

to: **Nora Leibowitz** date: **January 7, 2005**
from: **Sandi Hunt/Pete Davidson** subject: **Non-Contracted DRG
Hospital Payment Amounts**

This memo describes the methods we used to develop non-contracted DRG hospital payment amounts and the methods to be used by health plans to determine their payment obligations to those hospitals. In general, reimbursement for inpatient hospital services will be determined based on a per diem amount, and outpatient hospital payments will be determined based on the billed charges on the claim multiplied by the adjusted cost-to-charge ratio specific to each hospital. The remainder of this memo describes in more detail the development of the payment amounts and their application.

Inpatient Hospital Services

To calculate the aggregate DRG hospital funding per day, we analyzed DRG hospital encounter data for the period July 1999 through June 2001. We applied cost-to-charge ratios, cost trends, and the 28% reduction in DRG hospital funding to derive the projected FY 2004 funding for inpatient hospital services provided by DRG hospitals. Utilization trends and completion factors were not applied since these generally affect the projected number of services, not the cost per service, and therefore would not impact the projected funding per day. Claim records for Medicare/Medicaid dual eligibles are excluded from the calculations, as are claim records for Mental Health inpatient admissions, since these admissions are not subject to the rule. Additionally, admissions with anomalous day counts were excluded.

The per diem rates for each hospital reflect differences in input costs based on the FY 2004 CMS geographic adjustments. Additionally, adjustments were applied to recognize differences in case mix for inpatient hospital services for individuals who are treated outside of their local service area. To differentiate between in-area and out-of-area admissions, we employed the same method used in the calculation of the inpatient hospital geographic factors applied to the capitation rates, as described in our September 2004 report "Capitation Rate Development, Federal Fiscal Year 2004." Out-of-area admissions are defined as any admission to a DRG hospital located more than 75 miles from the patient's residence, with the following exceptions:

- For Tri-County residents, all admissions are designated as In-Area,
- Out of state hospitals are not directly considered in the calculations, and

- For Coos and Douglas counties, the Out-of-Area threshold is 50 miles from the patient's residence.

The steps employed to develop the per diem rates for each hospital are as follows:

1. The statewide per diem consistent with the funding in the capitation rates was developed as described above.
2. The CMS geographic factors were applied to the statewide per diem to derive regional per diems. The geographic factors were normalized using the distribution of inpatient days by region so that the composite of the regional per diems equals the statewide per diem.
3. Those hospitals eligible for separate out-of-area per diems were identified. A minimum threshold of 100 out-of-area days during the 1999-2001 data period was used to determine which hospitals were eligible.
4. For those hospitals eligible for separate out-of-area per diems, the relationship of their billed charge per day for out-of-area admissions to their aggregate billed charge per day was calculated. If this relationship was less than 1.0 for a hospital, then no separate out-of-area per diem was calculated.
5. For those hospitals eligible for separate out-of-area per diems, the aggregate value of out-of-area days in excess of their respective regional per diems was calculated; this amount was then divided by total expected inpatient spending to determine the proportion of costs associated with the excess out of area rates.
6. The per diems for all hospitals were reduced by multiplying by 1 minus the proportion calculated in Step 5.
7. For those hospitals eligible for separate out-of-area per diems, the out-of-area factors determined in Step 4 were applied to the revised regional per diems in Step 6. All other hospitals receive the revised regional per diem for in-area and out-of-area admissions.

The composite per diem calculated using the per diems developed in Step 7 above and the distribution of in-area and out-of-area days by hospital equals the statewide per diem calculated in Step 1.

The attached Exhibit 1 shows the development of the aggregate statewide and regional per diems. Exhibit 2 shows the calculated per diems for each DRG hospital at the level consistent with the funding in the capitation rates, and with a reduction of 7.5% as required by the legislation. The rates on these exhibits presume that FCHPs and hospitals will apply comparable criteria as described above in the determination of appropriate reimbursement amounts to non-contracted DRG hospitals.

Outpatient Hospital Services

For outpatient hospital services, payments will be determined based on the billed charges on the claim, multiplied by the adjusted cost-to-charge ratio specific to each hospital and the 0.925 non-participating hospital payment adjustment.

The methods for determining the adjusted hospital-specific cost-to-charge ratios for outpatient services are generally consistent with those used to determine the adjusted cost-to-charge ratios for inpatient services. More specifically, the method was as follows:

- Hospital-specific charges per visit were calculated for each month of the period July 1999 through June 2003. Each DRG hospital with average monthly outpatient charges of \$500,000 or more in the most recent 12 months of data was separately analyzed. Hospitals operating within hospital systems were aggregated, and all remaining hospitals were combined for analysis;
- Trends were estimated over the data period using regression analysis. Trends were measured over the period July 1999 through June 2003 since this period encompasses the data used to develop the 2003-2005 per capita costs and the FFY 2005 capitation rates, as well as the most currently available validated encounter data;
- The estimated trend, which reflects an annualized rate of change in charges per visit, was compared to the average annual cost trend of 3.20% used in the per capita cost and capitation rate development;
- Each hospital's cost-to-charge ratio was adjusted by multiplying the starting cost-to-charge ratio by the ratio of the cost and charge trend values, compounded from the midpoint of the data period to the midpoint of the contract period. For the FY 2005 rates, the trend adjustment is compounded for 4.75 years (July 2000 to April 2005). A further adjustment of 0.72 is applied to recognize the reduction in DRG hospital funding built into the FFY 2005 capitation rates.

Exhibit 3 shows the development of the hospital-specific adjusted cost-to-charge ratios for outpatient services.

To determine its payment obligation for an outpatient hospital claim, a health plan would perform the following operation:

- Start with the billed charges on the claim;
- Multiply by the hospital-specific adjusted cost-to-charge ratio; and

- Multiply by the non-contracting hospital adjustment of 0.925. The 0.925 adjustment factor is in compliance with the Non-Participating hospital payment rules.

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Please call Pete Davidson at 415/498-5636 or Sandi Hunt at 415/498-5365 if you have any questions regarding this memo.

**Oregon Health Plan
Development of Non-Contracted DRG Hospital Per-Diems
FY 2005
Base Rates at 100% of Amount Funded in Managed Care Per Capita Costs**

Exhibit 1

	A	B	C = A / B		
	Total Projected FY 2005 DRG Hospital Funding	July 1999 - June 2001 Inpatient Days	Statewide Per- Diem		
DRG Hospitals	\$ 217,189,906	172,566	\$1,259		

	D	E	F=C x E	G	H=F x G
Hospital County	CMS Geographic Factor	Normalized CMS Geographic Factor	FY 2005 Per-Diem	July 1999 - June 2001 Inpatient Days	Projected FY 2005 Payments
Benton	1.104	1.018	\$1,281	6,284	\$8,052,515
Jackson	1.052	0.970	\$1,221	16,186	\$19,757,422
Lane	1.100	1.014	\$1,277	38,773	\$49,494,005
TriCounty	1.083	0.998	\$1,257	111,322	\$139,885,964
Statewide	1.084	1.000	\$1,259	172,566	\$217,189,906

Note: Projected funding is developed by applying the cost to charge ratios used in the 2003 - 2005 Per Capita Cost Development, the DRG Hospital Funding Adjustment (0.72), and cost trend to the July 1999 - June 2001 encounter data.

**Oregon Health Plan
Non-Contracted DRG Hospital Per-Diems
FY 2005**

Exhibit 2

Base Rates at 100% of Amount Funded in Managed Care Per Capita Costs

<u>Hospital Name</u>	<u>CMS Region</u>	<u>Per-Diem @ 100%</u>	<u>Per-Diem with 7.5% Reduction</u>	<u>In-area Per-Diem</u>	<u>Out-of-area Per-Diem</u>
ADVENTIST MEDICAL CTR	TriCounty	\$1,256.58	\$1,162.34	\$1,130.65	\$1,130.65
ALBANY GENERAL HOSPITAL	Benton	\$1,281.43	\$1,185.32	\$1,153.01	\$1,153.01
BAY AREA DISTRICT HOSPITAL	Lane	\$1,276.51	\$1,180.77	\$1,148.58	\$1,148.58
GOOD SAMARITAN HOSPITAL	Benton	\$1,281.43	\$1,185.32	\$1,153.01	\$1,153.01
KAISER HOSPITALS	TriCounty	\$1,256.58	\$1,162.34	\$1,130.65	\$1,130.65
LEGACY EMANUEL HOSP HLTH CTR	TriCounty	\$1,256.58	\$1,162.34	\$1,130.65	\$1,961.78
LEGACY GOOD SAM HOSP MED CTR	TriCounty	\$1,256.58	\$1,162.34	\$1,130.65	\$1,130.65
LEGACY MERIDIAN PARK HOSPITAL	TriCounty	\$1,256.58	\$1,162.34	\$1,130.65	\$1,130.65
LEGACY MT HOOD MED CTR	TriCounty	\$1,256.58	\$1,162.34	\$1,130.65	\$1,130.65
MCKENZIE WILLAMETTE MEMORIAL	Lane	\$1,276.51	\$1,180.77	\$1,148.58	\$1,148.58
MERCY MEDICAL CENTER INC	Lane	\$1,276.51	\$1,180.77	\$1,148.58	\$1,148.58
MERLE WEST MEDICAL CENTER	Jackson	\$1,220.65	\$1,129.10	\$1,098.32	\$1,098.32
OHSU HOSPITAL	TriCounty	\$1,256.58	\$1,162.34	\$1,130.65	\$1,867.69
PROVIDENCE MEDFORD MEDICAL CTR	Jackson	\$1,220.65	\$1,129.10	\$1,098.32	\$1,098.32
PROVIDENCE MILWAUKIE HOSPITAL	TriCounty	\$1,256.58	\$1,162.34	\$1,130.65	\$1,130.65
PROVIDENCE PORTLAND MEDICAL	TriCounty	\$1,256.58	\$1,162.34	\$1,130.65	\$2,705.19
ROGUE VALLEY MEMORIAL HOSP	Jackson	\$1,220.65	\$1,129.10	\$1,098.32	\$1,388.94
SACRED HEART GENERAL HOSPITAL	Lane	\$1,276.51	\$1,180.77	\$1,148.58	\$1,714.43
ST CHARLES MEDICAL CENTER	Lane	\$1,276.51	\$1,180.77	\$1,148.58	\$1,148.58
ST VINCENT HOSPITAL MED CTR	TriCounty	\$1,256.58	\$1,162.34	\$1,130.65	\$1,877.22
SALEM MEMORIAL HOSPITAL	TriCounty	\$1,256.58	\$1,162.34	\$1,130.65	\$1,130.65
THREE RIVERS COMM HOSPITAL	Jackson	\$1,220.65	\$1,129.10	\$1,098.32	\$1,098.32
TUALITY COMMUNITY HOSPITAL	TriCounty	\$1,256.58	\$1,162.34	\$1,130.65	\$1,130.65
WILLAMETTE FALLS COMM HOSPITAL	TriCounty	\$1,256.58	\$1,162.34	\$1,130.65	\$1,130.65
WILLAMETTE VALLEY MEDICAL CTR	TriCounty	\$1,256.58	\$1,162.34	\$1,130.65	\$1,130.65
WOODLAND PARK HOSPITAL	TriCounty	\$1,256.58	\$1,162.34	\$1,130.65	\$1,130.65
Out of State Hospitals				N/A	\$1,765.35
In-State Average			\$1,164.20	\$1,132.45	\$1,765.35

**Oregon Health Plan
Development of Outpatient Hospital Adjusted Cost to Charge Ratios for
Non-Participating DRG Hospitals
Fiscal Year 2005**

Exhibit 3

Data Period Annualized Cost Trend	3.29% ¹
Projection Period Annualized Cost Trend	3.13% ¹
Composite Annualized Cost Trend	3.20% ²
Statewide Average DRG Hospital Annualized Charge Trend	11.82% ³
Trend Months	57 ⁴

Hospital Name	Estimated Average Charge Trend ³	Base CCRs Used in the 03-05 PCC Development ⁵	Adjusted Cost to Charge Ratios	
			With 72% DRG Hospital Funding Adjustment ⁶	With Charge Trend Adjustment ⁷
ADVENTIST MEDICAL CTR	12.5%	44.8%	32.3%	21.4%
ALBANY GENERAL HOSPITAL	12.0%	57.5%	41.4%	28.1%
BAY AREA DISTRICT HOSPITAL	19.1%	59.6%	42.9%	21.7%
GOOD SAMARITAN HOSPITAL	18.5%	68.2%	49.1%	25.5%
KAISER HOSPITALS				30.0%
LEGACY EMANUEL HOSP HLTH CTR	0.9%	57.0%	41.1%	45.8%
LEGACY GOOD SAM HOSP MED CTR	0.9%	56.3%	40.5%	45.2%
LEGACY MERIDIAN PARK HOSPITAL	0.9%	55.4%	39.9%	44.4%
LEGACY MT HOOD MED CTR	0.9%	50.3%	36.2%	40.4%
MCKENZIE WILLAMETTE MEMORIAL	12.0%	64.4%	46.3%	31.4%
WILLAMETTE VALLEY MEDICAL CTR	12.0%	42.2%	30.4%	20.6%
MERCY MEDICAL CENTER INC	14.5%	45.2%	32.6%	19.9%
MERLE WEST MEDICAL CENTER	12.0%	54.5%	39.2%	26.6%
OHSU HOSPITAL	25.7%	78.4%	56.4%	22.1%
PROVIDENCE MEDFORD MEDICAL CTR	8.1%	58.7%	42.3%	33.9%
PROVIDENCE MILWAUKIE HOSPITAL	8.1%	53.9%	38.8%	31.1%
PROVIDENCE PORTLAND MEDICAL	8.1%	46.1%	33.2%	26.6%
ST VINCENT HOSPITAL MED CTR	8.1%	44.3%	31.9%	25.5%
ROGUE VALLEY MEMORIAL HOSP	12.0%	82.3%	59.3%	40.2%
SACRED HEART GENERAL HOSPITAL	7.7%	52.3%	37.7%	30.8%
ST CHARLES MEDICAL CENTER	15.5%	77.3%	55.6%	32.6%
SALEM MEMORIAL HOSPITAL	7.6%	69.2%	49.8%	40.9%
THREE RIVERS COMM HOSPITAL	10.1%	54.1%	39.0%	28.6%
TUALITY COMMUNITY HOSPITAL	12.0%	53.8%	38.8%	26.3%
WILLAMETTE FALLS COMM HOSPITAL	12.0%	53.0%	38.2%	25.9%
WOODLAND PARK HOSPITAL	12.0%	37.4%	26.9%	18.2%
Out of State Hospital	11.8%	60.9%	43.9%	30.0%

- Notes:
- ¹ From 03-05 Per Capita Cost Development
 - ² Calculated based on the application of the Data Period trend for 24 months and the Projection Period trend for 33 months.
 - ³ Based on regression analysis of charges per visit for the period 7/1/99 through 6/30/03. The statewide average charge trend is displayed for informational purposes only. Hospital-specific charge trends were calculated for hospitals that averaged at least \$500K in average months billed charges to FCHPs for the period 7/1/02 through 6/30/03. Charge data for all other hospitals (excluding Kaiser) were grouped together for the determination of average charge trends. Hospitals within the Legacy and Providence systems were also grouped together.
 - ⁴ The number of months from the midpoint of the Data Period (7/1/00) to the midpoint of the FY 05 Contract Period (4/1/05). The ratio of the Cost Trend to the Charge Trend is compounded over this period.
 - ⁵ From Hospital Settlement Reports
 - ⁶ These values represent the percentage of billed charges used in the calculation of the 03-05 Per Capita Costs.
 - ⁷ The determination of the cost of a OP hospital visit for non-participating hospitals will be determined using these adjusted cost to charge ratios.