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DATA BRIEF # 3

AMBULATORY CARE QUALITY

SNAPSHOT: DIABETES

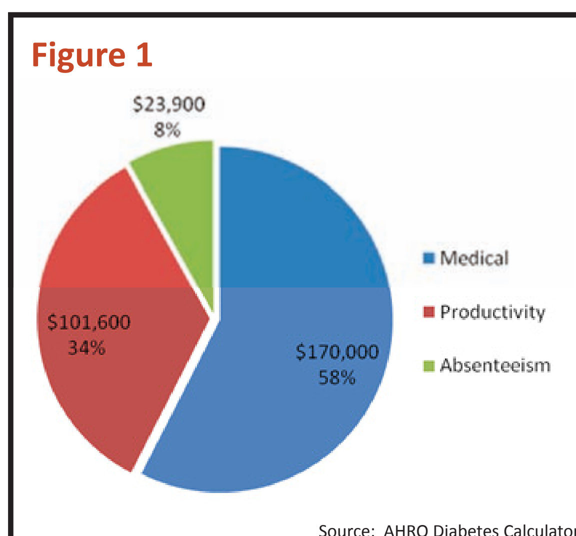
What if quality care meant not needing care at all?

Previous Data Briefs have focused on the experience of patients who have been admitted to the hospital. Hospital care is an expensive and stressful experience. Hospitals provide much needed intense and life-saving care. But many admissions are potentially avoidable, especially for people with chronic diseases.

Another term used to describe many of these is "ambulatory care-sensitive conditions." These are conditions impacted not only by a patient's choices, but by his or her interactions with the health system. Examples of conditions where good outpatient care can prevent a hospitalization include:

- Diabetes
- Perforated appendicitis
- Chronic obstructive pulmonary disease
- Hypertension
- Congestive heart failure
- Low birth weight
- Dehydration
- Bacterial pneumonia
- Urinary infections
- Angina
- Asthma

Illustration of the average cost of diabetes to an average Kansas company with 500 employees



Many factors can lead to a hospitalization for one of these conditions, including:

- individuals failing to take care of themselves responsibly
- inadequate health literacy
- a lack of early identification
- lack of monitoring and follow-up
- not following evidence based guidelines for care
- lack of coordination of care
- lack of access to appropriate care

Diabetes provides a good example of a health condition where the way in which the various stakeholders work together can have a significant impact on outcomes. And it is an example of how "process of care" measures -- such as ensuring appropriate monitoring and testing occur -- are important to consider along with outcomes, such as HbA1C levels.

In this issue we will focus on diabetes as one of these conditions where outpatient care is critical to maintaining health and avoiding complications. With appropriate self-care, regular interaction with a physician, appropriate medication, and regular testing and monitoring, most diabetes can be kept in control and complications which may require hospitalization can be avoided.

Why It Matters

Better care is possible

Research has consistently shown that a focused approach to the care for diabetics can result in significant improvements in both process of care measures as well as outcomes, such as control of blood glucose levels. There are widely recognized measures of the standard of care for diabetes. They include regular monitoring and screening and generally include:

- HbA1c testing (blood glucose levels)
- Eye exams
- LDL-C screening (also referred to as blood lipid or cholesterol screening)
- Nephropathy (kidney functioning)
- Neuropathy and foot exams
- Blood pressure
- Exercise, nutrition, and smoking cessation are often included with regard to counseling and education provided for patients

When these occur regularly, a diabetic's chances of remaining healthy and avoiding complications (including hospitalizations) is greatly increased. Clearly the responsibility falls on the diabetic to take responsibility for his or her own health. But research consistently shows that when the health system engages with patients to ensure these standards of care are met, the likelihood of avoiding complications is significantly increased.

Diabetes in Kansas

8.5%	Percent of adult Kansans diagnosed with diabetes (approximately 180,000)
120,000	Undiagnosed people with diabetes in Kansas
$300,000	Estimated cost of diabetes to an average employer in Kansas with 500 employees (medical and productivity)
$1.5 billion	Estimated annual cost to Kansas in medical expenditures and lost productivity from diabetes
2/3rds	Estimated portion of national in-patient hospital costs for diabetes that could have been averted with appropriate primary care
68%	Adults with diabetes who die of heart disease or stroke

For more information on the impact of diabetes in Kansas, see www.kdheks.gov/diabetes/download/Kansas_Diabetes_Facts.pdf

Potentially Avoidable Hospitalizations

The Prevention Quality Indicators (PQIs) are a set of measures that can be used with hospital inpatient discharge data to identify quality of care for "ambulatory care-sensitive conditions." These are conditions for which good outpatient care can potentially prevent the need for hospitalization or for which early intervention can prevent complications or more severe disease. Even though these indicators are based on hospital inpatient data, they provide insight into the community health care system or services outside the hospital setting. Patients with diabetes may be hospitalized for diabetic complications if their conditions are not adequately monitored or if they do not receive the patient education needed for appropriate self-management.

Figure 2

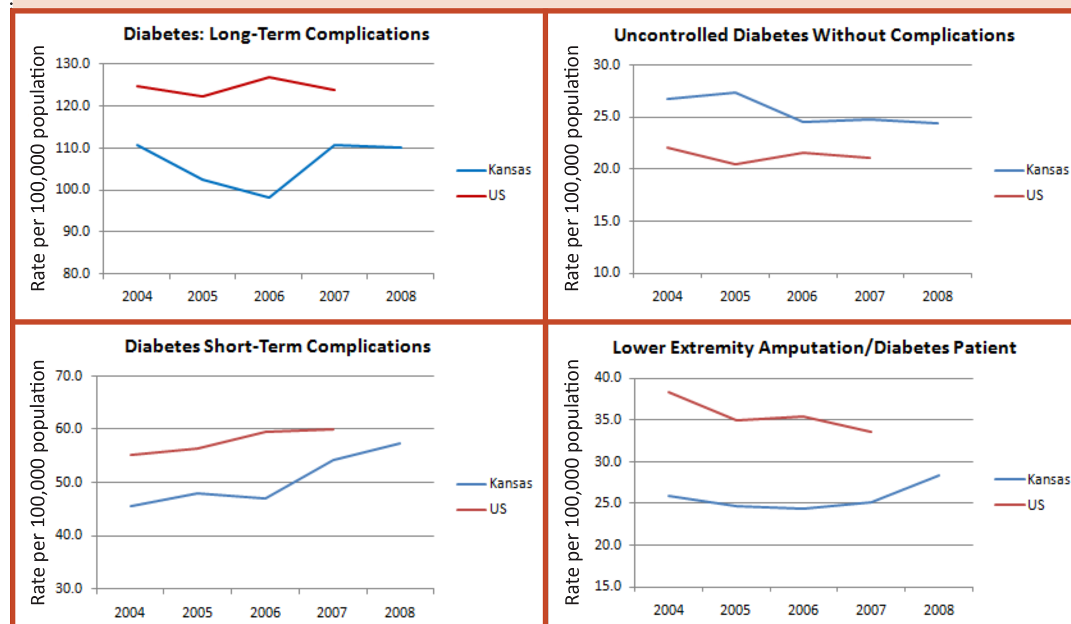


Figure 2 These charts show the rate of potentially preventable hospitalizations per 100,000 people for both Kansas and the United States.

How Wichita Scores

Researchers at Dartmouth University have tracked health care utilization and variation for more than 30 years. Dartmouth analysis of Medicare data regarding diabetes care provides insight into how Wichita compares to other regions in the country on measures important to good diabetes care. The data on this page is for the years 2003 through 2007. It shows the rate of appropriate care for diabetic enrollees in Medicare for each hospital service area. Visit www.dartmouthatlas.org to explore this extensive resource, which allows detailed comparisons of health care quality and utilization between regions in the U.S. These charts show what percent of the diabetics enrolled in Medicare have received the recommended care.

Figure 3

HbA1c is a measure of blood sugar control. Lower numbers are better. Every 1 percent reduction in HbA1c levels results in a 40 percent reduction in risk of developing eye, kidney or nerve disease. Lowering blood sugar levels significantly reduces the risk of eye disease, kidney disease and nerve disease.

HbA1C test — **Figure 3**

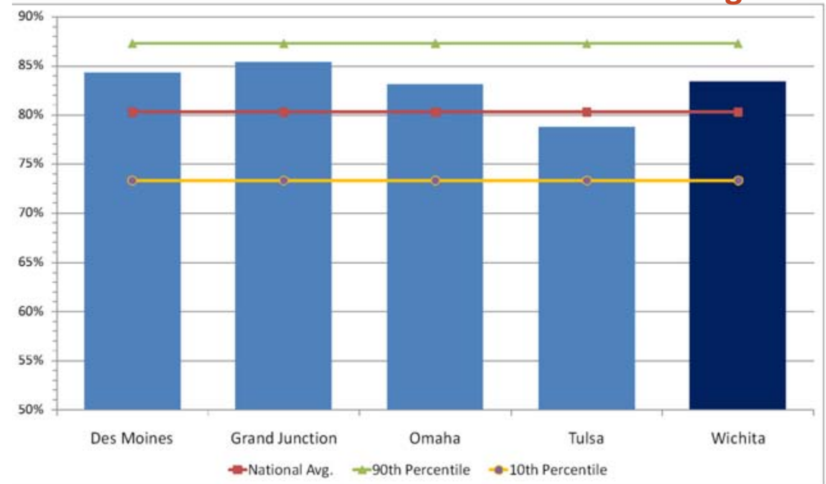


Figure 4

A dilated retinal examination by an eye specialist can detect complications related to diabetes. Diabetes is the leading cause of blindness in people ages 20 to 74. Ensuring that diabetics receive regular eye exams is a key standard of care for diabetics.

Eye exams — **Figure 4**

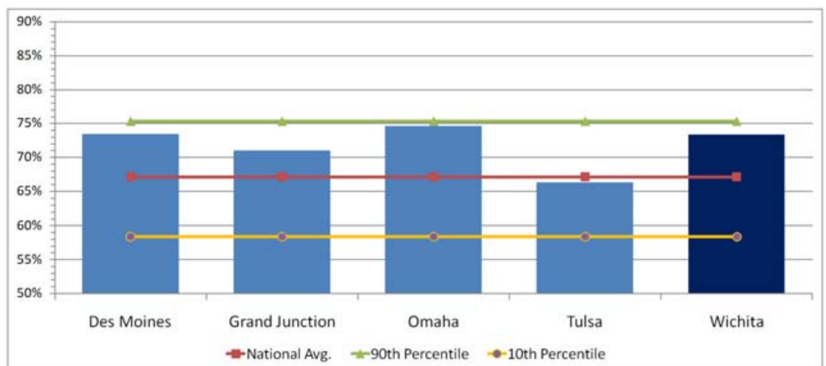
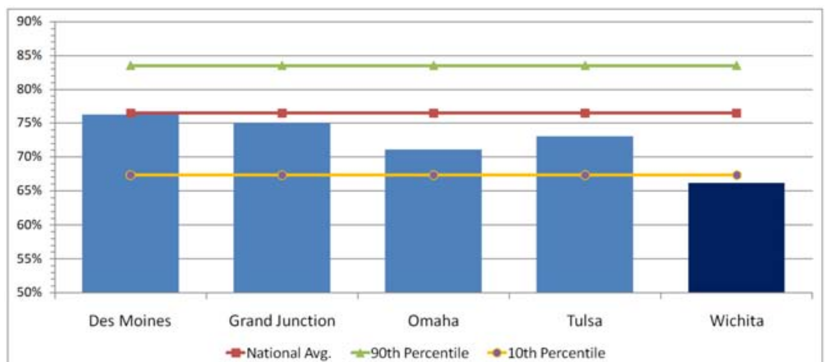


Figure 5

Blood lipids, or cholesterol screening, is important for diabetics. It is common for diabetics to have high levels of LDL or "bad" cholesterol. Managing cholesterol levels is critical to avoid complications related to heart disease and stroke.

Blood lipids test — **Figure 5**



Certification and recognition

The American Diabetes Association (ADA) and the National Committee for Quality Assurance (NCQA) offer the most widely recognized programs for recognizing excellence in the care of diabetics.

The Diabetes Education Recognition Program (**ERP**) recognizes health care settings (offices, clinics and hospitals) that meet the ADA standards for providing self-education programs. The Diabetes Recognition Program (**DRP**) for physicians is a voluntary program designed to recognize physicians and other clinicians who use evidence-based measures to provide excellent care to their patients with diabetes. The DRP includes an assessment of 10 areas, including control for HbA1C, blood pressure, and LDL, along with related exams and assessments that together constitute excellent care.

Physician practices who have undergone assessment through the DRP process have demonstrated increased performance in diabetes care over time. Those physicians who achieve DRP Recognition show their peers, patients and others in the Diabetes community that they are part of an elite group that is publicly recognized for its skill in providing the highest-level diabetes care.

	Nebraska **ERP**: 47 **DRP**: 58	
Colorado **ERP**: 28 **DRP**: 213	Kansas **ERP**: 30 **DRP**: 2	Missouri **ERP**: 70 **DRP**: 150
	Oklahoma **ERP**: 34 **DRP**: 17	

Figure 6

Figure 6 shows the number of ERP and DRP facilities and clinicians in Kansas and the four surrounding states who have voluntarily submitted data and achieved recognition by NCQA for diabetes care.

HEDIS: Measuring health plan performance

The Healthcare Effectiveness Data and Information Set (HEDIS) is a tool used by more than 90 percent of America's health plans to measure performance on important dimensions of care and service. HEDIS provides information on the percentage of health plan members 18 to 75 years of age with diabetes (type 1 and type 2) who received testing and screening recommended for diabetics to keep them healthy and in control.

HEDIS measures allow employers and other purchasers of health care to assess relative performance of health plans. These measures provide one indication of how well the plans work with employers, patients, and physicians to continually improve care and care processes. In many markets, health plans and/or business coalitions publish regional HEDIS scores to increase awareness regarding health system performance.

In Wichita, HEDIS data is collected by some health plans, but there is no publicly available source of data on HEDIS performance for any of the major health plans providing coverage in Wichita. Data for Preferred Health System's HMO population in Kansas is shown here to illustrate the type of data available through HEDIS.

One factor that can determine the extent to which HEDIS measures are utilized is whether purchasers make HEDIS reporting an expectation as part of the contracting process.

Many purchasers use HEDIS measures as part of their efforts to identify and reward high performance and to encourage their employees to seek out high-performing providers.

Kansas - HMO patients

Comprehensive Diabetes Care (CDC)	% of Eligible	Midwest Benchmarks Percentile		
2010 Rates	PHS	75th	50th	25th
HbA1C Testing	89.93	91	88	86
HbA1C Poor Control* (* Lower is better)	21.7	24	28	31
LDL-C Screening	78.75	85	81	79
Medical Attention for Nephropathy	78.75	82	78	72
Eye Exam (Retinal)	72.04	62	55	49
BP Control	65.32	64	62	56

HEDIS Plan data for Preferred Health System (2010 Plan Year)

Figure 7

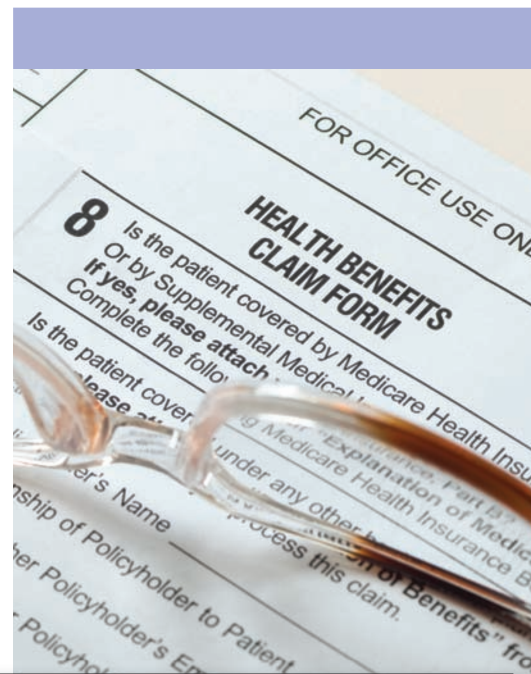
Perfect Measures?

No measure of care is perfect. One critique of HEDIS data is that it is often based on claims data which may not always be accurate or complete. NCQA designations are based on a sampling of patient charts and many physicians say this under-represents their efforts to work with diabetic patients.

For example, many physicians say their efforts to work with patients are not reflected in the chart or on the claim. Doctors also say the data doesn't adequately take into account patient compliance with requests to come in for visits or to follow up with appropriate testing.

Measures of performance developed and reported by physicians might assist in determining how best to assess health system performance, but such measures do not yet exist in this market.

Nonetheless, it is clear that when there is a concerted effort to measure and monitor performance, overall performance improves. While the measures we have may not be perfect, they often are our only indication of the activity in which patients and physicians are engaged in to improve care and outcomes.



Bridges to Excellence

Bridges to Excellence Diabetes Care Link—Bridges to Excellence (BTE) programs provide incentives that reward physicians and practices for adopting better systems of care that result in physician practice reengineering, the adoption of health information technology and delivering good outcomes to patients. The BTE Diabetes Care Link (DCL) program improves the quality of care for patients with diabetes.

Physicians who demonstrate they are top performers in diabetes care can earn financial rewards for each diabetic patient covered by a participating health plan and/or employer. Participants fund these incentives from the savings they achieve through lower health care costs and increased individual productivity that results from delivery of higher quality diabetes care. To attain rewards available through the BTE DCL reward program, eligible physicians and physician practices voluntarily submit medical record data demonstrating that they provide high levels of diabetes care.

Coalitions help to implement BTE by serving as intermediaries between health plans, employers, and physicians. Many coalitions help plans with recruiting physicians as recognized DCL providers and by encouraging employers to approve incentive payments. For more information on BTE see: www.bridgestoexcellence.org

A multi-faceted approach

The most effective means of improving care and outcomes is through a multi-faceted approach involving multiple sources of information, education and intervention targeted at both patients and providers.

Effective diabetes care is the result of patients and physicians working together. Other stakeholders, including health plans and employers, can play critical supporting roles in facilitating and supporting this relationship. Common approaches to improving the management of diabetes illustrate the various avenues to performance improvement and include:

- **disease/care management**
- **provider education**
- **patient education**
- **patient reminders**
- **appropriate medication, including compliance (taking medication as directed)**

Collaboration for results

Group Health Alliance in Washington brought together a group of employers, physicians and other stakeholders to address the standard of care provided in the region to diabetes patients.

Included in the extensive report that resulted from this group's work is this list of recommended change strateges for improving and enhancing diabetes care. The groups recommendations are listed in **Figure 9**.

Figure 9

Recommended Change Strategies for Improving and Enhancing Diabetes Care	
1. Patient Registries	• Emphasize the importance of patient registries (either stand-alone or incorporated into Electronic Health Records, or EHRs) in clinical quality improvement efforts. • Promote and facilitate the use and dissemination of registries in ambulatory care settings.
2. Financial Incentives	• Encourage health plans and purchasers to create incentives and eliminate access barriers so that patients and providers can most effectively manage diabetes. For example: Encourage health plans and purchasers to eliminate or reduce out-of-pocket costs for diabetes medications and supplies if they are not already doing so.
3. Promotion of Self Management	• Promote and support discussion of self management between the provider and the patient in the clinical care setting. • Identify vetted tools and resources for providers to use in promoting patient self management and encourage and facilitate their use. (Strategy is related to but separate from patient education)
4. Patient Education	• Promote diabetes education between providers and patients in the clinical care setting. • Identify vetted private and public patient education resources in the community and encourage and facilitate providers in making referrals to them. (Strategy is related to but separate from promotion of self-management)
5. Clinical Reminders and Feedback to Providers	• Promote the use of clinical reminders to providers regarding the service needs of individual patients. For example: Remind provider when a patient with diabetes is overdue for a specific service. • Promote the use of performance feedback to providers for individual patients with diabetes as well as their total diabetes patient population.
6. Patient Reminder Systems	• Promote the use of patient reminders—sent directly to the patient with diabetes.

About this Data Brief

The vision of the Wichita Business Coalition on Health Care is to achieve substantive and sustainable improvement in the value received for the health care dollars spent by the region's employers, to enhance the health of employees and their families, and to increase the quality of health care for the community.

The Coalition carries out this mandate by promoting value-based decision-making, including through this Data Brief series.

This Data Brief was published by the Wichita Business Coalition on Health Care with support from the University of Kansas School of Medicine-Wichita's Department of Preventive Medicine and Public Health.

For more information about this Data Brief (2010, Issue 3), please contact Ron Whiting, executive director of the Coalition at ron@wbchc.com. To download this publication and learn about others as they become available, visit us online at www.WBCHC.com and register to receive e-Alerts.