



An Alliance for Improved Health Care

A program of the Robert Wood Johnson Foundation's *Aligning Forces for Quality* initiative and other funders



Community Health Checkup

Executive Summary | June 2009

3rd Report on Diabetes

Focus on: Health Reform
and Better Health



Visit betterhealthcleveland.org
to read the full report

OUR MISSION

Better Health Greater Cleveland is a multi-stakeholder partnership that improves the health and value of health care provided to people with chronic medical conditions in Northeast Ohio.

We are committed to:

- improving care and outcomes of all people with chronic conditions;
- eliminating disparities in health observed among disadvantaged populations by insurance, race and income; and
- transparency across collaborating organizations, and, through public reporting of patient care data, with our community.



To the Community:

On behalf of Better Health Greater Cleveland, I am pleased to submit our third Community Health Checkup that reports the achievement of 44 primary care practice sites in the care of their adult patients with diabetes during calendar year 2008. This Checkup also highlights organizational progress for our fledgling collaborative and summarizes data from other sources that present challenges to us as we seek to make Greater Cleveland both a healthier place to live and a better place to do business.

Most of *Better Health's* initiatives are at the forefront of themes at the core of the national dialogue about health reform that will play themselves out in the weeks and months ahead. Our participation in the national network of *Aligning Forces for Quality* communities, supported by the Robert Wood Johnson Foundation, both permit us to view these national themes through a regional lens and to bring to the dialogue our experience from the front lines of primary care.

The results in this report identify significant progress as well as major challenges. Perhaps most strikingly, we already are seeing the impact of rising unemployment in the region reflected in increasing numbers of uninsured patients in our partner practices. From 2007 to 2008, we report a 6% decline in commercially insured patients and a 19% increase in uninsured patients in the same practice sites. The loss of insurance not only reduces the resources available for patient care but frequently will result in forced disruptions in the patient-physician relationship.

Better Health's clinical and public health partners are committed to addressing these challenges. Nonetheless, the underlying causes of the unsatisfactory outcomes of chronic conditions in Greater Cleveland, as elsewhere, extend far beyond the walls of the physician's examining room. We are hopeful that the gathering breadth and strength of our collaboration will produce community-wide solutions.

A handwritten signature in blue ink that reads "Randall D. Cebul".

Randall D. Cebul, M.D.,
Director, Better Health Greater Cleveland

Introduction and Overview

National Themes Through a Regional Lens. Better Health Greater Cleveland is part of a nationwide partnership of 15 alliances in regional markets with a common goal of improving the health of their residents with chronic medical conditions (Figure 1). These alliances, which soon will be joined by collaborations in additional markets, have committed to publicly reporting accepted measures of their patients' care and outcomes, developing region-wide quality improvement initiatives and engaging consumers to participate in the quest to improve health care and health in their communities. Common challenges and best practices are shared in twice yearly meetings hosted by The Robert Wood Johnson Foundation, the granting agency for the *Aligning Forces for Quality* program, RWJF's signature health improvement initiative.

Better Health is unique among the *Aligning Forces* communities in its emphasis on the use of electronic medical records (EMRs) for quality measurement and reporting, its exceptional diversity of clinical practice partners and its commitment to identify and eliminate disparities in health and health care among its patients by insurance, race, income and education.



Better Health provides its partner health care organizations detailed reports that they can use to improve care and outcomes. At the Cleveland Clinic Medicine Institute, led by Dr. David Bronson (pictured above), physicians' results for their diabetes patients are shared with physicians quarterly and included in the annual reviews the Clinic provides its doctors. "Our physicians take pride in providing excellent care, and sharing data and feedback on their outcomes helps them improve the care of their patients."



Figure 1. *Aligning Forces for Quality Markets, 2009.*



As a self-employed lawyer with Type 1 diabetes, the cost of insurance was out of reach for Orlando Smith. He skipped routine tests and diabetes education and tried to manage his disease with exercise and diet. Smith recently found a new health care team at MetroHealth's Lee-Harvard health center and gained access to the health care and education he needs. One of the most important lessons so far, Smith says, is the importance of having a team that is a true partner in improving his health.

National Quality Forum

The National Quality Forum (NQF) is a multi-stakeholder, private and not-for-profit organization that helps advance efforts to improve quality through performance measurement and public reporting. Its work in endorsing voluntary consensus standards following a rigorous evidence-based review and a formal development process has made its measures the "gold standard" on which major purchasers rely.

Better Health's partnership in this network enables it to view national themes through a regional lens and to bring its experience on the front lines of primary care to the national dialogue on health reform. This third Community Health Checkup arrives during a time of dramatic economic difficulty throughout the United States and with great impact in Greater Cleveland. Because most people's health insurance remains linked to their job, the effect of rising unemployment in the region is evidenced in this report by declines in commercially insured patients and growth in uninsured patients. Poorer outcomes are associated with lack of insurance, as well as by discontinuous care, such as when a patient must change doctors because she has lost her insurance. These stresses represent significant challenges to our patients with chronic conditions, to policy makers seeking to enhance access to high quality primary care and to systems of care delivery.

Other themes in the national health reform dialogue also are reflected in *Better Health's* successes and struggles to improve the quality and value of health care:

- The need for more widespread and inter-connected electronic health data to permit providers access to comprehensive health information for every patient and the tools needed to identify and reduce gaps in care and outcomes;
- Commitment to transparency and accountability in reporting health outcomes;
- Focus on better care and outcomes for chronic conditions, which are associated with 75% of the nation's \$2.5 trillion medical bill;
- Reform in care delivery systems that are integrated and accountable; and
- Payment reform that shifts incentives for providing *more* care to incentives that reward wellness, prevention, clinical outcomes and coordinated evidence-based care.

Organizational Update. Since our last Checkup in January 2009, the Robert Wood Johnson Foundation added a new market area (Albuquerque, New Mexico), awarded planning grants to Central Indiana and Boston, and, despite challenges to its own endowment, committed to continued support of the *Aligning Forces* initiative through 2015. Progress in *Better Health's* relationships include new organizational membership in the National Quality Forum (NQF) the pre-eminent leader in establishing standardized quality measures, (www.qualityforum.org) and formal agreements with Bridges to Excellence (www.bridgestoexcellence.org), the national leader in recognizing and rewarding physician achievement in quality, which, importantly, will include audits of our data related to quality of care. This spring, we applied to the IRS for non-profit (501c3) status, leading us to establish more formal governance structures and enabling us to expand our external sources of financial support.

Within the *Better Health* partnership, we are pleased to have made a seamless transition to new leadership of our Quality Improvement Learning Collaborative. We are grateful to Dr. David Aron of the Louis Stokes VA Medical Center for getting us off to a great start and to Dr. Christopher Hebert, general internist and newly appointed Associate Medical Director

for Quality at Kaiser Permanente, for filling David's large shoes. In addition, Lisa Anderson, RN, from the Center for Health Affairs, and her nurse-led team from area hospitals are making good progress in *Better Health's* efforts to improve our hospitalized patients' transitions of care from the hospital back to the community. Finally, our support of efforts to acquire EMRs for the region's Federally Qualified Health Centers gained a welcome boost from federal stimulus dollars for capital improvements that will permit implementation of EMRs.

Results Reported in this Checkup. This third Community Health Checkup summarizes the achievement of 361 physicians in their care for 25,724 adult patients with diabetes in 44 clinical practice sites during calendar year 2008. The availability of reports by the same sites over multiple reporting periods provides the opportunity to identify changes in achievement at both the regional and site level. The changes are useful as indicators of our overall progress and to identify replicable "best practices" of sites (and individual providers) that can be shared region-wide to accelerate change.

We report changes in calendar year 2008 as compared with calendar year 2007. As in our previous Checkups, we summarize regional findings overall and in sub-groups according to patient race, income, educational attainment and insurance status, including patients without health insurance. Also as before (and reported in detail in the full Checkup available at betterhealthcleveland.org), we report practice site-level achievement overall and by insurance status, requiring that a given site provides care for at least 50 patients in an insurance category in order to have its achievement reported for those patients. Our nine nationally endorsed (by NQF) and locally vetted standards continue to be grouped into two composite standards, including a summary of five clinical *outcomes* and a summary of four *care processes* (see Table 4 on page 8). We also use our detailed data to compare our achievement to "HEDIS" standards of the National Committee on Quality Assurance (NCQA), which are used to compare health plan data nationwide.

What's New. In contrast to previous Checkups, most charts in the current report summarize region-wide results for all 44 practice sites together, combining sites that have paper-based record systems with those that use EMRs for measurement. Relevant differences in achievement across sites by type of records systems are identified, as appropriate. Finally, new to this Checkup are the preliminary results of regional hospitalizations for complications of diabetes. For these, we use data sources that cannot yet be linked to our partner practices but compare Cuyahoga County's hospitalization rates to Ohio's overall.

Our current results highlight six major categories of findings:

1. We observe 6% fewer commercially insured patients and 19% more uninsured patients within the partner practices that provided data both in 2007 and 2008, reflecting increases in regional unemployment that accelerated in late 2008. We expect this trend to continue.



John Snell, 65, got his diabetes under control after his doctor referred him to diabetes education classes and he learned how to manage his condition. Snell, who lives in Cleveland's Mt. Pleasant neighborhood, sees his health care team regularly and works on his own to eat well and exercise. "It seems hard when you begin, but after a while it gets easier," he says.

BETTER HEALTH PARTNERS

Founding Partners

The MetroHealth System, Robert Wood Johnson Foundation grantee
The Center for Community Solutions
Health Action Council Ohio

Primary Care Partners

Care Alliance Health Center
Case Western Reserve University
Practice-Based Research Network
Cleveland Clinic, Main Campus
and Family Health Centers
Huron Hospital,
Community Health Center
Kaiser Permanente-Ohio
Louis Stokes VA Medical Center
MetroHealth, Main Campus and
Center for Community Health
Neighborhood Family Practice
North Coast Health Ministry
Northeast Ohio Neighborhood Health
Services (NEON)
University Hospitals Family Medicine

Hospital Partners

Cleveland Clinic Health System Hospitals
Cleveland Clinic Main Campus
Euclid
Fairview
Hillcrest
Huron
Lakewood
Lutheran
Marymount
South Pointe
MetroHealth Medical Center

Employers and Health Plan Partners

Health Action Council Ohio
Ohio Medicaid
Aetna
Cigna
Kaiser Health Plan
Medical Mutual of Ohio
United Healthcare

Organizations and Agencies

Academy of Medicine of Cleveland
and Northern Ohio
Center for Health Affairs
Cleveland Department of Public Health
Cuyahoga County Board of Health
Cuyahoga County Public Library
Diabetes Association of Greater Cleveland
NetWellness.org
Ohio Department of Job & Family Services
Ohio Department of Health
OneCommunity
SMART Center, Case Western Reserve
University Bolton School of Nursing

Other Valued Supporters

Robert Wood Johnson Foundation
Mt. Sinai Health Care Foundation
The MetroHealth System
Wellpoint Foundation
Health Action Council
The Center for Community Solutions
Medical Mutual of Ohio
OneCommunity

2. Our partner practices achieved above the national average on virtually all NCCQA's "comprehensive diabetes care" standards for health plans nationwide and above the 90th percentile for many. Our partner practices had favorable results for uninsured patients, for which there are no direct national comparisons.
3. We observe continued improvement in achievement overall from 2007 to 2008, both in our composite care process standard (19% relative increase) and in our composite outcome standard (7.6% relative increase).
4. We continue to observe disparities in achievement and improvement among those with fewer resources. In general, patients do less well, especially on outcomes, if they are uninsured or insured by Medicaid, non-white, from poorer neighborhoods and have less education. Practice sites with paper-based records systems, which also disproportionately care for patients with fewer resources, also fare less well.
5. We find additional opportunities to recognize evidence-based "best practices" that can drive improvements in care and outcomes across physicians in the same sites and region-wide, as we extend our analyses to [de-identified] physicians within sites.
6. We identify challenges to measuring and improving important outcomes among the region's adults with diabetes, as we extend analyses to hospitalizations for diabetic complications in Cuyahoga County. The region's high level of obesity, which presents difficulties in controlling diabetes, is an important underlying cause.

Partners, Supporters and a Changing Landscape

Better Health's organizational and clinical partners, as well as other valued supporters, continued to grow (see sidebar). Primary care partner practices include the 44 sites reporting their achievement in the current report along with those planning to report or participating in our region-wide Quality Improvement Learning Collaborative. Hospital partners participate in our Transitions of Care Collaborative and initiatives designed to improve inpatient care and reduce hospital readmissions for patients with selected chronic conditions. Employers and health plan partners participate on our Leadership Team and *Better Health's* Clinical Advisory, Information Management and Consumer Engagement committees. Other organizations and agencies represent public health, communication professionals and consumers on these committees as well. Finally, funding for *Better Health* comes from contributions and grants that are unrestricted or dedicated to one or more program priority areas of *Better Health Greater Cleveland*. We have received tremendous leadership, financial and in-kind support from the local community and from statewide and national organizations. Our partner organizations donate goods and services, and their volunteers contribute hundreds of hours working toward *Better Health's* goals.

The remarkable diversity of our clinical partners is summarized in Table 1. The 361 physicians reporting in this Checkup provide care for patients at 44 practice sites in eight health systems. The 44 sites include 31 that use EMRs to measure and report their achievement and 13 whose paper-based

records are abstracted by *Better Health* medical records specialists. Overall, most patients are insured by Medicare or commercial health plans (79%), although this differs substantially between EMR-based systems (85%) and paper-based systems (33%). Similarly, while almost half of all reported diabetic patients are non-white (47%), 85% of patients in the paper-based practices are African-American (75%), Hispanic (9%), or "Other" (1%). Patients in the paper-based practices also tend to be from neighborhoods that are poorer and have lower educational attainment.

TABLE 1. CHARACTERISTICS OF CLINICAL PARTNERS AND PRACTICE SITES IN CALENDAR 2008

	<i>Better Health</i> Population	Range Across Sites	EMR-Based Systems	Paper-Based Systems
Health Systems	8		3	5
Practice Sites	44		31	13
Primary Care Physicians	361		280	81
Qualifying Diabetes Patients	25,724	75 to 1,973	22,777	2,947
Diabetic Patient Characteristics				
Insurance ¹ [%]				
Medicare	9,181 [36]	4 to 53	8,726 [38]	455 [16]
Commercial	11,119 [43]	1 to 65	10,612 [47]	507 [17]
Medicaid	2,263 [9]	0 to 48	1,525 [7]	738 [25]
Uninsured	3,143 [12]	0 to 82	1,914 [8]	1229 [42]
Medicaid + Uninsured	5,406 [21]	1 to 95	3,439 [15]	1967 [67]
Race/Ethnicity ² [%]				
White	10,252 [53]	4 to 95	9,804 [59]	448 [15]
African-American	7,657 [39]	2 to 96	5,476 [33]	2,181 [75]
Hispanic	1,086 [6]	0 to 62	830 [5]	256 [9]
Other	518 [3]	0 to 56	480 [3]	38 [1]
Non-White	9,261 [47]	5 to 96	6,786 [41]	2,475 [85]
High School Graduation Rate, %	79.7	68.7 to 90.4	80.8	71.3
Median Household Income, \$	40,342	24,089 to 66,685	42,029	27,484

¹ Primary insurance at the most recent visit. Insurance was not reported for 18 patients.

² Race/ethnicity by patient self-report. Most of the 518 patients classified as "Other" are Asian-American. Race was not available for 6,211 patients, including all Kaiser Permanente patients.

The impact of the sharp economic downturn that began in the fourth quarter of 2008 is seen in the decline of resources available to patients in *Better Health's* partner practices. Figure 2 summarizes changes in the distribution of insurance types across 42 practice sites that reported both in 2007 and 2008. Six percent fewer patients were insured by commercial payers in 2008 than in 2007, and the number of uninsured patients increased by 19%.

Figure 9. Percentage of Patients Vaccinated for Pneumonia across 35 Practice Sites in July 2007 – June 2008 Reporting Period.

Data-Catalyzed Opportunities to Accelerate Improvement

In preparing our second Checkup in January 2009, we identified a data-catalyzed



Losing health insurance is a serious side effect of job loss, which has affected thousands in Northeast Ohio. Safety-net providers, including Neighborhood Family Practice, where Dr. Erick Kauffman works, see more uninsured patients – and worry that too many others are not seeking care they need. New federal funding for Federally Qualified Health Centers is enabling improvements and expansions to better serve patients in need.

What is HEDIS?

The Healthcare Effectiveness Data and Information Set (HEDIS) is used by most American health plans to measure the performance of health care systems on a broad range of important health issues, including comprehensive diabetes care.

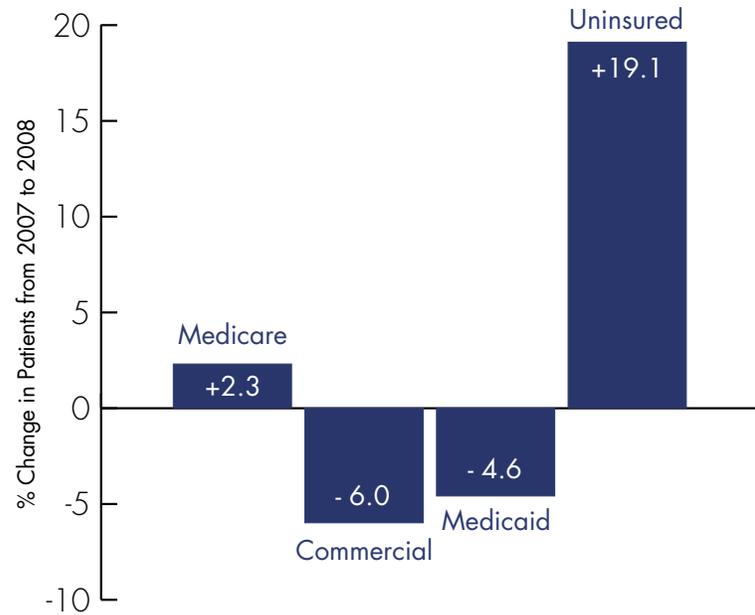


Figure 2. Percentage Changes by Insurance Type for Better Health's Patients Between 2007 and 2008.

Achievement Of *Better Health's* Partners Compared to Health Plans Nationwide

As in our first two Checkups, we report the achievement of *Better Health's* partners on standards of care and outcomes for diabetes published by NCQA for health plans nationwide ("HEDIS" standards, see sidebar). We note a few important points about our sample and methods. First, in order to make fair comparisons to NCQA's results, *Better Health's* leadership deliberately includes in its reports only those patients with diabetes between the ages of 18 and 75, and reports data stratified by primary insurance type. We also limit our sample to those who have made two or more visits to their primary care physician during the one-year measurement period. Second, because *Better Health's* partners provide detailed results on their patients, we are able to report our achievement on NCQA's standards, even though the NCQA thresholds for certain test results (such as the percentage of patients with blood pressure values less than 130/80) are different than those we have selected to measure local achievement. Third, our partners' results in this Checkup pertain to calendar year 2008 as compared to NCQA's results, which describe health plan results from calendar 2007 (*The State of Health Care Quality 2008* (www.ncqa.org)). While comparing our more recent results with NCQA's older results may be viewed as unfairly biasing this benchmark if nationwide trends are favorable, we believe that our more current data are more actionable for providers, health plans and patients in Greater Cleveland. Finally, no health plans exist for the uninsured. Thus, the results for *Better Health's* uninsured patients have no direct comparator, necessitating comparison to patients insured by Medicare, Medicaid or commercial health plans.

Tables 2 and 3 summarize our results for 25,706 patients reported by all 44 practice sites during 2008, including both EMR-based and paper-based medical records systems. Table 2 describes *Better Health* partners' achievement compared to the average (mean) results for health plans nationwide. The region was above the average for health plans nationwide on virtually all standards, and the results for our uninsured patients were better than the national average for patients in Medicaid health plans for most standards. Table 3 provides more detailed comparisons for *Better Health's* insured patients, including results that are better than 90% of health plan results nationwide ("++", green) and those that are between the mean and 90th percentile ("+", white). The only result that is below the health plans average ("-", orange) is for obtaining eye examinations for diabetic patients insured by Medicaid. This result is likely due to under-reporting (or documentation) of eye examinations that patients obtain outside of partner systems or practice sites.

TABLE 2. REGIONAL ACHIEVEMENT COMPARED TO HEALTH PLANS NATIONWIDE
HEDIS COMPREHENSIVE DIABETES CARE MEASURES REPORTED BY NCQA

Measure	Group	Medicare	Commercial	Medicaid	Uninsured	Overall
HbA1c testing	Region	95.0	93.1	91.7	90.8	93.4
	National	88.1	88.1	77.3	-	-
Poor HbA1c Control (>9)*	Region	12.3	18.8	26.3	35.8	19.2
	National	29.0	29.4	47.9	-	-
Eye Exams	Region	69.6	62.0	44.2	48.5	61.5
	National	62.7	55.1	49.9	-	-
LDL-C Screening	Region	89.9	89.4	75.0	77.4	86.8
	National	85.7	83.9	70.8	-	-
LDL-C Control (<100)	Region	61.3	53.8	38.3	36.7	53.0
	National	46.8	43.8	31.3	-	-
Monitoring Nephropathy	Region	91.8	89.4	86.6	87.0	89.7
	National	85.7	80.6	74.4	-	-
Blood Pressure Control (<130/80)	Region	38.5	38.6	36.1	31.7	37.5
	National	31.7	32.1	29.5	-	-
Blood Pressure Control (<140/90)	Region	66.1	71.2	59.7	62.6	67.3
	National	58.9	63.9	55.5	-	-

* Lower rates are better for this measure



“The most exciting development in health care today is people with chronic diseases partnering with their provider, reviewing their numbers and working out a plan for successful management of their conditions. Everyone can benefit from having access to the data that drives change.”

— Dr. Ann Reichsman
Neighborhood Family Practice

TABLE 3. DETAILED COMPARISON OF REGIONAL TO NATIONAL ACHIEVEMENT (NCQA) FOR INSURED PATIENTS

Measure	Medicare	Commercial	Medicaid
HbA1c testing	+	+	++
Poor HbA1c Control (>9)	+	++	++
Eye Exams	+	+	—
LDL-C Screening	+	++	+
LDL-C Control (<100)	+	++	+
Monitoring Nephropathy	+	++	++
Blood Pressure Control (<130/80)	+	+	+
Blood Pressure Control (<140/90)	+	+	+

++ Regional achievement is better than 90th percentile nationwide
 + Regional achievement is between the nationwide mean and 90th percentile.
 — Regional achievement is between the nationwide 10th percentile and mean.

Better Health’s Standards for Diabetes Care and Outcomes

Table 4 summarizes *Better Health’s* five standards for intermediate outcomes, the criteria used for a composite Outcome Standard, and four Care Process standards, including the criteria used for the composite Process Standard. We continue to believe that Process standards are mostly responsive to provider or health care system actions, while achievement on Outcomes also reflects patient resources (such as insurance, financial and educational factors), patient behaviors and the effectiveness of partnerships between patients and their health care providers. The rationale for each individual standard was summarized in our first Community Health Checkup reported in June 2008 (betterhealthcleveland.org). Each practice site’s Outcomes are reported for individual standards and by the percentage of its patients who meet *at least four of the five* Outcome standards. Each practice site’s Care Processes also are reported individually and by the percentage of patients who meet *all four* Process standards – a higher achievement criterion for Processes than for Outcomes.

TABLE 4. BETTER HEALTH’S INDIVIDUAL AND COMPOSITE STANDARDS

CLINICAL OUTCOMES	CARE PROCESSES
<p>5 standards of good control:</p> <ul style="list-style-type: none"> • Blood Sugar (HbA1c<8%) • Blood Pressure (<140/80) • Cholesterol (LDL Cholesterol <100) • Weight (Body Mass Index <30) • Documented non-smoker <p>Composite Reported: Percentage of patients who met at least 4 standards</p>	<p>4 standards for good routine care:</p> <ul style="list-style-type: none"> • Blood sugar control test done • Screening or treating kidney problems • Annual eye exam • Pneumonia vaccine given <p>Composite Reported: Percentage of patients who met all 4 standards</p>

Region-Wide Achievement and Improvement in Care Processes and Outcomes

Figure 3 summarizes 2008 region-wide achievement on our composite Care Process and Outcomes standards for 44 partner practices and their 25,724 diabetic patients, comparing overall achievement in 2008 to their achievement in 2007. In contrast to previous Checkups, we report here all practice sites, including both those that use traditional paper medical records and those that use EMRs. Despite setting the achievement bar higher for processes than for outcomes, 46.8% of our patients met all four Process Standards, while 38.2% met four or five of the five Outcome Standards. Outcomes improved a modest 2.7 points (7.6% relative change) in 2008 from 2007, while Care Processes improved a more impressive 7.5 points (19.1% relative change). Details on region-wide and practice site-level achievement for individual standards are provided in the full Checkup, which can be downloaded at betterhealthcleveland.org

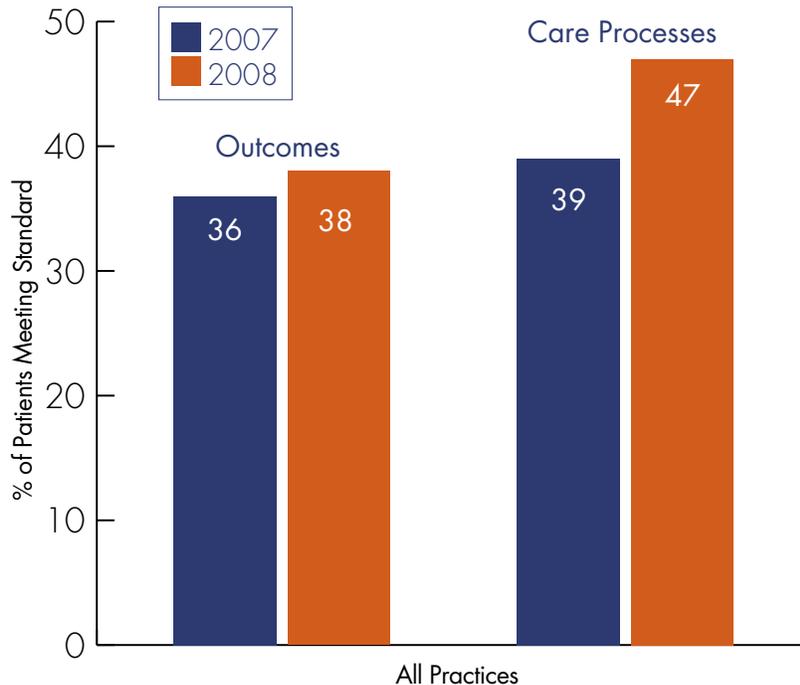


Figure 3. Region-Wide Achievement on Composite Outcomes and Care Processes, 2007-2008.

Region-Wide Achievement and Changes In Patient and Practice Site Sub-Groups

Figures 4-7 summarize achievement and changes in achievement in patient sub-groups by race, income, education and insurance, while Figure 8 compares achievement and changes by practice sites, according to their data source (EMR versus paper-based medical record systems). The patterns across patient sub-groups are fairly consistent, with better achievement and change observed among white patients and those with greater resources:



The Rev. Floyd O'Neal's neighbors shout "Hey, Old School!" when he bicycles through his East Cleveland neighborhood, but the 65-year-old Baptist preacher just laughs as he pedals. Riding a bike is just one of the lifestyle changes O'Neal has made since he learned he has diabetes and took a class at Huron Hospital that his doctor recommended to help him manage it. "I want to stick around here, and I've got two legs that I want to keep," O'Neal said.

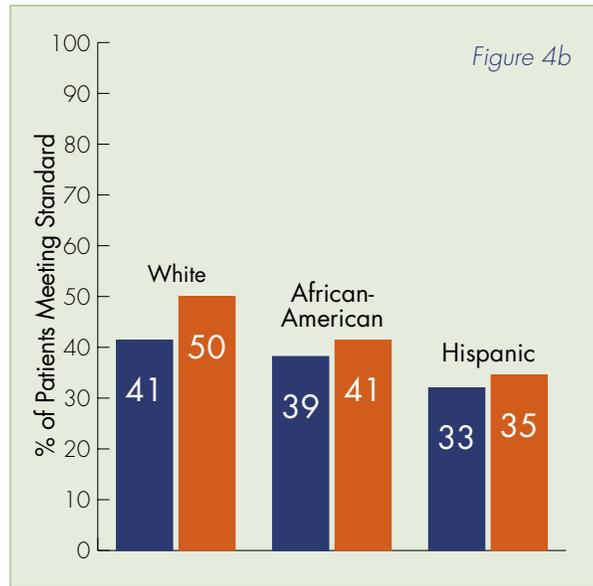
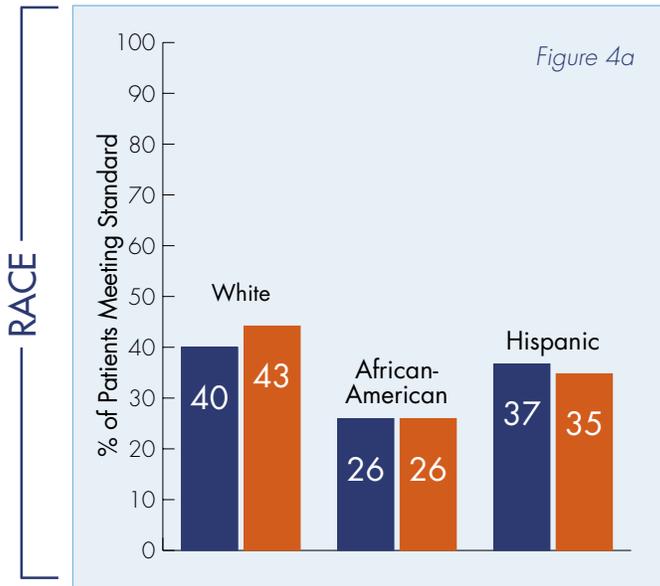
higher incomes, educational attainment, and Medicare or commercial insurance. Disparities by race continue, as African-Americans achieve least well on outcomes, and neither African-Americans nor Hispanic patients improved on outcomes from 2007 to 2008. Likewise, outcomes achievement was unchanged or declined among Medicaid and uninsured patients with diabetes in the region. Finally, larger health care systems with EMRs achieved better and improved more than practice sites that use paper medical records (Figure 8). While the practices with EMRs have advantages in their ability to identify and support process improvement, recall that the five practice sites using paper-based medical records also are substantially more likely to serve non-white patients and those with fewer resources (Table 1), making it difficult to untangle the multiple factors that may contribute to their patients' lower achievement levels.



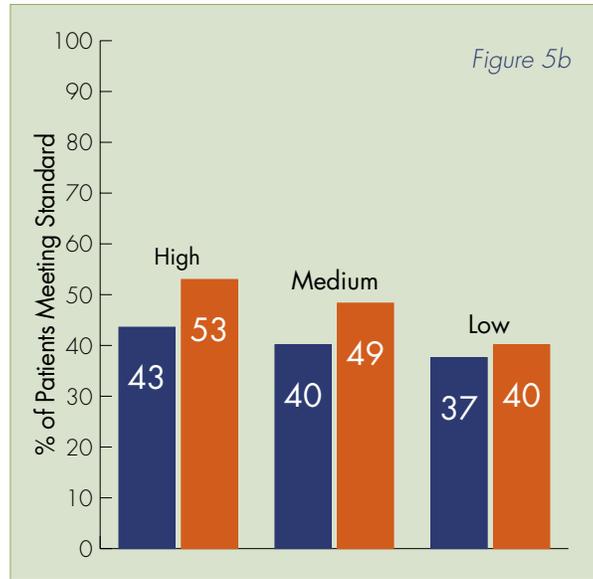
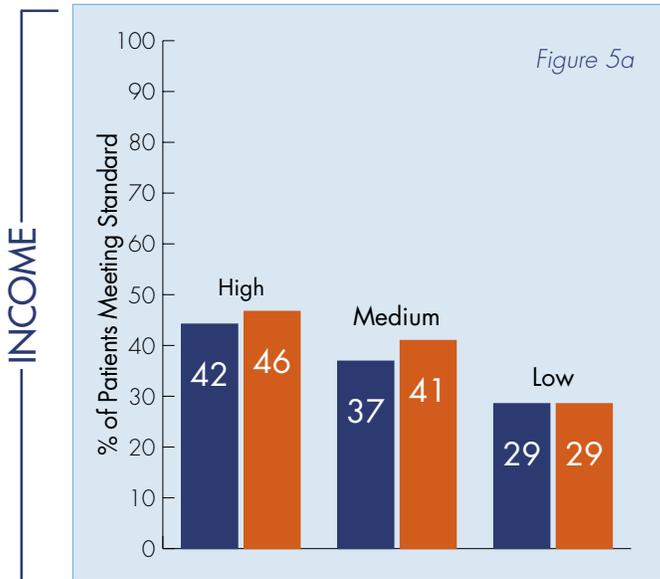
Achievement in 2007 and 2008

OUTCOMES

CARE PROCESSES



Figures 4a & 4b. Regional Achievement on Composite Outcomes and Care Processes by Race/Ethnicity, 2007-2008.



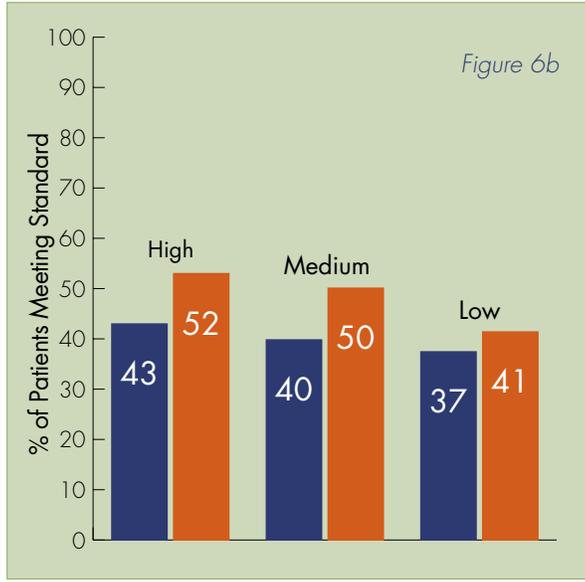
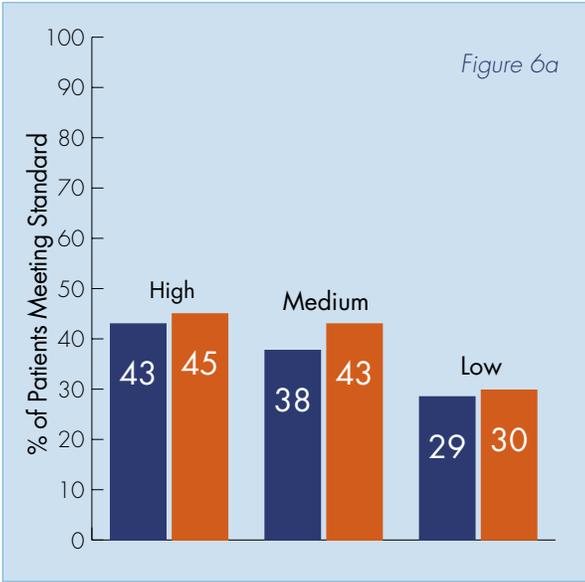
Figures 5a & 5b. Regional Achievement on Composite Outcomes and Care Processes by Income Category, 2007-2008.



OUTCOMES

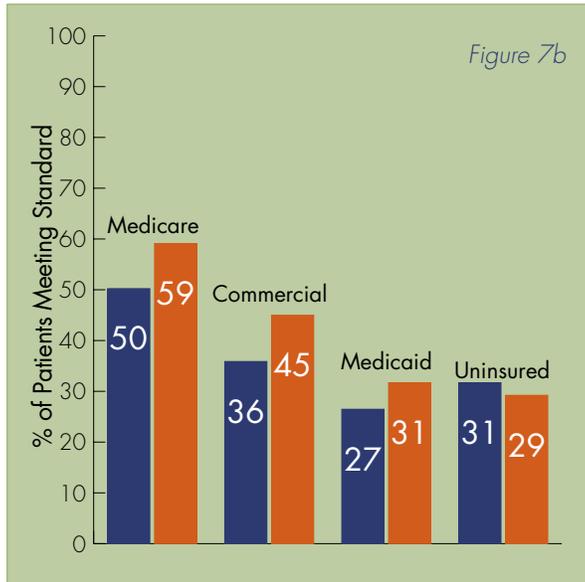
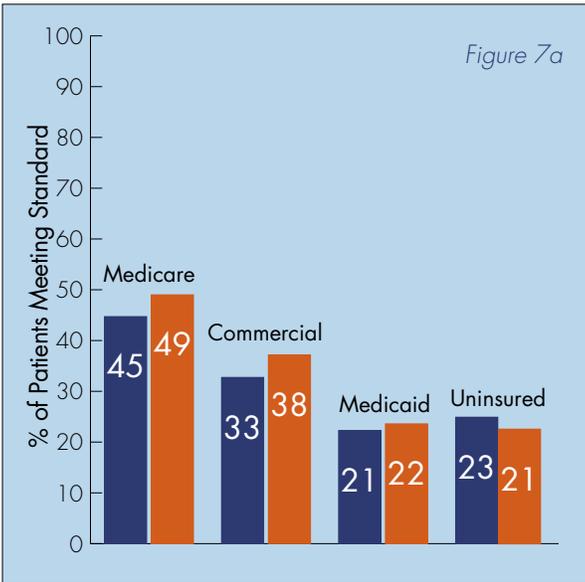
CARE PROCESSES

EDUCATION



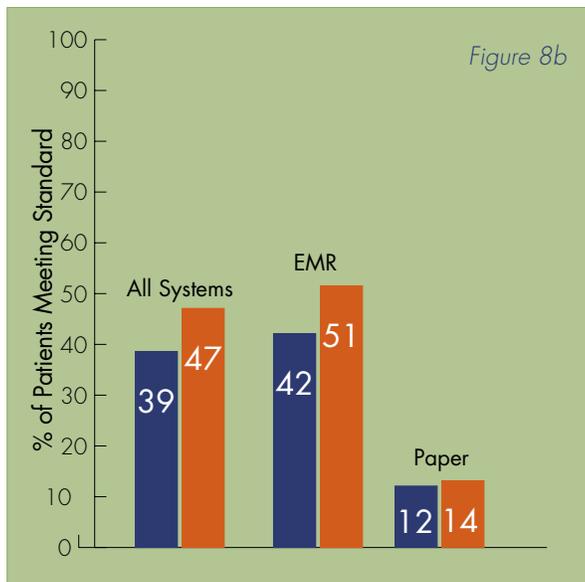
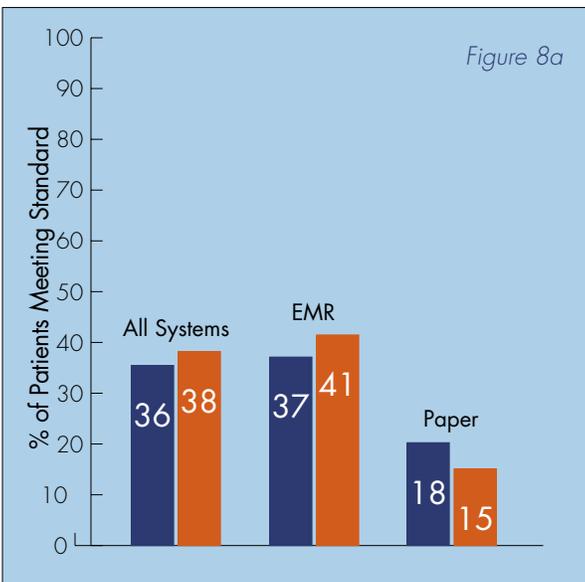
Figures 6a & 6b. Regional Achievement on Composite Outcomes and Care Processes by Education Category, 2007-2008.

INSURANCE

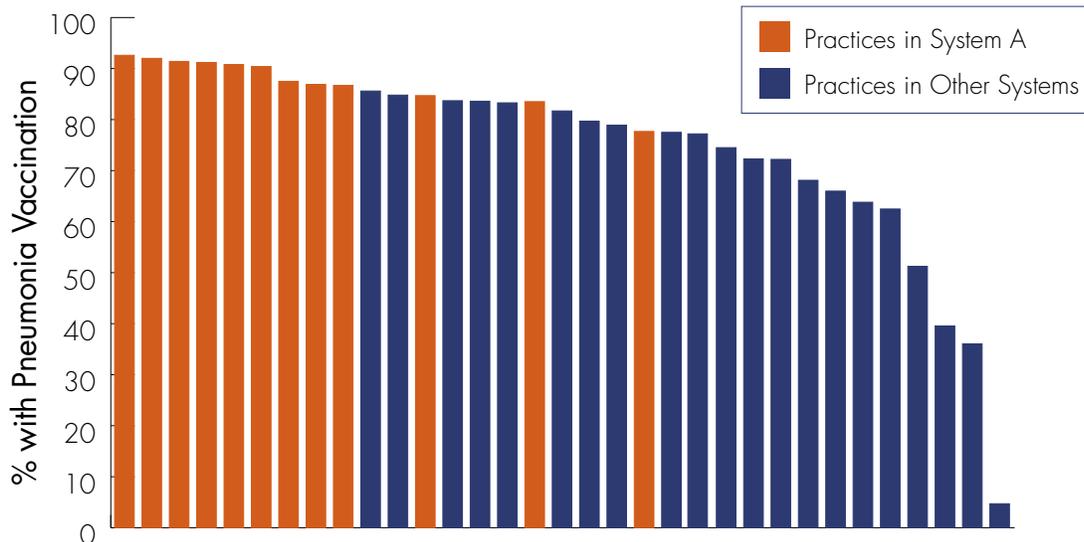


Figures 7a & 7b. Regional Achievement on Composite Outcomes and Care Processes by Insurance Type, 2007-2008.

MEASUREMENT SOURCE



Figures 8a & 8b. Regional Achievement on Composite Outcomes and Care Processes by Measurement Source, 2007-2008.



“As a reminder to our federal policy makers who are attempting to tackle ‘health care reform’, no plan will be successful without an intense focus on reducing chronic disease among all Americans.”

— Matt Carroll, Director
Cleveland Department
of Public Health

opportunity to accelerate region-wide improvement by uncovering “best practices” in health care systems and practice sites that could be shared across sites and systems. Figure 9, which was published in that Checkup, summarizes the rates of pneumococcal vaccinations across 35 *Better Health* partner practices, highlighting the fact that the top nine rates were in practice sites of a single health care system. In less than three years, pneumococcal vaccination rates among diabetics in The MetroHealth System (identified as System A in Figure 9) climbed from less than 30% to over 85%.

At *Better Health’s* public event in January 2009, Kathleen Lehman, an ambulatory care nurse administrator in The MetroHealth System, described the straightforward and replicable means by which she and her colleagues achieved these results at one site and then disseminated the methods throughout the system. She subsequently shared her approach with clinicians participating in the *Better Health* region-wide Learning Collaborative (see sidebar on opposite page). By incorporating “show and tell” stories of replicable system improvements in our related initiatives, we hope to see a broader impact of best practices in our region-wide achievement, including improved vaccination rates in future reports.

Another data-centered approach used to identify opportunities for improvement is a summary of overall changes in achievement at the practice-site level. Figure 10 describes site-level changes in overall achievement on our composite Care Process and Outcome Standards from 2007 to 2008. Thirty-four practices with site-level data in both periods are represented in the figure. Of these, 2008 achievement was better both for care processes and outcomes at 25 sites (the “northeast” corner of the diagram), better for processes but worse for outcomes in eight practices and slightly better

for outcomes but lower for processes for one practice site. In the January 2009 Checkup, we identified sites that showed *exceptional improvement* in both composite scores and invited one practice leader to share his story of change at a Cleveland Clinic practice. The story featured a larger role for nurses in co-managing patients, echoing successes of other practices that more effectively used all members of the practice team to improve care.

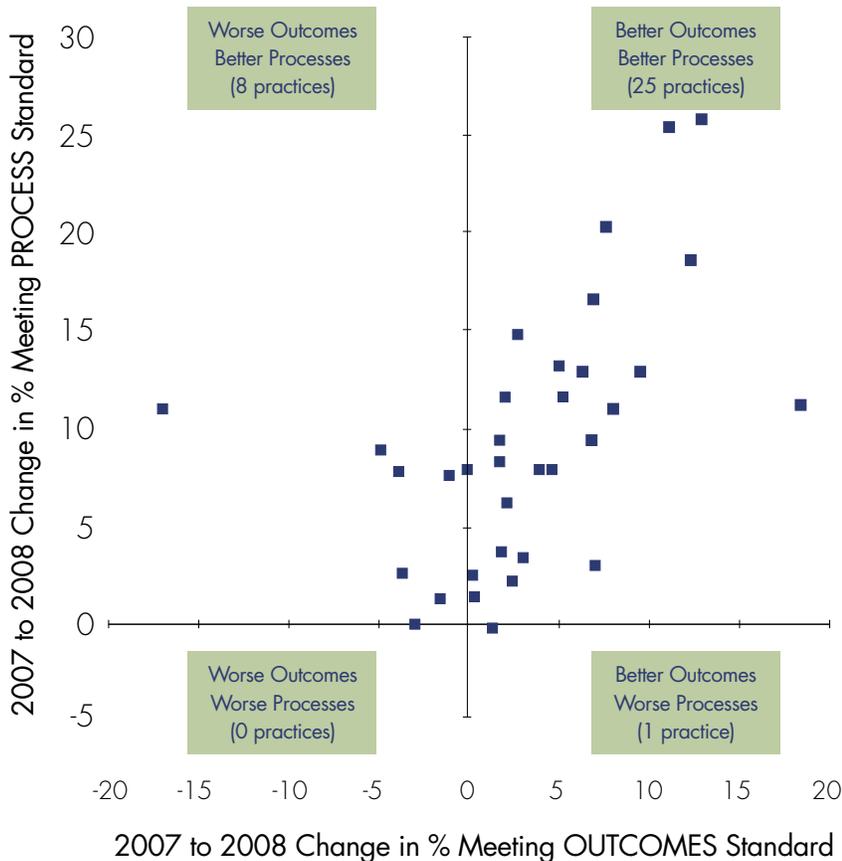


Figure 10. Change in Percentage of Patients Achieving Composite Standards for Outcomes and Care Processes, 2007 to 2008.

In this Checkup, we begin to use our de-identified data to examine variation in achievement or improvement across physicians *within* sites. The goal is to find replicable “best practices” of a physician that can be shared with colleagues within a practice and across sites and systems. Figure 11 summarizes one physician’s substantially higher achievement in Care Process at a practice site that overall had modest achievement (33% as compared to 47% region-wide) but better improvement from 2007 to 2008 (31% relative change as compared to 19% region-wide). In addition to exceeding the overall region-wide average for Care Processes (73% compared to 47%), “Dr. A” also improved 46% from his/her prior year’s achievement. What did this physician do that might be replicated by others at his/her site and elsewhere?



Kathleen Lehman, R.N., left, a nurse administrator at MetroHealth Medical Center, led the team that produced System A’s results in Figure 9. The team presented its work in a poster at the American Academy of Ambulatory Care Nursing’s national conference in April. The poster won top awards and its lessons were well received. “Many hospital and clinic systems have or will have an EMR, and its application can be used for multiple situations,” Lehman said.

The MetroHealth System’s (System A) strategy:

1. Uses EMR system each week to identify scheduled patients who need the vaccine (using age and condition-related indications) and provides list to clinic receptionist.
2. When a patient on the list checks in, receptionist provides pamphlet about the vaccine.
3. Uses “standing orders” from clinic physicians that authorize nurses to offer and administer vaccine.
4. Nurse documents patient consent and vaccine administration in EMR.



Achieving metrics that are associated with fewer serious complications requires patients and physicians to work together. Better Health created posters that its partner practices are hanging in examination rooms and waiting rooms to encourage and inform partnerships.

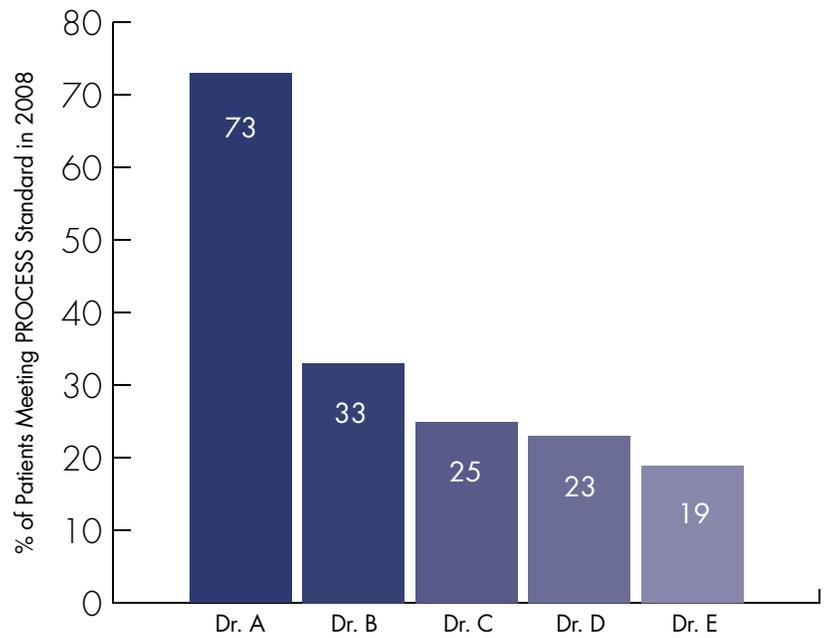


Figure 11. Achievement on Care Processes Composite Standard across the Five Primary Care Physicians in a Single Practice, 2008.

Additional Challenges and Opportunities for Improving Population Health

While our local patient and physician-level data provide the foundation of our Checkups, we also recognize the importance of understanding challenges to Greater Cleveland that are identified in national data sets, such as the Dartmouth Atlas Project (DAP). In our January 2009 Checkup, DAP reported cross-region differences in amputation rates for older diabetic patients who are insured by Medicare and identified Greater Cleveland's rates as "middle of the pack" among 14 *Aligning Forces* communities. To learn more about how Greater Cleveland compares in "hard" outcomes such as amputations and other avoidable complications of diabetes for this Checkup, we analyzed Cuyahoga County's hospitalization rates for all diabetic complications, as defined by the Agency for Healthcare Research and Quality (AHRQ)¹. Figure 12 summarizes our results for calendar 2008. Using all-payer data from the Ohio Hospital Association (OHA) and AHRQ-identified diagnostic codes for hospitalizations, the figure compares Cuyahoga County's hospitalization rates to statewide rates, by insurance type, for short-term complications (such as diabetic keto-acidosis), long-term complications (such as kidney failure), "uncontrolled" diabetes and lower limb amputations. Most striking in these charts is that rates are highest for patients insured by Medicaid, and, across the board, higher for Cuyahoga County than for Ohio overall. One possible explanation of higher Medicaid rates is that medical bills-related impoverishment² among the uninsured may lead them to seek Medicaid coverage prior to their hospitalizations for serious complications. These data represent all hospitalizations at non-federal hospitals, including the large number of the region's diabetic patients who are not reported in this Checkup and not managed by *Better Health* participating practices. Because the OHA

¹ AHRQ Prevention Quality Indicators, www.qualityindicators.AHRQ.gov.

² Himmelstein DU, Thorne D, Warren E, Woolhandler S. Medical bankruptcy in the United States, 2007: Results of a national study. *Am J Med.* E-pub. 2009; June 4.

do not identify individual patients, it is not possible to distinguish complications among *Better Health's* reported patients as compared with others. Regardless, these data present sobering reminders of additional important outcomes, both for patients and health care payers, that must be addressed if we are to improve the population's health. It should also remind us of the relatively long lag time between improvement in diabetes outcomes and the prevention of long-term diabetes complications.

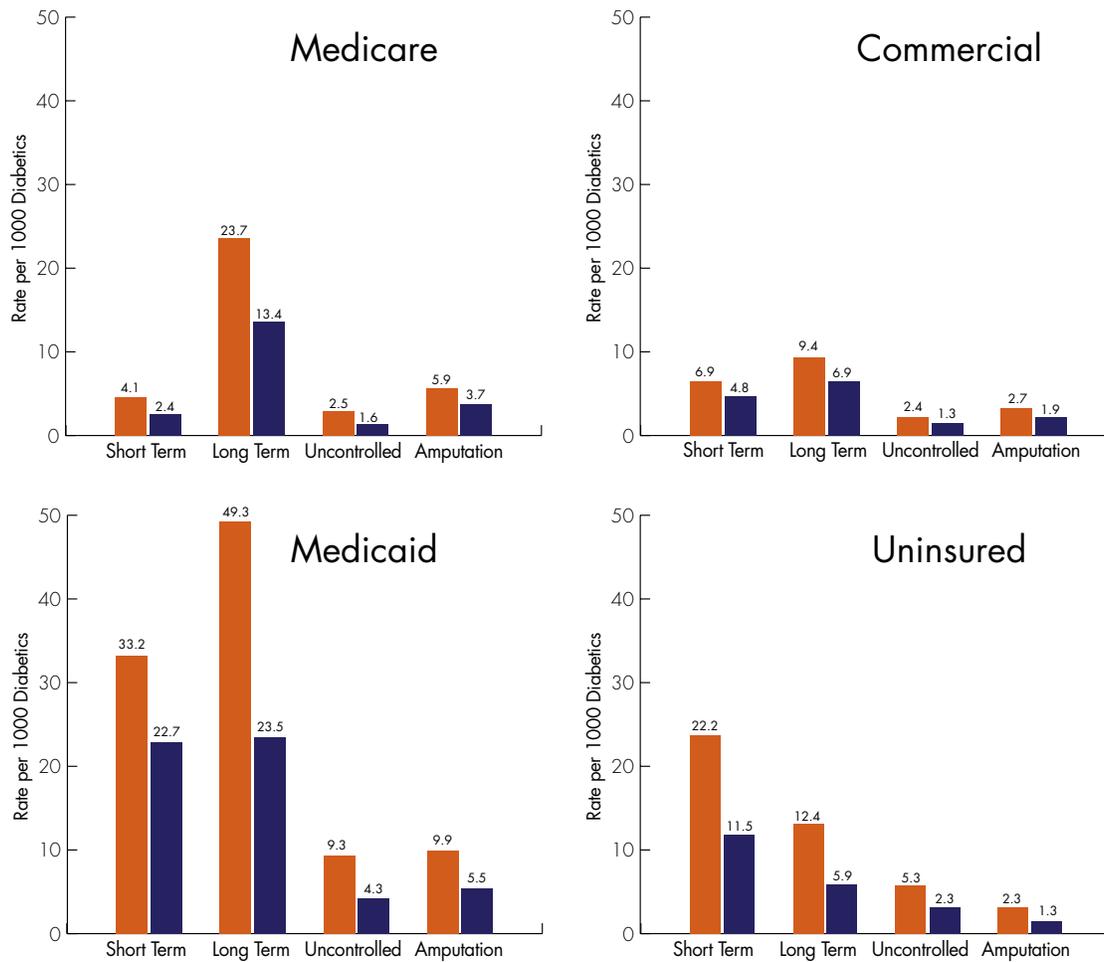


Figure 12. Hospitalization Rates for Diabetic Complications in Cuyahoga County and the State of Ohio, 2008, by Insurance.

Figures 13 and 14 highlight the problem of obesity in our community as the major contributor to the epidemic of Type 2 diabetes. Figure 13 uses data from the 2008 Ohio Family Health Survey (OFHS) to map the prevalence of obesity in Cuyahoga County adults.

The OFHS estimates that 107,000 adults in Cuyahoga County have diabetes and about 90% of them are overweight or obese. Rates of overweight or obesity are similar across race, except for Asian-Americans with diabetes, whose Body Mass Index is generally lower.



“Not only does obesity increase the risk of developing chronic diseases, it also presents a critical challenge in efforts to improve outcomes in people who already have chronic diseases. The increasing rates of obesity must be addressed across the community and in health clinics.”

— Denise Kaiser,
R.N., B.S.N., C.D.E.

Percentage of Adults That Were Overweight or Obese* in Cuyahoga County, 2008

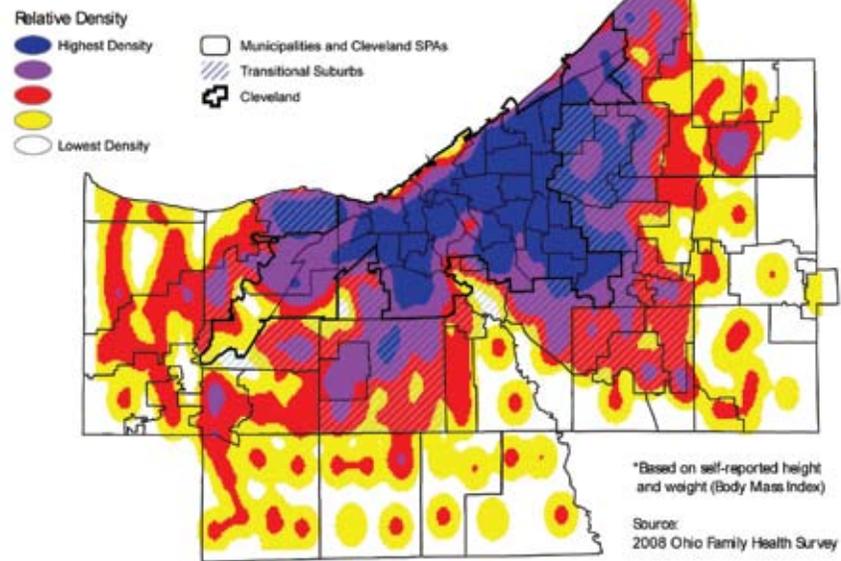


Figure 13. Percentage of Adults who are Overweight or Obese in Cuyahoga County, 2008 (Courtesy: Center for Community Solutions).

Percentage of Non-Obese Patients in 2007 and 2008

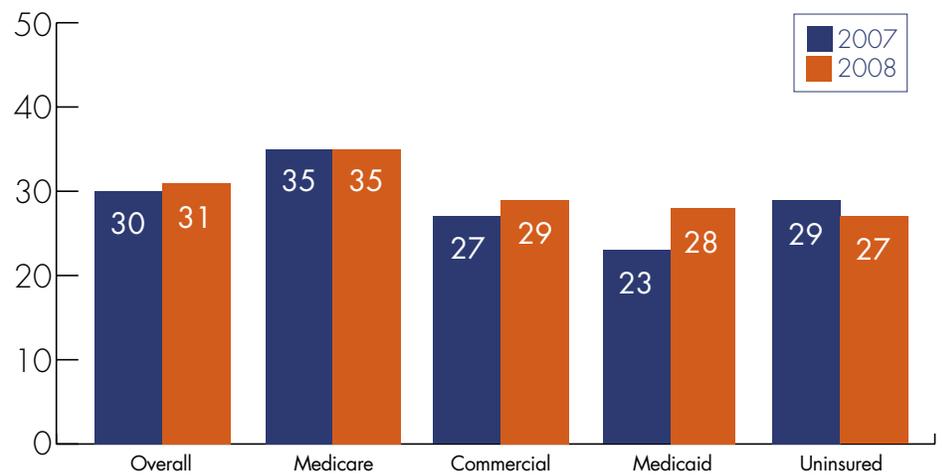


Figure 14. Percentage of Patients with Body Mass Index Below 30, Overall and By Insurance, 2007 and 2008

Obesity is a problem that appears to be particularly difficult for *Better Health's* clinical partners to address alone. Only about 30% of *Better Health's* 25,000 patients are not obese, with an absolute improvement of only 1 point from 2007 to 2008 (Figure 14). Across insurance categories, our Medicaid patients appear to have improved moderately (absolute improvement of 5 points), although our commercially insured patients have improved only slightly (1.4 points) and our uninsured patients are 2.4 points worse.

While *Better Health's* clinical partners have committed to measuring and working to improve obesity rates, this is clearly a region-wide problem that requires region-wide solutions from all of the community's stakeholders. As examples, public health, policy and employment-based initiatives could foster improved access to healthy foods and recreation facilities and insurance-based approaches could utilize "value-based benefits designs" to provide incentives for wellness and weight loss. Community planning could emphasize the availability of inexpensive opportunities for exercise such as walking and bicycling trails. It is clear that the obesity problem begins in childhood.¹ Growing evidence suggests important roles for schools, which can better engage families and reinstate physical education as an anchor in the K-12 curriculum. Models for region-wide approaches that appear to be succeeding elsewhere² may offer the most cost-effective alternative to the "medical model" or widespread adoption of weight-loss surgery.

National Health Reform Through a Regional Lens: Comments

Better Health *Greater Cleveland's* initiatives are at the forefront of themes that are the core of the national health reform dialogue. We have deliberately highlighted region-wide care and outcomes, including population sub-groups that focus on the importance of insurance, race, income and educational attainment in achieving better health. By demonstrating that disadvantaged populations not only achieve less well, but also are less likely to improve over time, we seek to provide an evidence base that supports efforts and policies to eliminate these disparities. We are committed to transparency and public reporting of our achievement and improvement at the level of the primary care group practice, and to the meaningful use of electronic medical records for measurement and reporting. Our detailed and timely reports drive region-wide quality improvement efforts and provide the basis to engage the community, and our patients, in recognizing important evidence-based metrics of high quality care. Health reform must provide incentives for these efforts, including recognition of the centrality of primary care in an era of diminishing primary care resources. *Better Health's* data initiatives also align with national themes that support creation of "accountable health care organizations" and integrated delivery systems that coordinate care across primary and specialty services and seamless sharing of information about patients' health and care. Increasing evidence supports the value of these principles not only for improving health outcomes, but also for reducing health care costs.

Finally, it is widely accepted that the causes of chronic health conditions are driven by social and behavioral factors that extend far beyond the boundaries of the physician's examination room. Therefore, "health reform" must address wellness and healthy behavior; it must be more than "health care" reform alone. These principles and relevant policies will play out in communities and require multiple stakeholders to play a role. The gathering breadth and strength of *Better Health's* collaboration and the support of our partners in Greater Cleveland position the region well to tackle these important challenges.



Photo by Marc Golub. Victor Gelb, chair, Board of Directors, Mt. Sinai Health Care Foundation, with Dr. Cebul, right.

Randall D. Cebul, M.D., Director of Better Health Greater Cleveland, on June 15 received the prestigious Maurice Saltzman Award for 2009 from the Mt. Sinai Health Care Foundation. Dr. Cebul was recognized for his leadership in Better Health. In introducing the award, the Hon. Daniel Polster, Federal District Judge for Northern Ohio, said that the effort had "brought together community-wide stakeholders from all facets of the health care industry to address chronic illnesses in a manner never before attempted, giving Greater Cleveland the infrastructure necessary to change the quality of care and reduce the economic and personal burden of chronic disease."

¹ Benson L, Baer HJ, Kaelber DC. Trends in the diagnosis of overweight and obesity in children and adolescents: 1999-2007. *Pediatrics*. 2009; 123(1):e153-8.

² Katan MB. Weight-loss diets for the prevention and treatment of obesity. *N Engl J Med*. 2009; 360: 923-5.



THE POWER OF
PARTNERSHIP



A program of the Robert Wood Johnson
Foundation's *Aligning Forces for Quality*
initiative and other funders

Randall D. Cebul, M.D., *Director*
Diane Solov, *Program Manager*
Carol Kaschube, *Project Specialist*

216.778.8024
betterhealthcleveland.org