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Rhode Island Nursing Facility Payment Method Policy Design Document

Report to the Rhode Island
Executive Office of Health and Human Services

June 19, 2012
DRAFT



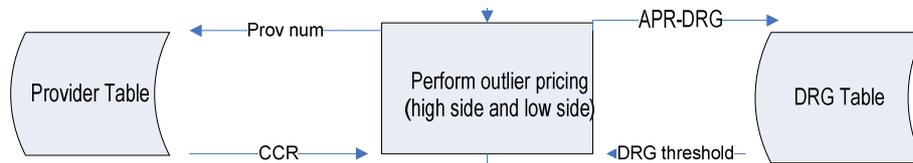
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For further information, contact Doug Kent, MMIS/Project Manager at SCDHHS regarding questions on the project overall (kentdoug@scdhhs.gov, 803-898-0824) or Kevin Quinn, Vice President of Payment Method Development at ACS regarding technical questions (kevin.quinn@acs-inc.com, 406-457-9550).

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Letter of Transmittal

June 11, 2012

Elena Nicolella
Medicaid Director
Executive Office of Health and Human Services
Cranston, RI xxxx

Re: Nursing Facility Payment Method

Dear Elena:

It is my pleasure to submit this Policy Design Document to support the proposed new nursing facility payment method.

This document provides the building blocks for the new resident specific nursing facility payment method. The content of this report is based on discussions, recommendations, and tentative decisions from the Department to date. We have also used numerical examples from the Rhode Island 2010 dataset in order to make the discussion more clear. These examples should be taken as illustrative; actual values for payment rates and other aspects of the payment method will depend on decisions made by the State.

Anyone with questions may feel free to contact me at 802-683-7731 or Kathleen.martinxerox.com.

Sincerely,

Kathleen Martin

Cc Rick Jacobsen
Rhode Island Account Manager
Xerox

Summary of Business Requirements

Summary of Business Requirements				
#	Item	Description	Change from Current?	Status
A. Scope of Payment Method				
A.1	Goals of the project	Replace the cost based facility specific payment method with a RUG specific payment method		Tentative recommendation
A.2	Current payment method	Each nursing facility is paid an acuity adjusted per diem. The per diem is specific to the facility.	Change to patient specific per diem dependent on RUG category	Tentative recommendation
A.4	Key dates	Final Policy Design Document submitted: 6/25/12 System build and testing: 7/1/12 MMIS implementation: 10/1/12		Tentative recommendation
A.5	Affected providers	Included in scope of project: in-state nursing facilities	No change	Tentative recommendation
A.6	Affected claims	Applies to nursing facility claims submitted on the UB-04 claim form or ANSI ASC X12N 837 Institutional transaction.	No change	Tentative recommendation
B. Payment Calculations				
B.1	Overview of calculations	Key payment formulas for the new payment method include: <ul style="list-style-type: none"> RUG Base Payment = RUG relative weight x Direct Care base rate Provider base rate= statewide price for other care+ provider price for capital and taxes+ policy adjustors Allowed amount = RUG base payment + provider base rate 		Tentative recommendation
B.2	Casemix measurement	Measured using Resource Utilization Group software. <ul style="list-style-type: none"> Available from CMS. Latest version available at implementation, with updates as available thereafter 		Tentative recommendation
B.3	Relative weights	The national weights do fit the Rhode Island data well. We recommend that the Department simply adopt the weights that are provided in the grouper for Medicaid. A new reference table needs to be built to accommodate RUG information	New table for RUG descriptions and weights	Tentative recommendation

Summary of Business Requirements				
#	Item	Description	Change from Current?	Status
B.4	Policy adjustors	There are two policy adjustors potentially applicable to each facility base rate. The Department has not decided whether to track these separately in the MMIS.	Potential new fields in the provider rate file	Tentative recommendation
C.	RUG Payment Components			
C.1	Direct Care rate	Use a statewide price for Direct Care. This is the factor that is impacted by the RUG weight.	New pricing component	Tentative recommendation
C.2	Provider base rate	The provider base rate includes all the pricing factors that are not adjusted for acuity, with the possible exception of policy adjustors. Policy adjustors may be tracked as a separate rate component.	Change in how provider rate is used in calculation of allowed amount	Tentative recommendation
C.3	Provider assessment	The patient specific payment must be adjusted by x.xx% for the provider assessment as an additional step in calculating the allowed amount.	New method of accounting for provider assessment	Tentative recommendation
D.	MDS Records and the RUG Grouper			
D.1	MDS Assessments	Summary and analysis of Medicare's HAC & POA policy	MDS records are currently collected	Tentative recommendation
D.2	RUG Grouper		New tool	Tentative recommendation
D.3	Recipient RUG assignment		New field on the recipient file, date sensitive, with the RUG category.	Tentative recommendation
D.4	MMIS implications	<p>3M will update APR-DRG grouper to include HAC functionality to support compliance with reduced interim payment of claims and allow calculation of costs to be excluded from year end settlements.</p> <ul style="list-style-type: none"> • New field to capture and report DRG without the HAC for affected claims • New valid value of blank for POA valid values • New edit based on diagnosis set to suspend claims with secondary diagnosis in the E8700-E8799 for review by the Department for potential payment disallowance • For codes E8765-E8767, set diagnosis code edit to suspend for review by the Department and deny payment for erroneous surgeries 	Changes in adjudication logic, new field, new valid value, reporting	Tentative recommendation
D.5	Future policy directions	Consider opportunities for future pay for quality initiatives, e.g., PPCs, PPRs or other state-defined measures	No change	Tentative recommendation

Summary of Business Requirements				
#	Item	Description	Change from Current?	Status
E	Implementation			
E.1	Training for hospital, fiscal agent and SCDHHS staff	Hospital education sessions currently planned by the Department and the hospital association to occur in April and May. Introduction via conference call scheduled for April 14, 2011 Sessions in Charleston, Greenville, Florence, and Columbia to be scheduled May 2011 Training session for SCDHHS and/or Clemson staff are also planned for the same timeframe		Tentative recommendation
E.2	Policy documentation	Policy documentation changes identified for state plan and provider policy manuals.	Change	Tentative recommendation
E.3	Policy updates and file maintenance tasks	Recommendations for updates related to the new payment method include: <ul style="list-style-type: none"> • DRG grouper to be updated each year to the current version, except for the year prior to ICD-10 • Relative weights to be updated annually at the same time as the DRG grouper is updated • Policy adjustors, if used, to be reviewed annually to determine whether they remain appropriate • DRG discharge rates to be analyzed and updated annually as needed based on Medicaid budget/funding allocations/targets and historical utilization. Recommend this occur in conjunction with DRG grouper updates to account for changes in relative weights. 	Change	Tentative recommendation
E.4	Post-payment Review	Recommended post-payment review activities for the new payment method are summarized under this section		Tentative recommendation
E.5	Frequently asked questions	FAQ document will be made available to interested parties and updated as needed. Recommended uses: post to SCDHHS website, education and training material for hospitals, state and Clemson staff		Tentative recommendation
F	MMIS Implementation			
F.1	Systems considerations	Potential MMIS impacts summarized under this section.	Change	Tentative recommendation
F.2	Systems testing considerations	Potential testing scenarios will be provided as a separate document		Tentative recommendation
F.3	Payment policy flow chart	A flow chart shows how claims will be edited and priced under the new payment method	Change	Tentative recommendation
F.4	Pricing formulas	Pricing formulas are listed under this section	Change	Tentative recommendation
F.5	Pricing examples	Examples of different pricing calculations are shown under this section	Change	Tentative recommendation

Summary of Business Requirements				
#	Item	Description	Change from Current?	Status
H.7	Data dictionary	This table lists the data fields (existing and new) that will be used by the new payment method	Change	Tentative recommendation
H.8	Inpatient edits (current and new)	A new edit will be needed to flag those claims where the DRG assignment was affected by the HAC adjustment. Recommend review and testing of edits related to error DRGs and present-on-admission valid values.	Change to add a new edit	Tentative recommendation
H.10	Other systems considerations	Other systems design considerations are summarized under this section		Tentative recommendation
Attachments				
A.1				
A.2				
A.3				

A Scope of Payment Method

A.1 Goals of the Project

In proposing a new payment method for hospital inpatient care based on All Patient Refined Diagnosis Related Groups (APR-DRGs), the Department's goals are to:

- Replace the obsolete CMS-DRG grouping algorithm with a modern grouping algorithm more suitable to the needs of the Rhode Island Medicaid population
- Enable payment for quality, in particular not paying for specific "never events" and hospital-acquired conditions
- Simplify the current payment method where possible

Based on experience in Rhode Island and other states, the new payment method can be expected to be in place for 10 to 20 years or more. Therefore the payment method structure must be robust, readily updated, and flexible enough to accommodate future changes in payment policy with as few changes as possible to MMIS logic.

A.2 Current Payment Method

The current payment method may be summarized as cost reimbursement, with interim payments made on a DRG basis.¹ Almost all hospitals in Rhode Island, as well as one hospital in Georgia, are reimbursed for allowable cost, as determined through reviews and audits of cost reports submitted by the hospitals. The following short term psychiatric hospitals and long-term acute care hospitals are paid by DRG but not cost-settled:

Short-term psychiatric hospitals:

- Carolina Center for Behavior Health (A00806)
- Palmetto Low Country, DHS (A00729)
- Three Rivers Centers for Behavioral Health (A00808)
- Lighthouse Care Center (A00851)

Long-term acute care hospitals:

- North Greenville (A00853)
- Inter-Medical Hospital of Rhode Island (A76000)

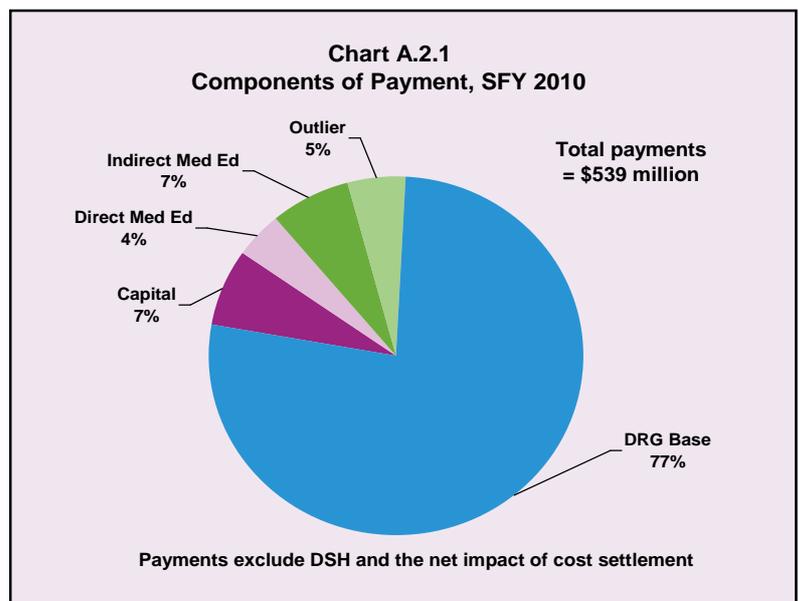
This project is not making any changes to the fundamental structure of cost reimbursement. Rather, the changes are to the DRG-based method that is used to pay hospitals in the interim before cost settlement.

Currently, DRG-based payment is calculated using the Version 24 of the CMS-DRG algorithm that became obsolete when Medicare moved to MS-DRGs on October 1, 2007. A key goal of this project is to replace the CMS-DRG algorithm with an updated and more suitable algorithm, APR-DRGs.

As a general statement, the current payment method is also very complex. Another key goal of the project is to make simplifications where appropriate. Table A.2.1 summarizes how DRG-based

payments were made in SFY 2010. Chart A.2.1 shows the components of payment. As shown in Table A.2.1, the reimbursement calculations were as follows.

- **Straight DRG.** For 73% of stays, payment is calculated as the DRG discharge rate times the DRG relative weight. Unlike most DRG payers, Rhode Island uses different DRG discharge rates (also known as DRG base prices in other states) for each hospital. These discharge rates are recalculated each year so that interim payments will approximate final cost-based payments for each hospital.
- **Per diem DRG.** There are 538 CMS-DRGs, but only 320 are paid using a DRG, that is, on a case basis. Three DRG categories (neonatal intensive care, psychiatric and rehabilitation) that comprise 16 CMS-DRGs are paid on a per diem basis, as are 202 low-volume DRGs where calculated relative weights may not be a stable reflection of relative resources needed to care for patients. About 14% of stays are paid based on a per diem basis.
- **Cost outliers.** For SFY 2010 and in addition to the DRG payment, Rhode Island made cost outlier payments (reimbursement type C) to hospitals totaling approximately \$24.7 million or 5% of total payments.
- **Day outliers.** In the SFY 2010 analytical dataset, 683 or 1.0% of stays were paid as day outliers because the recipient's covered length of stay exceeded the day outlier threshold for the applicable DRG. These payments are on top of the DRG payment.
- **Transfer stays.** When a patient is transferred from one acute-care hospital to another, payment to the transferring hospital is reduced if the actual length of stay is less than half the average length of stay for that DRG. Transfer cases (with cost and day outlier variations) account for fewer than 2% of the total stays.
- **Partial eligibility.** When a patient has Medicaid fee-for-service coverage for less than the full length of stay, payment is reduced in proportion to the number of days covered by Medicaid. This affects fewer than 1% of stays.
- **One day stays.** There were 5,157 one-day stays totaling \$14.5 million in payments in SFY 2010. One day stays are paid per diem with payments reduced based on the average length of stay for the DRG.
- **Same day stays.** Same day stays are paid at half the single day DRG payment. As with one-day stays, the cutback logic is not applied to transfer stays, stays where the patient died, or stays for normal deliveries, false labor, or normal newborns. There were 652 same day stays in SFY 2010.
- **Capital payment.** Approximately 7% of total payments in SFY 2010 represented payment for capital.



- **Payment for medical education.** Direct and indirect medical education add-on payments to teaching hospitals represented approximately 11% of total payments for SFY 2010.
- **Out-of-state hospitals.** In general, DRG-based payment is final for out-of-state hospitals, with no cost settlement. Doctors' Hospital of Georgia is the only exception.
- **Negotiated payments.** In exceptional circumstances (e.g., pediatric organ transplants) where only a few hospitals nationwide are capable of providing care, the Department may negotiate a separate payment level.
- **Payments to disproportionate share hospitals.** "DSH" payments are made separately from claims payments and are outside the scope of this project.

Table A.2.1 Summary by Reimbursement Type					
Reimbursement Type	Stays	Days	Charges	Estimated Cost	Baseline Payment
A - Straight DRG	47,934	167,418	\$821,128,035	\$285,678,094	\$318,118,117
P - Per diem infreq DRG	8,274	72,562	\$308,109,215	\$109,371,980	\$101,297,427
Q - PDI DRG over thresh	788	33,703	\$160,609,644	\$54,624,854	\$41,914,684
C - Cost outlier no transfer	739	16,143	\$139,918,541	\$44,448,020	\$24,733,088
D - Day Outlier no transfer	683	15,466	\$52,856,442	\$19,016,642	\$18,580,533
U - One day stay DRG	5,157	5,157	\$63,595,196	\$21,442,343	\$14,510,778
B - Transfer no outlier	1,120	5,183	\$35,471,572	\$12,470,591	\$9,717,063
R - PDI DRG part elig	57	1,214	\$14,719,747	\$4,988,040	\$2,842,910
E - Transfer cost outlier	52	1,217	\$12,635,771	\$3,880,351	\$2,234,470
H - Per diem DRG no outlier	127	673	\$6,644,856	\$2,330,330	\$1,077,781
F - Transfer day outlier	23	693	\$2,425,846	\$870,081	\$1,032,401
S - PDI DRG ovthrsh prt elig	7	578	\$3,012,929	\$818,339	\$967,057
M - Same day DRF no outlier	652	652	\$5,293,774	\$1,730,587	\$747,752
J - Per diem DRG cost outlier	22	523	\$6,291,330	\$1,828,640	\$730,351
K - Per diem DRG day outlier	4	177	\$790,545	\$217,892	\$312,845
T - PDI DRG same day stay	58	58	\$386,362	\$129,078	\$35,047
Total	65,697	321,417	\$1,633,889,805	\$563,845,863	\$538,852,303
<i>Notes:</i>					
1. "Payment" refers to the allowed amount and excludes supplementary payments to disproportionate share hospitals.					
2. Data does not reflect impact of cost settlement.					
3. Cost estimated using the most recent Medicare inpatient statewide cost-to-charge ratios for out-of-state hospitals.					
4. Cost estimated using the most recent hospital-specific inpatient cost-to-charge ratios from 2009 for in-state hospitals provided by SCDHHS.					

A.5 Affected Providers

Included in the scope of project are all Medicaid licensed nursing facilities in Rhode Island. The new payment method does not apply to out-of-state facilities.

A.6 Affected Claims

Within the nursing facility provider type, the new payment method will apply to nursing facility claims submitted on the UB-04 claim form or ANSI ASC X12N 837 Institutional transaction.

- Included in the scope of project: All fee for service nursing facility claims
- Excluded from the scope of project: managed care stays

Table A.7.1 Overview of Payments							
	Claims	Days	Charges	Estimated Cost	Allowed	Claims	Pay-to-Cost
SC general acute care hospital	62,277	302,637	\$1,535,302,778	\$528,437,419	\$506,338,330	33%	96%
Border hospital	2,788	16,072	\$86,195,776	\$30,656,521	\$28,816,396	33%	94%
Out-of-state hospital	661	2,847	\$12,753,779	\$4,890,559	\$3,798,183	30%	78%
Total	65,726	321,556	\$1,634,252,333	\$563,984,500	\$538,952,909	33%	96%
<i>Notes:</i>							
1. "Payment" refers to allowed amount and excludes supplementary payments to disproportionate share hospitals as well as the net impact of cost settlement.							
2. Border states are Georgia and North Carolina, including the cities of Savannah, Charlotte and Augusta.							

Table A.7.1.1 Overview of Payments, Averages Per Stay			
	Days	Charges	Estimated Cost
SC general acute care hospitals	4.9	\$24,653	\$8,485
Border hospitals	5.8	\$30,917	\$10,996
Out-of-state hospitals	4.3	\$19,295	\$7,399
Total	4.9	\$24,865	\$8,581

B Payment Calculations

Prospective payment methods, such as payment methods based on Diagnosis Related Groups, may be summarized by the mnemonic “groups, weights, rates, and rules.” In this Section B we describe how stays will be grouped and then how a relative weight will be calculated for each DRG. In Section C we describe how the relative weights are converted into payment rates. In Sections D and F we describe various other “rules” that apply within the payment method, such as payment for transfer stays and requirements for prior authorization.

B.1 Overview of Calculations

Recommended payment for each stay consists of calculations using the following key formulas, where an asterisk indicates “if applicable.” Over 90% of stays are expected to be paid as straight RUG claims – that is, with a single RUG category for a patient for the dates of service on the claim. See Pricing Example 1 in Section H.6.

(B.1.1) Direct Care Base Payment = RUG Relative Weight x statewide Direct Care rate

(B.1.2) RUG Payment = Direct Care Base Payment + Provider specific base rate+ policy adjustor*+quality adjustor*

B.2 Casemix Measurement

The heart of a RUG payment method is the RUG grouping algorithm itself. DRGs define the “product of a hospital,” so an appropriate DRG grouper must do a good job categorizing the incredible range of inpatient activities into a tractable number of groups, each of which includes patients similar both clinically and in terms of hospital resources required for their care. To take an extreme example, categorizing all newborns into a single DRG would obviously be inappropriate both clinically and in terms of hospital resources. When DRGs are used for payment, inaccuracies in the DRG algorithm may not have immediate impacts but they can have major impacts over time. To continue with the example of a single DRG for all newborns, the impact would be to make neonatal intensive care units financially disastrous for hospitals, with subsequent impacts on access to care.

B.2.1 Applicability to Paying for Quality

At the national level, there has been considerable interest in measuring and incentivizing provision of quality care, especially with regard to minimizing potentially preventable readmissions and complications of inpatient care. Similarly, there has been much discussion of possibly bundling episodes of inpatient and related outpatient care. While discussion of these topics is beyond the scope of this project, we do believe that such initiatives must include accurate risk adjustment. For example, simple counts of readmissions are unfair to hospitals that have significant numbers of readmissions that are not potentially clinically related to the original admission. At this time, APR-DRGs have been used more widely than any other DRG algorithm to risk-adjust measurements of quality and therefore are more likely than other algorithms to be suitable in the

future. As noted above, they are certainly more applicable for risk adjustment in a Medicaid population than MS-DRGs.

B.2.2 Results of APR-DRG Grouping

The 65,726 stays in the analytical dataset were prepared for grouping using APR-DRG V.28. The most important task was to check that 566,077 diagnosis and procedure code values were valid for the dates of service. Although an invalid value in the principal diagnosis field will generate an error APR-DRG, invalid values in other fields are simply ignored by the grouper. Therefore, validity of all values needs to be checked. Overall, only about 40 values were invalid and needed to be corrected, usually by adding a fifth digit to reflect updated values in the ICD-9-CM codeset.

Of the 65,726 stays, 29 grouped to an error APR-DRG. There were 26 claims in APR-DRG 955-0 (Principal Diagnosis Invalid as Discharge Diagnosis), and three claims in APR-DRG 956-0 (Ungroupable). Most of the error stays involved newborns, especially when the principal diagnosis started with V30 (live newborn) but the date of admission was not the date of birth. When the new payment method is in production, a hospital receiving notification of an error DRG will be expected to correct the claim and re-submit (as is true today).

All of the 29 error stays were otherwise very typical, that is, there were no stays that generated unusually large payments when originally paid. These 29 stays, representing 0.04% of the analytical dataset, were therefore removed from further analysis. For purposes of the remainder of this document, the analytical dataset now comprises 65,697 stays. Table B.2.4.1 shows the top 50 APR-DRGs in terms of total baseline payment in SFY 2010 (that is, as paid under the current methodology, not the new methodology). Attachment A.1 provides more detail for every APR-DRG, ranked first in declining order of total stays and then ranked sequentially.

B.2.3 MMIS Implications

The most significant implication for the MMIS is that an APR-DRG is a four-byte field while a CMS-DRG is a three-byte field. This is expected to result in the DRG field being widened throughout the MMIS.

The APR-DRG is in the format 123-4, where the first three bytes indicate the base APR-DRG. The hyphen can be implicit in the MMIS. The fourth byte indicates the severity of illness for a given DRG. For example, APR-DRG 139-1 is pneumonia, severity 1, while APR-DRG 139-2 is pneumonia, severity 2. The APR-DRG software returns the base DRG and the severity of illness as separate fields. These fields should be concatenated for use in subsequent APR-DRG processing, e.g., for use as a key field in looking up the relative weight from the DRG table.

There are 314 base DRGs, each with four levels of severity, for a total of 1,256 APR-DRGs. There are also two error DRGs. For the error DRGs, the 3M software shows the base DRG as 955 (Principal Diagnosis Invalid as Discharge Diagnosis) or 956 (Ungroupable). It does not show a severity of illness. In the MMIS, these DRG values can be shown as 955 and 956 or 955-0 and 956-0, whichever is easier for processing purposes. The grouper software also provides a “return code” that indicates why the claim may have grouped to an error DRG. Currently, the MMIS uses return codes from the CMS-DRG software to generate reason and remark codes to advise the hospital that the claim was denied due to an error DRG. The same information should be needed under APR-DRG.

B.3 Relative Weights

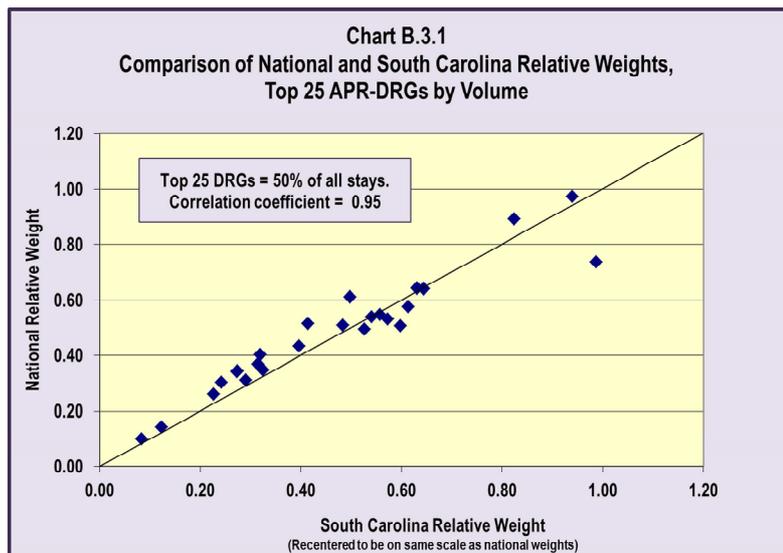
B.3.1 Basis of Relative Weights

The choices of a grouping algorithm and of a basis for relative weights are logically separate. Once a Medicaid program has chosen the grouping algorithm, the relative weights can be adopted from another payer, calculated from a national dataset like the Nationwide Inpatient Sample, or calculated by a state from its own data.

For every payer, there are two challenges in calculating DRG weights. The first is the effort necessary to regularly update and recalibrate the set of DRG weights. The second is that a substantial number of DRGs can have unstable relative weights because these DRGs occur infrequently. By “unstable,” we mean that the relative weight can bounce around from year to year due to the presence or absence of one or two unusual stays. (That is, the law of large numbers, which says that a sample average is more stable when it is based on a large number of stays, does not apply.)

Currently, Rhode Island defines stable weights as those for DRGs with at least 30 stays or those with 22 to 29 stays and a coefficient of variation of less than 200%.² (The coefficient of variation, or CV, equals the standard deviation divided by the mean. Higher values indicate greater variation in the cost of a stay within a DRG.) Under the Department’s current payment method, 202 CMS-DRGs do not meet the stability criteria and are therefore paid on a per diem basis.

Although the ACS payment development team usually uses slightly different and more stringent criteria (at least 30 stays and a relative standard error of less than 30%) the Department’s criteria are perfectly reasonable and we do not recommend a different approach.³



Using the Department’s criteria, 414 of the 1,256 APR-DRGs would be defined as having stable relative weights. For 103 APR-DRGs, there was no volume at all in the analytical dataset. There are ways to deal with the issue of unstable weights but one simple solution is to use relative weights calculated by someone else from national data. The essential caveat, of course, is that the national weights would have to be accurate for the Rhode Island dataset.

To analyze this question, we calculated both cost-based and charge-based weights from the Rhode Island analytical dataset. Although weight calculation can be an esoteric topic, in essence it is very simple. If the average cost of a stay in DRG 123 is \$15,000 and the overall average cost per stay is \$10,000, then the relative weight of DRG 123 is 1.50. Refinements can be made by trimming extreme stays from the dataset, but such refinements would not affect the results discussed here. As expected, Rhode Island cost-based and charge-based weights were virtually identical. We

therefore compared Rhode Island cost weights with national charge-based APR-DRG weights. The national weights are calculated by 3M Health Information Systems from 7.9 million stays in the Nationwide Inpatient Sample. As shown in Chart B.3.1, there is a very high degree of correlation ($r=0.95$) between the two sets of weights for the 25 most common DRGs. This degree of correlation extends to other, less common DRGs.⁴ This finding echoes our findings from Medicaid data in Mississippi, Montana, North Dakota and Rhode Island. In each of those states, Medicaid chose to use national weights and save itself the effort of recalibrating weights every year. New York Medicaid, on the other hand, is an example of a state that chose to calculate its own APR-DRG relative weights, with the implication that it must continue to re-calculate weights on a regular basis.

Because the national weights do fit the Rhode Island data well, we recommend that the Department simply adopt the updated 3M relative weights every time the APR-DRG grouper is updated.

Throughout the rest of this report, the terms “relative weight” and “casemix” may be used interchangeably. For convenience, we usually use “relative weight” when referring to payment calculation and “casemix” when referring to average patient severity. For example, we say that Hospital A has a higher casemix than Hospital B.

B.4 Policy Adjustor

A policy adjustor is an explicit adjustment to a relative weight in order to boost payment for a range of DRGs, usually in order to encourage access for categories of care where Medicaid represents a significant portion of the market. Because Rhode Island uses hospital-specific DRG discharge rates, policy adjustors may be unnecessary.

If the Department decides to use policy adjustors in the future, these adjustments are made to the relative weights before they are loaded into the MMIS. In general, we recommend that policy adjustors be few in number, apply to entire Medicaid Care Categories, and be initiated for compelling policy reasons, e.g., to enable access for care where Medicaid payment levels can have substantial impact. We recommend against tinkering with relative weights for individual APR-DRGs.

C DRG Discharge Rate

C.1 DRG Discharge Rate

Payment based on APR-DRGs will continue to reflect hospital-specific discharge rates, just as payment based on CMS-DRGs has done so. The hospital-specific discharge rates are set with the goal of making interim DRG-based payment as close as possible to final payment based on allowable cost as determined by the Department.

Readers of this document will note that the term “discharge rate” is also referenced in other contexts as the DRG base price or the Medicare standard amount.

C.2 Budget Neutrality

For the design of the payment method, we propose a budget neutral target overall and plan to base it on FY 2010 claims data. For implementation, the goal is to adjust rates in order to achieve budget neutrality for each hospital relative to what would have been paid in RY 2012 under the current method.

C.3 Documentation and Coding Adjustment

On October 1, 2011, hospitals will continue to be paid casemix-adjusted prospective payment rates, but casemix will now be measured using APR-DRGs rather than CMS-DRGs.

Recall from Section B.3.1 that the average relative weight of all Medicaid stays at a given hospital is referred to as the hospital’s casemix. Total payment equals the number of stays times casemix times the base price, although various adjustments can also have an impact.⁵ Other things equal, a 1% increase in measured casemix will result in a 1% increase in payment.

Measured casemix may increase because of “real” changes in patient clinical conditions or because of improved documentation and coding on the claim form.⁶ Payers such as Medicare typically want to pay for increases in real casemix but not for changes due to improved documentation and coding. The small but focused literature on this topic reflects consensus that real casemix change is about 0.5% to 1.5% a year, most likely at the lower end of the range.⁷ Payers therefore may make a “documentation and coding adjustment” that reduces the DRG discharge rate in anticipation of casemix increases due solely to improved documentation and coding.

More refined DRGs increase the need for improved documentation and coding. For Medicare, the number of DRG groups increased from 538 to 745 when MS-DRGs were implemented. For Rhode Island Medicaid, the number of DRG groups will increase from 538 to 1,256 when APR-DRGs are implemented effective October 1, 2011. More refinement will provide additional financial incentive to hospitals to improve documentation and coding, especially in areas where Medicaid is a major payer such as neonate, obstetrics, pediatrics, and mental health. Currently, for example, coding additional diagnosis and/or procedure codes has no incremental effect on payment for neonate cases.

In April 2011, ACS will provide a recommendation of an appropriate documentation and coding adjustment to the discharge rate.

D Other Factors in Payment Calculation

D.1 Special Payments

Currently, three DRG categories are paid on a per diem basis as a matter of policy: sick newborns, behavioral health, and rehabilitation.⁸ This payment policy affected 11% of stays and 12% of payments in SFY 2010 (Table D.1.1). (As well, per diem payment is used for low-volume DRGs as described in Section B.3.) This decision, which presumably dates back to the original implementation of DRGs by Rhode Island, is similar to policies put in place by other states that used CMS-DRGs. For sick newborns, it was always well-known that CMS-DRGs were inappropriate measures of hospital resources.⁹ For behavioral health and rehabilitation, meanwhile, Medicare itself has never had a consistent approach. Initially, these stays were paid on cost reimbursement principles if they occurred within a freestanding specialty hospital or a designated distinct-part unit of a general hospital. Otherwise, they were paid by CMS-DRG. Today, Medicare uses separate prospective payment methods for specialty hospitals and distinct-part units and MS-DRGs for all other stays. Rhode Island was hardly alone in carving out these three categories from an overall DRG-based approach.

- Neonatal intensive care.** Going forward, we recommend that neonatal stays be paid using APR-DRGs. The grouper logic was developed by 3M Health Information Systems and the National Association of Children’s Hospitals and Related Institutions, in significant part because Medicare DRGs were so inaccurate for neonatal care. Instead of four to six neonatal CMS-DRGs (depending how you count them) for neonatal care, there are 104 neonatal APR-DRGs, plus another eight for normal newborns. The APR-DRG logic uses birthweight, which has been shown to be a reliable predictor of hospital resource use. Other APR-DRG states, such as New York, Maryland, Montana, and Rhode Island, all pay for neonatal care on a case basis rather than a per diem basis.

	Stays	Days	Charges	Est. Cost	Baseline Payment
Behavioral health	4,754	23,621	\$111,865,525	\$38,045,451	\$35,023,145
Neonate (sick newborns)	2,000	20,464	\$105,351,515	\$35,889,688	\$28,402,228
Rehabilitation	360	1,563	\$11,224,594	\$3,731,108	\$3,114,349
Subtotal	7,114	45,648	\$228,441,634	\$77,666,246	\$66,539,722
Total (all stays)	65,697	321,417	\$1,633,889,805	\$563,845,863	\$538,852,303
As % of total	11%	14%	14%	14%	12%
<i>Note:</i>					
1. For purposes of this table, categories were defined using Medicaid Care Categories. Behavioral health includes both psychiatric and substance abuse.					

- **Behavioral health stays.** In the analyses of hospital payment that we do for Rhode Island and other states, we always pay extra attention to behavioral services, for two reasons. First, access to behavioral health care, especially for children, is always an important policy issue for Medicaid. Second, DRG-based methods sometimes need special provisions to pay appropriately for mental health.¹⁰ As seen in Table B.1.7.1, behavioral health payments totaled \$24.9 million, or 4.6% of all payments. (These figures exclude payments to freestanding long-term behavioral health facilities, which are outside the scope of the APR-DRG project. Behavioral health includes both psychiatric and substance abuse.)

Payers differ in how they pay for behavioral health stays. Medicare, for example, pays per diem for the two-thirds of stays that are provided in distinct-part psychiatric units (either freestanding or within general hospitals) and per stay using DRGs for the one-third of stays that are provided in other units of general hospitals. We recommend payment per stay for Rhode Island, partly in the interest of consistency with the rest of the payment method and partly because experience has shown that hospitals can manage average length of stay. APR-DRGs have also shown to perform better than other DRG algorithms for behavioral health stays. The current system clearly provides financial rewards for long lengths of stay, which implies there may be room to reduce average length of stay and create more capacity in the state's mental health care system.

That said, appropriate payment for behavioral health care is a complex and important issue. Therefore, we additionally recommend monitoring behavioral health stays after implementation of the new payment method in order to identify future trends and potential need for adjustments such as a policy adjustor (Section B.4) or other protections.

- **Rehabilitation stays.** In implementing new inpatient payment methods, questions typically arise about payment for rehabilitation stays. Rehab, like inpatient mental health care, is something of a special topic for Medicare, which applies separate payment methods depending on whether the setting is a general hospital bed (on the one hand) or a distinct-part unit or freestanding facility (on the other hand). However, unlike mental health care, rehab is a small portion of Medicaid hospital payments and Medicaid is a small portion of rehab center revenue. In SFY 2010, rehab represented just 0.9% of total payments in the analytical dataset. Accordingly, the effort to develop and implement a separate payment method for rehabilitation stays is not justified by the potential benefits. If an adjustment to payment becomes necessary, we recommend that this be done through policy adjustors on the rehabilitation DRGs. (See Section B.4.)

D.6 Partial Eligibility

When a patient has Medicaid fee-for-service coverage for less than the full length of stay, it may be appropriate to pro-rate the payment. Currently, Rhode Island MMIS compares the covered days to the days on the claim and calculates the percent. The percent is then applied to the DRG payment.

(D.6.1) Partial eligibility base payment = DRG Payment * (Medicaid covered days / LOS)

Our recommendation is to continue the current payment policy. Please refer to corresponding pricing examples 5, 6, and 12 in Section H.5.

D.9 Payments for Capital (FRV) and Property Taxes

Some states include payment for capital within the broader DRG base price (and include it in the statewide and hospital specific CCRs) while others have paid it separately on a hospital-specific basis. Medicare takes a third approach—it does not pay capital on a hospital-specific basis but does have separate DRG discharge rates (in our terminology) for both capital and operating components.

As background, services that would be covered by the DRG payment method represent approximately 6% of statewide hospital cost.¹¹ Capital costs represent about 8% of total cost in the Rhode Island hospital industry.¹² Therefore separate payment for capital “pays” for about 0.48% (0.06 x 0.08) of overall hospital costs. This is too small to have any impact on hospital decision-making, assuming that Medicaid wishes to influence hospital decisions about capital spending. In fact, Medicaid may not wish to have any impact on internal hospital decisions about incurring capital costs vs. operating costs. Such a stance would be consistent with the philosophy that DRG payment represents “a price for a product.” As with consumers buying cars, the idea is that the purchaser pays for the car and leaves it up to the manufacturer to decide how to incur cost to produce the car.

In the interest of minimizing complexity and maintaining consistency with the DRG approach overall, we recommend that capital payments not be made separately. Instead, the hospital-specific DRG discharge rates would be calculated so that they are budget-neutral to what the sum of operating and capital payments would have been under the current method.

This change could be implemented in the MMIS simply by loading all hospital-specific capital payment values as zero. No changes to adjudication logic should be necessary.

D.12 Prior Payments and Cost Sharing

In general, Medicaid programs calculate the allowed amount for a service and then subtract two dollar quantities in determining the reimbursement amount, that is, the actual payment to the provider. The two quantities are:

- **Prior payments.** If BlueCross BlueShield of Rhode Island or some other third party is liable for some portion of the claim, then that portion is subtracted from the allowed amount.
- **Cost-sharing.** Cost-sharing comprises copayments, coinsurance and deductibles—that is, the various payments that a beneficiary makes to share in the cost of the service received. At this time, fee-for-service hospital inpatients are subject to a \$25.00 cost-sharing payment per admission in Rhode Island, within certain exemptions defined in law.

Some states also separately identify “spend-down” payments, made when beneficiaries “spend down” their own money until they are eligible for Medicaid. This amount is also subtracted from the allowed amount. Since Rhode Island does not have a spend-down program, there is no impact on the new payment method.

Because this design document addresses the determination of the allowed amount, no changes need to be made to the MMIS logic that calculates the difference between the allowed amount and the reimbursement. We recommend that prior payments and cost sharing continue to be applied under the new payment method as it is currently done for CMS-DRG payments.

D.13 Medicare Crossovers

Medicaid acts as the secondary payer behind Medicare for claims where the beneficiary has coverage under Medicare and Medicaid, i.e., is dually eligible. Payment policies for these

Medicare crossover claims differ among states. Some states pay the full Medicare coinsurance and deductible, while others apply what is commonly referred to as “lower of” pricing, limiting payment to the allowed amount paid by the specific state Medicaid program. Rhode Island uses ‘lower of’ pricing.

For crossover claims, Rhode Island pays the lower of (1) the difference between the Medicaid allowed amount and the Medicare payment, or (2) the sum of the Medicare coinsurance, blood deductible, and deductible. If the total payment by Medicare exceeds what Rhode Island Medicaid will allow for the service, there will be no payment to the provider.

Our recommendation is that Rhode Island Medicaid continue to pay Medicare crossover claims in the same manner. No changes are anticipated for the lower-of pricing logic as a result of the new payment method. Claims identified as hospital inpatient crossovers will go through the APR-DRG grouping, weighting and pricing logic to set the Medicaid allowed amount. Final payment will be calculated by applying the lower-of logic currently in MMIS. Testing crossover claims is also recommended.

E Health Care Acquired Conditions

E.4 MMIS Implications

E.4.1 Eligibility/Recipient File

Based on the previous analysis of the POA indicator, we recommend the following approach:

- Update the list of valid values to include a blank field (for situations when the codes are exempt from POA reporting)
- Verify the current POA edits to ensure proper disposition when invalid values are reported. From Table E.3.1.1, it appears that in SFY 2010 claims were processed that had invalid values.
- Ask the SCDHHS Division of Program Integrity to monitor patterns in POA values submitted by hospitals. In particular, POA indicator W for “clinically undetermined” means that a particular secondary diagnosis does not count as a hospital-acquired condition. A hospital that had unusually high numbers of W values, especially for infections and other diagnoses that can be acquired in hospital, may be inappropriately giving itself the benefit of the doubt in order to avoid payment reductions.

E.4.2 RUG Reference File

E.4.3 Direct Care Reference File/Parameter

E.4.4 Provider Rate File

F Assessment, Coding, Billing

F.1 MDS Submission

Rhode Island Medicaid requires prior authorization for some inpatient hospital services, such as for services provided out-of-state, certain diagnoses, and organ transplants. No changes are being made to PA requirements as part of this project. Nevertheless, PA logic may be affected if current requirements are put into operation through reference to specific CMS-DRG values. We believe this is unlikely, since PA requirements are typically operationalized using specific diagnosis and procedure code values. Clemson University is currently identifying all occurrences of specific CMS-DRG values in the MMIS so that these may be mapped to APR-DRG values where appropriate. Upon request, ACS will provide the crosswalk from CMS-DRG to APR-DRG so that existing PA requirements may be enforced under the APR-DRG payment method.

F.4 Medical Policy

Medicaid and other payers define benefit packages for their beneficiaries and providers, which generally, include a list of covered and non-covered services. Medical policy consists of payment guidelines for such services under the plan and is typically enforced through the claims processing system and payment editing logic based on diagnosis, procedures or other code values. For Medicaid programs, covered and non-covered services are often based on federal requirements and on state-specific coverage decisions which are also included in the State Medicaid Plan. Rhode Island Medicaid, for instance, does not cover convenience items or experimental/investigational procedures.

Medical policy editing logic and occurs in the MMIS prior to the pricing logic based on diagnosis and procedure codes. Implementation of the new payment method will have no impact on what is covered or not covered under the Rhode Island Medicaid program. Therefore, no changes are anticipated to the current medical policy logic.

F.5 Other UB-04 and X12N 837I Fields

The new payment method changes will not affect hospital billing submitted on paper (UB-04) or as an electronic transaction (X12N 837I). In particular, we see no impact on value, condition or occurrence codes, since these fields are not used in Medicaid claims processing.

F.6 Remittance Advice

We recommend that the X12N 835 remittance advice be changed to show the four-digit DRG code in the DRG field. A four-digit DRG is already a valid format.

The Department currently displays the DRG code and reimbursement type code on the paper remittance advice (RA). We recommend that the paper RA be changed to show the four-digit DRG code and the new reimbursement type values.

G Implementation

G.1 Training for Hospital, Fiscal Agent and OHHS Staff

Provider consultation and education are essential to a successful implementation. It would be appropriate to schedule trainings for nursing facility billing, assessment and financial staff. Similar trainings would also be appropriate for fiscal agent and Department staff.

Some of the materials referenced in this document will be useful in these trainings, for example:

- Frequently Asked Questions, a separate document referenced in Section G.5
- Payment Policy Flow Chart, provided in Section H.3
- Pricing Examples, provided in Section H.6

Table G.1.1 shows the expected impacts of the new payment method on hospitals.

Table G.1.1 Expected Impacts on Hospital Operations and Finances (Listed in declining order of impact)		
PDD Ref.	Item	Comment
B.2	Increased importance of diagnosis and procedure coding	Level of severity is driven by number, nature and interaction of comorbidities and complications Coding should be complete, accurate and defensible
D.2 D.3	New outlier calculations	Hospital-specific CCR to estimate case costs and a DRG-specific outlier threshold to determine if outlier payment will be made Low outside outlier policy
B.2.5	Four-byte APR-DRG code	APR-DRG = three-bytes for the base DRG and 1 byte for level of severity (format 123-4)
B.2.5	APR-DRG can be seen on electronic remit advice (835)	All four bytes will be available
D.4	Patient discharge status codes 02, 05, 66	These codes will apply to transfer cases
D.8	Patient discharge status code 05	Discontinue use of status code with acute care discharges related to administrative days
D.8	Patient discharge status code 70	New discharge status code to be used with acute care discharges followed by administrative days claiming
E.4.2	HAC diagnosis	HAC diagnosis may result in DRG payment reduction
D.2.2 D.2.3	Per diem and day outlier	Discontinue reimbursement types D, K, P, Q, R, S, and T
F.7	APR-DRG version 28 will be implemented 10/1/11	
E.4	POA indicator value blank	New value effective January 1, 2011 for exempt diagnosis codes
D.9	Payments for capital included in the DRG discharge rate	No separate payment for capital

G.2 Policy Documentation

Policy documentation includes materials related to statutory changes (e.g., proposed legislative language, fiscal impact, testimony), changes to regulation if needed, a state plan amendment and changes to provider policy manuals.

Upon request, Xerox will assist OHHS in preparation of policy documentation, in large part based on this policy design document.

G.3 Policy Update and File Maintenance Tasks

Periodic reviews, updates and maintenance—at least annually—are essential to the proper functioning of any payment method. Table G.3.1 lists the recommended tasks:

Table G.3.1 MMIS Reference Update and File Maintenance Tasks					
PDD Ref.	Payment Policy	Table	Recommended schedule	Primary Resp.	Notes
B.2.6 F.8.1	Diagnosis and procedure code mapper		Each October 1, unless grouper version is current	Fiscal agent	
B.2.6 F.8.1	APR-DRG version		Install new version each year	Fiscal agent	V.28 to be implemented 10/1/11
Att A.2	APR-DRG labels	DRG-PRICING-REC	Each time grouper version is updated	Fiscal agent	
B.3	APR-DRG relative weights	DRG-PRICING-REC	Each time grouper version is updated	Fiscal agent	
D.1 D.3 D.4 E.4 Att A.2	APR-DRG average length of stay data	DRG-PRICING-REC	Each time grouper version is updated	Fiscal agent	
D.2 D.3	APR-DRG outlier thresholds	DRG-PRICING-REC	Update annually	SCDHHS	Update thresholds for inflation even if DRG version unchanged
C.1	Hospital-specific DRG discharge rates	PPS-PROVIDER-REC	Review annually	SCDHHS	
D.2	Hospital-specific cost to charge ratio	PPS-PROVIDER-REC	Update annually	SCDHHS	CCRs tend to decline over time, so it's important to update values annually
D.2	Statewide cost-to-charge ratio				
B.2	Estimate fiscal impact of changes in grouper, relative weights, discharge rates		Each time there are significant changes in DRG version, relative weights or discharge rates	SCDHHS	
D.2 D.3	Marginal cost percentage used in outlier calculations		Review annually	SCDHHS	Current value is 60%
D.2 D.3	Percentage of payments made as high-side outliers		Review annually	SCDHHS	

G.4 Post-Payment Review

Under the previous payment method, payment was driven almost entirely by hospital-specific costs and the length of stay. It was therefore appropriate for the Department to thoroughly audit hospital cost reports, to ensure that admission was necessary and that the length of stay was the minimum that was medically necessary. Since the new payment method will continue to be based on cost reimbursement, with interim payments made on a DRG basis, and year-end cost settlements, we recommend that the Department maintain these activities after implementation.

In addition, we recommend on-going post-payment reviews to ensure the integrity of the new payment method. For example, the change in DRG algorithm may result in casemix changes driven largely by improved diagnosis and provider coding on claims.

G.5 Frequently Asked Questions

An FAQ document will be made it available to any hospital staff, state staff, and others who may be interested in this project, including during the training sessions planned for April and May 2011. Revisions to the FAQ will be made as decisions are finalized.

We also recommend making the FAQ document available to interested parties on the Rhode Island Medicaid website.

See separate document.

H MMIS Implementation

This section is not a technical systems design for the new payment method but is intended to provide some of the detail required that would be needed to create such a design.

H.1 Systems Considerations

Table H.1.1 lists recommendations in this document that are expected to affect MMIS processing.

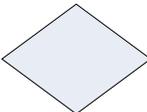
H.2 Systems Testing Considerations

Recommendations for testing scenarios will be provided as a separate document.

Table H.1.1 Summary of MMIS Impacts		
Item	Section	Comment
Changes in MMIS Adjudication Logic		
Four-byte DRG value	B.2.5	Table: DRG-PRICING-REC Also affects other locations in MMIS
Install APR-DRG V.28 (version effective 7/1/11 or 10/1/11 that includes HAC logic)	B.2.6 E.4.2	
Install 3M mapper software (version effective 10/1/11)	B.2.6	
Change cost outlier calculation to look up hospital-specific cost-to-charge ratio in provider table rather than statewide CCR parameter	D.2	May not be done, depending on level of effort for MMIS change
New field for hospital-specific CCR	D.2	Table: PPS-PROVIDER-REC
Change transfer calculation to look up discharge statuses 02, 05, and 66	D.4	Previous values were 02, 62, and 65
New field for APR-DRG without HAC adjustment	E.4.2	
New edit to identify claims where the value in the existing DRG field differs from the new Pre-HAC DRG field	E.4.2	
Add new logic for low-side outlier adjustment pricing	D.3.3	
Same-day and one-day stay cutback logic: change hard-coded values for transfer and DRG exemptions	D.3.3	See Table D.3.3.1 in particular
Changes to Table Values or Parameter Values		
New values for DRG labels	B.2	Table: DRG-PRICING-REC
New values for DRG relative weights	B.3.1	Table: DRG-PRICING-REC
New values for DRG thresholds	D.2	Table: DRG-PRICING-REC
New values for DRG average length of stay	D.4	Table: DRG-PRICING-REC
Zero values for capital add-on field	D.9	
Add valid value for POA = blank	E.4	
Add valid value and description for discharge status code = 70	D.8	
New values and descriptions for reimbursement type codes	H.9	
Other		
APR-DRG licensing arrangements in place between 3M Health Information Systems, SCDHHS, Clemson University	B.2	
Identify all instances of specific CMS-DRG values used in current MMIS logic and crosswalk to corresponding APR-DRG values	Attachment A.2	APR-DRG Version 28 code values and labels are listed in this attachment
Suspend for review claims with diagnosis codes in the range E8700-E8799	E.4	Table: DIAG-EX-MPT
For codes E8765-E8767, set diagnosis code edit to suspend for review by the Department and deny payment for erroneous surgeries	E.4	Table: DIAG-EX-MPT
Discontinue Medicare code editor edits		
Remittance advice paper and electronic	F.6	Move new four-byte DRG value to remittance advice
Indicator on remittance advice to show there was a change to the DRG because of a HAC	E.4.2	

H.3 Payment Policy Flow Chart

A flow chart summarizes the pricing logic.

Table H.3.1 Flow Chart Symbols			
	Data		Pre-existing process
	Decision		Data file (e.g., reference file)
	New process		Stop flow chart
			Page connector

H.4 Pricing Formulas

Table H.4.1 lists the pricing formulas used in the new payment method. An asterisk (*) indicates “if applicable” to the calculation or factor identified.

Table H.4.1 Inpatient Pricing Formulas		
Ref.	Item	Comment
B.1.1	DRG Base Payment = DRG Relative Weight x Hospital-specific discharge rate	
B.1.2	DRG Payment = DRG Base Payment + DRG outlier payment adjustment*	
B.1.3	Reimbursement = Allowed Amount – Prior payments* – Cost-sharing*	
D.2.2.1	Estimated cost = covered charges x hospital-specific CCR	
D.2.2.2	Loss or gain = DRG base payment* – Estimated cost <i>*DRG base payment is after transfer adjustment and same-day or one-day adjustments, if applicable</i>	
D.2.2.3	Cost outlier stay = yes if Loss > DRG-specific cost outlier threshold	
D.2.2.4	Cost outlier payment = (Loss – cost outlier threshold) x Marginal cost percentage	
D.4	Adjusted DRG Base Payment = (DRG Base Payment / Average LOS) x LOS	Transfer
D.6	Partial eligibility base payment = DRG Payment * (Medicaid covered days / LOS)	Partial Eligibility

H.6 Pricing Examples

Pricing examples support MMIS testing and are often helpful for purposes of provider training. This section includes examples of how claim payment might be calculated under the new APR-DRG based payment method. Over 90% of claims will be priced as “straight DRG” claims, that is, the relative weight times the hospital-specific base price. The other examples cover special situations, such as cost outliers, low-side outliers, adjustments for partial eligibility, and transfer stays.

The pricing examples reflect the following assumptions for illustrative purposes only.

- APR-DRG V.28 grouping and national relative weights
- The hospital-specific discharge rate of \$8,200 is just an example and does not reflect any Rhode Island rates
- No policy adjustor applied

Pricing examples show the calculations based on the reimbursement type as follows:

No.	Pricing Example	Scenario
1	Reimbursement Type A – Per case base payment	Pneumonia, severity of illness 3, three-day stay with charges of \$50,000
2	Reimbursement Type B – Transfer payment applicable	Same as No. 1, except patient is transferred to another acute-care hospital
3	Reimbursement Type C – Cost outlier (high side)	Same as No. 1, except total charges are \$150,000
4	Reimbursement Type E = Transfer with cost outlier (high side)	Same as No. 1, except the patient is transferred after three days and total charges are \$150,000
5	Reimbursement Type H – Partial eligibility	Same as No. 1 except the patient has Medicaid eligibility for only one of three days
6	Reimbursement Type J – Partial eligibility with cost outlier (high side)	Same as No. 1, except charges are \$150,000 and the patient has Medicaid eligibility for only one of three days
7	Reimbursement Type M – Same day discharge/half per diem	Same as No. 1 except admitted and discharged on same day
8	Reimbursement Type N – Same day discharge with cost outlier (high side)	Same as No. 1 but admitted and discharged on same day, with charges of \$150,000
9	Reimbursement Type U = One-day stay	Same as No. 1 but admitted one day and discharged the next
10	Reimbursement Type New1 = Low-side outlier	Same as No. 1 but a high-paying neonatal case
11	Reimbursement Type New2 = Low-side outlier with transfer	Same as No. 10 but transferred to an acute care hospital
12	Reimbursement Type New3 = Low-side outlier with partial eligibility	Same as No. 10 but with partial eligibility

H.6.1 Pricing Example 1: Per Case Base Payment

H.6.2 Pricing Example 2: Transfer Payment Applicable

H.6.3 Pricing Example 3: Cost Outlier (High Side)

H.6.4 Pricing Example 4: Transfer with Cost Outlier (High Side)

H.6.5 Pricing Example 5: Partial Eligibility

H.7 Nursing Facility Edits (Current and New)

Many edits (sometimes known as exceptions) are applicable to nursing facility claims, and occur in the MMIS prior to the pricing logic (See Section H.3 Payment Policy Flowchart). We anticipate no impacts to the existing edits as part of the new payment method. We recommend review of these edits during testing to ensure no impacts have occurred.

New edits will be needed for the following scenarios:

- No RUG category on file for the recipient
- No base rate on file for the facility
- Xxx
- xxxx

H.9 Reimbursement Types

Tentative recommendation

Table H.9.1 lists the reimbursement types affected by the new payment method and our recommendations to discontinue, change, or add new codes or labels.

Table H.9.1 Reimbursement Types Impact and Recommendations			
Code	Description	Recommendation: Discontinue/ Change / New	PDD Ref
A	Per case base payment	No change	A.2 B.1
B	Transfer payment	Change: discharge statuses	D.4 D.5
C	Cost outlier (high side)	Label modified to refer to high side	D.2.2
D	[Deleted]	Had been day outlier	D.2.3
E	Transfer with cost outlier (high side)	Label modified to refer to high side	D.4
F	[Deleted]	Had been transfer with day outlier	D.4
H	Partial eligibility	No change	D.6
J	Partial eligibility with cost outlier (high side)	Label modified to refer to high side	D.2.2 H.4
K	[Deleted]	Had been partial eligibility with day outlier	A.2.1
M	Same day discharge/half per diem	No change	D.3.3
N	Same day discharge with cost outlier (high side)	Label modified to refer to high side	D.3.3
P	[Deleted]	Had been per diem	D.1
Q	[Deleted]	Had been per diem, over threshold	D.1
R	[Deleted]	Had been per diem, partial eligibility	D.1
S	[Deleted]	Had been partial eligibility with day outlier	D.1
T	[Deleted]	Had been per diem, over threshold, partial eligibility	D.1
U	One-day stay	Had been per diem, same-day stay	D.3.3
New 1	Cost outlier (low side)	New value and label	D.3.3
New 2	Transfer with cost outlier (low side)	New value and label	D.3.3 H.4
New 3	Partial eligibility with cost outlier (low side)	New value and label	D.3.3 H.4

H.10 Other Systems Considerations

Tentative recommendation

Several other systems design considerations are beyond the scope of this document. These include:

- **Screen changes.** We anticipate that the project would require a new DRG screen, changes to the institutional claim screen, changes to the provider record screen, and changes to screens that show exceptions and exception text.
- **Management reports.** Depending on the current format and content of routine MMIS reports, it is possible that these reports would also need changes.

Notes

¹ Key documentation sources are the Rhode Island Medicaid State Plan, Attachment 4.19A and the Rhode Island Medicaid *Hospital Services Provider Manual*, especially the pricing examples in Section 3.

² State Plan, Attachment 4-19A, §IV.A.1.b.

³ Our criteria are similar to those used by the National Center for Health Statistics in deciding whether survey results are accurate enough to be published. The standard error of average cost equals the standard deviation of cost for the stays in the APR-DRG divided by the square root of the number of stays. The relative standard error equals the standard error divided by average cost and expressed as a percentage.

⁴ We broke the top 80 APR-DRGs by volume into groups of 10 and calculated Pearson correlation coefficients for each set of 10. All values were at least 0.94. (Doing eight groups is a more sensitive of correlation than doing all 80 together.) The top 80 APR-DRGs account for two-thirds of all stays.

⁵ These include outlier payments, transfer pricing adjustments, etc. They are not relevant for purposes of this section.

⁶ Measured casemix may also increase if there is an improvement in the capture of diagnosis and procedure information by the MMIS, for example through an expansion in the claims record length. However, this design document includes no such change in the MMIS.

⁷ Board of Trustees of the Medicare Trust Funds, *Review of Assumptions and Methods of the Medicare Trustees' Financial Projections*, Technical Review Panel on the Medicare Trustees Reports (Baltimore: Board of Trustees, 2000), p. 23; Medicare Payment Advisory Commission, *Report to Congress* (Washington, DC: MEDPAC, March 2006), p. 52; Grace M. Carter, Joseph P. Newhouse and Daniel A. Relles, "How Much Change in the Case Mix Index Is DRG Creep?" *Journal of Health Economics* (1990), pp 411-428.

⁸ Rhode Island State Plan, Attachment 4-19A, §IV.A.1.b

⁹ Richard F. Averill et al., "The Evolution of CaseMix Measurement Using Diagnosis-Related Groups," in *Physician Profiling and Risk Adjustment*, 2d ed., ed. N. Goldfield (Gaithersburg, Md.: Aspen, 1999), 391-454.

¹⁰ In statistical terms, DRGs do not explain the variation in hospital costs from patient to patient for mental health as well as they do for other types of care. A key reason is that the ICD-9-CM diagnosis codes that feed the DRG grouping algorithm do not provide clinically important information about functional status, aggressive tendencies, and the need for help with the activities of daily living. See, for example, Judith R. Lave, "Developing A Medicare Prospective Payment System For Inpatient Psychiatric Care," *Health Affairs* 22:5 (September/October 2003), pp. 97-109.

¹¹ Total hospital cost for services within the scope of the DRG method was \$564 million in SFY 2010, as shown in Table A.2.1. Total expenses for the Rhode Island industry, inpatient plus outpatient, were \$8.8 billion in 2008. See American Hospital Association, *Hospital Statistics 2010* (Chicago: AHA, 2010), p. 131.

¹² Centers for Medicare and Medicaid Services, "Medicare and Medicaid Programs: Changes to the Hospital Inpatient Prospective Payment Systems for Acute Care Hospitals, et al.", *Federal Register* 75:157 (Aug. 16, 2010), pp. 50590-50591. The 8% figure is calculated by calculating the capital cost-to-charge ratio as a percentage of overall (capital plus operating) cost-to-charge ratio.