

DRG Payment Method Options

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Introduction

This document describes the components of a DRG pricing methodology and the decision points that must be made during the design of a DRG pricing implementation. The intent in this document is to include a comprehensive list of options available to customize a DRG pricing method considering the experience of other state Medicaid agencies and Medicare. The Florida Agency for Health Care Administration (AHCA) DRG project team will not necessarily choose to implement all these options, but can select from this list those components that best meet the agency’s goals. In addition, as the project progresses, other ideas for customization of AHCA’s implementation of DRGs may arise.

The first two chapters of the document provide background on DRG pricing that will be helpful in evaluating the various pricing design considerations. Chapter 1 lists a series of criteria helpful in evaluating a payment method and describes some of the areas in which options in a DRG pricing method affect the criteria. Chapter 2 describes the components of the actual pricing calculation under a DRG pricing methodology, including a few optional components, such as policy adjustors. The remaining sections of the document describe each option of the overall DRG payment policy in detail, including discussion and recommendation for each option. In this version of the document, the recommendations are filled in based on qualitative review of the payment options with consideration of the guiding principles described in Chapter 1. As payment simulations are performed, the options will be reviewed in more detail and may be modified prior to finalization. As such, the recommendations contained herein should be considered preliminary. Finally two appendices are provided. Appendix A is a table summarizing all of the DRG payment method options described in this report. Appendix B includes examples of the options selected by a half dozen states that either have implemented or are in the process of implementing a new DRG payment method. States included in the matrix are California, New York, Texas, Virginia, Pennsylvania and Illinois.

1 Evaluating a DRG Payment Method

Developing a Medicaid payment method requires balancing a variety of trade-offs and competing priorities. Payment methods have an impact on beneficiaries, medical providers, taxpayers, and program administrators, each with their own point of view on what makes a payment method successful. To balance the priorities of these different stakeholders, it is helpful to establish a set of guiding principles that describe the goals of the payment method and offer a structure against which various system design options can be evaluated. The list below offers a series of guiding principles and discusses how these principles can affect a DRG payment method.

- » **Efficiency.** A payment method should be consistent with promoting hospital efficiency, rewarding hospitals that increase efficiency while continuing to provide quality care. To enable this, the payment method should minimize reliance on individual hospital charges or costs, and create opportunities for providers to increase margins by more effectively managing resources. For example, in the design of a DRG payment system,

selecting a single standardized base rate can create incentives for hospitals to better manage their resources to achieve improved margins. Conversely, establishing facility-specific base rates that fluctuate annually with increases or decreases in facility-specific costs would provide little incentive for cost effectiveness.

- » **Access.** A payment method should promote beneficiary access to care. This guiding principle is consistent with the requirements specified in federal regulation. In the State Plan for Medical Assistance (State Plan), AHCA must make certain assurances to the federal Centers for Medicare and Medicaid Services (CMS) with respect to its level of payments to Medicaid providers. In particular, the State Plan must:

“... provide such methods and procedures relating to the utilization of, and the payment for, care and services available under the plan ... as may be necessary to safeguard against unnecessary utilization of such care and services and to assure that payments are consistent with efficiency, economy, and quality of care *and are sufficient to enlist enough providers so that care and services are available under the plan at least to the extent that such care and services are available to the general population in the geographic area[.]*” 42 U.S.C. § 1396a(a)(30)(A) (“Section 30(A)”) (emphasis added).

Within a DRG payment method, policy adjustors, provider peer groups (used for setting base rates), and outlier payment parameters are items that can be adjusted to affect access to care.

- » **Equity.** A payment method should generate fair payments both across hospitals and across types of care. Generally, hospitals should be paid similar amounts for the same services, with the potential exception being when there are necessary and measurable differences in the costs associated with those similar services. Within a DRG payment method, the bulk of the payment amount for an individual hospital stay is calculated by multiplying a hospital base price times a DRG relative weight. The DRG relative weights are determined using average costs from many hospitals, so the relative weights help ensure similar payment for similar services, independent of where those services are provided. If adjustments do need to be made for reasonable, measurable differences in hospital cost structures, those can be made through modifications to the hospital base price via rate adjustments (for example, wage area adjustments) and/or provider peer groupings (for example, giving all children’s hospitals or all rural hospitals their own provider base rate).
- » **Predictability.** A payment method should generate stable, predictable payments. Both the state Medicaid agency and the hospitals have to manage their budgets, and that can best be facilitated through a payment method which generates consistent, predictable reimbursements. DRG payment methods are predictable if patient acuity and volume are understood.

- » **Transparency.** A payment method that is transparent promotes trust from hospital administrators, hospital clinicians, legislators, and Medicaid program administrators. A DRG payment method can be made transparent by selecting a DRG algorithm that is openly documented, and by making DRG relative weights, provider base rates, and pricing logic publicly available.
- » **Simplicity.** A payment method that is relatively simple will be easier to implement, easier for hospitals to understand, and easier to administer and maintain. For a Medicaid program, implementing a new DRG payment method will require significant MMIS changes, regulation changes, and program monitoring changes. For hospitals, a new DRG payment method may impact medical coding practices, billing procedures, and internal information systems. The complexity of these changes is limited if the payment method is kept relatively simple. At the same time, over-simplifying the payment method may negatively impact payment equity and, in turn, negatively impact access to care.
- » **Quality.** It is generally known that it is a mission of all hospitals to provide high quality care. Payment methods should be consistent with promoting quality care where possible. In truth, very few payment methods specifically reward quality. Most payment methods, including DRG payment methods, pay the same whether or not high quality care is provided. At the same time, some payment components, such as outlier payment parameters, can contribute to (or detract from) facilitating the effective use of hospital resources in a way that is consistent with a hospital's mission to provide high quality care.

From a logistical point of view, a payment method is a framework or structure created to determine reimbursement for medical services and supplies. The structure includes organization of data, numerical formulas, and specific parameters or values used in the formulas. This structure should be carefully developed as it controls the distribution of large amounts of state and federal funding, and is intended to meet the needs of people and organizations with competing priorities. The guiding principles presented above can be helpful in evaluating various options for the payment structure so that the final design best meets the needs of beneficiaries, providers, taxpayers and program administrators.

2 Basics of a DRG Payment Method

This section describes the calculations performed when determining the price on a claim using a DRG payment method. Ultimately, a payment method can be described as a series of calculations. As such, this section offers a context for how decisions on the various pricing options are applied to actually price claims. Discussions and recommendations for each component within these calculations are provided in Chapter 7.

2.1 DRG Codes and Weights

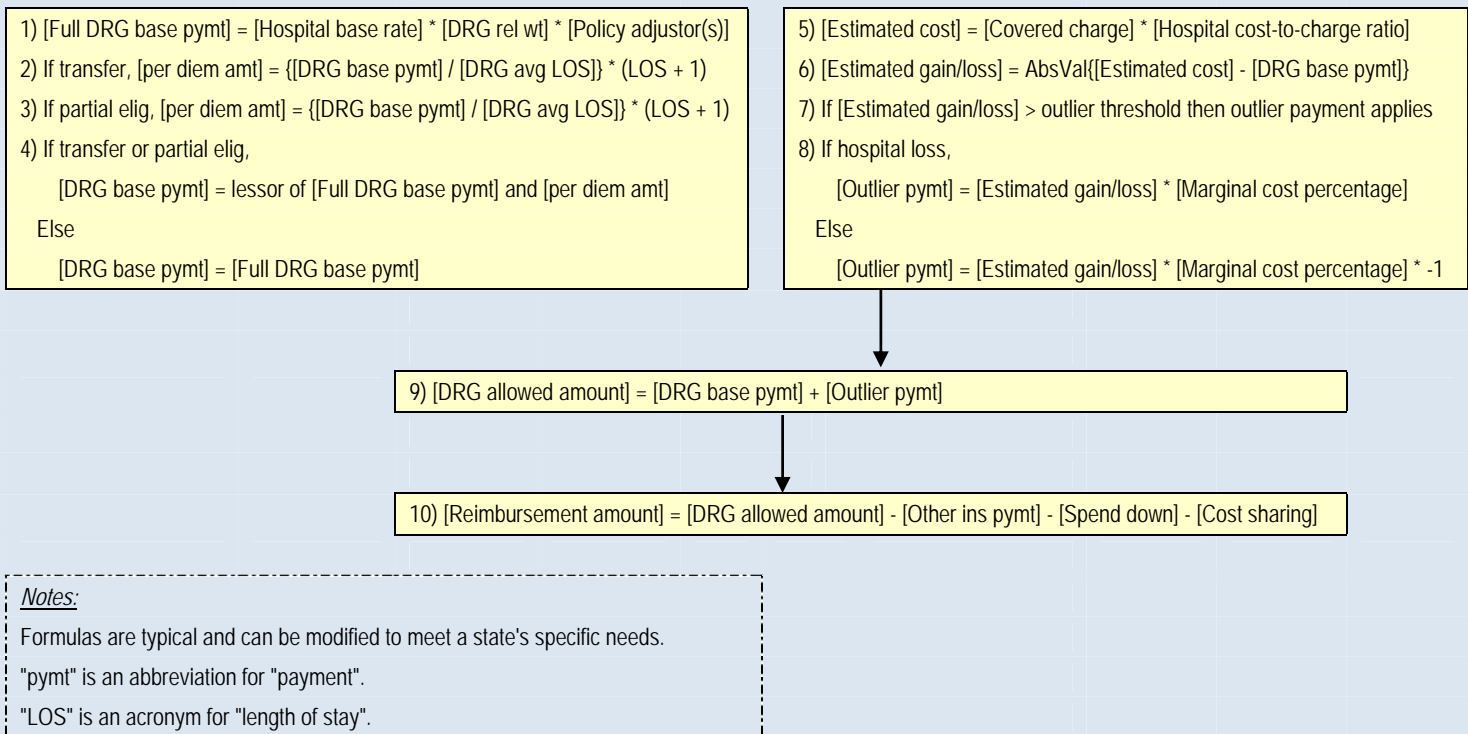
DRG payment methods involve classifying inpatient stays and then determining a price based on a combination of the classification and the hospital where the services were performed. Classification of the hospital stay is based on the diagnoses describing the patient's condition, the surgical procedures performed (if any), patient age, and discharge status. The classifications are labeled using codes referred to as DRG codes and the number of codes varies depending on the selected patient classification model. For example, the MS-DRG grouping method has 746 total codes including 335 base codes separated by severity into "no CC", "with CC" or "with major CC" (where "CC" stands for complications and comorbidities). Similarly, the APR-DRG grouping method has 1,254 codes including 314 base codes each separated into four levels of severity, minor, moderate, major and extreme.

Each DRG code is assigned a relative weight which is intended to indicate the average relative amount of hospital resources required to treat patients within that DRG category. These weights are relative to the overall average amount of hospital resources needed to treat a patient when looking across the full range of patients treated within an acute care inpatient setting. For example, a DRG weight of 2.0 would indicate an admission that requires twice the level of resources as an average admission, while a DRG weight of 0.5 would indicate an admission that requires half the level of resources as an average admission.

2.2 Summary of the DRG Pricing Formulas

A summary of a typical DRG pricing calculation is shown in Table 1 and the formulas are described in more detail in the following sections.

Table 1
Typical DRG Payment Formulas



2.3 Basic DRG Pricing Calculation

In a DRG pricing method, the vast majority of hospital stays are priced using a very simple formula. The formula is:

$$[\text{DRG Base Payment}] = [\text{Hospital base rate}] * [\text{DRG relative weight}] * [\text{Policy adjustor(s)}]$$

Policy adjustors, which are discussed in the next section, are optional and in many cases are set to 1.0, indicating no adjustment. If a policy adjustor of 1.0 is assumed, an example claim from a provider with a DRG base rate of \$8,000 and a DRG with relative weight of 2.0 would yield a payment of \$16,000. Similarly, an admission to the same provider that gets assigned a DRG with relative weight of 0.5 would yield a payment of \$4,000. Although this calculation is quite

simple, a great deal of thought goes into development of the DRG grouping algorithm (which determines the DRG code), assignment of relative weights to DRG codes, and assignment of base prices to hospitals.

2.4 Policy Adjustors

Medicaid agencies can make a policy decision to increase (or decrease) payments for particular types of hospital admissions to protect access for Medicaid beneficiaries. When increasing payment for types of services, policy adjustors are used. There are three types of adjustors commonly used, and should be considered as options:

- Service adjustors
- Age/service adjustors
- Provider/service adjustors

If implementing all three options for policy adjustors, the calculation of DRG base payment becomes:

$$\begin{aligned}
 \text{[DRG Base Payment]} &= \text{[Hospital base rate]} * \text{[DRG relative weight]} \\
 &\quad * \text{[Service adjustor]} * \text{[Age/service adjustor]} \\
 &\quad * \text{[Provider/service adjustor]}
 \end{aligned}$$

Policy adjustors, in general, modify payment for specific types of services, patient ages and hospital types. Service adjustors apply for specific types of care independent of the recipient and provider. Age/service adjustors apply only for recipients within a specific age range. Any age range can be used, but Medicaid programs generally use this to increase payment for pediatric care. Provider/service adjustors apply only for certain categories of providers.

For example, if a Medicaid agency decided to increase payments for neonatal care using a service adjustor of 1.5, then the claim payment would be increased by 50 percent. In this situation, a claim submitted from a provider with base rate \$8,000 and mapping to APR-DRG 622-3 (Neonate birth weight 2000-2499 grams with major respiratory condition; relative weight = 2.9453) the DRG base payment would be calculated as follows:

$$\begin{aligned}
 \text{[DRG Base Payment]} &= \$8,000 * 2.9453 * 1.5 * 1.0 * 1.0 \\
 &= \$35,343.60
 \end{aligned}$$

As a separate example, a Medicaid agency might decide to increase payment for pediatric care using an age/service adjustor of 1.25. In that case, a claim submitted from a provider with base rate \$8,000, for a recipient age 10, and mapping to APR-DRG 141-2 (Asthma; relative weight = 0.4946) the DRG base payment would be:

$$\text{[DRG Base Payment]} = \$8,000 * 0.4946 * 1.0 * 1.25 * 1.0$$

$$= \$4,946.00$$

A separate claim from the same hospital for a recipient age 35 (above the age adjustor cut-off) and mapping to the same APR-DRG, 141-2, would generate a DRG base payment of:

$$\begin{aligned} [\text{DRG Base Payment}] &= \$8,000 * 0.4946 * 1.0 * 1.0 * 1.0 \\ &= \$3,956.80 \end{aligned}$$

2.5 Adjustments to DRG Base Payment

2.5.1 *Transfer Claims*

When processing claims for recipients transferred from one acute facility to another, most Medicaid DRG implementations have followed the Medicare model for payment adjustments. In this model, a payment amount is calculated using a per diem method and then compared to the DRG base payment. If the per diem payment, referred to as a transfer-adjusted base payment, is less than the DRG base payment, then the transfer-adjusted base payment is used. Using the DRG base payment and the DRG’s average length of stay, a transfer-adjusted payment can be calculated as:

$$\begin{aligned} \text{Transfer-adjusted base payment} &= \{[\text{DRG base payment}] / [\text{DRG average length of stay}]\} \\ &\quad * \{[\text{length of stay}] + 1\} \end{aligned}$$

Adding one to the length of stay takes into account the disproportionate amount of costs required in the first day of admission to complete the admission process and perform an initial diagnostic evaluation.

For example, APR-DRG 602-3 (neonate birth weight 1000-1249 grams with respiratory distress syndrome, other major respiratory anomaly or other major anomaly) has relative weight 8.3857 and average length of stay equal to 52.16 days (in version 29). If a baby with this DRG is transferred out of a hospital after two days and the hospital’s base price is \$8,000 then,

$$\begin{aligned} \text{Full DRG base payment} &= \$8,000 * 8.3857 = \$67,085.60 \\ \text{Transfer-adjusted base payment} &= (67,085.60 / 52.16) * (2 + 1) = \$3,858.45 \end{aligned}$$

In this example, the transfer-adjusted base payment is less and would be used in place of the full DRG base payment.

2.5.2 *Partial Eligibility*

If a recipient is only eligible for Medicaid fee-for-service for part of a hospital stay, then a full DRG payment may not be appropriate. A smaller payment may be acceptable as the hospital will be getting reimbursement for part of the stay from other sources, such as a managed care organization.

Payment is determined in a partial eligibility situation very much the same way it is determined on transfer claims – a per diem payment is calculated, compared to the full DRG base payment, and the lower of the two is used. The calculation of eligibility-adjusted base payment can be exactly the same as the transfer-adjusted base payment. That is,

$$\text{Eligibility-adjusted base payment} = \{[\text{DRG base payment}] / [\text{DRG average length of stay}]\} \\ * \{[\text{length of stay}] + 1\}$$

Another option is to remove the “+ 1” from the number of days multiplier in cases where the Medicaid fee-for-service eligibility did not begin until after the day of admission. In that case the formula is,

$$\text{Eligibility-adjusted base payment} = \{[\text{DRG base payment}] / [\text{DRG average length of stay}]\} \\ * [\text{length of stay}]$$

2.6 Outlier Payments

Inevitably, some claims will be submitted for extreme and unpredictable cases in which the standard DRG payment differs greatly from the level of resources expended by the hospital. For these cases, referred to as outliers, a DRG payment method can adjust payment upward to share in hospital losses or downward to share in hospital gains. The Medicare model, also adopted by several states, is to employ a stop-loss threshold which generates outlier payments whenever the hospital’s estimated loss is above a threshold. With this method, the formula for an outlier payment adjustment is:

$$[\text{Hospital loss/gain}] = \text{AbsVal}\{([\text{Billed Charges}] * [\text{Cost to Charge Ratio}]) \\ - [\text{DRG base payment}]\}$$

If $[\text{Hospital loss/gain}] > [\text{Outlier Threshold}]$ Then

If hospital loss Then

$$[\text{Outlier pymt adjstmnt}] = \{([\text{Hospital loss/gain}] - [\text{Outlier threshold}]) \\ * [\text{Marginal cost \%}]\}$$

Else

$$[\text{Outlier pymt adjstmnt}] = \{([\text{Hospital loss/gain}] - [\text{Outlier threshold}]) \\ * [\text{Marginal cost \%}]\} * -1$$

Else

$$[\text{Outlier payment adjstmnt}] = 0$$

For example, an admission with charges of \$200,000, at a hospital with cost-to-charge ratio equal to 0.30 and a DRG base payment of \$5,000 has a hospital loss equal to \$55,000 $\{(\$200,000 * 0.3) - \$5,000\}$. If the Medicaid DRG policy included an outlier threshold of \$30,000 and a marginal cost percentage of 70% then the outlier payment would be $\{(\$55,000 - \$30,000) * 0.7\} = \$17,500$. Thus the final payment to the provider would be $(\$5,000 + \$17,500) = \$22,500$.

Medicare does not apply payment reductions when the hospital gain is above the threshold. But this is an option AHCA can consider, either using the same or a different threshold amount as used for hospital losses.

2.7 DRG Price versus Final Reimbursement

The previous sections in Chapter 2 describe how the DRG price is calculated. This is the amount of money Medicaid is willing to pay for the services without consideration of any other forms of payment. This price is sometimes referred to as the Medicaid allowed amount. Final reimbursement for a claim equals the DRG price minus any other forms of payment such as payment from another insurance carrier, recipient spend down, and patient cost sharing, such as copays. Thus,

$$\begin{aligned} \text{[Final reimbursement]} &= \text{[Allowed amount]} - \text{[Other ins pymt]} - \text{[Spend down]} \\ &\quad - \text{[cost sharing]} \end{aligned}$$

2.8 Non-DRG Paid Claims

Depending on the payment policies set by the state, some acute care inpatient claims may fall outside the DRG payment. These may be claims for services or providers carved out of the DRG payment method, or they may be interim claims from providers for services that are included in DRG payment. Both carved out items and interim claims are commonly paid per diem model, although they can also be paid as a percentage of charges. Unlike carved-out services, the per diem for interim claims is set relatively low as it is intended to be a temporary, partial payment. The interim claim per diem gives hospitals some reimbursement for cash flow purposes, while still leaving the hospital incentive to submit a final claim when the recipient is discharged.

3 Scope of DRG Payment Method

3.1 Affected Providers

3.1.1 *Affected Providers - Discussion*

DRG payment methods typically cover payments to general acute care inpatient facilities. Nursing home care and hospice care are normally paid outside of a DRG payment method.

There are other provider types, however, where the decision of inclusion or exclusion in DRG payment is less clear and varies among states using DRG payments. These provider types include:

- Physical rehabilitation
- Long term acute care
- Mental health and substance abuse facilities
- Critical access or rural hospitals
- Children’s hospitals
- Cancer hospitals
- Federally Qualified Health Centers
- Rural Health Clinics
- In-state / out-of-state / border hospitals
- Native American Indian hospitals
- Public hospitals

The first three provider types in the list above, physical rehabilitation, long term acute care, and mental health / substance abuse facilities all treat patients with highly variable and unpredictable lengths-of-stay. Because of this, some states choose to pay these providers with another method, such as a per diem method, instead of paying via DRGs. In addition, a hybrid option is possible where providers are paid per diem and the per diem amount is adjusted based on patient acuity, using DRG grouping to measure patient acuity. The APR-DRG patient classification model, for example, contains 72 different APR-DRG classifications and relative weights intended to reflect the resource intensity of different types of psychiatric patient care. The relative weights associated with the APR-DRG classifications can be used to adjust the per diem, offering a higher per diem for above average relative weight and a lower per diem for below average relative weight.

The next five providers, critical access, children’s, cancer, Federally Qualified Health Centers, and Rural Health Clinics are all excluded from the Medicare DRG inpatient prospective payment system. For that reason, states get some push back when including these providers in the Medicaid DRG payment method and need to offer justification for the decision. Payment simulations are a valuable tool for reviewing payments to these providers under a DRG method and help to show whether or not DRGs will offer fair reimbursement. With the robustness of some DRG models, such as that reflected in the APR-DRG algorithm, the simulations often do show DRG payment is a reasonable option. In addition, special considerations within the DRG

payment method can be reviewed to ensure fair reimbursement if needed. For example, separate hospital base rates can be given for some or all of these categories of providers. Also certain services can be given a service or age adjustor, which is particularly useful to children’s hospitals. In addition, certain services can be defined as separately billable on outpatient claims, such as organ search and acquisition costs, and blood factors, which is particularly appealing to cancer institutions. Making these kinds of payment adjustments within the overall DRG payment method allows for special considerations to be made while still maintaining the simplicity of all or nearly all providers paid using the same method.

Similarly to maintain simplicity, most states pay in-state, border hospitals, and out-of-state hospitals via DRGs. The only decisions normally made based on general location of each hospital are selection of hospital base price and determination of cost-to-charge ratio. For out-of-state hospitals, normally a single hospital base price and a default cost-to-charge ratio are used. For example, the state’s standard Medicare urban or rural cost-to-charge ratio can be assigned to each out-of-state hospital. However, border hospitals may have a sufficiently high volume of Medicaid recipients to justify treating them like in-state hospitals for the purpose of assigning base rates and cost-to-charge ratios.

Finally, many Medicaid agencies have separate policies associated with Native American Indian hospitals and public hospitals, so decisions need to be made on how these categories of providers will be affected by a DRG payment method.

3.1.2 Affected Providers - Recommendation

Consistent with guiding principles related to simplicity, fairness and incenting efficiency, we recommend including the majority of hospital inpatient stays in the new DRG payment method. A DRG payment method can promote hospital efficiency and can offer fair payment for the majority of inpatient stays. In addition, keeping the majority of hospital stays under a single payment method improves simplicity of program administration, including rate setting, software implementation and maintenance, and program operations. Specifically, we recommend the following types of providers be included in the DRG payment method:

- General acute care
- Critical access or rural hospitals
- Children’s hospitals
- Cancer hospitals
- Teaching hospitals
- In-state / out-of-state / border hospitals
- Long term acute care

Admissions in long term acute care facilities are similar to rehabilitation and psychiatric services in the sense that they have highly variable lengths of stay and highly variable costs of care. As a result, predicting their costs is a challenge for DRG groupers, and as such, we suggest paying long term acute care stays via a per diem instead of a DRG payment

methodology. However, Florida Medicaid only had 126 stays at long term acute care facilities in fiscal year 2010/2011. Given this extremely low volume, whatever payment method provides the greatest level of simplicity should prove acceptable. We expect that including the long term acute care hospitals with all other hospitals to be paid via DRGs will be the easiest to implement.

For the specialty provider types listed below, we recommend carving out of the DRG payment method. These providers offer services whose costs are not as well predicted through a DRG payment method and, are more fairly reimbursed under other payment methods such as that which can be achieved through a per diem model.

- Psychiatric specialty distinct part units
- Physical rehabilitation free-standing facilities and distinct part units

Free-standing, specialized mental health facilities are not included in the list above because they are not currently reimbursed by the Florida Medicaid fee-for-service program. It is our understanding that Florida Medicaid’s policy related to these providers will not be changing with the implementation of DRG payments.

Finally the following provider type should also be excluded from the DRG payment method because their funding sources are sufficiently unique to justify treating them separately:

State-owned hospitals

3.2 Affected Services

3.2.1 Affected Services - Discussion

The list of services sometimes included and sometimes excluded from DRG payments is similar to the list of provider types open for debate. States vary on inclusion in DRG payment for the following list of services,

- Physical rehabilitation
- Mental health and substance abuse
- Unpredictable and expensive services and supplies such as blood factors and organ search and acquisition
- New technologies

As described in the previous section, a policy decision must be made relating to inclusion or exclusion of specialty rehabilitation and psychiatric institutions within a DRG payment method. In addition, a policy decision must be made for payment of rehabilitation and psychiatric services when performed within a general acute care facility. If volumes are low, the simplicity of including them in the DRG payment method are likely justifiable. However, if volumes are high, it will be more justifiable to pay these services the same way they will be paid within the specialty institutions and distinct part units.

Unpredictable and expensive services and supplies such as blood factors and transplant organ searches create challenges for a DRG payment method. DRG payments are based on average resource usage and work very well when hospital admissions can be grouped into relatively homogeneous categories. However some cases require resources far outside the norm, such as the cost of blood factors required when operating on a patient with a blood clotting problem. For items that occur in very low volumes, the policy might simply be to allow outlier payments to help hospitals cover costs of very expensive cases. However, if volumes are high or are heavily concentrated at specific hospitals, outlier payments alone may not be sufficient. Instead, certain services and supplies can be carved out of the DRG payment and made separately payable. However, such a policy can be extremely challenging to implement in an MMIS. Other options such as different provider base rates, service adjustors, or multiple tiers in the outlier payment method (using a higher marginal cost percentage for very high losses) may generate fair payment and prove far simpler to implement.

New technologies can also be a challenge for a DRG payment. In theory they may reduce cost of care, but in practice, they most often increase cost. Furthermore, DRG relative weights may lag slightly behind in capturing these costs because DRG relative weights are calculated using costs from historical claims. Thus, offering separate payment for new technologies is justifiable. However, the task of maintaining an ever-evolving list of new technologies is very challenging.

3.2.2 Affected Services - Recommendation

Physical Rehabilitation and Mental Health Services

Rehabilitation and mental health services are included in the same discussion here because our recommendation is the same for both. For simplicity, we would prefer to include all services within the new DRG payment method. However, some services, most notably rehabilitation and mental health services, vary so much with respect to hospital costs and lengths of stay for the same diagnoses that a pure DRG payment method is generally not the best way to determine reimbursement. To confirm, we will perform analysis on Florida Medicaid claims for these services looking particularly at how variable the hospitals' costs are within each DRG. If the results show a very high variability, as they have with other states' Medicaid data, then we will recommend carving rehabilitation and mental health services out of the DRG payment method and maintaining some form of per diem payment method. Specifically, we recommend carving the services out when provided in a specialty stand-alone facility or in a distinct part unit of a full service hospital. We expect stays with a primary diagnosis of rehabilitation or mental health will for the most part occur in such a specialized setting. If there is an occasional rehabilitation or mental health stay occurring in a general acute care setting, it can be reimbursed under the new DRG payment method.

Identifying distinct part units within full service hospitals may be a function already performed by the Florida Medicaid provider enrollment process. If it is not, we can use Medicare information to determine which hospitals have distinct part rehab and/or psychiatric units.

This designation could then be added to FMMIS, most likely into a new indicator on the provider master file.

Paying via per diem is consistent with how Medicare pays these types of inpatient stays. Also similar to Medicare, we recommend separate standardized per diem rates for rehabilitation and mental health services with each standardized rate adjusted by the DRG relative weight enabling payment. This will adjust the rate based on patient acuity, which is discussed in more detail in section 6.3 - Per Diem Base Rates. Unlike Medicare, we do not recommend adjusting mental health per diem amounts based on the number of days in which a patient is in the hospital. Adjustment based on length of stay seems to add complexity without adding sufficient benefit. In addition, we do not have data in a sufficient level of detail to validate the tiered structure implemented by Medicare or to calculate Florida Medicaid specific multiplication factors. If implementing a tiered per diem adjustment, the best option would be to accept Medicare’s multiplication factors at face value.

Substance Abuse Services

Substance abuse services are treated as medical conditions under Florida Medicaid policy. They go through the same prior authorization procedures as medical services, not the prior authorization procedures used for mental health services. In keeping with that distinction, we recommend paying substance abuse claims via the DRG payment method, as will be used for nearly all other medical services. In addition, the standard deviations of length of stay for substance abuse DRGs is lower than the standard deviations for length of stay for mental health DRGs, indicating DRGs are a better predictor of hospital resource use for substance abuse services than for mental health services.

Unpredictable and Expensive Services

As with many policy decisions, the topic of unpredictable and expensive services requires a trade-off between the principles used to evaluate a payment method (described in Chapter 1). Allowing separate payment for unpredictable and expensive services diminishes the incentives for efficiency, reduces transparency, increases administrative burden, and increases complexity. On the other hand, access to care may be jeopardized if certain types of cases result in predictable and consistent losses, even with the casemix and outlier adjustments of a DRG payment method. An example is surgery for patients with hemophilia. The need for blood factors can sharply increase the hospital’s cost even for otherwise routine surgeries.

Looking at Medicare as an example, the inpatient prospective payment system allows for separate payment for inpatient services under three circumstances:

- ***Organ acquisition.*** In most cases, these costs are reimbursed through the cost settlement process; for renal transplants, designated renal transplantation hospitals are paid adjusted rates.
- ***Blood clotting factors.*** Blood factors are paid based on a fee schedule (e.g., 95% of average wholesale price).

- ***New medical technology.*** Devices that meet very specific Medicare criteria related to newness, FDA approval, substantial clinical improvement and unusual costliness criteria may qualify for add-on payments. Very few devices meet these criteria.

State Medicaid DRG payers, in contrast, often do not allow separate payment for unpredictable and expensive services because of both the concern over incentives and the added complexity to the payment method.

Further analysis is needed before determining whether any other services, most notably organ and bone marrow search and acquisition costs should be separately payable. Medicare does pay for them separately through a cost settlement process. However, such a cost settlement model can be rather complicated to administer. In addition, DRG payment simulations may show these costs are being adequately addressed through DRG relative weights and related payments. Payment simulations may also show payment via DRGs being higher to the types of hospitals that perform organ and bone marrow transplants. If that proves to be the case, it will be difficult to justify shifting even more money to these types of hospitals through separate additional payments. Lastly, policy adjustors for the transplant DRGs may be a more consistent way to address these cost differences, without making them separately payable.

New Technologies

Although Medicare pays separately for new technologies, we do not recommend Florida Medicaid adopt this policy. Maintaining a list of new technologies and identifying appropriate payment for each is a difficult administrative challenge. In addition, it can be troublesome to distinguish new technologies that are in fact beneficial to Medicaid recipients versus those that are simply more costly. Also, add-on payments for new technologies lend themselves to external pressure being applied to Medicaid policy makers on an ongoing basis. Lastly, the current payment method offers no additional payment for new technologies, so our recommendation on this topic is in line with current policy.

In addition, updating DRG relative weights yearly is recommended so that the weights are as up to date as possible with advances in technology. New technologies that prove to be successful will gain traction in the industry, thus becoming a factor in the costs of more and more hospitals. As that occurs, their costs will be captured within DRG relative weights.

3.3 Affected Beneficiaries / Medicaid Programs

3.3.1 Affected Beneficiaries / Medicaid Programs - Discussion

Medicaid agencies generally administer a variety of programs usually with beneficiaries enrolled in only one program at a time. Common programs include fee-for-service, primary care case management, managed care, and Children’s Health Insurance Program (CHIP). States often also administer smaller programs sometimes based on a waiver and sometimes paid for by separate funding sources than used for standard Medicaid. In addition, some Medicaid beneficiaries are dually eligible for Medicaid and Medicare. For these beneficiaries, most

healthcare services are paid primarily by Medicare with Medicaid acting as a supplementary payer, usually paying only the Medicare coinsurance and deductible amounts. However, there are certain services not covered by Medicare and cases where Medicare benefits have been exhausted, in which case Medicaid becomes the primary payer. As part of a DRG payment method implementation, Medicaid agencies must determine which programs and/or eligibility categories will be included in the new payment method. The new payment policy must also decide how Medicare crossover claims (where Medicare was the primary payer) are affected. For simplicity of the payment methods, Medicaid programs typically aim to include all programs in the DRG payment method and make exceptions only when specific, justifiable reasons are identified.

3.3.2 Affected Beneficiaries / Medicaid Programs - Recommendation

Services for Medicaid fee-for-service recipients are planned for reimbursement under the new DRG methodology. In addition, Medicare versus Medicaid lower-of pricing is recommended for Medicare crossover claims, so the new DRG payment methodology should apply to calculation of the Medicaid allowed amount for dual eligible beneficiaries.

The payment methodology used for services to recipients enrolled in managed care plans will continue to be the decision of the managed care organizations. Medicaid managed care plans can choose to follow fee-for-service and move to a DRG-based inpatient payment method, but are not required to do so. If managed care plans do choose to convert to DRGs, we recommend they perform a separate analysis to determine appropriate policies and payment factors for their specific portions of the Medicaid population.

3.4 Prior Authorization Changes

3.4.1 Prior Authorization Changes - Discussion

When moving from a per diem-based payment method to a DRG-based payment method, the unit of service that is tied to the payment methodology changes from a day to a complete hospital stay, or discharge. This often has implications on the service authorization process. In a per diem payment method, processes and systems are often installed to monitor the number of days of each hospital stay. Under a DRG payment method, length of stay is no longer a major contributor to payment. As a result, the Medicaid program no longer needs to emphasize careful control over the number of days authorized. Instead, Medicaid programs generally choose only to authorize hospital admissions, not the number of days following the admission. Medicaid programs also monitor very expensive stays, sometimes in the pre-payment authorization process and sometimes in post payment review. In addition, Medicaid programs may choose to monitor stays which are unusually short to prevent inappropriately early discharges, as hospitals are now incented to limit the length of stay.

Similarly, a change from per diem to DRG payment may change some of the post-payment review processes and reports. With DRG payments, length of stay is of little concern, but excessive numbers of very short stays or excessive numbers of stays for which outlier payments are made are a concern. Overall, a DRG payment method may decrease the effort needed in

support of prior authorizations, but may also increase the effort needed for post-payment review.

3.4.2 Prior Authorization Changes - Recommendation

We recommend procedures, system edits, and reports be reviewed with the idea in mind that controlling lengths of stay is of limited value under a DRG payment method. Authorizing a specific number of days for a hospital stay will no longer be necessary for those stays being paid under a DRG payment method. (Note, psychiatric stays and rehabilitation stays may remain in a per diem payment method.) In addition, concurrent reviews required after certain lengths of stay may no longer be necessary. Ideally under a DRG payment method, concurrent reviews are more valuable for stays that will generate an outlier payment. Unfortunately, identifying outlier stays in advance of a discharge is problematic.

4 Cost Estimation

4.1 Cost Estimation - Discussion

Estimating costs for inpatient hospital services is an important step in the design of a DRG-based payment or rate-setting methodology for several reasons. First, for payers planning to develop and implement their own relative weights, knowing the costs of claims is critical if those weights are to be based on relative differences in the average costs of services described by each DRG. Second, even for states that are considering adopting weights from other payers or national sources, understanding the costs of services can be useful for validating the appropriateness of the borrowed relative weight values. Third, understanding the costs of services can be helpful in evaluating the overall fairness and equity of a payment model and related rates.

Finally, costs can be useful as a starting point for establishing DRG base rates (as well as per diem rates that might be used to pay for services that are excluded from the DRG payment method). It should also be understood, however, that when designing a system that is intended to be budget neutral, that it is not necessary to start with the costs of services when establishing base rates. Base rates can be determined through an iterative process using a payment simulation model where rates can be set at a level that will result in an aggregate “spend,” set at a level to be consistent with the payer’s budget neutrality requirements.

Currently, AHCA’s policy for estimating costs uses an aggregated approach that would not be practicable for application on a claim-by-claim basis, which will be a requirement for the current design process. There are several other approaches that can be used to estimate costs on a claim-by-claim basis using generally the same hospital Medicare cost report data and paid claims data relied upon by AHCA for their calculations. Two common approaches require extracting cost and charge data from hospital Medicare cost reports and determining either aggregate or detailed cost-to-charge ratios (CCRs) and per diems to estimate routine and ancillary costs. Regardless of the approach used, Florida hospital Medicare cost report data extracted from the CMS Hospital Cost Reporting Information System (HCRIS) dataset will be necessary.

One approach, an aggregate CCR approach, determines a hospital-specific CCR based on the ratio of total allowable costs to total allowed charges reported on the hospital-specific Medicare cost report. This hospital aggregate CCR is applied to the total charges on a claim to estimate a total cost for the claim. This approach to cost estimation is less precise than the detailed approach described next; however, it is a less resource intensive process, and is very easy to understand.

An alternative approach to the aggregate CCR approach is to use a detailed line-level approach based on Medicare’s detailed cost apportionment methodology, relying on hospital-specific routine cost per diems and ancillary CCRs to estimate costs at a claim-detail level. The detailed line-level costing approach is intuitively considered to be a more precise estimation of costs

because it requires examination of the charges for each detail line within a claim to estimate a total cost for the claim. Additional consideration during rate development should be given to separately calculating for each claim the operating cost, capital cost and direct medical education cost. This can be accomplished by calculating operating, capital and direct medical education-specific routine cost per diems and ancillary CCRs, the data elements for which are readily available in the CMS HCRIS database.

The following steps are needed to estimate costs at the detailed line level:

- Extract Florida hospital Medicare cost report data from the CMS HCRIS database for each in-state acute care hospital with reporting dates matching the dates-of-service of the claims contained in the analytical dataset
- Calculate hospital-specific operating, capital and direct medical education routine per diems and ancillary CCRs for each standard Medicare cost center
- Crosswalk each ancillary CCR or routine cost per diem, by cost center, to the allowable revenue codes in the analytical dataset claims data detail. This will include matching cost reporting periods to claims data based on the claim date of service. Only revenue codes that are identified as allowable under AHCA’s current provider billing instructions would be included in the cost calculation.
- Estimate ancillary costs of each claim by multiplying the ancillary claim detail line charges by the applicable ancillary CCR
- Estimate routine costs of each claim by multiplying the routine claim detail line days by the applicable routine cost per diem
- Subtotal the operating, capital and direct medical education costs for each claim at the header level
- Inflate the cost of each claim to the midpoint of the proposed rate year based on changes in CMS hospital input price index levels

Both cost estimation approaches discussed here are acceptable methodologies used by Medicaid agencies for rate determination and impact analyses, and there are many variations of these approaches. The selection of a method for this project will be dependent on a number of factors, including the anticipated methods to be used to determine base rates and relative weights.

4.2 Cost Estimation - Recommendation

For analysis purposes during the design of the DRG payment method, we propose calculating hospital costs using a detailed line-level approach. Under our proposal, Medicare cost reports will be used to calculate routine cost per diems and ancillary cost-to-charge ratios (CCRs). The per diems and ancillary CCRs will be mapped to revenue codes then applied to claim service lines in the DRG simulation dataset based on the associated revenue codes. This will allow an estimated cost to be calculated for each claim service line and then summed to identify the cost per claim.

For the purposes of individual claim payment calculations under a DRG payment method, cost is only used in the determination of outlier payments. For this purpose, we recommend adopting Medicare hospital-specific CCRs which are the sum of the operating and capital CCRs. For hospitals not currently reimbursed under the inpatient prospective payment system, these CCRs will not be available. Instead, these CCRs can be calculated from cost reports.

We recommend CCRs be determined for every hospital with provider agreements to participate in the Florida Medicaid program including high volume out-of-state hospitals. There are currently 18 out-of-state hospitals participating in the Florida Medicaid program. For non-participating out-of-state hospitals, a default CCR will be needed. The default CCR can be set to a statewide average CCR, or the Medicare urban or rural average CCR.

5 DRG Grouping

The topic of DRG grouping breaks down into two basic decision points. The first is which DRG grouping algorithm to use. Once that is decided, then the source of the DRG relative weights and average lengths of stay can be determined.

5.1 DRG Grouper

5.1.1 DRG Grouper - Discussion

5.1.1.1 Introduction

The goal of diagnosis related groupers is to define patients into categories based on similar clinical conditions and on similar levels of hospital resources required for treatment. These categories are identified using Diagnosis Related Group (DRG) codes each of which is assigned a relative weight appropriate for the relative amount of hospital resources used to treat the patient. For example, if a DRG grouper assigns “patient A” to DRG 123 with relative weight 0.5, and assigns “patient B” to DRG 321 with relative weight 1.0, this indicates the average amount of hospital resources required to treat “patient A” is a half the amount of resources required to treat “patient B”. These relative weights associated with DRGs are used in the calculation of reimbursement with the intent of paying more when the patient’s care required more resources and less when the patient’s care required fewer resources. Thus, from the point of view of hospital reimbursement, the best DRG grouper for a particular healthcare payer is the one that most accurately predicts the relative hospital resource usage for the full range of services reimbursed by the payer.

Given the importance of generating fair payment for services provided, the primary objective of a DRG grouper is to categorize hospital stays in a way that most accurately predicts relative hospital resource usage for the care provided to each patient. In addition, there are other benefits of DRG grouping such as contributing to measurement of hospital quality and categorizing the types of care reimbursed by the payer. Also, as with any tool, DRG groupers need to be evaluated in terms of long term viability and reliability. With all these thoughts in mind, the criteria recommended for evaluation of different DRG groupers are:

1. Accuracy categorizing relative cost of care for the full range of services reimbursed by the Medicaid agency, with particular concentration on the services for which Medicaid is a major player in the market
2. Long term viability in an ever-evolving healthcare industry
3. Ability to contribute to measurement of hospital quality
4. Familiarity and experience being used in the industry

5.1.1.2 Options

There are six DRG grouping algorithms currently available in the United States as shown in Table 2.

Algorithm	Developer	All-Patient Weights	Planned ICD-10 Compliance	Marketed for Medicaid	Medicaid Payer Use	Other Payer Use	Used to Measure Quality
CMS-DRGs	3M for CMS	No	No	No	Yes	Yes	No
MS-DRGs	3M for CMS	No	Yes	No	Yes	Yes	Yes
AP-DRGs	3M	Yes	No	Yes	Yes	No	No
APR-DRGs	3M / NACHRI	Yes	Yes	Yes	Yes	Yes	Yes
APS-DRGs	OptumInsight	Yes	Yes	Yes	No	No	No
Tricare DRGs	3M	No	Yes	No	Yes	Yes	No

Two of these algorithms, CMS-DRGs and AP-DRGs are being phased out. Neither is actively being updated which means neither will be released with an ICD-10 compliant version. The Tricare DRG algorithm, which was developed and is currently maintained by 3M, uses generally the same DRG grouping logic as MS-DRGs, but has been enhanced to reflect the grouping logic of the obsolete AP-DRG model for pediatric and neonatal services. Based on our discussions with representatives from 3M, there has been relatively little investment focused on the Tricare DRG tool to bring it current with the standards established for more current models, particularly with respect to classifying neonatal and pediatric cases. The DRGs for those types of cases have been the same for many years and have not been (nor are they expected to be) updated with new research. For these reasons, the CMS-DRG, AP-DRG and Tricare DRG algorithms can be considered unacceptable options, leaving only three potential options for Florida Medicaid, MS-DRGs, APR-DRGs, and APS-DRGs. These are compared in greater detail in Table 3.

Table 3
Detailed Comparison of Select DRG Algorithms

Description	MS-DRGs V.28 (CMS - Maintained by 3M)	APR-DRGs V.28 (3M and NACHRI)	APS-DRGs V.28 (OptumInsight – formerly Ingenix)
Intended Population	Medicare (age 65+ or under age 65 with disability)	All patient (based on the Nationwide Inpatient Sample)	All patient (based on the Nationwide Inpatient Sample)
Overall approach and treatment of complications and comorbidities (CCs)	Intended for use in Medicare Population. Includes 335 base DRGs, initially separated by severity into “no CC”, “with CC” or “with major CC”. Low volume DRGs were then combined.	Structure unrelated to Medicare. Includes 314 base DRGs, each with four severity levels. The is no CC or major CC list; instead, severity depends on the number and interaction of CCs.	Structure based on MS-DRGs but adapted to be suitable for an all-patient population. Includes 407 base DRGs, each with three severity levels. Same CC and major CC list as MS-DRGs.
Number of DRGs	746	1,258	1,223
Newborn DRGs	7 DRGs, no use of birth weight	28 base DRGs, each with four levels of severity (total 112)	9 base DRGs, each with three levels of severity, based in part on birth weight (total 27)
Psychiatric DRGs (including chemical dependency)	9 DRGs; most stays group to “psychoses”	18 DRGs, each with four levels of severity (total 72)	10 base DRGs, each with three levels of severity (total 30)
Payment Use by Medicaid	MI, NH, NM, OK, OR, SD, WI	<i>Operational:</i> MA, MD, MT, NY, PA, RI, SC <i>Announced:</i> CA, CO, IL, ND, TX	None
Payment use by other payers	Commercial plan use	BCBSMA, BCBSTN	Commercial plan use
Other users	Medicare, hospitals	Hospitals, AHRQ, MedPAC, JCAHO, various state “report cards”	Hospitals, AHRQ, various state “report cards”

Table 3 Detailed Comparison of Select DRG Algorithms			
Description	MS-DRGs V.28 (CMS - Maintained by 3M)	APR-DRGs V.28 (3M and NACHRI)	APS-DRGs V.28 (OptumInsight – formerly Ingenix)
Uses in measuring hospital quality	Used as a risk adjustor in measuring readmissions. Used to reduce payment for hospital-acquired conditions.	Used as risk adjustor in measuring mortality, readmissions, complications	Used as risk adjustor in measuring mortality and readmissions and to reduce payment for hospital-acquired conditions
<p><u>Source:</u> Quinn, K., Courts, C. Sound Practices in Medicaid Payment for Hospital Care; Center for Healthcare Strategies, November 2010. Updated by Navigant with additional and more current information.</p>			

5.1.1.3 Accuracy Categorizing Relative Cost with a Medicaid Population

Both the APR- and APS-DRG algorithms are designed for a full beneficiary population. The APR-DRG algorithm even includes significant granularities for sick newborns and pediatrics that are developed and maintained by the National Association of Children’s Hospitals and Related Institutions (NACHRI) for 3M Health Information Systems. Presumably both APR-DRGs and APS-DRGs are reasonably accurate for predicting relative hospital cost given characteristics of the patient. However, more confidence exists in the accuracy of the APR-DRG scheme simply because it is used by many more payers than APS-DRGs.

MS-DRGs, in contrast, are developed specifically for the Medicare population. The DRGs are designed for beneficiaries over the age of 65 or who are disabled or suffering from end stage renal disease. It was in 2004 when the Centers for Medicare and Medicaid Services (CMS) made a policy shift to no longer support the needs of all payers.

“As previously stated, we do not have the data or the expertise to develop more extensive newborn and pediatric DRGs. Our mission in maintaining the Medicare DRGs is to serve the Medicare population.”¹

Then in 2007 when Medicare adopted its new Medical Severity DRG algorithm (MS-DRGs), CMS made several statements underscoring the fact that MS-DRGs were developed only for the Medicare population. For example,

“The MS-DRGs were specifically designed for purposes of Medicare hospital inpatient services payment. As we stated above, we generally use MEDPAR data to evaluate

¹ CMS, “Medicare Program; Changes to the Hospital Inpatient Prospective Payment Systems and Fiscal Year 2005 Rates; Final Rule,” *Federal Register* 69:154 (Aug. 11, 2004), p. 48,939.

possible DRG classification changes and recalibrate the DRG weights. The MEDPAR data only represent hospital inpatient utilization by Medicare beneficiaries. We do not have comprehensive data from non-Medicare payers to use for this purpose. The Medicare program only provides health insurance benefits for people over the age of 65 or who are disabled or suffering from end-stage renal disease. Therefore, newborns, maternity, and pediatric patients are not well represented in the MEDPAR data that we used in the design of the MS-DRGs. We simply do not have enough data to establish stable and reliable DRGs and relative weights to address the needs of non-Medicare payers for pediatric, newborn, and maternity patients. For this reason, we encourage those who want to use MS-DRGs for patient populations other than Medicare make the relevant refinements to our system so it better serves the needs of those patients.”²

The number of newborn DRGs provides a useful contrast between the MS-DRG algorithm and an all-patient algorithm such as APR-DRGs. MS-DRGs provide seven (7) DRG codes for the care of newborns while APR-DRGs provide 112 DRG codes (28 base DRGs, each with four (4) levels of severity). In addition, MS-DRGs do not take birth weight into consideration when assigning a DRG despite the fact that birth weight has been widely accepted as a significant indicator of the viability and overall health of newborns.

When comparing APR-DRGs and APS-DRGs, APRs also stand out as having more granularity for specific services commonly paid for by a Medicaid program. For example,

- » For newborns, there are 112 APR-DRG codes for newborns (28 base DRGs, each with 4 levels of severity), and 27 APS-DRG codes (9 base DRGs each with 3 levels of severity)
- » For psychiatric care, there are 96 APR-DRGs (24 base DRGs each with 4 levels of severity), and 30 APS-DRG codes (10 base DRGs each with 3 levels of severity)

5.1.1.4 Long Term Viability

As mentioned previously, CMS-DRGs and AP-DRGs have already been discontinued and are not expected to be offered in an ICD-10 compliant version. APR-DRGs and MS-DRGs are heavily used, and widely accepted, so their viability is strong. Both are planned to be released with ICD-10 compliant versions and are expected to be updated as necessary to follow future changes in healthcare payment strategies in the United States for years to come. OptumInsight has confirmed they too plan to have an ICD-10 compliant version of APS-DRGs and plan to maintain the product for the foreseeable future. All of that is presumably true, but confidence in the long term viability of the APS-DRG product is a little lower simply because it appears to hold a much smaller share of the market – in fact there is no state Medicaid agency using APS-DRGs to pay for fee-for-service claims.

² CMS, “Medicare Program; Changes to the Hospital Inpatient Prospective Payment Systems and Fiscal Year 2008 Rates; Final Rule,” *Federal Register* 72:162 (Aug. 22, 2007), p. 47,158.

5.1.1.5 Applicability to Quality Measures

Incorporating hospital quality measures into payment systems has become increasingly common and sophisticated over the past decade. States face increasing pressure to demonstrate that Medicaid payments support quality care – as evidenced by section 2702 of the Patient Protection and Affordable Care Act prohibiting federal Medicaid payments for services treating healthcare-acquired conditions (effective July 1, 2012).

To fairly measure hospital quality, the quality measure should be risk adjusted (also referred to as casemix adjusted). For example, performing direct comparisons of mortality rates or complication rates between a cancer institute and a small rural hospital would be unfair unless they are casemix adjusted. In a situation where a cancer institute has a complication rate of 7 percent, and a small rural hospital has a complication rate of 5 percent, at face value, the complication rate of the cancer institute appears higher. However, when taking into consideration patient acuity between the two facilities, the complication rate at the cancer institute might prove to be lower than the rate at the rural hospital. APR-DRGs are very commonly used for the purpose of casemix adjustment.

APR-DRGs are also used as a basis for two quality measurement tools becoming increasingly popular with Medicaid programs for measurement of hospital quality using medical claims data. Those tools are:

- » **3M™ Potentially Preventable Complications (PPC) Grouping Software** – identifies complications that may have been avoided. This software first identifies conditions not present on admission and then determines whether those conditions were potentially preventable given the patient’s reason for admission, procedures, and underlying medical conditions. It also flags Hospital Acquired Conditions monitored by CMS.
- » **3M™ Potentially Preventable Readmission (PPR) Grouping Software** – identifies readmissions clinically related to previous admissions which were potentially preventable.

Both of the above software applications have already been used by various payers – including Medicaid agencies – for reporting purposes, payment purposes, or both. The Maryland All Payer system, for example, uses PPCs to adjust inpatient hospital rates. In the first year of use, the system experienced a 12 percent reduction in PPCs (\$62.5 million in averted costs to state and providers) and an 8 percent reduction the following year (\$43 million in additional averted costs).³ Texas Medicaid reduced inpatient Medicaid spending by \$18 million using PPRs and PPCs and reduced premiums to managed care organizations (MCOs) by up to 5 percent by reducing a variety of preventable events.⁴

³ 3M Health Information Systems for the Navigant Healthcare Payer Strategy Group. *3M Payment and Performance Measurement Systems*. January 31, 2012.

⁴ 3M Health Information Systems for the Navigant Healthcare Payer Strategy Group. *3M Payment and Performance Measurement Systems*. January 31, 2012.

Because the 3M PPC and PPR quality measurements are built “using the language of APR-DRGs,” implementing APR-DRGs for payment can facilitate a move to PPC and PPR quality measures.

5.1.1.6 Prevalence in the Industry

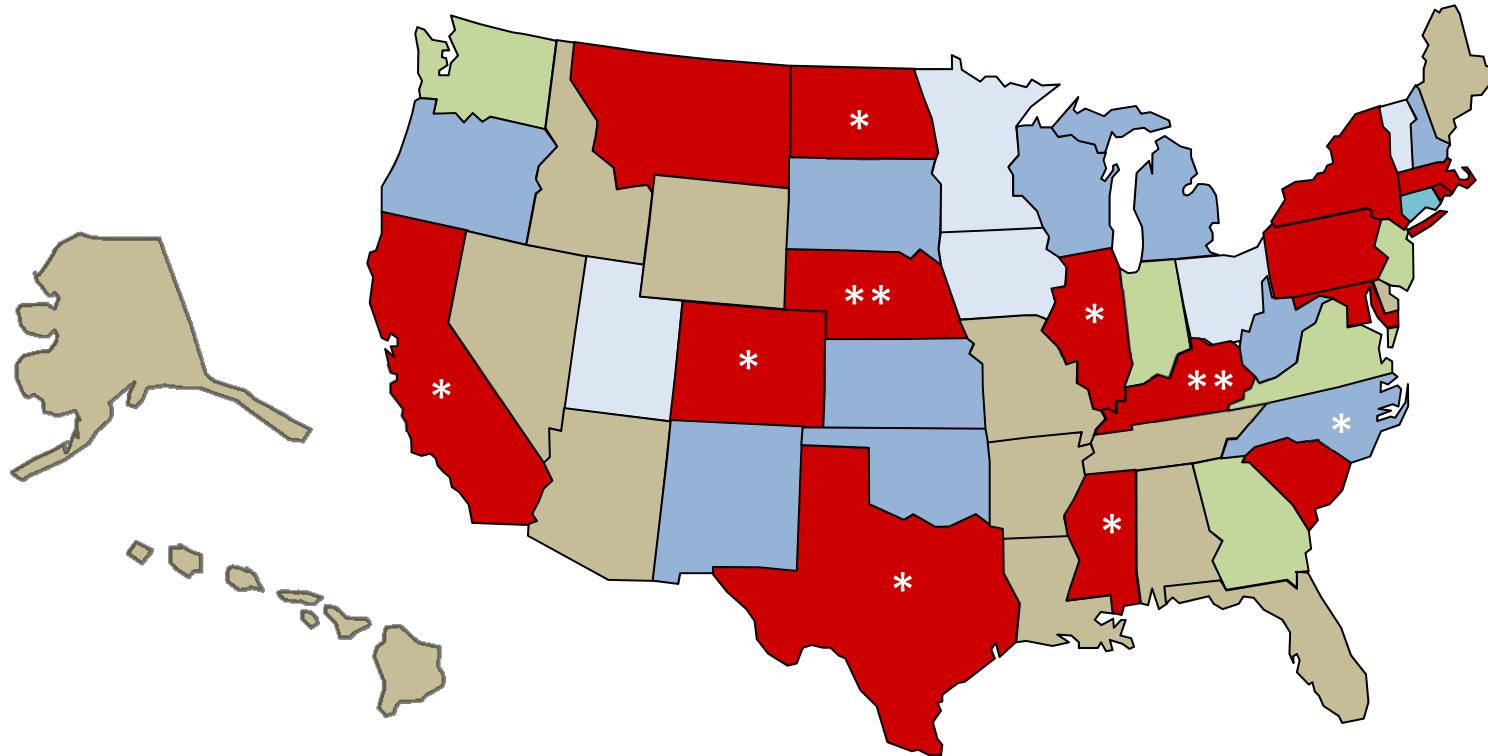
MS-DRGs are the DRG algorithm implemented for Medicare. In addition, a few state Medicaid agencies have chosen MS-DRGs. APR-DRGs are also used by several public and commercial payers. Figure 1 shows how states currently pay for inpatient care, including seven state agencies already using APR-DRGs (Massachusetts, Maryland, Montana, New York, Pennsylvania, Rhode Island, South Carolina) and six having announced plans to implement APR-DRGs in the near future (California, Colorado, Illinois, Mississippi, North Dakota, and Texas). APR-DRGs have also been used to adjust for casemix differences in performance measures in Florida, Hawaii, Maryland, Massachusetts, New York, Texas and Utah.⁵ Blue Cross Blue Shield of Massachusetts and Blue Cross Blue Shield of Tennessee have also implemented APR-DRGs.

APS-DRGs are not currently used by any state Medicaid agency for the purpose of determining reimbursement of inpatient acute care claims.

⁵ Prepared by ACS for the California Department of Health Care Services. *Medi-Cal DRG Project Draft Policy Design Document*. January 10, 2012. Page 24.

Figure 1: How states pay for inpatient acute care.

- APR-DRGs
- CMS-DRGs
- Per Stay/Per Diem/Cost Reimbursement/Other
- AP or Tricare DRGs
- MS-DRGs
- * Indicates Moving Toward
- ** Indicates Under Consideration



5.1.2 DRG Grouping - Recommendation

For a Medicaid population, there is one DRG grouper that stands out as the best option for use in paying inpatient claims – APR-DRGs. Of the two other primary options, MS-DRGs are not well suited for a Medicaid population (at CMS’s own admission) and APS-DRGs have gained little traction in the market – in fact are not used by any state Medicaid agency to pay fee-for-service claims. APR-DRGs, in contrast, have sufficient granularity to categorize hospital stays and associated cost of care for the full range of beneficiaries served by Medicaid agencies. APR-DRGs are even particularly detailed for certain services in which Medicaid is a major payer, specifically newborns and pediatrics. APR-DRGs are currently used by several state Medicaid agencies for claims payment and are planned for implementation in a handful of additional states. With its strong market share, APR-DRGs are expected to be updated for future changes impacting the U.S. medical insurance industry, including the planned migration to ICD-10. And finally, APR-DRGs are heavily used for risk adjustment and for hospital quality measures becoming more prevalent as a way to incent quality care.

5.2 DRG Relative Weights

5.2.1 DRG Relative Weights - Discussion

States have three options when selecting a set of relative weights for the DRGs they will be using:

- a. Use national relative weights
- b. Develop state-specific weights
- c. Borrow state-specific weights developed by another payer or Medicaid program

National relative weights exist for APR-DRGs, MS-DRGs, and APS-DRGs. For APR-DRGs and APS-DRGs, national relative weights are updated yearly and are calculated using the two most recent year’s data from the Nationwide Inpatient Sample maintained by the Agency for Healthcare Research and Quality (AHRQ). This data includes claims from all types of payers including many Medicaid programs. MS-DRG relative weights are also updated each year, using only claims data from Medicare recipients.

National relative weights are relatively easy to use as they are calculated by external agencies. If using national relative weights, states can decide to use the values as they are distributed, or re-center the weights to the individual state’s overall casemix. Re-centering the weights simply resets the average relative weight to 1.0 which makes the numbers very easy to understand – relative weights less than 1.0 are below average and relative weights above 1.0 are above average.

Instead of using national relative weights, states can choose to calculate their own weights. This option has the benefit of ensuring the weights accurately reflect costs of hospitals when treating patients that are unique to that state’s Medicaid population. However calculating state-specific weights requires more effort from the Medicaid agency (more than simply downloading national values). In addition, it offers the challenge of deciding what values to use for DRGs with statistically low volume in the Medicaid program. Even California, the largest Medicaid

program in the country, found there were 463 APR-DRGs with fewer than 30 stays in a single year (2009), including 46 APR-DRGs with zero volume.⁶ In cases with low volume, states can choose to use the national value, or prorate the weight from a similar DRG.

If choosing to use state-specific relative weights, decisions must also be made on how those weights will be calculated. The basis for weights can be charges or relative costs. Typically, relative weights come out similarly when using charges or costs, but using costs is far more defensible (see Chapter 4 for a discussion of options for estimating the costs of services). When using costs, another necessary decision is defining how costs will be determined for the relative weight calculation. Further, the process for recalculating the weights would have to be performed periodically, usually annually.

The final option a state can select is to copy the relative weights from another Medicaid program. This has the advantage of limiting the effort a state expends to determine relative weights while allowing the weights used to be specific to a Medicaid program. Pennsylvania selected this option, and uses the state-specific APR-DRG relative weights calculated by New York.

Once a DRG grouper is selected, a comparison can be made of national relative weights versus state-specific weights. Navigant has performed this type of comparison in the past and found the national weights and state-specific weights align very closely on the high volume and high cost DRGs. If similar analysis using Florida Medicaid generates the same results, it will be an argument for using the national weights.

Similar to relative weights, average length of stay must also be determined for each DRG. Average length of stay is used in transfer and partial eligibility payment adjustments. Average length of stay can also be used in outlier calculations if day outliers are implemented. If using national relative weights, national average lengths of stay would also be available for use. Similarly, if borrowing from another state, both the relative weights and average lengths of stay could be borrowed. If, on the other hand, Florida Medicaid state-specific relative weights are selected, then state-specific average lengths of stay would also need to be calculated, including the challenge of deciding what to do with DRGs having statistically low volumes of observations.

5.2.2 DRG Relative Weights - Recommendation

Studies with other state Medicaid data have shown that state-specific weights and national weights align very well for high volume DRGs. We believe the same will prove true with Florida-specific relative weights, although analysis will be performed to confirm. Also, as mentioned in the discussion section, using national weights requires less administrative burden and requires little or no manual adjustment for low-volume DRGs. Given these facts, we recommend adopting national relative weights for use by the Medicaid program.

⁶ Prepared by ACS for the California Department of Health Care Services. *Medi-Cal DRG Project Draft Policy Design Document*.

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In addition, we recommend re-centering those weights to 1.0 (by dividing each national relative weight by the Florida Medicaid overall average casemix). Re-centering the weights has the simple effect of making 1.0 the average relative weight, numbers below 1.0 less than the average, and numbers above 1.0 greater than the average, thus providing a quick and easy interpretation of relative weight values.

If Florida state-specific weights are used, there are 278 APR-DRGs with volume below 30 stays in two years of fee-for-service data (using data from fiscal years 09/10 and 10/11). Thirty is generally accepted as a statistically significant sample size, so DRGs with less than 30 stays would need their relative weights determined manually. Also, as Florida Medicaid shifts more recipients to managed care, the number of DRGs in the fee-for-service population that have small sample sizes will increase. Assuming the plan to migrate to a managed care model moves forward, state-specific weights would likely need to be calculated in the future using the Florida Health Finder all-payer inpatient data instead of the Medicaid fee-for-service data. Another option will be to use a combination of Medicaid fee-for-service and managed care claims to result in sufficient volume for relative weight calculations. For this option to work, the encounter data will need to be as high in quality as the fee-for-service data.

6 Provider Base Rates

Provider base rates are another significant contributor to the reimbursement amount on individual hospital stays and to Medicaid hospital inpatient reimbursement in aggregate. Thus selection of provider base rates is a critical step in ensuring fair reimbursement when implementing a DRG payment method. The simplest approach from the point of view of maintaining budget neutrality would be to assign each hospital its own base rate. However, this would defeat one of the basic goals of a DRG payment method – that is incenting and rewarding hospital efficiency. The opposite approach would be to develop a single base rate to be applied to all hospitals, with potential adjustments to that base rate for individual hospitals only to address reasonable differences in cost, and where those differences are actually measurable. Many states have found, however, that a solution somewhere between individual hospital base rates and a single state-wide base rate is a more appropriate answer.

6.1 Provider Base Rate Wage Area Adjustments

6.1.1 *Provider Base Rate Wage Area Adjustments - Discussion*

One factor employed by states (and by the Medicare program) to adjust hospital base rates is a geographic wage area index or factor. The wage areas and associated wage indices can be state-defined values or can be linked to the Medicare values. Adjustment by wage area allows for higher payment in geographic regions that have historically reported higher wage rates for hospital employees.

Wage area indices act as multipliers to common base rate(s) and can be applied either to the entire base rate or to a portion of the base rate. For example, Medicare applies the wage area index only to a percentage of the common base rate where the percentage is a standardized estimate of the percentage of hospital costs attributed to labor. In particular, Medicare applies the wage index to 62% of the common base rate for hospitals with a wage index less than 1 and

applies the wage index to 68.8% of the common base rate for hospitals with wage index greater than or equal to 1. For example, the base rate for a hospital with a wage index greater than 1 is:

$$\text{Base rate} = ([\text{Common base rate}] * [\text{hospital wage index}] * 0.688) + ([\text{Common base rate}] * 0.312)$$

Medicare also has a cost of living adjustment (COLA) applied to the non-labor portion, but that is only applied to hospitals in Alaska and Hawaii. In addition, Medicare has separate calculations for operating base payment and capital base payment, and sums the two to generate overall payment. The formulas for the two separate base payments are very similar.

Medicare wage indices for providers participating in Florida Medicaid (including a select few out of state providers) range from 0.7277 to 1.0163 and the average is 0.9287. The difference from the lowest wage index to the highest is 0.2886 which is over 30% of the average.

An alternative to adopting Medicare’s wage indices would be to develop Florida-specific wage indices. However, determination of wage areas can be very complicated and would likely require AHCA to take on a significant amount of additional effort. In addition, CMS is currently undergoing a major effort to redesign wage areas that will presumably result in a solution more widely accepted in the hospital community.

6.1.2 Provider Base Rate Wage Area Adjustments - Recommendation

Medicare wage indices in Florida vary from 0.8342 to 1.0163 (and if participating out-of-state hospitals are included, the lowest wage index is 0.7277). With as much as a 22% difference in wage index from the lowest to highest wage area in Florida, we believe the differential is sufficient to justify the added complexity of implementing base rate adjustments for different geographic regions. In particular, we recommend adoption of a simplified version of the Medicare model of applying a wage index to the labor portion of each hospital’s base rate. The simplification we suggest is due to the fact that we recommend calculation of only one base rate for each hospital – not separate operating and capital base rates. So the wage index will be applied to the labor portion of each hospital’s lone base rate. In addition, we recommend simplifying the calculation by using a single percentage to identify the labor portion of hospital costs in contrast to Medicare’s practice of identifying the labor portion as 62% for wage indices less than 1 and 68.8% for wage indices greater than 1. Finally, we recommend adopting Medicare’s wage area assignments, including reclassifications and redesignations of hospitals into adjacent wage areas. The only adjustment to the Medicare numbers we recommend is a re-centering of the values so that the lowest value is 1.0 and all other values are greater than 1.0. This is done by dividing each wage index by the lowest value, 0.8342. The simple result of this calculation is that no hospital sees its base rate reduced because of a geographic adjustment. Instead, base rates will only be increased or remain the same due to the geographic adjustment. For non-participating out-of-state hospitals, we recommend setting the wage index to 1.0, which means they receive the standard base rate without any geographic adjustment.

The Medicare model for wage areas and indices may not be perfect, but it is generally accepted in the industry. Also, Medicare is actively researching ways to improve it. Determining

appropriate geographic cost adjusters is a complex and controversial topic. AHCA is better served by using a model already entrenched in the industry than attempting to calculate and justify its own set of adjusters.

6.2 Provider Base Rate Categories

6.2.1 *Provider Base Rate Categories - Discussion*

The combination of provider base rates adjusted by wage area, DRG relative weights, and policy adjusters (discussed in section 7.2) may be enough to ensure fair payment to providers. However, if those options leave open some areas of concern, another option available is adjustment of hospital base rates based on hospital categories or peer groups. Hospital peer groups can be used to protect access to care at specific facilities, such as rural hospitals, and/or to generate fair payment to hospitals that legitimately have higher cost structures (if the reason for higher cost is separate from wages in different geographic areas). To protect access to care, for example, the California Department of Health Care Services plans to have a separate set of base rates for remote rural hospitals. In addition, when looking at cost structures, separate base rates may be justifiable, for example, for trauma facilities, specialty children’s hospitals and/or teaching hospitals. For teaching hospitals, Medicare provides additional payment, separate from the base rate. However, that additional payment can just as easily be incorporated into the base rate.

A peer group can also be considered if there is a group of hospitals who treat very complicated, expensive cases and are expected to have an unusually high percentage of outlier payments. In most DRG implementations, outlier payments cover a lower percentage of hospital costs than standard DRG payments so high numbers of outlier stays become a burden to hospitals. One way to solve that problem is to give these hospitals a higher base rate, which will serve to reduce their percentage of outlier stays.

If separate base rates are selected for some groups of providers, we recommend the criteria used to categorize hospitals within groups be very clear and maintainable. Understandably, hospitals will be motivated to be defined into the peer group offering the most attractive reimbursement. Having clearly defined criteria for each grouping will help maintain the integrity of the payment policy and lessen the administrative burden of categorizing all hospitals.

6.2.2 *Provider Base Rate Categories - Recommendation*

Historically, the Florida State Legislature has protected rural hospitals by mandating a higher pay-to-cost ratio for these facilities. As long as that continues to be true, we recommend two base rates, one for rural hospitals and one for all other hospitals. Other hospital categories, such as teaching and children’s receive additional payments for their unique cost structures through funds coming from inter-governmental transfers. These funds and their distribution model are not expected to change with the implementation of DRG pricing. They will continue to be the avenue through which additional funding is provided where appropriate for categories of hospitals other than rural hospitals. Thus, two standardized base rates should prove sufficient, although final decisions on this topic can only be made after DRG pricing simulations are performed.

Typically long term acute care (LTAC) providers are given separate consideration because their cost per discharge is generally higher (generally due to longer lengths of stay). Medicare, for example, calculates a separate set of DRG relative weights specifically for LTACs. Medicaid programs do not have enough LTAC volume to calculate separate DRG relative weights, and instead we typically recommend giving LTACs a separate base rate. However, there were less than 130 stays annually at long term acute care providers in state fiscal years 2009/2010 and 2010/2011. In addition, the highest Florida Medicaid market share of any LTAC is 6.6% and most LTACs have a Medicaid market share below 4%. The volume is so low that the extra complexity of calculating a separate LTAC base rate may not be worthwhile.

For all out-of-state hospitals, including those participating in the Florida Medicaid program, we recommend including them in with all the hospitals receiving the non-rural hospital standardized base rate.

6.3 Per Diem Base Rates

6.3.1 Per Diem Base Rate - Discussion

As mentioned previously, some provider types and some types of services may be carved out of the DRG payment method because they are more appropriately paid via another method. If such a decision is made, the carved-out services will presumably be paid per diem as that is the current AHCA inpatient payment method, and per diem rates will need to be determined. The current method used to create per diem rates may be acceptable, in which case no changes need to be made. However, the current method may be unnecessarily cumbersome when applied to only a relatively small subset of inpatient stays, and, if so, AHCA may want to consider adjusting the per diem rate setting process.

Options for setting per diem base rates include setting rates based on average hospital cost per day and using a graduated scale based on length of stay as Medicare uses for paying psychiatric services. In addition, the availability of DRG grouping allows the option of calculating casemix adjusted per diems, similar to the way Medicare pays for some services. Furthermore, for a limited number of specialty services, a percent of charges (cost based) method could be considered in place of a per diem payment method.

6.3.2 Per Diem Base Rate - Recommendation

The types of hospitals and services under consideration for remaining in a per diem payment method are psychiatric, long term acute, and rehabilitation. Given the low volume of stays paid to LTAC facilities by the Medicaid fee-for-service program, we are recommending LTAC facilities be included in the DRG payment method. However, we expect the data will show psychiatric and rehabilitation services are too variable to be a good fit for DRG payment method. As a result, we are recommending psychiatric and rehabilitation services be carved out of the DRG payment method and remain under a per diem type of reimbursement model. However, grouping claims to DRGs to understand differences in resource requirements can add value even in a per diem payment method. We recommend setting two standardized per diem rates, one for psychiatric services and one for rehabilitation services, and then adjusting the per diem rates on individual claims based on the assigned DRG's relative weight. This allows a

higher per diem to be determined for higher acuity patients and a lower per diem for lower acuity patients.

In addition, similar to standardized DRG base rates, per diems can also be adjusted for labor costs in different geographic regions. We recommend doing this. Also similar to the recommendation for standardized DRG base rates, we recommend adjusting the per diems using Medicare wage indices assigned using Medicare wage areas. In addition, the percentage of costs coming from labor is typically higher in psychiatric facilities and distinct part units, so the wage index is multiplied by 76 percent of the base rate, as opposed to the percentage between 62 and 68.8 percent used for general acute care facilities.

Unlike the recommendations for DRG base rates, we do not recommend separate standard base rates for rural and non-rural facilities. This is simply because the complexity is not justified. Florida Medicaid only pays for psychiatric services at acute care facilities, including distinct part units. It does not pay for services at free-standing specialty psychiatric facilities. And we are recommending per diem payment for psychiatric services only when provided in a specialty facility or distinct part unit. There are likely few if any rural hospitals with distinct part psychiatric units, so calculation of a separate standardized per diem rate for this category is unwarranted.

In contrast, free-standing specialty rehab facilities are reimbursed by Florida Medicaid. So a separate rural per diem rate is worthy of consideration. However, relatively few of these are likely in rural areas, and no free-standing specialty rehab facility in Florida has a Medicaid market share above 10 percent. This indicates Medicaid is not a big part of the business for any of the free-standing specialty rehab facilities. Thus, we have the same recommendation for rehab services – a single standardized per diem rate is sufficient.

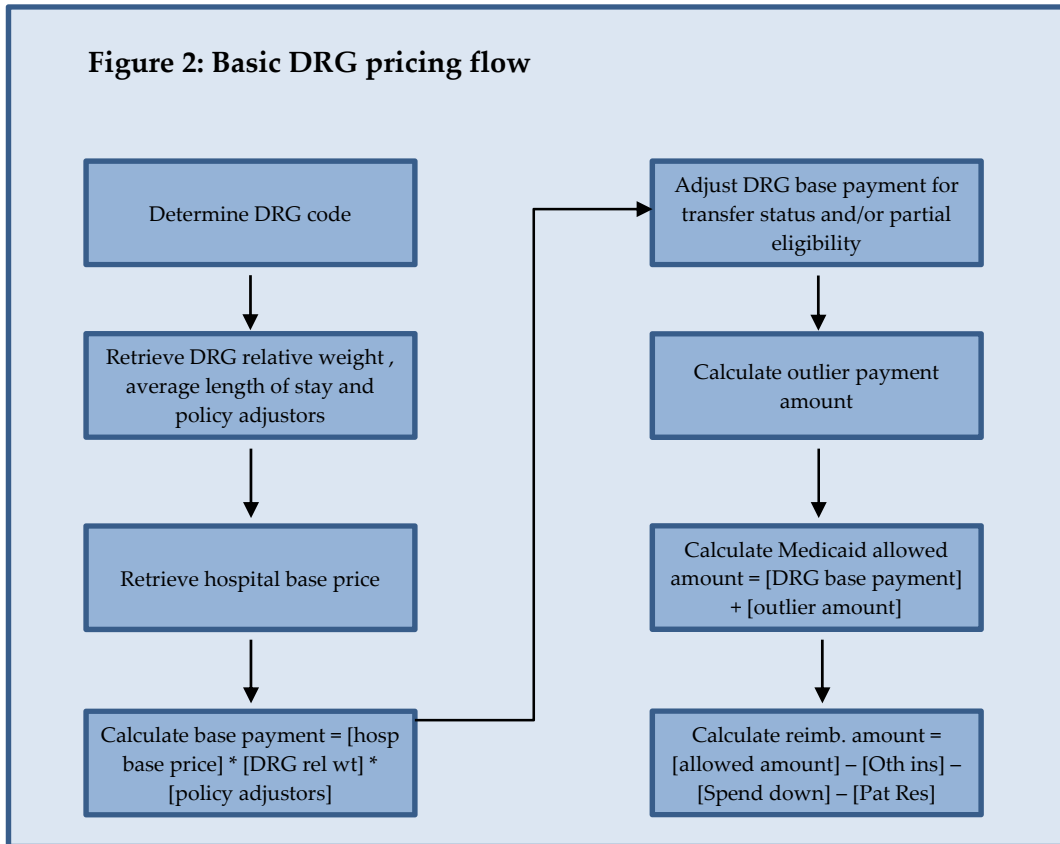
For psychiatric services, Medicare not only adjusts the standardized per diem based on geographic region and DRG relative weight, but also adjusts based on the length of stay (see Table 4). This is done to account for an expectation that hospital costs per day are greater early on in a psychiatric stay and become less as the stay gets longer. Although this expectation may be true, we do not believe the added complexity of adjusting per diems for length of stay is worthwhile, and do not recommend adopting this policy.

Table 4 Medicare Per Diem Adjustment Based on Length of Stay			
Day of Patient's Stay	Per Diem Adjustment Factor	Day of Patient's Stay	Per Diem Adjustment Factor
1	1.19	12	0.99
2	1.12	13	0.99
3	1.08	14	0.99
4	1.05	15	0.98
5	1.04	16	0.97
6	1.02	17	0.97
7	1.01	18	0.96
8	1.01	19	0.95
9	1.00	20	0.95
10	0.99	21	0.95
11	0.99	22 or more	0.92

7 Pricing Logic

7.1 Pricing Flow

Figure 2 shows the basic flow of DRG pricing logic, which was described in more detail in Chapter 2. DRG codes, DRG relative weights, and hospital base prices were discussed previously in Chapters 5 and 6. The following sections of this chapter discuss the rest of the factors involved in calculating a DRG-based price.



7.2 Policy Adjustors

7.2.1 Policy Adjustors - Discussion

Policy adjustors are multipliers applied to specific claims for the purpose of increasing or decreasing payment. Generally, policy adjustors are applied for specific types of care, either for all recipients receiving that care or for subsets of recipients. Three types of policy adjustors are commonly used:

- Service adjustors
- Age/service adjustors
- Provider/service adjustors

Policy adjustors are an optional feature that can be used to help protect access to care for specific services. Often these are used for services where Medicaid funding can have a significant impact on beneficiary access, such as obstetrics, newborn care, mental health and pediatrics. The adjustors are above and beyond DRG relative weights and represent an explicit decision to direct funds to a particular group of patients who are otherwise clinically similar. Also, assuming a goal of budget neutrality, use of policy adjustors cause hospital base rates to be reduced having the effect of shifting some money from one area to another. We generally recommend including policy adjustor functionality in a DRG implementation because it creates an ability to meet current and future Medicaid program goals by adjusting payments without requiring significant software changes within the MMIS. However, policy adjustors do not necessarily need to be a major contributor to overall program reimbursements. They can be used sparingly to meet specific needs.

The first type of policy adjustor, service adjustor, works particularly well if there is a desire to increase payment for specifically targeted services, such as obstetrical and neonatal care.

The age/service adjustor is better suited if AHCA desires to adjust payment for recipients within specific age categories, such as adjusting all pediatric services. Age/service adjustors provide a different payment for similar services when provided to a child versus an adult. For example, an age/service adjustor of 1.25 on APR-DRG 139-1 (pneumonia severity 1) would increase payment by 25% if the patient was a child. In contrast, an adult whose claim mapped to APR-DRG 139-1 (pneumonia severity 1) would receive the DRG base payment without any adjustment. In truth, age/service adjustors can be applied to any age range, but are typically used by Medicaid programs to promote access for pediatric beneficiaries.

Finally, provider/service adjustors can be used to increase (or decrease) payment for specific services when offered by specific groups of providers. For example, a Medicaid agency might choose to increase payment for neonatal care when offered at a specialty children’s hospital which might incur greater costs to support clinical expertise and equipment needed to treat very sick children. In such a scenario, a provider/service adjustor could be used to increase payment for neonatal care when provided at children’s hospitals without increasing payment for other types of care (such as normal deliveries) at the same hospitals. (Increasing payment for all services at a particular hospital or group of hospitals can be done by setting their base rate appropriately and would not be done using policy adjustors.)

Within DRG pricing calculations, the adjustors affect the DRG base payment using the following formula:

$$\begin{aligned}
 \text{[DRG base payment]} &= \text{[Hospital base rate]} * \text{[DRG relative weight]} \\
 &* \text{[Service adjustor]} * \text{[Age/service adjustor]} \\
 &* \text{[Provider/service adjustor]}
 \end{aligned}$$

For any particular service, one, two, or all three of the adjustors can be, and very commonly are, set to 1.0, thus creating no adjustment.

The types or categories of service for which policy adjustors are applied are identified by DRG codes. Each DRG code is assigned a DRG relative weight and three adjustor values, service, age, and provider. In theory, a Medicaid program could simply make adjustments to DRG relative weights outside the MMIS and avoid putting separate adjustor fields into the MMIS. However, this would upset the integrity of the DRG relative weights and is something we strongly discourage. DRG relative weights are intended to indicate relative hospital resource expenditures and patient acuity, and can be used to measure hospital casemix. Those measurements would not be valid if the DRG relative weights were manipulated.

7.2.2 Policy Adjustors - Recommendation

Because Medicaid is a major payer for neonatal and pediatric care, we recommend policy adjustors to increase payment for these two categories of service. The exact values for the adjustors will be determined during the DRG payment simulations. The DRG payment simulations will also indicate if any other policy adjustors are warranted.

7.3 Transfer Payment Adjustments

7.3.1 Transfer Payment Adjustments - Discussion

DRG payments are designed to be a single payment for a complete stay in a hospital. Given this design, full DRG payments can be unnecessarily high if a patient is transferred from one acute care facility to another resulting in an unusually low length of stay at the “transferring from” hospital. To handle this situation, most Medicaid DRG implementations have followed the Medicare model in which a payment amount is calculated using a per diem method and then compared to the DRG base payment. The per diem payment is referred to as a transfer-adjusted payment amount and, if less than the DRG base payment, is used in place of the DRG base payment. The formula used to calculate transfer-adjusted base payment is:

$$\text{Transfer adjusted base pymt} = \{[\text{DRG base payment}] / [\text{DRG average length of stay}]\} \\ * \{[\text{length of stay}] + 1\}$$

Adding one to the length of stay takes into account the disproportionate amount of costs required in the first day of admission to complete the admission process and perform an initial diagnostic evaluation. Under this particular formula, the transfer adjusted base payment comes out less than the DRG base payment if the length of stay is less than the DRG’s average length of stay minus 1. Otherwise, the “transferring from” hospital receives full DRG payment.

For average length of stay data, AHCA can use arithmetic or geometric averages derived from untrimmed or trimmed data. In addition, statewide averages can be used, or national averages calculated using data from the Nationwide Inpatient Sample.

Transfer payment adjustments only apply to the transferring hospitals. Receiving hospitals are paid the full DRG amount.

The transfer payment adjustment process is used when a patient is transferred from one acute care setting to another. Transfers are identified in claims data through the discharge status and

AHCA’s DRG payment policy will need to specify which discharge status codes apply to the transfer payment adjustment process. Possible status codes to include are:

- 02 – discharged/transferred to a short-term general hospital for inpatient care
- 05 – discharged/transferred to a designated cancer center or children’s hospital
- 07 – left against medical advice (Medicare uses this value if the patient is admitted to another acute care hospital on the same day)
- 43 – discharged/transferred to a federal facility
- 62 – discharged/transferred to an inpatient rehabilitation facility or distinct part unit
- 63 – discharged/transferred to a long term care hospital
- 65 – discharged/transferred to a psychiatric hospital or distinct part unit
- 66 – discharged/transferred to a critical access hospital

AHCA may also consider a “post-acute care transfer policy” similar to that used by Medicare. This policy reduces payment to hospitals for a specified list of DRGs (currently 275 MS-DRGs) when the patient is transferred to a particular type of hospital. The need for this policy arose from the disparate payment incentives facing acute care providers (paid per stay) and post-acute care providers (paid per day). For patients requiring both acute and post-acute care (as identified by the list of 275 MS-DRGs, for example, hip replacement), Medicare reduces payment to the hospital if a stay is particularly short and the patient is discharged to a post-acute setting. Patient discharge status codes that Medicare includes in its post-acute care transfer policy are:

- 03 – discharged/transferred to a skilled nursing facility
- 05 – discharged/transferred to a cancer or children’s hospital
- 06 – discharged/transferred to a care of a home health agency
- 62 – discharged/transferred to a rehabilitation facility or distinct part unit
- 63 – discharged/transferred to a long-term care hospital
- 65 – discharged/transferred to a psychiatric hospital or distinct part unit⁷

Medicare has a large enough percentage of their population fitting this scenario to justify incurring the extra administrative complexity of this post-acute transfer policy. Medicaid programs have a significantly lower percentage of their populations fitting this scenario, so the added complexity of this policy may be unwarranted.

7.3.2 Transfer Payment Adjustments - Recommendation

7.3.2.1 Acute Care Transfers

We recommend including an acute care transfer policy that reduces payment for unusually short lengths resulting from transfer of a patient from one acute care hospital to another. Also, we recommend using the Medicare model for calculating the transfer payment amount and deciding when it applies. As mentioned in the previous discussion section, the transfer payment is calculated as

⁷ Medicare Claims Processing Manual - Chapter 3 - Inpatient Hospital Billing; Rev. 2388, 01-20-12, 40.2.4-C p. 123
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 Submitted to the Florida Agency for Health Care Administration

$$\text{Transfer adjusted base pymt} = \{[\text{DRG base payment}] / [\text{DRG average length of stay}]\} \\ * \{[\text{length of stay}] + 1\}$$

This formula calculates a per diem amount using the DRG base payment and average length of stay. The “plus 1” added to the length of stay takes into account the disproportionate amount of costs required in the first day of admission to complete the admission process and perform an initial diagnostic evaluation. The formula effectively pays double for the first day of care.

For DRG average length of stay, we recommend staying consistent with the data used for DRG relative weights. If national relative weights are used, then we recommend using national average lengths of stay. If Florida Medicaid state specific relative weights are used, then Florida Medicaid state specific average lengths of stay should also be used.

The transfer adjusted base payment is compared to the DRG base payment and the lower of the two gets paid. The effect is to reduce payment on transfer cases only if the length of stay is less than [average-length-of-stay minus 1]. Also, this calculation applies only to the transferring hospital. The receiving hospital is paid a full DRG reimbursement.

Acute care transfers are determined through discharge statuses reported on the UB-04 and 837I and payers must identify which statuses will qualify. We recommend the following statuses as an indication of an acute care transfer as opposed to a post-acute care transfer:

- 02 – discharged/transferred to a short-term general hospital for inpatient care
- 05 – discharged/transferred to a designated cancer center or children’s hospital
- 65 – discharged/transferred to a psychiatric hospital or distinct part unit
- 66 – discharged/transferred to a critical access hospital

The above list does not include discharge status 07 (left against medical advice). Medicare does include this as an acute transfer status if the patient is admitted to another Medicare DRG hospital on the same day. In practice, we expect this occurs very rarely and the logic required to implement this policy is difficult to install in an MMIS and is dependent on the order in which claims are received. As a result, we do not feel it is worthwhile to include in the acute transfer policy stays with discharge status 07 followed by an admit at another hospital on the same day.

The above list also does not include discharge status 43 (discharged/transferred to a federal facility) because this includes discharges to both acute care providers (i.e., a VA hospital) and post-acute care providers (i.e., a VA nursing facility). We suggest following Medicare’s example in not defining this status as an acute care transfer.

The above list does include discharge statuses 05, 65, and 66 which are not included in Medicare’s acute transfer policy. Instead, Medicare chooses to include these in its post-acute transfer policy because none of the receiving hospitals are DRG paid hospitals under Medicare’s Inpatient Prospective Payment System. We prefer to think of the transfer policy as applying to any acute care facility independent of the receiving facility’s method of reimbursement. Thus,

even if psychiatric care is carved out of Florida Medicaid’s DRG payment method, we recommend leaving discharge status 65 in the acute transfer policy.

Given this list, the percentage of stays expected to be considered for transfer adjustments is approximately 2 percent, as shown in Table 5.

Discharge Status	Description	Stays	Days	Charges	Allowed Amount	Percent of Total
01	Discharged home	298,129	1,196,950	\$ 8,751,833,411	\$ 2,042,796,865	86.5%
02	Discharged to another short-term general hospital	3,702	21,000	\$ 192,907,712	\$ 33,914,955	1.1%
03	Discharged to SNF	6,564	69,304	\$ 610,160,631	\$ 111,000,715	1.9%
04	Discharged to an Intermediate Care Facility (ICF)	1,593	10,663	\$ 70,739,802	\$ 15,999,544	0.5%
05	Discharged to cancer center or children's hosp	667	5,414	\$ 38,261,392	\$ 10,696,870	0.2%
06	Discharged to care of home health service organization	10,460	97,256	\$ 884,865,436	\$ 163,517,018	3.0%
07	Left against medical advice	6,152	17,937	\$ 162,120,956	\$ 27,740,598	1.8%
09	Admitted as an inpatient to this hospital	9	76	\$ 413,215	\$ 104,353	0.0%
10	Unspecified	6	11	\$ 52,603	\$ 11,597	0.0%
20	Expired	3,167	32,743	\$ 499,778,666	\$ 56,525,691	0.9%
21	Discharged to law enforcement / prison	194	1,008	\$ 6,979,389	\$ 1,616,839	0.1%
30	Still a patient	5,594	170,297	\$ 1,539,029,301	\$ 366,056,011	1.6%
40	Expired at home	13	41	\$ 235,777	\$ 58,561	0.0%
41	Expired in a medical facility	5	21	\$ 250,443	\$ 29,878	0.0%
43	Discharged to a federal health care facility	26	283	\$ 2,840,099	\$ 451,050	0.0%
50	Discharged to Hospice - home	1,437	11,700	\$ 92,219,972	\$ 19,680,300	0.4%
51	Discharged to Hospice - medical facility	1,813	18,306	\$ 184,718,752	\$ 29,037,098	0.5%
61	Discharged to SNF within same institution	14	152	\$ 1,720,623	\$ 335,896	0.0%
62	Discharged to inpatient rehab facility / unit of hosp	1,878	22,976	\$ 265,771,188	\$ 41,997,263	0.5%
63	Discharged to long term care hospital	207	3,073	\$ 31,963,986	\$ 4,556,314	0.1%
64	Discharged to a Medicaid nursing facility	183	2,022	\$ 20,328,643	\$ 2,506,981	0.1%
65	Discharged to a psychiatric hosp or distinct part unit	2,470	10,554	\$ 71,908,587	\$ 15,647,053	0.7%
66	Discharged to a critical access hospital	18	231	\$ 2,434,333	\$ 394,023	0.0%
70	Discharged to another type of healthcare institution	378	2,637	\$ 19,293,060	\$ 4,571,431	0.1%
71	Unspecified	1	6	\$ 84,212	\$ 4,317	0.0%
Total		344,680	1,694,661	\$ 13,450,912,189	\$ 2,949,251,222	100%

7.3.2.2 Post-Acute Care Transfers

Paying rehabilitation stays via a per diem while paying other acute care stays via a DRG method creates an opportunity for hospitals (particularly those who own a rehab center) to maximize reimbursement by shifting patients as quickly as possible from an acute care setting to a rehab setting. Medicare limits this opportunity through its post-acute transfer adjustment policy. This policy reduces payment for stays with specific DRGs that have a discharge status indicating the patient has moved to a post-acute setting and has a length of stay less than the DRG’s average length of stay. We do not recommend adopting a post-acute care transfer policy for Florida Medicaid.

We recommend against this policy because it adversely affects one of the basic concepts of a DRG payment method – that being the idea that DRGs pay based on average service resource needs, while individual cases may be higher or lower than average in terms of hospital

resources used. A post-acute care transfer policy may take away from the basic integrity of a DRG payment method. In addition, the policy would add some complexity to the overall payment method and would require regular updates of the list of applicable DRGs.

7.4 Partial Eligibility Payment Adjustments

7.4.1 *Partial Eligibility Payment Adjustments - Discussion*

As mentioned in the section on transfer claims, a DRG payment is designed to be a single payment for a complete hospital stay. This kind of payment will be inappropriate if the beneficiary did not have eligibility for all of the days of the stay. Having eligibility for only part of a hospital stay is relatively rare in a Medicaid program, but can happen at times either because a beneficiary lost or gained Medicaid eligibility during the hospital stay or shifted from fee-for-service to managed care during the stay.

One option for avoiding overpaying in this scenario is to perform calculations very much the same as those used with transfer claims. A per diem type of payment, referred to as the eligibility-adjusted base payment can be calculated and compared against the full DRG base payment. If the eligibility-adjusted base payment is less, it is used in place of the full DRG base payment.

Another option would be to prorate the full DRG payment based on the number of days the recipient was eligible. For example, if a recipient is Medicaid fee-for-service eligible for 6 days out of a 10 day hospital stay, payment could be reduced to 60% of the full DRG payment.

7.4.2 *Partial Eligibility Payment Adjustments - Recommendation*

Partial eligibility scenarios exist currently under the following circumstances,

- » Dual eligible recipients who exhaust Medicare coverage prior to July 1 of a year, thus making available Medicaid coverage which replenishes at the beginning of the state fiscal year
- » Medicaid managed care recipients under the age of 21 who exhaust their HMO inpatient benefits
- » Medically needy recipients who meet their share of cost during an inpatient hospital stay

Because these scenarios exist (and potentially others), we recommend including a partial eligibility payment reduction policy that works much the same way as the transfer payment policy. That is, a per diem payment is calculated and if the per diem payment is less than the full DRG payment, the per diem payment should be used. Specifically, if the recipient is eligible on the admit date, then the partial eligibility payment should be calculated as:

$$\text{Partial eligibility base pymt} = \{[\text{DRG base payment}] / [\text{DRG average length of stay}]\} \\ * \{[\text{length of stay}] + 1\}$$

If on the other hand the recipient is not eligible on the admit date, then the partial eligibility payment should be calculated as:

$$\text{Partial eligibility base pymt} = \{[\text{DRG base payment}] / [\text{DRG average length of stay}]\} \\ * [\text{length of stay}]$$

The partial eligibility base payment should be compared to the full DRG base payment and the lesser of the two should be used.

7.5 Outlier Payments

7.5.1 Outlier Payments - Discussion

DRG payment methods typically include outlier provisions to adjust payment for stays that are unpredictably expensive and sometimes for stays that are unpredictably inexpensive. The DRG grouper is designed to predict hospital resource use so that the relative weight and therefore the DRG base payment may be set accordingly. However, the DRG grouper is limited to using information on medical insurance claims including principal diagnosis, procedures, age, complications and comorbidities (identified through secondary diagnosis codes), and discharge status. Given the tremendously wide range of cases seen in an inpatient setting, DRG grouping does not always accurately predict hospital resource use. In those cases, where the prediction differs significantly from reality, outlier payments are used to generate a more reasonable reimbursement.

Most outlier cases are stays where the costs to the hospital far outweigh the payment, but the opposite also occurs – where payment far exceeds hospital cost (which occurs most often with patients who expire). Payers typically provide outlier payment increases to mitigate extreme losses to hospitals, thus promoting access to inpatient care for seriously ill patients. Making outlier payment reductions for cases of extreme hospital gain is less common, but is worthy of consideration. Having a policy to reduce payments in cases of high hospital profit is prudent particularly if a charge cap is not in place. In addition, it has the benefit of shifting money, albeit a relatively small amount of money, from highly profitable stays into other stays.

Medicare and many Medicaid agencies utilize a cost-based stop-loss model that applies outlier payments if the estimated loss to a hospital exceeds a dollar amount threshold. When the threshold is exceeded, remaining costs are reimbursed at some percentage. This percentage is referred to as a “marginal cost factor” because it is intended to cover only the marginal costs of the additional care. These costs include only variable costs such as staffing and supplies, not fixed costs such as buildings and equipment. Medicare’s marginal cost factor is 80 percent (90 percent for burns) and states’ values range from 50 percent to 80 percent.⁸

A variety of strategies are used to set the estimated loss threshold. Medicare uses a single threshold. California Medicaid has selected two thresholds, with one marginal cost percentage (60 percent) used for losses between threshold 1 and threshold 2 and a second marginal cost

⁸ Prepared by ACS for the California Department of Health Care Services. *Medi-Cal DRG Project Draft Policy Design Document*. January 10, 2012. Page 57.

percentage (80 percent) applied for losses above threshold 2. Other states base the outlier threshold on the DRG relative weight, for example, Washington, DC. While other states, for example Pennsylvania, set the outlier threshold to some percentage of the DRG base payment, such as 150 percent.

Under the cost-based stop-loss outlier payment model, a method has to be selected for determining cost-to-charge ratios (CCRs) for purposes of estimating hospital cost. A single state-wide CCR can be used, separate CCRs for each hospital can be determined – one per hospital, or separate CCRs can be determined for each standard cost center for each hospital. The lower level of granularity in CCRs offers greater accuracy in estimating costs, but has the trade-off of requiring additional effort to periodically recalculate the values.

Less commonly, outlier cases are identified by length of stay being above a threshold number of days. For days above the threshold a per diem amount can be paid to help alleviate hospital losses. Rhode Island, for example, uses a length of stay outlier threshold for mental health stays. However some states, as well as Medicare, have discarded the day outlier option because virtually all day outliers are also cost outliers – so a day outlier policy adds complexity to the payment method without having a significant effect on overall reimbursements.

Setting outlier threshold(s) and marginal cost percentage(s) are a policy decision. Generally the values are set so that outlier payments are within a pre-determined range of total payments. For example, Medicare generally aims for an outlier payment percentage between 5 and 6 percent. Medicaid programs tend to have a slightly higher percentage of high-cost cases and generally aim for an outlier payment percentage between 5 and 10 percent. The percentage of payments made through outliers can be adjusted by increasing or decreasing the outlier threshold and/or increasing or decreasing the marginal cost percentage. As previously described in Chapter 2:

$$[\text{Outlier pymt adjstmnt}] = \{[\text{Hospital cost}] - [\text{DRG payment}] - [\text{Outlier threshold}]\} \\ * [\text{Marginal cost \%}]$$

and outlier payments are only made if $\{[\text{Hospital cost}] - [\text{DRG payment}]\}$ is greater than the outlier threshold. Payment simulations can be made in which the outlier threshold and the marginal cost percentage are adjusted until the desired outlier payment percentage is reached. Provider base rates and policy adjustors can also be manipulated resulting in an increase or decrease of outlier payments.

From a policy perspective outlier payments are important to ensure access to care for very high cost cases. Providers need to know they will be compensated if they treat very sick individuals. However, paying too much out in the form of outliers removes provider incentives to contain costs. In addition, in a budget neutral system, an increase in reimbursements paid out as outliers generates a reduction in provider base rates. These trade-offs are typically balanced in Medicaid programs by setting a target outlier payment in the range of 5 to 10 percent, and outlier threshold and marginal cost percentage are set to hit that target.

A completely different strategy for dealing with outlier cases is to shift them out of the DRG payment method and pay them with some other method, such as percentage of cost or per diem. These methods may be more amenable to hospitals, however, they remove some of the incentives to control costs provided by a DRG payment method. They also complicate the overall Medicaid inpatient payment method because individual providers are reimbursed using more than one process.

7.5.2 *Outlier Payments - Recommendation*

For significant hospital losses on individual stays, we recommend following the Medicare stop-loss outlier model. The exact values for the fixed outlier threshold and the marginal cost percentage cannot be determined until payment simulations are performed. These numbers will be set so that the percentage of total payments made in the form of outliers is somewhere between 5 and 10 percent. Prior to simulations, we can only speculate that the fixed outlier threshold will likely be in the range of \$25,000 to \$40,000 and the marginal cost factor will likely be in the range of 60% to 80%.

In the calculation of hospital loss, we recommend including add-on payments which we anticipate will be the payments from automatic and self-funded Inter-Governmental Transfers (IGTs). Thus, the formula will be,

$$\begin{aligned}
 \text{[Hospital loss]} &= (\text{[Billed Charges]} * \text{[Cost to Charge Ratio]}) \\
 &\quad - (\text{[DRG base payment]} + \text{[Add-on payments]})
 \end{aligned}$$

The inclusion of add-on payments prior to the outlier calculation has been made because a relatively high portion of hospitals' reimbursements come from IGT funding. Without inclusion of the add-ons prior to calculating outliers, the number of outliers would be expected to be unusually high. Another option to address with this scenario would be to set the outlier threshold unusually high, thus reducing the number of claims hitting outlier status and/or set the marginal cost percentage unusually low, thus paying less for each outlier. But either of these options would penalize those providers who do not receive much reimbursement through IGT-funded payments.

We also recommend a "low-side" or hospital gain outlier policy symmetrical with the "high side" or hospital loss outlier policy. We recommend this in place of a charge cap policy where Medicaid pays the lesser of allowed amount and hospital charges. We prefer a hospital gain outlier policy in place of a charge cap because the charge cap gives a slight benefit to hospitals who inflate their charges. In addition, we recommend the hospital loss and hospital gain outlier policies are symmetrical simply because it makes them easier to understand, thus making them easier to communicate and administer. Being symmetrical means the same values and logic are used to calculate the outlier threshold, and the same values are used for marginal cost percentage. For example, if the fixed loss outlier threshold is \$30,000 then the fixed gain outlier threshold would also be \$30,000. Also, if outlier payment increases on hospital losses are made using a 60% marginal cost factor, then payment reductions on hospital gains would also be calculated using a 60% marginal cost factor.

7.6 Per Claim Add-On Payments

7.6.1 Per Claim Add-On Payments - Discussion

In addition to using varying provider base rates to ensure fair payment, some DRG installations include per-claim add-on payments, which can be applied for a variety of reasons. For example, Medicare offers per-claim add-on payments for direct graduate medical education costs. (Medicare also provides payment adjustments for indirect medical education costs, capital, and disproportionate share hospitals, but these adjustments are made to the common base rates.⁹) Montana Medicaid provides separate add-on payments for medical education, capital, and disproportionate share payments. Similarly, Washington DC Medicaid provides per-claim add-on payments for medical education and capital. Other supplemental payments can also be distributed through add-on payments if distribution of the funds makes sense to be made on a per claim basis.

7.6.2 Per Claim Add-On Payments - Recommendation

The current recommendation is for payments resulting from automatic and self-funded IGTs be incorporated as add-on payments and kept separate from provider base rates. This will help distinguish payments made from each source of funding. It also takes away the need to have separate base rates for statutory teaching, children's, CHEP, rehabilitation and high charity hospitals, each of which are allotted specific percentages of the automatic IGT funds.

No other add-on payments are recommended.

7.7 Transitional Period

7.7.1 Transitional Period - Discussion

Making a change in payment method from per diem to DRGs has potential to result in significant redistribution of funds. Even if implemented with budget neutrality, we expect some hospitals will receive higher payments under the new DRG method (when compared to legacy system payments) and some hospitals will receive lower payments. A transition period can be implemented to give hospitals time to adapt to these changes in funding levels. Also, the transition can be applied to all hospitals or only to hospitals with particularly significant changes in overall Medicaid inpatient reimbursement. Medicare, for example, commonly uses a four year transition period when making significant changes to its payment methodology. Medicaid programs, New York for example, have also utilized transition periods. On the other hand, some states, like Pennsylvania, provided no phase-in or transitional period.

A variety of methods can be devised to implement a transition period. Medicare and New York Medicaid often use a linear phased-in approach where payment is calculated the old way and the new way and a percentage of each is used to determine actual reimbursement. The linear phase-in approach is illustrated in the following table:

⁹ Medicare Learning Network (MLN), *Acute Care Hospital Inpatient Prospective Payment System – Payment System Fact Sheet*, ICN 006815, February 2012.

Implementation Year	Percentage of Reimbursement from Legacy Payment Method	Percentage of Reimbursement from New Payment Method
1	75%	25%
2	50%	50%
3	25%	75%
4	0%	100%

Although conceptually very straight forward, we consider calculation of payment of the legacy and new method to be a less attractive option because it is very complicated to implement in the MMIS. Also, it clouds the incentives to improve efficiency since the previous AHCA payment method potentially rewards longer lengths of stay while the new DRG payment method potentially rewards shorter lengths of stay.

To simplify implementation in the MMIS, we generally recommend a transition process in which the hospital DRG base rates are adjusted to meet the transition goals. The calculation of hospital base rates can be performed outside the MMIS, requiring only a load of new base rates yearly through the transition time period.

As another example, California Medicaid (Medi-Cal) decided the linear phase-in approach created too much of a change year-to-year in hospital reimbursement, producing too great a burden on those hospitals expected to receive significant reimbursement shifts. As such they decided to limit the projected change in reimbursement to 5 percent each year for the first three years, then shift to full, unadjusted DRG payment in year 4. For example, a hospital projected to receive a 28 percent reduction in Medicaid reimbursement would get their base rate adjusted so that the projection is no more than a 5 percent change in year 1, no more than a 10 percent change in year 2, no more than a 15 percent change in year 3, and a full 28 percent change in year 4. Medi-Cal felt this gave hospitals more time to react to the new DRG payment method. During the phase-in period, hospitals would have the opportunity to improve documentation and coding, if needed, and to make decisions on service offerings.

Medi-Cal is also an example program planning to proceed with the method of controlling the transition period through use of hospital-specific DRG base rates. These rates get set using the historical dataset from which DRG pricing simulations are run. The simulations provide prediction of future hospital reimbursement under the assumption that Medicaid volume and patient acuity at a hospital remain unchanged. If actual volume or patient acuity at a particular hospital happens to change, then actual payments will adjust accordingly. As mentioned previously, the bulk of the payment on any given claim comes from the simple multiplication of [hospital base rate] times [DRG relative weight]. If the number of claims (patient volume) changes or the casemix (average DRG relative weight) changes at a hospital, then actual payment will automatically change accordingly.

Of course, when reviewing the projected change in Medicaid inpatient reimbursement for individual hospitals, it's helpful to know the percentage of each hospital's revenue coming from Medicaid. A 20 percent change in Medicaid revenue has significantly more impact to a hospital with half of its business coming from Medicaid versus a hospital with a tenth of its business coming from Medicaid.

7.7.2 Transitional Period - Recommendation

Transition periods may be appropriate if the change in the payment model will create significant changes in Medicaid reimbursement to individual hospitals. Also the length of the transition should be proportionate to the size of the reimbursement change – greater reimbursement changes justify longer transition periods.

Experience in other states has shown that a move from a per diem payment method to a DRG payment method will generate sufficient changes in hospital Medicaid reimbursement to justify a transition period. However, Florida Medicaid inpatient reimbursements have a major component coming from IGT funds, which will be largely unaffected by the shift to DRG payments. As such, the impact resulting from a new DRG model on Florida hospitals may not prove as significant as seen in some other states that converted from per diem payments to DRG payments. DRG pricing simulations will be needed to create a clear picture of the magnitude of this change for Florida hospitals.

Prior to running DRG pricing simulations, we will make the assumption that there will be a need for some sort of transition period so that we will be prepared to recommend such an implementation option should it be warranted. If in fact it proves warranted, we will likely recommend a transition period somewhere between one and four years in length.

If a relatively long transition period proves to be warranted, then we prefer the model devised by the California Medicaid agency. In the Medi-Cal model, gains or losses in annual Medicaid reimbursement are held relatively small for the first three years (no more than 5% each year, for a maximum of 15% at the end of year three). This is followed by full implementation of the new DRG payment method in year four in which any remaining adjustment in reimbursement to individual hospitals is applied. This model provides hospitals more time to adjust to the new payment levels while experiencing limited payment changes in the first few years of implementation.

Logistically, we recommend implementing the transition period by calculating base rates that enable total Medicaid reimbursement to hit specific target values for each individual hospital. We find this method significantly less complicated than blending of payments calculated using the legacy payment method (per diem) and the new payment method (DRGs). We find it is also simpler than blending DRG base rates calculated using historical payment levels and projected new payment levels.

7.8 Documentation and Coding Adjustment

7.8.1 Documentation and Coding Adjustment - Discussion

Under a DRG payment method, overall casemix has a significant impact on overall Medicaid payments. This can be seen when looking at the DRG base payment formula:

$$[\text{DRG Base Payment}] = [\text{Hospital base rate}] * [\text{DRG relative weight}] * [\text{Policy adjustor(s)}]$$

Overall casemix equals the average DRG relative weight from all inpatient claims paid via DRGs. Assuming limited use of policy adjustors, aggregate Medicaid inpatient spending can be roughly estimated as

$$[\text{Total inpatient payments}] = [\text{Average hospital base rate}] * [\text{Overall casemix}]$$

Actual spending in a DRG payment method is also affected by policy adjustors, outlier payments, and transfer and partial eligibility adjustments. But these additional factors all have a relatively small impact on overall spending. The bulk of the spending comes from hospital base rates and casemix, making it important to estimate these values carefully and to monitor them through the first few years of a DRG payment implementation.

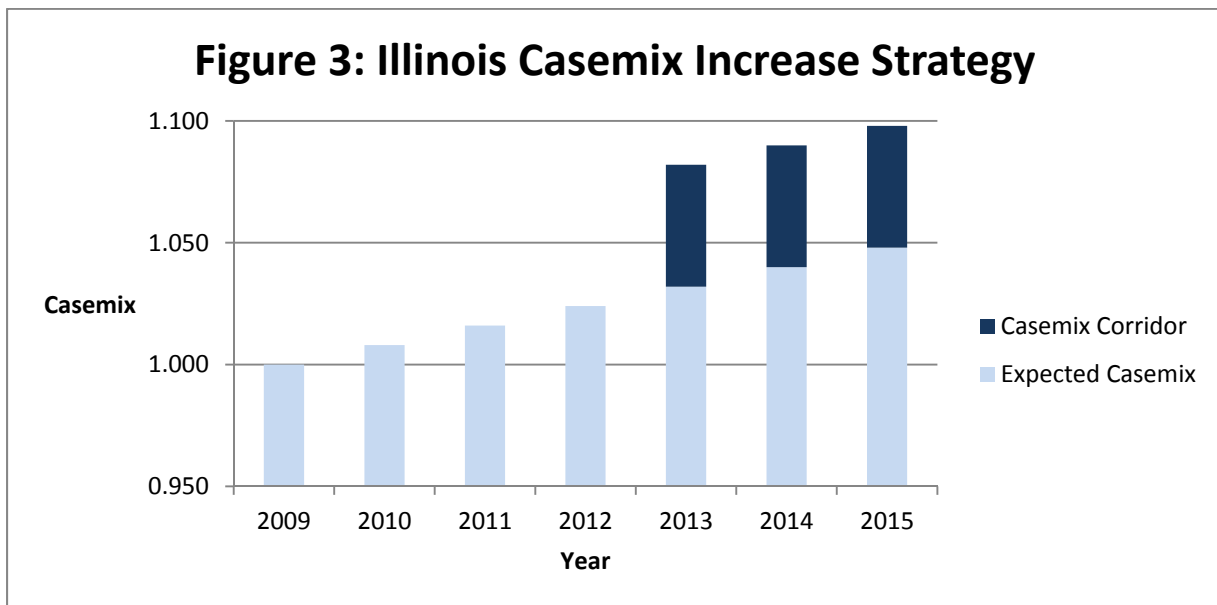
Overall casemix is expected to increase between the historical claims used for DRG payment simulations and the claims paid during the first couple of years of DRG implementation. The primary reason for increased casemix is expected to result from increased numbers of diagnosis and procedure codes on inpatient claims. The increase in number of codes is referred to as documentation and coding improvement, and is an appropriate and necessary response by providers to the implementation of a DRG payment method. The new method puts increased value on claim documentation compared to the legacy per diem payment method. These changes in casemix are not actual changes in patient acuity, but changes resulting from improved reporting/billing. In addition, a smaller amount of casemix increase is expected between the simulation dataset and production claims because of true increases in overall casemix. Overall casemix tends to increase each year because of ongoing improvements in medical technology and because of shifts of care of relatively low acuity patients to the outpatient setting.

As a result, AHCA may decide to incorporate a documentation and coding adjustment that reduces the DRG base price in anticipation of casemix increases. This type of payment adjustment is necessary to hit budget targets and is consistent with other state Medicaid implementations of DRGs and with Medicare's move from CMS-DRGs to MS-DRGs. The first challenge for AHCA is to determine how much of a casemix increase to expect between the data used for DRG payment simulation and the first year of claims processed for payment using DRGs. The second challenge involves devising an adjustment plan if the predicted increase in casemix proves inaccurate. Nearly all stakeholders will agree there will be some increase in casemix, however few will agree on the magnitude. And no definitive method exists for conclusively predicting casemix change. As such, a strategy for adjusting payment parameters based on actual casemix numbers is a necessity.

Medi-Cal for example, has a tentative plan of estimating a 2.5 percent increase in casemix from documentation and coding improvement as well as a 2 percent increase in casemix for the four years between its DRG pricing simulation dataset (2009) and its first year of DRG payment (2013). Given a casemix of 0.61 in its DRG pricing simulation dataset (using APR-DRG grouping) this means Medi-Cal is predicting casemix in the first year of DRG payment to be 0.6375 (0.61 * 104.5%).

As another example, Illinois Medicaid is expecting a casemix increase of 0.8 percent per year for the years between the DRG pricing simulation dataset and the first year of production DRG payments. This 0.8 percent per year is for actual increase in casemix and is based on analysis of four years of historical Illinois Medicaid claims. This increase totals 3.2 percent as there are four years between the simulation dataset (2009) and the first year of production, 2013. In addition, Illinois is anticipating up to a 5 percent increase in overall casemix from improved documentation and coding. The net result is hospital base payments will be set 8.32 percent lower in anticipation of casemix increase. Illinois Medicaid is also considering a strategy of “holding back” the 5 percent in anticipation of improved documentation and coding adjustable based on actual results in the first year of DRG payment.

Using casemix numbers for 2009 centered at 1.0, this means Illinois is expecting the casemix during the first year of DRG payment, 2013, to be somewhere between 1.032 and 1.082. This is depicted in the following chart, with the first 3.2 percent change referred to as “expected” and the following 5% change referred to as the “corridor.”



Based on this strategy (which is still in the development stages), if the overall casemix in 2013 comes out less than 1.032, the full 5 percent of payments withheld for improved documentation and coding will be reimbursed back to hospitals. On the other hand, if actual casemix in 2013 is greater than “expected”, but falls within the “corridor”, Illinois will return an appropriate portion of the money set-aside for the casemix corridor. Finally, if actual casemix in 2013 is

greater than the combined “expected” and “corridor,” Illinois will retain the full set-aside amount as that amount will have been fully absorbed through aggregate casemix increases. Actual casemix changes that fall outside of the “corridor” may also trigger “re-centering” of the relative weights to prevent significant overpayments in future periods.

Pennsylvania implemented a transition strategy, similar to that under consideration in Illinois, with one key difference; adjustments for changes outside of the expected range are made prospectively. In other words, the Commonwealth is at risk for higher payments resulting from casemix increases above the threshold for a full year before adjustments to the weights are made.

7.8.2 Documentation and Coding Adjustment – Recommendation

Experience with Medicare and several state Medicaid programs has shown there is both actual casemix increases each year and casemix increases due to changes in claim documentation and coding when a new DRG payment method is implemented. In some cases, the documentation and coding changes are improvements resulting from implementation of more thorough processes and in other cases they are simply adjustments in coding to better align with the codes given priority by the DRG grouping algorithm. For example, the MS-DRG grouper does not put an emphasis on birth weight, but the APR-DRG grouper does. As such, hospitals become more consistent with their coding of birth weight when a payer shifts from MS-DRG grouping to APR-DRG grouping.

As a result, we recommend planning for an increase in casemix between the dataset used for DRG pricing simulations (which will contain historical claims from state fiscal year 2010/2011) and the claims received during first year of DRG payment. In addition, we believe the model planned for the Illinois conversion is the best for limiting risk to both the State and the hospitals. In this model, a yearly amount of actual casemix increase is estimated using historical data. In addition, an amount of casemix increase from documentation and coding improvements is estimated and reimbursement covering that increase in casemix is held aside in a way that is akin to escrow. If the casemix increase turns out to be less than the estimated and set-aside amount, then an appropriate amount of the money held in reserve gets distributed back to the hospitals. If the casemix increase turns out greater than, the estimate then the money held in reserve would have been fully consumed through payments on individual claims.

7.9 Interim Claims and Late Charges

7.9.1 Interim Claims and Late Charges – Discussion

DRG payments are designed to be single payments for complete hospital stays. Thus, a final DRG payment cannot be made until the patient is discharged. For most hospital stays, that is perfectly acceptable to both the provider and the Medicaid agency. However, for very long stays, waiting until discharge for payment from Medicaid can cause cash flow challenges for hospitals. This can be solved by allowing interim billing and payment. Unfortunately, generating final payment for a hospital stay after interim payments have been made is an extremely challenging task to implement in an MMIS. As a result, decisions related to interim claim payments are an important part of a DRG payment policy despite the fact that they affect a relatively small percentage of overall stays.

One option is to disallow all interim claims and put the onus on hospitals to manage their cash flow. If instead, AHCA decides to allow interim payments, then a series of design decisions must be made. First, the threshold minimum number of days per interim claim must be decided – most states have selected 30 days. Next the method of payment for interim claims must be determined. Per diem payment is the most common option, and if per diem is used then a per diem amount needs to be selected. The amount should be set low enough so that interim claim payment is rarely, if ever greater than the full DRG payment. If the interim payment(s) are greater than the full DRG payment, then hospitals will have no incentive to submit a final bill when the patient is discharged. Finally the payment policy must include a method for making final payment. When the final claim is submitted, many states have chosen to void all interim claims, thus taking back the money paid out on the interim claims, and then pay the full DRG payment on the final claim. With this solution, decisions must be made either to give hospitals the responsibility to submit voids for all the interim claims, or systematically void all the interim claims, or suspend the final claim and require manual void of all interim claims. Once all the interim claims are voided, the final claim can be paid. Another option is to adjust reimbursement on the final claim down by the amount already paid out on interim claims. However, there is risk that the interim payment(s) turn out to be more than the final DRG payment, which would be extremely problematic under this option because the payment amount on the final claim would be negative.

Late charges (claims with bill type 115) are also problematic in a DRG payment method. To accurately calculate DRG payment, including outlier payments, all charges for the hospital stay need to be submitted on a single claim. For this reason, late charges are typically not accepted by Medicaid agencies paying via DRGs.

7.9.2 Interim Claims and Late Charges – Recommendation

Because of the very tight implementation timelines, we recommend disallowing payment on interim claims, asking hospitals instead to manage their cash flow. However, if AHCA feels strongly that late charges need to be accepted, then we recommend requiring the length of stay to be at least 30 days on each interim claim. We also recommend setting the interim claim per diem rate relatively low, such as \$400 or \$500 so that hospitals have an incentive to submit a final claim after the patient is discharged.

In addition, we also recommend against accepting claims for late charges. The decision on late charges is independent of the decision on interim claims, and we believe late charges should be disallowed even if the final policy design includes acceptance of some interim claims.

7.10 Charge Cap

7.10.1 Charge Cap – Discussion

Medicaid programs, like most payers traditionally have a charge cap in place which ensures payment on individual claims equals the lesser of the Medicaid allowable payment and the provider’s submitted charges. AHCA will need to decide if a charge cap should be put in place for claims priced via the new DRG method. Because DRGs are a prospective payment based off of averages of hospital resource usage (recorded in the form of DRG relative weights), the actual

payment for an individual stay may be above or below hospital costs and could possibly even be above hospital charges. The general strategy with DRG payments is that payments will over time average out to hit Medicaid’s desired pay-to-cost ratio even though payments on individual claims may be above or below this ratio. Applying a charge cap can get in the way of this basic strategy, so it is worthwhile to consider excluding the charge cap logic from claims paid via DRGs. In addition, instituting a charge cap on DRG claims has potential to negatively impact providers who are doing a good job of aligning charges with costs. Charge caps have the effect of rewarding hospitals who inflate charges well above costs, which is not necessarily a behavior worthy of reward.

If AHCA decides to exclude charge caps on DRG priced claims, then we more strongly recommend instituting a hospital gain cost outlier policy. If on the other hand, AHCA decides to apply a charge cap to DRG priced claims, then the need for a hospital gain outlier policy is diminished.

7.10.2 Charge Cap – Recommendation

We recommend a hospital gain outlier policy in place of a charge cap. However, if AHCA chooses not to implement a hospital gain outlier policy, then we strongly recommend a charge cap be included with the DRG payment logic. In one form or another, we believe AHCA needs to have a policy that avoids gross overpayments for individual stays. Further, it is important to note that the risk of large over payments is greater under a DRG, per-discharge payment system than under a per diem system.

7.11 Medicare Crossover Comparison Pricing

7.11.1 Medicare Crossover Comparison Pricing – Discussion

Many Medicaid programs have implemented Medicare crossover comparison pricing logic. This logic is applied specifically to Medicare crossover claims and compares the Medicare allowed amount to the Medicaid allowed amount. It then sets Medicaid reimbursement amount so that the total provider reimbursement, combining Medicare and Medicaid payments, reaches the lower of the two allowed amounts. If AHCA uses this kind of pricing logic, then Medicare crossover claims will need to be processed through the new DRG pricing method so that a DRG-based Medicaid allowed amount can be determined.

7.11.2 Medicare Crossover Comparison Pricing – Recommendation

We recommend including Medicare/Medicaid comparison logic, ensuring total payment is the lesser of the Medicare allowed amount and the Medicaid allowed amount. For this to occur, DRG pricing should be performed on Part A crossover claims to determine the Medicaid allowed amount.

8 Specifics for Florida Medicaid

8.1 Budget Neutrality

The implementation of DRG pricing is intended to be budget neutral across the entire Medicaid program. That is, the total Medicaid expenditures in the first year of DRG payment are

intended to equal the total expenditures from the previous year, except for standard adjustments made for inflation and fee for service eligibility changes. Reaching budget neutrality at the program level will not ensure neutrality for individual hospitals. Some hospitals will see overall Medicaid revenue increase with DRG payments while others will see revenues decrease.

DRG payment simulations will be performed using historical Florida Medicaid fee-for-service inpatient claims from state fiscal year 2010/2011. Base rates, policy adjustors, outlier parameters and so forth will be determined to reach the same total Medicaid reimbursement via DRGs as was actually paid on these claims using the current payment method. This will allow predictions of how the DRG payments will reimburse individual hospitals, categories of hospitals, and categories of care in the future. Final base rates, adjustors, etc., to be used in production when DRG pricing first goes live will be adjusted and/or recalculated based on actual budget numbers planned for state fiscal year 2013/ 2014 (the first year DRG pricing is expected to be live).

Separate budget values will be determined for each category of hospitals receiving their own standardized base rate. Under our preliminary recommendations, there are only two categories – rural hospitals and all other hospitals. In addition, separate budget figures will be identified for services that are carved out of the DRG payment method and remain in some form of per diem payment method. Under current recommendations, the services carved out of DRG payment are psychiatric and rehabilitation services. We recommend setting the initial budget values for these two types of service to amounts that keep the pay-to-cost ratios the same for these services and for all the services being reimbursed via DRGs.

8.2 Interaction of DRG Payment and IGT Funding

It is our understanding that the only way in which the DRG payment method may affect IGT funding is related to the limits on amounts providers and local governments can contribute. CMS will only provide federal matching funds up to certain limits. The limits are related to total reimbursements to hospitals. If individual hospitals receive more money through DRG payments than through historical per diem payments, then the amount they can receive from IGT funds (which will be eligible for federal matching dollars) will go down, thus their contributions to IGTs will go down. Of course, the opposite is also true. Individual hospitals that receive less money through DRG payments than historical payments will be able to receive more from IGT funds and will have the option to contribute more in the form of IGTs.

We won't be able to predict the changes in Medicaid reimbursement for individual hospitals until we begin payment simulations. When that occurs we will pay particular attention to the reimbursement changes for those entities that have historically been major contributors of IGT funds.

8.3 Interaction of DRG Payment and IGT Funding

The current plan is to determine DRG base rates using only funds from general revenue and the PMATF. Payments from funds originating from IGTs that are paid out on individual claims will be included as add-on payments, separate from the DRG base payment. We recommend,

however, that the add-on payments be included before calculation of DRG outlier payments, otherwise an unusually high percentage of claims are likely going to reach outlier status.

8.4 Recipient Out of Pocket Expenses

Policies related to recipient out of pocket expenses will be unaffected by the transition to DRG pricing for inpatient fee-for-service stays.

8.5 45-Day Benefit Limit

The 45-day limit is an existing AHCA policy that limits Medicaid benefits to adults to 45 days in an inpatient setting each state fiscal year. The day limit does not apply to recipients under the age of 21. This policy is easily implemented in the current per diem pricing method, but is more challenging to implement in a DRG methodology. Under a DRG methodology, partial eligibility scenarios will be created each time a recipient reaches the 45 day limit in the middle of a hospital stay. To avoid numerous partial eligibility claims, we recommend changing the policy so that it is enforced only at the beginning of each hospital stay. Under this recommendation, any recipient admitted prior to reaching the 45-day limit would receive Medicaid benefits for the entire hospital stay. Only for new hospital stays begun after a recipient has reached the 45-day limit would benefits be denied.

8.5 Effect of Transition to Managed Care

The planned move of Florida Medicaid recipients to managed care has relatively little effect on the DRG payment method and vice versa. There will always be some services paid via Medicaid fee-for-service, and DRG payment will be the method for reimbursing those services when performed in an inpatient setting. DRG payment parameters such as policy adjustors and outlier values should be reviewed each year under normal course of events. This review should include only recipients and types of stays that are expected to be in fee-for-service in the following year. Also, as the volume of fee-for-service claims gets smaller, encounter claims or all-payer claims may need to be included in the calculation of DRG relative weights if state-specific relative weights are used.

Managed care plans may choose to adopt DRG payment. In general, we believe DRG payment is the best method currently available for reimbursing most inpatient acute care stays. In addition, there may be a policy or expectation that managed care plans pay hospitals at a level similar to what Medicaid fee-for-service would have paid. As such, we would expect that managed care plans would consider DRG reimbursement.

8.6 County Billing

AHCA currently relies on contributions from the counties for a portion of reimbursement for hospital stays in excess of a specified number of days. The amount paid by the counties is made in the form of a per diem amount, referred to as the county billing rate. Under the new DRG per discharge payment model, a new method will need to be identified for determining the counties' obligation under this program.

Conclusion

A variety of decisions need to be made when developing a DRG payment method. This document strives to give a comprehensive list of those decisions and offers criteria against which the decisions can be evaluated.

In the initial version of this options document, recommendations for the various decisions were left blank. As the project progresses, a combination of review of AHCA goals, the current payment method, and simulations of the new DRG payment method will be used to make recommendations on each decision. When completed, AHCA will be well on its way to defining its new inpatient pricing methodology.

Appendices

Appendix A – Summary DRG Payment Method Options

The following table summarizes the payment method options described in this document.

Appendix A Summary of DRG Payment Method Options		
Decision Point	Options / Comments	Recommendation
3.1. Affected Providers		
Stand-alone facilities <ul style="list-style-type: none"> • General acute care • Physical rehabilitation • Long term acute care • Mental health and substance abuse facilities • Critical access / rural hospitals • Children’s hospitals • Cancer hospitals • Federally Qualified Health Centers • Rural Health Clinics • In-state / out-of-state / border hospitals • Native American Indian hospitals • Public hospitals 	Include or exclude in DRG payment	Include the following hospitals in the DRG payment method: <ul style="list-style-type: none"> • General acute care • Long term acute care • Critical access / rural hospitals • Children’s hospitals • Cancer hospitals • In-state / out-of-state / border hospitals • Teaching hospitals
Distinct part units <ul style="list-style-type: none"> • Physical rehabilitation • Long term acute care • Mental health and substance abuse 	Include or exclude in DRG payment	Include long-term acute care distinct part units in the DRG payment method.
3.2. Affected Services		
<ul style="list-style-type: none"> • Physical rehabilitation 	Include or exclude in DRG payment	<ul style="list-style-type: none"> • Include physical rehabilitation and mental

Appendix A Summary of DRG Payment Method Options		
Decision Point	Options / Comments	Recommendation
<ul style="list-style-type: none"> • Mental health and substance abuse • Unpredictable and expensive services and supplies such as blood factors and organ search and acquisition • New technologies 		<p>health services in DRG payment only when performed in a general acute care setting, not when performed in a free-standing specialty facility or distinct part unit.</p> <ul style="list-style-type: none"> • Always include substance abuse services in DRG payment • Allow separate payment only for a very select list of procedures/services – initially recommending only blood factors as separately payable • No separate payments for new technologies
3.3. Affected Beneficiaries / Medicaid Programs		
<ul style="list-style-type: none"> • Fee-for-service • Primary care case management • Managed care • CHIP • Waiver programs • Dual eligible (Medicare and Medicaid) 	Include or exclude in DRG payment	<p>Include</p> <ul style="list-style-type: none"> • Fee-for-service • Dual eligible (Medicare and Medicaid)
3.4. Prior authorizations		
<ul style="list-style-type: none"> • Authorize length of stay • Change concurrent review • Change focus of post-payment review 	<ul style="list-style-type: none"> • Yes/no/sometimes • Currently based on length of stay 	<ul style="list-style-type: none"> • No, not on claims paid via DRG • Yes if a more applicable method can be identified • Yes
4. Cost Estimation		
<ul style="list-style-type: none"> • Aggregate CCR methodology • Detailed line-level methodology 	Select costing methodology. Note that both options provide reasonable estimates.	Use detailed line-level cost measurements for analysis of the DRG payment method and a single aggregate CCR (the Medicare value where

Appendix A Summary of DRG Payment Method Options		
Decision Point	Options / Comments	Recommendation
		available) for each hospital in the claim outlier calculations
5. DRG Grouping		
DRG Grouper <ul style="list-style-type: none"> • APR (all patient refined) • MS (medical severity) • APS (all-payer severity-adjusted) 	Select a grouping algorithm	APR
Source of DRG relative weights and average length of stay	Options are, <ul style="list-style-type: none"> • National all-payer values • State Medicaid-specific values • Values borrowed from another state 	National all-payer values
<i>If state-Medicaid-specific values are created ...</i>		
Basis for the weights	Hospital charges or estimated cost	Estimated cost
Method for estimating costs (if costs are the bases for the weights)	See decision point 4. Cost Estimation above.	Detailed line-level cost measurements
Determination of values for stays with statistically low numbers of occurrences	Use national weights and lengths of stays or prorate values from similar DRGs	Prorate from similar DRGs
6. Provider Base Rates		
Number of common (a.k.a. standard) base rates	Generally one or very few common base rates are used. If more than one is used, the different values are typically used for different categories of providers.	Two standardized base rates – one for rural hospitals, one for all other hospitals
Geographic base rate adjustments	Apply or forego geographic base rate adjustments	Yes include geographic base rate adjustments
If geographic base rate adjustments are applied, define geographic regions	Options are, <ul style="list-style-type: none"> • Medicare wage areas • State counties • Any other state designator of geographic regions 	Use Medicare wage areas and wage area assignments, including re-classifications
If geographic base rate adjustments are applied, define the adjustment factor per region	Wage indices are available with Medicare wage areas. If some other method is used to define	Use Medicare wage indices

Appendix A Summary of DRG Payment Method Options		
Decision Point	Options / Comments	Recommendation
	geographic regions, then adjustment factors must be assigned to each region.	
If geographic base rate adjustments are applied, define the percentage of the base rate to which the adjustor applies	The adjustment factors can be applied to all or some portion of the common base rate. For example, Medicare wage indices are only applied to the labor portion of hospital costs, which is defined as 62% for wage areas less than 1.0 and 68.8% for wage areas greater than 1.0.	65% for all DRG payments, 75% for per diem adjustment for mental health and rehabilitation services
Any other multiplier-type of adjustment to common base rates.	Some other criteria may be identified that will adjust common base rates in a way that will meet AHCA reimbursement goals.	No other multipliers
7.2. Policy Adjustors		
Service adjustors - should service adjustors be included in the DRG payment method? If yes, what services should get an adjustment and what should the adjustment factor(s) be?	If included, payment for services for which Medicaid is a major payer, such as obstetrics and neonatal care, are typically assigned an adjustor.	Service adjustors for neonatal care
Age/service adjustors - should age/service adjustors be included in the DRG payment method? If yes, what age ranges and for what services should an adjustment be applied, and what should the adjustment factor(s) be?	Can be used to adjust payment for services to any age grouping, but is typically used by Medicaid payers to adjust payment for pediatric care.	Age/service adjustors for pediatric care
Provider/service adjustors - should provider/service adjustors be included in the DRG payment method? If yes, what providers (or provider categories) and for what services should an adjustment be applied, and what should the adjustment factor(s) be?	This adjustor is the least commonly used of the three, but can be used to adjust payments for specific services if provided at specific types of services – for example neonatal care at a hospital with a level III neonatal intensive care unit.	None
Application of policy adjustors	If multiple policy adjustors are implemented, the	Cumulative

Appendix A
Summary of DRG Payment Method Options

Decision Point	Options / Comments	Recommendation
	<p>adjustors can either be cumulative (multiple adjustors applied to the same claim, when appropriate), or hierarchical in which case only one adjustor (possibly the largest one) gets applied to a claim.</p>	
7.3. Transfer Payment Adjustments		
<p>What patient discharge statuses should be used for acute-to-acute hospital transfers</p>	<p>Options are:</p> <ul style="list-style-type: none"> 02 – discharged/transferred to a short-term general hospital for inpatient care 05 – discharged/transferred to a designated cancer center or children’s hospital 07 – left against medical advice (Medicare uses this value if the patient is admitted to another acute care hospital on the same day) 43 – discharged/transferred to a federal facility 62 – discharged/transferred to an inpatient rehabilitation facility or distinct part unit 63 – discharged/transferred to a long term care hospital 65 – discharged/transferred to a psychiatric hospital or distinct part unit 66 – discharged/transferred to a critical access hospital 	<p>02, 05, 65, 66</p>
<p>Should there be an acute-to-post-acute care transfer payment adjustment? If yes, for which patient discharge statuses should the adjustment apply?</p>	<p>If a post-acute care transfer policy is implemented, options for applicable patient discharge statuses are:</p> <ul style="list-style-type: none"> 03 – skilled nursing facility 05 – cancer/children 	<p>No post-acute transfer policy. But if one is implemented, use statuses 03, 06, 43, 62, and 63</p>

Appendix A Summary of DRG Payment Method Options		
Decision Point	Options / Comments	Recommendation
	06 – home health 43 – federal facility 62 – rehabilitation 63 – long-term care hospital 65 – psychiatric	
What should the transfer claim payment adjustment formula be?	Medicare and several states use the following formula: $\text{Transfer-adjusted base payment} = \left\{ \frac{\text{[DRG base payment]}}{\text{[DRG average length of stay]}} \right\} * \{\text{[length of stay]} + 1\}$	Medicare formula
7.4. Partial Eligibility Adjustments		
Do partial eligibility scenarios occur enough to justify a partial eligibility payment adjustment?	Include or forego a partial eligibility payment adjustment calculation.	Include a partial eligibility payment adjustment
If a partial eligibility payment adjustment is included, what should the formula be?	A formula similar to the transfer payment adjustment formula makes sense. However, the “+ 1” for day of admission could be dropped.	Add 1 day to the length of stay if the recipient is eligible on the date of admission, otherwise do not add the additional day
7.5. Outliers		
How to pay outlier claims	DRG with outlier (stop loss model) or another method such as percentage of charges	Stop loss model with a single threshold
Loss and/or gain	Pay outliers only for cases of extreme hospital loss or for both cases of loss and gain	Symmetrical outlier policy for both hospital losses and gains
Size of outlier pool	Set targeted percentage of payments made via outliers Medicaid agencies generally have an outlier pools between 5 and 10 percent. In FY 2012, Medicare is aiming for an outlier pool of 5.1 percent of total IPPS payments. ¹⁰	Between 5 and 10 percent
<i>If using stop-loss model ...</i>		

¹⁰ Medicare Learning Network (MLN), *Acute Care Hospital Inpatient Prospective Payment System – Payment System Fact Sheet*, ICN 006815, February 2012.

Appendix A Summary of DRG Payment Method Options		
Decision Point	Options / Comments	Recommendation
<i>Note: Separate decisions / values can be used for hospital loss versus hospital gain if both types of outliers are utilized.</i>		
Basis of threshold	Cost, days, or both - depending on the service	Cost only
Number of thresholds	One or two pre-set thresholds, thresholds based on DRG relative weight or thresholds set as a multiple of DRG base payment.	One for now – may change depending on the results of the simulations
Amount of threshold	One pre-set threshold, one per DRG, or a multiple of DRG base payment. Generally this value and marginal cost percentage are adjusted to ensure the outlier payment amount hits a particular target percentage.	A single pre-set threshold, value to be determined through pricing simulations
Marginal cost percentage	Typically, one cost percentage is used, but more than one can be used if more than one threshold is implemented. Generally this value and the threshold value are adjusted to ensure the outlier payment amount hits a particular target percentage.	One cost percentage, value to be determined through pricing simulations
Granularity of cost-to-charge ratio	One for the entire state; one per hospital; one per standard cost center within each hospital	One per hospital
7.6. Per Claim Add-On Payments		
Will there be any supplemental payments made on a per-claim basis.	Any type of supplemental payment can, in theory, be made on a per-claim basis, including DSH, graduate medical education, and capital. Reimbursement levels for supplemental payments made this way depend on hospital claim volume.	Claim level payments from IGT funds made as add-on payments
7.7. Transitional Period		
Should there be a period of transition into the new DRG pricing methodology?	Yes or no.	Yes
If a transition period is offered, how many years will it entail?	Typically the length of transition periods is between 1 and 4 years.	Length to be determined through review of pricing simulations

Appendix A Summary of DRG Payment Method Options		
Decision Point	Options / Comments	Recommendation
If a transition period is offered, which providers will be affected?	All providers or only those with project payment changes above a certain percentage. In addition, each hospital's Medicaid market share could be used as a determining factor.	To be determined through review of pricing simulations
If a transition period is offered, how the transition be applied?	Through adjustments to base rates performed outside the MMIS, or through adjustment multipliers in the MMIS, or through merger of payments calculated using the Legacy method and the new DRG method.	Adjusted base rates
If a transition period is offered, what will the phase in percentages be each year?	One option (used by Medicare), is to phase in by 25% each year, ending up at full transition (100%) in year 4. Another option is to transition slowly in the first year or two, limiting hospital reimbursement shifts, then making the final jump to full DRG reimbursement in the final year of the transition.	If a long transition, such as 4 years, then set the phase-in percentages relatively low for the first two or three years.
7.8. Documentation and Coding Adjustment		
How much adjustment should be estimated for real casemix changes between the dataset used for pricing simulations and the first year of DRG payment in production?	Typically this value is estimated between 0.5 and 1 percent.	Recommendation will require further conversations with AHCA
How much adjustment should be estimated for improvements in coding by providers?	Typically, this value is estimated between 2 and 5 percent, but can be greater.	Recommendation will require further conversations with AHCA
What kind of strategy should be used to cover risk of inaccurate estimate for both the Medicaid program and the hospital community?	Lump sum payments or hospital credits can be applied, or retroactive payment adjustments can be made by adjusting previously paid claims.	Recommendation will require further conversations with AHCA
7.9. Interim Claims and Late Charges		
Should interim claims be accepted?	Yes or no	No
If interim claims are accepted, what will be the minimum length of stay on each interim claim?	Typically 30 days.	If accepted, 30 days

Appendix A Summary of DRG Payment Method Options		
Decision Point	Options / Comments	Recommendation
If interim claims are accepted, how should they be paid?	Typically they are paid a per diem with a relatively low per diem rate so that there is little risk of the payment made on interim claims being greater than the final DRG payment.	If accepted, per diem
If interim claims are accepted, how will final payment be calculated when the final claim is received?	Typically, the final claim is paid the full DRG payment amount, but only after all interim claims are voided. Under this method, a process must be defined to identify the interim claims and submit a void for each one.	If accepted, systematically void interim claims
Should claims for late charges (type of bill 0115) be paid?	Typically the answer is no. Instead, if a provider identifies additional charges, it must submit a void for the original claim and then submit a new claim.	No
7.10. Charge Cap		
Should a charge cap be applied to claims paid via a DRG method?	Yes, or no. If no, then a provider gain outlier function is highly recommended.	No, prefer a provider gain outlier instead
7.11. Medicare Crossover Comparison Pricing		
Will comparison pricing (Medicare versus Medicaid) be applied to Medicare crossover claims?	Yes or no.	Yes

Appendix B - Sample State Medicaid DRG Implementations

Category	California	New York	Texas	Virginia	Pennsylvania	Illinois
Scope						
Included provider types	All acute care hospitals not in the exclusion list, including, children’s hospitals, specialty cancer hospitals, critical access hospitals, teaching hospitals, and tertiary hospitals	General acute Specialty hospitals (long-term acute, cancer, and Blythedale Children’s Hospital) Chemical dependency rehab Critical access hospitals	All acute care hospitals not in the exclusion list	General acute hospitals Children’s hospitals	All acute care hospitals not in the exclusion list, including, children’s hospitals, specialty cancer hospitals, critical access hospitals, teaching hospitals, and tertiary hospitals and trauma centers	General acute hospital Freestanding Children’s Hospitals Long term acute care providers
Excluded provider types	Psychiatric hospitals Hospice providers Designated public hospitals Rehabilitation hospitals (including alcohol and drug rehabilitation) Rehabilitation units at general hospitals	Psychiatric hospitals Medical rehabilitation	Children’s hospitals Rural hospitals, including critical access hospitals State-owned teaching hospitals Freestanding psychiatric facilities FQHCs have the option of payment via DRGs or payment at 100% of reasonable cost Rural health clinics	Freestanding Psychiatric facilities Rehabilitation hospitals Rehabilitation units at general hospitals Hospitals operated by the Department of Behavioral Health and Developmental Services	Psychiatric hospitals and distinct part units Hospice providers Designated public hospitals Rehabilitation hospitals (including alcohol and drug rehabilitation) and distinct part units	Psychiatric freestanding and distinct part units Rehabilitation freestanding and distinct part units
Included services	General acute care Transplants Neonatal care Trauma	General acute care Transplants Neonatal care Trauma	General acute care Transplants Neonatal care	General acute care Neonatal care Transplants Inpatient acute psychiatric (with service authorization)	General acute care Neonatal Trauma	General acute care Neonatal care Long-term acute care Transplants
Excluded services	Rehabilitation Most psychiatric care Sub-acute Administrative days Blood factors Donor search	Chemical dependency detoxification		Behavior modification Remedial education Psychological testing Alcoholism and drug abuse therapy	Transplants, including acq. (negotiated) Psych, rehab, D&A in freestanding or DPUs Psych partial hospitalization Observation	Psych and rehab in freestanding or DPRs
Included Medicaid	Fee for service	Fee-for-service	Fee for service	Fee for service	Fee-for-service	Fee for service and CHIP

Category	California	New York	Texas	Virginia	Pennsylvania	Illinois
programs	California Children's Services (CCS) Genetically Handicapped Persons Program (GHPP)	Managed care Workers comp No fault	Primary care case management			
Excluded Medicaid programs	Managed care	None listed	Managed care	None listed	Managed care, but required to pay out-of-network using predecessor AP-DRG model	Managed care
DRG Grouping						
Groupers	APR (planned for implementation 7/1/2013)	APR	APR (effective 9/1/2012)	AP	APR	APR
Relative weights	National weights adjusted (re-centered) for CA casemix	New York specific	Texas specific	National	Adopted New York weights, adjusted (re-centered) for PA casemix	National weights adjusted (re-centered) for Illinois case mix
Provider Base Rates						
Provider groupings with separate standard base rates	Remote rural All other	Single common base rate	Single common base rate	Single common base rate, but separate rate for State Teaching Hospitals	Single statewide operating rate (excludes capital and medical education)	Long-term acute care hospitals All other hospitals
Base rate adjustments	Medicare wage indices	Hospital's labor costs wage equalization factor (WEF) and each hospital's GME costs using updated cost basis and formula	Geographic wage adjustment Medical education Trauma designation	Medicare wage indices Rural hospitals - Medicare wage index of the nearest metropolitan wage area or the effective Medicare wage index, whichever is higher Adjustment for medical education	Adopted Medicare wage index adjustment if hospital's Medicare index exceeded 1.0. If below 1.0, no adjustment.	Geographic wage adjustments using Medicare values and method Adjustments for critical access and specialty providers are maintained through legacy supplemental payments outside of DRG model – but will be phased out over time.
Pricing Rules						
Policy adjustors	1.25 for pediatrics 1.25 for most neonates 1.75 for neonates at a facility operating a	None	None	None	Provider-specific teaching hospital adjustments of either 5% (Teaching) or 10%	Yes – for critical access hospitals only – value TBD. No other policy

Category	California	New York	Texas	Virginia	Pennsylvania	Illinois
	certified NICU surgery unit				(Advanced Teaching). Designations based on Medicare resident of bed ratio – Advanced Teaching above average ratio, Teaching below average ratio. Provider-specific adjustments based on Medicaid utilization ranging from 0% to 20%.	adjustors, but enhanced funding for specialty services (children’s, neonatal, pediatric, etc.) are accommodated through legacy supplemental payments made outside of the DRG model. Supplemental funding will be gradually incorporated into DRG model over time, and may be replaced with additional policy adjustors.
Transfer payments	<p>Calculation for acute-to-acute transfers:</p> <p>Lesser of [DRG base payment] and $\{([DRG \text{ base pymt}] / [DRG \text{ ALOS}]) * (LOS + 1)\}$</p> <p>No acute-to-post-acute transfer payment reductions</p>	<p>Calculation for acute-to-acute transfers:</p> <p>Lesser of [DRG base payment] and $\{([DRG \text{ base pymt}] / [DRG \text{ ALOS}]) * LOS\}$</p> <p>No acute-to-post-acute transfer payment reductions</p>	<p>Calculation for acute-to-acute transfers:</p> <p>$\{([DRG \text{ base pymt}] / [DRG \text{ ALOS}]) \text{ times the lesser of } \{[DRG \text{ ALOS}], [\text{claim LOS}], \text{ and } [30 \text{ days}]\}$</p> <p>No acute-to-post-acute transfer payment reductions</p>	<p>Calculation for acute-to-acute transfers:</p> <p>Lesser of [DRG base payment] and $\{([DRG \text{ base pymt}] / [DRG \text{ ALOS}]) * LOS\}$</p> <p>No acute-to-post-acute transfer payment reductions</p>	<p>Calculation for acute-to-acute transfers:</p> <p>Lesser of [DRG base payment] and $\{([DRG \text{ base pymt}] / [DRG \text{ ALOS}]) * LOS\}$</p> <p>No acute-to-post-acute transfer payment reductions</p>	<p>Calculation for acute-to-acute transfers:</p> <p>Lesser of [DRG base payment] and $\{([DRG \text{ base pymt}] / [DRG \text{ ALOS}]) * (LOS + 1)\}$</p> <p>No acute-to-post-acute transfer payment reductions</p>
Provider loss outliers?	Yes, cost based	Yes, cost based	Yes for recipients under age 21 only, and based on either cost or length of stay. If both apply on a single claim, the higher outlier amount is paid.	Yes, cost based	Yes, cost based	Yes – cost based
Provider loss outlier threshold(s)	Two thresholds: tier 1 threshold \$30,000, tier	By DRG and adjusted by provider wage	Variable – greater of [1.5 times DRG base	\$26,000, adjusted in the base year so as to	\$30,000	\$22,385

Category	California	New York	Texas	Virginia	Pennsylvania	Illinois
	2 threshold \$100,000	equalization factor	payment] and [11.14 times hospital base price]	result in expenditures for outliers operating payments equal to 5.1% of total operating payments for DRG cases.		
Provider loss outlier marginal cost percentage(s)	60% for losses between tier 1 and tier 2 thresholds; 80% for losses above tier 2 threshold	100%	60%	80%	100% for neonatal and burn cases; 80% for all other services	80 % marginal cost factor
Provider gain outliers?	Yes, cost based	No	No	No	Yes, cost based	Under consideration
Provider gain outlier threshold(s)	\$30,000	n/a	n/a	n/a	\$30,000	
Provider gain outlier marginal cost percentage(s)	60%	n/a	n/a	n/a	80%	
Interim claims	Paid via per diem if length of stay is > 30 days		Yes, but only one accepted per hospital stay.	Yes	No	Yet to be determined
Charge cap	Currently undecided				Yes	Currently undecided
Medicare/Medicaid dual eligible pricing comparison logic	Yes	Yes	Yes	No	Yes – lesser of payment difference or deductible/copay amount	Proposed but not in effect
Implementation Items						
Transition strategy	Limit gain and loss to 5% per year for first 3 years (maximum is 15% in third year). Full implementation in year 4.		None (Moving from MS-DRG to APR-DRG)		No transition period	Considering a transition similar to California
Documentation and coding adjustment	0.5% real casemix increase yearly between simulation dataset and implementation 2.5% anticipated casemix change from improved				1% real casemix increase yearly between simulation dataset and implementation No prospective adjustment in anticipation of documentation and	0.8% real casemix increase yearly between simulation dataset and implementation 5% anticipated casemix change from improved

Category	California	New York	Texas	Virginia	Pennsylvania	Illinois
	documentation and coding				coding with plan. Documentation and coding improvement proved to be significant in the first year of implementation.	documentation and coding with plan to redistribute money to hospitals if documentation and coding improvement is over estimated.