

# CONNECTICUT HOSPITAL PAYMENT MODERNIZATION TRANSITION TO APR-DRGS

JULY 28, 2014

**James Matthisen, ASA, MAAA**  
**Jean Ellen Schulik, MBA**  
**Scott Simerly, PhD, Myers and Stauffer**  
**Amy Perry, CPA, Myers and Stauffer**

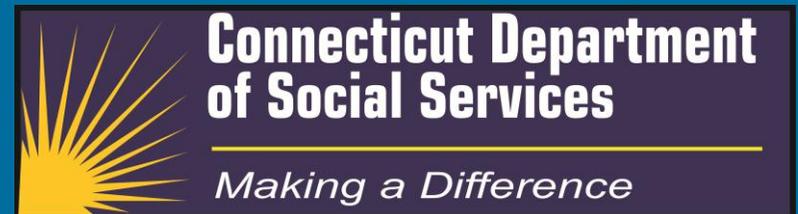
**Hartford, Connecticut**

# Agenda

- Welcome and introduction.
- Methodology review.
- Key topics.
- Next steps.
- Questions and answers.



# INTRODUCTION



# HOSPITAL PAYMENT MODERNIZATION PROJECT



July 28, 2014

# METHODOLOGY REVIEW

# Methodology Review

## General

Topic	Approach
All Patient Refined Diagnosis Related Groups (APR-DRG) grouper version.	APR-DRG version 31.
APR-DRG implementation date.	Admissions on or after January 1, 2015.
Included hospitals.	General acute care hospitals.
Excluded hospitals.	Rehabilitation, psychiatric, long-term acute care, and other specialty hospitals.
Out-of-state and border hospitals.	APR-DRGs based on statewide average.
Included populations.	All populations paid for by the Connecticut Department of Social Services (DSS).
Excluded services.	Inpatient (IP) behavioral health for children.
Disproportionate share hospital (DSH).	DSH program payments will remain outside of the APR-DRG payment system.
Direct graduate medical education (GME).	GME payments will remain outside of the APR-DRG payment system.

# Methodology Review (cont'd)

## Weights

Topic	Approach
Claim period for weight setting.	Calendar Year (CY) 2012 dates of service.
APR-DRG relative weight calculations.	Cost-based, adjusted to a common period.
Data used to estimate costs.	Inpatient claims data and Medicare cost report with period ending in CY2012, adjusted to a common period.
Estimated cost of each claim.	Hospital-specific crosswalk, if provided and validated; otherwise, standard crosswalk.
APR-DRG weight calculations for low-volume APR-DRGs.	Based on 3M standard APR-DRG weights.

# Methodology Review

## Weights (cont'd)

Topic	Approach
How stable weights are determined.	Statistical test based on standard deviation, certainty factor and acceptable range.
How external weights are validated.	T-test to ensure external weight is reasonable or fallback to original calculated weight.
Discrepancies in clinical cohesiveness.	Inconsistencies with level of severity weights adjusted to a weighted average from within the weight set.
Same day stays.	Same day stays excluded from data for weight setting.
Transfers.	Transfers excluded from data for weight setting.

## Methodology Review (cont'd)

### Rates

Topic	Approach
Claim period and reconciliation period.	CY2012 paid claims and 2012 reconciliation.
Base rate determination.	Hospital-specific base rates with revenue neutral targets.
Capital and operating costs.	Capital and operating costs will be combined to form a single base rate.
Hospital based physicians.	Hospital based physicians will bill directly under the professional fee schedule.
Indirect medical education (IME) factor.	Rate adjustment factor based on Medicare formula.
Documentation and coding improvements (DCI).	5% DCI adjustment factor to be set aside as a reserve.

# Methodology Review (cont'd)

## Pricing Logic

Topic	Approach
Outlier methodology.	Cost outlier with statistical basis with minimum threshold.
Transfers.	Double pay first day and prorate remainder based on the number of days on the claim compared to the average length of stay (ALOS) of the APR-DRG.
Indemnity payments — Third Party Liability (TPL).	No change to current process, except allowed amount will be based on a APR-DRG, not per diem.
Partial eligibility/spend down.	Pay a per diem (APR-DRG payment divided by ALOS) for eligible days, not to exceed the APR-DRG payment.
Crossover claims.	No change to current process.

## Methodology Review Pricing Logic (cont'd)

Topic	Approach
Hospital acquired conditions (HAC).	For a selected group of HACs the claim allowed amount will be calculated without consideration of the HAC. If the claim is eligible for an outlier payment, the cost used to calculate the outlier payment will be reduced to reflect the HAC cost.
Transplants.	Transplants will be paid using standard APR-DRG methodology.
Organ acquisition costs.	Heart, lung, pancreas, liver, and kidney organ acquisition costs will be paid in addition to the APR-DRG payment.
IP behavioral health (adult).	Hospital specific behavioral health per diem rate if distinct part unit (DPU) identified. Otherwise pay using APR-DRG system.
IP behavioral health (child).	Hospital specific behavioral health per diem child rate.
Physical rehabilitation.	Hospital specific rehab per diem rate if DPU identified. Otherwise pay using APR-DRG system.

# KEY TOPICS

## Key Topics

- Target development.
- Inpatient behavioral health and rehabilitation claims.
- Documentation and coding improvements.
- APR-DRG payment example.
- Pro forma calculation.

## Key Topics (cont'd)

### Target Development

Item from 2012 Reconciliation	Include in Target?	Notes
Lower of 1) target amount or 2) IP operating costs (excluding capital, provider-based physicians and medical education).	Y	2012 adult behavioral health and rehab will be separately identified. Child behavioral health is not included.
Capital-related costs for Medicaid inpatient routine and ancillary services.	Y	Capital costs based on 2012 reconciliation amounts.
Program provider-based physician costs.	N	Transitioning to direct billing under the professional fee schedules.
Organ acquisition costs (kidney, heart, and liver).	N	Heart, lung, pancreas, liver, and kidney organ acquisition costs will be paid outside of the APR-DRG system.
Heart and liver transplants.	Y	Transplants will be paid via APR-DRG.
Costs for burn units certified by the American Burn Association.	Y	Burn admissions will be paid via APR-DRG.
Direct GME Payments.	N	GME will be handled as a separate calculation and payment.
Indemnity payments — other party payors.	N	TPL recoveries will be removed at the time of claims adjudication.
Hospital acquired condition (HAC) payment adjustment.	N	Claims will be reduced for HAC at the time of claims adjudication.

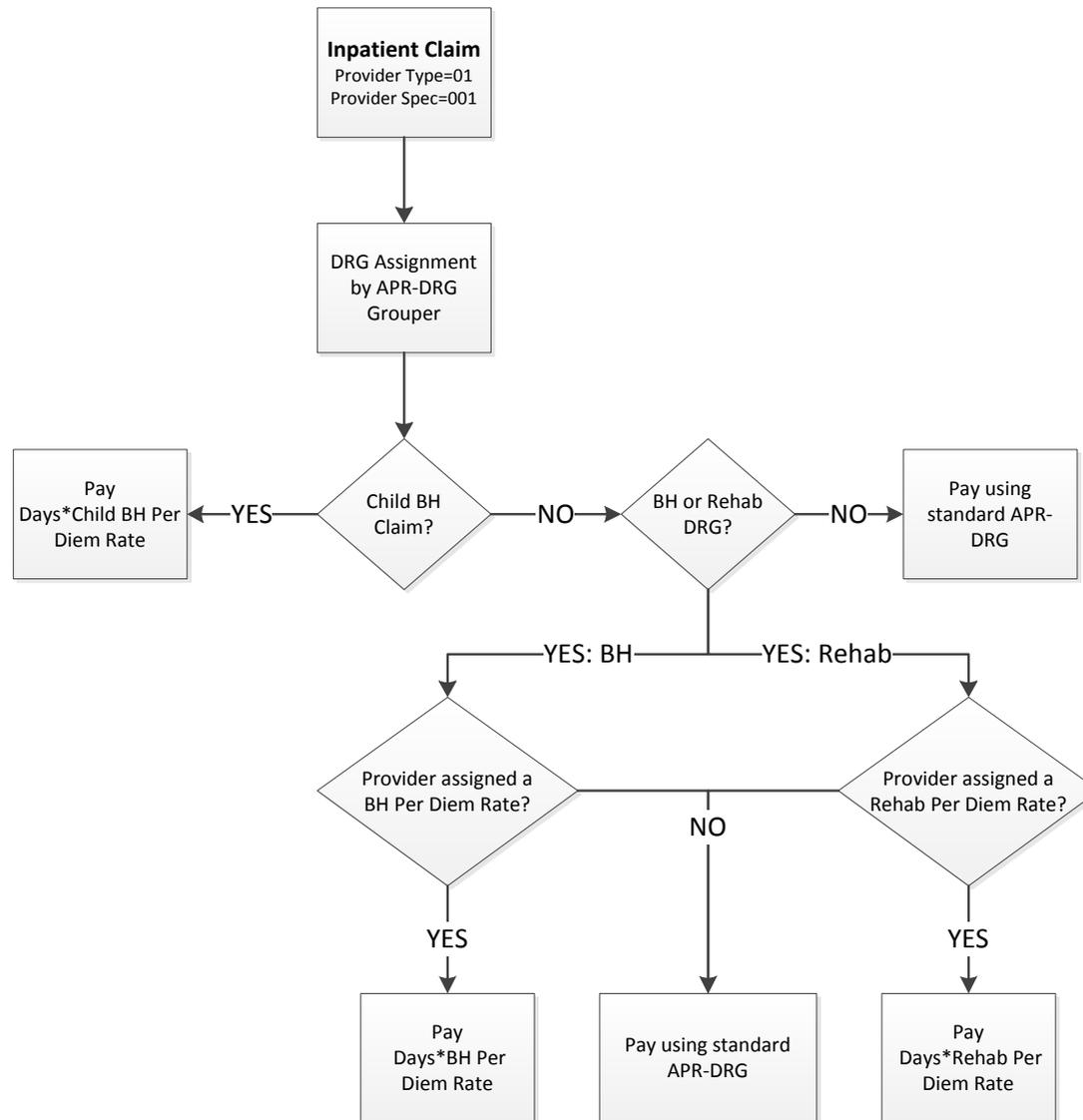
## Key Topics (cont'd)

### Inpatient Behavioral Health and Rehab

- Behavioral health and rehab have more variability in length of stay and cost per discharge.
- APR-DRG methods are less accurate for these cases.
- Even standard outlier approaches are not adequate.
- For these cases, DSS will pay a per-diem rate.
- Details:
  - Hospitals that report to Medicare using DPU will be paid per-diem rates derived from the Medicare Cost Reports.
  - Hospitals that do not report using DPU will be paid using APR-DRG.
  - Out of state hospitals will receive the statewide average per-diem payment.

# Key Topics

## Inpatient Behavioral Health and Rehab (cont'd)



## Key Topics (cont'd)

### Documentation and Coding Improvement

- When coding is based on diagnosis and procedure, coding improves.
- As coding improves, for the same level of care, measured acuity may increase.
- Increases in acuity cause increased payments.
- This project is designed to be revenue neutral:
  - Without consideration of expected coding improvement, payments will likely exceed revenue neutrality.
  - Medicare and other states have built DCI factors into similar implementations.
- To ensure revenue neutrality, DSS will build in a DCI adjustment of 5%, but will track this amount as a reserve, and after the first year of payment, any excess will be returned to the hospitals on a prorated basis.

## Key Topics

### Documentation and Coding Improvement (cont'd)

- What about increases in acuity that are not an artifact of improved coding?
  - As more care is transitioned to outpatient settings, isn't there a corresponding increase in the acuity of the cases left in the inpatient setting?
- Derivation of real acuity increase for DCI analysis:

	2008	2009	2010	2011	2012
<b>Total Case Mix Index, All Payers</b>	1.2745	1.2903	1.2957	1.3202	1.324
<b>Annual Increase</b>		101.2%	100.4%	101.9%	100.3%
<b>Average Annual Increase 2-year</b>			100.8%	101.2%	101.1%
<b>Average Annual Increase 3-year</b>				101.2%	100.9%
<b>Average Annual Increase 4-year</b>					101.0%

Annual Report on the Financial Status Of Connecticut's Short Term Acute Care Hospitals for Fiscal Year 2011 and 2012; State of Connecticut Department of Public Health Office of Health Care Access; September 2012 and 2013; page 18 and page 22.

# Key Topics

## Documentation and Coding Improvement (cont'd)

- How will the calculation work?

<b>Example One — Coding Improvement Less than Expected</b>	
2015 aggregate Case Mix Index (CMI)	1.05
2015 allowable aggregate CMI	1.03
2015 coding improvement (1.05–1.03)	0.02
Expected year one coding improvement	0.05
Coding improvement above/below expected (refund 3% to hospitals)	-0.03
<b>Example Two — Coding Improvement Greater than Expected</b>	
2015 aggregate CMI	1.10
2015 allowable aggregate CMI	1.03
2015 coding improvement (1.10–1.03)	0.07
Expected year one coding improvement	0.05
Coding improvement above/below expected (consider 2% reduction for future years)	0.02

## Key Topics (cont'd)

### Revenue Neutral Pro Forma Calculation

Item from 2012 Reconciliation	Include in Target?	Notes
Lower of 1) target amount or 2) IP operating costs (excluding capital, provider-based physicians and medical education).	Y	2012 adult behavioral health and rehab will be separately identified. Child behavioral health is not included.
Capital-related costs for Medicaid inpatient routine and ancillary services.	Y	Capital costs based on 2012 reconciliation amounts.
Program provider-based physician costs.	N	Transitioning to direct billing under the professional fee schedules.
Organ acquisition costs (kidney, heart, and liver).	N	Heart, lung, pancreas, liver, and kidney organ acquisition costs will be paid outside of the APR-DRG system.
Heart and liver transplants.	Y	Transplants will be paid via APR-DRG.
Costs for burn units certified by the American Burn Association.	Y	Burn admissions will be paid via APR-DRG.
Direct GME Payments.	N	GME will be handled as a separate calculation and payment.
Indemnity payments — other party payors.	N	TPL recoveries will be removed at the time of claims adjudication.
Hospital acquired condition (HAC) payment adjustment.	N	Claims will be reduced for HAC at the time of claims adjudication.

## Key Topics (cont'd)

### APR-DRG Payment Example



- Hospital-specific APR-DRG payment examples will be provided with release of hospital rates.
- Payment example includes payment adjustments for transfers and outliers.
- Proposed outlier threshold — maximum of \$35,000 and Raw Average Cost of APR-DRG + 1.96 \* Standard Deviation.
- Outlier payment percentage likely to fall in range of 70%–80% based on modeled inlier and outlier payments (Medicare pays 80%).
- Excel Exhibit.

# NEXT STEPS

## Next Steps

- Operational changes.
- Inpatient timeline.
- Questions.



## Next Steps (cont'd)

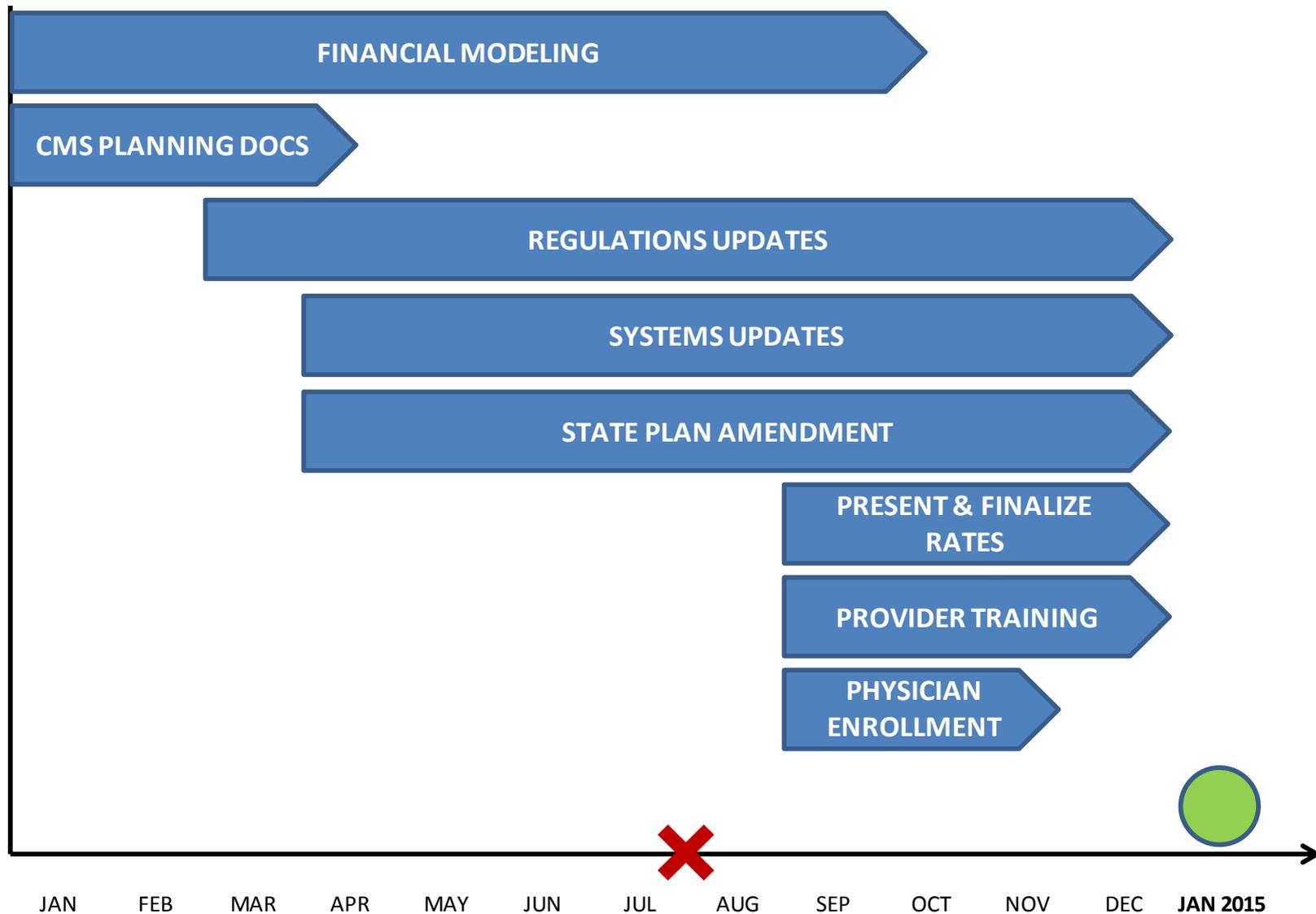
### Operational Changes

- Complete enrollment of physicians.
- Attend HP training for billing changes.
- Update billing systems.
- Plan for elimination of annual cost settlement process fiscal year 2016.



# Next Steps (cont'd)

## Inpatient Timeline



# Resources

**Connecticut Department of Social Services Reimbursement Modernization Website:**

<http://www.ct.gov/dss/cwp/view.asp?a=4598&q=538256>

**Connecticut Medical Assistance Program Website:**

[www.ctdssmap.com](http://www.ctdssmap.com)



# QUESTIONS?



July 28, 2014

Please address any additional questions in writing to:

Kate McEvoy, DSS Medicaid Director  
55 Farmington Avenue  
Hartford, CT 06105



July 29, 2014



**Connecticut Department of Social Services**  
**Example Revenue Neutrality Calculation**

**DRAFT: 7/24/2014**

**Data Inputs**

Hospital-Specific Revenue Neutral Target Payments	\$20,000,000
Hospital-Specific Number of Discharges	2,910
Documentation and Coding Improvements (DCI) Reserve %	5%
Hospital Specific Case Mix Index (CMI)	0.9233
Hospital-Specific Indirect Medical Education (IME) Factor	0.1101
Hospital-Specific Calculated Outlier Payments	\$950,000
Hospital-Specific Number of Behavioral Health Days	4,500
Hospital-Specific Number of Rehab Days	750
Hospital-Specific Behavioral Health Per Diem Rate	\$1,250
Hospital-Specific Rehab Per Diem Rate	\$875

**Step 1: Calculate Estimated Behavioral Health Payments**

Hospital-Specific Behavioral Health Per Diem Rate	\$1,250	
multiply: Hospital-Specific Number of Behavioral Health Days	x	4,500
Hospital-Specific Behavioral Health Payments	= \$	5,625,000

**Step 2: Calculate Estimated Rehab Payments**

Hospital-Specific Rehab Per Diem Rate	\$875	
multiply: Hospital-Specific Number of Rehab Days	x	750
Hospital-Specific Rehab Payments	= \$	656,250

**Step 3: Calculate Hospital-Specific DCI Reserve**

Hospital-Specific Revenue Neutral Target Payments	\$20,000,000	
subtract: Hospital-Specific Behavioral Health Payments	-	\$5,625,000
subtract: Hospital-Specific Rehab Payments	-	\$656,250
Hospital-Specific Revenue Neutral Target less Behavioral Health and Rehab	=	\$13,718,750
multiply: DCI Reserve %	x	5%
Hospital-Specific DCI Reserve	=	\$685,938

**Step 4: Calculate Hospital-Specific APR-DRG Base Rate**

Hospital-Specific Revenue Neutral Target Payments	\$20,000,000	
subtract: Hospital-Specific Behavioral Health Payments	-	\$5,625,000
subtract: Hospital-Specific Rehab Payments	-	\$656,250
subtract: Hospital-Specific DCI Reserve	-	\$685,938
subtract: Hospital-Specific Calculated Outlier Payments	-	\$950,000
Hospital-Specific Inlier Portion Revenue Neutral Target Payments	=	\$12,082,813
divide by: Hospital-Specific CMI	/	0.9233
divide by: 1 + Hospital-Specific IME	/	1.1101
divide by: Hospital-Specific Number of Discharges	/	2,910
Hospital-Specific APR-DRG Base Rate		<u>\$4,051</u>

**Step 5: Revenue Neutral Target Check**

Hospital-Specific Number of Discharges	2,910	
multiply: Hospital-Specific APR-DRG Base Rate	x	\$4,051
multiply: Hospital-Specific CMI	x	0.9233
multiply: 1 + Hospital-Specific IME	x	1.1101
Hospital-Specific Inlier Portion Revenue Neutral Target Payments	=	\$12,082,813
add: Hospital-Specific Calculated Outlier Payments	+	\$950,000
add: Hospital-Specific Rehab Payments	+	\$656,250
add: Hospital-Specific Behavioral Health Payments	+	\$5,625,000
Total Hospital-Specific Acute Care Payments	=	\$19,314,063
add: Hospital-Specific DCI Reserve	+	\$685,938
Hospital-Specific Revenue Neutral Target Payments	=	<u>\$20,000,000</u>

# Connecticut APR-DRG Payment Example, SFY 2014

## Inpatient Claims, APR-DRG Grouper

Draft

### Hospital Information

<b>Sample</b>
(SELECT HOSPITAL)
APR-DRG (Select from Dropdown): <b>626</b>
Severity Level (Select from Dropdown): <b>1 - Minor</b>

Medicare # 070000  
 Medicaid # 004041000

### Claim Information

APR-DRG 626-1  
 Neonate Bwt 2000-2499g, Normal Newborn or Neonate W Other Problem

Discharge Status (Select from Dropdown)	Discharged Alive
Discharge Code	01
Length of Stay (Enter)	2
Total Charges (Enter):	\$12,000.00
Non-Covered Charges (Enter):	\$3,000.00
Third Party Liability (Enter):	\$0.00

Total Payment Less TPL  
**\$1,285.96**

### APR-DRG Payment Determination

Hospital-Specific APR-DRG Base Rate		\$4,500.00
Multiply: 1 + Hospital-Specific IME Factor	x	1.0800
Hospital-Specific APR-DRG Payment Rate	=	\$4,860.00
Multiply: APR-DRG Weight	x	0.2646
Hospital-Specific APR-DRG Base Payment	=	\$1,285.96

### Transfer Adjustment (if applicable)

Length of Stay + 1		3
Divide: APR-DRG ALOS	/	2.68
Ratio of (LOS+1)/APR-DRG LOS (maximum 1.00)	=	1.00
Multiply: Hospital-Specific APR-DRG Base Payment	x	\$1,285.96
Hospital-Specific APR-DRG Transfer Base Payment (if applicable)	=	\$1,285.96

### Outlier Add-On Determination

Total Charges		\$12,000.00
Subtract: Non-Covered Charges	-	\$3,000.00
Allowed Charges	=	\$9,000.00
Multiply: Hospital-Specific Cost-to-Charge Ratio	x	0.490000
Hospital-Specific Estimated Cost	=	\$4,410.00
Subtract: APR-DRG Outlier Threshold	-	\$35,000.00
Hospital-Specific Cost Above APR-DRG Threshold	=	\$0.00
Multiply: Outlier Payment Percentage	x	80%
Hospital-Specific Outlier Add-On Payment	=	\$0.00

Subject to Change - Outlier Threshold = Maximum (\$35,000 and Raw Avg Cost of APR-DRG +

Subject to change - Medicare pays 80% which results in 5-7% in outlier payments.

### Total Payment Calculation

Hospital-Specific APR-DRG Base Payment (with transfer adjustment if applicable)		\$1,285.96
Add: Hospital-Specific Outlier Add-On Payment	+	\$0.00
Hospital-Specific APR-DRG Total Payment	=	\$1,285.96
Subtract: Third Party Liability	-	\$0.00
Final Payment to Hospital	=	\$1,285.96