

There Is Enough Money

Presentation to the Sphex Club

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Introduction

As a new member of SPHEX I have mindful of certain customs associated with the privilege of presenting a paper to the membership. Early on I detected a bent toward the intellectual topics. I was impressed by the breadth of knowledge exhibited by the long standing members as they presented papers. Of particular note was the ability of certain members to speak with authority of subjects that were far removed from their professional calling. It was as if my neurosurgeon was also the starting shortstop for the St. Louis Cardinals.

I attempted to emulate this practice in my initial presentations. With some trepidation I first spoke on Immigration Policy and then a later talk on the Life and Poetry of Robert Frost. My hope was that the membership would treat a new member gently and that I could draw to some limited extent on my long ago liberal arts background made possible by the generosity and vision of the Reverend Benjamin Wofford who founded a small college in Spartanburg, South Carolina.

More recently I have been interested to learn that in earlier times the SPHEX presentations often focused on hotly debated contemporary topics of national, regional, or local interest. Such presentations allowed the members to express personal views and perhaps stir debate or help form local opinions among the leaders of the town and the gown communities who were in attendance. For this reason, and perhaps as a sign of the limits of my intellectual repitore, this paper will deal with healthcare and more particularly with the current Medicare funding crisis our country faces and some of the causes and possible solutions thereto.

While this topic has the advantage of falling within the scope of my professional life for the last 45 years, it is far from "safe" in the midst of this group. In the first place, many of us in this room have lived successful long lives and are therefore may feel entitled to claim the status of Medicare Recipient. Hopefully I can provoke at least some members of this group of Medicare beneficiaries. And then there is a healthy sprinkling of physicians present whom I am sure to provoke as well. As for those among us who are younger and still employed, just know that the rest of us are counting on you to fund our health insurance and we only wish you economic success as you do so.

There Is Enough Money

As a starting spot I quote from the 2011 Report of the Medicare Board of Trustees (<http://www.ssa.gov/OACT/TRSUM/index.html>). This is a six member Board composed of such notables as Secretary of the Treasury Geithner and Secretary of Health and Human Services Sebelius. Two of the six are from the private sector. From the 2011 Report:

The Hospital Insurance Trust Fund fails the test of short-range financial adequacy, as projected assets drop below one year's projected expenditures early in 2011. The fund also continues to fail the long-range test of close actuarial balance. Medicare's HI Trust Fund is expected to pay out more in hospital benefits and other expenditures than it receives in income in all future years. The projected date of HI Trust Fund exhaustion is 2024, five years earlier than estimated in last year's report, at which time dedicated revenues would be sufficient to pay 90 percent of HI costs. The share of HI expenditures that can be financed with HI dedicated revenues is projected to decline slowly to 75 percent in 2045, and then to rise slowly, reaching 88 percent in 2085. Over 75 years, HI's actuarial imbalance is estimated to be equivalent to 21 percent of tax receipts or 17 percent of program outlays. "

The Hospital Insurance Trust Fund covers Medicare Part A benefits. The 2011 Trustees Report goes on to state:

Part B of Supplementary Medical Insurance (SMI), which pays doctors' bills and other outpatient expenses, and Part D, which provides access to prescription drug coverage, are both projected to remain adequately financed into the indefinite future because current law automatically provides financing each year to meet the next year's expected costs. However, the aging population and rising health care costs will cause SMI costs to grow rapidly from 1.9 percent of GDP in 2010 to approximately 3.4 percent of GDP in 2035 and approximately 4.1 percent of GDP by 2085. Roughly three-quarters of these costs will be financed from general revenues and about one-quarter from premiums paid by beneficiaries.

I should add that these projections, as worrisome as they are, are based on assumptions that most believe are highly suspect. For instance, the SMI projections assume that the Medicare Physician Fee schedule will be cut by about 30% starting in the coming year pursuant to the Balanced Budget Act of 1997. In reality Congress has passed "work around" legislation every year to temporarily delay the implementation of these cuts. In the future Congress will be forced to choose between the risk of a physician exodus

from Medicare participation or increasing pressure on the general fund revenues. The Hospital Insurance Fund assumptions are based on future cuts to Hospital rates that were included in the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010 (the "Affordable Care Act" or ACA). The long term viability of this legislation is still in question.

In case the point is not clear the 2011 Trustee's Report concludes with the following:

. For the sixth consecutive year, a "Medicare funding warning" is being triggered, signaling that projected non-dedicated sources of revenues -- primarily general revenues - - will soon account for more than 45 percent of Medicare's outlays. That threshold was in fact breached for the first time in fiscal 2010. A Presidential proposal is required by law in response to the latest warning.

Conclusion

Projected long-run program costs for both Medicare and Social Security are not sustainable under currently scheduled financing, and will require legislative corrections if disruptive consequences for beneficiaries and taxpayers are to be avoided.

The financial challenges facing Social Security and Medicare should be addressed soon. If action is taken sooner rather than later, more options and more time will be available to phase in changes so that those affected can adequately prepare.

Addressing the Shortfall

At this point you should wonder if the title of this talk was misunderstood. Perhaps it was: **Is there Enough Money?** That is a fair question and one we will come back to during the course of this talk.

Addressing the shortfall, in one sense, is a pretty simple proposition. Broadly speaking the options are to:

- Bring more money to the table , by (1) diverting existing dollars from other programs, (2) raising new tax revenues, and/or (3) charging higher premiums or copays to Medicare participants; or to
- Spend less, by (1) reducing benefits to program participants, (2) reducing growth in the number of participants in the face of the baby boomer generation, (3) reducing the volume of services consumed by

each plan participant, and/or (4) paying less to those who provide services to participants.

In practice, all of these remedies to Medicare deficit pose significant political risks and problems. When it comes to new tax revenues, Republican and Democratic philosophies are pitted against each other. The AARP and other senior interest groups vigorously oppose reducing benefits or increasing costs to beneficiaries. And the hospitals, doctors, drug companies and other health groups are well represented by lobbyists and PACs. As a result, Congress has failed to take any significant action to resolve the funding issue. Several significant opportunities have been missed to seriously address the issue.

Paul Ryan (Republican Congressman) would approach the problem from a different perspective. His proposal would restructure the Medicare Program and provide a subsidy or stipend to seniors with which a private plan of their individual choosing would be funded. This proposal shifts much of the risk of future inflation in costs to the individual Medicare beneficiary. Before rejecting this plan out of hand you might pause to consider that most private pensions have gone down the same path and that increasingly employers are heading in the same direction with health benefits

Variation in Healthcare Spending: An opportunity.

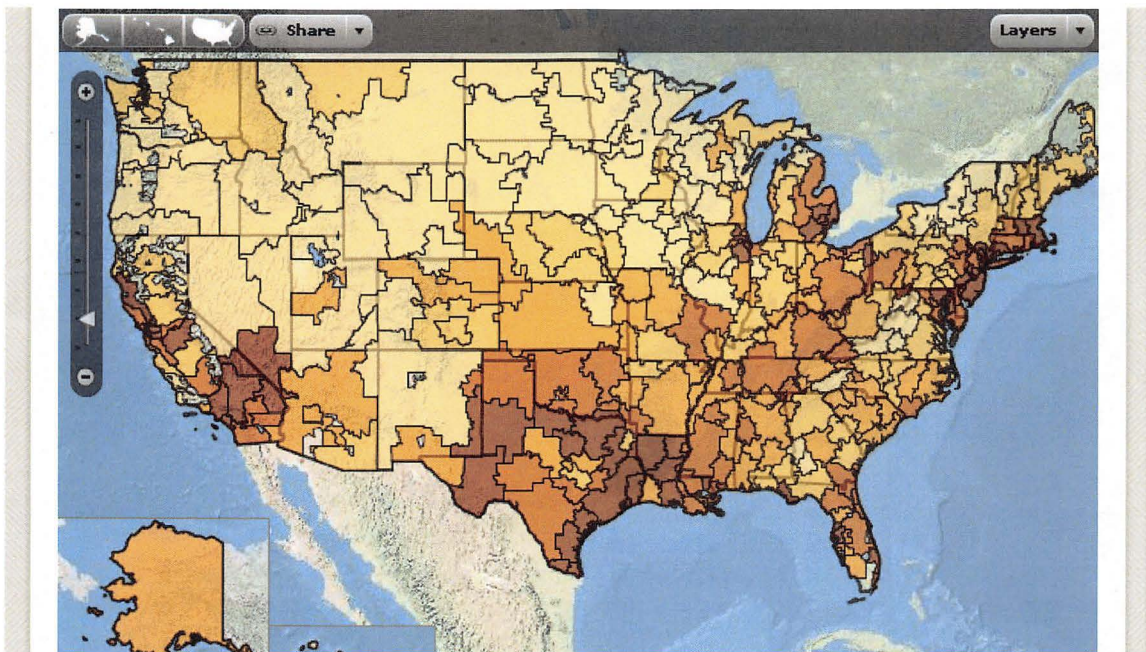
Permit me to introduce you to the work of Dr. Jack Wennberg, a graduate of Stanford, McGill, and Johns Hopkins. He is an internist and nephrologist, but his greatest contribution has come about in the fields of epidemiology and public health as “the pioneer and leading researcher of unwarranted variation in the healthcare industry. Through four decades of work, Wennberg has documented the geographic variation in the healthcare that patients in the United States receive. In 1988 he founded the Center for Evaluative Clinical Services (CECS) at Dartmouth Medical School.” (http://en.wikipedia.org/wiki/John_Wennberg#References). Today Dr. Elliott Fisher continues his work.

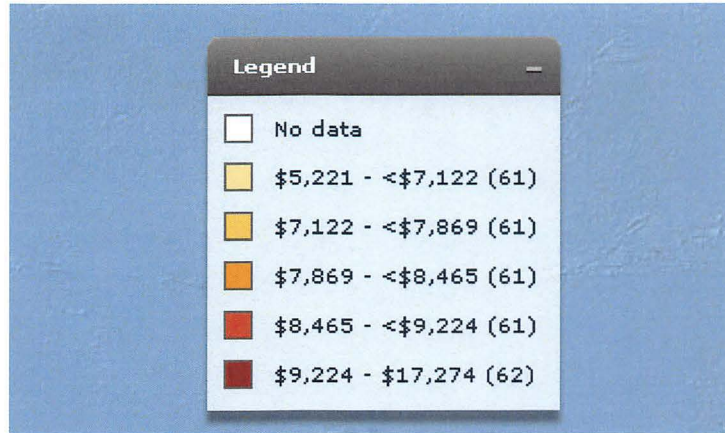
The Dartmouth Atlas Project has examined regional variations in the practice of medicine and in spending for health care, principally in the Medicare population. Among the conclusions they have reached is that

Medicare spending varies widely from one place to the next. Not only from state to state but from city to city.

“Medicare spending in 2006 varied more than threefold across U.S. hospital referral regions. Research has shown that some of the variation is due to differences in the prices paid for similar services, and some is due to differences in illness; but even after accounting for these factors, twofold differences remain. In other words, the differences in spending are almost entirely explained by differences in the *volume* of health care services received by similar patients.” (**Health Care Spending, Quality and Outcomes** , Elliott Fisher, David Goodman, Jonathan Skinner and Kristen Bronner (2/27/2009)).

The Dartmouth Health Atlas website depicts this geographic variation using maps like that shown below which is based on 2007 data:





A word about the Dartmouth methodology. Data has been collected on individual patients (a random, statistically valid 5% sample of all Medicare patients excluding those in Medicare Advantage plans). It is age, race and gender adjusted based on US Medicare populations as the standard. The Medicare spending data reflects the region in which a patient lives – not the region in which care was received. For example, the cost of the care a Lynchburg, Virginia resident received from a hospital located in Boston would be included in the Medicare spending data for the Lynchburg region.

The key question then is what benefits results from the increased spending gradient? Are the Medicare populations of the regions with higher Medicare spending healthier? Do they have lower mortality rates? Do they have higher satisfaction with the care they have received? Winnberg and Fisher would answer “no” to each of these questions. While others would argue with the universal applicability and magnitude of their findings, almost all who have studied the question have agreed that they are directionally correct.

Elliott Fisher, et al state their conclusions as follows:

“Over the past ten years, a number of studies have explored the relationship between higher spending and the quality and outcomes of care. The findings are remarkably consistent: higher spending does not result in better quality of care, whether one looks at the technical quality and reliability of hospital or ambulatory care, or survival following such serious conditions as a heart attack or hip fracture. This finding holds even when we consider changes over time; regions experiencing the greatest increase in

health care spending for heart attack patients did not exhibit the most rapid improvements in health outcomes. Higher spending also did not result in improved patient perceptions of the accessibility.” (Ibid.)

A review of published literature produces a number of articles which concur with this conclusion. See for example the conclusions of Lagu, et al:

Hospital spending and adjusted mortality rates for patients with sepsis vary substantially, but higher hospital expenditures are not associated with better survival. Efforts to enhance the value of sepsis care could be modeled on hospitals that achieve lower-than-expected mortality and costs. (Lagu, et al., *Arch Intern Med.* 2011;171(4):292-299. doi:10.1001/archinternmed.2011.12).

The editors of the Annals of Internal Medicine commented on the 2003 published landmark study by Fischer and others as follows:

“Using end-of-life care spending as an indicator of Medicare spending, the researchers categorized geographic regions into five quintiles of spending and examined costs and outcomes of care for hip fracture, colorectal cancer, and acute myocardial infarction. Residents of high-spending regions received 60% more care but did not have better quality or outcomes of care.

Implications

Medicare beneficiaries who live in higher Medicare spending regions do not necessarily get better-quality care than those in lower-spending regions.

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Other articles in the Annals of Internal Medicine reached the opposite conclusion in finding a correlation between more expensive care and better outcomes. (Hospital Spending and Inpatient Mortality: Evidence From California: An Observational Study ANN INTERN MED February 2011 154:3160-167

Nor has there been any association demonstrated between high spending and overall patient satisfaction or preference. Consider for instance the

conclusions of a nation wide study of 2515 Medicare participants who were surveyed in 2005:

Conclusion In this representative sample of Medicare beneficiaries, no consistent association was observed between the mean per capita expenditure in a geographic area and the perceptions of the quality of medical care of the people who live in those areas. (Relationship between Regional Per Capita Medicare Expenditures and Patient Perceptions of Quality of Care JAMA May 28, 2008 299:2406-2412).

A Tale of 6 Cities

To better appreciate the Dartmouth Health Atlas research, consider the data from six US locations: Lynchburg, VA, Winston Salem, NC, the home of the Mayo Clinic – Rochester, MN, and Miami, FL, Boston, MA, and Manhattan, NY. The data is grouped by “hospital referral region”.

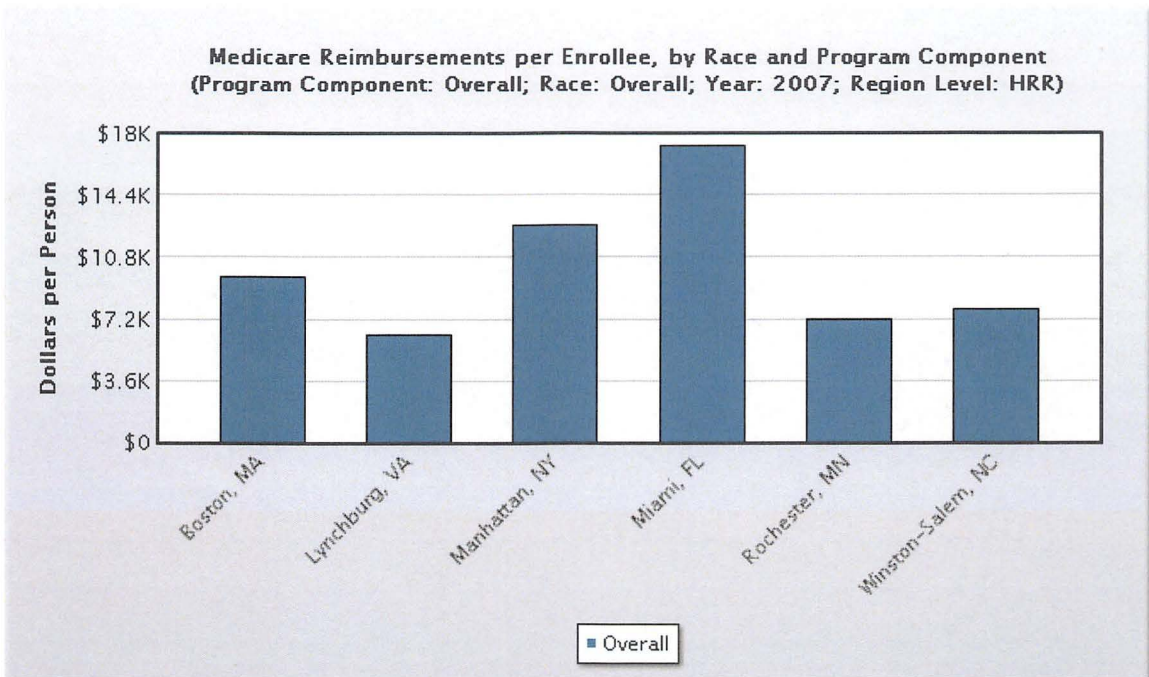
Hospital referral regions (HRRs) represent regional health care markets for tertiary medical care that generally requires the services of a major referral center. The regions were defined by determining where patients were referred for major cardiovascular surgical procedures and for neurosurgery. Each hospital service area (HSA) was examined to determine where most of its residents went for these services. The result was the aggregation of the 3,436 hospital service areas into 306 HRRs. Each HRR has at least one city where both major cardiovascular surgical procedures and neurosurgery are performed. (Source: The Dartmouth health Atlas. <http://www.dartmouthatlas.org/data/region/>)

The chart below depicts the 2007 aggregate Medicare Reimbursement (spending) per enrollee in the HRR in which each city is located. It also breaks out Part a (hospital) spending and Part B (physician and outpatient) spending. 2007 data is the most recent available in this format due to data collection reporting, and analysis lags. (Source: Ibid.)

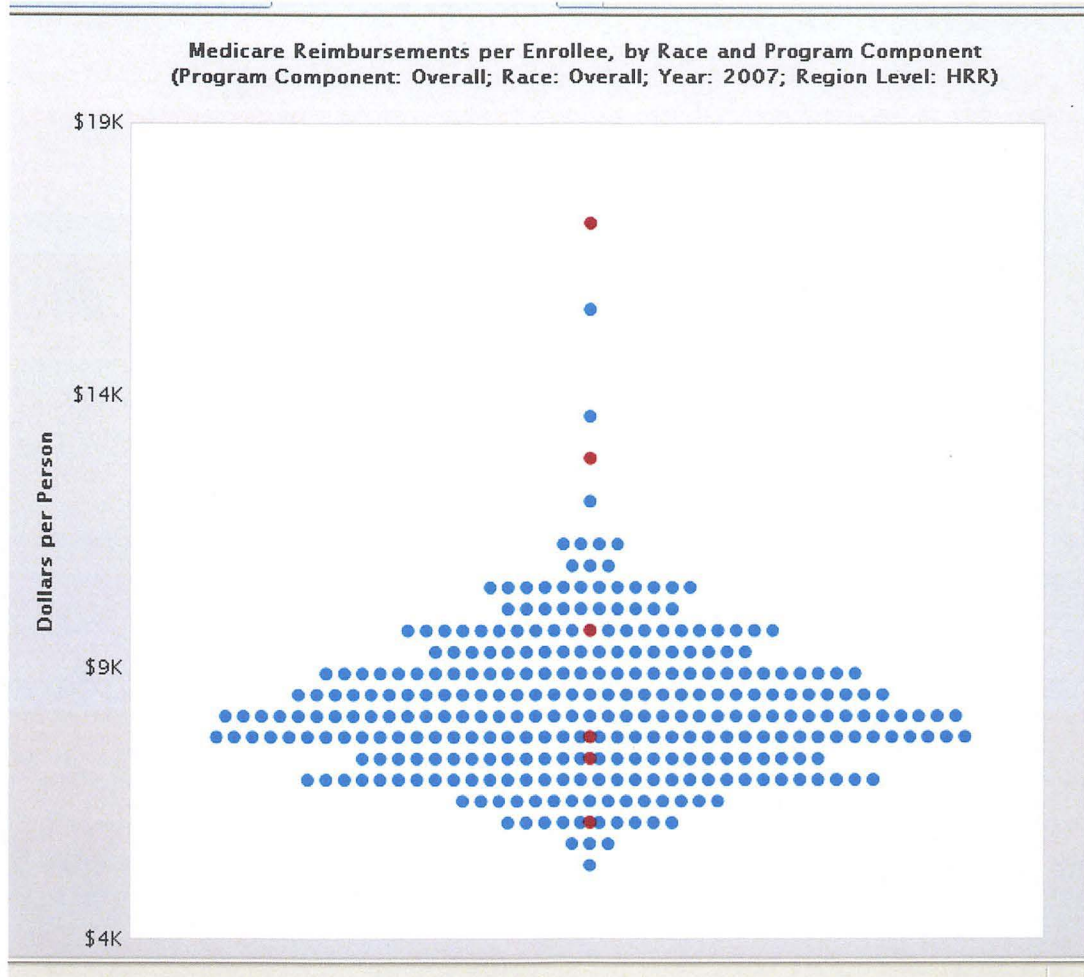
Region (Click a region name below to view its profile)	Medicare Reimbursements per Enrollee, by Race and Program Component (Race: Overall; Program Component: Overall; Year: 2007; Region Levels: HRR)	Medicare Reimbursements per Enrollee, by Race and Program Component (Race: Overall; Program Component: Part A; Year: 2007; Region Levels: HRR)	Medicare Reimbursements per Enrollee, by Race and Program Component (Race: Overall; Program Component: Part B; Year: 2007; Region Levels: HRR)
▲ ▼	▲ ▼	▲ ▼	▲ ▼
Miami, FL	\$17,274	\$6,524	\$10,801
Manhattan, NY	\$12,714	\$7,649	\$5,043
Boston, MA	\$9,704	\$5,587	\$4,110
Winston-Salem, NC	\$7,819	\$4,285	\$3,534
Rochester, MN	\$7,206	\$4,217	\$2,986
Lynchburg, VA	\$6,323	\$3,412	\$2,911
National Average	\$8,682	\$4,716	\$3,965
90th Percentile	\$9,995	\$5,528	\$4,537
50th Percentile	\$8,136	\$4,444	\$3,700
10th Percentile	\$6,771	\$3,547	\$3,146

The disparity is immediately apparent between Lynchburg which is in the lowest decile of the 306 HRRs nationally and Miami which in 2007 was by far the most expensive HRR in the country and a clear outlier from the cost perspective. **Of greater interest to me is the comparison between Lynchburg and Winston Salem.** In 2007 the Medicare program spent an extra \$1496 or 24% to care for each Medicare recipient in Winston Salem as compared to Lynchburg. The two cities are in neighboring states, are less than 150 miles apart, and have similar costs of living (For instance see the following website: <http://www.bestplaces.net/col/?salary=50000&city1=55147672&city2=53775000>).

Here the same data is shown in bar chart format. :



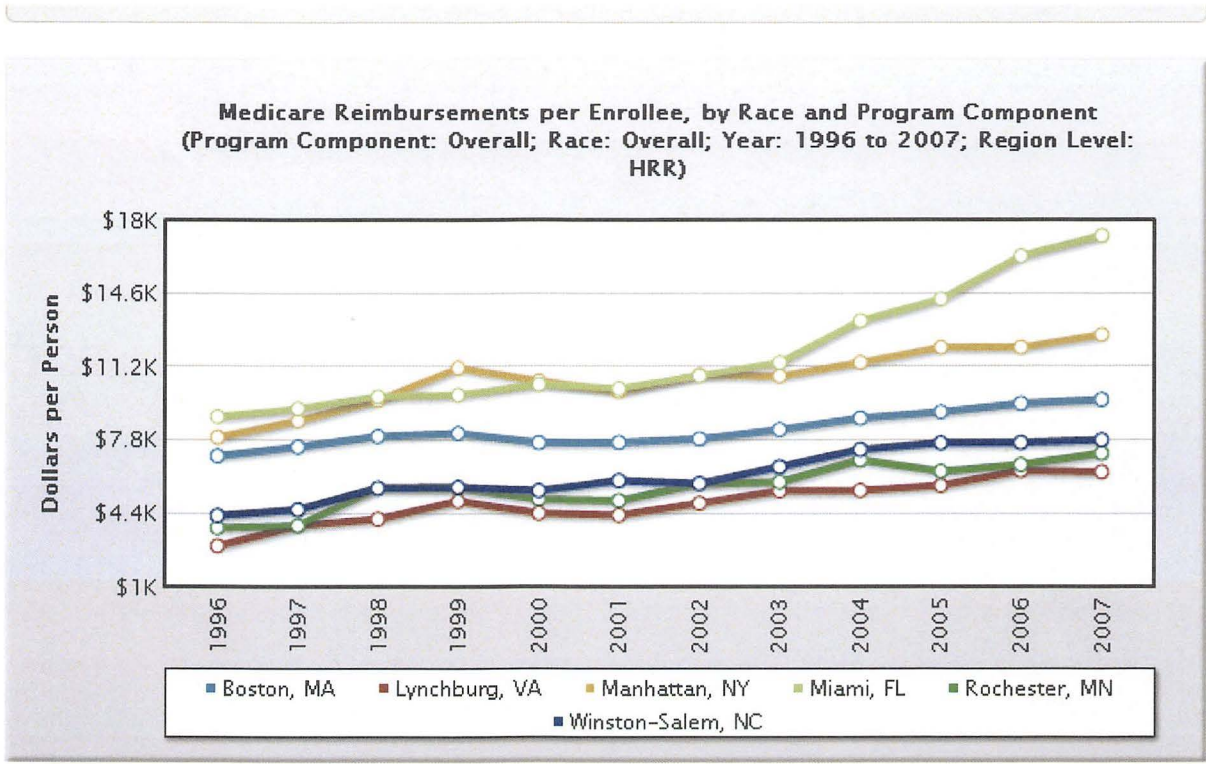
The following chart depicts Lynchburg (shown as the brown dot near the bottom) as compared to all other US regions in 2007:



It is also instructive to look at trends over time. The chart below depicts the growth of reimbursement per enrollee in each of the six regions over the 11 year period from 1996 through 2007. The three "low cost" regions, Lynchburg, Rochester, and Winston Salem have maintained their rankings and positions despite growth in reimbursement that ranged from 82% in Winston Salem to 118% in Lynchburg over the 11 year period. These are large annual increases and yet in 2007 all three regions were below the national average and Lynchburg continued to be in the bottom decile. It is interesting to note that in 1996, the Lynchburg region at \$2899 had the lowest cost among all of the 306 regions in the US.

The comparison of Miami and Boston is also very interesting. The two regions in 1996 were relatively close at \$8913 and \$7087 respectively. At the time Miami was the highest market in the country and Boston was not far behind as the 14th highest region. Over the next 11 years, reimbursement per enrollee in Boston

increased only 36% period and by 2007 Boston had moved toward the middle of the data base with reimbursement per enrollee that was within \$1000 of the national average. In contrast, Miami which experienced explosive increases during the later part of the 11 years, not only maintained its position as the highest region in the country but was more than \$1500 per enrollee higher than the next closest region , McAllen, Texas.



McAllen, Texas and Atul Gwande

On June 1, 2009 Dr. Atul Gwande and the New Yorker Magazine put McAllen, Texas in the national health reform spotlight. In a feature 8 page article opened like this:

It is spring in McAllen, Texas. The morning sun is warm. The streets are lined with palm trees and pickup trucks. McAllen is in Hidalgo County, which has the lowest household income in the country, but it's a border town, and a thriving foreign-trade zone has kept the unemployment rate below ten per cent. McAllen calls itself the Square Dance Capital of the World. "Lonesome Dove" was set around here.

McAllen has another distinction, too: it is one of the most expensive health-care markets in the country. Only Miami—which has much higher labor and living costs—spends more per person on health care. In 2006, Medicare spent fifteen thousand dollars per enrollee here, almost twice the national average. The income per capita is twelve thousand dollars. In other words, Medicare spends three thousand dollars more per person here than the average person earns.

In the following pages of the article Dr. Gwande, a general surgeon on the faculty of Harvard and a well published author, proceeded to describe the visit he scheduled to McAllen after reading about it in the Dartmouth Health Atlas report. His article became required reading in among the staff of the White House as health reform consideration was underway. Exactly how influential the article was, it certainly brought the work of Winnberg and Fisher closer to the mainstream.

In the article, Dr. Gwande contrasted data on McAllen to that of another Texas border town, El Paso noting:

El Paso County, eight hundred miles up the border, has essentially the same demographics. Both counties have a population of roughly seven hundred thousand, similar public-health statistics, and similar percentages of non-English speakers, illegal immigrants, and the unemployed. Yet in 2006 Medicare expenditures (our best approximation of over-all spending patterns) in El Paso were \$7,504 per enrollee—half as much as in McAllen. An unhealthy population couldn't possibly be the reason that McAllen's health-care costs are so high.

Across the country, the tendency is to discount the Dartmouth data. Reasons cited include racial disparities, poverty, health status, and cost of living. There are serious issues related to both race and poverty. A well respected article in the New England journal of Medicine

(Getting Past Denial — The High Cost of Health Care in the United States Jason M. Sutherland, Ph.D., Elliott S. Fisher, M.D., M.P.H., and

Jonathan S. Skinner, Ph.D. N Engl J Med 2009; 361:1227-1230 September 24, 2009). Concluded that:

“Regional differences in poverty and income explain almost none of the variation. Health status does matter...accounting for {about 18% of the difference between the lowest and highest intensity region}. But that leaves more than 70% of the differences in spending that cannot be explained away by the claim that “my patients are poorer or sicker.”

The Dartmouth data is adjusted for age, gender, and black population percentages of Medicare recipients in a region. The indirect adjustment is based on national average data applied to each region. Thus it might not accurately reflect the experience in any given area. Dartmouth also does not discount the social impact of poverty and racial disparities in health and access. Rather they note:

These disparities are particularly striking when examined across U.S. states and regions; it's not only who you are that matters, but also where you live. Indeed, many studies that report racial disparities based on national samples do not account for the tremendous variation across regions and procedures. The rate of leg amputation -- a devastating complication of diabetes and peripheral vascular disease -- is four times greater in blacks than in whites; but rates of amputation vary nearly tenfold across regions. For evidence-based services, such as screening mammography and appropriate testing for diabetes, disparities across regions are substantially greater than the differences by race; there are some regions where blacks receive equal or better care than whites but where care for all patients is less than ideal. A recent study found that black cancer patients treated at NCI-designated cancer centers did not experience higher mortality than white patients served at the same hospitals.

(Source:<http://www.dartmouthatlas.org/keyissues/issue.aspx?con=2942>)

Gwande concluded that the reasons for variation relate to pervasive patterns of excessive treatment for patients. Underlying causes have to do with excess supply of hospitals and surgery centers, and imaging centers, and home health agencies. And with ordering patterns for tests and surgery and hospitalizations that are much higher than national norms. These conclusions match those of the Dartmouth researchers. Gwande described it this way:

“In 1992, in the McAllen market, the average cost per Medicare enrollee was \$4,891, almost exactly the national average. But since then, year after year, McAllen's health costs have grown faster than any other market in the country, ultimately soaring by more than ten thousand dollars per person.

Between 2001 and 2005, critically ill Medicare patients received almost fifty per cent

more specialist visits in McAllen than in El Paso, and were two-thirds more likely to see ten or more specialists in a six-month period. In 2005 and 2006, patients in McAllen received twenty per cent more abdominal ultrasounds, thirty per cent more bone-density studies, sixty per cent more stress tests with echocardiography, two hundred per cent more nerve-conduction studies to diagnose carpal-tunnel syndrome, and five hundred and fifty per cent more urine-flow studies to diagnose prostate troubles. They received one-fifth to two-thirds more gallbladder operations, knee replacements, breast biopsies, and bladder scopes. They also received two to three times as many pacemakers, implantable defibrillators, cardiac-bypass operations, carotid endarterectomies, and coronary-artery stents. And Medicare paid for five times as many home-nurse visits. The primary cause of McAllen's extreme costs was, very simply, the across-the-board overuse of medicine.”

The Dartmouth team contends that differences in ordering and practice patterns tend to often not be significant when physicians are confronted with choices that are well documented with scientific evidence. Not surprisingly, much more variation shows up in the less well established “gray” areas of the art and science. In the high cost regions, doctors seem to lean toward the expensive test or procedure or to have a bias to treat. In the lower cost regions the impulse seems to be just the opposite. Underlying causes may well relate to training, financial incentives, time pressures, or others.

The questions of supply driven demand for healthcare, prevailing community culture and practice style, and related topics of medical economics have serious national implications but are also important questions for our community and its future. As we enter an era of national health reform, what organizational structure will serve to deliver quality, access and affordable care to our region? Will some new form of Accountable Care Organization be necessary to produce the analytical information derived from all inclusive data base? What part will employers and the general public play in addressing the problems related from obesity, tobacco use, and other life style issues. How will we deal with end of life issues that are estimated to be the root cause of much variation in spending?

AS to the original topic - THERE IS ENOUGH MONEY- I will leave you with two quotations. The first is a repeat from the 2011 Medicare Trustees Report: “Over 75 years, HI's actuarial imbalance is estimated to be equivalent to 21 percent of tax receipts or 17 percent of program outlays.”

The second is from The Dartmouth Health Atlas website:

“The Dartmouth approach was to ask how much might be saved if all regions could safely reduce care to the level observed in low-spending regions with equal quality; we find estimates ranging from 20-30%, but view these as an underestimate given the potential savings even in low cost regions. At least three other groups have come to 30% waste estimates: the New England Healthcare Institute, McKinsey, and Thomson Reuters.”
(<http://www.dartmouthatlas.org/keyissues/issue.aspx?con=1338>)