I. **Purpose**

The purpose of this actuarial memorandum is to demonstrate that the capitation rates were developed in compliance with 42 CFR 438.6(c). It is not intended for any other purpose.

This memorandum presents a discussion of the adjustment to the capitation rates effective from July 1, 2011 through June 30, 2012 (CYE12).

II. **Overview of Rate Setting Methodology**

The contract year ending 2012 (CYE12) rates were developed using a hybrid methodology including both a rebase and a rate update. Historical Medicaid managed care encounter data was used as the primary data source in development of the base time period.

Other data sources used in setting the actuarially sound rates include financial statements, supplemental information from DDD, anticipated AHCCCS Fee For Service rate changes, Center for Medicare and Medicaid Services (CMS) National Health Expenditure (NHE) Report estimates and AHCCCS case management model.

Trend rates were calculated from the databook and other sources on a unit cost and/or utilization basis by category of service (COS) and a cap was applied to limit the negative and positive trends to a reasonable level. These adjustments also include state mandates, court ordered programs and other program changes, if necessary.

Ideally, the experience data should be analyzed by different rate cells which are comprised of members with similar risk characteristics. However, segregating the DDD population into different rate cells would lead to a statistical credibility problem due to the statewide disbursement of the relatively small membership base. DDD will have two separate rates – a regular DDD rate and a Behavioral Health rate.

The experience only includes DDD Medicaid eligible expenses for DDD Medicaid eligible individuals. In addition, the experience includes reinsurance amounts and share of cost.

The contract between AHCCCS and DDD specifies that DDD may cover services for members who are not covered under the State Plan; however those services are not included when setting capitation rates. AHCCCS will not include uncovered services in the DDD rates.
The general process in developing the rates involves trending the base data to the midpoint of the effective period, which is January 1, 2012. The next step involves the deduction of the reinsurance offsets and share of cost offset. Following this calculation, the projected case management, administrative expenses, risk/contingency margin and premium tax are added to the projected claim per member per month (PMPM) to obtain the capitation rates. Each step is described in the sections below.

AHCCCS is anticipating implementation of significant reductions to provider reimbursement via rate reductions and adult benefit limitations on October 1, 2011. AHCCCS expects that the capitation rates for all affected risk groups will be adjusted via an October 1, 2011 contract amendment to account for the savings resulting from these reductions to provider reimbursement and other benefit changes. In addition to the above mentioned changes, AHCCCS is anticipating future adjustment of the acute component of the capitation rates due to DDD's RFP for acute services which is effective October 1, 2011. A contract amendment including revised rates is anticipated to be submitted to CMS for approval no later than September 1, 2011.

III. Base Period Experience

Since DDD has a relatively small membership base, multiple years and sources of data were used to increase the statistical credibility. For CYE12 rate development, DDD's encounter data was found to be credible for all service categories. For the base period AHCCCS used historical encounter data for the time period from July 1, 2008 through June 30, 2010. The data was reviewed and audited for accuracy, timeliness and completeness through encounter validation studies as well as studies comparing the encounter data to the Contractor's financial statements. A final adjustment was made to apply completion factors to the encounter data for the most recent year.

IV. Projected Trend Rates

The trend analysis includes both the financial data experience and the encounter data experience. Financial data experience is from July 2006 through December 2010. Encounter data experience is from July 2007 through September 2010. Trend data includes a longer time frame than the base period since additional data can provide smoother, more accurate trends. The financial data trends were examined using both year over year and quarterly regression analysis. The encounter data trends were examined using monthly regression analysis, quarterly regression analysis and year over year data. The resulting trend rates were compared with trend rates from sources such as the CMS National Health Expenditures Trend Forecast, the AHCCCS Acute Care trend rates, the AHCCCS ALTCS EPD trend rates, the AHCCCS ALTCS Fee-For-Service fee schedule and the DDD fee schedule. The final utilization trends and historical unit cost trends were selected based on a methodological blend of actuarial judgment and empirical methods. The projected unit cost trends were selected based on changes to provider rates which were assumed to remain flat, except for pharmacy.
The Annual Trend Rates used in projecting the claim costs are identified in Table I. These do not include any impact due to rebasing.

Table I: Annual Trend Rate

<table>
<thead>
<tr>
<th>Service Category</th>
<th>Average Annual Trend</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DDD Rate</td>
</tr>
<tr>
<td>Institutional</td>
<td>-5.29%</td>
</tr>
<tr>
<td>HCBS</td>
<td>1.02%</td>
</tr>
<tr>
<td>Acute Care</td>
<td>0.00%</td>
</tr>
<tr>
<td>Behavioral Health</td>
<td>N/A</td>
</tr>
</tbody>
</table>

V. Projected Gross Claim PMPM

The base period utilization, unit costs and net claims PMPMs are trended forward to arrive at the CYE12 utilization, unit costs and net claims PMPMs for each component.

VI. State Mandates, Court Ordered Programs, Program Changes and Other Changes

No new changes are included in the rates at this time. AHCCCS is anticipating changes that will require updated rates and contracts as stated above.

VII. Projected Net Claim PMPM

The projected gross claim PMPMs were adjusted for the recipients' share of cost (SOC) to obtain the net claim PMPM. The share of cost is $5.70. The share of cost was estimated based off of actual DDD SOC data, and was rebased for CYE12. NOTE: the Reinsurance offset is included in the acute care component of the DDD rates. The acute component and reinsurance offset is not being adjusted at this time due to an open RFP that will be awarded with an October 1, 2011 effective date. The acute component rate will be adjusted as part of the October 1, 2011 amendment. The projected net claim PMPMs are included in Table II.

Table II: Projected Net Claim PMPM

<table>
<thead>
<tr>
<th>Service Category</th>
<th>Projected CYE12/Claim Cost PMPM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DDD Rate</td>
</tr>
<tr>
<td>Institutional</td>
<td>$ 119.82</td>
</tr>
<tr>
<td>HCBS</td>
<td>$ 2,345.07</td>
</tr>
<tr>
<td>Acute Care</td>
<td>$ 375.95</td>
</tr>
<tr>
<td>Program Changes</td>
<td>$ -</td>
</tr>
<tr>
<td>Behavioral Health</td>
<td>N/A</td>
</tr>
<tr>
<td>Total</td>
<td>$ 2,840.83</td>
</tr>
<tr>
<td>Less Share of Cost</td>
<td>$ (5.70)</td>
</tr>
<tr>
<td>Net Claim Cost</td>
<td>$ 2,835.13</td>
</tr>
</tbody>
</table>
VIII. **Case Management**

For DDD members the CYE12 case management PMPM was developed using the AHCCCS case management model as well as looking at financials and supplemental case management cost reports from DDD. This is a similar methodology to previous years. The CYE12 case management PMPM for the DDD population is $142.52.

For the targeted case management (TCM) PMPM the AHCCCS case management model was used as well as actual cost information for this population provided by DDD. The assumptions in the model were refined by using data specific to this population. The CYE12 TCM PMPM is $85.96.

Table III displays the projected case management PMPM values.

<table>
<thead>
<tr>
<th>Rate Cell</th>
<th>Case Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>DDD</td>
<td>$142.52</td>
</tr>
<tr>
<td>Behavioral Health</td>
<td>N/A</td>
</tr>
<tr>
<td>Targeted Case Management</td>
<td>$85.96</td>
</tr>
</tbody>
</table>

IX. **Administrative Expenses and Risk Contingency**

For CYE12 administrative expense AHCCCS analyzed DDD’s financial statements as well as supplemental information provided by DDD. The CYE12 administrative expense for DDD is $190.40. The risk contingency for DDD is 1.00%.

The Behavioral Health administrative expenses were revised based on financial statements and information from ADHS. The Behavioral Health administrative rate is remaining the same at $7.83. The Behavioral Health risk contingency is 1.00%.

Table IV displays the projected administrative and risk contingency PMPM values.

<table>
<thead>
<tr>
<th>Rate Cell</th>
<th>Admin Expenses</th>
<th>Risk Contingency</th>
</tr>
</thead>
<tbody>
<tr>
<td>DDD</td>
<td>$190.40</td>
<td>$30.26</td>
</tr>
<tr>
<td>Behavioral Health</td>
<td>$7.83</td>
<td>$0.97</td>
</tr>
</tbody>
</table>
X. Proposed Capitation Rates and Their Impacts

The proposed capitation rates equal the sum of the projected net claim PMPM (in Section VII), the projected case management (in Section VIII) and administrative expenses and risk contingency PMPM (in section IX), divided by one minus the two percent premium tax. The premium tax for the behavioral health component is included in the DDD capitation rate. Table V shows the current and proposed capitation rates and the budget impact from CYE11 (4/1/11 capitation rate) to CYE12 using CYE12 projected members.

Table V: Proposed Capitation Rates and Budget Impact

<table>
<thead>
<tr>
<th>Rate Cell</th>
<th>Projected CYE12 Member Months</th>
<th>CYE11 (4/1/11) Rate</th>
<th>CYE12 Rate</th>
<th>Estimated CYE11 (4/1/11) Capitation</th>
<th>Estimated CYE12 Capitation</th>
<th>Dollar Impact</th>
<th>Percentage Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>DDD</td>
<td>290,629</td>
<td>$3,353.14</td>
<td>$3,265.76</td>
<td>$974,518,937</td>
<td>$949,122,122</td>
<td>$(25,396,815)</td>
<td>-2.61%</td>
</tr>
<tr>
<td>Behavioral Health</td>
<td>290,629</td>
<td>$99.72</td>
<td>$106.23</td>
<td>$28,982,417</td>
<td>$30,873,977</td>
<td>$1,891,560</td>
<td>6.53%</td>
</tr>
<tr>
<td>Targeted Case Management</td>
<td>53,436</td>
<td>$106.60</td>
<td>$85.96</td>
<td>$5,696,278</td>
<td>$4,593,365</td>
<td>$(1,102,913)</td>
<td>-19.36%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>$1,009,197,632</td>
<td>$984,589,463</td>
<td>$(24,608,168)</td>
<td>-2.44%</td>
</tr>
</tbody>
</table>

BH does not reflect premium tax
XI. **CMS Rate Setting Checklist**

1. **Overview of rate setting methodology**

   **AA.1.1: Actuarial certification**
   
   Please refer to Section XII.

   **AA.1.2: Projection of expenditure**
   
   Please refer to Section X.

   **AA.1.3: Procurement, prior approval and rate setting**
   
   This is a sole source contracting method, between AHCCCS and DES/DDD.

   **AA.1.5: Risk contract**
   
   There is no risk sharing between AHCCCS and DES/DDD, in addition to the reinsurance contract. DES/DDD is responsible for all losses, except reinsurance and share of cost.

   **AA.1.6: Limit on payment to other providers**
   
   AHCCCS makes no additional payments to providers, except supplemental payments to hospitals including Disproportionate Share Hospital (DSH) payments, Graduate Medical Education (GME) payments, and Critical Access Hospital payments. GME is paid in accordance with state plan. DSH and Critical Access are paid in accordance with operational protocol.

   **AA.1.7: Rate modification**
   
   Please refer to Sections III, IV, VI, VII, VIII and IX.

2. **Base Year Utilization and Cost Data**

   **AA.2.0: Base year utilization and cost data**
   
   Please refer to Section II and III.

   **AA.2.1: Medicaid eligibles under the contract**
   
   The data includes only those members eligible for managed care.

   **AA.2.2: Dual Eligibles (DE)**
   
   There are dual eligibles.

   **AA.2.3: Spenddown**
   
   Not applicable, not covered under this contract.

   **AA.2.4: State plan services only**
The contract between AHCCCS and DDD specifies that DDD may cover additional services. Non-covered services were excluded from the base data and not included in the rates.

AA.2.5: Services that can be covered by a capitated entity out of contract savings.

Same as AA.2.4

3. Adjustments to the Base Year Data

AA.3.0 Adjustments to base year data

Please refer to Section II, III and IV.

AA.3.1 Benefit differences

There are no changes to the covered benefits. Therefore, no adjustment was made.

AA.3.2 Administrative cost allowance calculation

Please refer to Section IX.

AA.3.3 Special populations' adjustment

It is anticipated that the risk characteristics of this population will not change materially from the base period to the effective period of the capitation rates. Therefore, no adjustment was made.

AA.3.4 Eligibility Adjustments

No adjustment was made.

AA.3.5 DSH Payments

No DSH payments were included in the capitation development

AA.3.6 Third party Liability (TPL)

This is a contractual arrangement between AHCCCS and its contractors.

AA.3.7 Copayments, coinsurance and deductible in the capitated rates

Not applicable, member cost sharing is not required.

AA.3.8 Graduate Medical Education (GME)

The experience excludes any payments for GME.

AA.3.9 FQHC and RHC reimbursement

The experience excludes any additional payments that FQHCs may receive from the State.
AA.3.10 Medical cost/trend inflation
Please refer to Section IV.

AA.3.11 Utilization adjustment
Other than trend, no specific adjustment was made to utilization.

AA.3.12 Utilization and cost assumptions
Not applicable, since actual experience was used.

AA.3.13 Post-eligibility treatment of income (PETI)
Not applicable, not required to consider PETI.

AA.3.14 Incomplete data adjustment.
The encounter data was not fully complete. AHCCCS applied completion factors to the
encounter data. The audited financial statements may include outstanding claim liabilities,
which were audited and believed to be reasonable by DDD auditors.

4. Establish Rate Category Groupings

AA.4.0: Establish rate category groupings
Please refer to Section II.

AA.4.1: Age
Please refer to Section II.

AA.4.2: Gender
Please refer to Section II.

AA.4.2: Locality/region
Please refer to Section II.

AA.4.2: Eligibility category
Please refer to Section II.

5. Data Smoothing, Special Populations and Catastrophic Claims

AA.5.0: Data smoothing
Please refer to Section II, III and IV.

AA.5.1: Special populations and assessment of the data for distortions
Please refer to Section II.

AA.5.2: Cost-neutral data smoothing adjustments

Please refer to Section VII.

AA.5.3: Risk-adjustment

There is no risk adjustment.

6. Stop Loss, Reinsurance, or Risk-Sharing arrangements

AA.6.1: Commercial reinsurance

There is no commercial reinsurance.

AA.6.2: Simple stop loss program

Please refer to Section VII.

AA.6.3: Risk corridor program

There is no risk sharing between AHCCCS and DDD, except the stop loss program (ie Reinsurance). DDD assumes all other risks.

7. Incentive Arrangements

There is no incentive arrangement between AHCCCS and DDD.
XII. **Actuarial Certification of the Capitation Rates:**

I, Windy J. Marks, am an employee of Arizona Health Care Cost Containment System (AHCCCS). I am a Member of the American Academy of Actuaries. I meet the qualification standards established by the American Academy of Actuaries and have followed the practice standards established from time-to-time by the Actuarial Standards Board.

The rates were developed using generally accepted actuarial principles and practices and are considered to be actuarially sound. The rates were developed to demonstrate compliance with the CMS requirements under 42 CFR 438.6(c) and are in accordance with applicable laws and regulations. The rates are appropriate for the Medicaid populations covered and Medicaid services to be furnished under the contract. The rates may not be appropriate for any other purpose. The documentation has been included with this certification. The actuarially sound capitation rates that are associated with this certification are effective for the twelve-month period beginning July 1, 2011.

The actuarially sound capitation rates are a projection of future events. It may be expected that actual experience will vary from the values in the rates.

In developing the actuarially sound capitation rates, I have relied upon data and information provided by DES/DDD and the AHCCCS internal databases. I have accepted the data without audit and have relied upon the DES/DDD auditors and other AHCCCS employees for the accuracy of the data.

This actuarial certification has been based on the actuarial methods, considerations, and analyses promulgated from time to time through the Actuarial Standards of Practice by the Actuarial Standards Board.

Windy J. Marks

Date: 05/26/11

Fellow of the Society of Actuaries
Member, American Academy of Actuaries