

Health Care Questions: Measuring the Uninsured and Implications of Cost-Shifting

By Mark A. Foster, MAFA, consultant to
Institute of Social and Economic Research, University of Alaska Anchorage

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Purpose of note: At a hearing of the Joint Committee on Health Care on March 29, 2007, senators asked specific questions about two important health-care issues: how do we measure who is uninsured, and what are the implications of cost-shifting in health care? In this note, Mark Foster, a consultant to ISER who has broad experience in studying health-care issues, responds to those questions.

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Health Care in Alaska

1 How do we measure who is uninsured?

1.1 Introduction

How do we measure who has health insurance and who is uninsured?

The most common method to measure who has health insurance is to survey a broad sample of households and ask whether they have it.

Prominent household surveys may ask questions about health insurance and health coverage in different ways.

One of the differences among the household surveys is how they ask respondents about their health insurance coverage or lack thereof:

1. Do you have health insurance (today)?
2. Have you *had* health insurance during the previous calendar year?
3. Have you been *without* health insurance anytime during the past twelve months?

So, if a person had insurance coverage today that had been in effect for three months out of the prior twelve, they would be classified as “covered” under questions 1 and 2 but not 3. Thus, it is useful to consider what question was asked when evaluating what the trends and comparisons with the data might mean.

Another potential source of variation among surveys is whether they treat certain kinds of health coverage, e.g., Indian Health Service, as health insurance or not.

In addition, given variations in coinsurance, co-payments and deductibles and benefits covered, simply asking whether a person has insurance may not reveal important differences in coverage levels.¹

Finally, if one is interested in measuring *access* to health care, it may be useful to assess the extent to which affordable health care is available to households in a particular community or region, regardless of whether they have insurance or not.²

1.2 Sources of Survey Data on the Uninsured

The most widely cited household survey that tracks health insurance is the U.S. Census Bureau's Annual Social and Economic Supplement (ASEC) to the Current Population Survey (CPS).³

The CPS ASEC:

- asks respondents whether they have health insurance *in the prior calendar year*
- provides a consistent historical time series at the national level
- can be used to examine state-level trends and differences (through multi-year averages), though the *large sampling errors of state-level data limit its usefulness*
- is mainly useful for examining timely estimates of the insured and uninsured population at the national level
- is useful as a source of estimates of the insured and uninsured populations at the state level⁴
- is the official source of estimates used to allocate federal funding to states for the State Children's Health Insurance Program (SCHIP).

¹ See for example, "Generosity and Adjusted Premiums in Job-Based Insurance: Hawaii is Up, Wyoming is Down", Jon Gabel, et al., Health Affairs, May/June 2006. The report examines the differences between the quality of employment-based health insurance plans based on benefits, first dollar coverage, and co-payments. Given the utilization patterns of a standard population, they calculated the cost of an equivalent plan for employees. Rural areas tended to have the least generous health plans. When the cost of single premiums in Wyoming were adjusted to reflect the additional cost to the employee for comparable coverage in other states, the cost of the average single premium rose from \$3439 to \$4001 (+16.3%). Alaska was not included in the analysis because of small sample size in the Medical Expenditure Panel Survey data.

² A generous health insurance plan in a remote rural location may not be as valuable as a generous health insurance plan in a metropolitan location with affordable access to more care choices without as many travel requirements and potential for delays.

³ See <http://www.census.gov/hhes/www/hlthins/overview.html>

⁴ It is useful to keep in mind that the sample size and stratification between urban/rural areas can create differences between standard error estimates when comparing states to the U.S. estimate and when comparing states to one another. For example, the 2004-2005 national estimate of the uninsured has a $\pm 0.1\%$ standard error at the 90% confidence interval, while Alaska has a $\pm 1.4\%$ standard error at the 90% confidence interval and Washington state has a $\pm 1.0\%$ standard error at the 90% confidence interval.

On March 23, 2007, the U.S. Census Bureau announced that it had overstated the number of uninsured by 0.6% and 0.7% for 2005 and 2004 respectively. Revised figures for 1995-2003 are expected to become available in August 2007 when figures for 2006 are released. In the meantime, because the revision appears to be relatively consistent from year to year, the impact on unadjusted trend data is expected to be small.

While the CPS ASEC provides reliable estimates of the *net change in the number of uninsured people from one year to the next*, it does not show

- how long a given person remains uninsured,
- what percentage of the uninsured population remains uninsured in the following year,
- how many people obtain coverage, or
- any changes in a person's coverage within a given year.

Questions that examine these more dynamic measures of health coverage are found in the U.S. Census Bureau's Survey of Income and Program Participation (SIPP). The most recent SIPP survey available is from 2001. It does not provide a state-by-state breakdown.

1.2.1 Classification of "Indian Health Service Only"

After consulting with health insurance experts, the Census Bureau modified the definition of the population without health insurance in the Supplement to the March 1998 Current Population Survey, which collected data about coverage in 1997. Previously, people with no coverage other than access to the Indian Health Service were counted as part of the insured population. Subsequently, the Census Bureau has counted these people as uninsured. The effect of this change on the overall estimates of health insurance coverage was negligible.

However, this change does result in a noticeable change in the estimate of health coverage in several states where the percentage of the population that is Alaska Native/American Indian is greater than 5%.⁵ The decrease in the number of uninsured, if IHS only is classified as insurance, is statistically significant for Alaska, reducing the percentage of uninsured from 18.8% to 14.6% for the 2002/2003 CPS data.⁶

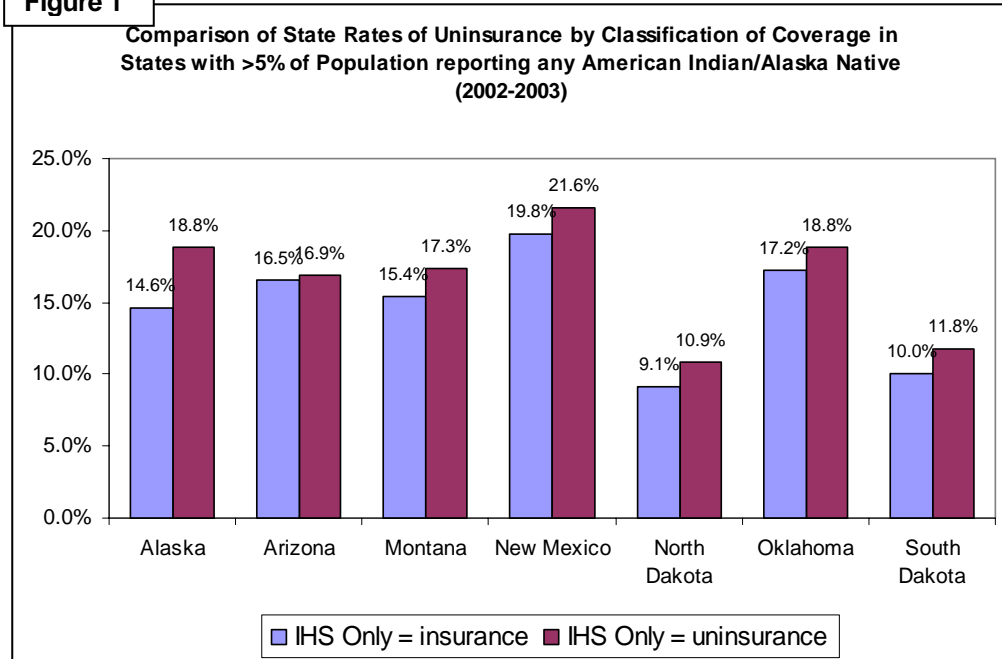
See Figure 1 on the following page.⁷

⁵ See "Reclassifying Insurance Coverage for the Indian Health Service in the Current Population Survey: Impact on State Uninsurance Estimates", University of Minnesota School of Public Health, State Health Access Data Assistance Center, Issue Brief #11, April 2005.

⁶ Ibid, p.2.

⁷ Ibid, p.2.

Figure 1



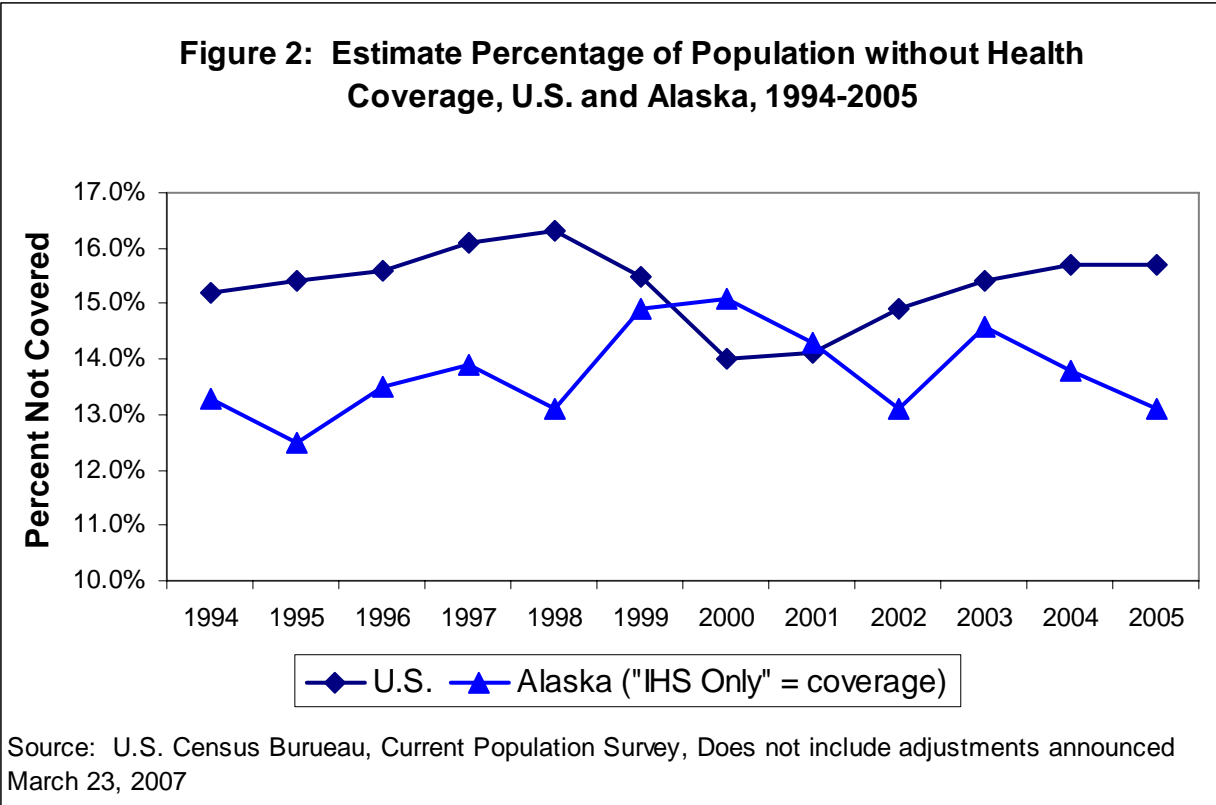
Source: University of Minnesota School of Public Health, State Health Access Data Assistance Center, Issue Brief No. 11

If one classifies “IHS only” as insurance⁸ and compares Alaska to the U.S. average for the period 1994-2005, (not including the CPS adjustment announced on March 23, 2007, since it is only available for 2004/2005), two things emerge. First, Alaska appears have a lower than U.S. average percentage of uninsured over most of the time series. Second, the increases/decreases in the uninsured in Alaska do not appear to track the U.S. average and may run somewhat counter.

This may not be particularly surprising given the general tendency for health insurance coverage to track overall trends in the economy.⁹ As the U.S. economy grew in the late 1990s, health insurance coverage expanded. With the slowdown in the U.S. economy in the early 2000s, health insurance coverage declined. Similarly, as Alaska experienced relatively low oil prices by historic standards in the late 1990s, health insurance coverage declined. As oil prices and the economy in Alaska experienced a modest rebound after 2000, there is a slight increase in health insurance coverage.

⁸ We tend to classify “IHS Only” as coverage due to 1) the major expansion in service and capacity of the Tribal Health System in Alaska during the years following the formation of the Alaska Native Tribal Health Consortium in 1997, and 2) the tendency for employer based insurance to have shifted more costs to employees over the same time period. In short the quality of IHS coverage has gone up while the quality of employer coverage has declined.
⁹ See for example, “Changes in Economic Conditions and Health Insurance Coverage, 2000-2004”, John Holahan and Allison Cook, Health Affairs, November 2005.

See Figure 2 below.¹⁰



¹⁰ The figure is based on Current Population Survey data, Percent without health coverage for U.S. and Alaska (1994-2005), Alaska figures treat "IHS Only" as health insurance coverage.

2 Cost Shifting

2.1 Introduction

What do we mean when we use the term cost shifting?

Where do we find cost shifting?

2.2 What do we mean when we use the term cost-shifting

Cost shifting means different things to different people.

Some economists have defined “cost shifting” in health care to mean that services are provided *below* their **variable cost** – the direct costs of providing the service, *not including* fixed costs (sometimes referred to as overhead). Perhaps not surprisingly for an industry with a large portion of fixed or overhead costs and small variable costs, many economic studies have not found much evidence to support the contention that hospitals and doctors engage in pricing below their variable cost and thus shift some of their variable costs to someone else.

However, health providers have tended to define cost shifting more broadly. They tend to view cost shifting as when one payer picks up a smaller or larger share of their fixed costs compared to another.

For the purpose of this discussion, we will adopt what appears to be the more common usage in the health care industry, i.e., cost shifting is a situation where one payer picks up a small or larger share of fixed costs compared to another.

2.3 Where do we find cost shifting

2.3.1 Between Payers

Hospitals and doctors may accept lower than average cost (but greater than incremental cost) payments from Medicaid and Medicare and charge higher than average cost for private insurance or patient self-payers. In other words, they’ve shifted a larger share of overhead to private payers.

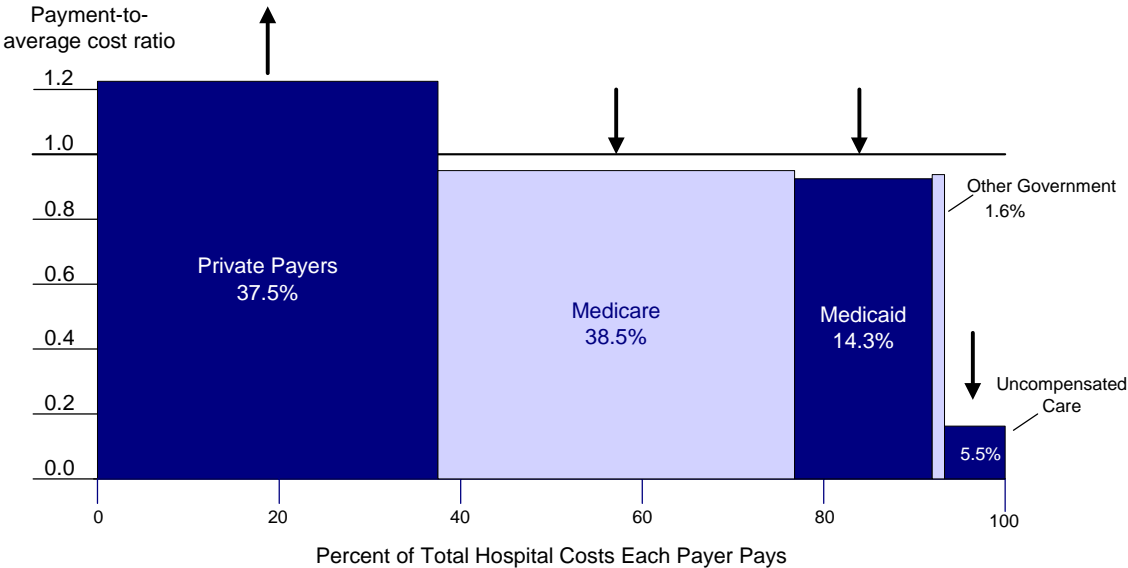
Similarly, as bad debt and charity care increases, the overhead that has to be covered increases the average cost that needs to be recovered from those who pay. This differential pricing of service is generally referred to

as “cost shifting” or the “payment hydraulic” in American Hospital Association presentations.

National hospital data from 2002 suggests that the overall payment to average cost ratio for private payers was 1.22. Medicaid and Medicare were paying roughly 90% of the average cost. Aggregate revenue *directed* at covering uncompensated care (charity care and bad debt) amounted to about 10% of the average cost.

See Figure 3 below.¹¹

Figure 3: The U.S. Hospital Cost-Shift Payment Hydraulic, as of 2002



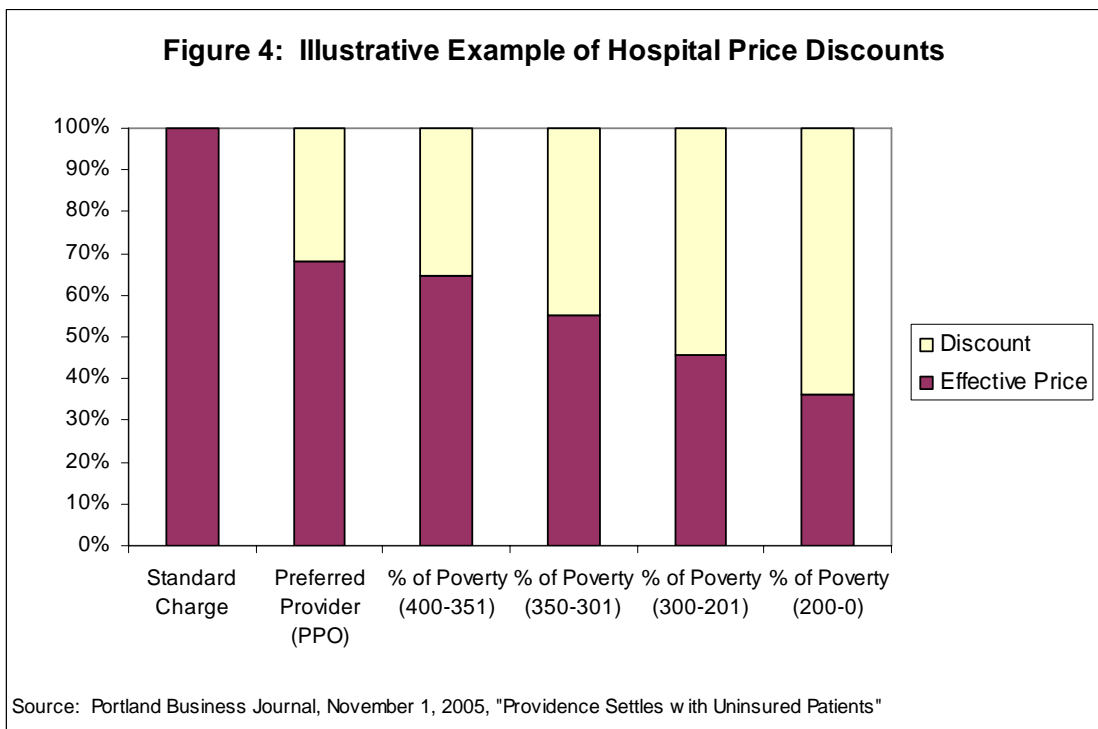
Source: "The Cost-Shift Payment Hydraulic: Foundation, History, And Implications," by Allen Dobson, Joan DaVanzo, and Namrata Sen
 Health Affairs, Volume 25, Number 1, Jan/Feb 2006, p. 24, Exhibit 1.
 Based on: Lewin Group Analysis of data presented in Lewin Group, Trendwatch Chartbook 2005: Trends Affecting Hospitals and Health Systems (Washington: American Hospital Association, May 2005).

If government programs reduce their prices and uncompensated care increases without additional support from other funding sources, a 1% decline in these areas (representing roughly 2/3rds of the total cost), results in roughly a 2% increase in the price to private payers.

Finally, among private payers, it is not uncommon to find that large insurance carriers are able to negotiate a preferred provider discount that is larger than smaller insurance carriers and self-pay individuals might be able to obtain.

¹¹ We note that the figures for the percentage of total hospital costs each payer pays add to 97.4%, not 100% - this reflects the data presentation in both source references, the Health Affairs article and the Trendwatch Chartbook 2005.

The relative lack of access to discounting for self-pay individuals has been mitigated somewhat by the rise of billing practices that extend progressively steeper discounts to patients at 400% of poverty and below. See for example Figure 4 below.



2.3.2 Between Services

Similarly, it is not uncommon to find that the payment to cost ratios vary for the many and various services a health care provider offers.¹²

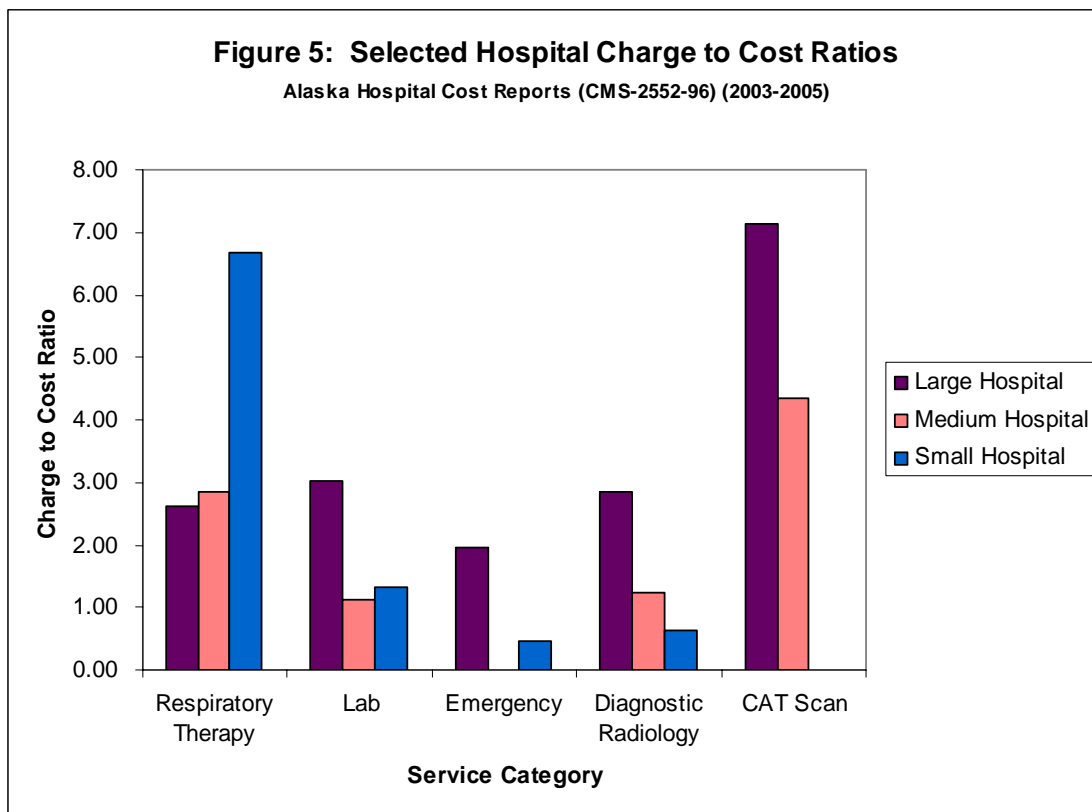
Diagnostic imaging services, e.g., X-Ray, CAT scan, MRI, ultrasound, tend to have relatively high contribution margins.

Lab, respiratory and physical therapy also tend to have higher than average contribution margins.

More specialized labor intensive care, e.g., neonatal, cardiology, tend to have lower than average contribution margins in hospitals offering a wide range of services.

¹² In contrast to the "payment to cost ratio" typically used to evaluate the relative contribution margin of payers, the Center for Medicare and Medicaid Hospital Cost Reports (CMS-2552-96) contain worksheets describing the ratio of *cost to charges* for various categories of care. In order to focus on the relative contribution margin of service categories, we use the inverse, the ratio of charges to cost in this presentation.

However, it is not unusual to find wide variation in the margins *among* providers within a region or state. For example, the contribution margin on lab work tends to decline as the hospitals become smaller and more rural. See Figure 5 below.



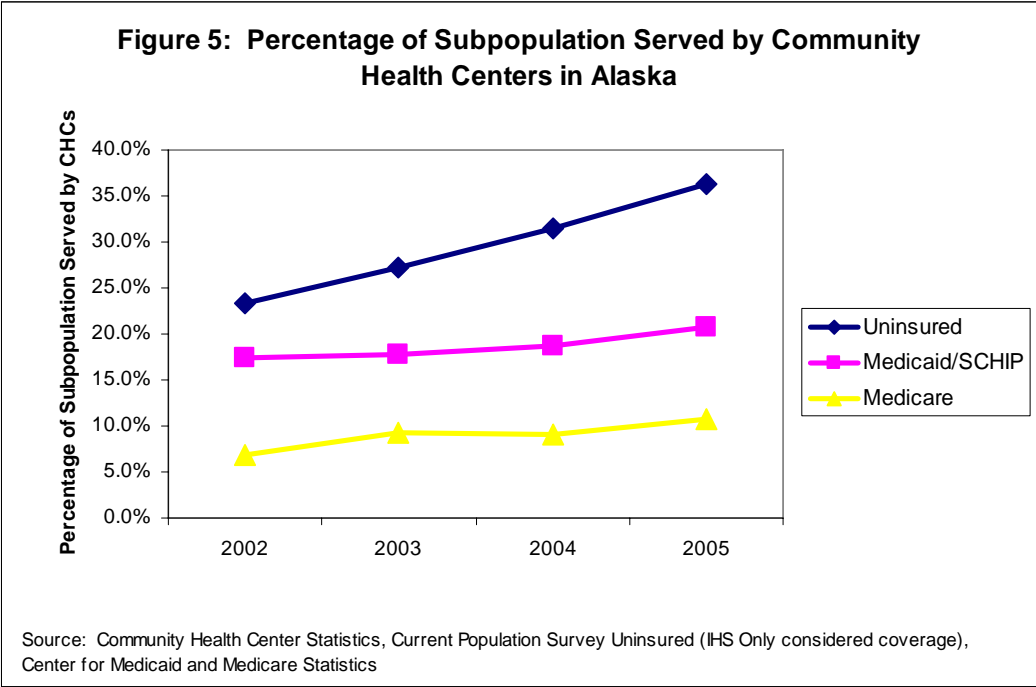
Finally, with the rise in independent diagnostic imaging centers, hospitals have expressed concern that they are losing relatively high margin patients to the independent centers while retaining their obligations to provide other lower margin services. The net result of the increased pressure on incumbent hospital margins has been a mix of cost growth containment efforts and price adjustments.

2.3.3 Between Providers

As the cost to deliver service increases and the average revenue per patient decreases due to lower reimbursements, higher overhead for claims support and/or higher claims denial rates, doctors have an

incentive to refer lower margin patients to the safety net that includes critical access hospitals and federally qualified health centers.¹³

There is some evidence of this in Alaska based on the relatively rapid growth in the percentage of low margin patients seen by the safety net health providers, especially the uninsured. See Figure 5 below.



¹³Due to current data limitations, we only include §330 Public Health Service Act funded facilities in the data in Figure 5 on the percentage of low margin patients seen by federally qualified community health centers.