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County Health Rankings – Part II
Quality of Care – What Will Be Gained by Public Reporting
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The health rankings of counties is based on two sets of measures:

- Health outcomes (length and quality of life)
- Health factors (health behaviors, access to and quality of clinical care, social and economic factors, and the physical environment).

The two most important elements within these measures are "quality of life" and "quality of care." Both are incredibly difficult to define and most often we simply resort to a description of either or both. The County Health Ranks descriptive materials talk about "quality of care."

Quality of care is a broad term that has many definitions. A simplified way of explaining quality health care is that it is the right care, for the right person, at the right time. The Institute of Medicine (IOM) further defines the quality of health care as "the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge." The IOM lists six characteristics of quality care. Health care needs to be:

- safe
- timely
- effective
- efficient
- equitable
- patient-centered

In its widely-distributed and discussed report, *Crossing the Quality Chasm: A New Health System for the 21st Century*, the IOM addressed ten rules to guide the redesign of healthcare; including:

- Care based on continuous healing relationships.
- Customization based on patient needs and values.
- The patient as the source of control.
- Shared knowledge and the free-flow of information.
- Evidence-based decision-making.
- Safety as a system property.
- The need for transparency.
- Anticipation of needs.
- Continuous decrease in waste.
- Cooperation among clinicians.

The County Health Rankings reports quality of care for several important reasons. First, while there have been modest improvements in the overall quality of care provided in recent years, disparities remain for certain populations.[Sixty percent of disparities in health care quality have stayed the same or worsened for African American, Asian, and low-income populations. Second, a study from 2003 that looked at a large number of quality of care measurements reported that patients receive the correct diagnosis and subsequent treatment only 55% of the time. Third, health care quality can be affected by individual and community involvement. Patient empowerment and chronic disease management depend on collaboration between providers, insurers, and individuals.

There are hundreds of potential quality measures, with no consensus on the set of measures to use for assessing quality of health care. However, certain guidelines should be applied when choosing measures. Quality indicators should ideally focus on measures that provide the greatest benefit to patient outcomes, help bridge the gaps seen in different populations, and can be implemented in a safe, efficient, and cost-effective way.

The County Health Rankings uses three separate measures to report the health care quality for each county.

- The first measure is preventable hospitalizations, or the hospitalization rate for ambulatory-care sensitive conditions per 1,000 Medicare enrollees. Ambulatory-care sensitive conditions (ACSC) are usually addressed in an outpatient setting and do not normally require hospitalization if the condition is well-managed.
- The second measure, diabetic screening, reports the percent of diabetic Medicare enrollees that receive HbA1c screening. Regular HbA1c screening among diabetic patients is considered the standard of care. It helps assess the management of diabetes over the long term by providing an estimate of how well a patient has managed his or her diabetes over the past two to three months. When hyperglycemia is addressed and controlled, complications from diabetes can be delayed or prevented.
- The third measure, hospice use, is the percent of chronically ill Medicare enrollees that receive hospice care in the last six months of life. Evidence suggests that terminally ill patients have a higher quality of life during their last months of life if they receive hospice care. The data from all three measures comes from the Dartmouth Atlas, a project that documents variations in health care throughout the country through use of Medicare claims data.

A weakness of all three measures is that they use Medicare claims data, which limits the population evaluated to mostly individuals ages 65 and older. The measures, therefore, may potentially miss trends and disparities present among younger age groups.

Preventable Hospitalizations

Preventable Hospitalizations often is used to assess the effectiveness and accessibility of primary health care. A study using the National Hospital Discharge Survey found that 12% of all hospitalizations in 1990 (3.1 million) were for potentially preventable

conditions. Additionally, the same study found disparities regarding which populations were hospitalized for these conditions. Rates of hospitalization were higher for middle and low income areas compared to high income areas, and hospitalization rates were higher for African Americans compared to whites.

This indicator is also useful for indirectly reporting the quality of primary health care in the county. Evidence shows that a higher density of primary care providers is associated with lower probability of hospitalization for ambulatory-care sensitive conditions. Therefore, a community can improve its potentially preventable hospitalization rates through increasing access to high quality primary health care providers.

Two studies analyzing the association between self-reported accounts of individuals' access to medical care with hospital admissions rates for ambulatory-care sensitive conditions (ACSC) found that individuals who reported poor access to medical care had higher hospitalization rates for ACSC.

The literature surrounding using Medicare claims as a representative sample for hospitalization among the population is inconclusive. One study that showed higher rates of hospitalization based on the income level and racial group found that after age 65 these disparities cease to exist. This is presumably because after age 65, every individual has some access to health care through Medicare. However, another study found that African Americans and Hispanics have a higher preventable hospitalization rate for all age groups in both genders. Additionally, this measure could be classified as both a quality and an access measure, and some literature describes hospitalization rates for ambulatory-care sensitive conditions primarily as a proxy for access to primary health care.

Diabetic Screening

Evidence suggests that improvements in quality of care can be seen through implementation of disease management programs that target multiple components of chronic diseases. The use of HbA1c testing to measure glycated hemoglobin for long-term monitoring of diabetes is widely accepted as one component of a comprehensive disease management program. HbA1c testing is recommended for all patients with diabetes as part of the initial assessment after a diabetes diagnosis, and then on a routine basis as a part of the patient's comprehensive diabetes care plan. This widespread acceptance of the HbA1c test as a standard component of competent diabetes care makes it an ideal indicator to estimate the quality of care provided.

A limitation to using this measure is that it requires access to the health care system for patients to be tested and then accurately diagnosed with diabetes. The Centers for Disease Control and Prevention (CDC) estimated in 2007 that in the United States approximately 18 million people had diagnosed diabetes and approximately 6 million people had undiagnosed diabetes. This means that a county could report a high percentage of HbA1c testing, but simultaneously could have a large undiagnosed diabetic population.

Hospice Use

There is wide consensus that hospice services provide superior comprehensive end-of-life care for individuals compared with care in an institution. Medicare claims hospice admissions are fairly representative of the overall patient populations that use hospice services. In a study that looked at characteristics of hospice patients from 1999-2000, 79% of hospice patients used Medicare as their primary payment source. While this does not account for the entire population using hospice services, the measure can provide a rough estimate of hospice usage in the county.
Over the past few decades, hospice care has gained acceptance as high quality end-of-life care. It not only oversees the death of a patient, but offers comprehensive care in pain management as well as emotional and spiritual support.[Hospice admissions in the United States have increased from 1,000 in 1975 to 700,000 in 2000. However, hospice care is still underused in most parts of the country. In 2000, hospice services were not used by 75% of individuals who died that year.

There are many barriers to entering hospice care that can compromise the usefulness of this measure.

- First, the availability of high quality hospice services is a key component to whether a physician refers a terminally ill patient to hospice.[Evidence shows that if hospice services are not available, physicians will extend the length of chemotherapy treatment longer than they otherwise would have.
- Second, there is uneven access to hospice services due to geography, rural settings, and patient socioeconomic factors. Additionally, patients in a health maintenance organization (HMO) are more likely to receive a referral to hospice care. One study found that the rates of hospice use were higher for Medicare beneficiaries in a managed care plan (26.6 per 100 deaths) versus fee for service enrollees (17 per 100 deaths) in 1996.
- Finally, while the stigma surrounding hospice services is lifting, negative attitudes persist. Decreasing this stigma will be important for increasing use of this important care service.

Pubic Reporting of Provider Performance

All of the elements of quality defined by the IOM and employed by the Robert Woods Johnson Foundation for the County Health Rankings are fulfilled by Public Reporting of provider performance and by the following of the National Committee for Quality Assurance's (NCQA) Standards and Elements for recognition as a Patient-Centered Medical Home. SETMA's efforts toward both of these can be seen at www.jameslhollymd.com under the headings "Your Life Your Health," Public Reporting," and "Medical Home."

The following is SETMA's HgbA1C performance by provider for January 1 – December 31, 2009.

Diabetes Consortium - HgbA1c Measures

E & M Codes: Clinic Only

Encounter Date(s): Jan 1, 2009 through Dec 31, 2009

Report Criteria: Patients 18 to 75 With a Chronic Diagnosis of Diabetes
Specialists Excluded (Dr. Ahmed Included)

		HgbA1c Level				HgbA1c Frequency		
Location	Provider	<= 6.5	<= 7.0	> 7.0	Not Present	Within 3 Months	Within 6 Months	Not Within 6 Months
SETMA 1	Aziz	59.2%	69.9%	26.7%	3.3%	69.2%	86.4%	13.6%
	Duncan	57.3%	68.5%	28.5%	1.9%	63.4%	78.4%	21.6%
	Groff	52.5%	66.7%	29.2%	3.3%	56.7%	80.0%	20.0%
	Henderson	56.6%	68.5%	29.8%	1.6%	67.0%	79.9%	20.1%
	Murphy	59.0%	69.1%	25.5%	5.3%	71.8%	84.4%	15.6%
	Sims	56.9%	68.9%	24.3%	6.7%	58.6%	74.0%	26.0%
	Thomas	48.5%	61.0%	32.3%	6.4%	58.1%	73.0%	27.0%
SETMA 1 Totals:		57.0%	68.2%	27.5%	4.0%	66.1%	80.8%	19.2%
SETMA 2	Ahmed	32.9%	46.1%	49.9%	3.7%	80.8%	90.5%	9.5%
	Anthony	52.0%	67.4%	30.7%	1.7%	79.2%	88.4%	11.6%
	Anwar	50.2%	68.5%	27.3%	4.2%	75.3%	88.6%	11.4%
	Cricchio	56.6%	69.8%	26.6%	2.9%	69.5%	83.6%	16.4%
	Holly	61.3%	71.5%	24.5%	3.6%	88.7%	91.7%	8.3%
	Leifeste	54.3%	65.8%	25.3%	8.9%	73.6%	82.7%	17.3%
	Wheeler	54.7%	65.0%	31.8%	3.2%	74.9%	86.7%	13.3%
SETMA 2 Totals:		45.1%	58.8%	37.0%	4.0%	77.9%	88.2%	11.8%
SETMA West	Curry	48.1%	57.7%	26.8%	15.5%	50.0%	64.5%	35.5%
	Halbert	48.6%	62.0%	27.2%	10.4%	54.6%	66.3%	33.7%
	Horn	39.5%	50.0%	25.8%	24.2%	54.9%	66.4%	33.6%
	Satterwhite	45.2%	56.8%	29.2%	13.8%	60.4%	71.5%	28.5%
	Vardiman	46.5%	69.5%	22.1%	8.4%	60.2%	71.2%	28.8%
	Young	55.2%	68.3%	26.1%	5.3%	60.5%	77.1%	22.9%
SETMA West Totals:		47.1%	60.1%	26.7%	13.1%	56.3%	68.8%	31.2%
SETMA Totals:		49.0%	61.8%	32.0%	5.9%	69.9%	82.0%	18.0%

The quarterly report for October 1 – December 31, 2009 is posted on our website. Going forward the quarterly performance will be placed on the website. This transparency empowers patients with knowledge that their provider is, or is not keeping them up to date and it challenges providers to keep them up to date. In addition to hemoglobin A1Cs, SETMA tracts over 200 quality metrics, all of which are, or will be posted to our website. The community will be able to see if we SETMA providers improve over the course of this year. If I understand human nature, the above figures while very good, will dramatically improve.

What Will Be Gained by Public Reporting

In that SETMA has begun "public reporting of provider performance", and in that we hope to:

1. Improve provider performance on quality measures and on treatment to target.
2. Increase patient review of our public reports
3. Encourage more physician-led public reporting

I have begun to look at the medical literature on this subject. The below is a response from my inquire to one of the authors of an article entitled "Motivating Public Use of Physician-Level Performance Data," which appeared in the Medical Care Research and Review, Vol. 66, No. 1, 68-81 (2009). (I have removed her name and address as I have not sought permission to share her comment publicly.) I am intrigued by her statement, "The short answer to your question, though, is that I do not know any other practices that are doing what you have done. The only thing I know of that comes close is the reporting being done by Beth Israel Deaconess Medical Center (Boston, MA) under the leadership of Paul Levy (CEO)."

On Wednesday, February 24, 2010, SETMA held the second of six three-hour training sessions for all of SETMA's primary care providers on the fulfillment of quality measures and the meeting of NCQA's 183 data points for recognition as a Patient-Centered Medical Home. All of our staff is beginning to "get it." The recognition of the value to our patients and practice of these quality measures and of the NCQA's PC-MH standards, and the resolution on the part of our providers to excel in the meeting of these standards is infectious.

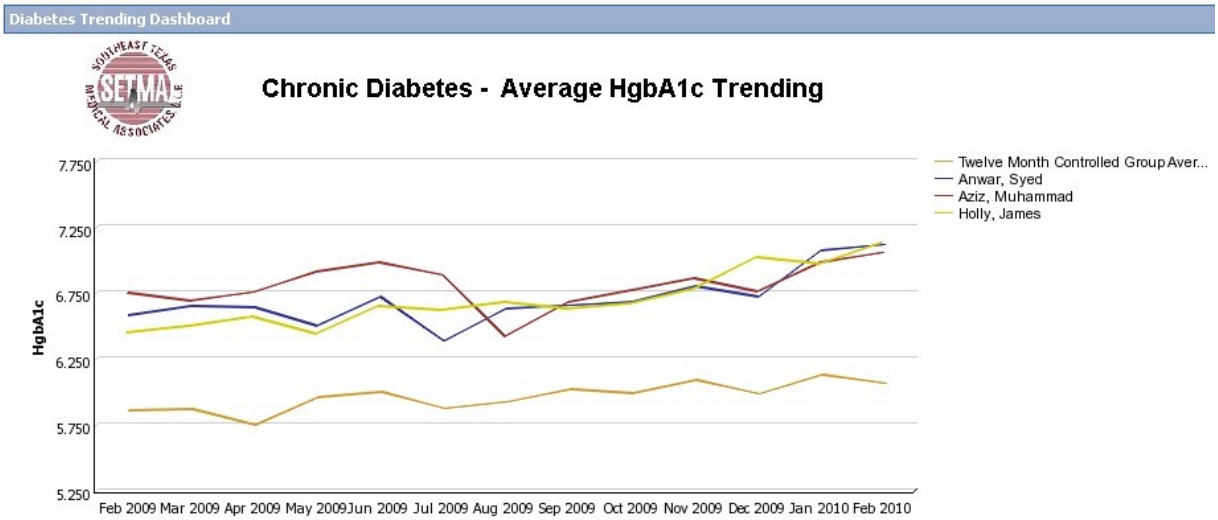
The evidence of their enthusiasm is the fact that with only one five-minute break, they were all alert, attentive and actively engaged in the training session. Another evidence of enthusiasm came from two suggestions for improving our training sessions:

- Have different members of our staff show how they incorporate performance measures into their workflow each day.
- Send out weekly notes about where the greatest need for improve is. The recommendation of this was giving in a colloquial but communicative metaphor by a provider who said, "Send out a note telling where we are screwing up."

Digital Dashboard

Perhaps the most exciting part of our discussion was the review of SETMA's "diabetes digital dashboard." Most of our COGNOS Project (for details see www.jameslhollymd.com under Public Reporting/COGNOS Project) consists of static reports which show provider compliance with NCQA Hedis, AQA Ambulatory Care, NQF, PQRI, PCPI (multiple measures) and SETMA-developed quality measurement sets.

"Digital dashboards" allow providers to contrast their performance on quality measures for diabetes with the entire clinic, multiple clinic locations, individual or selected groups of providers. The display can be by graph or bar. It contrasts patient who are treated to goal with patients who are not. It allows the provider to analyze the differences between the two groups and to see if those differences provide opportunities for improving the care of those who are not to goal.



For instance, several things are obvious when we review the over-time graph of our HgbA1Cs results for all of 2009 and for several other years as well.

- Patients at goal are typically seen 2-3 times as often as those who are not.
- Patients at goal are typically tested 2 times as often as those who are not.
- SETMA's patients with diabetes show striking patterns of gradual but significant increases in HgbA1Cs from January to December. This pattern is evident for multiple years.

As we looked at these preliminary dashboards, we began to see some patterns:

1. Holidays are a real challenge to maintaining goals.
2. The insurance medication "doughnut hole" may be contributing to these changes.
3. The frequency of visits decreases toward the end of the year for patients not at goal.

There are other observations but these are illustrative. We are already creating strategies for improving care and compliance based on these preliminary observations.

In addition to the above-referenced article, we have looked at:

- "The American College of Cardiology Foundation's 2008 Health Policy Statement on Principe for Public Reporting of Physician Performance Data", published in the *JACC,* Vol. xx, No. X, 2008.
- "Provider Attitudes Associated with Adherence to Evidenced-Based Clinical Guidelines in a Managed Care Setting, published in the *Medical Care Research and Review* Volume 67 Number 1 February 2010, pp. 93-116."

Peter Senge at MIT

The idea of using a business-intelligence software program in medicine, what we call the COGNOS Report, came from Peter Senge's *Fifth Discipline*. He uses the parable of the "boiling frog" to show that in order to change behavior\, you have to create a motive for change which most often will result from a degree of discomfort. With medicine everywhere being confronted by "treatment inertia," the motivation to change comes from external pressure. "Public Reporting" done for quality and not punitive purposes helps create that discomfort in providers who then will change their behavior. Once those changes are internalized, they become transformational with generative, self-sustaining energy, which no longer require reformational, external pressure.

Whatever the patients use of our public reporting, we believe that is will be one of the principle elements to the transformation of our practice and of our healthcare delivery model.

Jefferson County's Health Ranking

One way in which Jefferson County can improve it's ranking is to create a community wide data base for the reporting of quality data by provider. SETMA has obtained and is developing a means of doing just this. If all healthcare providers in Southeast Texas participated, we would rapidly move up the county health rankings.