Office for Oregon Health
Policy and Research

Study of Medicaid Reimbursement of Type A and Type B Hospitals

Policy Note #6
HB 5031
2007 Legislative Session

September 2008

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Objective: DHS Policy Note #6
The Office for Oregon Health Policy and Research (OHPR) and Department of Human Services (DHS) shall conduct a study of Medicaid reimbursement for Type A and B hospitals (ORS 442.470). The study shall review and analyze the current methods used to determine Medicaid reimbursement for these hospitals; if appropriate, include recommendations for changes to reimbursement; and estimate the fiscal impact of these recommendations on the hospitals and on the state's Medicaid health plan costs. The Office and DHS shall present the results of this study to appropriate interim legislative committees including the Emergency Board by June 30, 2008.

Current Policy and Background

Medicaid Classifications for Oregon Hospitals

For the purposes of Medicaid reimbursement policy, Oregon hospitals are classified into three categories: DRG, Rural Type A, and Rural Type B.

Since 1984, under Medicare law, hospitals receive a fixed payment for each patient based on the diagnostic-related group (DRG) the patient falls into. DRG hospitals are primarily large, urban hospitals. The rural Type A, B, and C hospital classifications are unique to Oregon, although differential Medicaid inpatient reimbursement for rural hospitals is not unique *(See Payment Methodologies)*. In 1987, the Oregon legislature, recognizing particular vulnerabilities of rural hospitals, granted authority to Office of Rural Health (ORH) to identify rural hospitals and directed the state Medicaid agency (DHS) to reimburse Type A and B hospitals at 100% of reasonable costs.

DRG Hospitals

Diagnostic Related Groups (DRGs) provide the basis for payment to hospitals for care of Medicare, Medicaid and commercially insured patients. The federal government adopted DRGs more than two decades ago to curb rising hospital costs associated with reasonable cost and line-item reimbursement methods. Through DRGs, hospitals are reimbursed a flat weight based on a patient's diagnosis and treatment. DRG hospitals are generally located in urban areas and have more than 50 beds. Currently, Oregon has 25 (43%) hospitals that are reimbursed using the DRG methodology.

Type A and B Rural Hospitals.

For the purpose of this policy, the Office of Rural Health has defined a hospital as rural if it is at least 10 miles outside the center of a city of 40,000 or more.[1] For the purposes of differential Medicaid reimbursement, rural hospitals are classified as follows:

- *Type A* – Rural hospitals that have 50 beds or less and are greater than 30 miles from another acute inpatient facility are reimbursed at 100% of reasonable cost by Medicaid. These types of facilities make up 21% (12) of Oregon hospitals.
- *Type B* – Rural hospitals with 50 or fewer beds and located 30 miles or less from another acute inpatient care facility are reimbursed at 100% of cost by Medicaid. These types of facilities make up 35% (20) of Oregon hospitals.

[1] Oregon Office of Rural Health. Available at http://www.ohsu.edu/ohsuedu/outreach/oregonruralhealth/data/definitions/index.cfm. Accessed on June 3, 2008.

Medicare Reimbursement for Oregon Hospitals

Hospitals can also be classified as a Critical Access Hospital (CAH) under the Medicare Rural Hospital Flexibility Program. Critical Access Hospitals receive enhanced Medicare reimbursement at 101% of reasonable costs for inpatient, outpatient and laboratory services. There are 25 Oregon hospitals (11 Type A and 14 Type B; See Table 1-2) meeting the definition of a CAH hospital.

In order to qualify as a CAH, a hospital must meet the following requirements:[2]

- Be a for-profit, non-profit or public hospital that is open and operating. Hospitals that have either closed or downsized to health centers or clinics in the past 10 years are also eligible for CAH designation.
- Be located more than a 35-mile drive (or, in the case of mountainous terrain or in areas with only secondary roads available, a 15-mile drive) from a hospital or another CAH, or before January 1, 2006, the CAH is certified by the State as being a necessary provider of health care services to residents in the area. A CAH that is designated as a necessary provider as of December 31, 2005 will maintain its necessary provider designation after January 1, 2006.
- Be located in a rural area or classified by the Secretary of the U.S. Department of Health and Human Services (DHHS) as rural in an urban county is located in a census tract that is considered rural under the most recent update of the Goldsmith Modification; or located in an area designated by State law or regulation as a rural area or designated by the state as rural providers; or meets other criteria as specified by the Secretary.
- Limit bed size to 25 except in any combination of acute inpatient and swing beds.
- Make available 24-hour emergency services and nursing services but need not meet all the staffing and service requirements that apply to other hospitals.
- Participate in a rural health network, which is defined as an organization consisting of at least one CAH and at least one non-CAH hospital where participants have entered into specific agreements regarding patient referral and transfer, communication.
- Establish credentialing and quality assurance agreements with at least one network partner hospital, a Quality Improvement Organization or equivalent or another entity identified in the rural health plan of the state.

[2] Oregon Office of Rural Health, Oregon Health & Science University, Available at from http://www.ohsu.edu/ohsuedu/outreach/oregonruralhealth/hospitals/rural_hospitals.cfm. Accessed on April 23, 2008.

State Rural Hospital Payment Methodologies

The policy goal of creating a differential Medicaid reimbursement is to stabilize Oregon's small rural community hospitals. However, the current methodology does not adequately distinguish between the rural community hospitals that require ongoing stabilization and those that, because of changing demographics and increased population density, no longer require differential Medicaid reimbursement. A more flexible methodology is needed.

There are many methods states use to pay rural hospitals and Critical Access Hospitals (CAH) in particular; Oregon is not limited to applying either a 100% of reasonable cost or DRG methodology alone. A review conducted as part of the CAH/FLEX National Tracking Project in 2002 showed that 40% (17) of the 42 states studied had created a differential Medicaid inpatient reimbursement policy for hospitals meeting the CAH definition. Six of these states, like Oregon, have enhanced payment structures that were developed for either all rural hospitals or all small hospitals and are not limited to CAHs alone. Eleven of the 17 states apply a cost-based methodology similar to Oregon's, some through annual cost settlement rather than direct cost-based reimbursement. Other approaches included:

- Minnesota: CAHs receive a 20% add-on to the diagnosis-related group (DRG) calculation.
- Oklahoma: CAHs receive a 38% enhancement to the per diem payment.
- Kentucky: CAHs are given nearly a 100% enhancement to the per diem rate paid to other hospitals.
- North Carolina: All Medicaid-participating hospitals are guaranteed DRG payments no lower than the 45th percentile. At the end of the fiscal year, if a CAH's Medicaid costs are above the 45th percentile, Medicaid promised 100% cost settlement. If their costs are below the 45th percentile, the facility keeps the difference, receiving more than costs for their inpatient Medicaid services.
- New York: All acute care hospitals within each of the eight geographic regions are used as peer groups to determine a hospital's per diem rate. CAHs are guaranteed payment equal to 110% of the average payment for their region. This payment methodology likely benefits CAHs because larger and higher volume hospitals are used in the calculation of average payments.
- Ohio: Any CAH Medicaid shortfall is recovered through payments from a disproportionate share (DSH) pool protected for CAHs, with special criteria used to determine each CAHs share.

Nineteen of the 42 states included in this study had not created any preferential payments for CAHs or any other group of rural hospitals that would include CAHs. However, many of the Medicaid directors interviewed for the review felt that the general methodology applied was generally beneficial to rural hospitals.[3]

[3] RUPRI Center for Rural Health Policy Analysis, CAH/FLEX National Tracking Project, *Findings from the Field.* Volume 2, Number 8, December 20, 2002.

Study Approach
In order to complete this study, the Office for Oregon Health Policy and Research (OHPR) convened an internal advisory workgroup made up of agency representatives with expertise in rural hospital reimbursement policy and practices. A detailed financial analysis was completed by OHPR staff, and Division of Medical Assistance Programs (DMAP) staff modeled the impact on hospitals of changing from cost based reimbursement to a DRG methodology (See *Financial Analysis).* A review of the literature on alternative payment methodologies applied nationally was also completed. After OHPR's initial draft of recommendations, OHPR convened an external advisory group whose concerns are included in the discussion sections below. Members of the external advisory group included representatives from DMAP, the Oregon Association of Hospital and Health Systems, individual rural Oregon hospitals, the Oregon Office of Rural Health, and Medicaid managed care organizations. The intent of this advisory group was to provide feedback about proposed recommendation to be included in this report (*See Recommendations, Stakeholder Discussion*).

Recommendations
OHPR's analysis of the financial status of rural hospitals in Oregon indicates that Type A hospitals, which are more geographically isolated, experience significant variability from year to year and generally struggle to maintain positive operating margins. The Office's analysis also showed there are some Type B hospitals that may not require the differential Medicaid payment in order to remain financially healthy. After an analysis of audited financials and a review of national methodologies for defining rural, OHPR recommends a change in rural hospital Medicaid reimbursement policy for Type B rural hospitals.

Rural hospitals serve a critical function in communities, and the following policy recommendations are aimed at maintaining state fiscal support for those hospitals in most need of differential reimbursement while recognizing the changing landscape of Oregon. Discussion of each of these recommendations including stakeholder feedback and the detailed analysis are as follows:

Recommendation #1: No recommended change in Medicaid reimbursement for Type A hospitals.

Although there was one Type A hospitals meeting OHPR's criteria for a healthy five-year average operating margin, these hospitals are less financially stable year to year. Type A hospitals, on average, experienced only two of five years with a positive operating margin, and the combined five-year average operating margin for all Type A hospitals was -1.35%.[4] Because of their financial instability from year to year, OHPR recommends no changes to the current cost-based Medicaid reimbursement policy for Type A hospitals.

Stakeholder Reaction:
No stakeholder reaction to this recommendation.

[4] Oregon Office for Health Policy & Research analysis from 2002-2006 hospital audited financial statements and FR-3.

Recommendation #2: OHPR recommends DMAP consider a 5%, five-year average operating margin financial benchmark for Medicaid reimbursement classification for Type B hospitals.

The Division of Medical Assistance Programs (DMAP) should reimburse Type B hospitals with five-year average operating margins above the benchmark 5% at the DRG rate for a contract period adequate for hospital financial planning. A process and methodology should be developed by DMAP in consultation with OHPR to regularly evaluate the operating margins prior to the contract renewal period in order to reclassify reimbursement.

The policy intent of 100% cost-based reimbursement is to help stabilize rural community hospitals that would not otherwise be financially stable. As described in detail in the Financial Analysis (*See below*) conducted for this report, DRG reimbursement modeled for a single year had a modest impact on the financial health as reflected in operating margins of Type B hospitals.

Stakeholder Reaction:

- There was concern expressed that the benchmark operating margin applied by OHPR in its analysis may not be generalizable to rural community hospitals. Hospital representatives felt that a 5% operating margin may be appropriate for large hospitals but not for small, rural hospitals. One hospital representative stated that a small, rural hospital with less than a 5% operating margin may have their credit rating downgraded and face reduced capacity to secure funds for capital improvement, technology advancements and other future improvements.
- Stakeholders expressed concern that the data OHPR used to conduct their analysis did not reflect the most current, corrected hospital financial data, which can occur after the audited financials are submitted to the state. They also suggested that there are alternative metrics that may more accurately reflect the financial health of a hospital.
- One stakeholder felt that state Medicaid cost-based reimbursement does not contribute to the operating margin of the hospital because it pays cost with no margin. In addition, the member stated that the national trend from Medicare is to move toward cost-based reimbursement for rural hospitals and not in the direction of the policy recommendation presented.
- One stakeholder thought that OHPR's analysis should include the entire financial history of hospitals under the current policy, back to its inception in the late '80s, and not only the most recent five-year period.
- It was noted that the financial impact analysis presented in this report is not complete without analysis of the policy's impact on Medicaid managed care organizations.

Further discussion

The stakeholder discussion challenged the use of a 5% operating margin as a viable financial indicator for this policy. Specifically, there was concern that such a benchmark would negatively impact hospitals' credit ratings and impact their access to the capital market. OHPR's review of two of the three Nationally Recognized Statistical Rating Organizations (NRSRO) designated by the U.S. Securities and Exchange Commission,

Fitch's and Standard & Poor's, showed this not to be the case. Our review showed that, on average, high bond ratings were assigned to hospitals with less than a 5% operating margin.[5,6]

- Fitch ratings of not-for-profit hospitals, 2007
    - Average operating margin, all hospitals: 2.8%
    - Average operating margin, AA rated (highest rating) hospitals only: 4.1%
- S&P ratings of stand-alone not-for-profit hospitals 2007
    - Average operating margin, all hospitals: 2.9%
    - Average operating margin, AA rated hospitals only: 4.0%

There was also a general concern in the group that the potential savings resulting from shifting the identified hospitals to a DRG status would not be realized by the state, but instead would remain in the capitation paid to the Medicaid managed care plans. According to the Division of Medicaid Assistance Programs (DMAP), the managed care capitation rates would be actuarially adjusted to reflect the proportional changes in reimbursement to the hospitals affected by the proposed policy. Detailed actuarial analysis beyond the scope of this study is required for a more detailed assessment of the impact on managed care organizations. However, any reduction in payment to hospitals would not be passed to the managed care organizations as savings to them but would be proportionally corrected in the new capitation rates. Savings in public funds from the proposed policy change would be accrued to the state budget, and could be considered for alternative funding to support those hospitals in more critical financial health as proposed in Recommendation 4.

Recommendation #3: Develop or adopt a new geographical methodology of defining rural that includes population measures as well as the economic integration of communities.

The Office of Rural Health (ORH) and DMAP should develop or adopt a geographic methodology similar to the federal U.S. Office for Management and Budget (OMB), Rural-Urban Commuting Area (RUCA) or a hybrid version (See Geographical Analysis below) for defining rural for hospital Medicaid reimbursement policy. The current method of defining rural for Medicaid reimbursement does not take into account the social and economic integration of communities and does not have established criteria for changing over time. By basing a methodology on national standards that are updated on a regular basis with population and economic data, the definition will appropriately change as Oregon's communities change.

An OMB hybrid method should be considered as the OMB method accounts for the integration of a region through commuting patterns and is the criteria Medicare and the federal Office of Rural Health utilizes for defining rural. However, the OMB method alone may be too blunt of a methodology considering Oregon's large counties and does not take into consideration "pockets of rurality". By this logic, RUCA should also be considered as a more detailed method for defining rural especially within large counties.

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[5] Fitch Inc. *2007 Median Ratios for Nonprofit Hospitals and Healthcare Systems.* August 8, 2007.
[6] Standard & Poor's. *US not-for-profit health care 2007 stand-alone median ratios show stability but slowed growth.* August 3, 2007.

There are trade offs to be considered with each of these methods, and a hybrid version should be considered that meets the unique needs and policies of Oregon. For example, patient place of residence may be considered. Typically, patients in Oregon's rural hospitals reside in rural zip codes. However, there are exceptions. Between 2003 and 2006, 23% of the admissions to Providence Newberg Medical Center were from urban zip codes and 40% of the admissions to Silverton hospital were patients from urban zip codes.[7] Patient flow patterns can further clarify unique circumstances of the local community and should be investigated for inclusion in a hybrid methodology.

Stakeholder Reaction:
One stakeholder stated that changing the definition of rural by either using an OMB or RUCA method would result in changing the rural status of some hospitals, thus affecting their reimbursement. The member also stated federal definitions of rural have limitations when applied to Western states with large counties.

Recommendation #4: Create an Oregon Rural Health Revitalization Program
Small rural hospitals are an important part of the community health care system in Oregon, however many struggle financially, as demonstrated through their low operating margins. In many cases, Type A rural hospitals are in need even with Oregon's current cost-based Medicaid reimbursement policy (See Recommendation #1). As a mechanism for supporting rural hospitals in Oregon beyond Medicaid reimbursement, the Legislature may want to consider creating the Oregon Rural Health Revitalization Program. Through allocation of money through such a grant program, low interest or no interest loans, or another funding mechanism, rural hospitals most at need financially could receive additional state assistance to continue to provide essential services in rural Oregon.

Criteria for providing funding could include analysis of hospital financial health and preference should be given to hospitals with demonstrated financial need. The program might consider hospitals in communities that have shared financial responsibility through creation of a health district. Six (50%) of Oregon's Type A hospitals are part of a health district. This shared fiscal responsibility demonstrates a community's dedication to the services provided and enhances the value of money the program could allocate.

In addition to financial need, the program might consider those hospitals providing care to higher proportions of Medicaid clients. Through these two proposed criteria, the program could both assist in the financial stability of rural hospitals and incentivize providing care to Medicaid clients.

Stakeholder Reaction:
Members were in agreement that additional funding support is needed for small rural hospitals outside of reimbursement policy.

[7] Office for Oregon Health Policy & Research analysis of the 2003-2006 inpatient hospital discharge data using the ORH definition of urban.

Financial Analysis

Because many small rural hospitals have struggled to survive financially, the workgroup evaluated the operating and total margins of Oregon's Type A and B hospitals in order to assess Oregon's Medicaid rural hospital payment policies. Hospital margins are a measure of hospital financial health, and the difference in average margins between urban and rural hospitals is often seen as an indicator of the need for change to the payment system. In addition to a retrospective examination of hospital margins, the work group looked at predicted margins as a method of examining the potential impact of policies on future financial performance of these hospitals. [8] The following hospitals were included in the analysis for this report:

Table 1. Oregon Type A Hospitals (*also critical access hospital)

Blue Mountain Hospital in John Day*	Lake District Hospital in Lakeview*
Curry General Hospital in Gold Beach*	Pioneer Memorial Hospital in Heppner*
Good Shepherd Community Hospital in Hermiston*	St. Anthony Hospital in Pendleton*
Grande Ronde Hospital in La Grande*	St. Elizabeth Hospital in Baker City*
Harney District Hospital in Burns*	Tillamook County General Hospital*
Holy Rosary Medical Center in Ontario	Wallowa Memorial Hospital in Enterprise*

Table 2. Oregon Type B Hospitals (*also critical access hospital)

Ashland Community Hospital	Providence Newberg Hospital
Columbia Memorial Hospital in Astoria*	Providence Seaside Hospital*
Coquille Valley Hospital*	Samaritan Lebanon Community Hospital*
Cottage Grove Community Hospital*	Samaritan North Lincoln Hospital in Lincoln City*
Lower Umpqua Hospital in Reedsport*	Samaritan Pacific Communities Hospital in Newport*
Mid-Columbia Medical Center in The Dalles	Santiam Memorial Hospital in Stayton
Mountain View Hospital in Madras*	Silverton Hospital
Peace Harbor Hospital in Florence*	Southern Coos Hospital in Bandon*
Pioneer Memorial Hospital in Prineville*	St. Charles Hospital in Redmond
Providence Hood River Hospital*	West Valley Hospital in Dallas*

Margins

A hospital margin is the ratio of hospital profits to hospital revenue. All of Oregon's rural hospitals are non-profit, so the margin is essentially an expression of surplus revenue over expenses. There are two different margins frequently used as measures of overall profitability in health care: the operating margin and the total margin. The operating margin includes only revenues and costs related to patient care. The total margin

[8] North Carolina Rural Health Research and Policy Analysis Center. (2003). A Primer on Interpreting Hospital Margins. Available at http://www.shepscenter.unc.edu/research_programs/rural_program/Primer.pdf. Accessed on April 24, 2008.

expresses the difference between total revenue and costs as a proportion of total revenue. The total margin includes revenue not related to patient care, or "non-operating income" — for example, revenue from contributions, public appropriation, and investments.

For the purposes of this analysis, financial health is defined as an operating margin sufficient to finance the current and future capital needs required for maintenance and growth. The general industry standard for a "healthy" operating margin is between 3-5%.[9] Early signs of threats to a hospital's financial health are often detected in its operating margin. Operating margin is defined as operating revenue minus operating cost over operating revenue:

$$\textit{Operating Margin} = \frac{\textit{Operating Revenue-Operating Cost}}{\textit{Operating Revenue}}$$

In addition to operating margins, total margins can provide additional insight into the financial health of a facility beyond income generated from direct patient care. American Hospital Association (AHA) data support a range for a healthy total margin of 4-6%.[10]

Total margin includes both operating income and non-operating income:

$$\textit{Total Margin} = \frac{\textit{Operating Income + Non-Operating Income}}{\textit{Operating Revenue + Non-Operating Revenue}}$$

Applying the assumption that operating margins above 5% constitute "excess margin", DMAP modeled simulations of DRG reimbursement for rural hospitals with five-year average operating margins above 5% to assess the potential impact of changing Oregon's rural hospital reimbursement policy. Simulated operating margins and operating revenue were calculated using DMAP modeling output with real data from hospital audited financial statements.

Geographical Analysis

There is no single, national standard for defining rural for policy purposes. However, the most commonly used methodologies are from the US Census Bureau and the Office for Management and Budget (OMB).[11,12]

The U.S. Census Bureau defines "rural" as all territory, population, and housing units located outside an urbanized area (UA) (populations of at least 50,000) or an urban cluster (UC) (populations between 2,500-50,000), the core areas are defined as population density of 1,000 per square mile and adjacent census blocks of 500 people per square mile.[13] The methodology is built around census tract data collection.

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[9] Harrison MG & Montalvo CC. The financial health of California hospitals: A looming crisis. Health Affairs, 21(1), 2002.

[10] American Hospital Association. Trendwatch chartbook 2008. Available at http://www.aha.org/aha/trendwatch/chartbook/2008/08chapter4.ppt. Accessed on May 13, 2008.

[11] Coburn AF, Mackinney AC, McBribe TD, Mueller KJ, Slifkin RT, & Wakefield MK. Choosing rural definitions: Implications for health policy. Rural policy Research Institute Health Panel Issue Brief #2, March 2007.

[12] Rickets TC, Johnson-Webb KD, & Taylor P. Definitions of rural: A Handbook for health policy makers and researchers. Issue paper prepared for federal Office of Rural Health, June 1, 1998.

[13] Federal Registry.Volume 67, Number 224. November 20, 2002. Available at http://edocket.access.gpo.gov/2002/02-29464.htm. Accessed on May 13, 2008.

The most common methodology for federal program rural classification, including Medicare and the federal Office of Rural Health, was created by the U.S. Office for Management and Budget (OMB).[14] The OMB designates counties as either metropolitan or nonmetropolitan. Metropolitan is defined as a "core" county with an urban cluster (as defined by the US Census Bureau above) and any adjacent counties that have a significant number of employed residents of the "outlying" county or counties who commute to the central urban cluster of the "core" county. Any county, and associated cities and towns, not considered metropolitan is defined as "rural". This method takes into account not only the population density of a county but also accounts for the social and economic connectedness of a region through commuting data.

A third methodology utilized by federal programs is a hybrid methodology utilized by the US Department of Agriculture, federal Office of Rural Health and the US Department of Health and Human Services called Rural-Urban Commuting Area (RUCA). The RUCA categories are based on the size of towns as delineated by the Census Bureau and the functional relationships between places as measured by tract-level work commuting data.[15]

Hart, Larson and Lishner proposed an analysis of the strengths and weaknesses of each of the three methods described above.[13] Table 3 is an adaptation from that analysis.

Table 3. Federal methods for defining rural

Method	Geographic Unit	Strengths	Weakness
U.S.Census Bureau	Census tract	Does not account for arbitrary county or governmental boundaries	Other data infrequently collected at census tract
OMB	County	Useful for general definition of rural; geographic unit stable over time	Large counties obscure intra-county differences
RUCA	Census tract	Work commuting data differentiates within counties; very sensitive to demographic change	Other data infrequently collected at census tract; constant change; complex structure

The Office of Rural Health (ORH) designates Type A, Type B and Critical Access Hospital by Oregon Administrative Rule 410-125-0090.[16] "Rural" in Oregon has been defined using many national methodologies depending on the policy objective.[17] The

[14] Hart LG, Larson EH, & Lishner DM. Rural definitions for health policy and research. American Journal of Public Health, 95(7), p1149-1155, 2005.
[15] Available at http://depts.washington.edu/uwruca/rural.html. Accessed on June 3, 2008.
[16] Available at http://arcweb.sos.state.or.us/rules/OARS_400/OAR_410/410_125.html. Accessed on June 3, 2008.
[17] Oregon Office of Rural Health. Available at http://www.ohsu.edu/ohsuedu/outreach/oregonruralhealth/data/definitions/index.cfm. Accesses on June 3, 2008.

current ORH definition of a rural hospital, created in 1990, is a hospital in a geographic area ten or more miles from the centroid of a population center of 40,000 or more.[18]

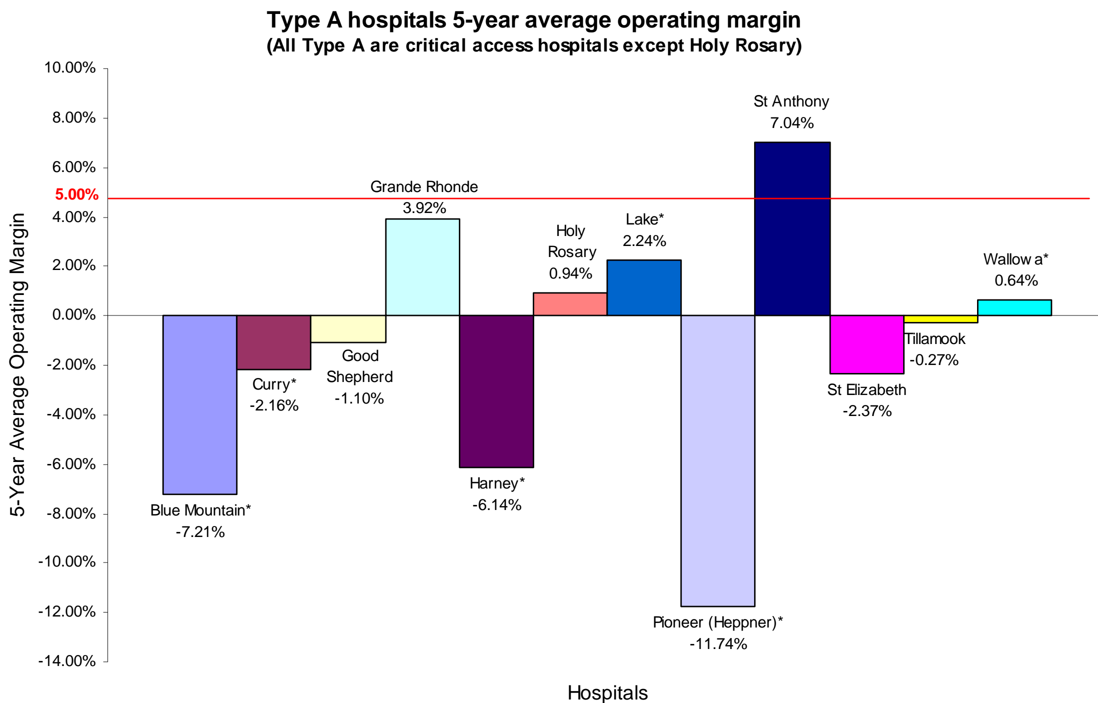
Financial modeling

Figures 1-2 shows the five-year operating margin for each hospital compared to the benchmark 5% operating margin standard. For each Type B hospital showing five-year average operating margins above 5%, the potential impact of changing these hospitals to DRG reimbursement was assessed, not only in terms of state savings, but also in terms of impact on hospital operating margin.

Type A

There was one hospital, St. Anthony, showing a 5-year average operating margin above 5% (Figure 1 below).

Figure 1. Type A hospital five-year operating margin, 2002-2006



Source: 2002-2006 hospital audited financial statements and FR-3 submitted to the Office for Oregon Health Policy & Research. Tillamook operating margins were re-submitted by the hospital administration and were not taken from audited financials submitted to OHPR. Wallowa operating revenue was re-submitted by hospital administration after re-analysis of previous information submitted to OHPR through audited financial statements. Wallowa inadvertently miscalculated operating revenue in the 2002-2004 submission to OHPR. OHPR adjusted operating margins for this report to reflect updated information.

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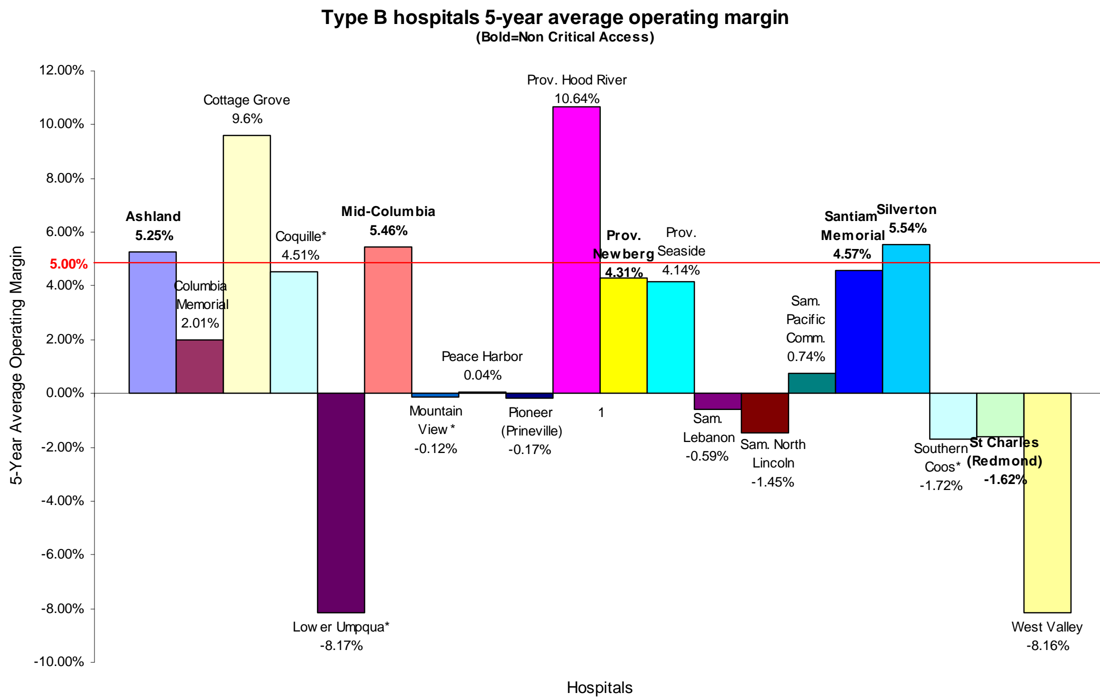
[18] Oregon Office of Rural Health. Available at http://www.ohsu.edu/ohsuedu/outreach/oregonruralhealth/data/definitions/index.cfm. Accessed on June 3, 2008.

Type B

There are five hospitals, Ashland, Cottage Grove, Providence Hood River, Mid-Columbia and Silverton, showing 5-year average operating margin above 5% (Figure 2 below). Tables 4 to 6 show the estimated single-year (2005) impact of changing to DRG reimbursement for Ashland, Cottage Grove, Providence Hood River, Mid-Columbia and Silverton.

Figure 2. Type B hospital 5-year average operating margin, 2002-2006



Source: 2002-2006 hospital audited financial statements and FR-3 submitted to the Office for Oregon Health Policy & Research

Table 4. Modeling of change in total OHP reimbursement from Type B to DRG, 2005

	Type B	DRG	Change in OHP revenue	% change in OHP revenue
Ashland	$3,383,325.99	$2,548,185.57	-$835,140.42	-25%
Cottage Grove*	$1,591,743.04	$1,304,745.05	-$286,997.99	-18%
Mid-Columbia	$1,327,167.17	$1,019,731.39	-$307,435.77	-23%
Prov Hood River*	$1,823,487.59	$1,238,238.47	-$585,249.12	-32%
Silverton	$4,751,904.12	$2,940,349.60	-$1,811,554.52	-38%

Source: DMAP, 2008

Table 5. Modeling of Change in Operating Revenue from Type B to DRG, 2005

	Type B	DRG	% Change in Operating Revenue
Ashland	$38,421,052	$37,585,912	-2.17%
Cottage Grove*	$9,137,385	$8,850,387	-3.14%
Mid-Columbia	$60,724,374	$60,416,938	-0.51%
Prov Hood River*	$43,384,000	$42,798,751	-1.35%
Silverton	$55,657,181	$53,845,626	-3.25%

* Critical Access Hospital
Source: OHPR analysis of 2005 audited financial statements and DMAP modeling

Table 6. Modeling of Change in Operating Margin from Type B to DRG, 2005

	Type B	DRG	OHP as % patient days
Ashland	0.26%	-1.96%	14.9%
Cottage Grove*	6.91%	3.89%	5.9%
Mid-Columbia	6.74%	6.27%	14.9%
Prov Hood River*	14.09%	12.91%	11.8%
Silverton	2.85%	-0.42%	43.9%

* Critical Access Hospital
Source: OHPR analysis of 2005 audited financial statements and DMAP modeling; OHPR analysis of 2005 inpatient discharge data

The reduction in OHP revenue for the five Type B hospitals ranges from 18% (Cottage Grove) to 38% (Silverton). Changes in OHP revenue reduce overall operating revenue from .51% (Mid-Columbia) to 3.25% (Silverton) (Table 5). Silverton Hospital shows the largest decrease (2.85% to -.42%) in operating margin if reimbursed as a DRG hospital. This effect is not surprising as Silverton has the largest share of patient days paid by OHP (43.9%).

Additional information about hospitals can be found in the *Oregon's Acute Care Hospitals: Capacity, utilization and trends 2003-2005* report published by the Office for Oregon Health Policy & Research.[19]

[19] Available at http://www.oregon.gov/OHPPR/RSCH/docs/HospRpt_2007.pdf. Accessed on June 3, 2008.

APPENDIX A: SEPTEMBER RE-SUBMISSION LETTER

September 25, 2008

The Honorable Peter Courtney, Co-Chair
The Honorable Jeff Merkley, Co-Chair
State Emergency Board
900 Court St. NE
H-178 State Capitol
Salem, OR 97301-4048

Re: Study of Medicaid reimbursement for Type A and B hospitals

Dear Co-Chairpersons:

The 2007 Legislature directed the Office for Oregon Health Policy and Research (OHPR) and Department of Human Services (DHS) to conduct a study of Medicaid reimbursement for Type A and B hospitals (ORS 442.470), noting that the study should review and analyze the current methods used to determine Medicaid reimbursement for these hospitals; if appropriate, include recommendations for changes to reimbursement; and estimate the fiscal impact of these recommendations on the hospitals and on the state's Medicaid health plan costs.

OHPR presented its study of Medicaid Type A and B hospital reimbursement to the Emergency Board Human Services Subcommittee on June 25, 2008. In presentation of our report, Senator Bates requested additional information to be presented along with the initial report to the Emergency Board Human Service Subcommittee in September.

AGENCY REQUESTED UPDATES

The department has compiled the information as requested above. The department's June 2008 report on the status of the study of Medicaid reimbursement for Type A and B hospitals is attached. In addition, the questions that arose from the June 2008 Emergency Board Human Services Subcommittee have been addressed below.

1. Rationale for a five year, 5% operating margin

OHPR reviewed national, peer-reviewed literature regarding an appropriate measure of a hospital's financial health. Our review indicated that the general industry standard for a "healthy" operating margin for a non-profit hospital is between 3-5%. Because early signs of threats to a hospital's financial health are often detected in its operating margin, it was identified as the key financial indicator for use in this analysis. *(Harrison MG & Montalvo CC. The financial health of California hospitals: A looming crisis. Health Affairs, 21(1), 2002.)*

Following an external stakeholder review of the draft, concern was raised that a 5% operating margin would limit access to the bond market by lowering the rating of the hospital. OHPR reviewed two key rating organizations that are Nationally Recognized Statistical Rating Organizations (NRSRO) designated by the U.S. Securities and Exchange Commission, Fitch's and Standard & Poor's, and they did not corroborate this concern. In fact, the average operating margin for the highest rated non-profit hospitals was 4%. OHPR believes this further supports our belief that a 5% operating margin would not have a negative impact on bond ratings for non-profit hospitals. Our review showed:

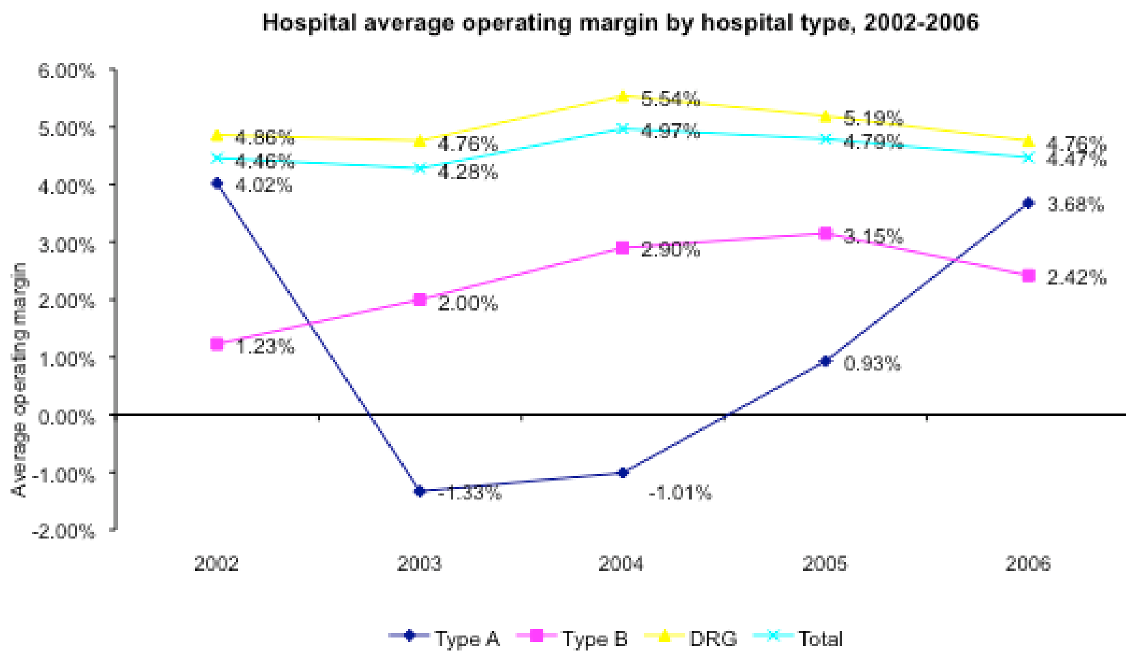
- Fitch ratings of not-for-profit hospitals, 2007
  - Average operating margin, all hospitals: 2.8%
  - Average operating margin, AA rated (highest rating) hospitals only: 4.1%

- S&P ratings of stand-alone not-for-profit hospitals 2007
  - Average operating margin, all hospitals: 2.9%
  - Average operating margin, AA rated (highest rating) hospitals only: 4.0%

(Source: Fitch Inc. 2007 Median Ratios for Nonprofit Hospitals and Healthcare Systems. August 8, 2007. Standard & Poor's. US not-for-profit health care 2007 stand-alone median ratios show stability but slowed growth. August 3, 2007.)

While OHPR believes the use of a 5% operating margin as an indication of a financially "healthy" hospital is supported by both academic literature and

by financial rating organizations, we also recognize that small, rural hospitals can experience significant financial volatility over time, as reflected in the average operating margins from 2002 to 2006 of Oregon's Type A and Type B hospitals shown below. The extreme volatility shown in Type A hospital's financial performance led OHPR to recommend that Division of Medical Assistance Programs' (DMAP) current cost-based reimbursement policy be continued for those hospitals and to focus further analysis on the impact of a potential change in reimbursement policy for Type B hospitals.



Source: Office for Oregon Health Policy & Research, calculated from 2002-2006 audited financial statements

OHPR chose to examine operating margins over a five-year period to attenuate some of the volatility small hospitals may experience in a single year and is often evident in small hospitals' financial performance.

Applying a 5% operating margin over a 5-year time span provided the parameters necessary for DMAP to model the policy impact of changing Medicaid reimbursement for Type B hospitals with an average operating margin above 5% over 5 years. The results of this potential policy are meant to be illustrative rather than definitive examples of the potential financial

impact for both the hospital and for DMAP. Understanding there are other approaches and formulas that states use to reimburse rural hospitals, OHPR modeled this approach for illustration.

OHPR identified alternative reimbursement models from other states that could be considered in discussion of changes to the current Oregon hospital Medicaid reimbursement policy. Two alterative state Medicaid rural hospital reimbursement policies are presented below.

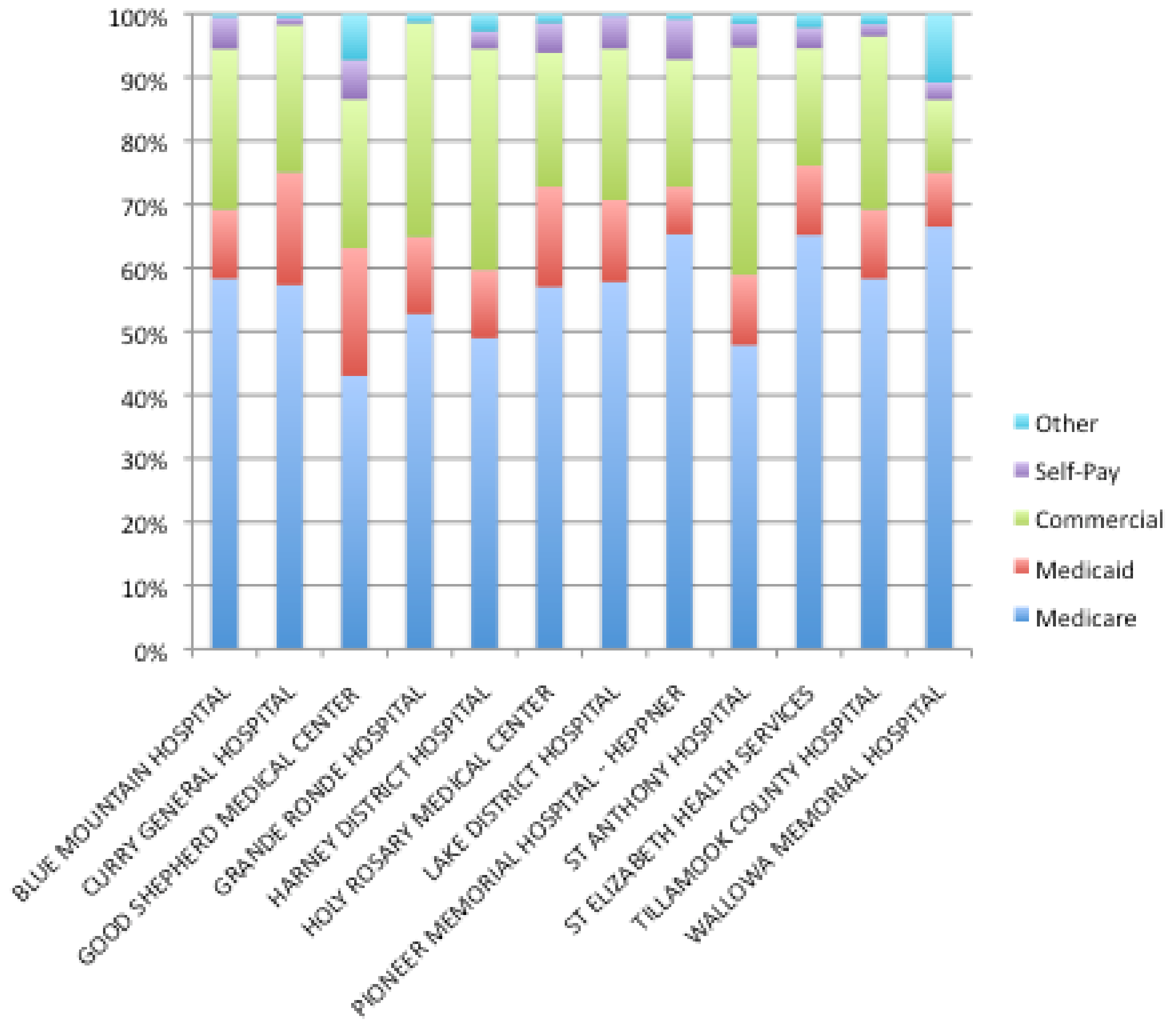
- North Carolina: All Medicaid-participating hospitals are guaranteed diagnosis-related group (DRG) payments no lower than the 45th percentile. At the end of the fiscal year, if a critical access hospital's (CAH) Medicaid costs are above the 45th percentile, Medicaid promised 100% cost settlement. If their costs are below the 45th percentile, the facility keeps the difference, receiving more than costs for their inpatient Medicaid services.

- New York: All acute care hospitals within each of the eight geographic regions are used as peer groups to determine a hospital's per diem rate. CAHs are guaranteed payment equal to 110% of the average payment for their region. This payment methodology likely benefits CAHs because larger and higher volume hospitals are used in the calculation of average payments.

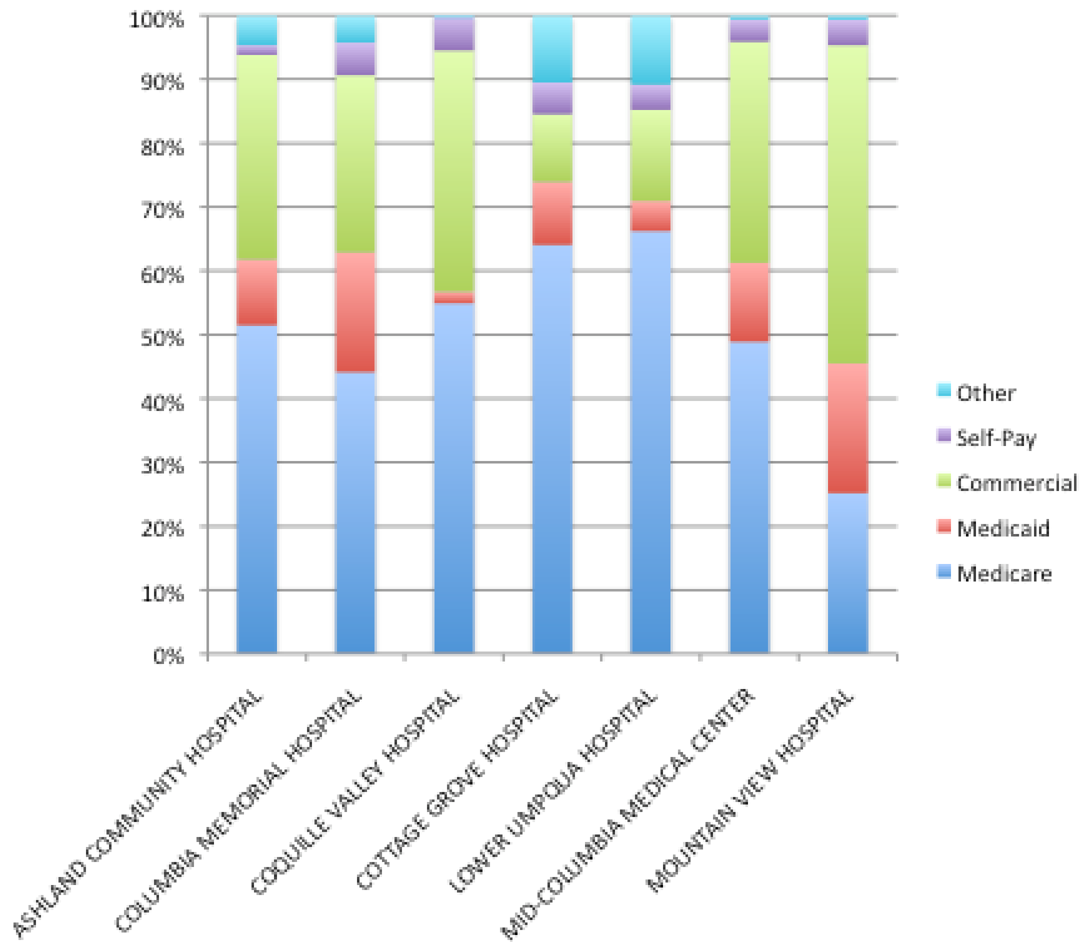
2. Medicare and Medicaid payer mix of Type A and B hospitals

Medicaid contributes differently to the overall revenue of a hospital. In every case for Type A and B hospitals, Medicaid does not make up more than 33% of the total charges over a five-year period *(Source: 2002-2006 inpatient hospital discharge data, Office for Oregon Health Policy and Research.)*

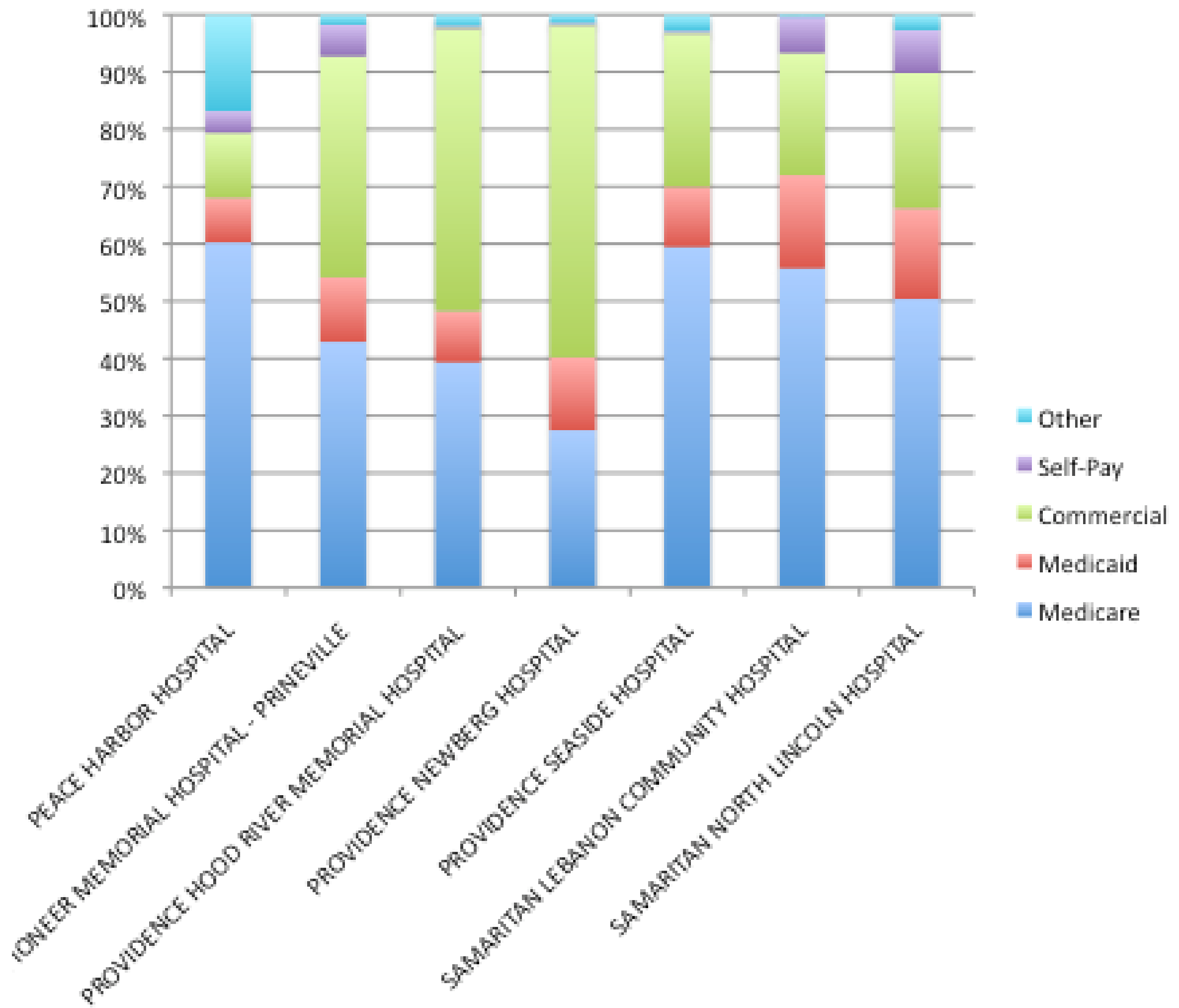
(see following maps)



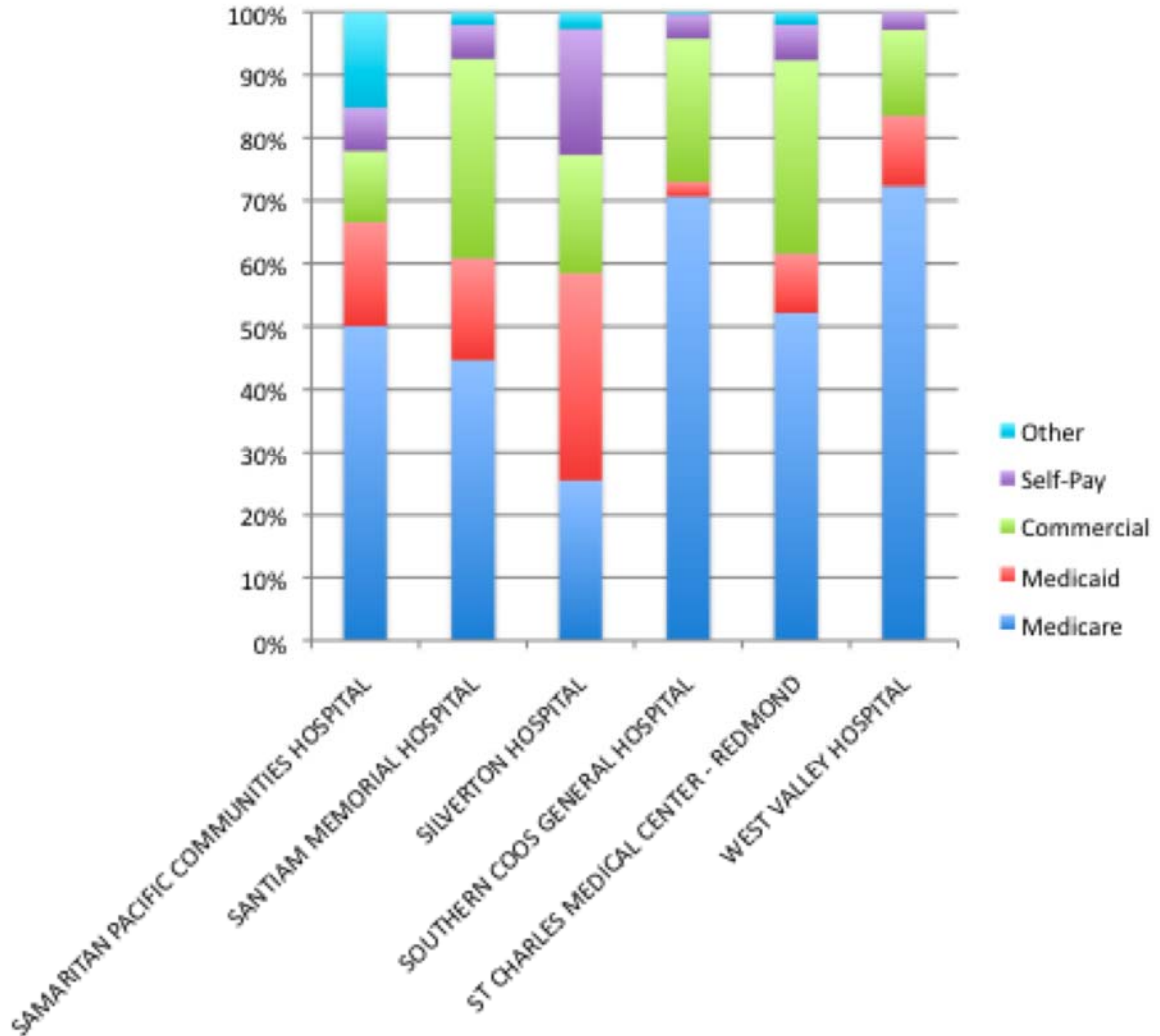
Source: 2002-2006 inpatient hospital discharge data, Office for Oregon Health Policy and Research



Source: 2002-2006 inpatient hospital discharge data, Office for Oregon Health Policy and Research



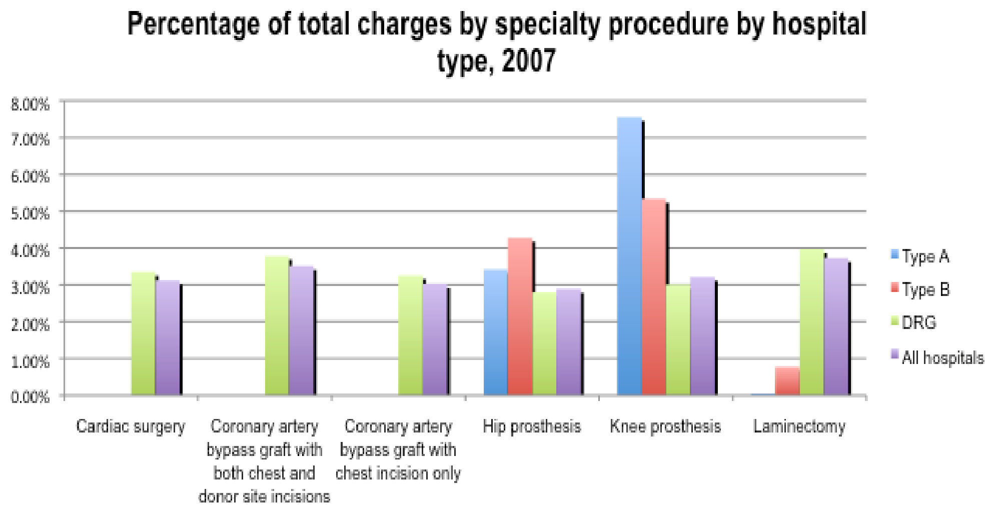
Source: 2002-2006 inpatient hospital discharge data, Office for Oregon Health Policy and Research



Source: 2002-2006 inpatient hospital discharge data, Office for Oregon Health Policy and Research

The impact of changing the reimbursement strategy is, of course, affected by this payer mix. DMAP's modeling of the impact of changing reimbursement from 100% of reasonable cost to a DRG reimbursement for the five Type B hospitals whose five-year average operating margin is over 5% shows a potential loss in operating revenue from -0.51% to -3.25% (2005 data) depending largely on the percent Medicaid is of the hospital payer mix.

3. Specialty procedures performed by Type A and B hospitals
Hospitals cross-subsidize the cost of some services with services that are more profitable. Cardiac and orthopedic services are often viewed as the mechanism to help offset losses in other service categories. OHPR performed an analysis of three commonly performed cardiac and orthopedic procedures to see if small, rural hospitals in Oregon have similar capacity to cross-subsidize.



Source: Oregon Health Policy & Research, 2007 hospital inpatient discharge data

There are no Type A or B hospitals performing cardiac procedures. Many of these hospitals (57% of Type A; 100% of Type B) perform at least one of the three specified orthopedic procedures. While orthopedic procedures account for a greater proportion of total charges in Oregon's small rural hospitals than in large, urban hospitals, small hospitals clearly have a reduced opportunity to cross-subsidize in the same manner.

SUMMARY
OHPR hopes that the concerns raised during the June Emergency Board Human Services Subcommittee hearing have been substantially addressed in our re-submission of this report. The study is intended to provide illustrative rather than

definitive examples of changes in Medicaid hospital reimbursement policy for Type A and B hospitals. Additional analysis and study would be required in order to implement any policy change. We are willing and able to conduct additional analysis and study of this policy at the direction of the Legislature if desired.

ACTION REQUESTED

The department requests the Emergency Board acknowledge this follow-up to the June 2008 report.

LEGISLATION AFFECTED

None.

Sincerely,

Bruce Goldberg, M.D.
Director
Department of Human Services

Attachment

CC: John Britton, Legislative Fiscal Office
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Jeanene Smith, Office for Oregon Health Policy & Research