recommendation notes.

The 150 charts that were obtained were self-selected by CMH staff and not proportional to regional populations. The In-Depth chart review recommendations therefore may not fully reflect ABA evaluation practices and outcomes from across Michigan in FY2018. Nine of the ten Prepaid In-patient Health Plans regions (PIHPs) were represented. Efforts were made to secure a proportional sample including data from all PIHP Regions.

References

- 1. Centers for Disease Control and Prevention Autism Information www.cdc.gov/ncbddd/autism
- 2. EPSDT Manual www.michigan.gov/documents/mdhhs/1710-EPSDT-P 598722 7.pdf
- 3. Michigan ABA Provider Policy Manual www.michigan.gov/documents/mdhhs/ABA Policy Provider FAQs 514113 7.pdf

- 4. US Census www.census.gov
- 5. Qualtrics, 2019 www.qualtrics.com
- 6. R core team, 2019 www.r-project.org/
- 7. Baio J, Wiggins L, Christensen DL, Maenner MJ, Daniels J, et al. Prevalence of Autism Spectrum Disorder Among Children Aged 8 Years Autism and Developmental Disabilities Monitoring Network, 11 Sites, United States, 2014. Available from: https://www.cdc.gov/mmwr/volumes/67/ss/ss6706a1.htm
- 8. Michigan Department of Health and Human Services, Michigan Autism Program: Autism Spectrum Disorder Assessment: Considerations for and Functional Skill Level. 2018 [cited 31 Oct 2019]. Available from: www.michigan.gov/autism/0,4848,7-294-73929----,00.html
- 9. LARA Social Work Scope of Practice www.nasw-michigan.org/page/Scope
- 10. Medicaid Manual www.mdch.state.mi.us/dch-medicaid/manuals/MedicaidProviderManual.pdf
- 11. Grant J & Michigan Department of Health and Human Services, Site Review Provider Credential Worksheet: Data Entry and Case Assignment Guide, 2018.
- 12. Michigan Department of Health and Human Services, Michigan Autism Program: Referral Guide for Primary Care Physicians. 2016 [cited 31 Oct 2019]. Available from: www.michigan.gov/autism/0,4848,7-294-73929---,00.html

Appendix A.

MI Approved Standardized Assessment Summaries

- 1. Autism Diagnostic Observation Scale, Second Edition (ADOS-2)
- 2. Autism Diagnostic Interview-Revised (ADI-R)
- 3. Modified Checklist for Autism in Toddlers, Revised with Follow-Up (M-CHAT-R/F)

Autism Diagnostic Observation Scale, Second Edition (ADOS-2)

Test Purpose: Allows accurate assessment and diagnosis of autism spectrum disorders across age, developmental level, and language skills.

Overview: ADOS-2 is a semi structured, standardized assessment of communication, social interaction, play, and restricted and repetitive behaviors. ADOS-2 includes five modules. The individual being evaluated is given only one module, selected on the basis of his or her expressive language level and chronological age.

- Toddler Module—for children between 12 and 30 months of age who do not consistently use phrase speech
- Module 1—for children 31 months and older who do not consistently use phrase speech
- Module 2—for children of any age who use phrase speech but are not verbally fluent
- Module 3—for verbally fluent children and young adolescents
- Module 4—for verbally fluent older adolescents and adults

Age Range: 12 months-through adulthood

Administrators:

- 1. Master's degree (MA, MS, MSW, and CAGS) in psychology, school counseling, occupational therapy, speech–language pathology, social work, education, special education, or a related field.
- 2. Bachelor's degree (BA, BS) in fields listed above and license or certification from an agency/organization that requires training and experience in assessment.

Training/Credentials Specified: ADOS-2 administration and coding are highly standardized. Therefore, valid assessment requires training. Three training options:

- 1. ADOS-2 Clinical Workshops
- 2. ADOS-2 DVD Training Package
- 3. ADOS-2 DVD Training Upgrade Package

Administration Time: 40–60 minutes

Scores and Interpretation: Toddler Module provides ranges of concern reflecting the extent to which a child demonstrates behaviors associated with ASD. Modules 1 through 4 provide cutoff scores for autism and autism spectrum classifications. Modules 1 through 3 also provide a Comparison Score indicating level of autism spectrum-related symptoms compared to children with ASD who are the same age and have similar language skills. By observing and coding these behaviors, information is obtained that informs diagnosis, intervention, treatment planning, and educational placement.

Reliability/Fidelity of Assessment: With improved algorithms, the ADOS-2 demonstrates strong predictive validity. It gives a highly accurate picture of current ASD-related symptoms, based on real-time observations.

Autism Diagnostic Interview-Revised (ADI-R)

Test Purpose: Useful for diagnosing autism, planning treatment, and distinguishing autism from other developmental disorders

Overview: ADI-R provides a standardized interview and response coding. To administer the ADI-R, an experienced clinical interviewer questions a parent or caretaker who is familiar with the developmental history and current behavior of the individual being evaluated. The interview can be used to assess both children and adults, as long as their mental age is above 2 years, 0 months. Composed of 93 items, the ADI-R focuses on three functional domains: Language/Communication, Reciprocal Social Interactions, Restricted, Repetitive, and Stereotyped Behaviors and Interest.

Following highly standardized procedures, the interviewer records and codes the informant's responses. Interview questions cover eight content areas.

Age Range: Children and adults with a mental age above 2.0 years

Administrators:

- 1. Master's degree (MA, MS, MSW, and CAGS) in psychology, school counseling, occupational therapy, speech—language pathology, social work, education, special education, or a related field.
- 2. Bachelor's degree (BA, BS) in fields listed above and license or certification from an agency/organization that requires training and experience in assessment

Training/Credentials Specified: Administration and coding of the ADI-R are highly standardized and valid assessment requires training through the study of the DVDs and Guidebook. The ADI-R DVD Training Package are offered by WPS gives an opportunity to learn administration procedures and practice accurate coding.

Administration Time: 90-150 minutes, including scoring

Scores and Interpretation: Provides categorical results for three domains: Language/Communication, Reciprocal Social Interactions, and Repetitive Behaviors/Interests. The ADI-R has a scoring CD, which allows for scoring all ADI-R algorithms.

Reliability/Fidelity of Assessment: The ADI-R has proven very effective in differentiating autism from other developmental disorders and in assessing syndrome boundaries, identifying new subgroups, and quantifying autistic symptomatology. Extensive use of the ADI-R in the international research community has provided strong evidence of the reliability and validity of its categorical results.

Modified Checklist for Autism in Toddlers, Revised with Follow-Up (M-CHAT-R/F)

Test Purpose: The M-CHAT-R/F is an autism screening tool designed to identify children 16 to 30 months of age who should receive a more thorough assessment for possible early signs of autism spectrum disorder (ASD) or developmental delay.

Overview: A 2-stage parent-report screening tool to assess risk for Autism Spectrum Disorder (ASD). The M-CHAT-R/F is available for free download for clinical, research, and educational purposes. The M-Chat-R/F is administered to a parent or caregiver, depending on the child's scores the follow up is administered. Referral immediately for diagnostic evaluation and eligibility evaluation for early intervention is made based on scores.

Age Range: Between the ages of 16 months to 30 months.

Administrators: Any professional can offer the questionnaires to a parent. Parents also can self-administer the Questionnaires.

Training/Credentials Specified: The M-CHAT-R is designed to be administered and scored without any formal training.

Administration Time: Not reported

Scores and Interpretation: The current recommended scoring algorithm is as follows:

- LOW-RISK: Total Score is 0-2; if a child is younger than 24 months, screen again after the second birthday. No further action required unless surveillance indicates risk for ASD.
- MEDIUM-RISK: Total Score is 3-7; Administer the Follow-Up (second stage of M-CHAT-R/F) to get additional information about at-risk responses. If M-CHAT-R/F score remains at 2 or higher, the child has screened positive. Action required: refer child for diagnostic evaluation and eligibility evaluation for early intervention. If score on Follow-Up is 0-1, child has screened negative. No further action required unless surveillance indicates risk for ASD. Child should be rescreened at future well-child visits
- HIGH-RISK: Total Score is 8-20; it is acceptable to bypass the Follow-Up and refer immediately for diagnostic evaluation and eligibility evaluation for early intervention.

Reliability/Fidelity of Assessment: M-CHAT-R and M-CHAT-R/F is a validated developmental screening tool for toddlers. It is designed to identify children who may benefit from a more thorough developmental and autism evaluation.

Appendix B. Requested Database Fields.

| Requested Database Fields. |
|-------------------------------------|
| Case ID |
| Status |
| Closing Reason |
| ADOS-2 Classification/Overall |
| Diagnosis |
| Birthday |
| Age at Evaluation |
| Referral Date |
| Evaluation Date |
| Eligibility Date |
| ReEvaluation Due Date |
| Eligibility End Date |
| IPOSExists |
| Telepractice Authorization |
| Requested |
| Level of Intensity/ Service Level |
| IPOS Start Date |
| IPOS Due Date |
| ABA Service Start Date |
| PIHP/CMH Name/Evaluation |
| Agency |
| Days Bet Ref Eval |
| Days Bet Elig IPOS |
| Currently Inactive |
| Has Past Inactive |
| Zip Code |
| MCA fields that were requested from |

WSA fields that were requested from Prepaid In-Patient Health Plans and Community Mental Health Organizations. Zip Code was later used to generate Rural or Urban designation.

Appendix C.

| PIHP or CMH | <u>WSA</u> | Dx Records |
|---|------------|------------|
| PIHP 1: Northcare Network PIHP | 1 | |
| Pathways | | 1 |
| Copper Country | | О |
| Hiawatha | | 1 |
| Northpointe | | 0 |
| Gogebic | | 0 |
| PIHP 2: Northern Michigan Regional Entity | 0 | |
| AuSable | 1 | 1 |
| Centra Wellness Network (Manistee-Benzie) | 1 | 1 |
| North Country | 1 | 0 |
| Northern Lakes | 1 | 0 |
| Northeast | 1 | 0 |
| PIHP 3: Lakeshore Regional Entity | 0 | |
| Allegan | 0 | 0 |
| Muskegon | 0 | 0 |
| Network 180 | 1 | 1 |
| Ottawa | 0 | О |
| West MI | 0 | 0 |
| PIHP 4: Southwest Michigan Behavioral Health | 1 | |
| Barry | | 1 |
| Berrien | | 1 |
| Kalamazoo | | 1 |
| Pines | | 0 |
| St. Joseph | | 1 |
| Summit Pointe | | 0 |
| Van Buren | | 0 |
| Woodlands | | 0 |
| PIHP 5: Mid-State Health Network | 1 | |
| Bay-Arenac | | 1 |
| CMH for Central MI | 1 | 1 |
| CEI | 1 | 0 |
| Gratiot | 1 | 0 |
| Huron | | 0 |
| Ionia | | 0 |
| LifeWays | | 0 |
| Montcalm Care Network | 1 | 1 |
| Newaygo | | 0 |
| Saginaw | | О |
| Shiawassee | | О |
| Tuscola | 1 | 1 |
| PIHP 6: CMH Partnership of Southeast Michigan | 0 | - |

| Washtenaw | 1 | / + |
|---|---|------------|
| Lenawee | 0 | 0 |
| Livingston | О | 0 |
| Monroe | 0 | 0 |
| PIHP 7: Detroit Wayne Mental Health Authority | 1 | 0+ |
| PIHP 8: Oakland County CMH Authority | О | 0+ |
| PIHP 9: Macomb County CMH Services | 1 | 0 |
| PIHP 10: Region 10 PIHP | 0 | |
| Genesee Health System | О | 0 |
| Lapeer | 1 | 1 |
| Sanilac | 1 | 0 |
| St. Clair | 1 | 1 |
| ✓ - Data provided by PIHP or CMH, ◆ - Diagnostic reports obtained through therapy provider, O- PIHP/ CMH refused request or did not respond | | |

PIHP & CMH Participation.

Appendix D.

| 1 | Enter Patient ID. |
|----|--|
| 2 | Age of patient at ADOS in years? |
| 3 | If age at ADOS is 2 years, please enter age in months. |
| 4 | What are the (terminal) credentials for the person DOING the evaluation? |
| 5 | Name of person DOING the evaluation? |
| 6 | What are the credentials for the person OVERSEEING the evaluation? |
| 7 | Name of person OVERSEEING the evaluation? |
| 8 | ADOS Module Administered? |
| 9 | Specify ADOS Module Administered. |
| 10 | Describe patient's speech fluency. |
| 11 | ADOS Overall Score. |
| 12 | ADOS Comparative Score. |
| 13 | Diagnosis based on ADOS in chart? |
| 14 | Diagnosis based on ADOS by reviewer? |
| 15 | Other testing done? |
| 16 | Other testing done which was ABNORMAL? |
| 17 | IPOS Case Holder Present? |
| 18 | Who Made the Referral? |
| 19 | Who brought the patient in to the evaluation? |
| 20 | Was the patient previously diagnosed with Autism or Autism Spectrum Disorder? |
| 21 | Who diagnosed the patient with Autism in the past? |
| 22 | Was the patient previously receiving Autism therapy? |
| 23 | What type of therapy has the patient received for Autism in the past? |
| 24 | Does the patient have other secondary diagnosis noted that may affect the ASD diagnosis? |
| 25 | Secondary diagnosis was noted? |
| 26 | Has the patient been receiving therapy for the secondary diagnosis? |
| 27 | Was a differential diagnosis noted as part of the evaluation? |
| 28 | If differential diagnosis was noted, what types of testing were done? |
| 29 | Was a history noted as part of the evaluation? |
| 30 | If a history was noted, what was described? |
| 31 | What ASD characteristics were discussed in the evaluation? |
| 32 | What was the diagnosis noted based on the evaluation? |
| 33 | Enrollment into ASD Benefit? |
| 34 | What were the therapeutic recommendations? |
| 35 | Family Feedback session completed? |
| 36 | Time frame noted for follow up evaluation? |
| 37 | Community resources recommended? |
| 38 | Was the therapy consistent with the (reviewer's) diagnosis? |
| | tions answered during detailed chart reviews |

Questions answered during detailed chart reviews.

Appendix E.

Feedback from Community Mental Health (CMH) Agencies:

Participating CMH executives provided the feedback regarding the Autism Benefit. Themes emerged in the experiences of the directors operating the benefit at the community level. (Names, titles and agencies have been de-identified per agreement with CMH Association)

Access

- The annual re-evaluation requirement through Medicaid limits the ability to conduct new evaluations in a timely manner. Per policy CMH prioritizes re-evaluations over new autism evaluations. Several CMHs reported difficulty getting to new evaluations with up to a 6 month waiting list for new evaluations.
- Several agencies reported having a very limited number of trained clinicians to conduct assessments, despite efforts to schedule as soon as possible.
- During the wait time for a new evaluation several agencies report referring to OT, ST, parent peer support and parent/caregiver training. This included as much as once weekly consultation with BCBA for parent training.
- Several CMH representatives reported that many families are often no longer interested in the ABA benefit by the time the initial evaluation has been completed and the recipient is authorized for services. Significant numbers of children assessed and authorized for ABA services have chosen not to proceed given the logistics and intensity of the ABA model, time and transportation demands on the family, and expressed that they were no longer interested after going through the evaluation process. Eliminating these instances would facilitate access for others who are interested in pursuing ABA therapy.
- Assumptions were offered by CMH staff and included maturation, success of parent training, initiation of other services, and dissatisfaction with the ABA treatment provider referral as potential reasons for families deferring ABA therapy. CMH representatives shared that they still face confusion from families regarding the ABA benefit when entering.

Diagnostic Evaluation- Clinical

- · In some instances, the agency reported that an LP Psychologist signs off or checks off on an evaluation electronically within the software system, however does not sign off on the hard copy diagnostic report. Therefore, it may be difficult to identify whether diagnostic reports were reviewed by other professionals.
- Many rural families are still traveling quite a distance for private evaluations outside of their local CMH. Families do not always understand the difference between school evaluations, medical evaluations and Medicaid evaluations. In particular those who have received high quality medical evaluations are still required to go through the full Medicaid evaluation process. Agencies shared that private or medical team evaluations often do not include an Adaptive Evaluation, which is required by Medicaid and therefore the evaluation is repeated.
- · Clinicians questioned the high false positive rate with the MCHAT-R screening.
- In some agencies, the ADI-R and ADOS-2 are being completed by two different clinicians, in order to maximize the time of an ADOS-trained clinician. They reported it being beneficial to have the same clinician administer both assessments, gleaning information from the parent interview (ADI-R) that adds to direct assessment of the child and in helping to confirm a diagnosis. There are agencies with only one ADOS- trained clinician on staff.
- Agencies reported a desire to hold biweekly meetings with clinicians completing the assessments to discuss clients and their needs, however they have not been able to implement case review because of the demands of new evaluations.

- · CMH Clinicians reported feeling that the current diagnostic tools should be "just one piece of the process" to be approved for ABA services. It was shared that the ADOS-2/ADI-R, while useful in identifying autism characteristics or traits, should not be used alone to approve or deny ABA services.
- Several clinicians shared that the evaluator is typically spending approximately an hour or less with an unfamiliar child conducting the ADOS-2 in a highly structured environment. While there was appreciation for the standardization including the scripted language used during test administration, several expressed that a typically developing child can score above threshold for autism on an ADOS-2. For evaluators who reported being BCBAs also, they shared a preference for evaluating a child with the VB-MAPP in a more natural setting. This presumed that the referred child has autism and would benefit from ABA therapy.

Process

- Multiple rural or small CMH agencies report the software required for record management to be costly for their agencies in the software systems required for reporting. Several reported that they had not yet purchased PCE software, or that they initially had not been able to afford to purchase the PCE system, and later added the data. Agencies reported using several different and more cost-effective programs at times- these included PCE, MHWIN, Streamline as examples.
- Supports Coordinator "drive the process," conducting intake and referring the child to the service providers that they express the need for, gathering reports and recommendations from all providers to reconcile in the Individual Plan of Service. The Supports Coordinator often translates clinical diagnostic report information into the IPOS. Supports Coordinators reported significant paperwork associated with the process from Intake to Treatment and that they frequently are overwhelmed with paperwork, requesting and waiting for reports from providers, scanning and entering of information into the appropriate consolidated document or plan of service.
- Concerns from healthcare systems, psychiatrists, and inpatient psychiatry unit professionals regarding communicating complex medical and behavioral issues with minimally qualified supports coordinator staff rather than staff with clinical training in order to obtain authorization for ABA therapy and transition supports in order to discharge from the hospital.
- Several CMH agencies have made design changes to their process, including having Case Managers dedicated to ABA clients, who have a greater understanding of the steps in the program and the treatment, and ensuring intake is conducted by a clinician who is skilled at explaining what treatment will look like for the family.
- Several agencies expressed a desire for greater alignment and reciprocity with private healthcare evaluations, and/or school evaluations. With report of a significant shortage of TLLP, LP, LLP reliance on school psychologists for other contractual within their agency, however inability to use school psychologists to conduct ASD evaluations given credentials required. It was also reported that they have seen cases where a child may undergo ADOS-2 testing several times within a short time period given requirements for medical, school, and Medicaid evaluations.

Recommendations/Treatment

- General agency concern with the ABA benefit which suggests that every child diagnosed with autism is appropriate for ABA therapy.
- Several agencies expressed that many ABA providers are very insistent that the client have/engage in a maximum or 40 hrs of ABA per week, while other providers take a much more

person-centered approach looking at frequency/intensity based on clinical assessments, client priorities, and family dynamics. They noted that this appeared to be unrelated to the severity of the child and was largely reflective of the provider.

- Agencies expressed concerns regarding ABA providers who design their treatment for younger children only. Included were providers who will not accept children for less than 15 hours per week, or those when referred an older child report that they were not a "good fit" for their center. They reported being aware of this at the County level, but unsure of how to address the issue given their capacity issues and also that the issue may only represent one individual provider and not the entire ABA company.
- It was reported that occasionally a child will score above threshold on the ADOS-2/ADI-R but show limited needs for ABA per BCBA assessment tools (ABLLS-R, AFLS, VB-MAPP). For clinically recommended hours of ABA services, BCBAs reportedly hold onto a rule that 20/40 hours a week is needed, even though families are often not able to meet the availability of hours recommended. A formalized measure or formula for treatment intensity was recommended. Specifically, it was suggested that it would be beneficial to have something that would take into consideration the child's specific needs or that was more patient-centered, take into account school attendance, extracurricular activities, and identified barriers. The VB-MAPP has a Barriers Assessment which is helpful when examining the child's needs, barriers to acquiring new skills that may need to be overcome, and number of recommended hours.
- Several agencies expressed a desire for a more Person-Centered approach to treatment and intensity. They reported that providers often quote research to advocate for a greater number of hours, however they have seen progress with a minimal number of hours of treatment that is aligned with a person-centered treatment plan.
- Clinicians reported that the ADOS training requirements are important, videos were reportedly useful but not enough for training and suggested face to face training.
- Concerns were expressed from CMH staff regarding the significant turnover of BCBAs and technicians from provider to provider. Frequent moves have resulted in many complaints from families. Families have expressed complaints regarding the goals written by unfamiliar professionals. Families and agency staff have also expressed concerns that lack of progress in ABA treatment may be attributed to frequent turnover in staff versus conditions of the child's behavior, including rewriting programs, frequently pairing and familiarizing with the child's unique behavior.
- · Concerns from agency staff regarding BCBAs who fail to direct families to treat trauma or for medication management.
- · Concerns that treatment goes on for an extended period of time and longer than necessary due to noncompliance with treatment.
- · Agencies expressed that reimbursement rates are too low for mental and behavioral health across the board. For example reimbursement for PTSD is minimal, however critically important and with much less attention paid.
- Several agencies reported success and ensuring that children are also receiving counseling for anxiety, sensory treatment with occupational therapy, speech therapy within their agencies.

ABA Provider Concerns

Several ABA providers reported that treatment has been put on hold given the turnover of Supports Coordinator staff or delays. There is a process in place to escalate when a Supports Coordinator has not completed their tasks in due time, however regardless a reported challenge given that providers are unable to provide treatment without a current IPOS and authorization.

- Networked ABA Providers expressed concerns that CMH agencies who conduct both evaluations and ABA treatment, are keeping "young, easy, daytime children" in their own centers and only referring to external providers for older, school age, adolescent, and complex behavior cases. Providers also expressed concerns regarding preference for certain providers and reported being told they will only receive referrals of children another provider can not accommodate. Providers reported that families are reported extensive wait time to get into ABA therapy by agencies who will not add treatment providers to their network, reporting that they have an adequate number of providers in network.
- Expressed concerns regarding Behavior Technician reimbursement cuts as they can not make salary cuts for those staff.
- Several providers reported having their own treatment models and scheduled meeting with Caregivers for training and to discuss progress, however additionally having to be present for quarterly meetings with Supports Coordinators in order to extend authorizations.
- Providers expressed reluctance to modify clinical treatment goals as it requires processing and authorization with the Supports Coordinator.

Caregiver Training

- · Agencies reported that family training is the most significant component and parents who engage increase the child's success in treatment. It was suggested that legislators should mandate caregiver training.
- · Currently Caregiver Training is billed by BCBAs, and it was reported that many BCBAs struggle with caregiver education and building rapport with families, and that they may not always be the best professional to provide caregiver training relative to an involved MSW, LPC, etc.
- It was also suggested that Caregiver Training should begin earlier, perhaps initiated with Infant Mental Health providers.

Appendix F.

In-Depth Chart Review Findings.

Questions (Appendix D), answered by pediatricians during in-depth chart reviews provided the following results.

Q2: Age of patient at ADOS in years? Similarities between data groups: In-depth vs WSA One of the most important aspects of the in-depth data review was to make sure it was at least similar to the data obtained from the WSA results. Since it was not possible to match these two reviews and since sampling based on percentage of charts received was not possible due to the small number of in-depth charts provided to AAoM, other measures of similarity were examined to verify that these were similar groups. One of these measures was age distribution which were similar: 7.58 years of age for the WSA group and 7.89 for the In-depth group. Also, the standard deviations for age at evaluation and in charts were similar with the larger WSA group having a standard deviation of 4.65 and the smaller in-depth group having a standard deviation of 5.11. These numbers for age, indicate some similarities between the two groups.

Q4: What are the (terminal) credentials for the person DOING the evaluation? Due to the redaction of the names on the in-depth charts it was not possible to evaluate the experience level of those individuals doing the evaluation as only 28 individual names (on 56 charts), of those doing the evaluations were available on the 150 charts. It was not possible to determine the experience level of those overseeing the evaluation as only 6 charts had the name of the person overseeing the evaluation. It was possible to determine, based on credentials, who did the evaluations and that psychologists (mostly Limited License Psychologists) did the evaluations 52% (60 of the 115 credentials listed on the chart) of the time. Other professionals who did the evaluation included PhDs 19% of the time, MSWs 14% of the time and BCBAs 8% of the time. Of note is that in only two cases was the evaluation done by a physician. Data on those overseeing the evaluation cannot be considered in any analysis due to the low availability of the terminal credentials of the oversight for the evaluation with only 26.7% (40 of 150 charts) of the charts having the oversight terminal credentials available. This low percentage of available terminal credentials for those doing oversight appeared to come from a combination of the credentials being redacted as well as the oversight credentials never being noted on the record at the time of the completion of the chart.

Q8: ADOS Module Administered?

Per the MDHHS ABA Provider Policy Manual, the determination of a diagnosis by a qualified licensed practitioner is accomplished by utilizing the Autism Diagnostic Observation Schedule-Second Edition (ADOS-2). Since this appears to be a required test in the Medicaid evaluation for autism a check for ADOS-2 completion and documentation was completed. Of the 150 charts the vast majority, 87% or 131 out of 150 charts, an ADOS was mentioned as part of the diagnostic process.

Q9 & Q10: Specify ADOS Module Administered & Describe patient's speech fluency. Correct use of ADOS?

It appears those administering the ADOS during the evaluation selected the correct module to administer the vast majority of the time. This is based on the pediatrician reviewer's assessment of the chart and determining the patient age and speech fluency as documented in the chart. The evaluator of patient correctly chose to administer the toddler module 14 of 14 times based

on the fact that the patient's age was <30 months. Also no one attempted to administer modules 2-4 to a toddler. They also correctly selected the toddler or module 1 for those with zero words to some words 49 to 51 times. Also, for phrase speech selecting module 2, 26 times with 25 patients having phrase speech. Finally, module 3 and 4 was selected 53 times for administration with at least 45 of these patients having fluent speech.

Q11 & Q13: ADOS Overall Score & Diagnosis based on ADOS in chart; Diagnosis based on ADOS compared to overall assessment

In general, there is fairly good agreement with the ADOS overall score of the reviewer compared to the diagnosis based on the ADOS by the evaluator at the time of the evaluation. With the diagnosis based on the ADOS in the chart ADOS of Non-spectrum at 17% and a score of <7 on the ADOS at 14% these are obviously similar. Although 33% of the charts did not have the overall score available so this can only be used as a rough approximation. While comparative scores in the ADOS were designed to indicate a level of autism spectrum-related symptomatology and can be helpful in evaluating individual changes over time and thus could be a benefit in an evaluation of an individual for autism in the sample of 150 charts only 38% of the charts had a comparative score so using this as a variable was not possible.

Q13 & Q14: Diagnosis based on ADOS in chart & Diagnosis based on ADOS by reviewer? Comparing diagnosis of Autism/ Autism Spectrum Disorder (ASD)/ Non-spectrum for evaluator (professional seeing the patient) vs reviewer (the pediatrician professional reviewing the evaluation)

The diagnosis of Autism or ASD vs Non-spectrum was in general consistent between the evaluator and the reviewer. The evaluator noted 22 of the patients in the Non-spectrum category and the reviewer noted 21. There was a large difference in percentages of Autism vs ASD 48% to 34% for the evaluator and 68% to 14% for the reviewer. Since the diagnosis of Autism on the ADOS scale indicates a patient with more symptomatology this seems to indicate that the ADOS score seemed to indicate to the reviewer that the cases of autism were more severe in review of the chart than the evaluator seemed to be indicating in their actual ADOS evaluation. However the other possibility, which may be more likely, is that the evaluators were not attempting to keep the diagnosis of autism and ASD as separate levels of symptomatology and in fact were just using the terms interchangeably. Keeping the terms separate to indicate different levels of symptomatology may be helpful in determining the need for different levels of intensity of service.

Q15: Other testing done?

In the MDHHS ABA Provider Policy Manual it is stated that besides ADOS an ADI-R or clinical equivalent and the Developmental Disabilities- Children's Global Assessment Scale (DD-CGAS) should be performed. Also mentioned in the MDHHS ABA Provider Policy Manual is the fact that the child must demonstrate impairments consistent with the Diagnostic and Statistical Manual of Mental Disorders- Fifth Edition (DSM-5) however on the In-depth chart evaluation, evidence of an ADI-R bein gadministered was present in only 76 of the 150 charts and a DD-CGAS was administered in 68 of the 150 charts. As far as the use of the DSM-5 as part of the evaluation it was occasionally mentioned as a standard in some of the charts but its use as an actual tool was limited.

Q17: IPOS Case Holder Present?

This question was designed to determine if the service provider who was going to provide services if the diagnostic visit was positive for Autism/ ASD was present at the time of the evaluation, and if so, would this influence the diagnosis. Unfortunately for most of the charts (76.5%) it was not documented as to whether the IPOS was present or not. Therefore, this variable which could have an influence on the diagnosis cannot be evaluated via the in-depth chart review

Q18: Who made the referral?

Anyone can make a referral for an evaluation for ABA. Whether a relationship between the source making the referral and the final diagnosis was of interest. Again, due to the fact that the majority of charts (53%) did not list who made the referral, and the fact that there were only 150 charts, it was not possible to establish whether there was or was not a relationship. Interesting very few of the charts mentioned that a full medical and physical exam was performed before the child was referred for this evaluation although this is the first step listed on the MDHHS Michigan Autism Program: Referral Guide for Primary Care Physicians. This is probably due to the separation in time and facility between the initial screen and this part of the evaluation.

Q19: Who brought the patient in to the evaluation?

Due to the fact that in 115 of the 143 charts where escort was indicated, the mother alone or the mother along with others brought in the patient for the evaluation, it was decided this variable was more of a constant and its influence on the final diagnosis, while it may be important, had no variation associated with it.

Q 20-23: Was the patient previously diagnosed with Autism or Autism Spectrum Disorder, who diagnosed the patient with Autism in the past, was the patient previously receiving Autism therapy, & what type of therapy has the patient received for Autism in the past?

The AAoM staff requested initial evaluation of patients for the determination of Autism from multiple sources including PHIP and CMH. Interestingly 57 of the 150 evaluations patients had a previous diagnosis of Autism or ASD. Some of these evaluations appeared to be yearly re-evaluations while others were from children who were previously diagnosed but needed this evaluation for insurance purposes. Of the 57 diagnosed with Autism 40 were already receiving therapy and 30 were already receiving ABA for their Autism. Whether a relationship between who made the previous diagnosis of Autism and the outcome of the current evaluation. Unfortunately, only 21 of the 57 professionals were noted making pursuit of this answer futile.

Q24-26: Does the patient have other secondary diagnoses noted that may affect the ASD diagnosis & has the patient been receiving therapy for the secondary diagnosis?

As expected from literature reviews many of the evaluations of the patients showed the patients had a pre-existing secondary diagnosis. In fact, 76 of the 150 evaluations had a secondary diagnosis listed and 40 charts had at least 2 secondary diagnoses. Of the 5 types of secondary diagnosis, "behavioral diagnosis" was the most common with 40 charts listing it. This is probably due to the high association of Autism with behavioral comorbidities as well as psychologists conducting many of the evaluations. Only 3 had "hearing" as a secondary diagnosis which makes sense due to the pre-screening for deafness or hearing loss in most of these cases.

Q27-28: Was a differential diagnosis noted as part of the evaluation & if differential diagnosis was noted, what types of testing were done?

A differential diagnosis should be part of any complete medical/ psychological evaluation process. In the chart reviews only 59 of the 150 had any differential diagnosis noted as part of the evaluation, indicating that often the Autism evaluation is not attempting to be a complete medical/ psychological evaluation and is instead confirmatory or exclusionary of MAP eligibility. As expected of the 59 differentials 40 had behavioral components noted and any of the other types of differential diagnosis were noted in a maximum of 25 of the charts. Again, this shows the focus on the Autism/ASD vs Non-spectrum dichotomy rather than a true evaluation looking for the etiology of the patient's behavior

Q29-30: Was a history noted as part of the evaluation & If a history was noted, what was described?

A history was noted in the vast majority of charts (118 of the 150) with an appropriate focus on development (103 of 150 charts), speech (94 of 150), social (94 of 150), educational (88 of 150), and medical (77 of 150) histories.

Q31: What ASD characteristics were discussed in the evaluation?

The evaluations appeared to be extremely thorough and well documented regarding the evaluation of ASD characteristics with 95% of the evaluations noting at least 4 ASD characteristics which were present or absent and 79% of the evaluations noting at least 7 characteristics which were either present or absent.

Q32: Diagnosis noted based on the evaluation?

Interestingly the final diagnosis in the charts indicate Autism 32% of the time and ASD 42% of the time. These percentages are inconsistent from the ADOS-2 scores which showed an Autism diagnosis 48% of the time and ASD 34% of the time. While these differences could be explained by the evaluators changing the diagnosis slightly due to something besides the ADOS in the evaluation process, it is more likely that the change in percentages reflects haphazard assignment of these diagnostic labels. The diagnosis percentages of 17% of Non-spectrum does not change between that obtained from the ADOS-2 scores. The final diagnosis in the charts is the most important finding since it establishes ABA benefit eligibility. If the severity of the patient's Autism could be captured during the evaluation, then the intensity of service could be connected to symptom severity. Also, if the ADOS is the deciding factor in the vast majority of cases of Autism Spectrum vs Non-spectrum, perhaps performing it should be used as a screen for service eligibility and the other tests could be administered in a stepwise approach for the eval. Interestingly, in four of the charts a final diagnosis was not noted.

Q33: Enrollment into ASD Benefit?

In 82 charts of the 150 total charts reviewed, the patient was enrolled in the ABA benefit. Of those 82 receiving ABA therapy, only 1 time was the patient diagnosed as Not Qualified/ Non-Spectrum. In 76 of the 82 charts the patient was diagnosed with either Autism or ASD and they were enrolled in the benefit

In 24 charts of the 150 total charts received, the patient was not enrolled in the benefit. Of those 24, 22 patients did Not Qualify for the program or were Non-Spectrum. Only 2 patients who were noted to have Autism/ASD in the sample appear to have not been enrolled in the benefit.

The above indicates that 3 times was there a situation in which a patient was either incorrectly enrolled in the benefit and should not have been (1 time) or was not enrolled and should have been (2 times). Due to the fact that in 44 of the 150 charts there was no clear documentation as to whether the patient was enrolled in the benefit and 13 charts where diagnoses other than Autism /ASD or Non-Qualified Non-Spectrum and 8 charts where both types of lack of documentation occurred this left 101 charts (see cross table Q33 vs Q32 (4): 150-24-13+8 =101 or 32+44+1+1+22=101) where a comparison between enrollment and diagnosis. This gives a variance of approximately 3% (3/101) between enrollment and diagnosis, with 2% due to not enrolling a qualified individual and 1% enrolling an individual who is not qualified.

Q34: What were the therapeutic recommendations?

The recommendations for therapy in general appear to be consistent with the diagnosis in the vast majority of the charts. ABA therapy was recommended for 102 of the 111 evaluations (chart 32- 48 autism and 63 ASD). Secondary therapies for these patients seemed appropriate with speech therapy (34 charts), occupational therapy (21charts) and psychological therapy (22 charts) being recommended frequently, as expected. Due to the fact that the amount of time for ABA therapy per week was not specified in 47 of the 102 charts in which it was recommended it is not possible to determine if the treatment intensity connected to the severity of the Autism/ASD noted at the time of the evaluation. The lack of clarity in the recommendation for the intensity of services appears to make the current evaluation practice more of an eligibility check for services than a complete diagnostic evaluation. Further, the lack of specificity in the recommendation for intensity of treatment in 47% of the evaluations leaves the level of intensity of service determination to the professional providing the service and not to the professional doing this evaluation.

Q35 & Q36: Was a family feedback session completed & was a time frame noted for follow up evaluation?

The feedback session is an important part of the evaluation process as it helps keep the family and patient informed. Documentation of this process was not noted in 81% of the cases. While follow up evaluations are mandated at yearly intervals, a time frame for this re-evaluation was only noted in 19% of the evaluations reviewed.

Q37: Community resources recommended?

This appears to be a part of the evaluation with which the evaluators did a fairly good job, making recommendations for resources 56% of the time.

Q38: Was the therapy recommendation consistent with the (reviewer's) diagnosis? The final and most important question of the in-depth chart review was whether the pediatrician reviewer agreed with the therapeutic recommendation. In general, there was agreement between the reviewer and the evaluator with both agreeing that either the patient had autism and that the therapy recommended was appropriate (75.5% of the time), or that the patient did not have autism and appropriate therapy was recommended (16.5% of the time). Only approximately 8% of the time was there disagreement between the reviewer and the evaluator.

In 6.5 % of those cases a patient was diagnosed with Autism/ ASD and was prescribed inappropriate therapy and in 1.5% of the cases they were diagnosed as not having autism but recommended other inappropriate therapy. In NO CASE was a patient who was diagnosed as non-spectrum recommended ABA therapy. This is important in avoiding misuse of ABA therapy for those who do not need it, but it is also important to have all children receive proper services. Therefore, working to decrease the 8% disagreement level noted above is important.

Descriptive statistics and cross tables.

| Q2: Age of patient at ADOS in years? | | | | | | |
|--------------------------------------|-----------|----|--------|---------|--|--|
| Levels | Frequency | | Perc % | Valid % | | |
| Age <= 30 months | | 15 | 10 | 11.45 | | |
| Age > 30 months | 1 | 16 | 77.33 | 88.55 | | |
| NA's | | 19 | 12.67 | | | |
| Total | 15 | 50 | 100 | 100 | | |

| Q4: What are the (terminal) credentials for the person DOING the evaluation? | | | | | | |
|--|-----------|----|--------|---------|--|--|
| Levels | Frequency | | Perc % | Valid % | | |
| BCBA | | 9 | 6.00 | 6.29 | | |
| DO/MD | | 2 | 1.33 | 1.40 | | |
| MSW | 1 | 6 | 10.67 | 11.19 | | |
| Not Available | 2 | 28 | 18.67 | 19.58 | | |
| Other | | 6 | 4.00 | 4.20 | | |
| PhD | 2 | 22 | 14.67 | 15.39 | | |
| Psychologist | 6 | 0 | 40.00 | 41.96 | | |
| NA's | | 7 | 4.67 | | | |
| Total | 15 | 50 | 100 | 100 | | |

| Valid % 7 7.78 7 1.11 |
|------------------------------|
| |
| 7 1 1 1 |
| 1.11 |
| 3 2.22 |
| 55.56 |
| 6.67 |
| 3 15.56 |
| 7 11.11 |
|) |
| 100 |
| 2 |

| | Q8: ADOS | Module Administer | ed? | |
|--------|-----------|-------------------|---------|-------|
| Levels | Frequency | Perc % | Valid % | |
| No | | 19 | 12.67 | 12.84 |

| Yes | 129 | 86.00 | 87.16 |
|-------|-----|-------|-------|
| NA's | 2 | 1.33 | |
| Total | 150 | 100 | 100 |

| Q9: Specify ADOS Module Administered | | | | | | | |
|--------------------------------------|-----------|--------|---------|--|--|--|--|
| Levels | Frequency | Perc % | Valid % | | | | |
| Module 1 | 35 | 23.33 | 26.72 | | | | |
| Module 2 | 26 | 17.33 | 19.85 | | | | |
| Module 3 | 45 | 30.00 | 34.35 | | | | |
| Module 4 | 8 | 5.33 | 6.11 | | | | |
| Toddler | 14 | 9.33 | 10.69 | | | | |
| Unknown Module | 3 | 2.00 | 2.29 | | | | |
| NA's | 19 | 12.67 | | | | | |
| Total | 150 | 100 | 100 | | | | |

| Q10: Describe patient's speech fluency. | | | | | | |
|---|-----------|--------|---------|--|--|--|
| Levels | Frequency | Perc % | Valid % | | | |
| Fluent Speech | 45 | 30 | 35.433 | | | |
| Phrase Speech | 25 | 16.67 | 19.685 | | | |
| Some Words | 16 | 10.67 | 12.598 | | | |
| Unknown | 6 | 4 | 4.724 | | | |
| Zero To Few Words | 35 | 23.33 | 27.559 | | | |
| NA's | 23 | 15.33 | | | | |
| Total | 150 | 100 | 100 | | | |

| Q11: ADOS Overall Score | | | | | | | |
|-------------------------|-----------|-----|-------|---------|--|--|--|
| Levels | Frequency | P | erc % | Valid % | | | |
| < 7 | | 14 | 9.33 | 14.00 | | | |
| 7 to 15 | | 38 | 25.33 | 38.00 | | | |
| > 15 | | 48 | 32.00 | 48.00 | | | |
| NA's | | 50 | 33.33 | | | | |
| Total | | 150 | 100 | 100 | | | |

| Q12: ADOS Comparative Score | | | | | | |
|-----------------------------|-----|------------------------|--|--|--|--|
| Frequency | | Perc % | Valid % | | | |
| | 7 | 4.67 | | 12.28 | | |
| | 4 | 2.67 | | 7.02 | | |
| | 11 | 7.33 | | 19.30 | | |
| | 35 | 23.33 | | 61.40 | | |
| | 93 | 62.00 | | | | |
| | 150 | 100 | | 100 | | |
| | | | | | | |
| | | Frequency 7 4 11 35 93 | Frequency Perc % 7 4.67 4 2.67 11 7.33 35 23.33 93 62.00 | Frequency Perc % Valid % 7 4.67 4 2.67 11 7.33 35 23.33 93 62.00 | | |

| Q13: Diagnosis based on ADOS in chart? | | | | | | | |
|--|-----------|---------|---------|--|--|--|--|
| Levels | Frequency | Perc % | Valid % | | | | |
| Autism | 62 | 2 41.33 | 48.44 | | | | |
| Autism Spectrum | 44 | 4 29.33 | 34.38 | | | | |
| Non-Spectrum | 22 | 2 14.67 | 17.19 | | | | |
| NA's | 22 | 2 14.67 | | | | | |
| Total | 150 | 100 | 100 | | | | |

Q14: Diagnosis based on ADOS by reviewer? Levels Valid % Frequency Perc % Autism 78 52 67.83 Autism Spectrum 16 10.67 13.91 Non-Spectrum 18.26 21 14 NA's 35 23.33 100 150 Total 100

| Adaptive, DSGAS Adaptive, DSGAS, CARS, Other Adaptive, Other ADIR ADIR, Adaptive ADIR, Adaptive, DSGAS ADIR, Cognitive ADIR, Cognitive, Adaptive, DSGAS ADIR, Cognitive, Adaptive, Other ADIR, Cognitive, DSGAS ADIR, DSGAS ADIR, DSGAS ADIR, DSGAS ADIR, DSGAS ADIR, MCHAT ADIR, MCHAT ADIR, Other CARS CARS, Other Cognitive Cognitive, Adaptive, DSGAS Cognitive, Adaptive, Other DSGAS DSGAS, Other None Other | Q15: Other testing done? | | | | | |
|---|--------------------------|-------------|--|--|--|--|
| Adaptive, DSGAS Adaptive, DSGAS, CARS, Other Adaptive, Other ADIR ADIR, Adaptive ADIR, Adaptive, DSGAS ADIR, Cognitive ADIR, Cognitive, Adaptive, DSGAS ADIR, Cognitive, Adaptive, Other ADIR, Cognitive, DSGAS ADIR, DSGAS ADIR, DSGAS ADIR, DSGAS ADIR, MCHAT ADIR, MCHAT ADIR, Other CARS CARS, Other Cognitive Cognitive, Adaptive, DSGAS Cognitive, Adaptive, DSGAS Cognitive, Adaptive, Other DSGAS DSGAS, Other None Other | Perc | c % Valid % | | | | |
| Adaptive, DSGAS, CARS, Other Adaptive, Other ADIR ADIR, Adaptive ADIR, Adaptive, DSGAS ADIR, Cognitive ADIR, Cognitive, Adaptive, DSGAS ADIR, Cognitive, Adaptive, Other ADIR, Cognitive, DSGAS ADIR, DSGAS ADIR, DSGAS ADIR, DSGAS ADIR, MCHAT ADIR, MCHAT ADIR, MCHAT ADIR, Other CARS CARS, Other Cognitive Cognitive, Adaptive, DSGAS Cognitive, Adaptive, Other DSGAS DSGAS, Other Other Other | 1 0 | 0.67 0.67 | | | | |
| Adaptive, Other ADIR ADIR, Adaptive ADIR, Adaptive, DSGAS ADIR, Cognitive ADIR, Cognitive, Adaptive, DSGAS ADIR, Cognitive, Adaptive, Other ADIR, Cognitive, DSGAS ADIR, DSGAS ADIR, DSGAS ADIR, DSGAS ADIR, DSGAS ADIR, MCHAT ADIR, MCHAT ADIR, Other CARS CARS, Other Cognitive Cognitive, Adaptive, DSGAS Cognitive, Adaptive, Other DSGAS DSGAS, Other None Other | 2 1 | 1.33 1.34 | | | | |
| ADIR, Adaptive ADIR, Adaptive, DSGAS ADIR, Cognitive ADIR, Cognitive, Adaptive, DSGAS ADIR, Cognitive, Adaptive, Other ADIR, Cognitive, DSGAS ADIR, Cognitive, DSGAS ADIR, Cognitive, DSGAS ADIR, Cognitive, DSGAS ADIR, DSGAS ADIR, DSGAS ADIR, DSGAS ADIR, DSGAS ADIR, MCHAT ADIR, MCHAT ADIR, Other CARS CARS, Other Cognitive Cognitive, Adaptive, DSGAS Cognitive, Adaptive, Other DSGAS DSGAS, Other None Other | 2 1 | 1.33 1.34 | | | | |
| ADIR, Adaptive ADIR, Adaptive, DSGAS ADIR, Cognitive ADIR, Cognitive, Adaptive, DSGAS ADIR, Cognitive, Adaptive, Other ADIR, Cognitive, DSGAS ADIR, Cognitive, DSGAS ADIR, Cognitive, DSGAS ADIR, Cognitive, DSGAS ADIR, DSGAS ADIR, DSGAS ADIR, DSGAS ADIR, DSGAS ADIR, MCHAT ADIR, MCHAT ADIR, Other CARS CARS, Other Cognitive Cognitive, Adaptive, DSGAS Cognitive, Adaptive, Other DSGAS DSGAS, Other None Other | 2 1 | 1.33 1.34 | | | | |
| ADIR, Adaptive, DSGAS ADIR, Cognitive ADIR, Cognitive, Adaptive, DSGAS ADIR, Cognitive, Adaptive, Other ADIR, Cognitive, DSGAS ADIR, Cognitive, DSGAS ADIR, Cognitive, DSGAS ADIR, DSGAS ADIR, DSGAS ADIR, DSGAS ADIR, DSGAS ADIR, MCHAT ADIR, Other CARS CARS, Other COgnitive Cognitive Cognitive, Adaptive, DSGAS Cognitive, Adaptive, Other DSGAS DSGAS, Other None Other | 7 18 | 3.00 18.12 | | | | |
| ADIR, Cognitive ADIR, Cognitive, Adaptive, DSGAS ADIR, Cognitive, Adaptive, Other ADIR, Cognitive, DSGAS ADIR, Cognitive, DSGAS ADIR, Cognitive, DSGAS, Other ADIR, DSGAS ADIR, DSGAS, Other ADIR, MCHAT ADIR, MCHAT ADIR,Other CARS CARS, Other Cognitive Cognitive, Adaptive, DSGAS Cognitive, Adaptive, Other DSGAS DSGAS, Other None Other | 1 0 | 0.67 0.67 | | | | |
| ADIR, Cognitive, Adaptive, DSGAS ADIR, Cognitive, Adaptive, Other ADIR, Cognitive, DSGAS ADIR, Cognitive, DSGAS ADIR, Cognitive, DSGAS, Other ADIR, DSGAS ADIR, DSGAS, Other ADIR, MCHAT ADIR, MCHAT ADIR,Other CARS CARS, Other Cognitive Cognitive Cognitive, Adaptive, DSGAS Cognitive, Adaptive, Other DSGAS DSGAS, Other Other Other |) 6 | 6.71 | | | | |
| ADIR, Cognitive, Adaptive, Other ADIR, Cognitive, DSGAS ADIR, Cognitive, DSGAS, Other ADIR, DSGAS ADIR, DSGAS, Other ADIR, MCHAT ADIR, MCHAT ADIR, Other CARS CARS, Other Cognitive Cognitive, Adaptive, DSGAS Cognitive, Adaptive, Other DSGAS DSGAS, Other None Other | 1 0 | 0.67 0.67 | | | | |
| ADIR, Cognitive, DSGAS ADIR, Cognitive, DSGAS, Other ADIR, DSGAS ADIR, DSGAS, Other ADIR, MCHAT ADIR, MCHAT ADIR,Other CARS CARS, Other Cognitive Cognitive, Adaptive, DSGAS Cognitive, Adaptive, Other DSGAS DSGAS, Other None Other | 1 0 | 0.67 0.67 | | | | |
| ADIR, Cognitive, DSGAS, Other ADIR, DSGAS ADIR, DSGAS, Other ADIR, MCHAT ADIR,Other CARS CARS, Other Cognitive Cognitive, Adaptive, DSGAS Cognitive, Adaptive, Other DSGAS DSGAS, Other None Other | 2 1 | 1.33 1.34 | | | | |
| ADIR, DSGAS ADIR, DSGAS, Other ADIR, MCHAT ADIR,Other CARS CARS, Other Cognitive Cognitive, Adaptive, DSGAS Cognitive, Adaptive, Other DSGAS DSGAS, Other None Other | 3 2 | 2.00 2.01 | | | | |
| ADIR, DSGAS, Other ADIR, MCHAT ADIR,Other CARS CARS, Other Cognitive Cognitive, Adaptive, DSGAS Cognitive, Adaptive, Other DSGAS DSGAS, Other None Other | 1 0 | 0.67 0.67 | | | | |
| ADIR, MCHAT ADIR, Other CARS CARS, Other Cognitive Cognitive, Adaptive, DSGAS Cognitive, Adaptive, Other DSGAS DSGAS, Other None Other | 3 12 | 2.00 12.08 | | | | |
| ADIR,Other CARS CARS, Other Cognitive Cognitive, Adaptive, DSGAS Cognitive, Adaptive, Other DSGAS DSGAS, Other None Other | 9 6 | 6.04 | | | | |
| CARS CARS, Other Cognitive Cognitive, Adaptive, DSGAS Cognitive, Adaptive, Other DSGAS DSGAS, Other None Other | 2 1 | 1.33 1.34 | | | | |
| CARS, Other Cognitive Cognitive, Adaptive, DSGAS Cognitive, Adaptive, Other DSGAS DSGAS, Other None Other | 1 0 | 0.67 0.67 | | | | |
| Cognitive Cognitive, Adaptive, DSGAS Cognitive, Adaptive, Other DSGAS DSGAS, Other None Other 10 | 1 0 | 0.67 0.67 | | | | |
| Cognitive, Adaptive, DSGAS Cognitive, Adaptive, Other DSGAS DSGAS, Other None Other | 1 0 | 0.67 0.67 | | | | |
| Cognitive, Adaptive, Other DSGAS DSGAS, Other None Other | 1 0 | 0.67 0.67 | | | | |
| DSGAS DSGAS, Other None Other 10 | 2 1 | 1.33 1.34 | | | | |
| DSGAS, Other None 10 Other 15 | 4 2 | 2.67 2.68 | | | | |
| None 10 Other 19 | 2 14 | 1.67 14.77 | | | | |
| Other 19 | 6 4 | 4.00 4.03 | | | | |
| |) 6 | 6.67 6.71 | | | | |
| NA's | 9 12 | 2.67 12.75 | | | | |
| | 1 0 | 0.67 | | | | |
| Total 150 |) 1 | 100 100 | | | | |

| | Q17: IPOS Case I | loldor | Procent? | | |
|---------|------------------|--------|----------|---------|-------|
| Levels | Frequency | loidei | Perc % | Valid % | |
| No | | 26 | 17.3 | 33 | 17.45 |
| Unknown | | 114 | 76.0 | 00 | 76.51 |
| Yes | | 9 | 6.0 | 00 | 6.04 |
| NA's | | 1 | 0.6 | 67 | |
| Total | | 150 | 10 | 00 | 100 |

| Q18: Who Made the Referral? | | | | |
|-----------------------------|-----------|--------|---------|--|
| Levels | Frequency | Perc % | Valid % | |
| Behavioral Specialist | 4 | 2.67 | 2.68 | |
| Health Care Entity | 19 | 12.67 | 12.75 | |
| Insurance | 1 | 0.67 | 0.67 | |
| Medical Specialist | 3 | 2.00 | 2.01 | |
| Other | 21 | 14.00 | 14.09 | |
| Parent/Caretaker | 5 | 3.33 | 3.36 | |
| PCP | 17 | 11.33 | 11.41 | |
| Unknown | 79 | 52.67 | 53.02 | |
| NA's | 1 | 0.67 | | |
| Total | 150 | 100 | 100 | |

| Q19: Who brought the patient in to the evaluation? | | | | |
|--|-----------|--------|---------|--|
| Levels | Frequency | Perc % | Valid % | |
| Father | 6 | 4.00 | 4.20 | |
| Father, Other | 2 | 1.33 | 1.40 | |
| Mother | 82 | 54.67 | 57.34 | |
| Mother, Father | 21 | 14.00 | 14.69 | |
| Mother, Father, Othe | 4 | 2.67 | 2.80 | |
| Mother, Other | 8 | 5.33 | 5.59 | |
| Other | 20 | 13.33 | 13.99 | |
| NA's | 7 | 4.67 | | |
| Total | 150 | 100 | 100 | |
| NA's | 7 | 4.67 | | |

| Q20: Was the patient previously diagnosed with Autism or ASD? | | | | |
|---|-----------|-----|-------|---------|
| Levels | Frequency | Per | с % | Valid % |
| No | | 92 | 61.33 | 61.74 |
| Yes | | 57 | 38.00 | 38.26 |
| NA's | | 1 | 0.67 | |
| Total | | 150 | 100 | 100 |
| | | | | |

Q21: Who diagnosed the patient with Autism in the past?

| Levels Frequency % Valid % Autism Evaluation Center 5 3.33 8.77 Counselor (MSW, Psychologist, etc.) 2 1.33 3.51 Educational Personnel 5 3.33 8.77 Medical Specialist 2 1.33 3.51 Other 4 2.67 7.02 PhD 3 2.00 5.26 Unknown 36 24.00 63.16 NA's 93 62.00 Total 150 100 100 | | | Perc | |
|---|-------------------------------------|-----------|-------|---------|
| Counselor (MSW, Psychologist, etc.) 2 1.33 3.51 Educational Personnel 5 3.33 8.77 Medical Specialist 2 1.33 3.51 Other 4 2.67 7.02 PhD 3 2.00 5.26 Unknown 36 24.00 63.16 NA's 93 62.00 | Levels | Frequency | % | Valid % |
| Educational Personnel 5 3.33 8.77 Medical Specialist 2 1.33 3.51 Other 4 2.67 7.02 PhD 3 2.00 5.26 Unknown 36 24.00 63.16 NA's 93 62.00 | Autism Evaluation Center | 5 | 3.33 | 8.77 |
| Medical Specialist 2 1.33 3.51 Other 4 2.67 7.02 PhD 3 2.00 5.26 Unknown 36 24.00 63.16 NA's 93 62.00 | Counselor (MSW, Psychologist, etc.) | 2 | 1.33 | 3.51 |
| Other 4 2.67 7.02 PhD 3 2.00 5.26 Unknown 36 24.00 63.16 NA's 93 62.00 | Educational Personnel | 5 | 3.33 | 8.77 |
| PhD 3 2.00 5.26 Unknown 36 24.00 63.16 NA's 93 62.00 | Medical Specialist | 2 | 1.33 | 3.51 |
| Unknown 36 24.00 63.16 NA's 93 62.00 | Other | 4 | 2.67 | 7.02 |
| NA's 93 62.00 | PhD | 3 | 2.00 | 5.26 |
| | Unknown | 36 | 24.00 | 63.16 |
| Total 150 100 100 | NA's | 93 | 62.00 | |
| 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - | Total | 150 | 100 | 100 |

Q22: Was the patient previously receiving Autism therapy?

| Levels | Frequency | F | Perc % | Valid % |
|--------|-----------|-----|--------|---------|
| No | | 109 | 72.67 | 73.15 |
| Yes | | 40 | 26.67 | 26.85 |
| NA's | | 1 | 0.67 | |
| Total | | 150 | 100 | 100 |

Q23: What type of therapy has the patient received for Autism in the past?

| Levels | Frequen cv | Perc % | Valid % |
|---|---------------|-----------|------------|
| ABA | 18 | 12 | 45 |
| Speech (or) Occupational (or) Physical (or) Other, etc. | 10 | 6.67 | 25 |
| ABA, Other | 12 | 8 | 30 |
| | | 73.3 | |
| NA's | 110 | 3 | |
| Total | 150 | 100 | 100 |

Q24: Other secondary diagnosis noted that may affect the ASD diagnosis?

| Levels | Frequency | Perc | % |
|-----------|-----------|------|-------|
| No | | 29 | 19.33 |
| Not noted | | 45 | 30 |
| Yes | | 76 | 50.67 |
| Total | | 150 | 100 |

Q25: Secondary diagnosis was noted?

| Levels | Frequency | Perc % | Valid % |
|-------------|-----------|--------|---------|
| Behavioral | 16 | 10.67 | 21.05 |
| Educational | 5 | 3.33 | 6.58 |
| Medical | 9 | 6.00 | 11.84 |
| Speech | 8 | 5.33 | 10.53 |
| Hearing | 0 | 0.00 | 0.00 |
| 2 of Above | 22 | 14.67 | 28.95 |

| 3 or More of Above | 16 | 10.67 | 21.05 |
|--------------------|-----|--------|--------|
| NA's | 74 | 49.33 | |
| Total | 150 | 100.00 | 100.00 |
| | | | |

Q25: Charts with Individual Secondary Diagnosis

| Behavioral | 40 |
|-------------|----|
| Educational | 24 |
| Medical | 34 |
| Speech | 33 |
| Hearing | 3 |

Q26: Has the patient been receiving therapy for the secondary diagnosis?

| , , | | Perc | |
|-----------|-----------|-------|---------|
| Levels | Frequency | % | Valid % |
| No | 8 | 5.33 | 10.53 |
| Not Noted | 11 | 7.33 | 14.47 |
| Yes | 57 | 38.00 | 75.00 |
| NA's | 74 | 49.33 | |
| Total | 150 | 100 | 100 |

Q27: Was a differential diagnosis noted as part of the evaluation?

| Levels | Frequency | Perc % |
|--------|-----------|-----------|
| No | 91 | 60.67 |
| Yes | 59 | 39.33 |
| Total | 150 | 100 |

Q28: If differential diagnosis was noted, click all that apply.

| Levels | Frequency | Perc % | Valid % |
|--------------------|-----------|--------|---------|
| Behavioral | 14 | 9.33 | 24.14 |
| Educational | 1 | 0.67 | 1.72 |
| Medical | 6 | 4.00 | 10.35 |
| Speech | 2 | 1.33 | 3.45 |
| Hearing | 0 | 0.00 | 0.00 |
| 2 of Above | 22 | 14.67 | 37.93 |
| 3 or More of Above | 13 | 8.67 | 22.41 |
| NA's | 92 | 61.33 | |
| Total | 150 | 100 | 100 |

Q28: Charts with Individual Differential Diagnosis

| Behavioral | 40 |
|-------------|----|
| Educational | 18 |
| Medical | 25 |

| Speech | | | | 21 |
|-----------------------------|---|-----------|--------------|----------------|
| Hearing | | 7 | | |
| Q29: Was a | history noted as part o | of the ev | aluation? | |
| Levels | Frequency | | Perc 9 | % |
| No | | 2 | 25 | 16.67 |
| Not Noted | | | 7 | 4.67 |
| Yes | | 11 | | 78.67 |
| Total | | 15 | 50 | 100 |
| | nistory was noted, click | | | |
| Levels | Frequency | | erc % | Valid % |
| Birth | | 1 | 0.67 | 0.85 |
| Developmental Speech | | 1 0 | 0.67 0.00 | 0.85 0.00 |
| Speech Family | | 0 | 0.00 | 0.00 |
| Social | | 1 | 0.67 | 0.85 |
| Medical | | 0 | 0.07 | 0.00 |
| Educational | | 1 | 0.67 | 0.85 |
| Immunization | | 0 | 0.00 | 0.00 |
| Regression | | 0 | 0.00 | 0.00 |
| 2 of Above | | 10 | 6.67 | 8.55 |
| 3 or 4 of Above | | 26 | 17.33 | 22.22 |
| 5 or More of Above | | 77 | 51.33 | 65.81 |
| NA's | | 33 | 22.00 | |
| Total | | 150 | 100 | 100 |
| | | | | |
| Q30: Charts with Indi | <u>vidual History</u> | | 64 | |
| Developmental | | | 103 | |
| Speech | | | 94 | |
| Family | | | 55 | |
| Social | | | 94 | |
| Medical | | | 77 | |
| Educational | | | 88 | |
| Immunization | | | 14 | |
| Regression | | | 32 | |
| Q31: Click all ASD characte | ristics discussed in the ADOS test or not) | evaluat | ion (wheth | er part of the |
| | ADOS (est of flot) | Fre | quenc F | Perc Valid |
| Levels | | у | | % % |
| Eve Contact | | | 0 | 0 0 |

Eye Contact

0 0

| Speech (language issues) | 0 | 0 | 0 | |
|--|-----|------|-------|--|
| Finger Pointing (shared enjoyment) | 0 | 0 | 0 | |
| Social interaction issues | 0 | 0 | 0 | |
| Stim movements or stereotypical behaviors | 0 | 0 | 0 | |
| Obsessive Behaviors (i.e. stacking, lining up, etc.) | 0 | 0 | 0 | |
| Transition problems/Tantrums | 0 | 0 | 0 | |
| Sensory behaviors | 0 | 0 | 0 | |
| Play/Imagination | 0 | 0 | 0 | |
| Other | 0 | 0 | 0 | |
| 2 or 3 of Above | 7 | 4.67 | 4.79 | |
| | | 15.3 | | |
| 4 to 6 of Above | 23 | 3 | 15.75 | |
| 7 an Mana of Alassa | 440 | 77.3 | 70.45 | |
| 7 or More of Above | 116 | 3 | 79.45 | |
| NA's | 4 | 2.67 | | |
| Total | 150 | 100 | 100 | |
| | | | | |

Q31: Charts with Individual ASD Characteristics Discussed

| Eye Contact | 135 |
|--|-----|
| Speech (language issues) | 143 |
| Finger Pointing (shared enjoyment) | 120 |
| Social interaction issues | 143 |
| Stim movements or stereotypical behaviors | 132 |
| Obsessive Behaviors (i.e. stacking, lining up, etc.) | 103 |
| Transition problems/Tantrums | 106 |
| Sensory behaviors | 116 |
| Play/Imagination | 121 |
| Other | 2 |
| | |

Q32: Diagnosis noted based on the evaluation?

| Levels | Frequency | Perc % |
|----------------------------|-----------|--------|
| Autism | 48 | 32.00 |
| Autism Spectrum Disorder | 63 | 42.00 |
| Not Noted | 4 | 2.67 |
| Not Qualified/Non-Spectrum | 26 | 17.33 |
| Other | (| 6.00 |
| Total | 150 | 100 |

Q33: Enrollment into ASD Benefit?

| Levels | Frequency | Pe | erc % |
|------------------|-----------|-----|-------|
| Yes | | 82 | 54.67 |
| No | | 24 | 16.00 |
| Other or Unknown | | 44 | 29.33 |
| Total | | 150 | 100 |

| Levels | Frequency | Perc % | Valid % |
|-------------------------------------|-----------|--------|---------|
| ABA (amount of time not specified) | 31 | 20.67 | 21.09 |
| ABA <= 15 hours per week | 11 | 7.33 | 7.48 |
| ABA > 15 hours per week | 18 | 12.00 | 12.24 |
| Speech Therapy | 1 | 0.67 | 0.68 |
| Occupational Therapy | 0 | 0.00 | 0.00 |
| Physical Therapy | 0 | 0.00 | 0.00 |
| Family Therapy | 0 | 0.00 | 0.00 |
| Psychological Therapy | 4 | 2.67 | 2.72 |
| Social Skills Training | 1 | 0.67 | 0.68 |
| Activities of daily living training | 0 | 0.00 | 0.00 |
| Further evaluation | 4 | 2.67 | 2.72 |
| No therapy | 6 | 4.00 | 4.08 |
| Other therapy | 9 | 6.00 | 6.12 |
| 2 of Above | 26 | 17.33 | 17.69 |
| 3 of Above | 15 | 10.00 | 10.20 |
| 4 or more of Above | 21 | 14.00 | 14.29 |
| NA's | 3 | 2.00 | |
| Total | 150 | 100 | 100 |

| Q34: Charts with Individual Recommendations | |
|---|----|
| ABA (amount of time not specified) | 47 |
| ABA <= 15 hours per week | 18 |
| ABA > 15 hours per week | 37 |
| Speech Therapy | 34 |
| Occupational Therapy | 21 |
| Physical Therapy | 7 |
| Family Therapy | 6 |
| Psychological Therapy | 22 |
| Social Skills Training | 12 |
| Activities of daily living training | 6 |
| Further evaluation | 25 |
| No therapy | 7 |
| Other therapy | 40 |

| Q35: Family Feedback session completed? | | | | |
|---|-----------|------|-------|--|
| Levels | Frequency | Perc | % | |
| No | | 27 | 18.00 | |
| Unknown | | 94 | 62.67 | |
| Yes | | 29 | 19.33 | |
| Total | | 150 | 100 | |

Q36: Time frame noted for follow up evaluation?

| Levels | Frequency | Perc % | |
|--------|-----------|--------|-------|
| No | | 121 | 80.67 |
| Yes | | 29 | 19.33 |
| Total | | 150 | 100 |

Q37: Community resources recommended?

| Levels | Frequency | Per | rc % | /alid % |
|--------|-----------|-----|-------|---------|
| No | | 66 | 44.00 | 44.30 |
| Yes | | 83 | 55.33 | 55.70 |
| NA's | | 1 | 0.67 | |
| Total | | 150 | 100 | 100 |

Q38: Was the therapy consistent with the (reviewer's) diagnosis?

| Levels | Frequen cy | Perc % | Valid % |
|---|------------|-----------|------------|
| | - | 66.0 | |
| Yes, autism/ASD, recommended ABA | 99 | 0 | 71.22 |
| Yes, autism/ASD, recommended other therapy | 6 | 4.00 | 4.32 |
| | | 15.3 | |
| Yes, not autism, recommended appropriate therapy | 23 | 3 | 16.55 |
| No, not autism, recommended ABA | 0 | 0.00 | 0.00 |
| No, autism/ASD, inappropriate therapy | 9 | 6.00 | 6.48 |
| No, not autism, recommended inappropriate therapy | 2 | 1.33 | 1.44 |
| NA's | 11 | 7.33 | |
| Total | 150 | 100 | 100 |

Age by Q9

| | Age <= 30 | Age > 30 | NA' | Tot |
|----------------|-----------|----------|-----|-----|
| Levels | mos | mos | S | al |
| Module 1 | 1 | 29 | 5 | 35 |
| Module 2 | 0 | 25 | 1 | 26 |
| Module 3 | 0 | 44 | 1 | 45 |
| Module 4 | 0 | 7 | 1 | 8 |
| Toddler | 13 | 1 | 0 | 14 |
| Unknown Module | 0 | 3 | 0 | 3 |
| NA's | 1 | 7 | 11 | 19 |
| Total | 15 | 116 | 19 | 150 |

Age by Q10

| | Age <= 30 | Age > 30 | NA' | Tota |
|--------|-----------|----------|-----|------|
| Levels | mos | mos | S | ı |

| Fluent Speech | 0 | 43 | 2 | 45 |
|-------------------|----|-----|----|-----|
| Phrase Speech | 0 | 24 | 1 | 25 |
| Some Words | 0 | 15 | 1 | 16 |
| Unknown | 1 | 5 | 0 | 6 |
| Zero To Few Words | 13 | 18 | 4 | 35 |
| NA's | 1 | 11 | 11 | 23 |
| Total | 15 | 116 | 19 | 150 |
| | | | | |

Q13 by Q14

| | Autis | AS | AS Othe | | Tota |
|--------|-------|----|---------|----|------|
| Levels | m | D | r | S | I |
| Autism | 57 | 0 | 1 | 4 | 62 |
| ASD | 20 | 16 | 0 | 8 | 44 |
| Other | 1 | 0 | 20 | 1 | 22 |
| NA's | 0 | 0 | 0 | 22 | 22 |
| Total | 78 | 16 | 21 | 35 | 150 |

Q20 by Q22

| Levels | No | Yes | NA's | Total | | | | |
|--------|-----|-----|------|-------|--|--|--|--|
| No | 92 | 0 | 0 | 92 | | | | |
| Yes | 17 | 40 | 0 | 57 | | | | |
| NA's | 0 | 0 | 1 | 1 | | | | |
| Total | 109 | 40 | 1 | 150 | | | | |

Q32: 4 Levels

| | Frequenc | |
|----------------------------|----------|-------|
| Levels | у | % |
| Autism | 48 | 32.00 |
| Autism Spectrum Disorder | 63 | 42.00 |
| Not Qualified/Non-Spectrum | 26 | 17.33 |
| Other/Not Noted | 13 | 8.67 |
| Total | 150 | 100 |

Q17 by Q32 (4L)

| | | AS | NQ-N | Othe | Tota |
|--------|--------|----|------|------|------|
| Levels | Autism | D | S | r | - 1 |

| No | 12 | 6 | 5 | 3 | 26 | |
|---------|----|----|----|----|-----|--|
| Unknown | 31 | 53 | 21 | 9 | 114 | |
| Yes | 4 | 4 | 0 | 1 | 9 | |
| NA's | 1 | 0 | 0 | 0 | 1 | |
| Total | 48 | 63 | 26 | 13 | 150 | |

Q4 by Q32 (4L)

| <u> </u> | | | | | | | | |
|---------------|--------|----|-------|-------|------|--|--|--|
| | | AS | | | Tota | | | |
| Levels | Autism | D | NQ-NS | Other | ı | | | |
| BCBA | 5 | 1 | 2 | 1 | 9 | | | |
| DO/MD | 0 | 1 | 0 | 1 | 2 | | | |
| MSW | 8 | 3 | 2 | 3 | 16 | | | |
| Not Available | 11 | 8 | 7 | 2 | 28 | | | |
| Other | 2 | 2 | 1 | 1 | 6 | | | |
| PhD | 9 | 10 | 0 | 3 | 22 | | | |
| Psychologist | 11 | 34 | 13 | 2 | 60 | | | |
| NA's | 2 | 4 | 1 | 0 | 7 | | | |
| Total | 48 | 63 | 26 | 13 | 150 | | | |

Q18 by Q32 (4L)

| | Autis | AS | NQ-N | Othe | Tot |
|-----------------------|-------|----|------|------|-----|
| Levels | m | D | S | r | al |
| Behavioral Specialist | 1 | 1 | 1 | 1 | 4 |
| Health Care Entity | 1 | 12 | 3 | 3 | 19 |
| Insurance | 1 | 0 | 0 | 0 | 1 |
| Medical Specialist | 1 | 2 | 0 | 0 | 3 |
| Other | 7 | 9 | 3 | 2 | 21 |
| Parent/Caretaker | 2 | 3 | 0 | 0 | 5 |
| PCP | 4 | 9 | 4 | 0 | 17 |
| Unknown | 30 | 27 | 15 | 7 | 79 |
| NA's | 1 | 0 | 0 | 0 | 1 |
| Total | 48 | 63 | 26 | 13 | 150 |

Q19 by Q32 (4L)

| | Autis | AS | NQ-N | Othe | Tot |
|---------------|-------|----|------|------|-----|
| Levels | m | D | S | r | al |
| Father | 2 | 1 | 1 | 2 | 6 |
| Father, Other | 1 | 1 | 0 | 0 | 2 |

| Mother | 25 | 38 | 16 | 3 | 82 | |
|-----------------------|----|----|----|----|-----|--|
| Mother, Father | 6 | 11 | 1 | 3 | 21 | |
| Mother, Father, Other | 2 | 2 | 0 | 0 | 4 | |
| Mother, Other | 3 | 3 | 1 | 1 | 8 | |
| Other | 7 | 6 | 5 | 2 | 20 | |
| NA's | 2 | 1 | 2 | 2 | 7 | |
| Total | 48 | 63 | 26 | 13 | 150 | |
| | | | | | | |

Q20 by Q32 (4L)

| Levels | Autism | ASD | NQ-NS | Other | Total |
|--------|--------|-----|-------|-------|-------|
| No | 23 | 42 | 22 | 5 | 92 |
| Yes | 24 | 21 | 4 | 8 | 57 |
| NA's | 1 | 0 | 0 | 0 | 1 |
| Total | 48 | 63 | 26 | 13 | 150 |

Q33 by Q32 (4L)

| | Autis | AS | NQ-N | Othe | Tot |
|------------------|-------|----|------|------|-----|
| Levels | m | D | S | r | al |
| Yes | 32 | 44 | 1 | 5 | 82 |
| No | 1 | 1 | 22 | 0 | 24 |
| Other or Unknown | 15 | 18 | 3 | 8 | 44 |
| Total | 48 | 63 | 26 | 13 | 150 |

Q32: 3 Levels

| | Frequen | Perc |
|--------------------------|---------|-------|
| Levels | су | % |
| Autism | 48 | 32.00 |
| Autism Spectrum Disorder | 63 | 42.00 |
| Not Noted | 39 | 26.00 |
| Total | 150 | 100 |

Q17 by Q32 (3L)

| | | AS | | |
|---------|--------|----|-------|-------|
| Levels | Autism | D | Other | Total |
| No | 12 | 6 | 8 | 26 |
| Unknown | 31 | 53 | 30 | 114 |

| Yes | 4 | 4 | 1 | 9 | |
|-------|----|----|----|-----|--|
| NA's | 1 | 0 | 0 | 1 | |
| Total | 48 | 63 | 39 | 150 | |

Q4 by Q32 (3L)

| | AS | | Tota |
|--------|--|--|---|
| Autism | D | Other | I |
| 5 | 1 | 3 | 9 |
| 0 | 1 | 1 | 2 |
| 8 | 3 | 5 | 16 |
| 11 | 8 | 9 | 28 |
| 2 | 2 | 2 | 6 |
| 9 | 10 | 3 | 22 |
| 11 | 34 | 15 | 60 |
| 2 | 4 | 1 | 7 |
| 48 | 63 | 39 | 150 |
| | 5 0 8 11 2 9 11 2 | Autism D 5 1 0 1 8 3 11 8 2 2 9 10 11 34 2 4 | Autism D Other 5 1 3 0 1 1 8 3 5 11 8 9 2 2 2 9 10 3 11 34 15 2 4 1 |

Q18 by Q32 (3L)

| <u> </u> | | | | | | | | | |
|-----------------------|------------|---------|-----------|-----------|--|--|--|--|--|
| Levels | Autis m | AS D | Othe r | Tot al | | | | | |
| Behavioral Specialist | 1 | 1 | 2 | 4 | | | | | |
| Health Care Entity | 1 | 12 | 6 | 19 | | | | | |
| Insurance | 1 | 0 | 0 | 1 | | | | | |
| Medical Specialist | 1 | 2 | 0 | 3 | | | | | |
| Other | 7 | 9 | 5 | 21 | | | | | |
| Parent/Caretaker | 2 | 3 | 0 | 5 | | | | | |
| PCP | 4 | 9 | 4 | 17 | | | | | |
| Unknown | 30 | 27 | 22 | 79 | | | | | |
| NA's | 1 | 0 | 0 | 1 | | | | | |
| Total | 48 | 63 | 39 | 150 | | | | | |

Q19 by Q32 (3L)

| Levels | Autis | AS | Othe | Tot al |
|----------------|-------|----|------|-----------|
| | _ | | | _ |
| Father | 2 | 1 | 3 | 6 |
| Father, Other | 1 | 1 | 0 | 2 |
| Mother | 25 | 38 | 19 | 82 |
| Mother, Father | 6 | 11 | 4 | 21 |

| Mother, Father, Other | 2 | 2 | 0 | 4 |
|-----------------------|----|----|----|-----|
| Mother, Other | 3 | 3 | 2 | 8 |
| Other | 7 | 6 | 7 | 20 |
| NA's | 2 | 1 | 4 | 7 |
| Total | 48 | 63 | 39 | 150 |

Q20 by Q32 (3L)

| Levels | Autism | ASD | Other | Total |
|--------|--------|-----|-------|-------|
| No | 23 | 42 | 27 | 92 |
| Yes | 24 | 21 | 12 | 57 |
| NA's | 1 | 0 | 0 | 1 |
| Total | 48 | 63 | 39 | 150 |

Q33 by Q32 (3L)

| | Autis AS | | | Tot |
|------------------|----------|----|----|-----|
| Levels | m | D | r | al |
| Yes | 32 | 44 | 6 | 82 |
| No | 1 | 1 | 22 | 24 |
| Other or Unknown | 15 | 18 | 11 | 44 |
| Total | 48 | 63 | 39 | 150 |

Appendix G.

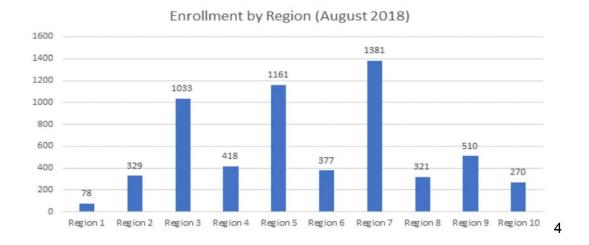
Summary MDHHS Diagnostician Survey

Overview

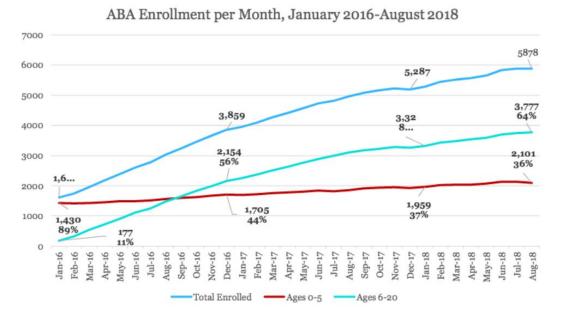
- MDHHS Autism Program updates
- MDHHS ASD Evaluator and Needs Assessment Project

Presenter: Kara Brooklier, PhD, Pediatric Neuropsychologist, Wayne State University 5,878 enrolled as of 8/31/2018

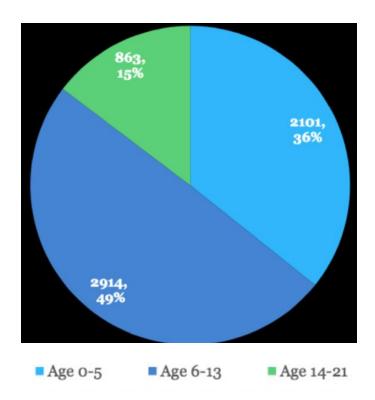
Enrollment same at July month end (many cases closed; 306 new enrollees)



ABA Enrollment per Month, January 2016-August 2018



Enrollment by Age (August 2018)



Telepractice

- 392 cases have been prior authorized
 - As of 9/13/2018: 255 open cases with telepractice authorizations
- Telepractice is authorized in 6 PIHP regions across 21 CMHs
 - (Region 1, 2, 4, 5, 9, 10)

ABA Provider Capacity Survey Results

| | July 2017 | January 2018 | June 2018 |
|-------|-----------|--------------|-----------|
| ВСВА | 281 | 334 | 393 |
| BCaBA | 35 | 33 | 34 |
| QBHP | 218 | 251 | 308 |

FY19 Budget

| Code | Service Description Reporting Reimbu Units | | | | | | |
|-----------------|--|---|--------------|--------------|----------|--|--|
| | | | BCBA | BCaBA | BT | | |
| 0359T | Behavior identification assessment includes interpretation of results and development of the behavioral plan of care. Untimed and typically 4 hours and no more than twice a year. | Encounter | \$480.0 0 | \$340.0 0 | N/A | | |
| 0362T/ 0363T | Exposure behavioral follow-up assessment (Functional Behavior Analysis/FBA). | 30 minutes | \$60.00 | \$42.50 | N/A | | |
| 0364T/ 0365T | Adaptive behavior treatment by protocol administered by technician. | 30 minutes | \$30.00 | \$30.00 | \$25.00 | | |
| 0366T/ 0367T | Group adaptive treatment by protocol administered by technician | 30 minutes | \$8.57 | \$8.57 | \$7.86 | | |
| 0368T/ 0369T | Adaptive behavior treatment with protocol modification and clinical observation & direction administered by qualified professional | 30 minutes | \$60.00 | \$42.50 | N/A | | |
| 0370T | Family behavior treatment guidance administered by qualified professional. Untimed typically 60-75 minutes. | Encounter | \$120.0 0 | \$85.00 | N/A | | |
| 0371T | Multiple family behavior treatment guidance administered by qualified professional. Untimed typically 90-105 minutes. | Encounter | \$72.00 | \$51.00 | N/A | | |
| 0372T | Adaptive behavior treatment social skills group. Untimed typically 90-105 minutes. | Encounter | \$51.43 | \$36.43 | N/A | | |
| 0373T/ | Exposure adaptive behavior treatment with protocol modification | First 60 | \$120.0 | \$120.0 | \$100.00 | | |
| 0374T | requiring two or more technicians for severe maladaptive behavior(s) | minutes Each additional 30 minutes | o \$60.00 | o \$60.00 | \$50.00 | | |

Kara Brooklier, PhD, LP The Children's Center Wayne State University

ASD Evaluator Survey Procedure

- Purpose
- Variables assessed
 - Demographics
- Training
- Supervision
- Current practices
- Challenges
- Training interests

Survey Procedure

- MDHHS Autism Team sent capacity surveys
- 175 evaluators
- 82% response rate

- Phone calls
 - Evaluators (n = 26); response rate = 74%
 - Supervisors (n = 9); response rate = 21%
- Results analyzed
- Summary and recommendations given to MDHHS Autism Team

Survey Results

- Evaluator Credentials:
 - Psychologists 61%
 - LP 12%
 - LLP 39%
 - TLLP 10%
 - Social Workers 37%
 - LMSW 29%
 - LLMSW 8%
 - Other 2% (physician, etc.)

Evaluator Experience & Training

- Experience varied
 - □ 30% < 1 year
 - □ 30% >5 years
- 95% had training on ADOS-2
 - □ 1/4 no additional training following ADOS-2 workshop
 - 1/2 training in ASD best practices
 - 1/3 training in comorbidity/ differential diagnosis

Evaluator Supervision

- Half receiving ongoing supervision
 - Most reviewing reports or discussing cases
 - □ < 15% supervisors watching tapes, live admin, reviewing coding, or diagnostic use
- Half not receiving ongoing supervision
 - Evaluators noted wanting additional training or supervision
- Supervisors tough to reach and noting most are not experienced with ASD assessment

Evaluator Readiness

- 44% reported not feeling *confidently prepared* for the ASD specific population and a little over half felt *somewhat prepared and confident*
- Take home, many evaluators come into this with little training or support beyond an initial two-day workshop and know they are not confident in doing these evaluations independently

Evaluation Load

- Most doing part-time or as a "small part" of job
- Range varied from 1-40 per month
 - Median = 4 per month
 - □ 10% completing > 20 per month

Current Evaluation Practices: Time

- Time spent in assessment
 - Most 2 to 3 hours
- Best practice in ASD research shows need for sufficient time with parent/caregiver and child to gather needed data (Gabrielson, 2015; Volkmar, 2014)

Current Evaluation Practices: Test Battery

- Required tools
 - ADOS-2 (95%)
 - ADI-R or Interview of ASD Symptoms (88%)
 - DD-CGAS (90%)
- Most only doing the minimum mandate

Current Evaluation Practices: Cognitive/ Developmental Assessment

- Rarely including or referring for cognitive measures in addition to mandated tools
- Despite the majority of QLP's indicating data is "extremely or very valuable" and 1/3 "somewhat valuable"
- Reasons cited for not including:
 - No time
 - Not qualified and have to refer out
 - Not reimbursed
 - Lack of admin support

Why Cognitive Assessment Matters

- Understanding developmental level
- Choosing a module
- Interpreting data from eval
- Writing good recs and goals
- EIBI outcome data— why ABA likely was approved as a benefit!
- Data tracking on ABA and other interventions

Current Evaluation Practices: Differential & Comorbid Diagnosis

- 50% see evaluation as autism specific
 - ASD (and sometimes just ABA) yes or no
 - Not assessing other conditions as differential or comorbidities
 - Reasons given, Lack of:
 - 1. Training
 - 2. Time
 - 3. Reimbursement
 - 4. Administrator support

Why does this matter?

- Tests (even really good ones) are just tools
- Tools are only as good as the hands they are in
- No test has perfect sensitivity and specificity
- 2016 study from Cathy Lord's group
 - School aged kids (module 3)
 - 20% kids with ADHD misclassified by ADOS-2 and 30% by ADI-R
 - Also missed 15% of kids with ASD

Current Evaluation Practices: Caregiver Feedback Sessions

- Arguably the most critical component
- Feedbacks are not being done consistently
 - Reasons given:
 - o Lack of admin support
 - o Not reimbursed

- o Families not showing/difficult to contact
- o Lack of time

Current Evaluation Practices: Treatment Recommendations

- Most suggest ABA when diagnosing ASD
 - But not addressing variables of ABA treatment, such as location, intensity, goals
- Limited to no recs outside of ABA
- · Limited to no recs for those not diagnosed
- Most not addressing recs for CLS, respite, school, speech, OT, or parent support

What Support Do Evaluators Want?

- Additional training
 - When cannot score ADOS-2 (85%)
 - Differential diagnosis (>75%)
 - Comorbid diagnosis (75%)
 - Additional training on ADOS-2 Coding (60%)
 - Understanding ABA treatment Challenging cases (trauma, severe ID, psychiatric)
- Peer and expert consultation
- Supervisor and administrator support

MDHHS Partnering with Experts

- Maintain list of evaluators
- Technical policy changes
- Development of best practice guidelines
- Monthly evaluator consultation calls/webinars
 - Second Wednesday of the month, 12-1pm

How Can Administrators Help?

- Support evaluators in providing best practice ASD evaluations
- Allow and support on-going training, supervision, and consultation
- Do not put excessive constraints on evaluators that interfere with quality evaluations
- Support a balance of quality with efficiency

• Support teams in families using full range of available services through CMH, not just ABA

Thank you!

Brie Elsasser, BCBA, Behavior Specialist; elsasserb@michigan.gov

James Grant, Data Analyst; grantj4@michigan.gov

Lisa Grost, Section Manager; grostl@michigan.gov

Kara Hart, Family Services and Supports Analyst; hartk2@michigan.gov

Jordan Milham, Program Analyst; milhamj@michigan.gov

Savannah Noeker, Student Assistant; noekers@michigan.gov

Morgan VanDenBerg, BCBA, Behavior Specialist vandenbergm@michigan.gov

For additional information, please visit www.michigan.gov/autism

Appendix H.

State Benchmarking Results

Participation:

51 State Inquiries Sent

All states except Tennessee offer the Katie Beckett state plan option or a comparable waiver to cover at least some children with significant disabilities regardless of household income (kff.org, 2019). In Michigan CSHCS does not include Autism on the list of medically eligible diagnoses.

TN does not offer TEFRA State Options (The Catalyst Center)

Evaluator Provider Type:

11 States Responding

| State | MD | PhD | NP w | LLP | LPC | MSW CI |
|-------|----|-----------|----------|-----|-----|--------|
| | | Psych- LP | training | | | |
| AK | X | X | | | | |
| AZ | X | X | | | | |
| СО | X | X | | | | |
| KY | X | X | Х | | | |
| MD | X | X | Х | | | |
| MI | X | X | Х | X | | X |
| MN | | X | | | | |
| MO | X | X | | | | |
| MT | X | X | Х | Х | Х | X |
| PA | X | X | | | | |
| RI | X | X | | | | |

Minimum Required Assessment:

11 States Reporting

ADOS-2 was a common diagnostic tool.

However, the following diagnostic assessments were also included in other states, and the ADOS was not reported in isolation.

- -physical exam/genetics testing
- -neurological exam
- -existing medical records
- -up to 2 hours of face to face contact
- -Vineland assessment

- -ADOS-2,
- -ADI-R or Interview of ASD Symptoms,
- -DD-CGAS
- -M-CHAT
- -CARS2
- -SCQ
- -ASRSTM
- -STAT
- -ABC
- -ASIEP
- -CHAT
- -PDDST
- -STAT
- -ASQ
- -GARS
- -ASDS

Re-Assessment:

The majority of states did not report a re-assessment requirement. A 6 month review of progress and re-authorization was commonly reported.

Average Wait Time for Assessment:

Range reported was 4 weeks to 6 months.

Common Recommendations:

29 States Reporting

| State | ABA | Psychiatry | PT/OT/S T | Pharm | ER/ Hospital | Psych | Thera- peutic | Parent Training | Hab | Other |
|-------|-----|------------|--------------|-------|-----------------|-------|------------------|--------------------|-----|-------|
| AK | Х | X | Х | Х | Х | | | _ | Х | |
| AL | Х | Х | Х | Х | | | Х | | | |
| AZ | Х | | Х | | | | | Х | | |
| CA | X | | | | | | | | | |
| CO | X | X | X | Х | | | Х | | Х | |
| CT | X | X | X | Х | Х | | | | | |
| FL | X | | X | | | | | | | |
| IL | X | | х | | | | | | Х | |
| IA | | | X | | | | | Χ | Х | X |
| KY | Х | X | X | Х | | | Х | | Х | |
| IA | Х | Х | Х | Х | | | Х | | Х | |
| MA | Х | | | | | | | | | |

| ME | Х | | Х | | | X | | Х | Х |
|----|---|---|---|---|---|---|---|---|---|
| MD | | Х | Х | | | Х | | Х | Х |
| MI | Х | Х | | Х | | Х | | | |
| МО | Х | X | X | X | X | Х | | Х | |
| MT | Х | X | X | X | X | Х | | Х | |
| NH | Х | X | X | X | X | | | | |
| NJ | Х | X | X | | | | | | Х |
| NM | Х | | X | | | | | | |
| NY | Х | X | X | X | X | Х | | | |
| NV | Х | X | X | X | X | | | Х | |
| OK | Х | X | | X | X | Х | | | |
| RI | Х | X | X | X | X | | | | |
| TX | Х | | X | | X | Х | Х | Х | Х |
| VA | Х | Х | | Х | X | Х | | | |
| VT | Х | Х | | Х | | Х | | Х | |
| WV | Х | | | | | | | | |

Min-Max Cost per Cases ABA Treatment:

| State | Dollar Amount/Year | Dollar Amount/Lifetime | Up to Age |
|-------|----------------------------------|---------------------------|--------------|
| AL | \$36K | Amount/Lifetime | n/a |
| AR | \$50K | | 18 |
| AZ | \$50K/\$25K | | 9/16 |
| СТ | \$50K/\$35K/\$2 5K | | 9/13/15 |
| FL | \$36K | \$200K | n/a |
| IL | \$36K | | n/a |
| IA | \$36K | | n/a |
| KS | \$36K/\$27K | | 7/19 |
| KY | \$\$50K/\$1K mth | | 1-7/7-21 |
| LA | \$36K | \$140K | 21 |
| MA | n/a | n/a | n/a |
| ME | \$36K | | n/a |
| МІ | \$50K/\$40K/\$3 0K | | 6/7-12/13-18 |
| МО | \$40K | | 18 |
| MT | \$50K/\$20K | | 8/9-19 |
| NH | \$36K/\$27K | | 12/21 |
| NM | \$36K | \$200K | n/a |
| NY | \$45K | | n/a |
| PA | \$36K | | n/a |
| RI | \$32K | | n/a |
| TX | 180 hours | 720 hours | 16 |
| VA | \$35K | | n/a |
| WV | \$30K (1 st 3 yrs) | | |

Caps on Treatment Duration:

| State | Up to Age |
|-------|-------------------|
| AK | 21 yrs |
| AR | 18 mos. – 5yrs |
| AZ | n/a |
| FL | 21 yrs |
| IL | 21 yrs |
| IA | 21 yrs |
| KS | 19 yrs |
| KY | 1-21 yrs |
| LA | 21 yrs |
| MN | 21 yrs |
| MT | 18 yrs |
| NH | 21 yrs |
| NJ | 21 yrs |
| NM | 19-22 yrs |
| NV | 18-22yrs |
| PA | 21 yrs |
| RI | 15 yrs |
| SC | 21 yrs |
| TX | 9 yrs |
| VA | 2-6 yrs |
| VT | 21 yrs |
| WV | 18 yrs |
| | |

Appendix I. DSM 5 Checklist Referral Form

| Patient Name | e: | Patient DOB: | Age: |
|--------------|---|---|---|
| Referring Ph | ysician: | NPI number: | |
| DSM-5 ASD | Chacklist: | | |
| | | al communication and social interac | ction across multiple contexts. as |
| | | , currently or by history (ALL 3 items | • · · · · · · · · · · · · · · · · · · · |
| | A1. Deficits in social-er failure of normal back- | motional reciprocity, ranging, for examp | ole, from abnormal social approach and aring of interests, emotions, or affect; to |
| | poorly integrated verba | al and nonverbal communication; to abrunderstanding and use of gestures; to | |
| | | - | ationships, ranging, for example, from ties in sharing imaginative play or in making |
| | icted, repetitive pattern toms currently or by h | ns of behavior, interests, or activities istory | s as manifested by at least 2 of 4 |
| | | etitive motor movements, use of object toys or flipping objects, echolalia, idios | |
| | behavior (e.g. extreme | eness, inflexible adherence to routines, distress at small changes, difficulties votake the same route or eat the same | |
| | B3. Highly restricted, fi | | ensity or focus (e.g., strong attachment to |
| | B4. Hyper- or hypo-rea (e.g., apparent indifferen | - | rest in sensory aspects of the environment ponse to specific sounds or textures, |
| | | in the early developmental periods (ted capacities, or may be masked by | but may not become fully manifest until |
| | toms cause clinically s | | |
| | = | Severity Level (1, 2, or 3) ehavior Severity Level (1, 2, or 3) | |
| | e disturbances are not der) or global developr | better explained by intellectual disal nental delay. | bility (intellectual developmental |
| | s criteria for ASD (criteria nature | a A-E satisfied)Date | |
| | | ria for ASD. Recommend further evalua | ation to r/o etiology of suspected delay. |
| · | | ch-Language Evaluation Occupa lopmental-Behavioral Pediatrician | ntional/Physical Therapy Evaluation Genetics Other |
| Pocomo | nend referral to Commun | nity Mantal Health for further Evaluation | and Rehavioral Consultation |

| Severity Level for ASD (Circle One) | Social Communication | Restricted Interests & Repetitive Behaviors |
|---|--|--|
| Level 3 'Requiring very substantial support' | Severe deficits in verbal and nonverbal social communication skills cause severe impairments in functioning, very limited initiation of social interactions, and minimal response to social overtures from others. For example, a person with few words of intelligible speech who rarely initiates interaction and, when he or she does, makes unusual approaches to meet needs only and responds to only very direct social approaches. | Inflexibility of behavior, extreme difficulty coping with change, or other restricted/repetitive behaviors markedly interfere with functioning in all spheres. Great distress/difficulty changing focus or action |
| Level 2 'Requiring substantial support' | Marked deficits in verbal and nonverbal social communication skills; social impairments apparent even with supports in place; limited initiation of social interactions; and reduced or abnormal response to social overtures from others. For example, a person who speaks simple sentences, whose interaction is limited to narrow special interests, and who has markedly odd nonverbal communication. | Inflexibility of behavior, difficulty coping with change, or other restricted/repetitive behaviors appear frequently enough to be obvious to the casual observer and interfere with functioning in a variety of contexts. Distress and/or difficulty changing focus or action. |
| Level 1 'Requiring support' | Without supports in place, deficits in social communication cause noticeable impairments. Difficulty initiating social interactions, and clear examples of atypical or unsuccessful responses to social overtures of others. May appear to have decreased interest in social interactions. For example, a person who is able to speak in full sentences and engages in communication but whose to-and-fro conversation with others fails, and whose attempts to make friends are odd and typically unsuccessful. | Inflexibility of behavior causes significant interference with functioning in one or more contexts. Difficulty switching between activities. Problems of organization and planning hamper independence. |

American Psychiatric Association. Pervasive developmental disorders. In: Diagnostic and Statistical Manual of Mental Disorders. 5th ed.-text revision (DSM-5). Washington, DC: American Psychiatric Association; 2013.

Additional ASD Screening Tools:

MCHAT-R/F CSBS-DP CAST

AIMS Modified INDT-ASD Tool (incl. app)

ASQ-3

FINANCIAL STATUS REPORT

Autism Alliance of Michigan

| FE ID Number 27-0472137 | Contract Num E20191719-0 | | | | | Page 1 | Of 3 | |
|--|-----------------------------|----------------------|--------------------------|----------------------------|-----------|---------------------------|-------------|--|
| Local Agency Name Autism Alliance of Michigan | Program Autism Suppo | rt Services Prog | | Code | | | | |
| Street Address 30100 Telegraph Rd. Suite 250 | Report Period 09/01/2019 | Thru | Date Prepared 10/31/2019 | Date Approved 11/5/2019 | | | | |
| City, State, ZIP Code Bingham Farms, MI, 48025 | Agreement Pe 10/01/2018 | eriod Thru | 09/30/2019 | | | Operational Advan 0.00 | ce | |
| | | Expen | ditures | | | Agreement | | |
| Category | Current Period | Correction | Agreement YTD | Match YTD | Budget | Balance | Expend% | |
| Program Expenses | | | | | | | | |
| 1. Salary & Wages | 137,439.11 | 0.00 | 865,239.04 | 0.00 | 855,986 | 5.00 -9,253 | .04 101.08% | |
| 2. Fringe Benefits | 59,542.92 | 0.00 | 144,809.73 | 0.00 | 177,31 | 7.00 32,507 | .27 81.67% | |
| 3. Travel | 4,524.35 | 0.00 | 26,020.42 | 0.00 | 20,000 | 0.00 -6,020 | .42 130.10% | |
| 4. Supplies & Materials | 6,342.99 | 0.00 | 50,954.84 | 0.00 | 43,400 |).00 -7,554 | .84 117.41% | |
| 5. Contractual | 143,666.19 | 0.00 | 471,428.97 | 0.00 | 461,750 | .00 -9,678 | .97 102.10% | |
| 6. Equipment | 0.00 | 0.00 | 0.00 | 0.00 | (| 0.00 | .00 0.00% | |
| 7. Other Expense | 0.00 | 0.00 | 0.00 | 0.00 | (| 0.00 | .00 0.00% | |
| Total Program Expenses | 351,515.56 | 0.00 | 1,558,453.00 | 0.00 | 1,558,45 | 3.00 0 | .00 100.00% | |
| | | | | | | | | |
| Indirect Costs | 46,838.50 | 0.00 | 113,797.00 | 0.00 | 113,79 | 7.00 | .00 100.00% | |
| TOTAL EXPENDITURES | 398,354.06 | 0.00 | 1,672,250.00 | 0.00 | 1,672,250 | 0.00 | .00 100.00% | |

Contract Number: E20191719-00

FINANCIAL STATUS REPORT

Autism Alliance of Michigan

| | | Revenues | | | | | | Agreement | | | |
|-------------------------|------------|-----------|--------|----------------|------------|------------|------------------|------------|--------------|---------|---------|
| Category | Funds | Cash | Inkind | Total Match | Total | Correction | Agreement YTD | Match YTD | Budget | Balance | Expend% |
| Source of Funds | | | | | | | | | | | |
| 1. Fees and Collections | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00% |
| 2. State Agreement | 343,611.59 | 0.00 | 0.00 | 0.00 | 343,611.59 | 0.00 | 1,422,715.00 | 0.00 | 1,422,715.00 | 0.00 | 100.00% |
| 3. Local | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00% |
| 4. Federal | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00% |
| 5. Other | 0.00 | 54,742.47 | 0.00 | 54,742.47 | 54,742.47 | 0.00 | 249,535.00 | 249,535.00 | 249,535.00 | 0.00 | 100.00% |
| Total Source of Funds | 343,611.59 | 54,742.47 | 0.00 | 54,742.47 | 398,354.06 | 0.00 | 1,672,250.00 | 249,535.00 | 1,672,250.00 | 0.00 | 100.00% |

FINANCIAL STATUS REPORT

Autism Alliance of Michigan

| CERTIFICATION: I certify that I am authorized to submit on behalf of this organization and that this is an accurate statement of expenditures and collections for the report period. Appropriate documentation is available and will be maintained for the required period to support costs and receipts reported. By submitting the FSR the individual is certifying to the best of their knowledge and |
|--|
| belief that the report is true, complete and accurate and the expenditures, disbursements, and cash receipts are for the purposes and objectives set forth in the terms and conditions of this agreement. |
| The individual submitting the FSR should be aware that any false, fictitious, or fraudulent information, or the omission of any material facts, may subject them to criminal, civil or administrative |
| penalties for fraud, false statements, false claims or otherwise. |

| Authorized Signature : Amy Emmons Date : 10/31/2019 | | Title: Financial Director | |
|---|--|----------------------------------|--|
| Contact Person Name: Amy Emmons | | Telephone Number: (734) 453-8804 | |

FOR STATE USE ONLY

| FOR STATE USE ONLY | | | | | | | |
|---|---|-------|-----|-------------|------------------------------|--|--|
| | Advance | INDEX | PCA | A OBJ. CODE | AMOUNT | | |
| Advance Outstanding | | | | | | | |
| Advance Issued or Applied | | | | | | | |
| Balance | | | | | | | |
| Message | | | | | | | |
| Authority: P.A. 368 of 1978 Completion: is a Condition of Reimbursement | Authority: P.A. 368 of 1978 Completion: is a Condition of Reimbursement The Autism Alliance of Michigan is an equal opportunity employer, services provider. | | | | loyer, services, and program | | |

Autism Alliance of Michigan Contract Number: E20191719-00 Page: 3 of 3