

Options for Case-Based Inpatient Payment Methodology Based on Diagnosis Related Groups

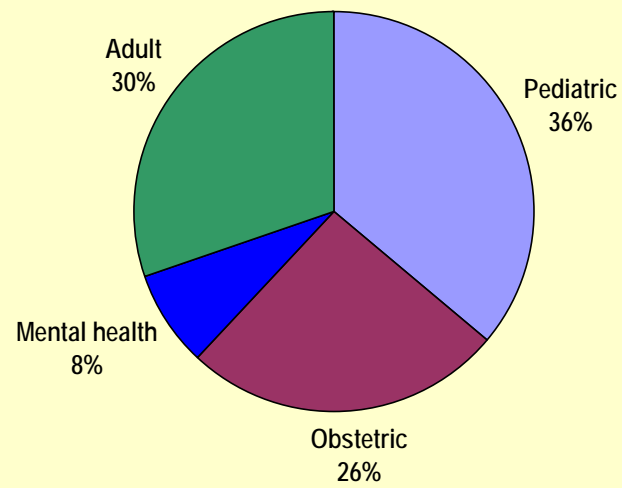
Discussion with the Rhode Island
Community Hospital Task Force
December 12, 2007

1. Fairness—similar payment for similar care
2. Quality—reward provision of quality care
3. Efficiency—reward efficient resource use
4. Acceptability—wide applicability and use
5. Resource-based—payment varies with acuity
6. Simplicity—minimize administrative burden
7. Outlier recognition—accommodate exceptions
8. Comprehensiveness—all acute care

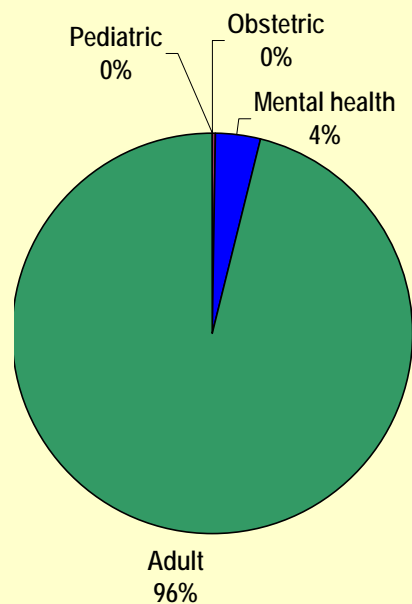
Medicaid & Medicare Are Very Different



Medicaid (7.3 million)

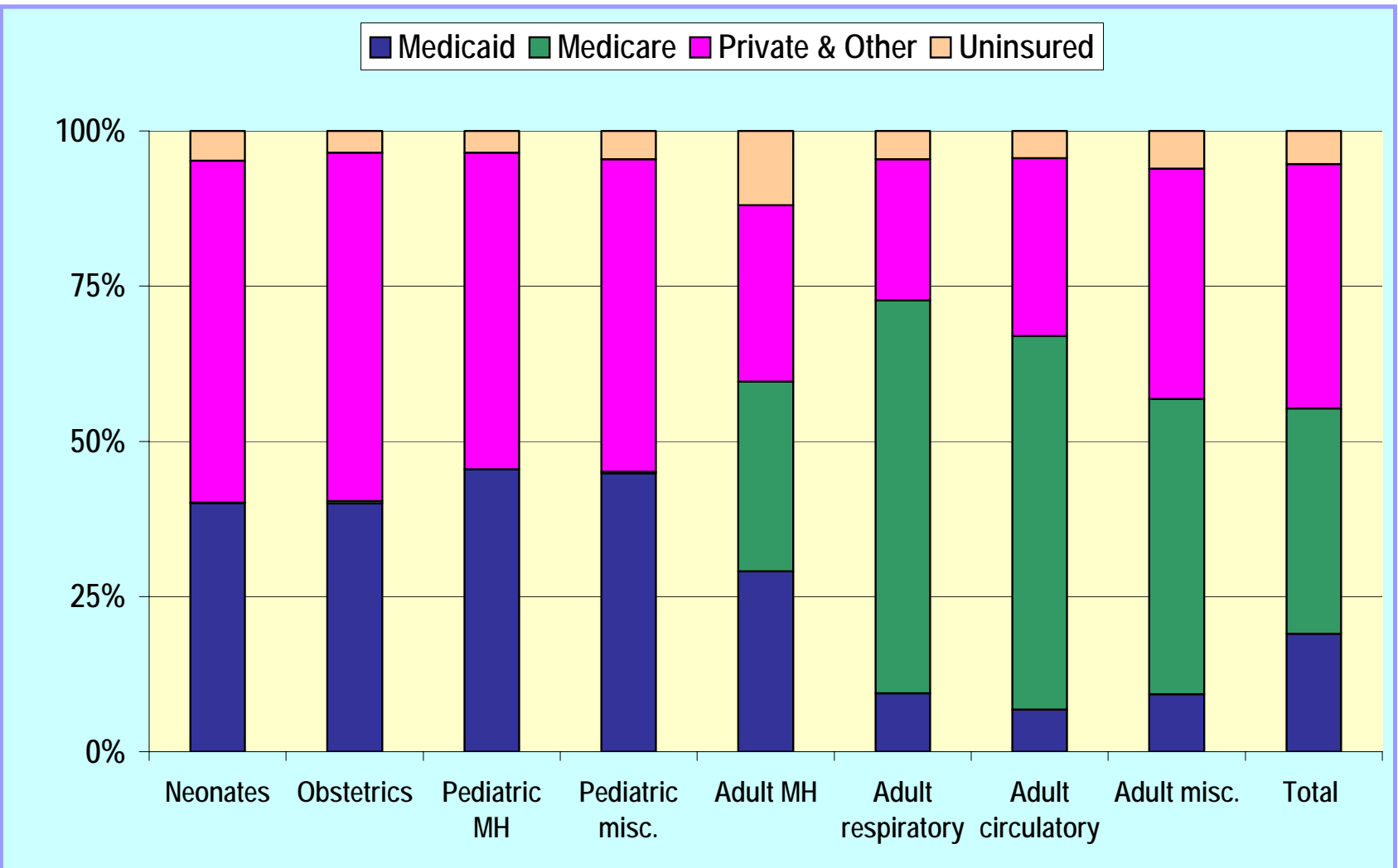


Medicare (14.0 million)



Source: ACS analysis of the Nationwide Inpatient Sample, 2004

Medicaid's Share of Inpatient Care



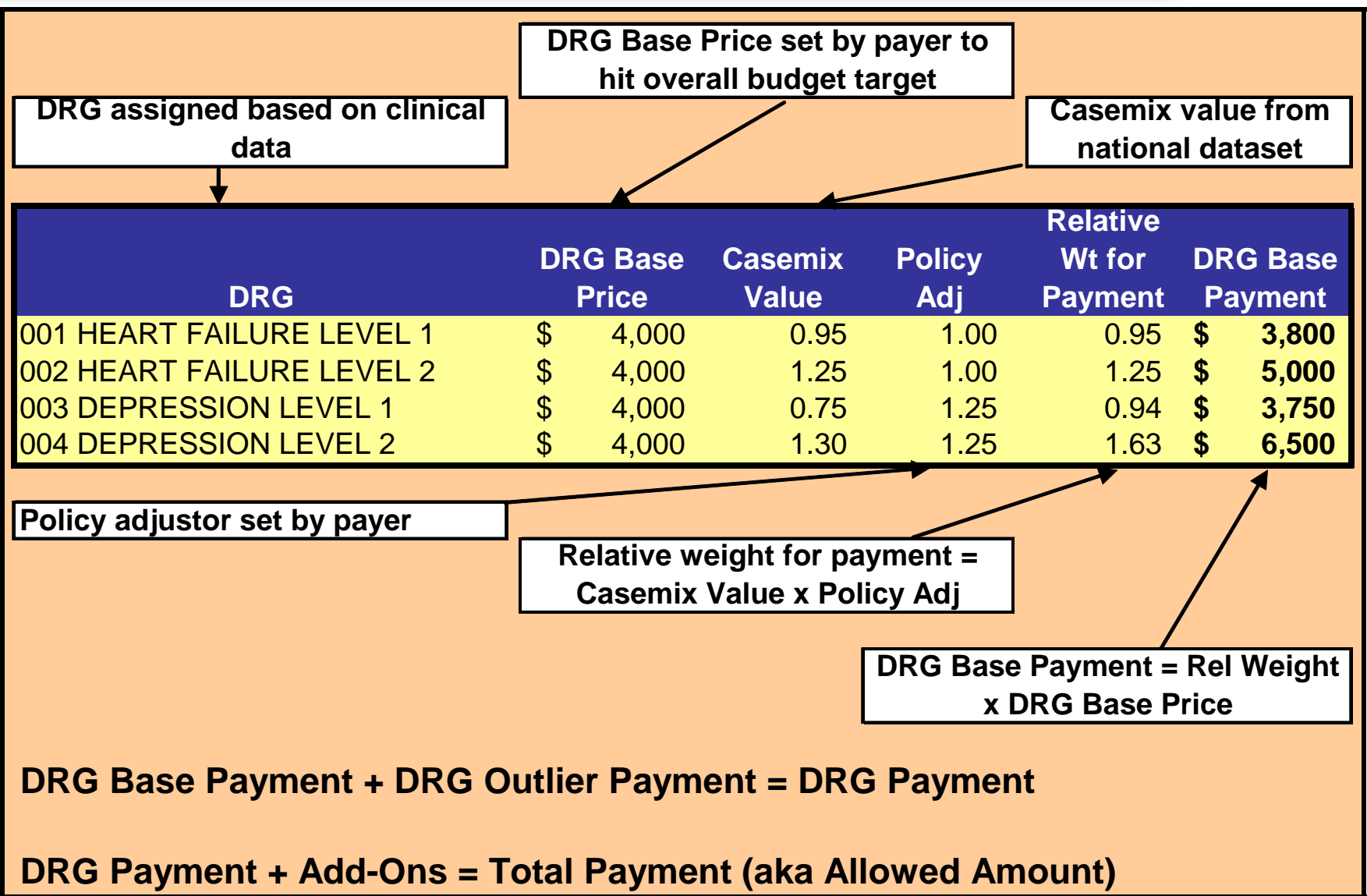
SOURCE: ACS analysis of the Nationwide Inpatient Sample, 2004.



“Pay More to Those Who Do More”

- ▲ *In the beginning:*
More = more charges, more cost
- ▲ *Fee for service philosophy:*
More = more care
- ▲ *The DRG revolution:*
More = treat sicker patients
- ▲ *The next revolution:*
More = better results

Mechanics of DRG Calculations



Typical Payment Policy Topics



- ▲ Which DRG algorithm to use
- ▲ Outlier calculations for unpredictably expensive cases
- ▲ One base price or more
- ▲ Policy adjustors to change payment rates for certain services, typically to promote access
- ▲ Add-ons for medical education or other
- ▲ Inclusion of pay-for-performance incentives
- ▲ Whether to have a transition period
- ▲ Carveouts for specific services or hospitals



- ▲ Design phase
 - Minimum six months
 - Ends with single document specifying all aspects of policy and system design
- ▲ Implementation phase
 - Minimum six to nine months
 - Depends on other MMIS enhancements
 - Should include extensive provider education

How States Purchase Inpatient Care



Per Case—Medicare DRGs

CO, IA, IL, KS, KY, MI, MN, MT*, NC, ND, NE, NH, NJ, NM, OH, OK, OR, PA*, SC, SD, TX, UT, WI, WV

*Moving to APR-DRGs

Per Case—AP or CHAMPUS DRGs

DC, GA, IN, NY, VA, WA

Per Case—Other

DE, MA, NV, WY

Per Diem

AK, AZ, CA, FL, HI, LA, MO, MS*, TN, VT**

* Moving to APR-DRGs

** Moving to CMS-DRGs

Cost Reimbursement

AL, AR, CT, ID, ME, RI

Regulated Charges Based on APR-DRGs

MD

Sources:

- 3M Health Information Systems
- ACS Government Healthcare Solutions

In 2004, a Policy Change at Medicare



- ▲ “We advise those non-Medicare systems that need a more up-to-date system to choose from other systems that are currently in use in this country or to develop their own modifications... Our mission in maintaining the Medicare DRGs is to serve the Medicare population.” (p. 48939)

-- *FFY 2005 Final Rule (8/11/04)*



- ▲ “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.” (p. 116)
- ▲ “The current versions of CMS-DRGs will remain in the public domain. However, we do not intend to make any updates to them...” (pp. 184-5)

-- FFY 2008 Final Rule (8/2/07)

Overview of DRG Alternatives



Variant	Developer	All-Patient Structure	All-Patient Weights	Marketed for Medicaid	Medicaid Use for Payment	Other Use for Payment	Use for Analysis
CMS-DRGs	3M for CMS	No	No	No	Yes	Yes	Yes
MS-DRGs	CMS	No	No	No	No	No	Soon
AP-DRGs	3M	Yes	Yes	Yes	Yes	No	No
APR-DRGs	3M	Yes	Yes	Yes	Yes	Yes	Yes
APS-DRGs	Ingenix	Yes	Yes	Yes	No	No	Yes
CHAMPUS-DRGs	CHAMPUS	Yes	No	No	Yes	Yes	No
R-DRGs	HSC	Yes	No	Yes	No	No	Yes
R-DRGs	Thomson	Yes	Yes	No	No	No	Yes

*ACS has no financial interest in any DRG grouping algorithm
 CS-DRGs as evaluated by RAND were based on APR-DRGs. Thomson previously was Solucient.*

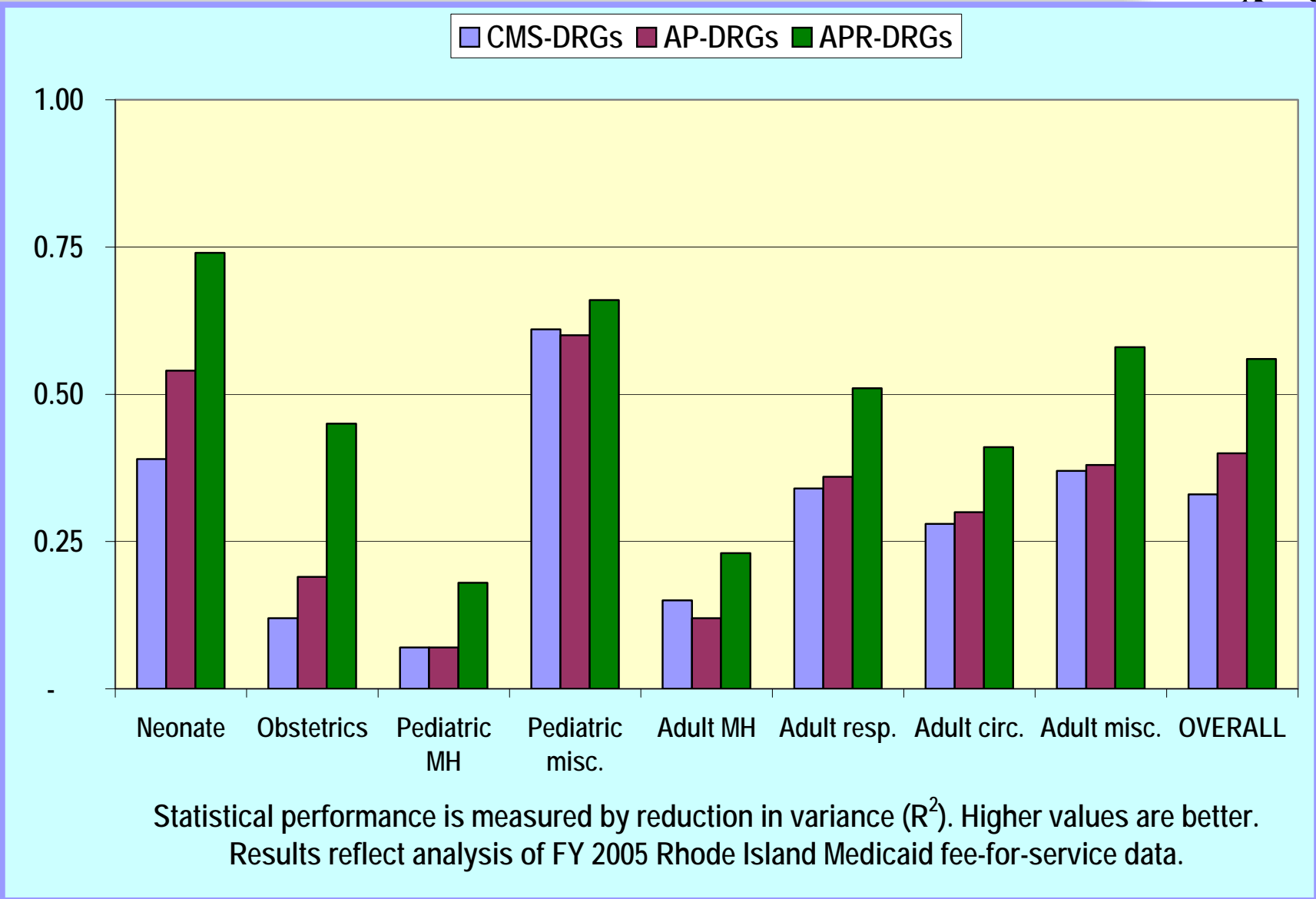
Grouper Comparison



A C S

	AP-DRGs	APR-DRGs	APS-DRGs
Developer	3M for New York State	3M & NACHRI	Ingenix
Total DRGs	676	1,258	1,136
Genesis	Late 1980s—adaptation of Medicare model for all patients	Early 1990s—new model	Mid 1990s—adaptation of Medicare model for all patients
Complications and comorbidities (CC)	Most conditions split "w CC" or "without CC"	316 base DRGs, each with 4 severity levels. No single CC list.	Most conditions split "w CC" or "without CC"
Neonates	34 DRGs; birthweight used in grouping	21 DRGs; birthweight used in grouping	112 DRGs; birthweight used in grouping
Principal uses--payment	WA, DC, NY, IN, VA	MD; Planned--MS, MT, PA; Wellmark	None
Principal uses--analysis	Very limited	NIS; report cards; <i>U.S. News</i> ; MedPAC; hospitals	NIS; hospitals
Applicability for quality measurement	Good casemix adjustment	Good casemix adjustment; adjustment for mortality risk	Good casemix adjustment
Impact of MS-DRGs	None	None	Grouper being redone
Strengths for Medicaid	<ul style="list-style-type: none"> Medicaid track record Previously, look & feel similar to CMS-DRGs Good statistical performance 	<ul style="list-style-type: none"> Wide acceptance Clear structure (base + severity) Very good statistical performance 	<ul style="list-style-type: none"> New version will have look and feel similar to MS-DRGs [Statistical performance not evaluated by ACS]
Drawbacks for Medicaid	Statistical performance not as good as APR-DRGs	<ul style="list-style-type: none"> Complex logic for severity adjustment 	<ul style="list-style-type: none"> Not currently used for payment New version to be released 1/08
Notes	<i>NACHRI is the National Association of Children's Hospitals and Related Institutions; NIS is the Nationwide Inpatient Sample. All variants ignore the impact of a CC if it is closely related to the principal diagnosis.</i>		

Statistical Performance on RI Data

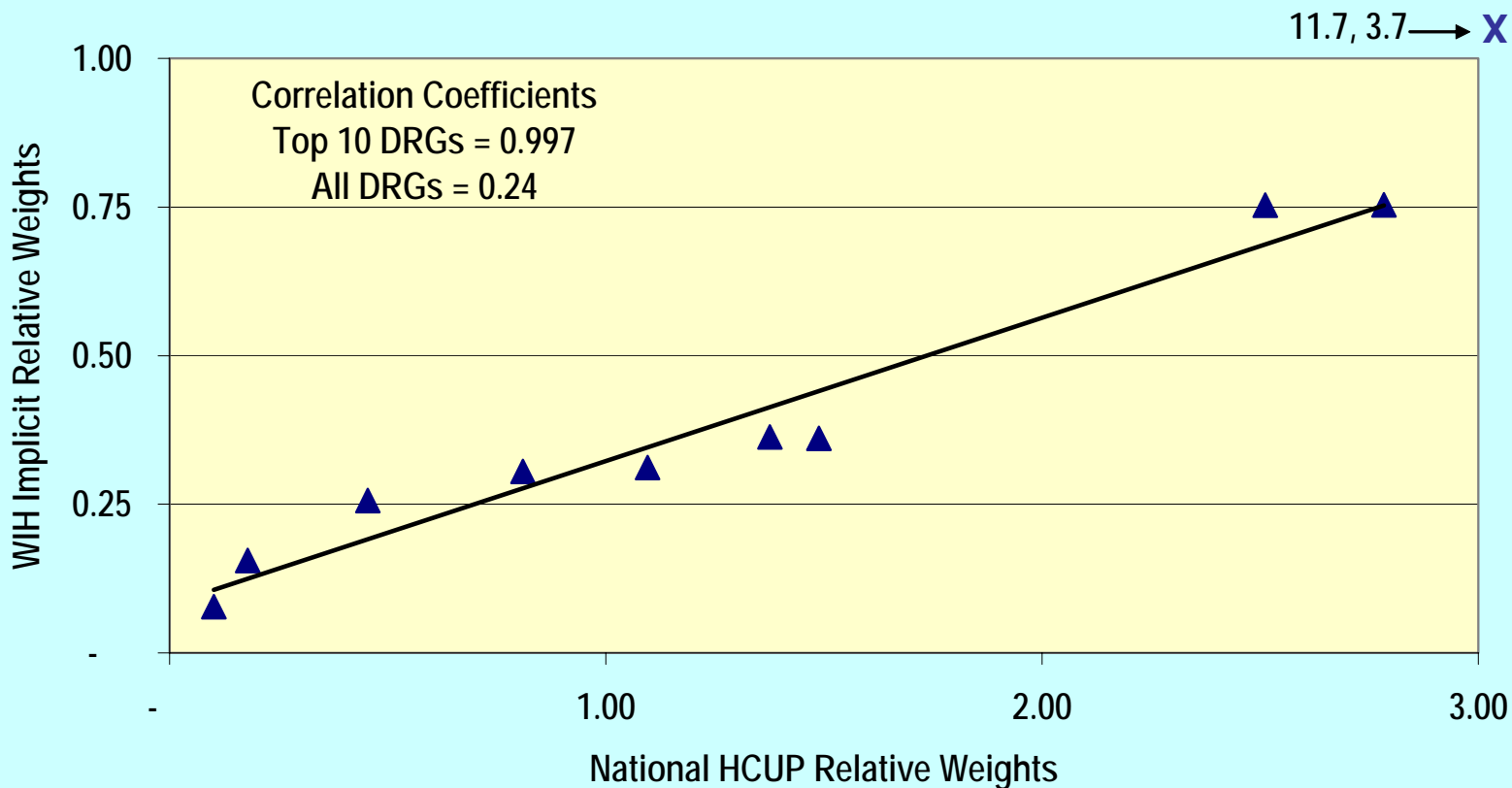


Statistical performance is measured by reduction in variance (R^2). Higher values are better. Results reflect analysis of FY 2005 Rhode Island Medicaid fee-for-service data.

Applicability of APR-DRGs to Neonates



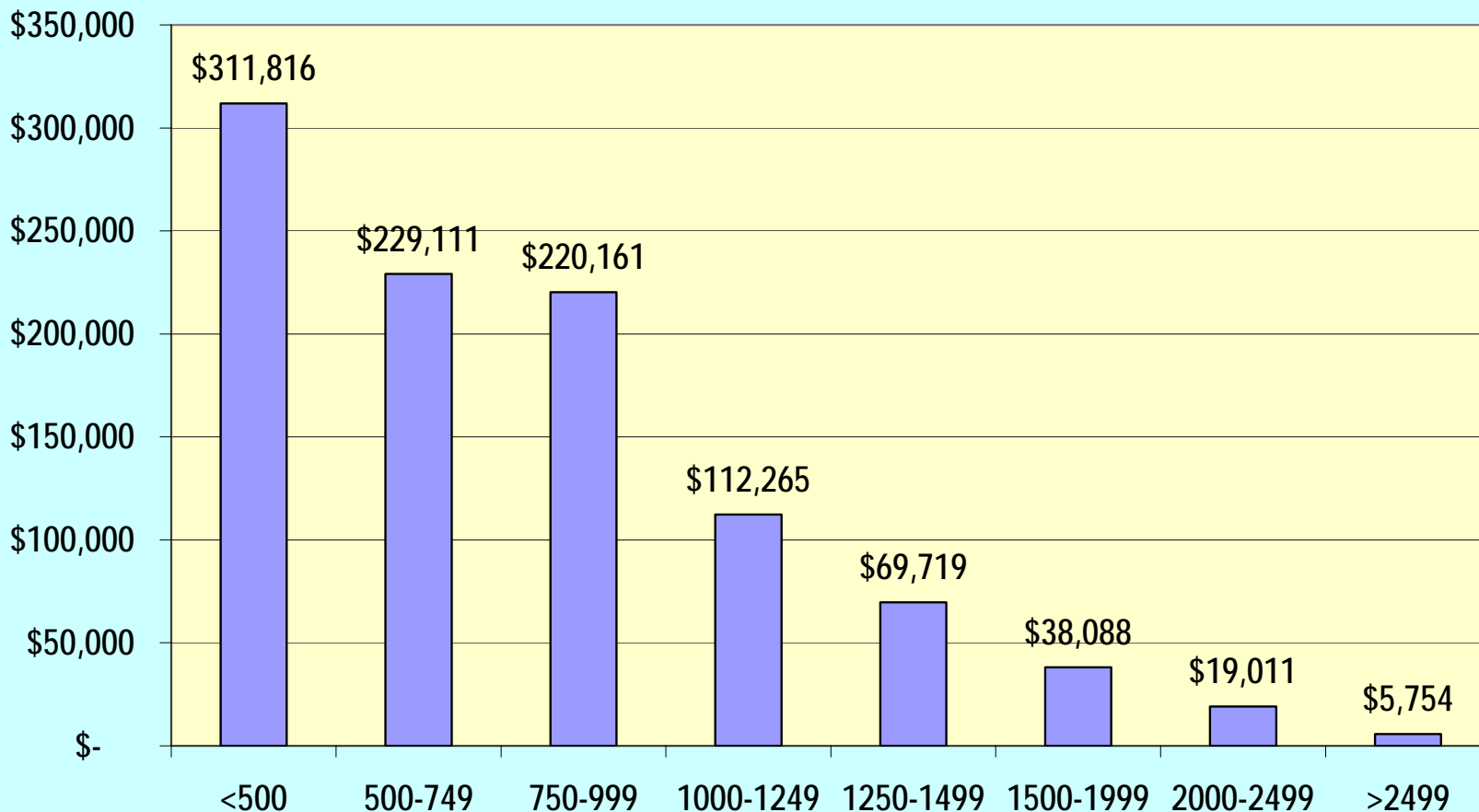
Relationship Between National Weights and WIH Implicit Weights,
Ten Most Common APR-DRGs



An Example of Purchasing Clarity



RI Medicaid Average Payment per Stay by Birthweight for Sick Neonates



In this chart, most babies with birthweight over 2499 g had other medical problems

The chart includes 829 neonates and excludes 18 neonates who had LOS < 5 days and were transferred to another hospital.



APR-DRG	Description	Stays	Days	Payment	ALOS	Average Payment		Casemix
						Per Stay	Per Diem	
753-2	BIPOLAR DISORDERS	329	5,963	\$ 5,833,251	18.1	\$ 17,730	\$ 978	0.87
750-2	SCHIZOPHRENIA	193	3,360	\$ 4,495,122	17.4	\$ 23,291	\$ 1,338	0.95
751-2	MAJOR DEPRESSIVE DISORDERS	320	3,296	\$ 3,613,650	10.3	\$ 11,293	\$ 1,096	0.69
750-1	SCHIZOPHRENIA	139	1,868	\$ 2,202,837	13.4	\$ 15,848	\$ 1,179	0.84
593-3	NEO BIRTHWT 750-999G W/O MAJOR PROC	10	717	\$ 2,119,953	71.7	\$ 211,995	\$ 2,957	11.66
593-2	NEO BIRTHWT 750-999G W/O MAJOR PROC	8	675	\$ 2,034,499	84.4	\$ 254,312	\$ 3,014	8.47
591-1	NEO BIRTHWT 500-749G W/O MAJOR PROC	7	628	\$ 1,765,287	89.7	\$ 252,184	\$ 2,811	0.10
753-1	BIPOLAR DISORDERS	197	1,834	\$ 1,729,035	9.3	\$ 8,777	\$ 943	0.59
758-2	CHILDHOOD BEHAVIORAL DISORDERS	27	1,537	\$ 1,693,015	56.9	\$ 62,704	\$ 1,102	0.86
004-4	TRACHEOSTOMY W LONG TERM MECH VENT	8	541	\$ 1,468,490	67.6	\$ 183,561	\$ 2,714	17.98

- ▲ “Payment” refers to the current payment method (FY 2006)
- ▲ Payment excludes DSH and the net effect of year-end settlement
- ▲ Top 10 DRGs represent 20% of FFS payments



- ▲ Relatively minor billing changes
 - Restrictions on interim claims and late charges
- ▲ No other changes in Medicaid requirements
 - Dx and Px fields can be coded as they are now
 - DRG is assigned by Medicaid
- ▲ Typical hospital actions
 - Make Dx and Px coding more complete
 - Buy software to check DRG assignment
 - Model financial impacts
 - With revenue fixed, look for ways to decrease cost and increase margins

A "Scorecard" Approach for Discussion



	Current Method	CMS-DRGs	AP-DRGs	APR-DRGs
Fairness	D	B	B	A
Quality	F	C	B	B
Efficiency	B	B	B	B
Acceptability	D	D	C	A
Resource-based	B	C	B	A
Simplicity/admin burden	C	C	C	C
Outlier recognition	B	D	C	B
Comprehensiveness	B	C	B	B

Notes:

- 1) "Grades" are intended only as a starting point for discussion
- 2) APS-DRGs were not included in the evaluation.
- 3) "Grades" for MS-DRGs would be very similar to those shown for CMS-DRGs.

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