UNDER SECRETARY OF DEFENSE
4000 DEFENSE PENTAGON
WASHINGTON, D.C. 20301-4000

PERSONNEL AND READINESS

JUN 25 2020

The Honorable James M. Inhofe
Chairman
Committee on Armed Services
United States Senate
Washington, DC 20510

Dear Mr. Chairman:

The enclosed annual report is in response to the Senate Report 114–49, pages 157-158, accompanying S. 1376, the National Defense Authorization Act for Fiscal Year (FY) 2016, which requests the Secretary of Defense provide an annual report on the Autism Care Demonstration.

The Autism Care Demonstration offers Applied Behavior Analysis services for all TRICARE-eligible beneficiaries diagnosed with Autism Spectrum Disorder. Autism Care Demonstration participation increased 39 percent from 11,461 beneficiaries in FY 2015 to 15,928 beneficiaries in FY 2019. Program costs increased 129 percent from $161.5M in FY 2015 to $370.4M in FY 2019. The report provides information on the current state of the Autism Care Demonstration, and steps for the future to improve the care and support for beneficiaries and families.

Thank you for your continued support for the health and well-being of our Service members, veterans, and their families. I am sending an identical letter to the House Armed Services Committee.

Sincerely,

//Signed//
Matthew P. Donovan
US Under Secretary of Defense for P&R

Enclosure:
As stated

UNDER SECRETARY OF DEFENSE
4000 DEFENSE PENTAGON
WASHINGTON, D.C. 20301-4000

PERSONNEL AND READINESS

JUN 25 2020

The Honorable Jack Reed
Ranking Member
Committee on Armed Services
United States Senate
Washington, DC 20510

Dear Senator Reed:

The enclosed annual report is in response to the Senate Report 114-49, pages 157-158, accompanying S. 1376, the National Defense Authorization Act for Fiscal Year (FY) 2016, which requests the Secretary of Defense provide an annual report on the Autism Care Demonstration.

The Autism Care Demonstration offers Applied Behavior Analysis services for all TRICARE-eligible beneficiaries diagnosed with Autism Spectrum Disorder. Autism Care Demonstration participation increased 39 percent from 11,461 beneficiaries in FY 2015 to 15,928 beneficiaries in FY 2019. Program costs increased 129 percent from $161.5M in FY 2015 to $370.4M in FY 2019. The report provides information on the current state of the Autism Care Demonstration, and steps for the future to improve the care and support for beneficiaries and families.

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Enclosure:
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UNDER SECRETARY OF DEFENSE
4000 DEFENSE PENTAGON
WASHINGTON, D.C. 20301-4000

PERSONNEL AND
READINESS

JUN 25 2020

The Honorable Adam Smith
Chairman
Committee on Armed Services
U.S. House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

The enclosed annual report is in response to the Senate Report 114--49, pages 157-158, accompanying S. 1376, the National Defense Authorization Act for Fiscal Year (FY) 2016, which requests the Secretary of Defense provide an annual report on the Autism Care Demonstration.

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Sincerely,

//Signed//
Matthew P. Donovan
US Under Secretary of Defense for P&R

Enclosure:
As stated

UNDER SECRETARY OF DEFENSE
4000 DEFENSE PENTAGON
WASHINGTON, D.C. 20301-4000

PERSONNEL AND READINESS

JUN 25 2020

The Honorable William M. "Mac" Thornberry
Ranking Member
Committee on Armed Services
U.S. House of Representatives
Washington, DC 20515

Dear Representative Thornberry:

The enclosed annual report is in response to the Senate Report 114-49, pages 157-158, accompanying S. 1376, the National Defense Authorization Act for Fiscal Year (FY) 2016, which requests the Secretary of Defense provide an annual report on the Autism Care Demonstration.

The Autism Care Demonstration offers Applied Behavior Analysis services for all TRICARE-eligible beneficiaries diagnosed with Autism Spectrum Disorder. Autism Care Demonstration participation increased 39 percent from 11,461 beneficiaries in FY 2015 to 15,928 beneficiaries in FY 2019. Program costs increased 129 percent from $161.5M in FY 2015 to $370.4M in FY 2019. The report provides information on the current state of the Autism Care Demonstration, and steps for the future to improve the care and support for beneficiaries and families.

Thank you for your continued support for the health and well-being of our Service members, veterans, and their families. I am sending an identical letter to the Senate Armed Services Committee.

Sincerely,

//Signed//
Matthew P. Donovan
US Under Secretary of Defense for P&R

Enclosure:
As stated

Report to the Committees on Armed Services of the Senate and House of Representatives

The Department of Defense

Comprehensive Autism Care Demonstration

Annual Report

2020

In Response to: Senate Report 114-49, pages 157-158, accompanying S. 1376, the National Defense Authorization Act for Fiscal Year 2016

The estimated cost of this report or study for the Department of Defense is approximately $8,250 in Fiscal Years 2020. This includes $0 in expenses and $8,250 in DoD labor.
Generated on 2020APR06 RefID: F-144F978)

REPORT ON EFFORTS BEING CONDUCTED BY THE DEPARTMENT OF DEFENSE ON APPLIED BEHAVIOR ANALYSIS SERVICES

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INTRODUCTION

This report is in response to the Senate Report 114-49, pages 157-158, accompanying S. 1376, the National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2016, which requests a report to the Committees on Armed Services of the Senate and House of Representatives on the results of the Comprehensive Autism Care Demonstration (ACD). An interim report was sent to Congress on December 13, 2019, promising the final by May 31, 2020. This report is late due to claims data mining and analysis and COVID-19. This report is based on FY 2019 claims data, and is the fifth of these annual reports.

> The annual report should include a discussion of the evidence regarding clinical improvement of children with Autism Spectrum Disorder (ASD) receiving Applied Behavior Analysis (ABA) therapy and a description of lessons learned to improve administration of the demonstration program. In the report, the Department should also identify any new legislative authorities required to improve the provision of autism services to beneficiaries with ASD.

BACKGROUND

ABA services are one of many TRICARE covered services available to mitigate the symptoms of ASD. Other services include, but are not limited to: speech and language pathology (SLP); occupational therapy (OT); physical therapy (PT); medication management; psychological testing; and psychotherapy. ABA services are based on clinical necessity and are not limited by the beneficiary's age, dollar amount spent, number of years of services, or number of sessions provided. Generally, all ABA services continue to be provided through the purchased care system.

The current ACD began July 25, 2014, and consolidated three previous programs.[1] The goal of the ACD is to strike a balance between maximizing access while ensuring the highest level of quality and appropriateness of services for beneficiaries. The consolidated demonstration ensures consistent ABA service coverage for all TRICARE-eligible beneficiaries, including Active Duty family members (ADFMs) and non-ADFMs (NADFMs) diagnosed with ASD. The ACD was originally set to expire on December 31, 2018. The Department extended the demonstration, via a Federal Register Notice that was published on December 11, 2017, until December 31, 2023. The Notice stated that additional analysis and experience is required in order to determine the appropriate characterization of ABA services as a medical treatment, or other modality, under the TRICARE program coverage requirements. The Department will gain additional information about what services TRICARE beneficiaries are receiving under the ACD, how to most effectively target services having the most benefit, collect more comprehensive outcomes data, and gain greater insight and understanding of the diagnosis of ASD in the TRICARE population.[2]

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[1] Notice. "Comprehensive Autism Care Demonstration." *Federal Register* 79, no. 115 (June 16, 2014) 34291-34296. www.govinfo.gov/content/pkg/FR-2014-06-16/pdf/2014-14023.pdf.

[2] Notice. "Extension of the Comprehensive Autism Care Demonstration for TRICARE Eligible Beneficiaries Diagnosed With Autism Spectrum Disorder." *Federal Register* 82, no. 236 (December 11, 2017): 58136-58137. www.govinfo.gov/content/pkg/FR-2017-12-11/pdf/2017-26567.pdf.

DESCRIPTION OF THE ACD

Currently, the ACD offers only ABA services for all TRICARE-eligible beneficiaries diagnosed with ASD by an approved provider. Under the ACD, a Board Certified Behavior Analyst (BCBA), BCBA-Doctorate, or other TRICARE authorized provider who practices within the scope of his or her state licensure or state certification, referred to as an "authorized ABA supervisor," plans, delivers, and supervises an ABA program. The authorized ABA supervisor can deliver ABA services under either the sole provider model or tiered delivery model.

The TRICARE Operations Manual (TOM) Chapter 18, Section 4 "Department Of Defense (DoD) Comprehensive Autism Care Demonstration"[3] provides guidance to the managed care support contractors (MCSCs) to execute the benefit under the demonstration authority. The TOM describes: beneficiary eligibility, referral, and authorization requirements; provider eligibility requirements; outcome measure requirements; covered services and reimbursement rates; documentation requirements; exclusions; and MCSC responsibilities.

The Defense Health Agency (DHA) realizes the ACD has been largely focused on the implementation of ABA services; however, since the ACD is a comprehensive demonstration, DHA is directing efforts toward incorporating all available medically or psychologically necessary and appropriate services for children diagnosed with ASD and supporting the family. These improvements are discussed further below.

UTILIZATION TRENDS

The following information was generated using TRICARE purchased-care claims incurred during the last five FYs (FY 2015 – FY 2019) for which full year data is available for the ACD. All claims data examined in this report were extracted from the Medical Data Repository (MDR) on February 1, 2020 and our results are based upon data entered into the MDR by that date.

[3] TRICARE Operations Manual (TOM) Chapter 18, Section 4 "Department of Defense (DoD) Comprehensive Autism Care Demonstration"
https://manuals.health.mil/pages/DisplayManualHtmlFile/TO15/62/AsOf/TO15/C18S4.html.

TRICARE ACD Program Participants

At the end of FY 2019, there were a total of 15,928 beneficiaries with a diagnosis of ASD participating in the ACD: 11,920 ADFMs and 4,008 NADFMs (Table 1). That reflected a 39 percent increase in total participants from the FY 2015 level (11,461): a 30 percent increase for ADFMs (9,178) and 75 percent increase for NADFMs (2,283).

Table 1 – Historical Number of TRICARE ADFM/NADFM ACD Program Participants

FY	Number of Participants	% Growth in Participants from Prior FY
ADFM Participants		
FY 2015	9,178	
FY 2016	10,321	12%
FY 2017	10,596	3%
FY 2018	11,100	5%
FY 2019	11,920	7%
NADFM Participants		
FY 2015	2,283	
FY 2016	3,070	34%
FY 2017	3,431	12%
FY 2018	3,850	12%
FY 2019	4,008	4%
Total Participants		
FY 2015	11,461	
FY 2016	13,391	17%
FY 2017	14,027	5%
FY 2018	14,950	6%
FY 2019	15,982	7%
Source: MDR Data as of February 1, 2020		

ABA Program Costs

Total government costs for the ACD increased 129 percent from the FY 2015 level to FY 2019 ($161.5 million (M) in FY 2015 and $370.4M in FY 2019) (Table 2). Government costs for ADFMs increased 116 percent from the FY 2015 level to FY 2019 ($132.1M in FY 2015 and $284.7M in FY 2019) and 191 percent for NADFMs ($29.4M in FY 2015 to $85.7M in FY 2019). Of note, effective October 1, 2015, the maximum Government payment or annual cap for ABA services of $36,000.00 was lifted, and all beneficiary cost-sharing and deductibles and enrollment fees were aligned with the TRICARE Basic Program. Additionally, effective January 1, 2019, all ABA services rendered on the same day became subject to only one copayment per day which protected beneficiary costs for multiple ABA services per day. The annual catastrophic cap protections apply to all ABA services for beneficiaries in the ACD.

Table 2 – Historical Government Expenditures for TRICARE ADFM/NADFM ACD Program Participants

FY	Dollars in Millions	% Growth in Dollars from Prior FY
ADFM		
FY 2015	$132.1	
FY 2016	$185.6	41%
FY 2017	$210.1	13%
FY 2018	$246.8	17%
FY 2019	$284.7	15%
NADFM		
FY 2015	$29.4	
FY 2016	$46.5	58%
FY 2017	$58.2	25%
FY 2018	$73.4	26%
FY 2019	$85.7	17%
Total		
FY 2015	$161.5	
FY 2016	$232.1	44%
FY 2017	$268.3	16%
FY 2018	$320.2	19%
FY 2019	$370.4	16%
Source: MDR Data as of February 1, 2020		

The average cost per participant has increased a total of 65 percent from FY 2015 to FY 2019. Average ADFM cost per ACD participant (Table 3) increased 66 percent from $14,393.00 in FY 2015 to $23,886.00 in FY 2019. Average NADFM expenditures per ACD participant increased 66 percent from $12,878.00 in FY 2015 to $21,371.00 in FY 2019.

Table 3 – Historical Government Expenditures per Participant for TRICARE ADFM/NADFM ACD Program

FY	Dollars per Participant	% Growth in Dollars from Prior FY
ADFM Participant Expenditures		
FY 2015	$14,393	
FY 2016	$17,986	25%
FY 2017	$19,829	10%
FY 2018	$22,233	12%
FY 2019	23,886	7%
NADFM Participant Expenditures		
FY 2015	$12,878	
FY 2016	$15,143	18%
FY 2017	$16,951	12%
FY 2018	$19,074	13%
FY 2019	$21,371	12%
Total Participant Expenditures		
FY 2015	$14,091	
FY 2016	$17,335	23%
FY 2017	$19,125	10%
FY 2018	$21,419	12%
FY 2019	$23,253	9%
Source: MDR Data as of February 1, 2020		

Annual Expenditures by Ranges in FY 2019

In the past, there has been interest in the share of ABA users that are near or reaching the historical $36,000.00 fiscal year cap on expenditures. While the ACD no longer has annual expenditure limits under this demonstration program, the $36,000.00 expenditure level can serve as a historical benchmark to evaluate the distribution of annual expenditures by ACD program beneficiaries.

In FY 2019, there were 22.5 percent of ADFMs (2,677 of 11,920 users) and 18.9 percent of NADFMs (757 of 4,008 users) that had annual expenditures at or above $36,000.00 (see Table 4). These values have increased significantly from FY 2015 when 9.9 percent of ADFMs and 10.0 percent of NADFMs had annual expenditures that exceeded $36,000.00.

Table 4 – Number of ACD Participants by Annual Expenditure Ranges in FY 2019

Beneficiary Category	<$30K	$30-34.99K	$35-35.99K	$36K Exactly	>$36K	Total
ADSM	8,534	605	104	0	2,677	11,920
NADSM	3,051	169	31	0	757	4,008
Total	11,585	774	135	0	3,434	15,928
Source: MDR Data as of February 1, 2020						

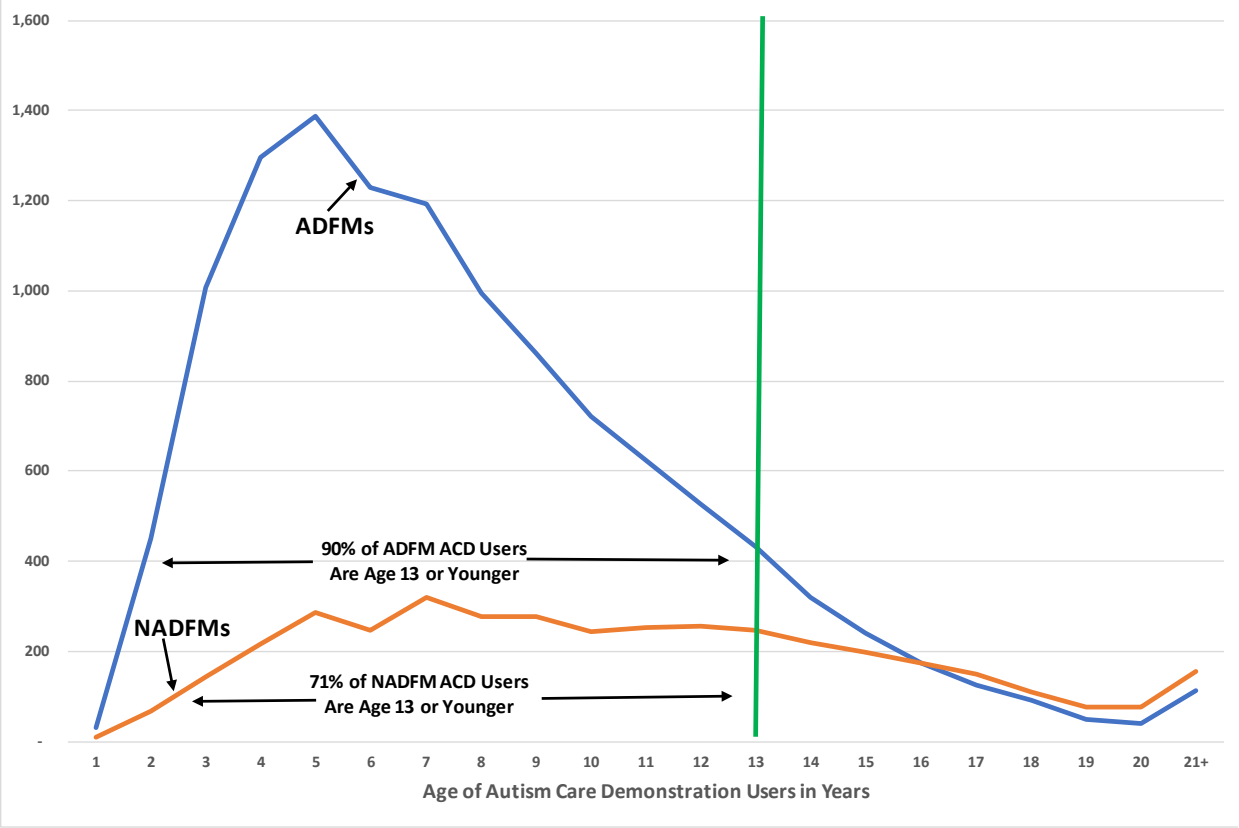
Age Distribution of ACD Program Users

Table 5 presents the distribution of ADFMs and NADFMs using TRICARE ACD services during FY 2019. Across both genders and both beneficiary types, 98.3 percent ACD beneficiaries are younger than age 21 and 85.5 percent are age 13 and younger (see Table 5 and Figure 1). The median participant age is 8 years, the average age is 8.5 years, and the most common age (mode) of participating beneficiaries is 5 years. Roughly 4 out of 5 beneficiaries diagnosed with ASD and participating in the ACD are male. ADFM beneficiaries tend to be younger than NADFMs, with a median age of 7 years (mean of 7.8) versus 10 years (mean of 10.8) for NADFMs.

Table 5 – FY 2019 Distribution of ADFM/NADFM TRICARE ACD Participants by Age

	Number of ACD Participants			Cumulative Percent Distribution
Age	ADFM	NADFM	Total	Total
1	32	10	42	0.3%
2	451	67	518	3.5%
3	1,007	145	1,152	10.7%
4	1,297	216	1,513	20.2%
5	1,389	287	1,676	30.8%
6	1,229	246	1,475	40.0%
7	1,194	320	1,514	49.5%
8	995	278	1,273	57.5%
9	862	276	1,138	64.7%
10	722	244	966	70.7%
11	625	253	878	76.2%
12	526	257	783	81.2%
13	434	246	680	85.4%
14	321	220	541	88.8%
15	241	197	438	91.6%
16	174	174	348	93.8%
17	126	150	276	95.5%
18	93	110	203	96.8%
19	50	78	128	97.6%
20	39	78	117	98.3%
21+	113	156	269	100.0%
Total	11,920	4,008	15,928	
Median Age	7	10	8	
Mean Age	7.8	10.8	8.5	
Mode Age	5	7	5	
% males	79%	81%	80%	
Source: MDR Data as of February 1, 2020				

Figure 1 – ACD Age Distribution FY 2019



Potential for Future Growth

With the moderation of annual ABA service user growth rates of 6 percent in FY 2018 and 7 percent in FY 2019 (Table 1), it is important to understand the potential for program growth in the future. One approach is to examine the proportion of current ADFM and NADFM beneficiaries diagnosed with ASD who are currently receiving ABA services with all those beneficiaries diagnosed with ASD under TRICARE. To estimate the total number of beneficiaries diagnosed with ASD in a given year, we queried both direct and purchased care claims filed and determined the number of beneficiaries ages 2 to 17 that had two or more separate claims with a diagnosis of ASD in any position (i.e., primary or secondary position).[4] Based on this analysis, we estimate the number of ADFMs and NADFMs diagnosed with ASD in FY 2019 was 34,361.

[4] DHA used this operational definition of two or more claims to estimate the number of beneficiaries diagnosed with ASD. Beneficiaries with only one claim are excluded because they likely would have been diagnosed with a non-ASD diagnosis as a result of additional testing.

Subsequently, we compared the total number of beneficiaries with a diagnosis of ASD to those with a diagnosis of ASD who are receiving ABA services under the ACD. We found that of all Military Health System (MHS) beneficiares with a diagnosis of ASD, 43 percent of ADFMs and 71 percent of NADFMs are not currently receiving any ABA services under the ACD (see Table 6). With 54 percent of the total MHS population of beheficiaries diagnosed with ASD not receving ABA services under the ACD, there is ample room for growth in this program. While we are not certain why 54 percent of the potential population does not use ABA services, we hypothesize that these beneficiaries may be using other clinical services (such as PT, OT, SLP, psychotherapy, psychotropic medication, etc.) or non-clinical services (such as academic supports, respite, other community resources, etc.), school-based or private pay ABA services, their diagnosis does not warrant clinical ABA services, they have previously used ABA services and no longer require these services, or other reasons.

Table 6 – Percent of Users Diagnosed with ASD Participating in the ACD during FY 2019

Beneficiary Category	Number of TRICARE Beneficiaries Diagnosed with ASD	Number of TRICARE ACD Program Users	Percent of TRICARE Beneficiaries Diagnosed with ASD Using the TRICARE ACD Program
ADFM	20,735	11,920	57%
NADFM	13,626	4,008	29%
Total	34,361	15,938	46%
Source: MDR Data as of February 1, 2020			

It is also important to note that ABA utilziation rates have plateaued over the years for both ADFM and NADFM (see Figures 2 and 3). Additionally, we do not expect the utilization rates between the two groups to equal as there are differences between the two groups; most notable is the average age of the participants. In general, NADFMs tend to be older children, and the utilization of ABA services tends to decrease significantly over time as noted in Figure 1. Other factors impacting NADFM utilization require further evaluation.

Figure 2 – ADFM Beneficiaries Diagnosed with ASD: ACD Users/Non-Users

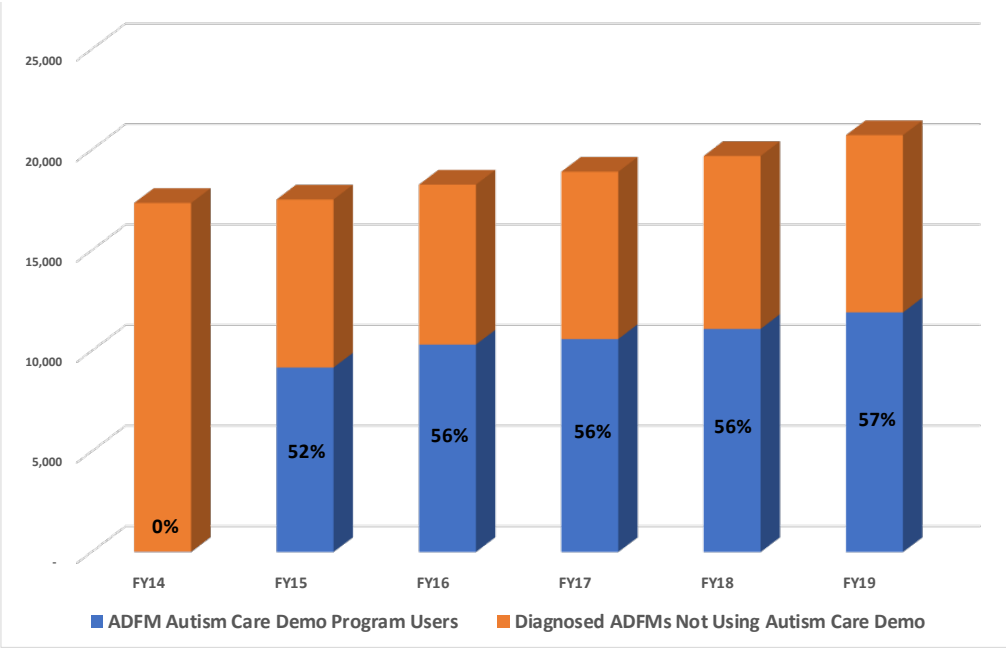
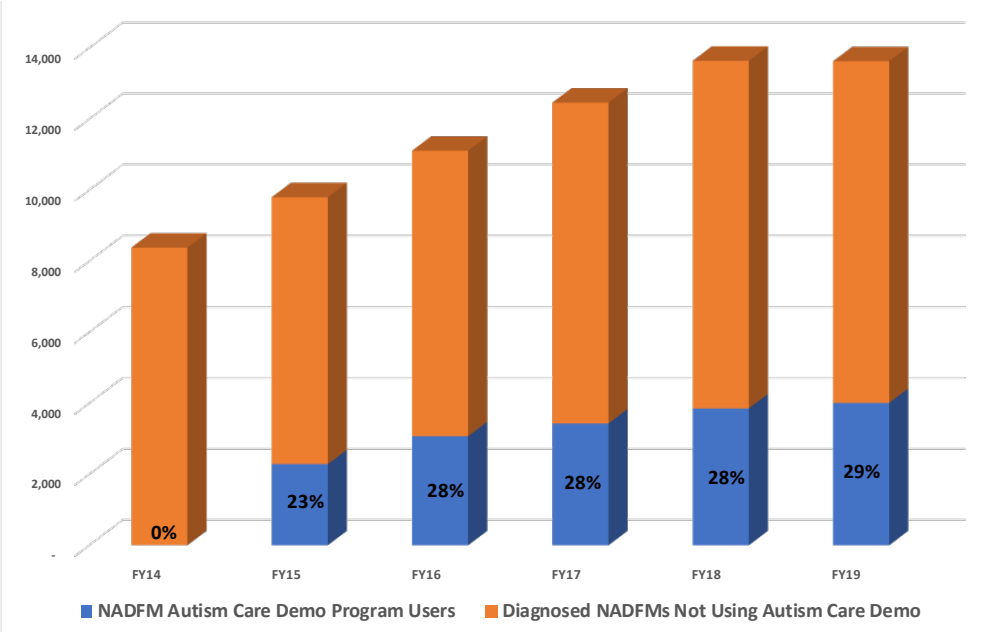


Figure 3 – NADFM Beneficiaries Diagnosed with ASD: Uses/Non-Users



Expenditures for Physical/Speech/Occupational Therapy and Prescription Drugs

In addition to the $370.4M in FY 2019 expenditures in the ACD, participating beneficiaries also use other TRICARE medical services for PT, SLP, and OT in both the purchased and direct care systems. Further, beneficiaries diagnosed with ASD also use the retail pharmacy, TRICARE Mail Order Pharmacy, and direct care pharmacy for prescription medications to treat behaviors impacting the symptoms of ASD, Attention Deficit Hyperactivity Disorder (ADHD), and related medical and mental health conditions. In examining the 15,928 TRICARE beneficiaries who participated in the ACD in FY 2019, we determined they received $48.9M in PT, SLP, and OT services (purchased care paid amounts and direct care full cost amounts) and $16.4M in prescription medications. Combined expenditures increased by 10 percent in FY 2019, increasing from $59.4M in FY 2018 to $65.3M in FY 2019 (Table 4).

Table 7 – Historical Government Expenditures for PT/OT/ST and Prescription Medication for TRICARE ADFM/NADFM ACD Program Participants

FY	PT/SLP/OT Services	Prescription Medications[1]	Total
ADFM Participant Expenditures			
FY 2015	$28,028,408	$13,852,350	$41,880,758
FY 2016	$31,516,590	$12,222,371	$43,738,961
FY 2017	$33,203,356	$10,427,384	$43,630,740
FY 2018	$37,257,644	$11,020,384	$48,277,835
FY 2019	$41,858,079	$12,026,340	$53,884,419
NADFM Participant Expenditures			
FY 2015	$3,775,274	$4,674,041	$8,449,315
FY 2016	$5,018,476	$4,297,492	$9,315,968
FY 2017	$5,877,184	$4,497,166	$10,374,350
FY 2018	$6,649,451	$4,479,409	$11,482,860
FY 2019	$7,046,223	$4,436,249	$11,482,472
Total Participant Expenditures			
FY 2015	$31,803,682	$18,526,391	$50,330,073
FY 2016	$36,535,066	$16,519,863	$53,054,929
FY 2017	$39,080,540	$154,924,550	$54,005,090
FY 2018	$43,907,302	$15,488,600	$59,406,695
FY 2019	$48,904,302	$16,462,589	$65,366,891

Source: MDR Data as of February 1, 2020
Note: Include paid Government amounts for purchased care and full costs for the direct care.
[1/]Includes medication for ASD, ADHD, and other types of mental health diagnoses.

ACD Participating ABA Providers

Under the ACD, an authorized ABA supervisor plans, delivers, and supervises an ABA program subject to approval by the MCSC. Based on reports submitted by the MCSCs, as of January 31, 2019, there were 13,096 TRICARE-authorized ABA supervisors across both TRICARE regions, and there were 1,200 assistants and 32,704 BTs supporting authorized ABA supervisors. This totals 47,000 certified[5] providers delivering ABA services to TRICARE beneficiaries.

Comparison of Recommended versus Rendered One-to-One Hours of ABA Services

In recent inquiries to the Department, stakeholders have expressed concerns that TRICARE beneficiaries are not receiving 35-40 hours of weekly one-to-one ABA direct services. During the period of Quarter 4, FY 2019, the average number of recommended one-to-one hours by the BCBA in each region was 19.88 hours per week (West) and 23.71 hours per week (East). Only 13 percent of treatment plans submitted by BCBAs in the West Region and 24 percent of treatment plans submitted by BCBAs East Region recommended 35 or more hours of one-to-one services per week. It is also important to note that not every beneficiary diagnosed with ASD requires 35-40 hours of weekly ABA services. Therefore, the Department does not expect to see all beneficiaries being recommended for, or utilizing 35-40 hours of ABA per week. Treatment plans should be based on the clinical necessity of the individual.

DISCUSSION OF THE EVIDENCE REGARDING CLINICAL IMPROVEMENT OF CHILDREN DIAGNOSED WITH ASD

While there is some limited research suggesting early behavioral and developmental interventions (based on the principles of ABA services delivered in intensive and comprehensive programs) can significantly affect the development of some children diagnosed with ASD, not all children diagnosed with ASD receiving ABA services show improvements. Two well-respected medical literature review services, external to DHA, continue to find the evidence for ABA services (Intensive Behavior Intervention) for the diagnosis of ASD is weak, noting, “An overall low-quality body of evidence mainly from poor-quality studies suggests that Intensive Behavior Intervention (IBI) improves intelligence or cognitive skills, visual-spatial skills, language skills, and adaptive behavior compared with baseline levels or other treatments. Six years after this agency’s extensive June 2013 ABA coverage review, the published reliable evidence does not reflect any consensus as to whether the reported improvements are clinically significant; very few studies reported on the clinical significance of findings. A paucity of evidence regarding the durability of treatment following treatment cessation, as well as uncertainty regarding optimal therapy parameters, preclude firm conclusions regarding the efficacy of IBI for ASD” (Hayes

[5] TRICARE accepts certification through the Behavior Analysis Certification Board (BACB); Behavior Intervention Certification Council (BICC); and the Qualified Applied Behavior Analysis (QABA) Certification Board.

2019)[6]. Cochrane (2018)[7] noted, "The strength of the evidence in this review is limited because it mostly comes from small studies that are not of the optimum design. Due to the inclusion of nonrandomized studies, there is a high risk of bias and we rated the overall quality of evidence as 'low' or 'very low' using the GRADE system, meaning further research is very likely to have an important impact on our confidence in the estimate of effect and is likely to change the estimate."

The research literature available regarding ABA services predominantly consists of single-case design studies which does not meet criteria for "reliable evidence" under TRICARE standards.[8] There are still methodological concerns limiting the strength of the research such as identified characteristics of children (including symptom severity), rendering providers, and types of treatment for positive outcomes. These limitations include: "dose-response" (frequency, intensity, and duration), treatment fidelity, few studies which use a control group, few longitudinal studies which demonstrate long-term effectiveness, and no replication of similar results in well-designed studies.

Currently, there are no defined ASD treatment Standards of Care (SoC). Practice parameters have been developed by various interest groups, to include the recently publish clinical report from the American Academy of Pediatrics (2020)[9], to guide the assessment, diagnosis, and treatment of ASD, but research has not been able to demonstrate effective and consistent results to identify a clear SoC for the treatment of ASD. No one intervention has been shown to be beneficial across all core symptoms of ASD. Consensus among recognized national organizations endorses the use of a comprehensive program that includes PT, OT, SLP, as well as ABA services, all targeted at deficits in the areas of: social communication, language, play skills, maladaptive function/behaviors, and ongoing parent education. Research has demonstrated ABA services have produced the best results for targeted maladaptive behavior, and the strongest intervention evidence appears to be for parent training and support noting that parental involvement is a fundamental component of effective ASD intervention.[10]

The Department continues to support evaluations into the nature and effectiveness of ABA services under the TRICARE program. The TOM Change 199, implemented norm-referenced, valid, and reliable outcome measures; the data collection began on January 1, 2017. Currently, there are three outcome measures required under the ACD: the Vineland Adaptive Behavior Scale – Third Edition (Vineland – 3) which is a measure of adaptive behavior functioning; the Social Responsiveness Scale, Second Edition (SRS-2) which is a measure of social impairment associated with ASD; and the Pervasive Developmental Disabilities Behavior

[6] Hayes, (2019) Comparative Effectiveness Review: Intensive Behavioral Intervention for Treatment of Autism Spectrum Disorder.
[7] Reichow B, Hume K, Barton EE, Boyd BA. Early intensive behavioral intervention (EIBI) for young children with autism spectrum disorders (ASD). *Cochrane Database of Systematic Reviews* 2018, Issue 5. Art. No.: CD009260. DOI:10.1002/14651858.CD009260.pub3.
[8] Title 32, Code of Federal Regulations, part 199.2 (32 CFR 199.2) Definitions: "Reliable Evidence"
[9] Hyman, S., Levy, S., and Myers, S. (2020). Identification, Evaluation, and Management of Children with Autism Spectrum Disorder, PEDIATRICS Volume 145, number 1.
[10] National Research Council. (2001). Educating Children with Autism. Washington, DC: The National Academies Press. https://doi.org/10.17226/10017.

Inventory (PDDBI) which is a measure designed to assist in the assessment of various domains related to ASD. Additionally, the PDDBI is a measure designed to assess the effectiveness of treatments for children with pervasive developmental disabilities, including ASD, in terms of Response to Interventions. The outcome measure scores are completed and submitted to the MCSCs by eligible providers authorized under the ACD. The Vineland-3 and SRS-2 are required every 2 years and the PDDBI is required every 6 months.

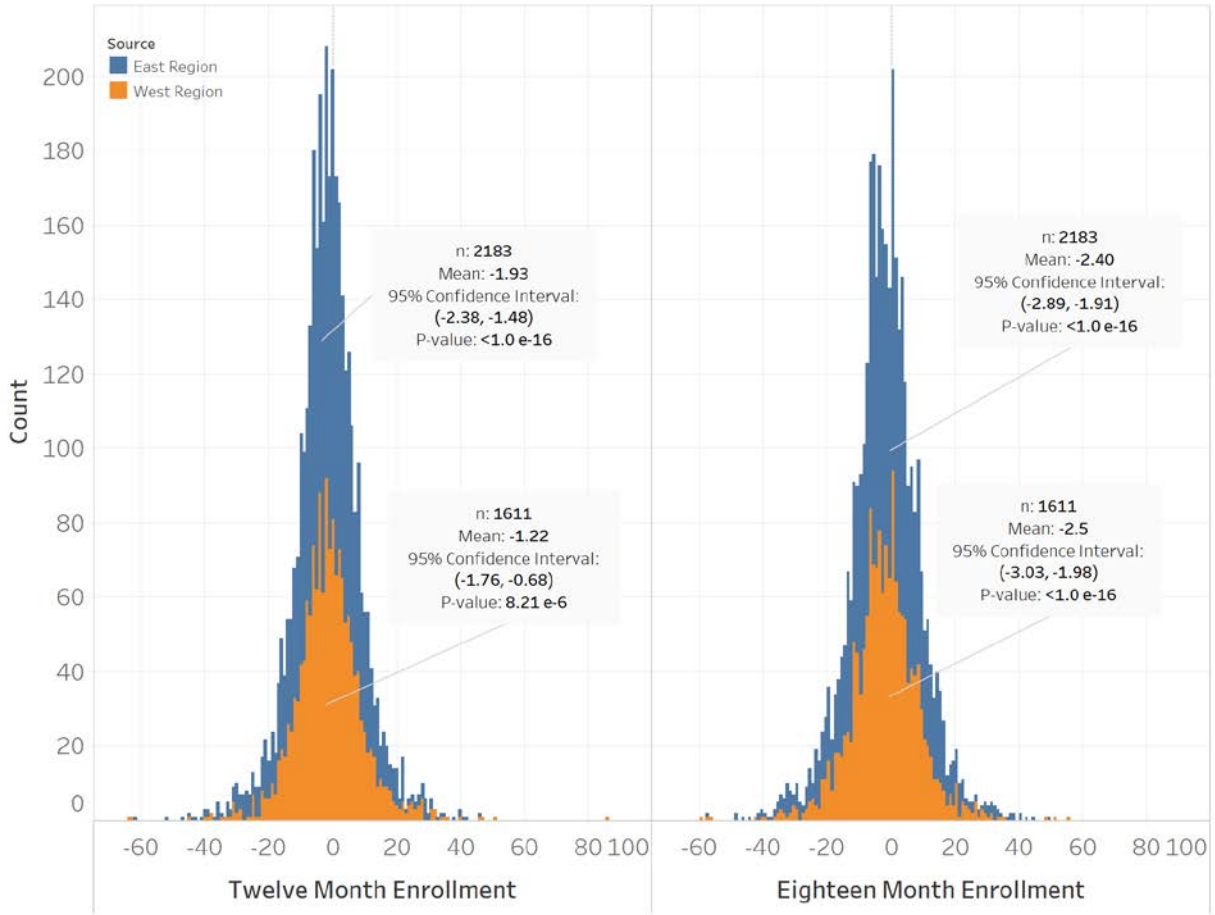
ACD Outcome Measures

The Department has published three reports to date with initial findings from the available records of PDDBI scores. The first two quarterly reports described PDDBI outcome scores for beneficiaries receiving 6 months of ABA services. The third report compared additional PDDBI scores for beneficiaries who received 12 months of ABA services. Initial findings demonstrated that overall, the majority of beneficiaries experienced little to no change in symptom presentation based on parent report. Additionally, a small percentage of beneficiaries were noted as having worsening of symptoms and a similar small percentage demonstrated symptom improvement. DHA also noted that these findings should be interpreted with caution as the PDDBI is just one metric of several collected and reported. Caution should be used as there were no other factors considered in those summaries such as age, symptom severity, number of hours of services, total duration of ABA services, other services, academic placement, etc. Subsequently, the Department received letters of concern regarding these findings. As a result, this annual report addresses some of the concerns presented by these stakeholders, based on the available data collected and reported.

The following outcome measures summary represents TRICARE beneficiaries from both East and West regions who have received at least 18 months of ABA services since January 1, 2018 (start of health care delivery for the new MCS contracts). Any beneficiary who did not have baseline, 12- and 18-month data points for the PDDBI Parent Form was excluded. Additionally, this report does not include any analysis of the Vineland-3 or SRS-2 as no one beneficiary had 2 full years of ABA services to include baseline and 2-year review data with these two measures. The total number of beneficiaries included in this analysis are 3,794 (West=1611; East=2183). Both regions demonstrate similar results across all figures thus increasing the confidence of the data. Please note that many of these beneficiaries received more than just ABA services, therefore, it is impossible to know for certain whether the changes reported here are due to ABA services, other services, maturation of the individual, or a combination of factors.

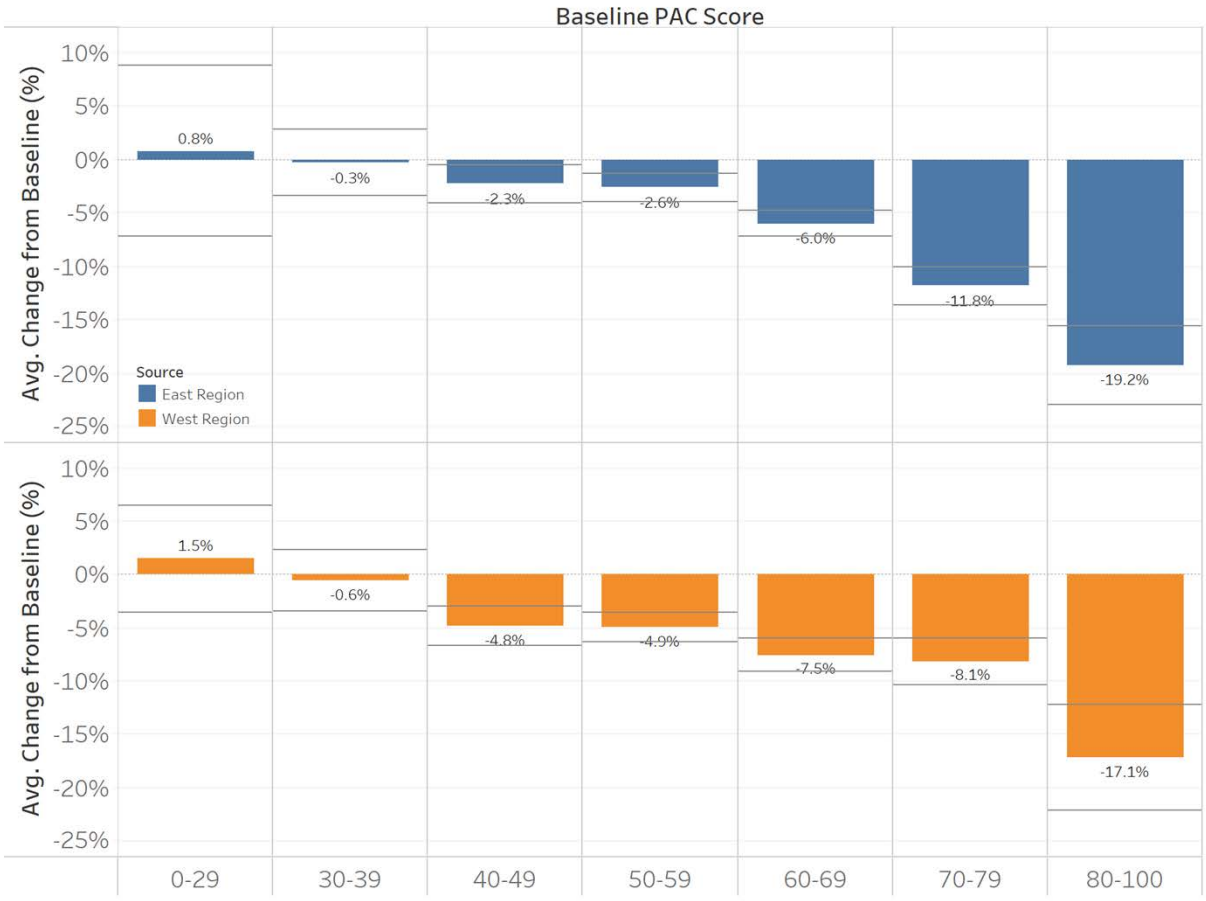
The histogram in Figure 4 represents a comparison for both West and East regions at 12 and 18 months for the beneficiary actual point score change (point score change is defined as the difference between baseline score and the 12 or 18 month score). Of note, a decrease in score on the PDDBI denotes improvement in symptom presentation. After 12 months of ABA services, West region beneficiaries had an average change score of -1.22, and East region beneficiaries had an average change score of -1.93 with a 95 percent confidence interval (CI) that accounts for random error, meaning that the true score falls within the range of -1.76, -0.68 and -2.38, -1.48, (West, East respectively). After 18 months of ABA services, West region beneficiaries had an average change score of -2.50, and East region beneficiaries had an average change score of -2.40, with a 95 percent CI that accounts for random error, meaning that the true score falls within the range of -3.03, -1.98 and -2.89, -1.91, (West, East respectively). For both 12 and 18 months, the p-value, which is an indicator if there is a difference from zero, is less than 0.05 which means that this data is statistically significant. Althougth there was a statistical difference in scores at 12 and 18 month, the presented changes do not necessarily indicate clinical improvement especially since the gains are extremely small. To our knowledge, there is no available literature defining how much change would be considered clinically significant. Additionally, there is no control group (i.e., no treatment or another treatment) to which these findings can be compared.

Figure 4 – Point Change in PACS (Parent Autism Composite Score) on PDDBI



The remaining outcome measures data reported in this report are analyses that focus on beneficiaries' outcomes after 18 months of ABA services. Figure 5 depicts the average percent of change scores for beneficiaries by their baseline score. Figure 5 is different from Figure 4 in that Figure 5 is a percent change not a point change. For both West and East regions, all groups with scores 40 and above demonstrated statistically significant change on the PDDBI. However, those beneficiaries with the most severe baseline scores (80-100) demonstrated the greatest change in PDDBI score after 18 months. Additionally, scores 39 and below demonstrated no change from baseline score. Again, it is unclear if ABA services were the change agent impacting these percent score changes or if another variable, or combination of variables, created the change. Additionally it is unclear if any of the change is of clinical significance.

Figure 5 – Average Percent Change in PACS after 18 Months of ABA Services: Baseline Scores

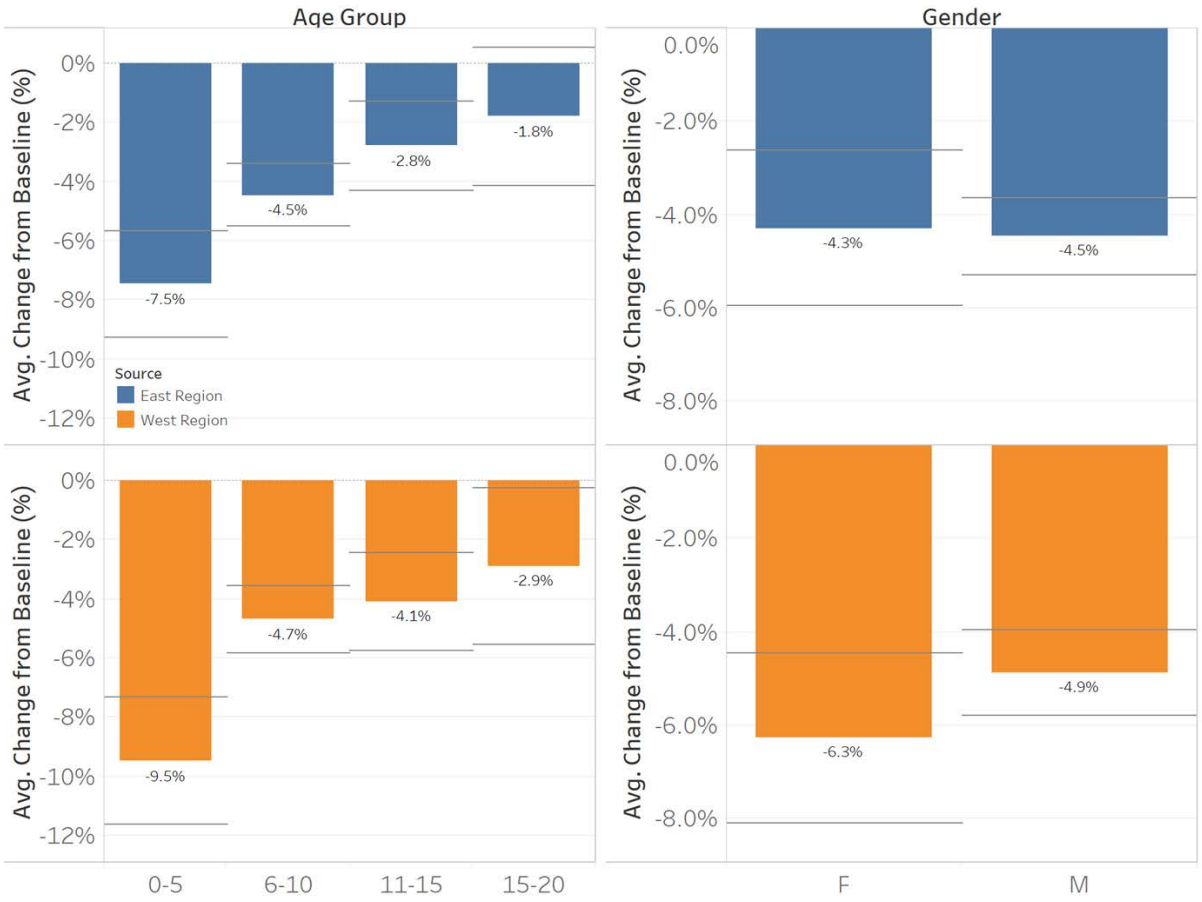


Note: Gray bars denote the 95 percent confidence interval

Figure 6 analyzes the data by age and gender. As seen in both data sets from the West and East regions, all ages groups except the East region ages 15-20 years demonstrated a statistically significant percent change from baseline scores. Additionally, beneficiaries who are younger, ages 0-5 years, had a percent change that was statistically significantly greater than the other age ranges, meaning the younger beneficiaries had a greater level of percent change from their baseline scores. All other age ranges had a CI that overlapped, indicating there was no statistically significant difference between age groups above 5 years.

Regarding gender, both regions demonstrated statistically significant percent change improvement from baseline scores, however, there was no statistically significant differences between males and females in either region.

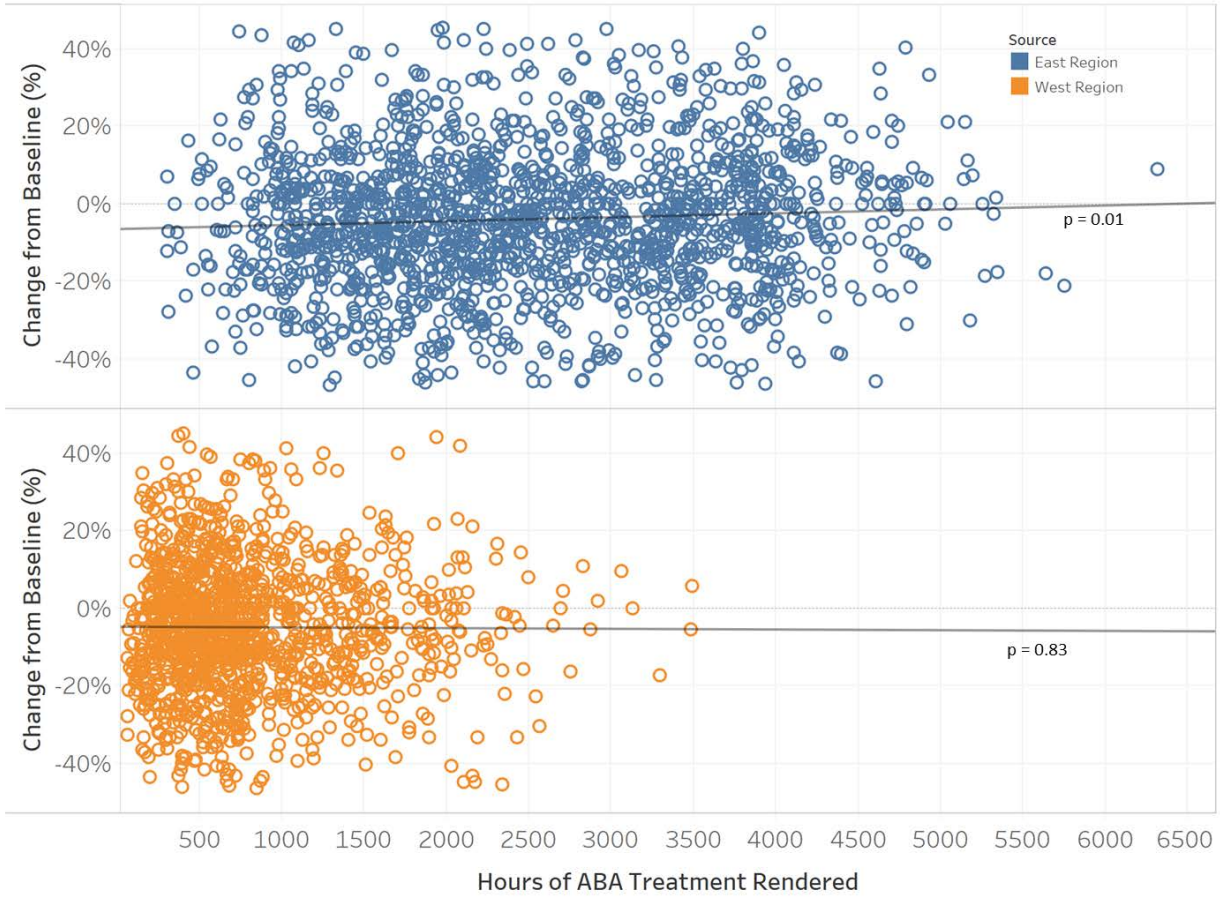
Figure 6 – Average Percent Change in PACS after 18 Months of ABA Services: Age/Gender



Note: Gray bars denote the 95 percent confidence interval

Figure 7 depicts the percent change in baseline PDDBI PACS compared to the total number of hours of rendered ABA services over 18 Months. This number is the total number of direct one-to-one hours of paid claims for Category III Current Procedural Terminology (CPT) code 0364T/0365T and Category I CPT code 97153 (Adaptive Behavior Treatment by Protocol). For the East region, the trend line indicates that beneficiary scores worsened with more hours of ABA services. In the West region, there is no statistically significant correlation between the total number of direct hours rendered and outcome measure scores. The West region trend line demonstrated a flat trend line noting no correlation with rendered hours of ABA services. There does not appear to be a correlation between outcome measures and the number of hours rendered. In other words, the number of hours rendered does not appear to impact outcomes. If the amount of direct ABA services was correlated with improvement, the trend line would demonstrate a statistically significant negative slope. Therefore, any percent change in PAC scores over time (Figure 4) cannot be directly attributed to hours of ABA services provided under the ACD, and could be due to other factors such as developmental growth/maturation and/or other concurrent treatment.

Figure 7 – Percent Change from Baseline Scores vs Total Hours of Rendered ABA Services after 18 Months



Subset population correlation analyses were run for age and severity (see Figures 8 and 9). As presented in Figure 8, no one age group demonstrated improvement when correlated with the number of hours of rendered ABA services. Additionally, some trends lines (East region: ages 0-5 and 6-10; West region: age 15-20) depict worsening percent score changes. In Figure 9, no one baseline PAC score, except the West region group of 0-29, demonstrated any improvement when correlated with the number of hours of rendered ABA services.

Figure 8 – Percent Change from Baseline Score vs. Total Hours of Rendered ABA Services after 18 Months by Age Group

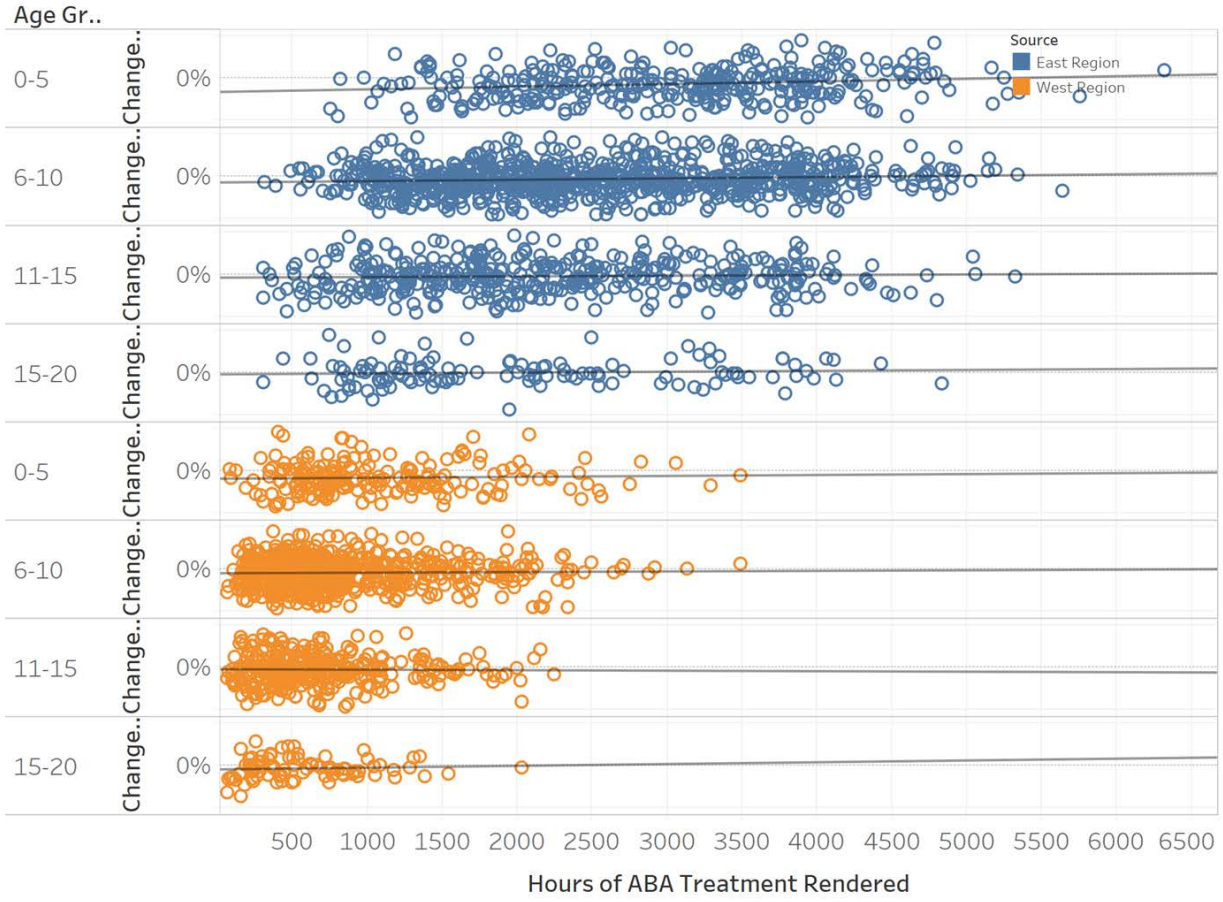
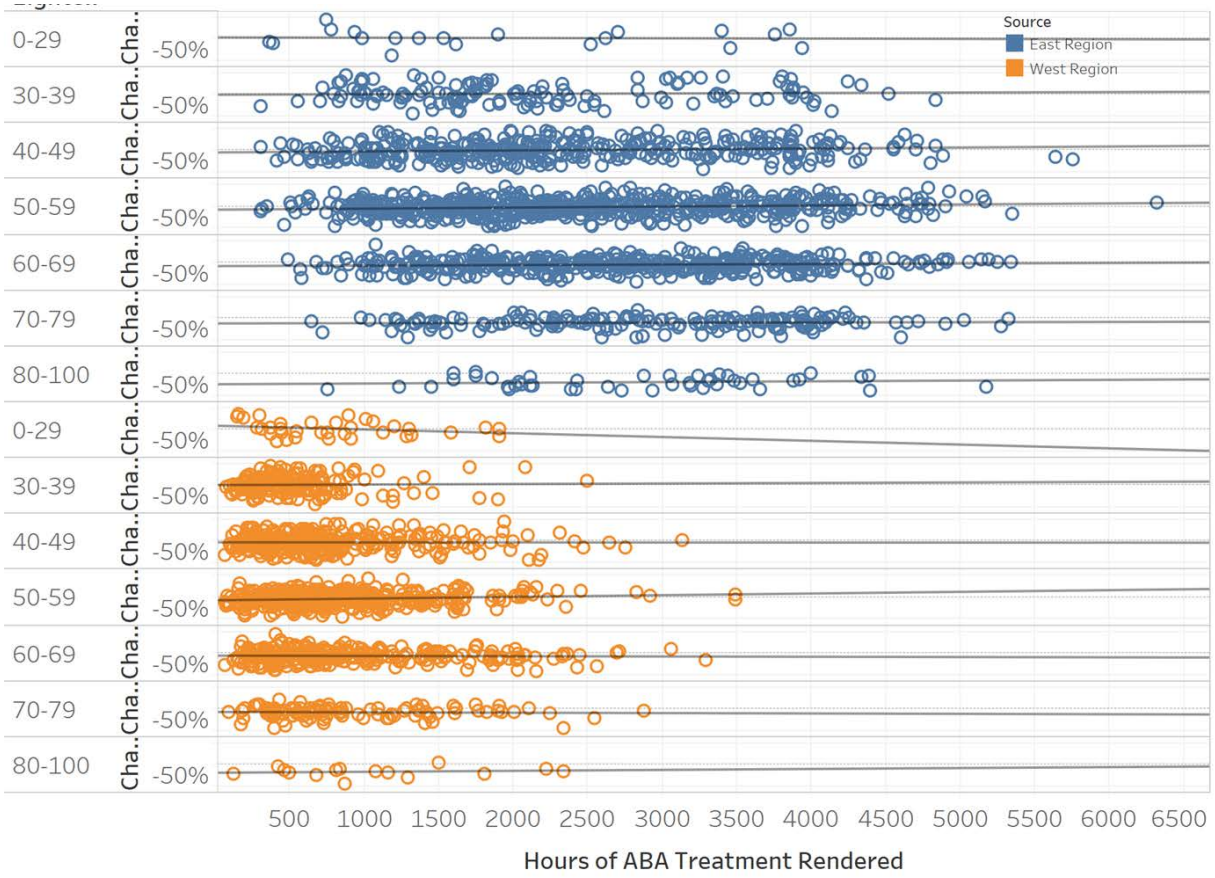


Figure 9 – Percent Change from Baseline Score vs. Total Hours of Rendered ABA Services after 18 Months by Baseline Score Group



Summary of ACD Outcome Measures Analysis

Overall, the findings from this analysis continue to demonstrate concern with overall outcomes of beneficiaries participating in the ACD. While the change scores in Figure 4 note improvements after 12 and 18 months of rendered ABA services, and that most baseline severity scores and most ages demonstrated some percent change in scores from baseline, the changes are small and may not be clinically significant. In addition, there is no comparison group (no treatment or another type of treatment) to note whether or not the change score at 12 months and 18 months is associated with ABA services or other treatments received. As a result, there is no way to know if the relatively small change observed here is the result of ABA services, other treatment, or if this simply is a result of maturation as noted in the PDDBI manual (page 60).[11] Additionally, it is important to note that there are no industry standards for "dose-response" regarding expected changes for beneficiaries receiving ABA services. What can be interpreted with confidence is that the number of hours of ABA services rendered did not have the intended

[11] Cohen, I., & Sudhalter, V. (2005). *Pervasive Developmental Disabilities Behavior Inventory Professional Manual*. Lutz, FL: Psychological Assessment Resources.

impact of symptom reduction on the PAC scores. This lack of correlation between improvement and hours of direct ABA services strongly suggests that the improvements seen are due to reasons other than ABA services and that ABA services are not significantly impacting outcomes.

As a result of this analysis, it is imperative that DHA take a deeper look into why TRICARE beneficiaries are not seeing more improvement over time. The findings that the outcomes do not correlate to treatment intensity, and that the overall results show limited improvement, demonstrate the need for changes to the ACD. The reasons for these findings are not clear, but regardless of the reasons for these outcomes, ultimately, these findings demonstrate that the current format of the ACD, and the delivery of ABA services, is not working for most TRICARE beneficiaries in the ACD. Planned changes to the policy, to include increased oversight and management, and greater support to the family, is imperative. While recognizing the limitations of the existing data, the Department remains very concerned about these results, and whether the current design of this demonstration, as well as ABA services specifically, is providing the most appropriate and/or effective services to our beneficiaries diagnosed with ASD.

DHA Annual TRICARE Quality Monitoring Contract (TQMC) ACD Audit

DHA conducted the first TQMC audit of ACD in 2016. The purpose of that study was to conduct an audit of the TRICARE ACD program that served as an analysis for the full implementation of the required annual audits. That audit provided valuable information regarding the ACD, the beneficiaries who utilize ABA services under the ACD, and the administration and compliance of the ACD as outlined in the TOM.

The current study used clinical data obtained through audit claims data and medical records reviews on a statistically valid sample of new and continuously enrolled ACD beneficiaries during FY 2018. The final representative sample included 1,252 beneficiaries. These combined statistics provide a broad view of the ACD, but the results cannot conclude clinical significance of treatment impact. Only a subjective inference is possible at this time. What this comprehensive examination does provide, however, is an informative description that can be useful in the current understanding of the ACD, in the development of measures and benchmarks, and ultimately in the fulfillment of the ACD's overarching goals.

This study provided descriptive analyses for a sample of ACD participants of the outlined TOM components, and these results were utilized to comprehensively examine the status of the ACD. Study results showed an overall average of 96 percent completeness for TOM requirements. All records included measurable goals and objectives and were associated with social interaction, communication, and behavioral domains. The vast majority of records showed that some measures were consistently used throughout the course of the treatment. Additional notable findings from this audit include:

- 12.3 percent of audit beneficiaries have received four or more years of ABA services with 2.9 percent of beneficiaries receiving more than seven years of ABA services;

- Almost 65 percent of treatment plans had zero to minimal (less than 30 minutes per week) parental participation;

- Only 22.1 percent of treatment plans reviewed recommended 21 or more hours of ABA services per week (77.9 percent recommended 20 or less hours per week of ABA services); and

- 63.3 percent of treatment plans documented Functional Behavioral Assessments for maladaptive behaviors.

Congressionally Directed Medical Research Program (CDMRP) Study

To acquire additional information on ABA services under TRICARE, DHA has been working with the CDMRP to award a contract to a research group to study ABA service delivery models. The CDMRP study was awarded to a research group from the University of Rochester in September 2018. Results from the first annual report noted that this study, titled "Comparative Effectiveness of Early Intensive Behavioral Intervention and Adaptive ABA for Children with Autism in TRICARE," completed several milestones to include, obtaining Institutional Review Board (IRB) approval, identifying research sites/partners, and beginning recruitment. Additional information is available at: https://clinicaltrials.gov/ct2/show/study/NCT0407806. It is anticipated that the results of the CDMRP study will not only further DHA's understanding of the impact of ABA services delivered to ACD participants, but that findings from this study may also benefit the larger community of individuals diagnosed with ASD and their families in several ways, including but not limited to, offering more choices to families, potentially identifying response to treatment through predictive factors, and lowering cost while increasing access.

Military Medical Treatment Facility (MTF) Programs Supporting Beneficiaries Diagnosed with ASD and their Families

Generally, all ABA services continue to be provided through the purchased care system. However, two innovative programs are ongoing at MTFs that aim to support beneficiaries diagnosed with ASD and their families by focusing on giving families more information about ASD and treatment options. In November 2017, Fort Belvoir Community Hospital (FBCH) created the FBCH Autism Clinic which includes 4 components: Autism and Communication Diagnostic Clinic (a multi-disciplinary clinic for newly diagnosed beneficiaries and their families); Autism Clinic (an new evaluation clinic for previously diagnosed beneficiaries and their families); the Autism Resource Clinic (a clinic designed to connect families with local resources and provide support); and an Autism Follow-up Clinic. Once per month, the Autism Resource Clinic hosts a 4-hour session featuring 15-20 speakers where families learn about medical and non-medical resources available on the installation, as well as obtain information regarding local area school programs and supports, community resources, and other non-military activities that support children diagnosed with ASD and their families. Subsequently, two additional MTFs have established Autism Resource Clinics following the FBCH model (Walter Reed National Military Medical Center in 2018 and Naval Medical Center (NMC) Portsmouth in

2019) with more installations gaining interest (proposed sites in 2020 include Tripler Army Medical Center; NMC San Diego; and Wright Patterson Air Force Base (AFB)). To date, 748 beneficiaries and their families have participated in the FBCH diagnostic clinic and 215 families have participated in the FBCH Autism Resource Clinic. Current metrics collected include parent satisfaction surveys. The Autism Research Clinic is also pending IRB approval for research to validate this program as a critical tool for the diagnosis of ASD and to establish parent education as a standard of ASD care.

At Madigan Army Medical Center, Joint Base Lewis McCord (JBLM), the Center for Autism Resources, Education, and Services (CARES) program is a military family readiness framework that opened in 2017. JBLM CARES delivers specialty care, family services/education, and establishes advocates for families affected by ASD or a related disorder who relocate to the Pacific Northwest. JBLM CARES brings together medical, installation, community, and education resources, and weaves together fragmented efforts from family and medical services. JBLM CARES has served over 1,000 families per year since its opening. The program currently received funding from the Army Medical Department. Employed staff include three SLPs, two OTs, two BCBAs, and one front desk staff. Current program metrics include access to care (i.e., an evaluation completed within 30 days from referral), reduction in Exceptional Family Member Program denials, TRICARE network savings, parent satisfaction tools, and proposed program effectiveness scales.

Additionally, Wright Patterson AFB originally received funding in FY 2015 through the Air Force/Surgeon's General to implement the PLAY (Play & Language for Autistic Youngsters) Project to TRICARE beneficiaries diagnosed with ASD. Subsequent funding was secured through the Air Force unfunded request dollars via a contract award. The PLAY Project is a developmental intervention using the pragmatic application of the theory of DIR® (Developmental Individual Differences & Relationship-Based)/Floortime. The PLAY Project is a parent-focused, early childhood (up to age three years) intervention focused on social/emotional development that teaches parents the intervention using supportive guidance, coaching, modeling, and video feedback. Therapeutic services are focused on social-emotional and play skill development between the parent and child. The goal of the PLAY Project is to improve the quality of parent/child social interactions. The PLAY Project is a portable intervention because video-feedback is used to train parents/caregivers, and after the initial training, parents/caregivers are not required to be physically present with the PLAY provider for the intervention to continue. The current state of the research literature is in its infancy and therefore it is too early to compare the PLAY Project as an intervention to ABA or other services for the diagnosis of ASD. The PLAY Project extended to Barksdale AFB in 2017 and Whiteman AFB in 2018. To date, over 200 families have been served by the 3 locations. Employed staff among the three locations include two developmental-behavioral pediatricians, one clinical psychologist, three social workers, and one OT. Current metrics collected include the Parenting Stress Index, the Greenspan Total Growth, the Receptive-Expressive Emergent Language – Third Edition, and Childhood Autism Rating Scale – Second Edition.

LESSONS LEARNED

Since implementation of the ACD in July 2014, the Department has conducted 20+ ACD round table and provider information session events. These events were well-attended, and senior Department officials listened to concerns, answered questions, and took matters for further analysis and action. The next anticipated provider information meeting will correspond to the upcoming manual changes with an anticipated publication date of summer 2020. DHA representatives have also presented at several behavior analytic annual conferences on medical records documentation and other issues related to the ACD, and have met with numerous experts in the field of autism care. DHA received constructive feedback from each event and directly from interested stakeholders. DHA greatly appreciates the participation of all interested parties and, through this process, gains additional insights about how to further refine and implement an optimum care delivery and reimbursement system for TRICARE beneficiaries diagnosed with ASD. Communication will continue with stakeholders and is crucial to the successful implementation of the change that is underway.

Continuous Improvement

The DHA is committed to ensuring all TRICARE-eligible beneficiaries diagnosed with ASD reach their maximum potential, and that all treatment and services provided support this goal. TRICARE continues to have one of the most robust ABA benefits nationwide, which is one component of comprehensive treatment for ASD. However, currently there are no clear guidelines or industry standards of care available with regards to "dose-response" or expected outcomes for an individual beneficiary as a result of ABA services. On February 23, 2018 and April 14, 2020, DHA Directors, VADM Bono and LTG Place, respectively, approved improvements to the ACD. The Agency is working to implement these changes.

Since the beginning of the ACD, the DHA has made significant improvements to the program, such as increased access, implementation of audits in response to the Department of Defense Office of Inspector General audits, and collection and evaluation of outcomes measures. Additionally, DHA has worked with experts in the field of autism care, both in and out of the MHS, including ABA providers, advocates, MHS providers, commercial plans, and leading researchers to develop a comprehensive revision of the ACD.

The comprehensive review of the ACD will evolve the program to a more beneficiary- and family-centric model. These changes aim to not only improve the quality of, value, and access to care and services for beneficiaries diagnosed with ASD and their families, but also to improve management and accountability of both the MCSCs and the ABA providers. These changes have been informed by a review of the data collected in the program, ongoing reviews of research evidence into the treatment of ASD, and discussions with experts in the field of autism care. These changes will focus on providing enhanced beneficiary and family support, improving outcomes, encouraging parental involvement, improving utilization management controls, and revising coverage of Adaptive Behavior Services (ABS) for the delivery of ABA services to TRICARE eligible beneficiaries diagnosed with ASD. Major areas of improvement and program revisions will include:

- Specialized care managers/coordinators that are assigned to each family, who will ensure families receive accurate, timely information about treatment and service options, and will work with the family and providers to manage the beneficiary's care.

- Increased parental involvement and support. Per available research such as NCR (2001) noted above, outcomes are better when parents are actively involved. Evidence suggests that family support is the most effective modality for the treatment of ASD.

- Increased utilization management (UM). DHA will implement UM solutions that consistently review impairments, level of functioning, and treatment goals and protocols using standardized outcomes measures when possible/appropriate to ensure the needs of the beneficiary and family are being met.

- Revision of coverage of ABS CPT Codes.

Department of Defense Ongoing Efforts to Eliminate Fraud, Waste, and Abuse in the ACD

The Department continues to be concerned regarding the improper billing and improper payments for ABA services which undermines the integrity of the ACD program. The Program Integrity offices and the Department of Justice continue to identify ABA providers/practices in their reviews. DoD has seen an increase in the number of ABA cases being investigated (see Table 8 for increasing cases).

Table 8 – Number of ABA Cases under DoD Investigation

Calendar Year	Number of ABA Cases
2012	4
2013	8
2014	7
2015	4
2016	5
2017	16
2018	9
2019	18
2020*	37*
Total	108
* To date as of 3/31/2020	

For the period of 2012 to 2020 (to date), the total restitution based on these ABA services investigations to DHA is $19,783,035. The total value in civil settlements for ABA services to DHA during this same period is $1,500,000. In addition to the amounts above, DHA has recouped $1,867,509 for improperly billed ABA services for this same period. Some of the findings that led to these actions include: services billed to TRICARE that were never rendered

to a beneficiary, falsification of medical records, and falsification of non-medical care as medical care (e.g., day care, transportation). DHA also excluded a large ABA provider from the TRICARE program for a period of 10 years subsequent to DoD investigations.

The Department continues to evaluate the oversight and monitoring of billing and payment activities of the ABA providers/practices via the regional contractor requirements. Pending revisions in the upcoming manual intend to reduce potential fraud, waste, and abuse via more comprehensive oversight prior to treatment plan authorization as well as improved post claims payment audits.

LEGISLATIVE AUTHORITIES REQUIRED TO IMPROVE THE PROVISION OF ABA SERVICES

There continues to be advocacy from beneficiaries, advocacy groups, legislators, and others, for the Department to expand coverage of ABA services. Such TRICARE coverage expansions, however, are not discretionary. TRICARE Basic Program benefit coverage determinations must be based solely on the hierarchy of "reliable evidence" defined in Federal regulation (see footnote reference 8).

As of now, ABA services do not meet the TRICARE hierarchy of evidence standard for medical and proven care. The Department continues to review the latest evidence in published literature regarding the effectiveness for ASD. At this time, no significant additions to the evidence based literature have been published since the last annual report regarding the "dose-response" (including intensity, frequency, or duration), treatment effectiveness, most effective use of ABA with other services, use of tiered model compared to BCBAs only, benchmarks for outcomes or anticipated/expected changes in ASD symptom presentation.

CONCLUSION

The ACD provides TRICARE reimbursement for ABA services delivered to TRICARE-eligible beneficiaries diagnosed with ASD. At the end of FY 2019, there were a total of 15,928 beneficiaries with a diagnosis of ASD participating in the ACD with a cost of $370.4M with an additional $65M in other medical services. Of the total ACD participants, 3,434 beneficiaries (22 percent) exceed the $36,000.00 threshold for annual expenditures. Additionally, 85.5 percent of ACD participants are age 13 years and younger. There were 47,000 ABA providers rendering ABA services to TRICARE beneficiaries for approximately a 3:1 ratio of ABA providers to ACD beneficiaries.

As another component of the analysis of the ACD, DHA continues to conduct an audit of the TRICARE ACD program. This audit provides valuable information regarding the ACD, the beneficiaries who utilize ABA services under the ACD, and the administration and compliance of the ACD as outlined in the TOM. The third iteration of this audit identified continued trends in ACD participants, ABA treatment plans, and identified goals. Similar to the analysis of rendered ABA services reported by paid claims data from the MCSCs (that 13 percent of treatment plans submitted by BCBAs in the West Region and only 24 percent of treatment plans

submitted by BCBAs East Region recommended 35 or more hours per week), the audit found that only 22.1 percent of treatment plans reviewed recommended 21 or more hours of ABA services per week

In addition to the ACD program executed in the purchased care system, the direct care system, the MTFs, has established 3 different types of programs to support beneficiaries with a diagnosis of ASD and their families. FBCH created the Autism Resource Clinic designed to connect families with local resources and provide support and to educate families on the complexity of the diagnosis of ASD as well as the vast potential of medical and non-medical resources available. This program is rapidly growing in interest and participation nationwide. The JBLM CARES program delivers specialty care, family services/education, and establishes advocates for families affected by ASD or a related disorder who relocate to the Pacific Northwest. And Wright Patterson AFB piloted to the PLAY Project within the MHS to TRICARE beneficiaries diagnosed with ASD that has also expanded to other military installations as a supplement to or alternative for ABA services.

Also ongoing is the CDMRP contract award that continues to make progress. At the end of the first year, several milestones have been met to include obtaining IRB approval, identifying research sites/partners, and beginning recruitment. Year two findings will be reported in the next annual report to congress.

Previous analyses yielded concerning results regarding treatment outcomes based on the scores reported in the Parent Form of the PDDBI. As a result, in preparation for this report, a more in-depth analysis of the available data was completed to include beneficiaries with baseline, 12-, and 18-month Parent Form PDDBI scores since the start of health care delivery with the West and East region MCSCs. The findings from this analysis continue to demonstrate concern with overall outcomes of beneficiaries participating in the ACD. While the change scores demonstrated small but statistically significant improvements after 12 and 18 months of rendered ABA services, and that most baseline severity scores and most ages demonstrated some percent change in scores from baseline, there was no comparison group (no treatment or another type or of treatment) to determine the attribution of these changes. It is also not clear if these changes are clinically significant. Subsequently, there is no way to know if the relatively small change observed here is the result of ABA services, other services received, or if this simply a result of maturation. However, the findings are clear that the number of hours of ABA services rendered did not improve symptom presentation of ASD based on the PAC scores. This finding strongly suggests that the small changes noted are not related to ABA services. As a result of this analysis, it is imperative that DHA take a deeper look into why TRICARE beneficiaries are not seeing more improvement over time. The findings that the outcomes do not correlate to treatment intensity, and that the overall results show limited clinical improvement, support a needed change to the ACD.

An additional continued concern with this program is the ongoing fraud, waste, and abuse by ABA providers and the improper billing and payments for ABA services. Government offices continue to identify improper activities by TRICARE ABA providers and practices that has resulted in millions of dollars of restitution, settlements, and recoupments. DHA must

implement improved oversight and auditing systems to reduce the number of identified cases and improve the integrity of the ACD.

Based on DHA's experience in administering ABA services under the ACD, including engagement with beneficiaries, providers, advocates, associations, and other payers, audit findings, current outcome measures results, and ongoing fraud, waste, and abuse cases, continued analysis is required in order to determine the appropriate characterization of ABA services as a medical treatment, or other classifications, under the TRICARE program coverage requirements – to include further research and evaluation of the results, whether BCBAs may appropriately be recognized and treated as independent TRICARE authorized providers of a proven medical benefit, and what authorities are required to add ABA services as a permanent benefit under the TRICARE program – whether as a proven medical benefit or otherwise. Therefore, the Department is pursuing a more effective method of delivering and validating the effectiveness of these ABA services. The Department will implement the comprehensive revisions of the ACD through contract modification to the current managed care support contracts in the summer of 2020. Changes to the policy include increased oversight and management, and enhanced support to the family. While recognizing the limitations of the existing data, the Department remains concerned about these results, and whether the current design of this demonstration, as well as ABA services specifically, is providing the most appropriate and/or effective services to our beneficiaries diagnosed with ASD.

The Department is committed to ensuring all TRICARE-eligible beneficiaries diagnosed with ASD reach their maximum potential, and that all treatment and services provided support this goal. TRICARE continues to be the most robust ABA benefit nationwide, as some commercial plans still have age, dollar, and duration limits. TRICARE is leading the Nation in developing an effective ABA program model as one component of comprehensive treatment for ASD. The Department fully supports the continued research on the nature and effectiveness of ABA services, and the evolution of the field from an educational discipline toward a health care discipline.