

November 25, 2015

## ***Memorandum***

**TO:** Doug McBroom

**FROM:** Arnie Brooks  
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**CC:** Vivian Ridgway

**SUBJECT:** **Options for 2016 TRICARE ABA Reimbursement Rates (Task Order No. 1505-005)**

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### **Introduction**

You requested that we provide alternative methods that DHA could use to calculate the 2016 TRICARE national maximum allowed amounts for eight Applied Behavioral Analysis (ABA) services by type of provider. These eight services and the estimated level of TRICARE allowed amounts in CY15 for each service are shown in Exhibit 1. This memo describes four different approaches and the rates that would result from each one. As you requested, we have also provided some of the advantages and disadvantages of each approach.

After DHA has selected an approach to calculating the national rates, we will develop the maximum allowed amounts for each of the 89 TRICARE localities by provider type.

### **Alternative Approaches**

We have identified four basic approaches that DHA could use to set the 2016 TRICARE national maximum allowed amounts for eight ABA services. Before discussing each of the alternative approaches, we note that we could not base the TRICARE rates on the rates paid by

**Exhibit 1**

**Eight Applied Behavioral Analysis (ABA) Services**

<b>CPT Code</b>	<b>Short Description</b>	<b>Estimated TRICARE Allowed Amounts in CY 2015</b>
<b>0359T</b>	Initial ABA assessment and initial treatment plan (fixed amount)	\$6.0M
<b>0360T</b>	Observational behavioral follow-up assessment - supervised fieldwork (first half hour)	\$9.1M
<b>0361T</b>	Observational behavioral follow-up assessment - supervised fieldwork (incremental half hours)	\$18.8M
<b>0364T</b>	One-on-one ABA treatment by protocol (first half hour)	\$33.2M
<b>0365T</b>	One-on-one ABA treatment by protocol (incremental half hours)	\$138.6M
<b>0368T</b>	Adaptive behavior treatment with protocol modification (first half hour)	\$2.1M
<b>0369T</b>	Adaptive behavior treatment with protocol modification (incremental half hours)	\$0.5M
<b>0370T</b>	Family adaptive treatment guidance (fixed amount)	\$2.6M
<b>Total</b>		<b>\$210.8M</b>

Note: The TRICARE definition of CPT codes 0360T and 0361T includes direct supervision of behavioral technicians (BTs) by authorized ABA supervisors. The TRICARE definition of 0359T includes semi-annual revisions of the treatment plan.

Medicare because these eight codes are not in the Medicare Physician Fee Schedule (MPFS).<sup>1</sup> We also could not use the approach that is typically used by DHA to set the maximum allowed amount for services that do not have maximum amounts in the Medicare Physician Fee Schedule: the calculation of national prevailing charge levels using the 80<sup>th</sup> percentile of billed charges from TRICARE claims. This method is described in the TRICARE Reimbursement Manual, Chapter 5, Section 1, and was used to set the CMACs for over 150 codes in 2015. Under this approach, DHA identifies the billed charges for a specific service using claims submitted during a prior 12-month period and then calculates the 80<sup>th</sup> percentile of the billed charges for that service, which is defined as the national prevailing charge for that service. Unfortunately, we could not calculate valid national prevailing charges for the eight ABA codes because the billed charges on the TRICARE claims are set to the TRICARE autism demonstration reimbursement rates, rather than being the providers' standard billed charge, on a very high percentage of claims. As a result, the billed charge is greater than the demonstration rate on only 5-10 percent of the claims. Because we could not implement the traditional TRICARE method, we focused instead on four alternatives, which are described below.

### **Option 1: Use RAND-calculated average amounts**

Researchers from RAND submitted a draft report to DoD in September 2015 which provided calculations of the average reimbursement amounts for ABA services in the U.S.<sup>2</sup> The researchers from RAND calculated these average reimbursement rates by developing weighted averages of Medicaid and private insurance payments in each state for which data were available. The draft report presented data on both Medicaid and private insurance, which represent the two major categories of payers for ABA services. Blending these rates provides

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<sup>1</sup> Medicare does have OPPS payment rates for several of these codes, but they are for hospital facility charges, not for professional providers.

<sup>2</sup> Maglione M., Kress A., and Kadiyala S. "*Applied Behavioral Analysis (ABA) Benefit Study*", draft report submitted by RAND in September 2015.

an estimate of the national reimbursement amounts for ABA services. The draft RAND report states that using local information on the public and private health insurance sectors and the quantities of services in local areas “. . . will assure that the final results accurately reflect the variation in rates and service utilization across the country; that rates in highly populated areas and areas of heavy utilization are adequately represented.” RAND’s draft report found that the Medicaid and private rates were similar in many states. For example, RAND identified 13 states that had both Medicaid and private insurance payments for ABA providers with less than a master’s degree. RAND found that the 2013 private insurance rates exceeded the Medicaid rates in 7 of the 13 states, but that the Medicaid rates were higher in the other 6 states.<sup>3</sup>

In calculating national average reimbursement rates for one-on-one ABA therapy services (codes 0364T and 0365T), RAND calculated the average reimbursement rates across 38 states which had either Medicaid or private insurance rates and then weighted the rates by the estimated number of children diagnosed with autism spectrum disorders (ASD) in the private and public health insurance systems in each state. For other ABA services, such as supervisory services and developing the initial treatment plan, RAND used a similar approach.<sup>4</sup>

There are five drawbacks to the RAND-calculated rates. First, the draft RAND report did not include results for providing one-on-one ABA therapy services by Ph.D. or master’s level providers (0364T and 0365T) or for family adaptive treatment guidance (code 0370T). Second, the draft RAND report used Medicaid data collected in late 2014 or early 2015. Since that time, many states have either established or updated their rates.

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<sup>3</sup> It is unclear whether the Medicaid rates were for 2014 or 2015; RAND’s draft report states that the Medicaid rates were provided to DoD in the January – April 2015 period.

<sup>4</sup> The rates that RAND presented in its draft September 2015 report weighted the private and Medicaid rates in each state by RAND’s estimate of the number of children diagnosed with ASD in each state with private/public health insurance coverage. RAND also explored calculating weighted average reimbursement rates using information on the utilization of ABA services in each state. RAND found that the two methods produced similar results and decided to weight the results using the number of children diagnosed with ASD in the public and private health insurance systems in each state.

Third, RAND blended private rates from 2013 with the 2014/2015 Medicaid rates. We think that the private rates should have been adjusted so that they are in the same year's dollars as the Medicaid rates. Fourth, for one-on-one direct ABA therapy services, RAND did not provide rates for bachelor's degree providers separate from those with less than a bachelor's degree. This is a problem because DHA wants to establish separate rates for these two groups and because in about half of the states, the Medicaid rates for direct, one-on-one ABA therapy are lower for providers without a bachelor's degree or providers without a bachelor's degree are not authorized to provide ABA therapy. Fifth, RAND was unable to provide private insurance rates for direct, one-on-one ABA therapy services by type of provider because the MarketScan data used by RAND did not allow RAND to distinguish between the four ABA therapy provider types. Thus, RAND's average of the private insurance rates would tend to understate amounts paid to Ph.D. or master's level providers and overstate amounts paid to bachelor's or high-school-diploma providers. This is a problem for services like direct, one-on-one ABA therapy that are provided by a broad range of provider types, especially because the rates often vary substantially by type of provider.

## **Option 2: Calculate average Medicaid amounts**

A second approach to develop a national TRICARE maximum reimbursement rate is to calculate an average of the maximum allowed amounts under state Medicaid programs. Because Medicaid is a very large payer for ABA services, this approach would allow DHA to have recent data on the maximum amounts being allowed by another large government payer for ABA services. The Medicaid rates are also publicly available in most states by provider type.

In developing the national average rates for each code and provider type under this approach we used Medicaid rates collected in July – October 2015, which represents Medicaid rates that were effective in 2015. In contrast, the RAND approach used some Medicaid data from 2014. More importantly, it allowed us to calculate separate rates for four categories of

providers: 1) Ph.D., 2) master's-level providers, 3) bachelor's-level providers; and 4) providers with a high-school diploma.<sup>5</sup> We found that in almost all states, the maximum levels of Medicaid reimbursement differed substantially between the four categories, although in a few states there were no differences between provider types.

State Medicaid programs differ in how they cover and pay for ABA therapy services. First, some states Medicaid programs do not currently cover ABA therapy services (such as Texas). Second, some states which cover ABA therapy services do this as part of a Medicaid waiver program. Third, other states include ABA therapy as part of their Medicaid state plan. In the future, all states must include services for the treatment of ASD in their state Medicaid plans, although not all states are planning to include ABA therapy services.

We were able to identify and confirm the Medicaid rates in over half of the states for the direct one-on-one ABA therapy codes (these therapy codes represent about four-fifths of TRICARE expenditures for ABA therapy services). One difficulty in collecting Medicaid rates was that new codes were introduced in July 2014 for these eight ABA services; as a result, many states are transitioning from one set of CPT/HCPCS codes to the new codes and are in the process of adopting rates for the new codes.<sup>6</sup> Like TRICARE, some states have decided to pay for the direct supervision of BTs by authorized ABA providers. We used these data in calculating the rates for codes 0360T and 0361T. A second difficulty in identifying the Medicaid rates is that some states prior to 2015 had offered ABA therapy services under Medicaid waivers and had established statewide rates for ABA therapy are now having their Medicaid managed care organizations establish the ABA therapy rates. As a consequence, the rates can vary within states. We found Medicaid rates for direct, one-on-one ABA therapy for about two-

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<sup>5</sup> TRICARE designates Ph.D. level providers as BCBA-Ds; master's level providers are designated as BCBA; bachelor's level providers are BCaBAs and providers with high school diplomas as Behavioral Technicians (BTs).

<sup>6</sup> For example, state Medicaid programs were using HCPCS codes ("H" codes) prior to 2015. Many states have adopted the new CPT codes for 2015 while others have not yet adopted them. Many states used the "H" codes for both ABA therapy and other services. For the states that had not yet adopted rates for the new CPT codes, we confirmed which codes are being used for ABA therapy.

thirds of the states, but found rates for the other codes in fewer states. We attempted to verify the appropriate rates with state Medicaid officials.

In order to calculate a weighted Medicaid average across the states, we used the method used by RAND and weighted the values for each state by RAND's estimate of the number of children diagnosed with ASD who rely on public insurance. We also standardized the rates in each state to remove the impact of local cost variations using the CY16 Medicare Geographic Adjustment Factors (GAFs) published by CMS in July 2015 as part of the Physician Fee Schedule NPRM.

### **Option 3: Adjusted Medicaid rates**

Most TRICARE reimbursement rates are based on Medicare payment levels, not Medicaid. A third option is to adjust the average Medicaid payment levels calculated in option 2 so that they approximate the level of reimbursement that Medicare would have set if Medicare covered these services. We calculated that, on average, Medicare payment rates were about 20 percent higher than Medicaid rates for a sample of the three highest-volume TRICARE individual mental health service codes. Under this option, DHA could decide to increase the rates calculated in option 2 to the Medicare level.<sup>7</sup> An advantage of this approach is that it attempts to have TRICARE rates approximate the rates that we estimate that Medicare would have paid for these services if they were in the Medicare Physician Fee Schedule. It would also allow TRICARE rates to be substantially above Medicaid rates.

### **Option 4: Blending of commercial and Medicaid rates**

A fourth option is to blend commercial data with Medicaid data to calculate weighted average reimbursement rates in each state for each of the four provider types. This option is similar to the approach followed by the RAND researchers in option 1, but we made five

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<sup>7</sup> We used a 21.6 percent adjustment factor based on 2015 Medicare and Medicaid data.

changes to the RAND approach: 1) we made adjustments to the private insurance rates provided by RAND to estimate the different levels of reimbursement under private insurance for Ph.D. providers, master's level providers, providers with bachelor's degrees, and providers without a bachelor's degree; 2) we inflated the private insurance rates from 2013 to 2015 (by three percent per year) so that the Medicaid and private insurance rates both represented an estimate for 2015; 3) we used the most recently updated Medicaid rates (from July – October 2015) instead of earlier Medicaid rates; 4) we used the Medicaid rates for four categories of providers instead of the two used by RAND for one-on-one ABA therapy; and 5) before calculating the national average rates, we standardized the state rates to remove the impact of local cost variations using the 2016 Medicare GAFs published by CMS.

Although this option has the advantage that it combines private insurance and Medicaid rates, we had to make adjustments to the actual data to estimate the private insurance payment rates for each of the four types of providers. RAND's draft report used the MarketScan data to calculate an average private insurance rate by state for ABA therapy providers. However, RAND could not disaggregate the MarketScan data for the four types of providers. As a result, RAND's private insurance averages will tend to understate the rates for Ph.D.'s and master's degree providers and overstate the rates for others. We attempted to address this problem by making adjustments to RAND's calculation of the average private insurance payment data for the combination of all four types of providers to approximate the separate level for each of the four provider types.<sup>8</sup> Although we believe that these adjustments provide rough approximations of the average private insurance rates by type of provider, they are not actual measurements of the separate rates. In contrast, the Medicaid values used in options 2-4 are based upon the actual rates by type of provider.

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<sup>8</sup> We used data on the share of ABA services provided by each type of provider in TRICARE and the relative level of payments made by Medicaid for the different types of providers to impute rates by provider type using RAND's averages for all providers combined.

## Setting Local Rates

Once DHA has selected an approach to calculate the national rates for each code and type of provider, we will calculate rates in each of the 89 TRICARE localities. For most states, the same TRICARE rate applies across the entire state. However, for 16 states, there is more than one TRICARE rate locality within a state. We will use the Geographic Practice Cost Indexes (GPCIs) established in the Medicare Fee Schedule to set the local rates using average portions for work, overhead, and malpractice costs. This will produce some local rates that are lower than the national level and some that are higher. We will also calculate the rates so that the rates for 2016 are not less than 85 percent of the 2015 level in a given locality to ensure that the rates do not decrease by more than 15 percent per year.

One potential disadvantage to all four options is that the resulting TRICARE maximum amounts could be lower than the Medicaid amount in a given state. TRICARE could also decide to ensure that its rates were at least equal to the Medicaid rates in each state. As a result, as a variation on any of the four options, DHA could decide that the state-level ABA therapy rates should be set so that they were at least equal to the statewide Medicaid ABA rates in that state, although DHA should establish a maximum increase in this increase, such as 25 or 50 percent. We note that there is a precedent for this under TRICARE: the TRICARE rates for professional maternity/delivery services are set so that the TRICARE CMACs are no lower than any state's Medicaid rate for maternity/delivery services.<sup>9</sup> However, DHA would have difficulties in applying this type of floor in the ABA rates because some states have not yet established rates and because the rates in some states vary by managed care organization/plan. As a result, we think that the maximum 25 percent or 50 percent increase should only be applied when there are established, statewide Medicaid rates.

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<sup>9</sup> This provision increased the maternity/delivery CMACs in 14 states in 2015.

## National Maximum Allowed Amounts Under Each Option

Exhibit 2 provides the national maximum allowed amounts under each option for each of the eight ABA codes. For the direct, one-on-one ABA therapy codes (0364T and 0365T), we have provided rates for four different provider types. For 0360T, 0361T, 0368T, and 0369T we have provided codes for providers with a Ph.D., master's, or bachelors degree.

Exhibit 2 provides an estimate of the level of TRICARE allowed amounts under current policy (\$211 million) and for each of the options. The current policy estimate of \$211 million is based on the use of ABA therapy services in the first six months of CY 2015. The costs of the other options assume that the level of services will remain unchanged but that the allowed amounts for each of the eight ABA therapy codes will vary as shown in Exhibit 2. We found that:

- Using the rates calculated in the draft RAND report, the level of TRICARE allowed amounts would increase slightly (from \$211 million to \$213 million).<sup>10</sup>
- Basing the national maximum allowed amount on the average Medicaid rates would decrease the aggregate level of TRICARE allowed amounts by about one-third (from \$211 million to \$138 million). Because the locality rates cannot decrease by more than 15 percent per year, the aggregate level of allowed amounts would only decrease by about 15 percent in the first year under this option, not the full 34 percent.
- If the average Medicaid amounts calculated in option 2 were increased by about 22 percent to approximate the level of Medicare reimbursement (option 3), then the aggregate level of TRICARE allowed amounts would decrease by about 20 percent

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<sup>10</sup> The RAND-calculated average reimbursement amounts provided in the draft report submitted by RAND in September 2015 did not include rates for the parent/caregiver training (code 0370T) nor did they include a rate for providing direct, one-on-one ABA therapy services by Ph.D. or master's level providers. We substituted other values for these codes to estimate the aggregate cost of this option.

relative to current policy (from \$211 million to \$168 million). The decrease in the first year would be somewhat less due to the constraint that the rates in a given locality cannot decrease by more than 15 percent per year.

- Using a blend of commercial and Medicaid rates would decrease TRICARE allowed amounts by about 10 percent (from \$211 million to \$188 million).

DHA may also decide to establish locality rates that are at least as high as statewide Medicaid rates. Adopting this policy would increase the annual allowed amounts by \$3 – 6 million per year more than the allowed amounts in each option shown in Exhibit 2.

### **Comparison of the Options**

Exhibit 3 provide a comparison of some of the advantages/disadvantages of each option.

## Exhibit 2

### Comparison of National Maximum Hourly Allowed Amounts for Eight ABA Services, by Provider Type

	<u>Current Rates</u>	<u>Option 1 (RAND-calculated averages)</u>	<u>Option 2 (Medicaid averages)</u>	<u>Option 3 (Adjusted Medicaid averages)</u>	<u>Option 4 (Blend of Commercial/Medicaid rates)</u>
<b>Supervised Fieldwork (0360T and 0361T)</b>					
• PhD	\$125	\$94.72	\$93.94	\$114.23	\$98.88
• Masters	\$125	\$94.72	\$88.10	\$107.14	\$97.40
• Bachelors	\$75		\$55.42	\$67.39	\$94.68
<b>Training on new protocol (0368T and 0369T)</b>					
• PhD	\$125	\$94.72	\$95.61	\$116.26	\$99.11
• Masters	\$125	\$94.72	\$90.35	\$109.87	\$97.58
• Bachelors	\$75		\$70.71	\$85.99	\$94.51
<b>Direct, one-on-one ABA therapy (0364T and 0365T)</b>					
• PhD	\$125		\$79.38	\$96.52	\$116.00
• Master's	\$125		\$72.75	\$88.46	\$106.31
• Bachelor's	\$75	\$65.16	\$50.19	\$61.03	\$72.96
• High-school diploma	\$50	\$65.16	\$32.99	\$40.12	\$47.76
<b>Non-hourly services</b>					
• Initial treatment plan (0359T)	\$500	\$190.27	\$396.37	\$481.99	\$239.05
• Parent/caregiver training (0370T)	\$125		\$93.48	\$113.67	\$93.48
<b>Estimated Annual Allowed Amounts (in millions)</b>	<b>\$211</b>	<b>\$213</b>	<b>\$138</b>	<b>\$168</b>	<b>\$188</b>

Note: Locality rates cannot decrease by more than 15 percent per year. The estimated annual allowed amounts do not include this constraint. As a result, allowed amounts in 2016 will be higher for options 2 and 3.

### Exhibit 3

#### Options to Establish TRICARE Reimbursement Rates for Eight ABA Services

Option	Advantages	Disadvantages
1. Use amounts calculated in RAND study to calculate national averages for each code	<ul style="list-style-type: none"> <li>Based upon RAND analysis of both private and Medicaid rates so that it represents the overall market for ABA services</li> </ul>	<ul style="list-style-type: none"> <li>RAND's study did not provide data for some codes and categories of providers</li> <li>Some RAND Medicaid data does not match current Medicaid rates</li> <li>RAND's private insurance rates are not provided by type of provider</li> </ul>
2. Use an average of state Medicaid rates to calculate each code	<ul style="list-style-type: none"> <li>Reflects current rates paid by a large government payer</li> <li>Can be calculated for all 8 codes and can differentiate rates by type of provider</li> </ul>	<ul style="list-style-type: none"> <li>TRICARE does not base its rates on Medicaid rates; instead it usually follows Medicare</li> </ul>
3. Inflate Medicaid rates to represent estimated Medicare rates	<ul style="list-style-type: none"> <li>More consistent with other TRICARE payments which are based on Medicare</li> </ul>	<ul style="list-style-type: none"> <li>Does not use private insurance data, although these data are not typically used by TRICARE</li> </ul>
4. Blend Medicaid and private data for each code	<ul style="list-style-type: none"> <li>Uses both commercial and Medicaid data to reflect entire ABA market</li> <li>Reflects current Medicaid/commercial data adjusted to differentiate by type of provider</li> </ul>	<ul style="list-style-type: none"> <li>Private insurance data not available by type of provider for one-on-one therapy (which necessitates adjusting the data)</li> <li>Data adjustments decrease the transparency of the rates and would be subject to disagreement</li> </ul>
5. Same as option 1 - 4, except ensure that no ABA rate is below the statewide Medicaid rate in that state	<ul style="list-style-type: none"> <li>Ensures that TRICARE is paying as much as Medicaid in each state with statewide rates</li> </ul>	<ul style="list-style-type: none"> <li>Some states do not have Medicaid ABA rates (so unable to apply floor) or do not have statewide rates</li> </ul>