Acute Care Actuarial Memorandum for CYE12
Risk Adjustment

I. Purpose

The purpose of this actuarial memorandum is to demonstrate that the Contract Year Ending 2012 (CYE12) Acute Care 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 revision to the CYE12 acute capitation rates for contractually-required risk adjustment factors. These revised payments are retroactive to the start of the contract year (October 1, 2011) and will be the rates in effect through the end of the contract year (September 30, 2012). This is the fourth year Arizona Health Care Cost Containment System (AHCCCS) is implementing the risk adjustment model.

II. Overview of Risk Adjustment Methodology

For CYE12 (October 1, 2011 to September 30, 2012), AHCCCS is using the same risk adjustment model and methodology as was used in CYE11. This method of risk adjustment uses risk scores resulting from the Ingenix Episode Risk Group (ERG) Model, a nationally recognized model. This risk adjustment methodology, implemented on a statewide basis, is budget neutral to AHCCCS.

The ERG model assigns each member to one or more of the 167 ERGs based on diagnostic and procedural information available on medical and pharmacy claims (i.e. encounters). An ERG profile for each member is created by considering age, gender and the ERGs to which they have been assigned. A relative health status weight is associated with each age, gender and ERG category.

Eligibility Groups
AHCCCS will risk adjust the prospective risk groups: SSI with and without Medicare, TANF, and AHCCCS Care/Non-MED. The following rates will not have a claims based risk adjustment model applied:
1. PPC Rates
2. Delivery supplemental rates
3. Option 1 & 2 transplant members
4. SOBRA Family Planning Rates

Model Calibration
The model was calibrated to the Arizona Medicaid population for the CYE09 risk adjustment. It is not a requirement to recalibrate the model every year, therefore it was not recalibrated for CYE12. The following costs were not reflected in the condition or demographic weights in the calibrated model:
1. Prior Period Coverage (PPC)
2. Behavioral health services covered by Arizona Department of Health Services (ADHS)
3. Costs above reinsurance thresholds for which health plans were not at risk
4. Children’s rehabilitative services
5. Maternity costs covered by the Delivery Supplement

The diagnoses on all claims (including those identified above) are used for purposes of identifying conditions, but the costs not at risk were excluded for purposes of determining the risk weights. This process captures the additional complexity/cost for at-risk conditions due to the presence of an underlying not-at-risk (i.e. behavioral) condition.

Risk weights were developed by age/gender category and for all of the 167 ERG condition categories. Three sets of risk weights were developed for the 167 ERG condition categories (TANF <1 was handled differently – see section below): 1) TANF and Non-MED, 2) SSI without Medicare, and 3) SSI with Medicare. Only members with at least six months of experience in the base period and at least one month of experience in the projection period were used in the calibration. Each member’s contribution to the regression model and therefore the risk weights, was weighted according to the number of months that member was enrolled during the prospective period.

Model weights were based on statewide data. Risk adjustments will take place at the Geographical Service Area (GSA) and risk group level. For GSA 10 (Pima and Santa Cruz), two separate risk adjustment calculations will take place: 1) for health plans awarded both Pima and Santa Cruz, and 2) for health plans awarded only Pima.

Risk scores calculated during the experience period will follow the individual during the rating period.

**Member Inclusion and Risk Factors for New Members / Short Cohort (for all members except TANF <1 during the experience period)**

Only members with at least six months of enrollment during the experience period (‘long’ cohort) will be given a claims based risk adjustment factor (average ERG risk score). Members with less than six months of enrollment during the experience period (‘short’ cohort) will be given a risk factor that is equal to 50% of their pure age/gender factor plus 50% of an adjusted plan factor. The adjusted plan factor is calculated by taking the average ERG risk score of the long cohort and dividing by the pure age/gender factor of the long cohort (relative health factor) and then multiplying by the pure/age gender factor of the short cohort. The weighted average of the long cohort and the short cohort results in the average risk score for each health plan, which will then be divided by the GSA average risk score to calculate the relative risk score.

**Encounter Data Validation and Issues**

AHCCCS regularly performs testing on encounters to identify any potential areas of concern. If AHCCCS identifies an area where encounters are not being submitted, AHCCCS contacts the health plan and works with the health plan to improve encounter submissions. AHCCCS monitors the encounters by reviewing encounter data by date of service and form type to identify potential issues. In addition, AHCCCS compares the health plan’s encounter data to their financials by quarter and compares how the health plans look relative to one another. Additional testing was
performed for the risk adjustment process which includes, but is not limited to, reviewing the average number of encounters per member per month, the encounter diagnosis information by health plan, the portion of a health plan’s population that has zero encounters and the portion of the population scored. These results are then compared across the health plans.

Based on this review, and after any necessary data corrections for program changes and member movement, no encounter data was excluded from the risk adjustment analysis.

Risk Adjustment for TANF <1
Risk adjustment for TANF under age one (newborns) is necessarily different than risk adjustment for other risk groups. Instead of an individual approach where risk adjustment factors follow individual members, an aggregate, concurrent approach was used. This approach assumes that historic relationships in newborn risk will continue into the future. While the specific newborns in any health plan will change from the experience period to the rating period, this approach assumes that health plans attract newborns with a consistent health status mix.

Based on Arizona data for the newborn Medicaid populations, a series of conditions that resulted in material variations among newborns due to the frequency, cost and nature of those conditions were identified. This analysis resulted in eleven general risk marker categories that will be used to differentiate the health status and therefore risk of newborns.

The analysis was limited to the newborns that were enrolled and at risk to a health plan at the time of birth during a 12-month time period. In order to obtain a significant experience period for each newborn while also making sure to include major conditions, we only included newborns enrolled in the experience period for at least the first three months of life by any combination of health plans, or who died while enrolled in the program.

Members with sufficient experience are identified during the experience period (July 1, 2010 through June 30, 2011). Sufficient experience is defined as being born in the experience period or during SFY10 (July 1, 2009 through June 30, 2010), and with at least three months of enrollment during the experience period or enrolled at the time of death. Members with sufficient experience are assigned a risk score.

Newborns not meeting the enrollment criteria described above are assigned 50% of the average relative risk adjustment for those meeting the eligibility criteria and 50% of a 1.00 factor. Each health plan’s risk score for newborns within a GSA will be calculated as the weighted average of the risk scores for newborns who met the above eligibility criteria during the experience period and those who did not.

Implementation
The risk adjustment factors were updated for CYE12. The experience period used is the period of July 1, 2010 - June 30, 2011 (SFY11). The adjustment will be retroactive to the start of the contract year (October 1, 2011) and will be the rates in effect through the end of the contract year (September 30, 2012). AHCCCS will
apply 100% of the risk adjustment factors for CYE12 to the previously approved capitation rates to develop the revised capitation rates.

III. **Proposed Revised CYE12 Capitation Rates and Resulting Impact**

The goal of the risk adjustment process is to better align the capitation payments with the acuity of the members. This process is budget neutral to the state; the adjustments impact contractors from an overall impact on previously approved capitation rates ranging from -2.0% to 2.2%. Individual health plan capitation rates will be impacted as shown in Section B of the contracts.
IV. **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 and a Fellow of the Society 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 proposed actuarially sound capitation rates that are associated with this certification are effective for the twelve-month period retroactive to October 1, 2011.

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

In developing the actuarially sound capitation rates, I have relied upon data and information provided by the contractors, the AHCCCS internal databases and analysis performed by Wakely Consulting. I have accepted the data without detail audit and have relied upon the health plan auditors, other AHCCCS employees and Wakely Consulting 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.

[Signature]

Windy J. Marks

Date

02/21/12

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