



Serving Sonoma, Napa, Marin & Yolo Counties

Managing and Reporting EHR Data for Performance Excellence

Optimize the Use of Your Electronic Health
Record & Meet Meaningful Use Requirements

Quality Culture Series II—Leadership Forum
Thursday January 13, 2011

 Jerry Lassa, MS Statistics
Quality Science International

Desired Outcomes

- Gain an understanding of national frameworks and best practices of Data Management in Community Health
- Provide a practical roadmap for developing and implementing an EHR Data Management Plan in your organization
- Share case studies of EHR data management in individual CHCs and a CHC networks

Agenda

- Introduce Jerry Lassa
- Overview (5 min)
- Baldrige: A framework for performance measurement and data management (10 min)
- Data Management Roadmap (10 min)
- Case studies of data management in individual CHCs and CHC networks (20 min)
- Q & A (10 min)
- After lunch: Table-Top exercise

Introduce Jerry Lassa

- BS Industrial Engineering, MS Statistics
- 10 years QI staff and director at 600 bed Academic Medical Center in Chicago
- 8 years QI director for two Community Health Centers and one ISDN (Alliance of Chicago; 200K undup users)
- 2 years strategy and HIT planning consulting with NIH/NIAID in D.C. and Sichuan Health Bureau in China
- 10 years adjunct instructor of statistics, quality & performance, and medical informatics at Northwestern University in Chicago
- 5 year Baldrige examiner in Illinois
- 5 year NACHC conference presenter on Performance Measurement in Community Health

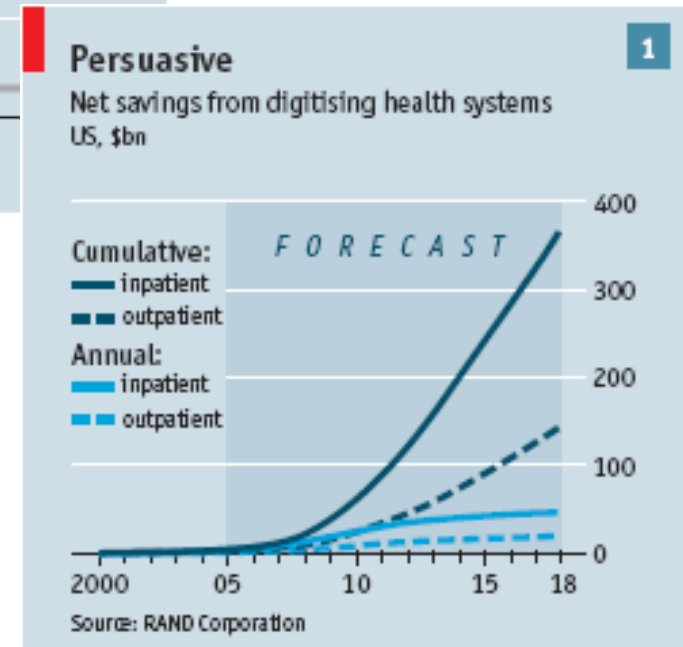
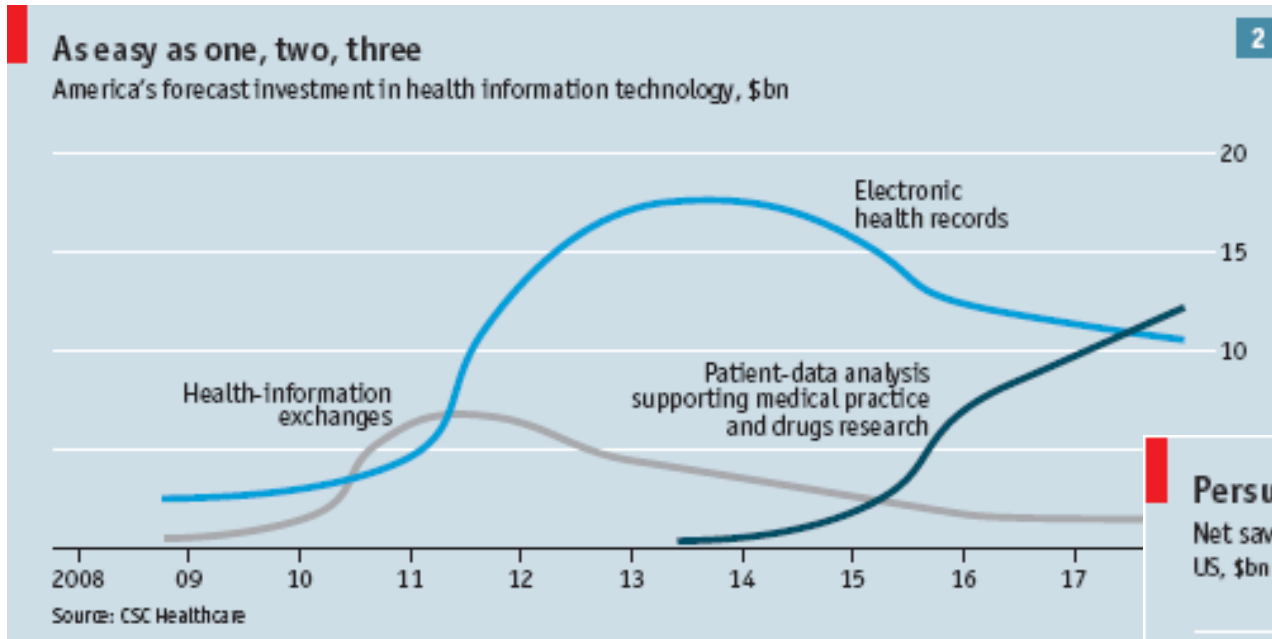
DATA MANAGEMENT OVERVIEW

Data Management Overview

- Managing EHR data post-implementation requires a thoughtful analytic and technical strategy to realize full benefits of the EHR and achieve long term strategic objectives for all stakeholders and achieve Meaningful Use requirements
- Establishing a shared vision for data management in your organization will serve as a guide for developing strategic approaches to data management
- A Data Management Plan should be developed to ensure alignment with organization strategy, allocation of adequate resources and performance achievement

Major Investment in HIT in U.S.

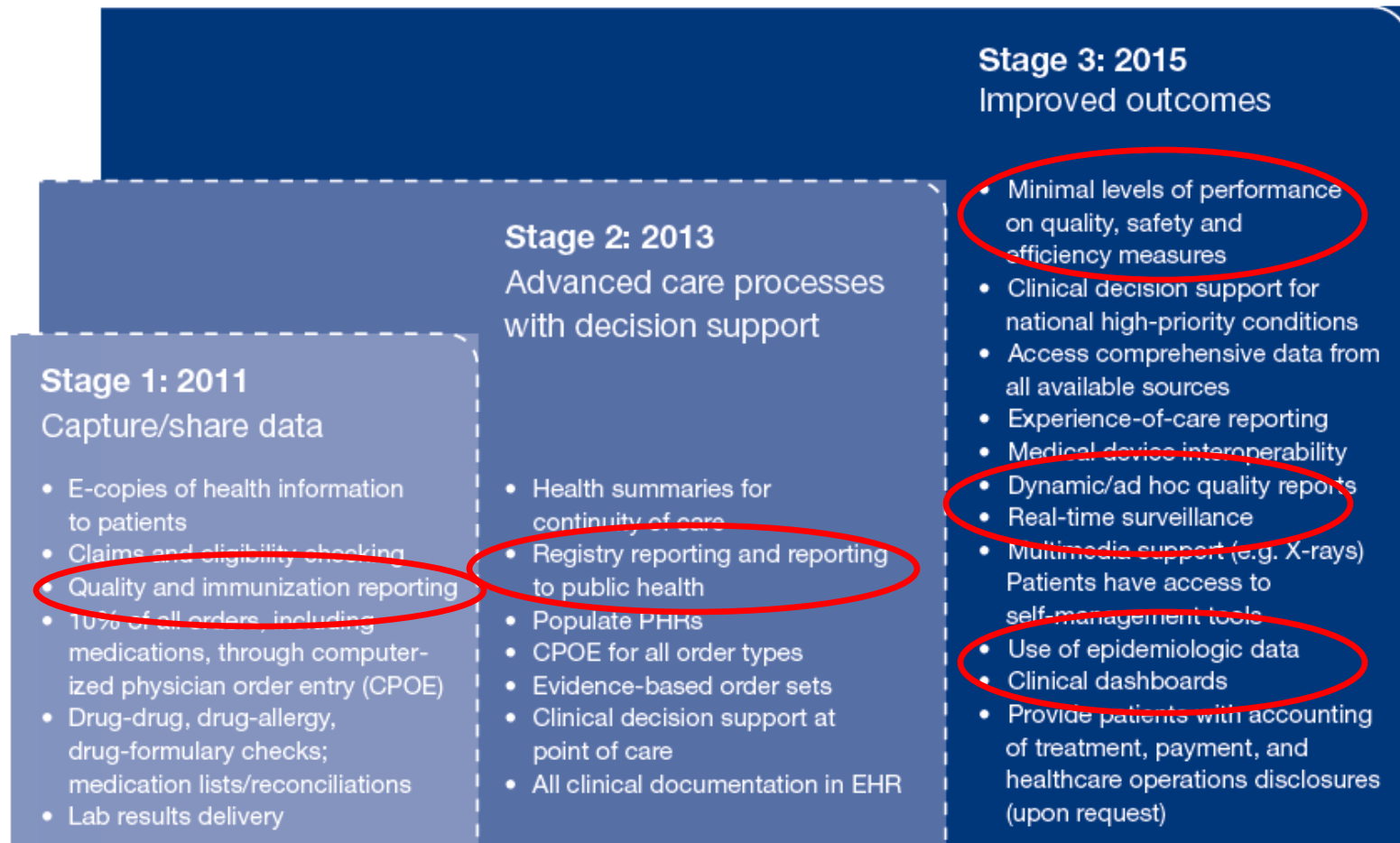
“Medicine Goes Digital,” The Economist, April 2009



Health Information Technology:
Investment 2010-2018 = \$200B
Projected Savings = \$500B

→ *How to achieve ROI?*

Meaningful Use has Elevated Importance of Data Management



• Source: PwC On the Road to Meaningful Use, June 2010

Low

Level of collaboration required with external parties

High

**BALDRIGE: A FRAMEWORK FOR PERFORMANCE
MEASUREMENT AND DATA MANAGEMENT**

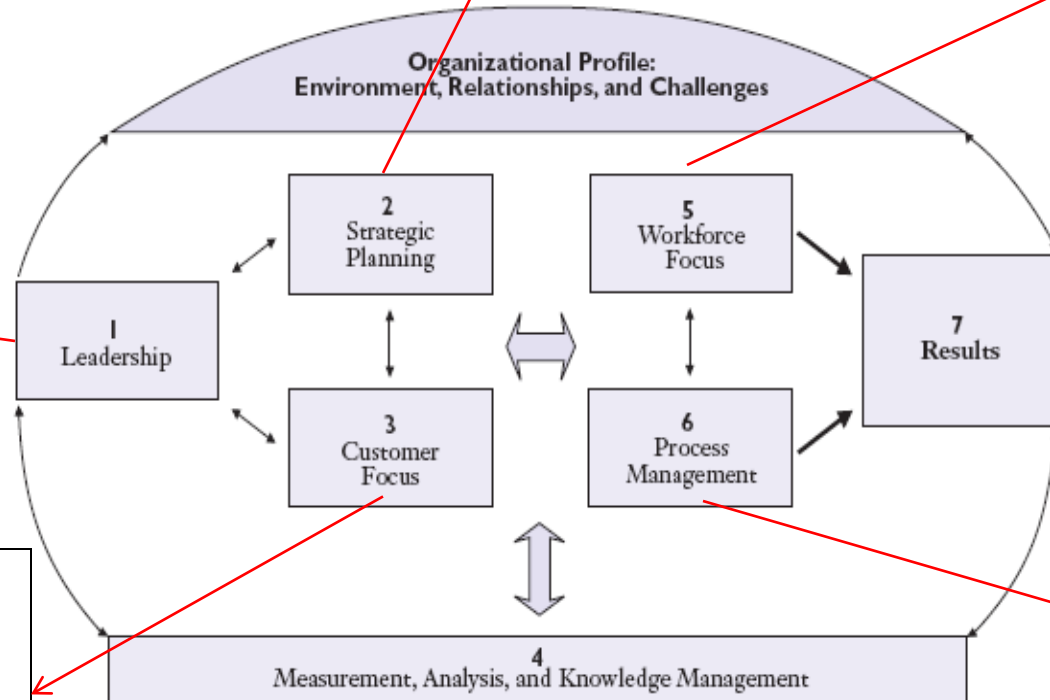
Baldrige National Quality Framework

How your key strategic objectives address your strategic challenges. How you ensure strategic and operational plans are achievable and adequately scoped. How you develop and deploy action plans throughout the organization to achieve objectives.

Baldrige Health Care Criteria for Performance Excellence Framework A Systems Perspective

How you foster an employee culture conducive to high performance. How you manage and develop your staff to utilize their full potential.

How your senior leaders communicate with and engage the entire workforce and encourage frank, two-way communication throughout the organization



What measurable results you have achieved.

How you “Listen and Learn” from your key stakeholders including Customers, Community, Partners, and Payors.

How you manage and improve your organizations’ key processes.

**How you turn data into information in your organization.
How you use that information to improve performance.**

Baldrige Priorities for Data Management

4 Measurement, Analysis, and Knowledge Management (90 pts.)



The *Measurement, Analysis, and Knowledge Management* Category examines how your organization selects, gathers, analyzes, manages, and improves its data, information, and knowledge assets and how it manages its information technology. The Category also examines how your organization reviews and uses reviews to improve its performance.

4.1 Measurement, Analysis, and Improvement of Organizational Performance: How do you measure, analyze, and then improve organizational performance? (45 pts.)

Process

Describe how your organization measures, analyzes, reviews, and improves its performance as a health care provider through the use of data and information at all levels and in all parts of your organization.

Within your response, include answers to the following questions:

a. PERFORMANCE MEASUREMENT

- How do you select, collect, align, and for tracking overall organization and ACTION PLANS? What are your longer-term financial measures? data and information to support
- How do you select and ensure that operations and strategic decisions?
- How do you keep your performance metrics? How do you ensure that organizational or external changes?

How do you align and integrate data and information for tracking daily operations and for tracking overall organization performance, including progress towards strategic objectives?

b. PERFORMANCE ANALYSIS AND REVIEW

How do you review organization of these reviews and to ensure that national success, performance related STRATEGIC OBJECTIVES and ACTION PLAN respond rapidly to changing or

How do you select and ensure effective use of key comparative data?

c. PERFORMANCE IMPROVEMENT

How do you translate organizational performance review findings into priorities for continuous and breakthrough improvement and into opportunities for innovation? How are these priorities and opportunities DEPLOYED to work group and functional-level operations throughout your organization to enable EFFECTIVE support for their decision making? When appropriate, how are the priorities and opportunities DEPLOYED to your suppliers, PARTNERS, and COLLABORATORS to ensure organizational ALIGNMENT?

How do you translate organizational performance review findings into priorities for continuous and breakthrough improvements and into opportunities for innovation?

Notes:

N1. Performance measurement face-based decision making for organizational directions and routine, key process, departmental levels.

N2. Comparative data and information obtained by benchmarking and comparisons. "Benchmarking" processes and results that represent performance for similar activities, inside or outside the health care industry. Competitive comparisons relate your organization's performance to that of

industry, performance measures reported throughout your Criteria Item responses, and performance measures reviewed by senior leaders (1.1b[2]), and they

should be guided by the strategic objectives and action plans described in Items 2.1 and 2.2. The reviews also might be informed by internal or external Baldrige assessments.

N4. Analysis (4.1b) includes examining performance trends; organizational, health care industry, and technology projections; and comparisons, cause-effect relationships, and correlations. Analysis should support your performance reviews, help determine root causes, and help set priorities for resource use.

For additional description of this Item, see pages 41–43.

Accordingly, analysis draws on all types of data: patient- and stakeholder-related, health care outcome, financial and market, operational, and competitive/comparative.

N5. The results of organizational performance analysis and review should contribute to your organizational strategic planning in Category 2.

N6. Your organizational performance results should be reported in Items 7.1–7.6.

4.2 Management of Information, Knowledge, and Information Technology: How do you manage your information, organizational knowledge, and information technology? (45 pts.)

Process

Describe how your organization ensures the quality and availability of needed data, information, software, and hardware for your workforce, suppliers, partners, collaborators, and patients and stakeholders. Describe how your organization builds and manages its knowledge assets.

Within your response, include answers to the following questions:

a. Data, Information, and Knowledge Management

- How do you ensure the following properties of your organizational data, information, and knowledge?
 - accuracy
 - integrity and reliability
 - timeliness
 - security, and confidentiality
- How do you make needed data and information available? How do you make them accessible to your workforce, suppliers, partners, collaborators, and patients and stakeholders?
- How do you manage data, information, and knowledge?
 - the collection and transfer of data, information, and knowledge
 - the transfer of relevant knowledge for use in your strategic planning process.

How do you ensure data, information, and knowledge are accurate, reliable, timely, secure and confidential?

b. Management of Information Resources and Technology

- How do you ensure that hardware and software are reliable, secure, and user-friendly?
- In the event of an emergency, how do you ensure the continued availability of hardware and software systems and the continued availability of data and information?
- How do you keep your data and information availability mechanisms, including your software and hardware systems, current with health care service needs and directions and with technological changes in your operating environment?

Note:

N1. Data and information access (4.2a[2]) might be via electronic or other means. Of growing importance to health care organizations are initiatives to develop and utilize electronic medical records to share patient data both within the organization and, as appropriate, with other health care organizations. Of particular

concern to health care organizations is the need to ensure the confidentiality of patient records in compliance with HIPAA.

For additional description of this Item, see page 43.

Data Management Culture & Tools

Culture

- Strategic Plan process exists
- Annual operating plan used to implement Strategic Plan
- Performance outcomes are reviewed in leadership forums (BOD, senior leadership, management, staff)
- Data is used to inform planning, resource allocation, course corrections, recognition
- Performance outcomes are transparent internally and externally
- There is accountability for performance outcomes

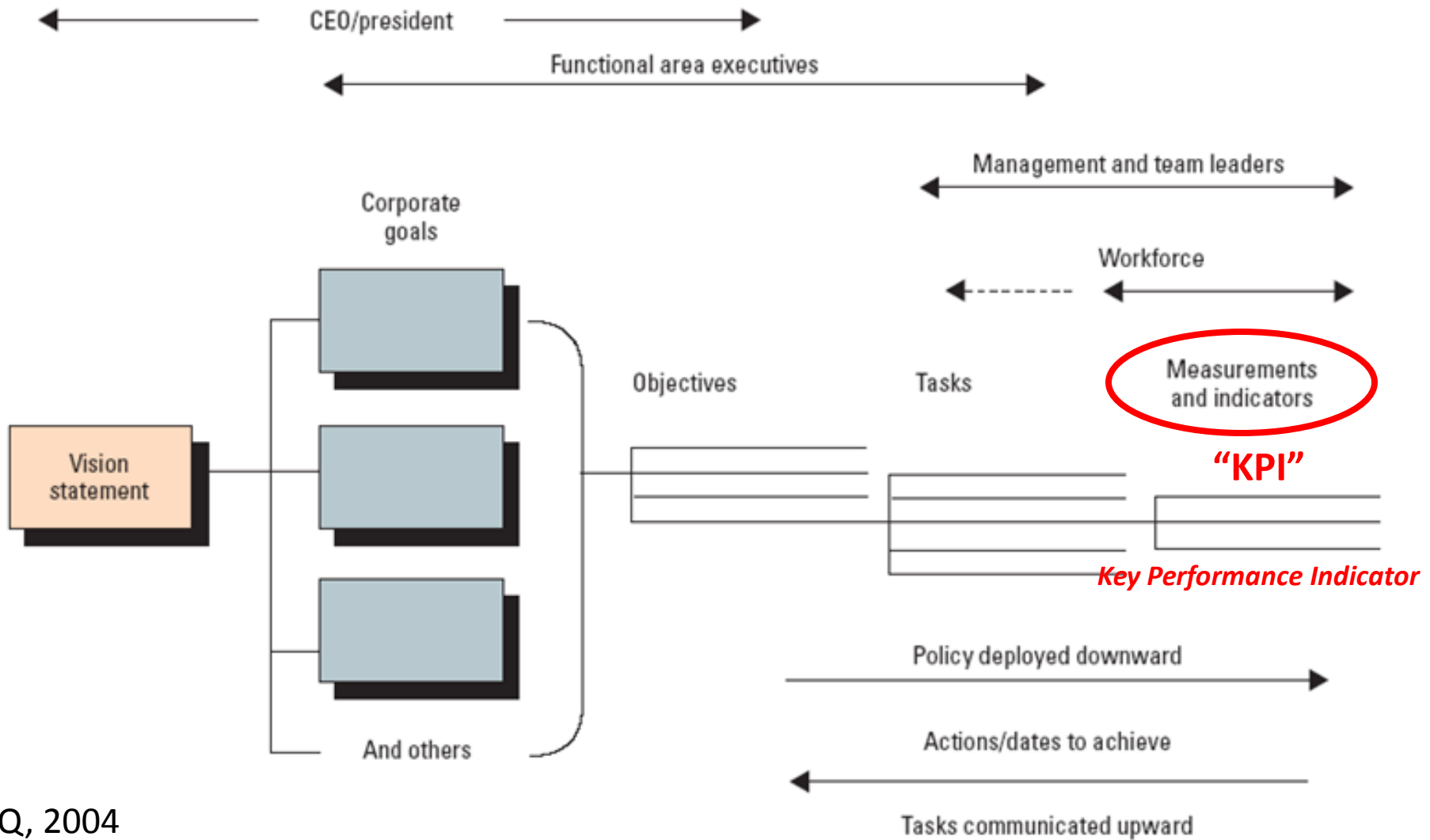


Tools

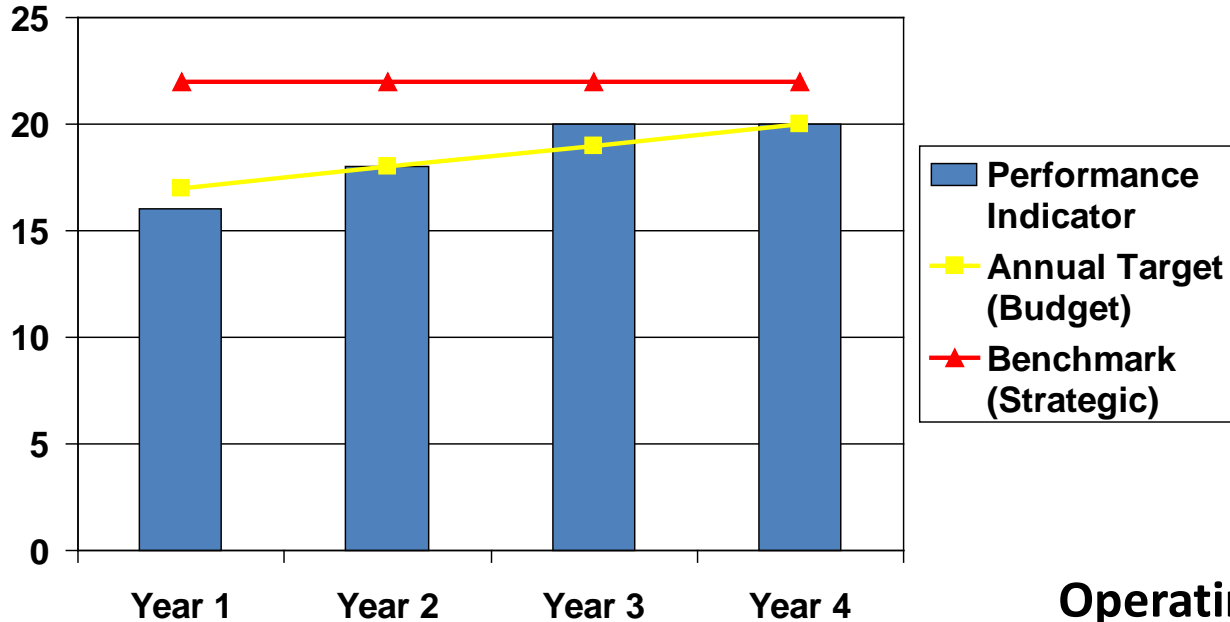
- National and industry-appropriate performance indicators are used to measure, monitor and benchmark Strategic Plan progress
- Dashboard and reporting tools support efficient review of progress and identification of opportunity at all levels and across all operating units
- Process improvement is used to improve performance (Incremental/PDSA, Breakthrough/Six Sigma/DMAIC)

Does your organization need more culture? More tools?

Indicators Quantify Strategic Plan



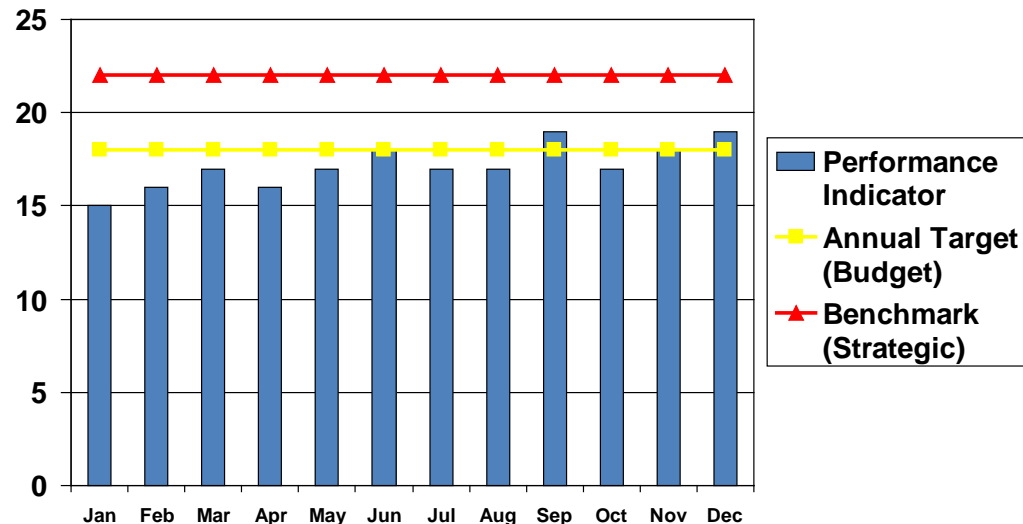
KPIs Track Progress of Strategic and Operating Goals



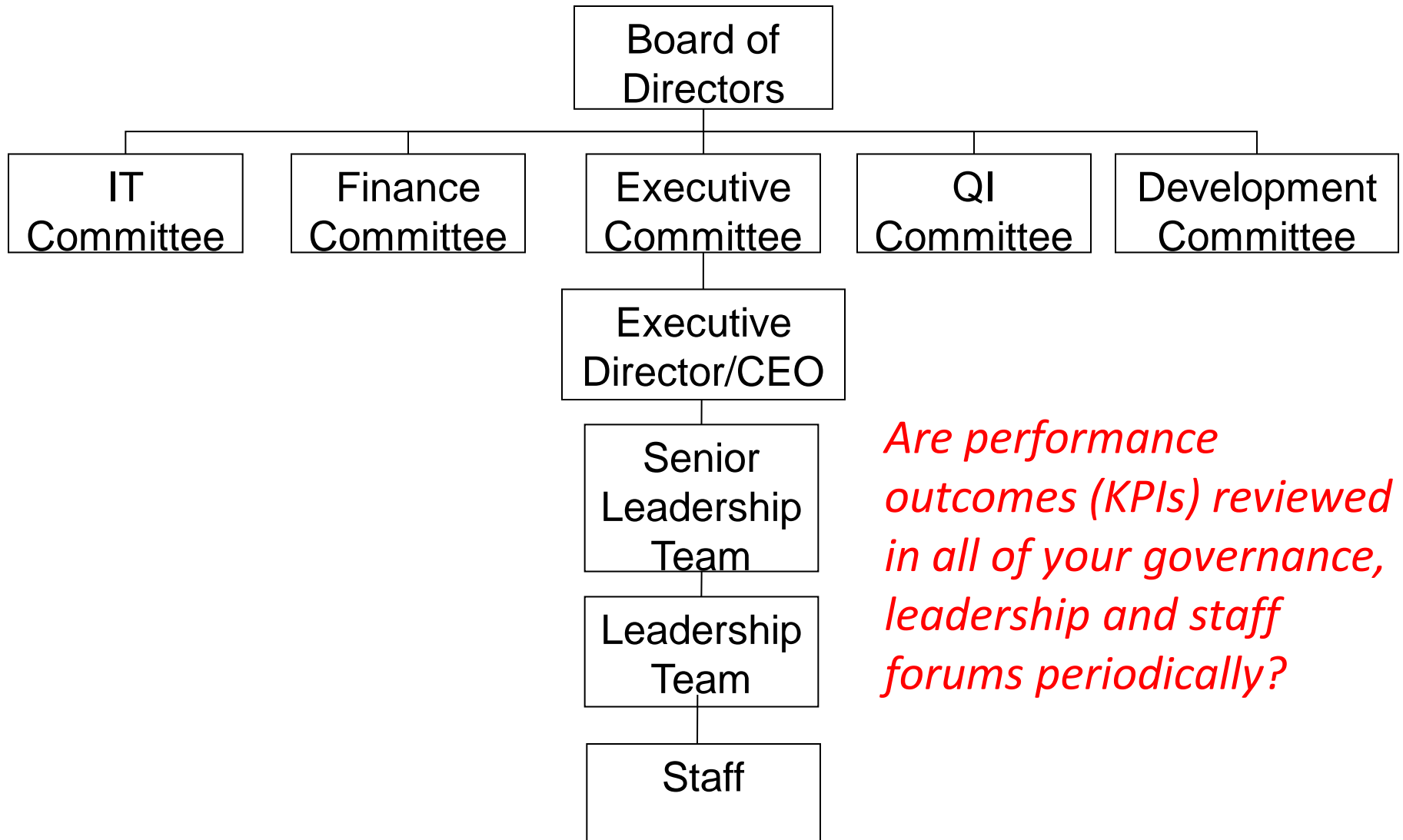
Strategic Indicator

Should Strategic and Operating indicators align?

Operating Indicator

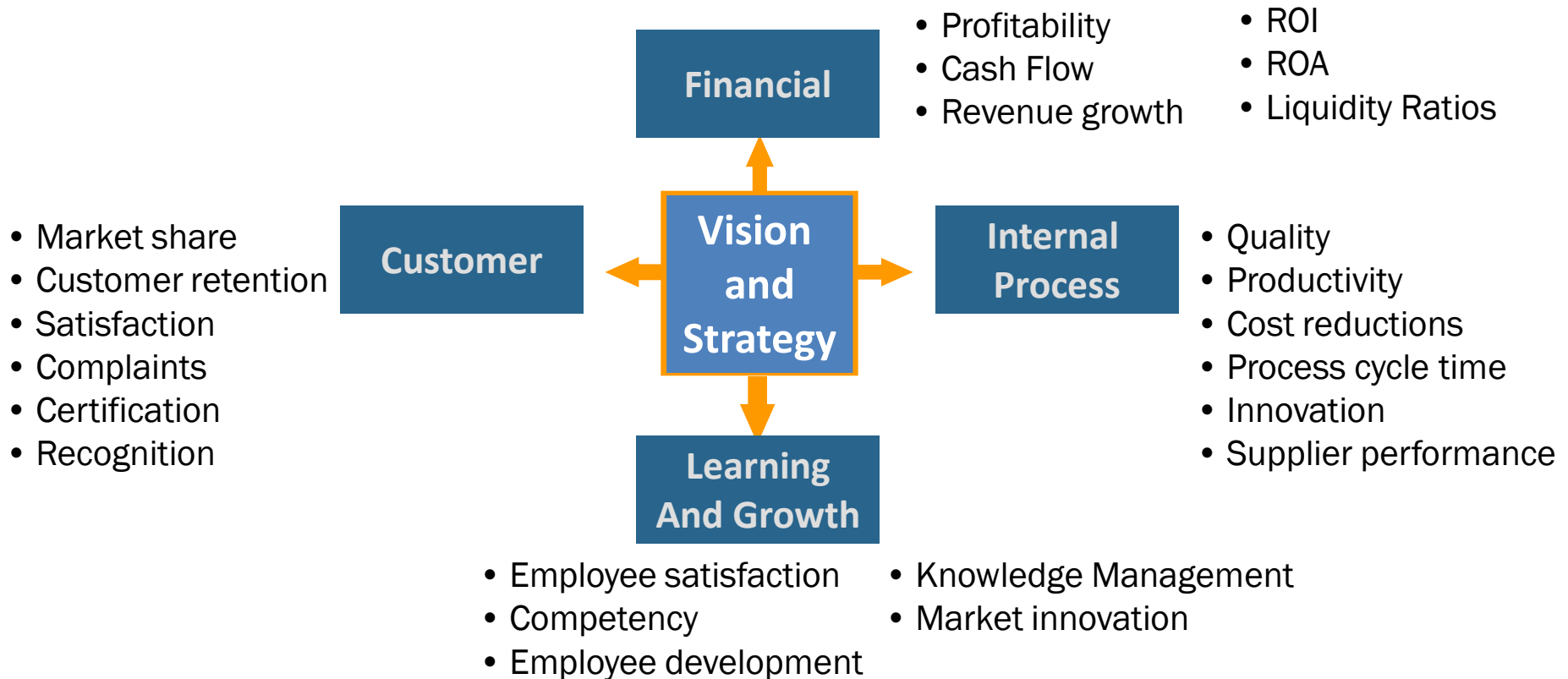


Data Management Review Forums



Are performance outcomes (KPIs) reviewed in all of your governance, leadership and staff forums periodically?

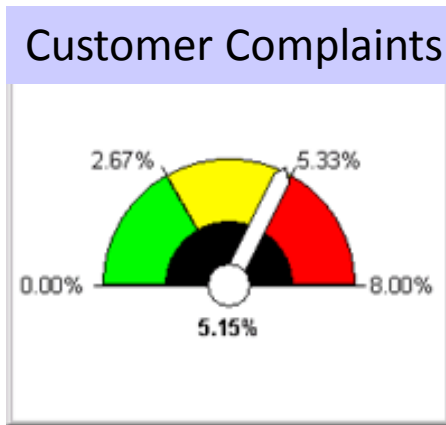
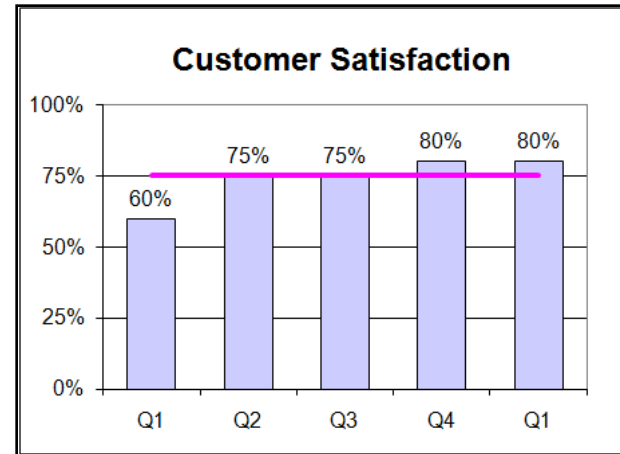
Display of KPIs: The Balanced Scorecard Model (a.k.a. Dashboard)



*Performance indicators from multiple “domains”
balances leadership and management focus*

Dashboard Display Types

- Trend Graphs
- Stoplights
- Gauges



Stoplight Summary			
Variance: Better than Within 5% Worse 5%+			
KPI	Year to Date		
	Actual	Goal	Var %
<u>Patient Satisfaction</u>			
1 Courtesy	90%	95%	-5%
2 Information	87%	85%	2%
3 Time Spent	78%	80%	-3%

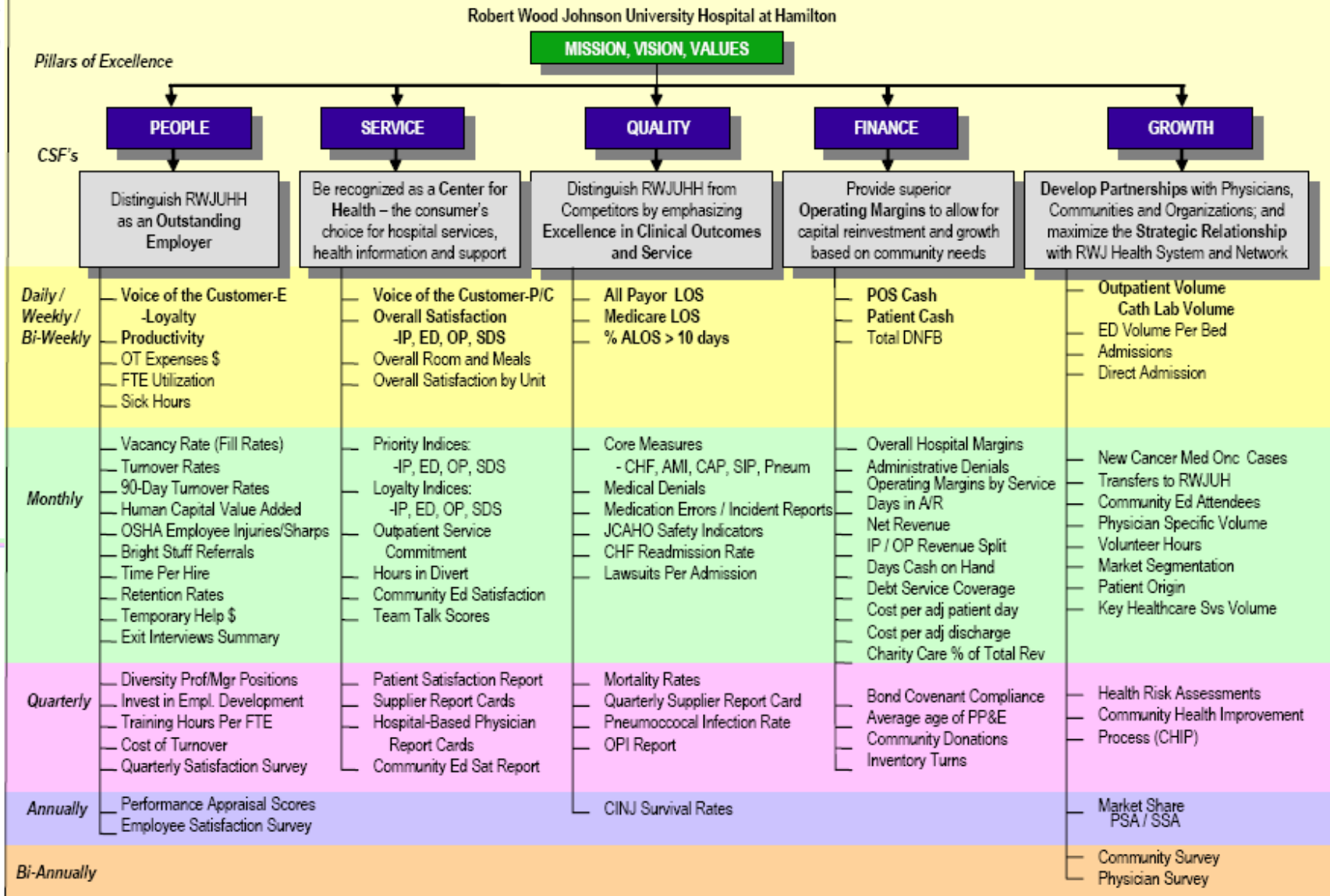
Which are most effective? Why?

Examples of CHC KPIs

- Patient Access
 - Unduplicated Patients
 - Visit Volume
 - Provider Productivity
 - Days to 3rd Available Appointment
 - No Show Rate
 - Same Day/Next Day Appts
 - Wait Time/Cycle Time
- Clinical Quality
 - Life Cycle Health Outcomes measures (Pediatric, Adolescent, Adult, Geriatric, Maternal Care, HIV/AIDS, Dental)
- Patient & Employee Satisfaction
- Financial
 - Budget vs. Actual
 - Cost/Visit
 - Current Ratio
 - Days in A/R and A/P
 - Days Cash on Hand
 - Collection Rate
- Compliance
 - % CPT/ICD9 coding accuracy
- Development
 - Fundraising-grant seeking/grants secured
 - New Donors
 - Media Hits

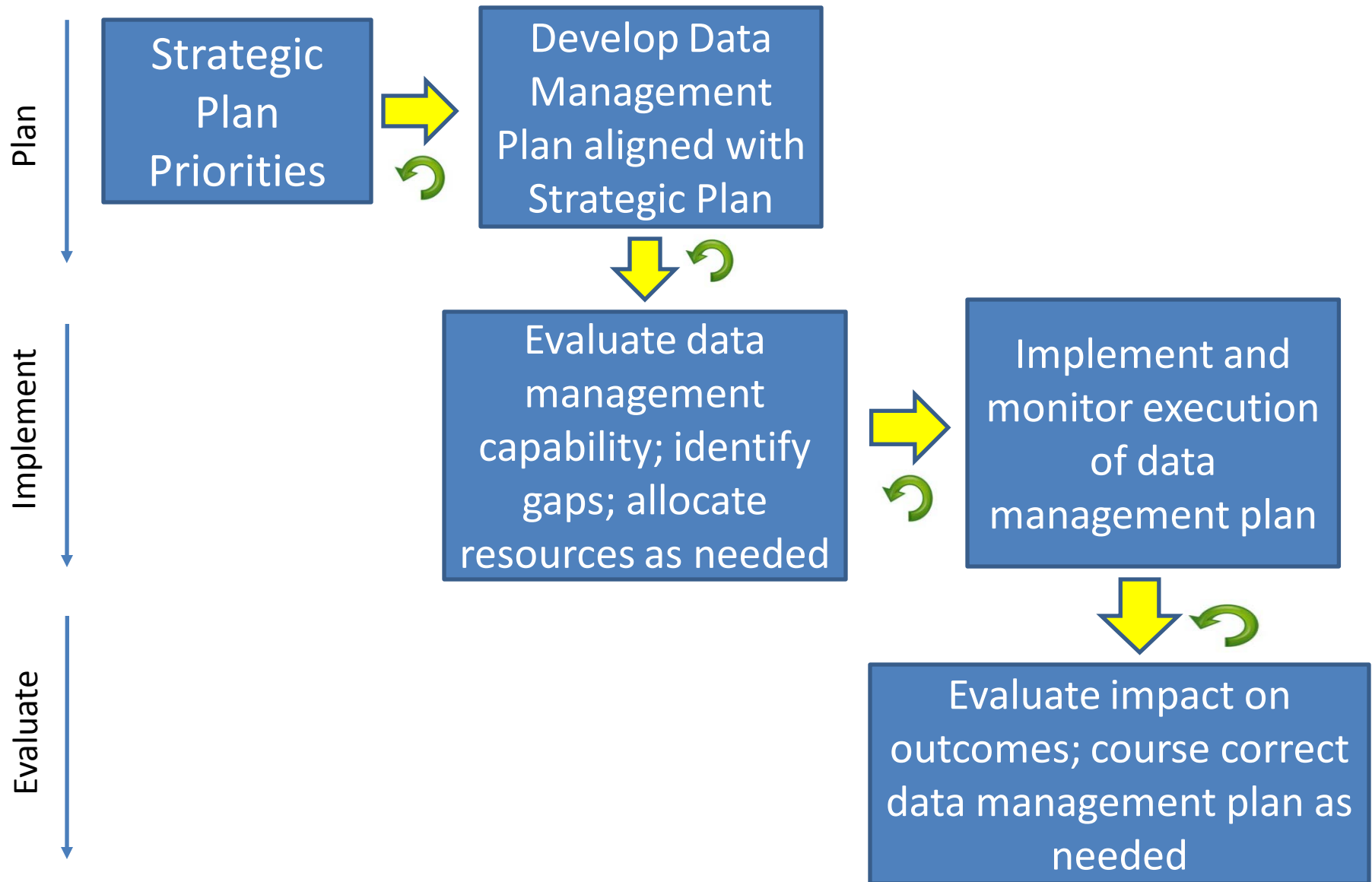
A Baldrige Winner's KPI Data Management Model

Figure 1.1-3 Dashboard/Balanced Scorecard Key Performance Indicators



DATA MANAGEMENT ROADMAP

Data Management Roadmap



Priorities: Meaningful Use Measures

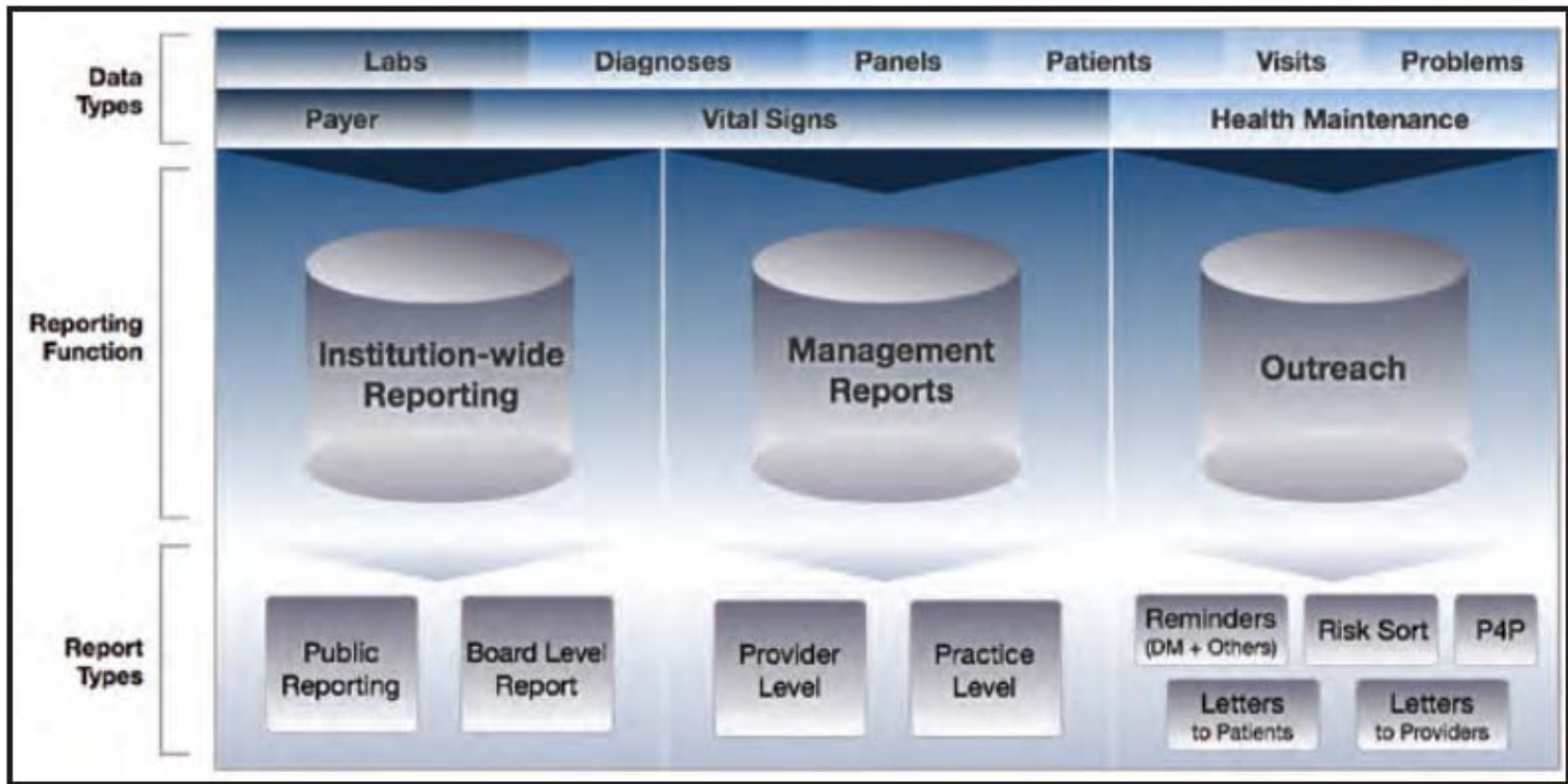
Improving quality, safety, efficiency, and reducing health disparities		
Use CPOE for med orders	More than 30% of unique patients with at least one medication in their medication list have at least one medication order entered using CPOE	<p><u>Numerator</u>: Number of unique patients with at least one medication in their medication list seen by an EP that have at least one medication order entered using CPOE</p> <p><u>Denominator</u>: Unique patients with at least one medication in their medication list</p>
Record demo: pref lang, ins type, gender, race, ethnicity, DOB	More than 50% of all unique patients* seen by the EP have demographics recorded as structured data	<p><u>Numerator</u>: Number of unique patients* seen in the reporting period with <u>all</u> required demographic elements recorded.</p> <p><u>Denominator</u>: Number of unique patients* seen during reporting period.</p>
Send reminders to patients per patient preference for preventive/follow up care	More than 20% of all unique patients 65 years or older or 5 years old or younger were sent an appropriate reminder during the EHRs reporting period	<p><u>Numerator</u>: Number of unique patients 65 years or older or 5 years old or younger seen during reporting period who are provided preventive/follow-up care reminders.</p> <p><u>Denominator</u>: Number of unique patients 65 years or older or 5 years old or younger seen during reporting period.</p>

*Unique patient - means that even if a patient is seen multiple times during the reporting period they are only counted once.

Priorities: Meaningful Use Measures cont.

Core Clinical Measures		
NQF 0013	Hypertension: Blood Pressure Measurement	Percentage of patient visits for patients aged 18 years and older with a diagnosis of hypertension who has been seen for at least 2 office visits, with blood pressure (BP) recorded
NQF 0028	Preventive Care and Screening Measure Pair: a. Tobacco Use Assessment, b. Tobacco Cessation Intervention	Percentage of patients aged 18 years and older who have been seen for at least 2 office visits who were queried about tobacco use one or more times within 24 months. B. Percentage of patients aged 18 years and older identified as tobacco users within the past 24 months and have been seen for at least 2 office visits, who received cessation intervention.
NQF 0421 PQRI 128	Adult Weight Screening and Follow-up	Percentage of patients aged 18 years old and older with a calculated BMI in the past six months or during the current visit documented in the medical record AND if the most recent BMI is outside parameters, a follow-up plan is documented.
Optional Clinical Measures (RCHC)		
NQF 0059 PQRI 1	Diabetes: HgbA1c Poor Control	Percentage of patients 18 - 75 years of age with diabetes (Type 1 or 2) who had hemoglobin A1c >9%
NQF 0064 PQRI 2	Diabetes: LDL Mgmt and Control	Percentage of patients 18 - 75 years of age with diabetes (Type 1 or 2) who had LDL-C <100 mg/dl
NQF 0061 PQRI 3	Diabetes: BP Mgmt	Percentage of patients 18 - 75 years of age with diabetes (Type 1 or 2) who had blood pressure <140/90 mmHg

Data Management Stakeholder Needs



“Quality Reporting Through a Data Warehouse,” Housman, Patient Safety and Quality, Jan/Feb 2009

Example Data Management Plan

Priorities

- I. Data management is integrated into strategic priorities.
 - Horizontal: Data management prioritized and integrated into strategy (e.g., financial, operational, clinical reporting needs)
 - Vertical: Data management balanced across leadership, management and front-line staff (e.g., dashboard reports, population reports, research reports)
- II. A data-driven management culture is fostered.
 - Training and coaching of leaders, management and staff on appropriate use of system reports, data analysis tools, performance measures and dashboard reports.
 - Use of data and reports to guide leadership, management, and committee planning and decisions

Example Data Management Plan

Priorities cont.

- III. Data management approach is shared and best leverages resources across all facilities.
 - Use of nationally recognized performance measures and relevant benchmarks
 - Shared approach to collection, analysis and reporting of data across facilities that best leverages resources
 - Long term data management investments that reduce resources required to turn data into information for management and staff decision-making

Data Management Staffing Needs

- Leadership and management
 - Planning
 - Ensure data management efforts are aligned with organization strategy and priorities
 - Ensure use of industry standard performance measures and benchmarks
 - Project management
 - Develop measureable work plans
 - Identify and recommend opportunity for course corrections or resource allocation to leadership and management

Who is responsible for these activities at your organization?

Data Management Staffing Needs

cont.

- Report development and production
 - Report Types
 - Leadership/management reports (e.g., dashboards for clinical, operations and financial performance measures)
 - Front-line staff level reports (e.g., population health management such as patient recall lists, reminder letters for immunizations, vaccinations and preventive care screenings)
 - Skill sets needed
 - Analytic/statistical
 - Technical/programming

DATA MANAGEMENT CASE STUDIES

Baldrige Data Management Examples

- The examples on the following slides demonstrate attributes of good data management
- Examples come from a Baldrige CHC case study and from a CHC Network
- Examples demonstrate data management for:
 - Health Outcomes
 - Customer/Patient focus
 - Workforce
 - Process
 - Financial
 - Technology

Baldrige CHC - Health Outcome KPIs

Figure 7.1-3a Cancer: Screening for Breast Cancer

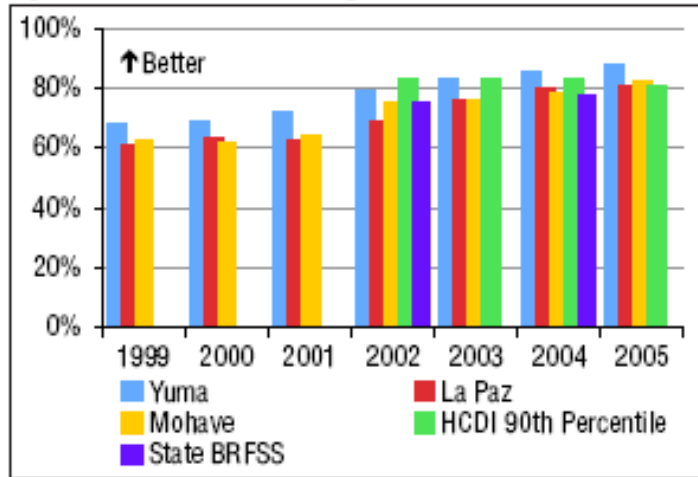


Figure 7.1-6 Asthma Care

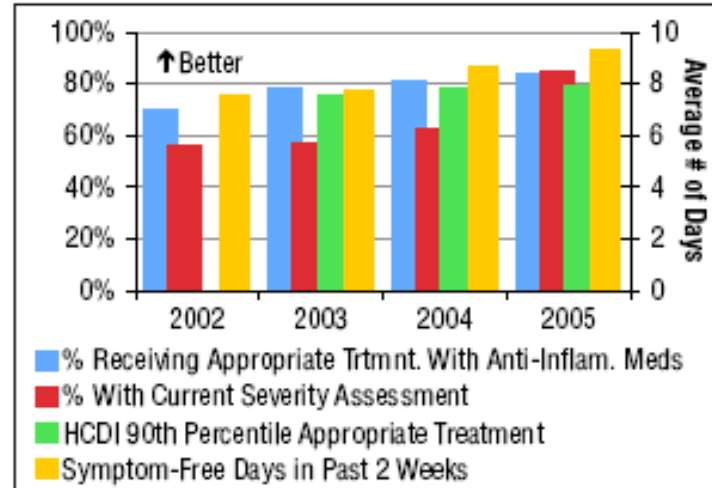


Figure 7.1-8b Pregnancy and Childbirth: Pregnant Women With Early Prenatal Care

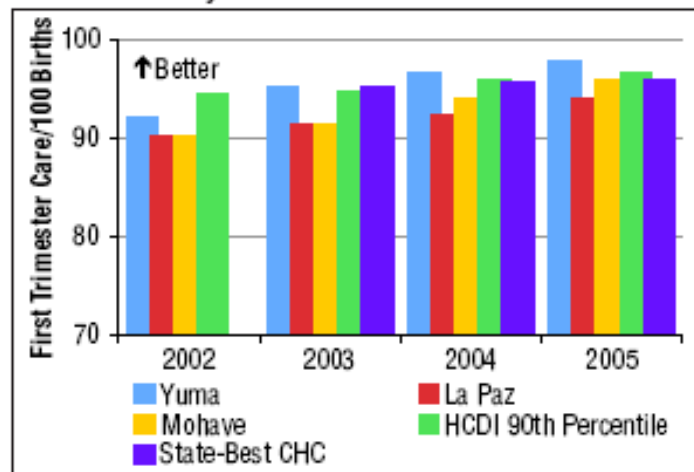
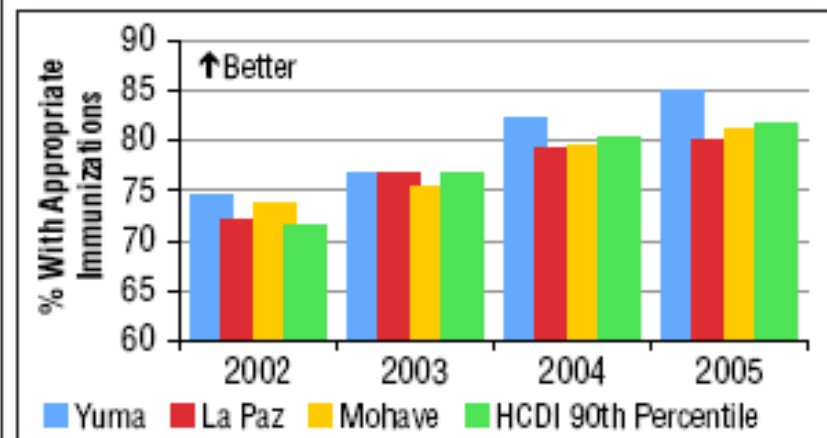
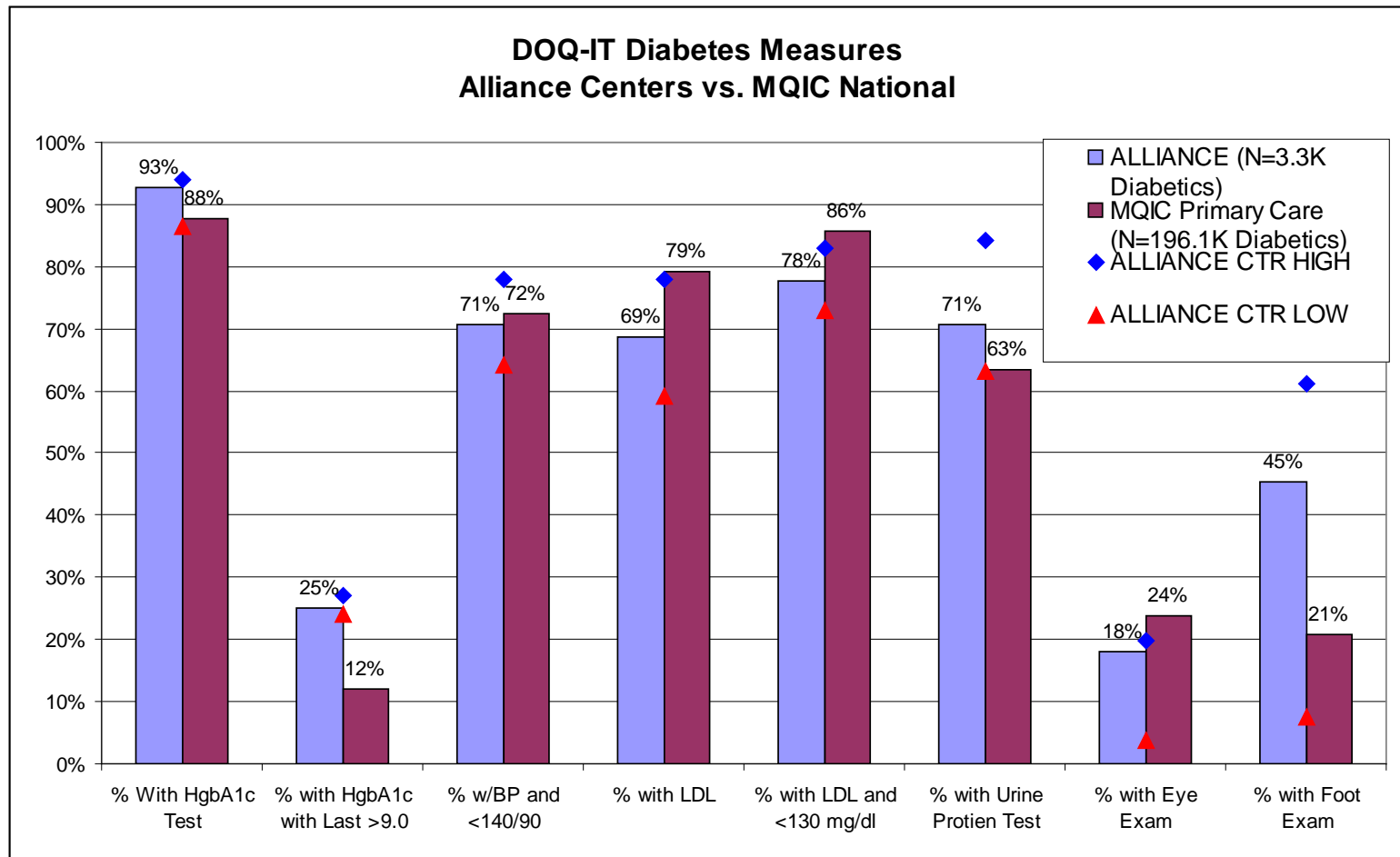


Figure 7.1-9c Pediatric Care—Well Child (ages 3–6): Appropriate Immunizations



- Data management should enable tracking and trending of KPIs and comparison against internal and external benchmarks

CHC Network - Diabetes KPIs

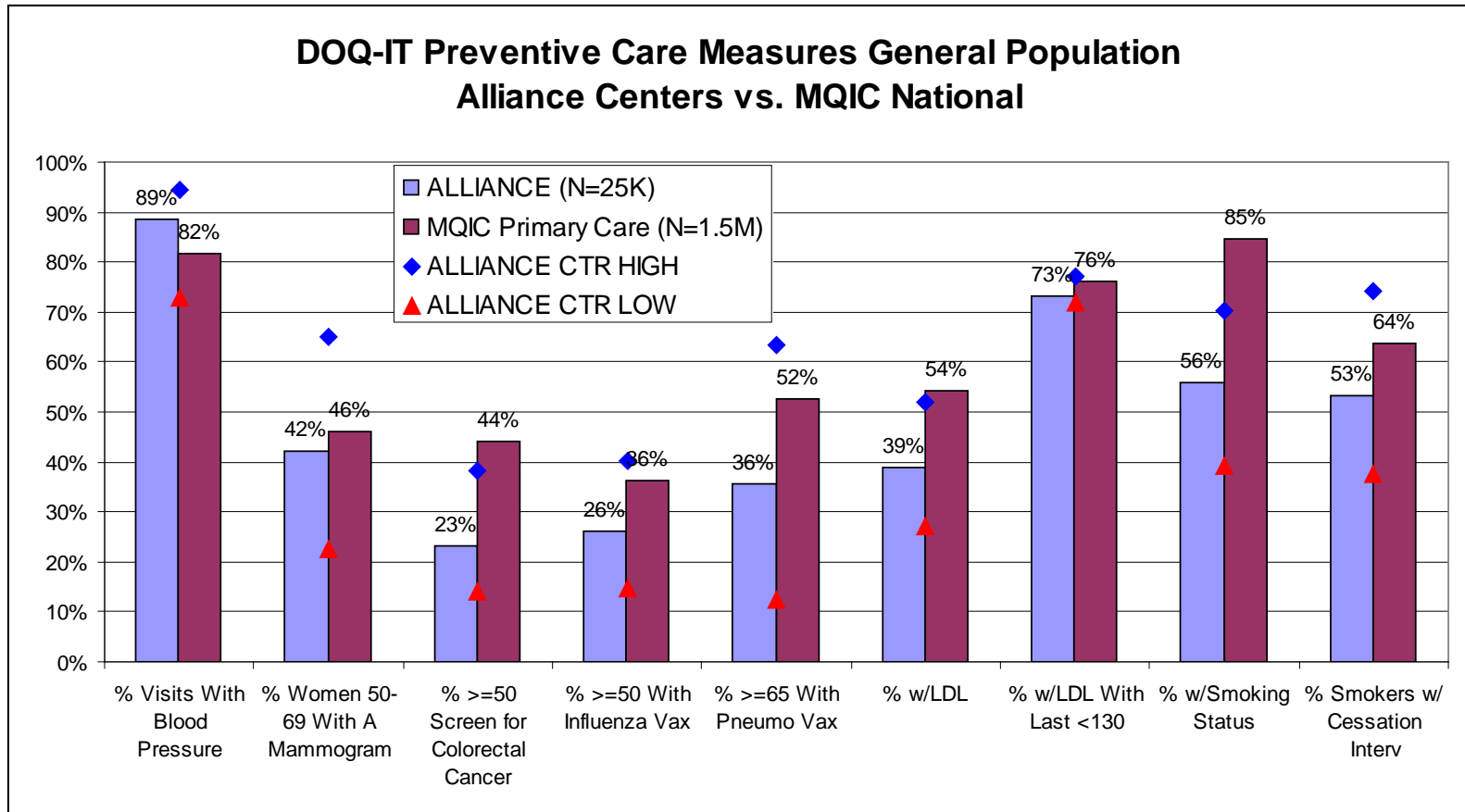


Data management should help identify opportunities:

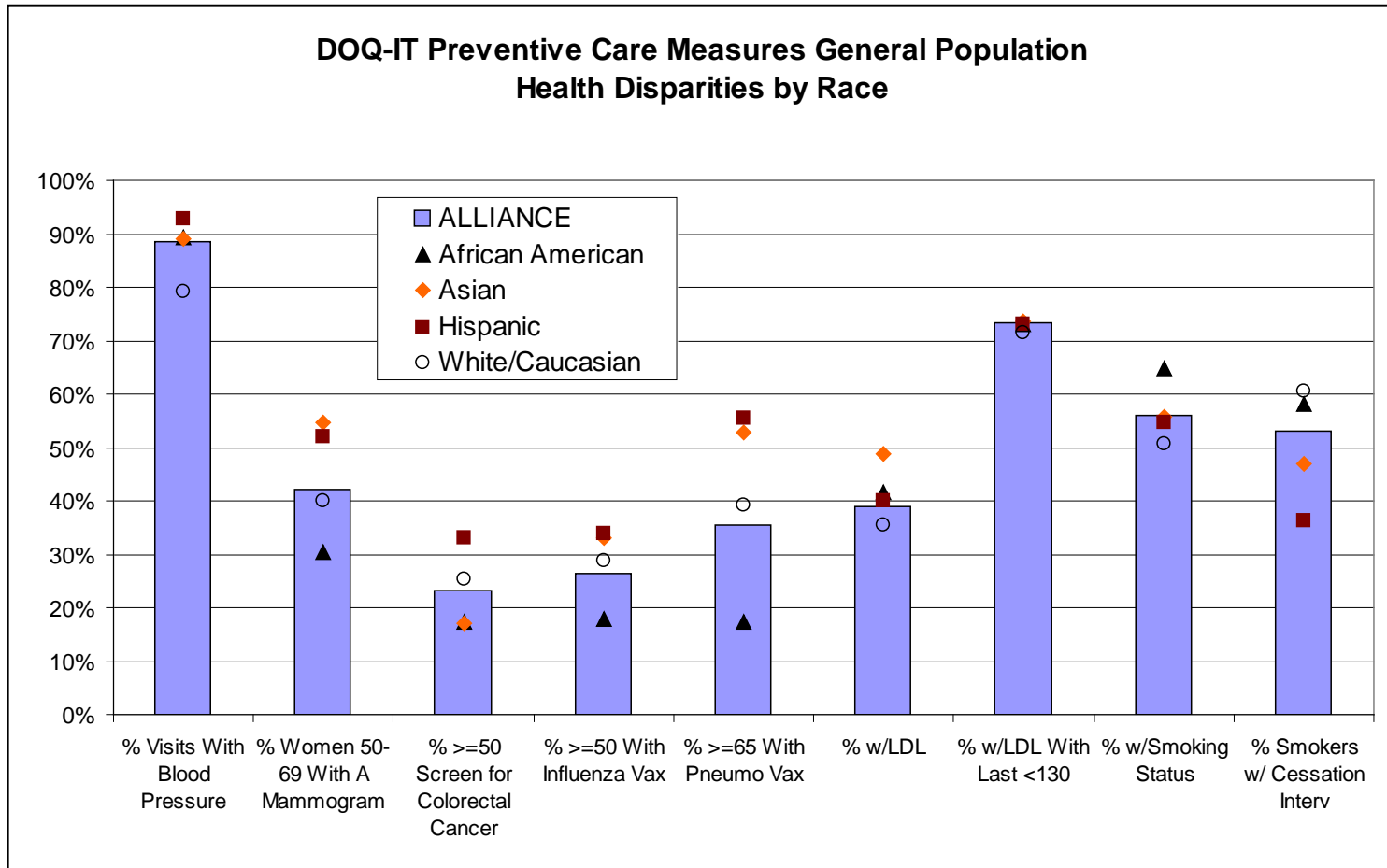
→ Strategically against national norms

→ Operational variability within centers

CHC Network – Preventive Care KPIs



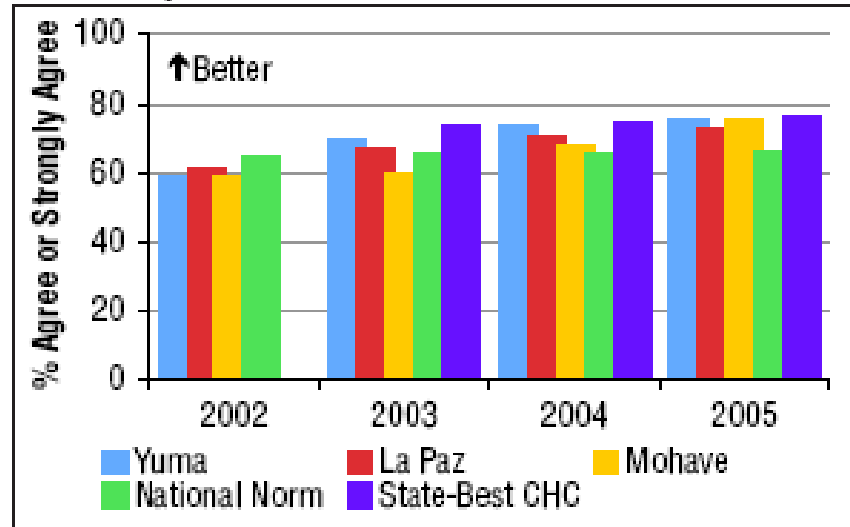
CHC Network – Preventive Care KPIs by Race



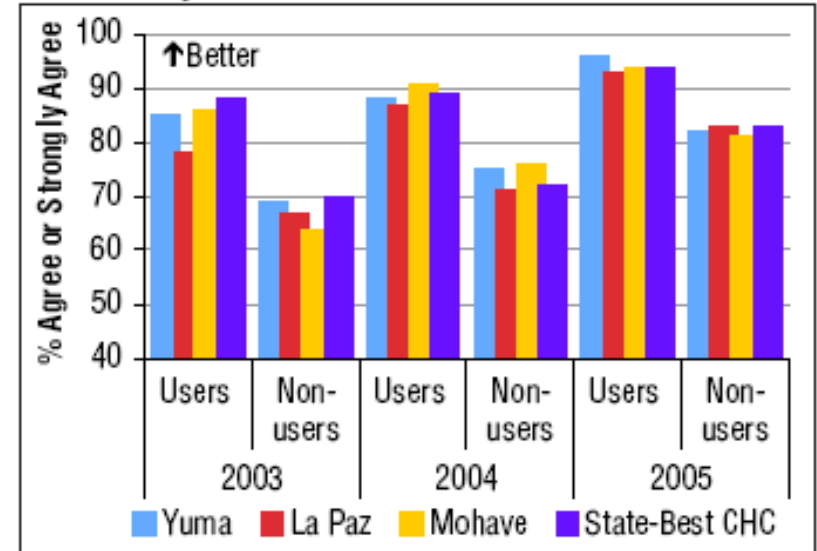
Data management should allow flexible drill down capability to understand sources of variability

Baldrige CHC - Patient and Community Needs KPIs

7.2-7 Patient Perception of Overall Care: Would Recommend to a Family Member or Friend

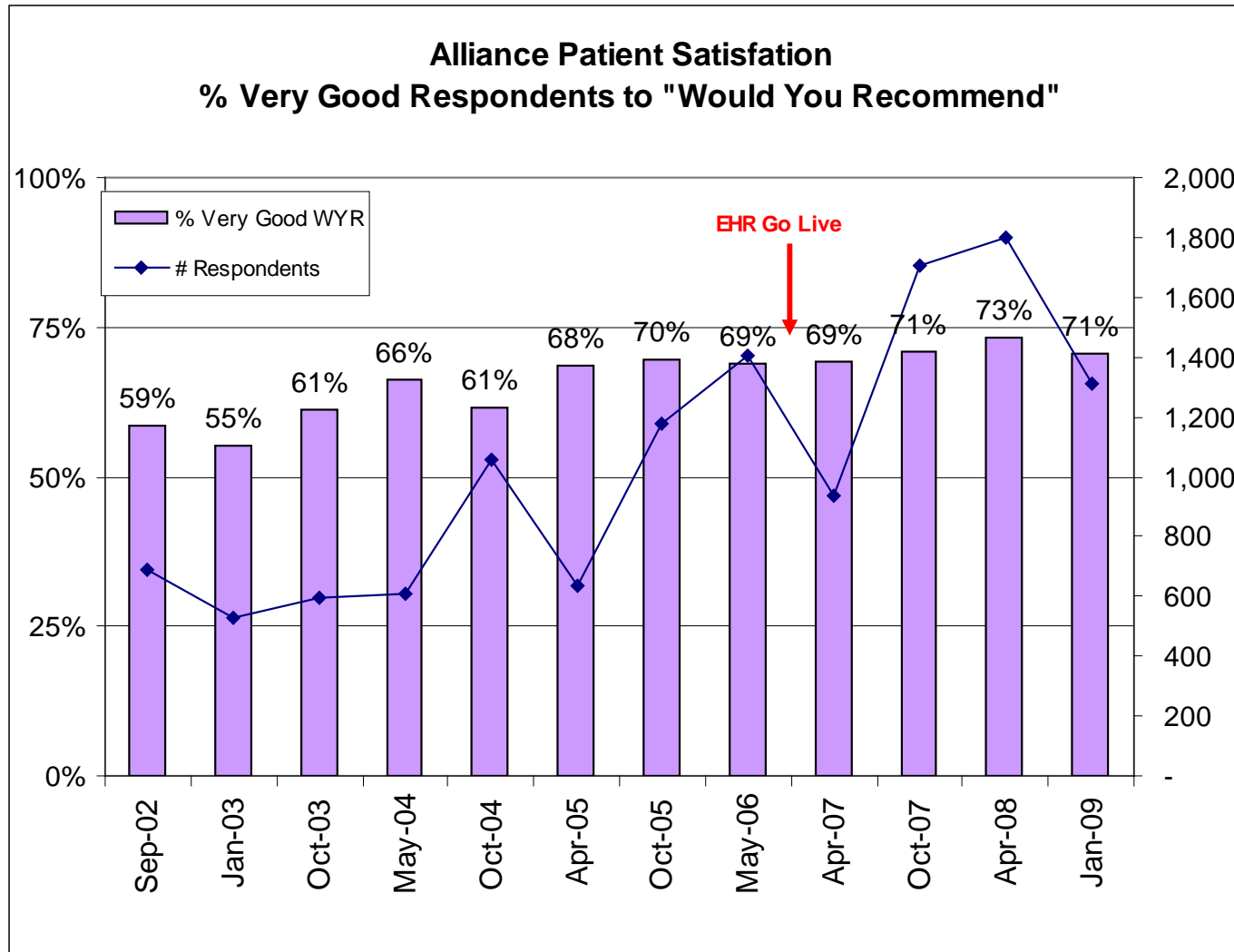


7.2-8a Community Climate Survey: Have Confidence in the Quality of Care



Data management should encompass all domains of data that are used to manage operations including patient and community needs data

CHC Network – Patient Satisfaction



This network uses a shared patient satisfaction survey tool at all centers (semi-annual sampling)

Baldrige CHC - Workforce KPIs

Figure 7.4-6b Staff Satisfaction by Job Group

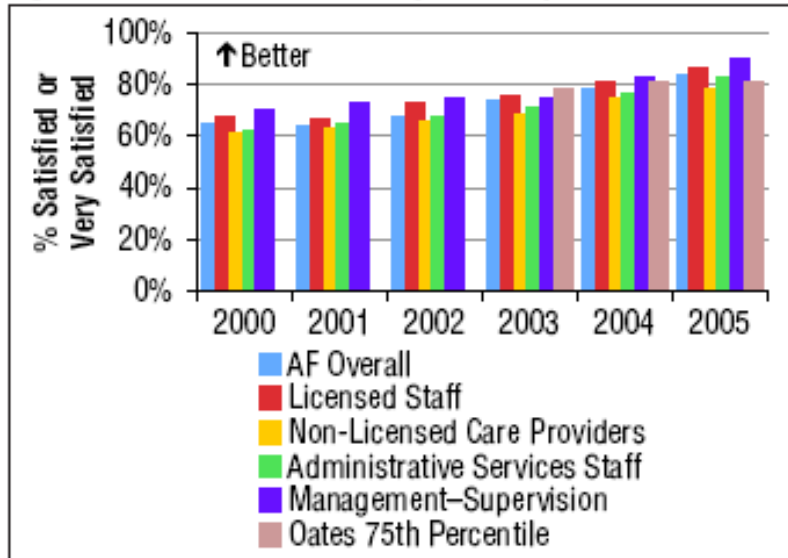
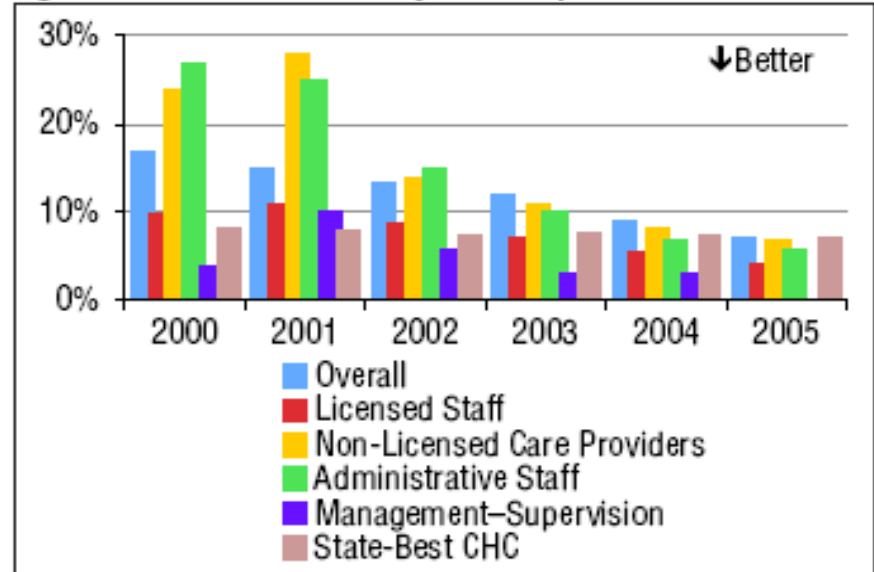


Figure 7.4-9a Staff Turnover by Job Group



Data management should also encompass employee performance measures...

Baldrige CHC - Process & Finance KPIs

Figure 7.5-2 Third Next Available Appointment

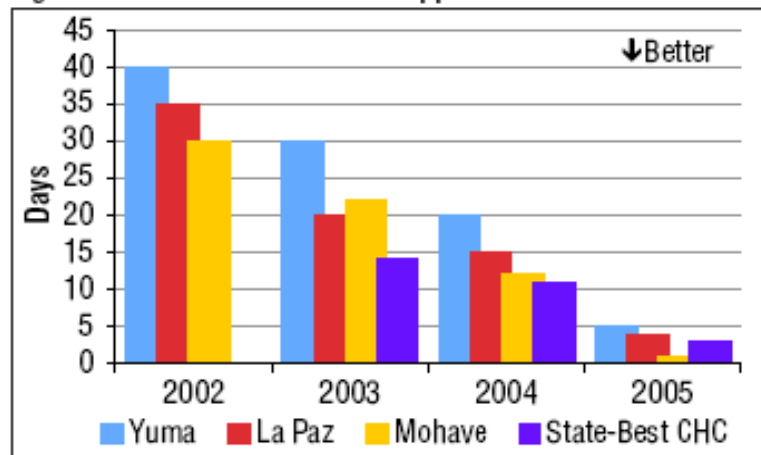


Figure 7.3-1 Revenues, Expenses, and Collections

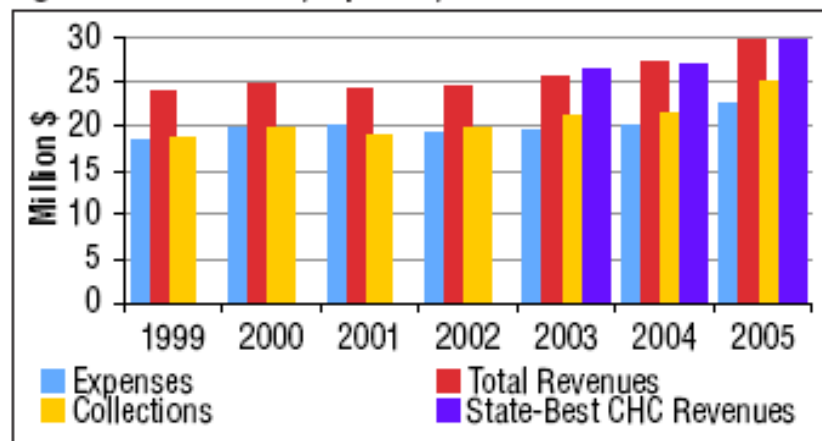


Figure 7.5-3 Office Visit Cycle Time

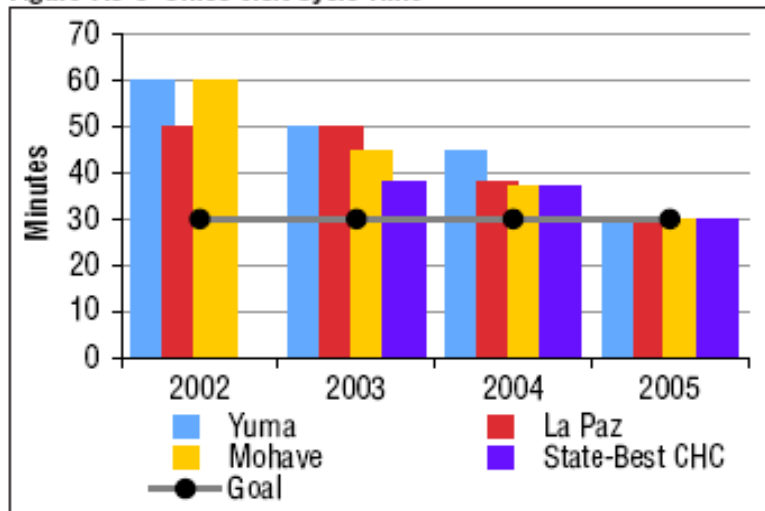
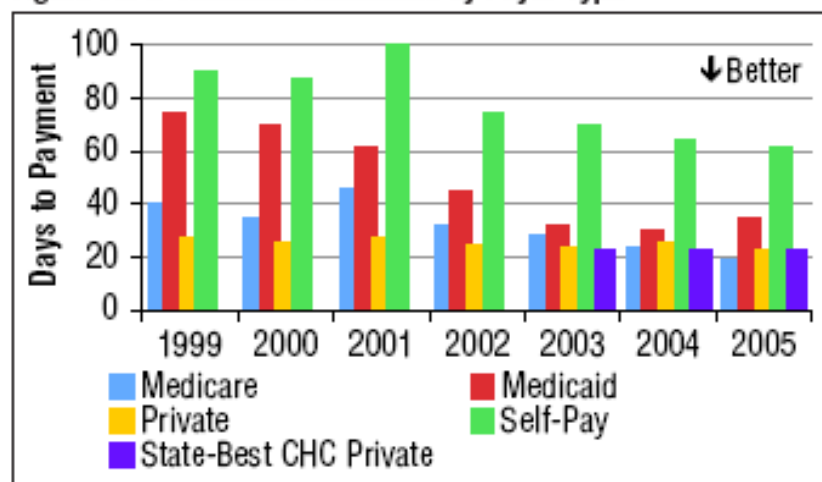
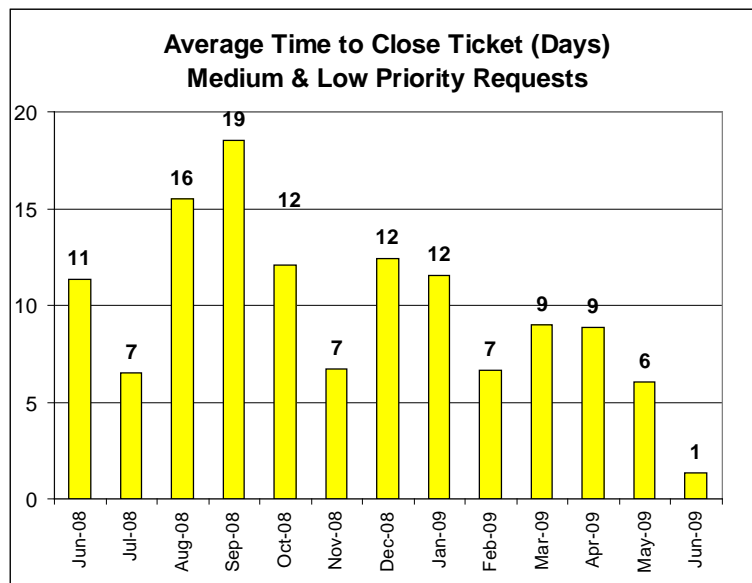
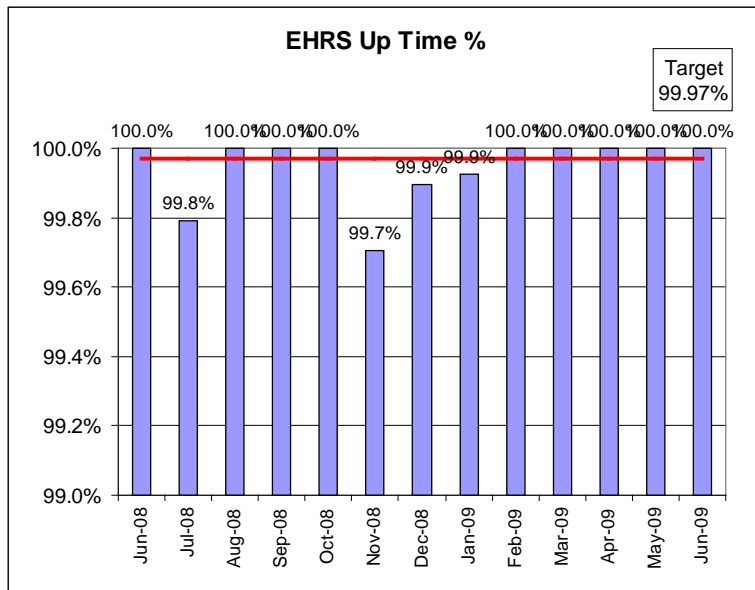
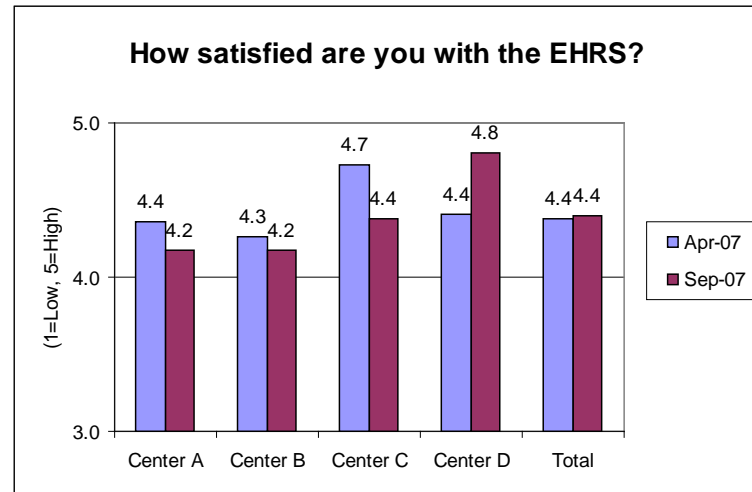
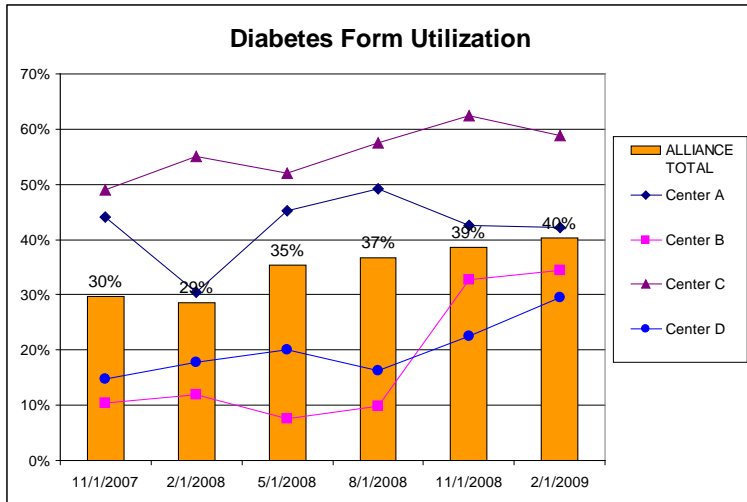


Figure 7.3-2 Accounts Receivable by Payor Type



...and process and finance measures...

CHC Network – Technology KPIs



...and technology measures.

Measures can be efficiently displayed in dashboard report format for easier review.

Alliance Community Health Center

Health Outcomes Dashboard for the Year Ending May 2009

Note: Monthly measurements reflect 12 month rolling period

With Comparison To:

Alliance Total =

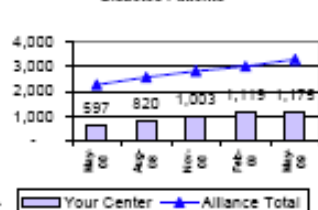


HDC National Goal (where available) =

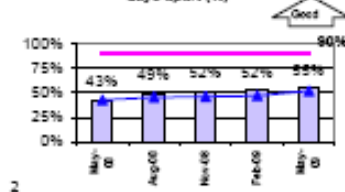


HDC Diabetes Metrics

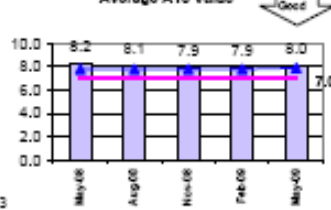
Diabetes Patients



A1c Values 2 or more, 91 or more days apart (%)



Average A1c Value



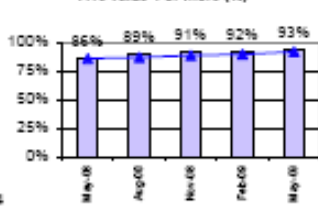
Stoplight Summary

Variance from Comparison Group:

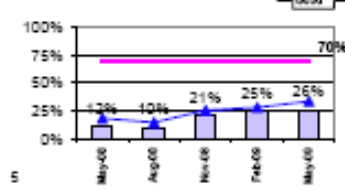
Better than Within 5% Worse 5%

#	Metric	Year Ending May 2009			
		CHC	Alliance	Var %	Nat'l Goal
1	Diabetes Patients	1,175	3,300		
2	A1c Values 2 or more, >=91 days apart	55.4%	51.7%	7.1%	90.0%
3	Average A1c Value	8.0	7.9	1.5%	7.0
4	A1c value 1 or more (%)	93.1%	91.7%	1.5%	
5	Self Management Goal (%)	26.1%	33.7%	-22.5%	70.0%
6	ACE Inhibitor or ARB (%)	86.1%	75.3%	14.4%	75.0%
7	Statins (%)	68.2%	58.4%	21.0%	60.0%
8	Blood Pressure Value (%)	99.2%	99.3%	-0.1%	
9	Blood Pressure less than 130/80 (%)	51.9%	40.2%	29.2%	40.0%
10	LDL value (%)	76.0%	67.4%	12.7%	
11	LDL less than 100 (%)	48.4%	48.2%	0.4%	70.0%
12	Fasting LDL value (%)	76.0%	67.4%	12.7%	
13	Fasting LDL less than 100 (%)	48.4%	48.2%	0.4%	
14	Aspirin or Antithrombotic (%)	73.2%	63.0%	16.1%	80.0%
15	Documented as current Smokers (%)	14.0%	23.4%		
16	Smokers with Advice to Quit (%)	17.5%	40.8%	-57.1%	
17	Smoking Status Documented (%)	58.9%	43.2%	36.4%	
18	Eye Exam (%)	20.3%	26.3%	-22.6%	
19	Foot Exam Complete (%)	42.4%	39.8%	6.5%	90.0%
20	Microalbumin Test (%)	64.3%	51.4%	25.1%	50.0%
21	Influenza Vaccine (%)	52.4%	39.3%	33.5%	90.0%
22	Dental Exam (%)	13.8%	6.6%	107.8%	70.0%
23	Depression Screening (%)	23.4%	29.7%	-21.2%	50.0%
24	Exercise Freq 3 per week (%)	7.4%	6.4%	15.8%	60.0%
25	Pneumococcal Vaccine (%)	60.1%	42.9%	39.9%	90.0%
HRSA Core Metric:					
26	% Adult Diabetics w/HbA1c > 9% (poor c	25.1%	24.3%	3.3%	29.0%

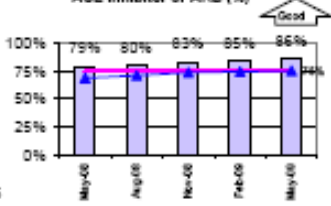
A1c value 1 or more (%)



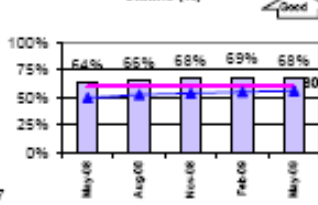
Self Management Goal (%)



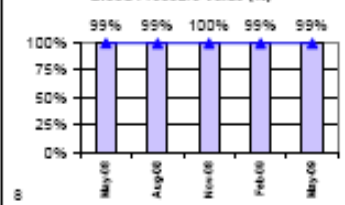
ACE Inhibitor or ARB (%)



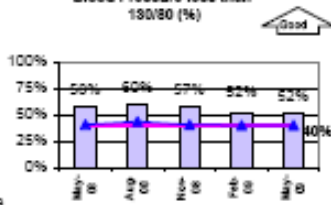
Statins (%)



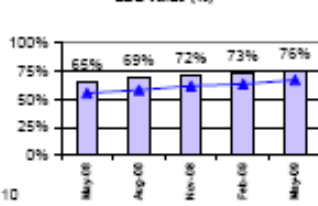
Blood Pressure Value (%)



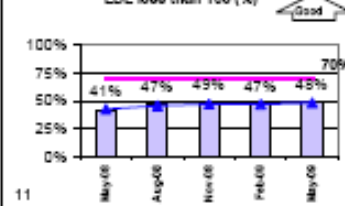
Blood Pressure less than 130/80 (%)



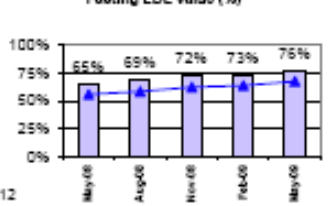
LDL value (%)



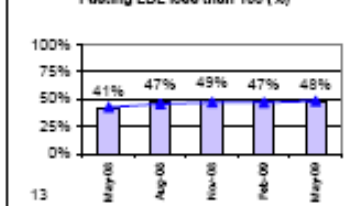
LDL less than 100 (%)



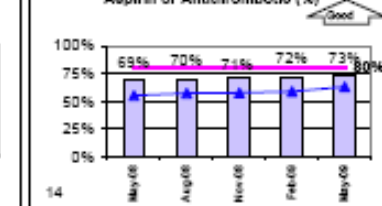
Fasting LDL value (%)



Fasting LDL less than 100 (%)



Aspirin or Antithrombotic (%)



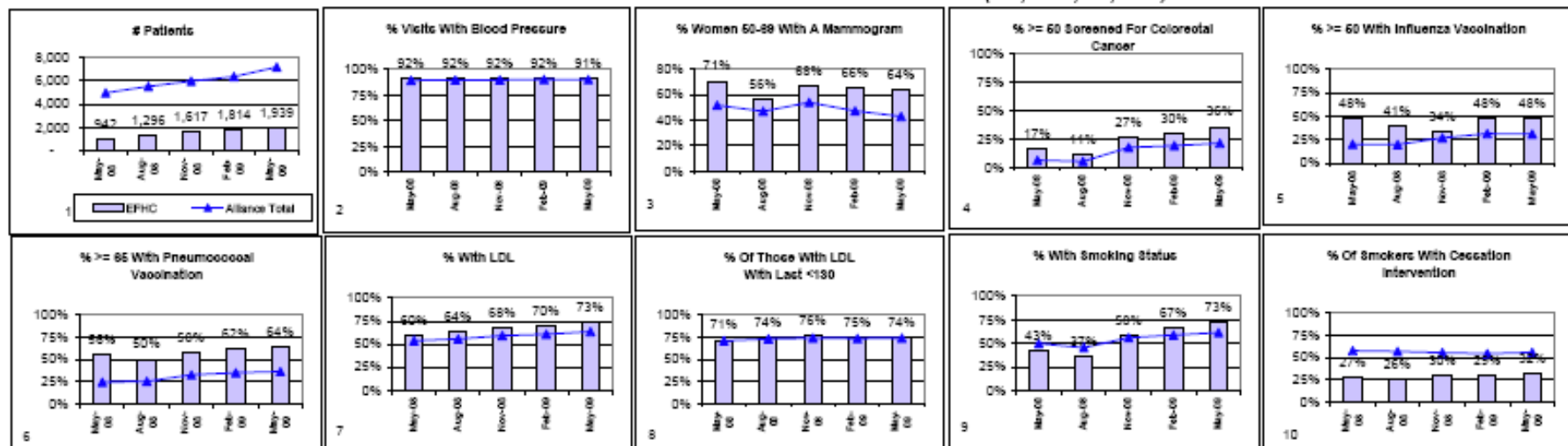
Alliance Community Health Center

Health Outcomes Dashboard for the Year Ending May 2009

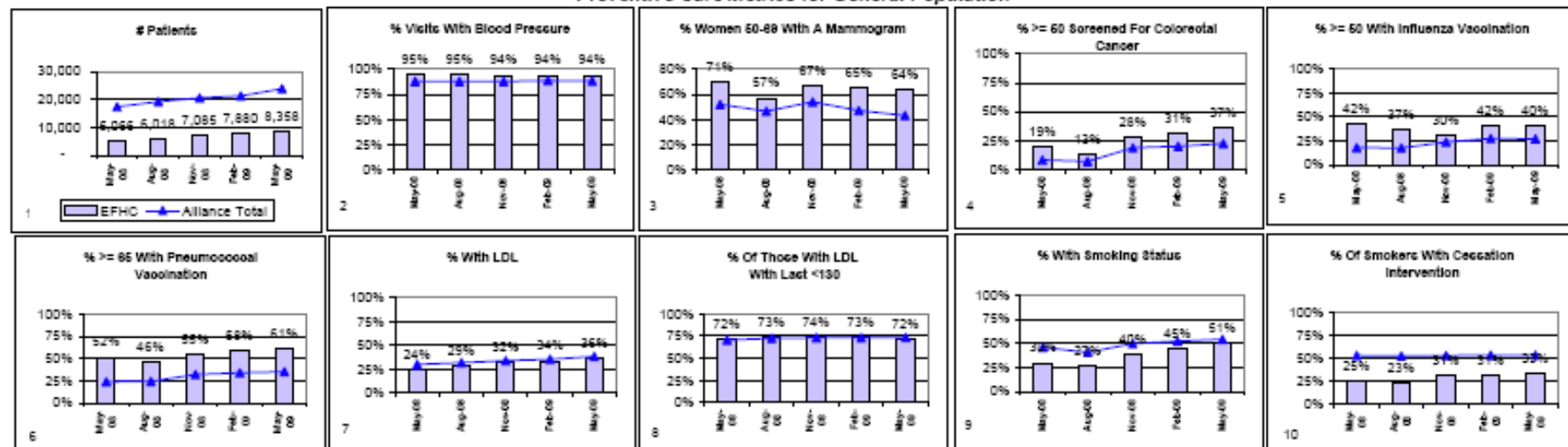
Note: Monthly measurements reflect 12 month rolling period

With comparison to: Alliance Total = ▲ ▲

Preventive Care Metrics for Patients with Chronic Conditions (DM, CAD, HF, HTN)



Preventive Care Metrics for General Population

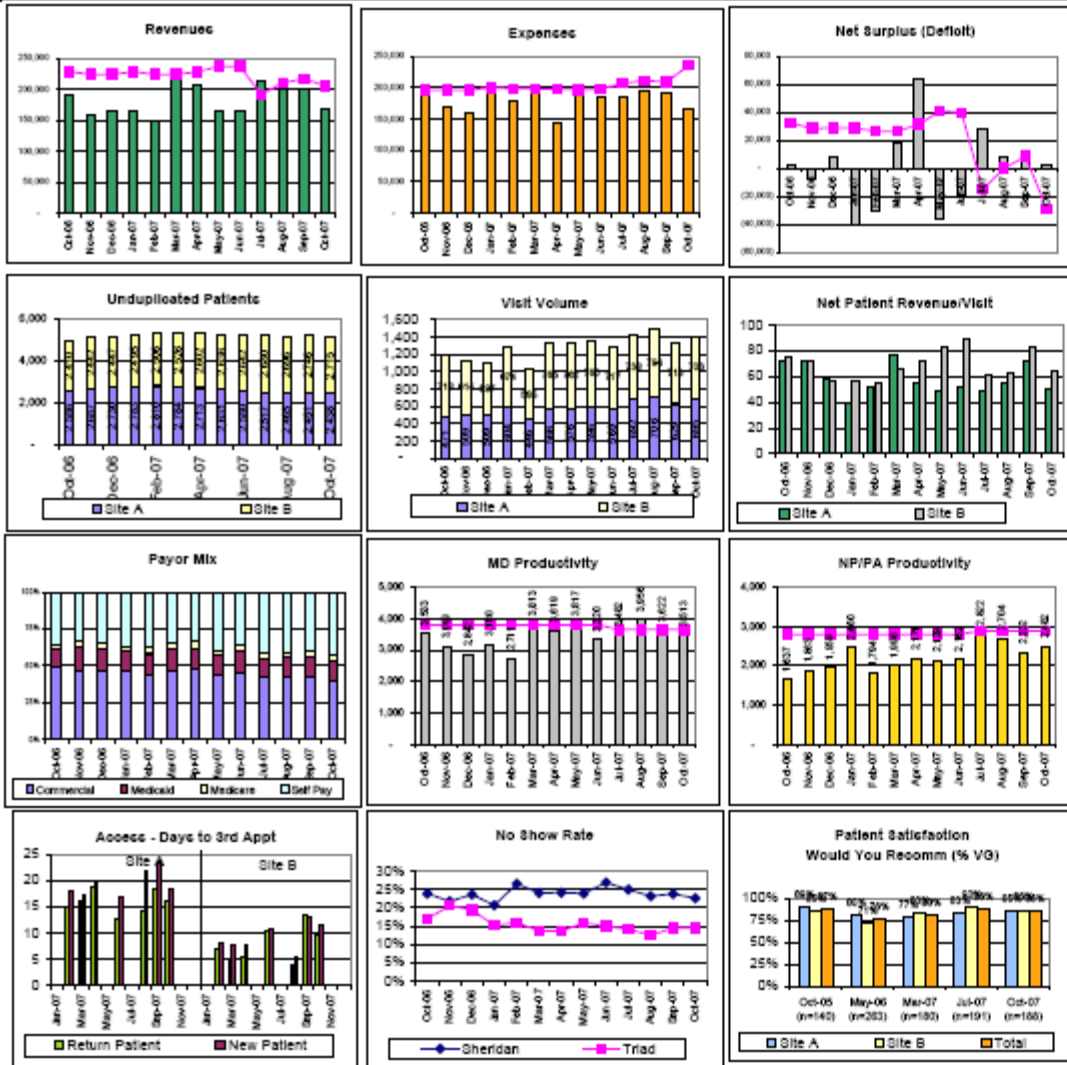


Stoplight Summary Year Ending May 2009

Variance from Comparison Group: ■ Better than ■ Within 5% ■ Worse 5%+

#	Metric	Chronic Condition Patients			General Population			#	Metric	Chronic Condition Patients			General Population		
		CHC	Alliance	Var %	CHC	Alliance	Var %			CHC	Alliance	Var %	CHC	Alliance	Var %
1	# Patients	1,939	7,171		8,358	23,878		6	% >=65 With Pneumo Var	63.9%	36.4%	75.5%	60.8%	35.2%	72.2%
2	% Visits With Blood Pressure	91.3%	90.0%	1.4%	93.9%	88.3%	6.4%	7	% w/LDL	73.2%	63.6%	15.2%	36.4%	38.3%	-6.1%
3	% Women 50-69 With A Mammogram	64.2%	43.0%	40.1%	63.7%	43.5%	46.8%	8	% w/LDL With Last <130	74.1%	73.9%	0.3%	72.5%	73.5%	-1.5%
4	% >=60 Screen for Colorectal Cancer	35.0%	21.5%	67.4%	36.6%	22.3%	63.9%	9	% w/Smoking Status	73.1%	61.6%	18.7%	50.8%	54.5%	-6.8%
5	% >=60 With Influenza Vax	47.8%	30.9%	54.5%	40.4%	27.0%	49.6%	10	% Smokers w/ Cessation Interv	32.5%	55.6%	-41.6%	33.0%	53.1%	-37.9%

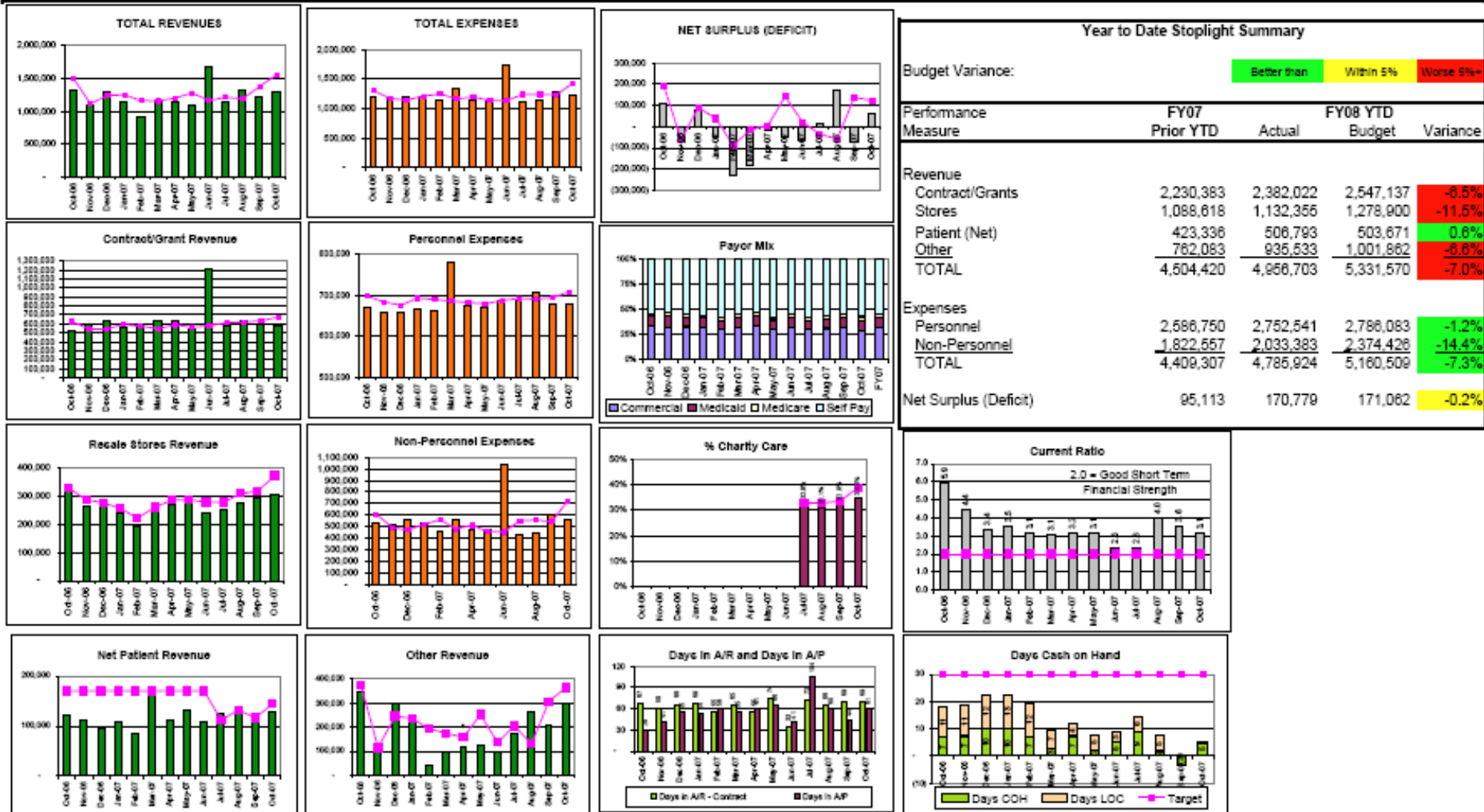
Medical Services Department Dashboard



Year to Date Stoplight Summary					
Budget Variance:	Better than		Within 5%		Worse 5%+
Performance Measure	FY07 Full Year	FY07 Prior YTD	Actual	FY08 YTD Budget	Variance
Financial					
Revenue	2,093,061	693,080	786,251	826,466	-4.9%
Expenses	2,144,137	703,401	737,844	861,178	-14.3%
Net Surplus (Deficit)	(51,076)	(10,321)	48,407	(34,713)	239.4%
Net Pt Rev/Visit					
Sheridan	60	68	56		
Triad	69	68	67		
Total	65	68	62		
Access					
Undup Pts					
Sheridan	2,580	2,586	2,438		
Triad	2,642	2,410	2,715		
Total	5,222	4,996	5,153		
Visit Volume					
Sheridan	6,433	2,058	2,722		
Triad	7,963	2,489	2,948		
Total	14,396	4,547	5,670		
Productivity					
MD	3,237	2,628	3,643	3,649	-0.2%
NP/PA	2,067	2,117	2,585	2,893	-10.6%
Payor Mix					
Commercial	46%	46%	41%		
Medicaid	14%	13%	13%		
Medicare	4%	4%	4%		
Self Pay	36%	37%	41%		
Total	100%	100%	100%		
Patient Satisfaction					
# Respondents	465	122	331		
Sheridan % VG	81%	89%	84%		
Triad %VG	78%	85%	84%		

Dashboards can be developed to meet different stakeholder needs. This is an example of a Medical Services division dashboard that was used to review results at the department/staff level.

Community Health Center Key Metrics - Financial



This is an example of a finance dashboard that is used to review monthly financials with the finance committee and BOD.

Health Outcomes by Provider

EHR Patients January - December 2007

Smith MD, John

Community Health Center

Measure	Dec-07 Smith MD, John	Dec-07 CHC	Stoplight Analysis		
			Variance from CHC	Dec-07 Alliance	Variance from Alliance
Variance: Better than Within 5% Worse 5%+					
HDC Diabetes Metrics					
1 Diabetes Patients	49	401		1,880	
2 A1c Values 2 or more, >=91 days	65%	50%	31.6%	47%	39.1%
3 Average A1c Value	7.8	7.8	0.0%	7.9	-1.3%
4 A1c value 1 or more (%)	90%	89%	1.4%	89%	1.3%
5 Self Management Goal (%)	35%	38%	-8.5%	12%	194.0%
6 ACE Inhibitor or ARB (%)	87%	78%	11.8%	70%	23.9%
7 Statins (%)	79%	61%	29.3%	52%	53.4%
8 Blood Pressure Value (%)	100%	100%	0.5%	100%	0.3%
9 Blood Pressure less than 130/80 (%)	37%	28%	33.3%	41%	-11.2%
10 LDL value (%)	82%	73%	12.5%	60%	35.5%
11 LDL less than 100 (%)	50%	52%	-4.3%	45%	12.0%
Preventive Care Metrics for General Population					
1 # Patients	212	2,675		14,637	
2 % Visits With Blood Pressure	78%	73%	7.3%	88%	-11.2%
3 % Women 50-69 With A Mammogr	83%	68%	22.1%	55%	52.6%
4 % >=50 Screen for Colorectal Canc	3%	9%	-67.5%	8%	-60.9%
5 % >=50 With Influenza Vax	39%	18%	112.1%	18%	114.3%
6 % >=65 With Pneumo Vax	87%	59%	46.7%	26%	233.9%
7 % w/LDL	65%	44%	46.1%	30%	114.6%
8 % w/LDL With Last <130	80%	72%	10.2%	68%	16.2%
9 % w/Smoking Status	80%	58%	38.8%	44%	83.0%
10 % Smokers w/ Cessation Interv	41%	56%	-27.1%	48%	-15.8%

This is an example of individual provider reports that the medical director shared with providers quarterly.

Q & A

AFTER LUNCH: TABLE TOP EXERCISE

Desired Outcomes

- Show how data and reports can support decision-making through rapid identification of trouble spots and prioritization of opportunities.
- Challenge participants to develop questions about the data for further drill-down and also develop interventions, next steps and follow-up.

Data Management Table-top Exercise

Scenarios

Helping Hands Health Center recently acquired a new EHR through a network service provider so they could leverage technical resources and implement technology more efficiently. The following scenarios describe various challenges they have had with data management . Read each scenario, then discuss and answer the questions provided as a group.

1. Data management strategy – Planning, Resource Allocation
2. Access to care – Appointment Availability
3. Meaningful Use functional measures – Med/Prob list up to date, form utilization
4. Meaningful Use clinical measures – Smoking Status & Cessation
5. Meaningful Use clinical measures – Diabetes
6. Meaningful Use clinical measures – Adult Preventive Care

1) Data Management Strategy – Planning, Resource Allocation

- Situation: Kate is the quality improvement coordinator at Helping Hands. She is responsible for collection of all clinical quality data for grants, research, and to track internal clinical quality efforts. Kate's background is in health sciences, so she understands medical processes and terminology and has supported internal clinical quality efforts well. Kate has intermediate level analytic skills and can use Excel to do basic summaries of data. Kate typically used chart audits to manually compile data but would use the practice management system to gather results using ICD9 or CPT codes. During the months leading up to EHR go-live, Kate spent most of her time on the EHR implementation effort. She provided valuable insight for system set up and reporting needs, and became a proficient user of the system.



Kate

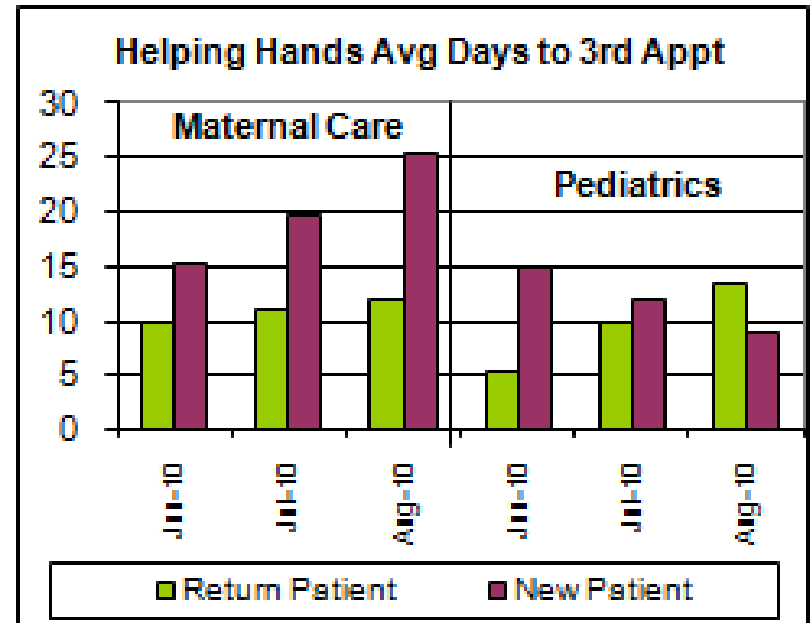
- Following go-live, Kate shifted her time back to clinical quality data and was now using the system to compile data. Though she knows the system well, she has difficulty finding reports that give the data she needs. She is working with the network service provider to develop selected reports but for now is pulling data by going into individual charts in the system, entering results into a spreadsheet and compiling it similar to how she compiled it prior to the EHR.

- Team discussion and analysis:

- What are the data management staffing, process and system strengths in this scenario?
- What are data management staffing, process and system challenges? What is the current and future impact of each?
- How would you address each challenge during the short, intermediate, and long term?
- How would you evaluate the effectiveness of your efforts?

2) Access to care – Appointment Availability

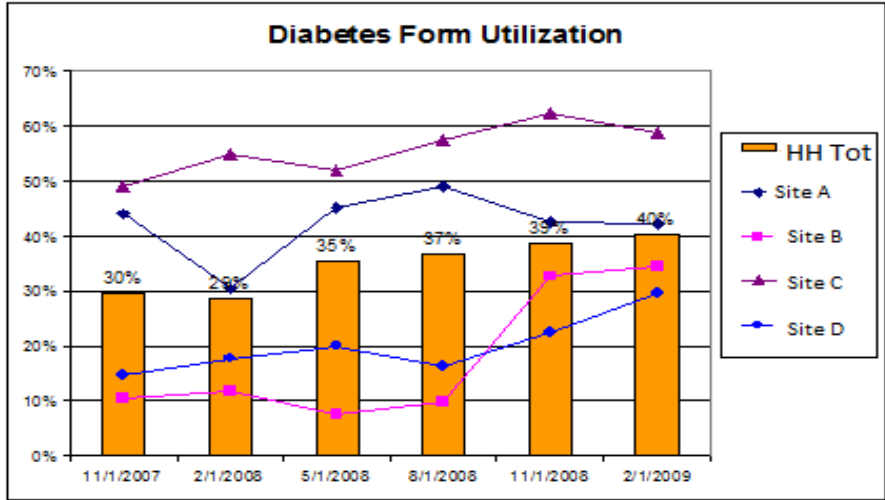
- Situation: Luz is the patient care director at Helping Hands. Once a month she has her front desk staff go into the scheduling system to find the 3rd available appointment for each of the 25 providers working at the clinic. The staff find the date of the 3rd available new patient appointment and the date of the 3rd available return visit for each provider and enter it into a spreadsheet. Kate, the QI coordinator, helps with the analysis of the data to compute the average days to 3rd available appointment.
- Team discussion and analysis:
- What issues might exist with integrity of the 3rd available appointment data? How would you address each of these issues in the short, intermediate and long term?
- What other ways could these data be collected and compiled? Evaluate the cost/benefit of each way against the current method.
- The following graph depicts Helping Hands average days to 3rd available appointment.
- Team discussion and analysis:
- Describe the results and speculate about cause. What additional questions do you have about the data? What recommendations would you make to improve performance of this KPI?



3) Meaningful Use functional measures – Med/Prob list up to date, form utilization

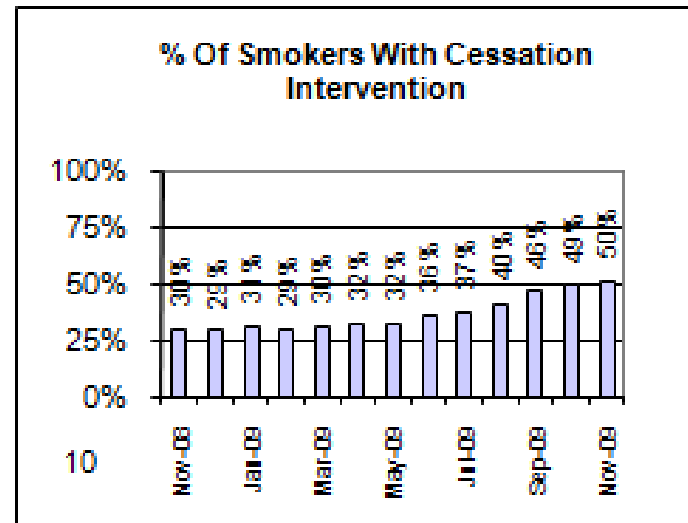
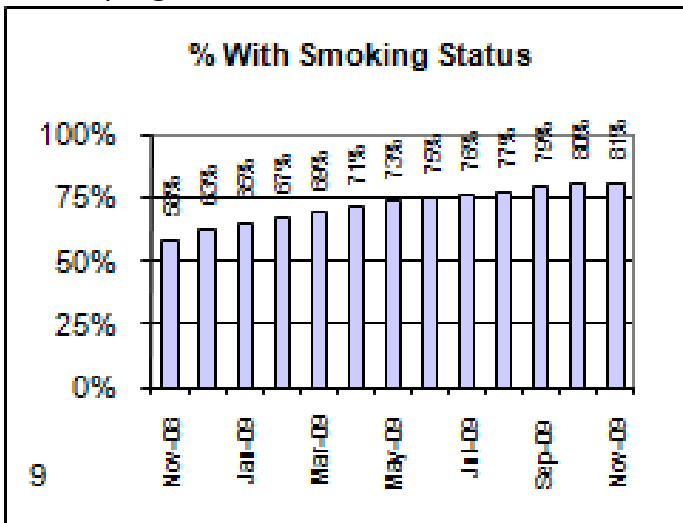
Maintain an up-to-date problem list of current and active diagnoses	More than 80% of all unique patients* seen by the EP have at least one entry or an indication of no problems are known for the patient recorded as structured data	Numerator: Number of unique patients* seen in reporting period with 1 coded entry or indication of none Denominator: Number of unique patients seen in reporting period
Maintain active medication list	More than 80% of all unique patients* seen by the EP have at least one entry (or an indication that the patient is not currently prescribed any medication) recorded as structured data	Numerator: Number of unique patients* seen in reporting period, with 1 entry on med list or an indication of 'none' if not currently prescribed any medications Denominator: Number of unique patients* seen in reporting period

- Situation: The table above defines the MU measures for up-to-date problem and med lists. The IT staff at Helping Hands are coordinating development of a program that would pull these results for all individual providers and a site summary.
- Team discussion and analysis:
- What issues might exist with integrity of the data pulled from the system? How would you address each of these issues in the short, intermediate and long term?
- What are all possible ways these data could be compiled? Evaluate the cost/benefit of each.
- The graph to the right depicts Helping Hands diabetes EHR flowsheet utilization for all eligible diabetics across four different sites.
- Team discussion and analysis:
- How would you define the numerator and denominator for this measure?
- Describe the results and speculate about causes behind increases or decreases in results. What additional questions do you have about the data? What recommendations would you make to improve performance of this KPI?

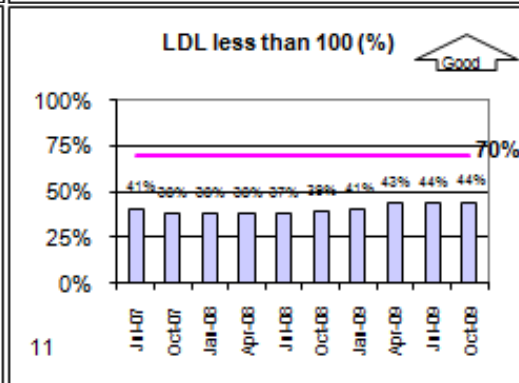
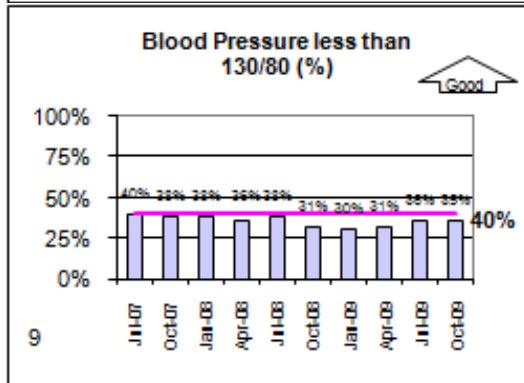
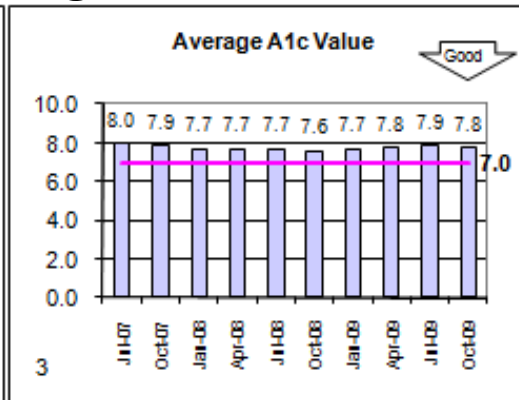
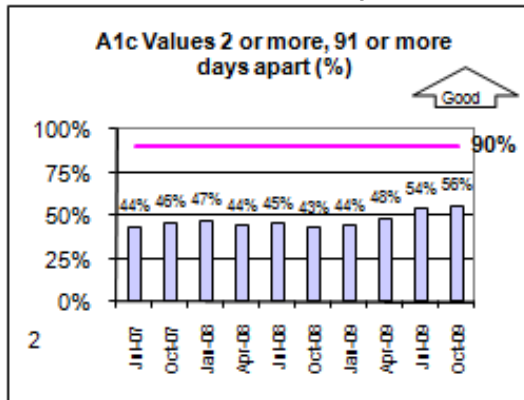


4) Meaningful Use clinical measures - Smoking Status & Cessation

- Situation: Dr. Francis, an internist at Helping Hands has long been passionate about smoking cessation among his patients, which are disproportionately affected by smoking. Previously he found it difficult to develop successful interventions for two reasons: 1) adequate documentation and 2) lack of focused and sustainable resources for interventions. With the implementation of the electronic health record, documentation will be better structured and enable tracking of status and interventions.
- Team discussion and analysis:
- What issues might arise with developing the clinical content for smoking documentation in the EHR? How would you address each of these issues in the short, intermediate and long term?
- Once smoking status content is developed, how should the data be analyzed effectively?
- The graphs below depict progress at Helping Hands with documentation of smoking status and cessation intervention over a one year period.
- Team discussion and analysis:
- Describe the results. What additional questions do you have about the data?
- What strategies and operational tactics do you think were employed to achieve these improvements?
- What should Helping Hands work on from here?

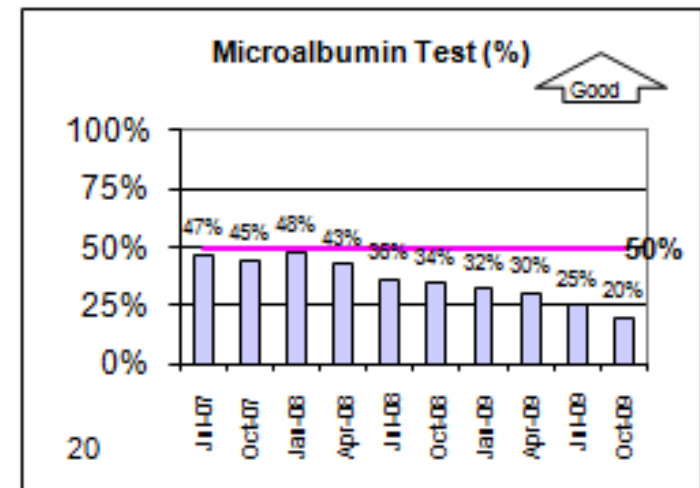


5) Meaningful Use clinical measures – Diabetes



- Situation: The graphs to the left show Helping Hands diabetes measure results for all eligible diabetics compared against national HDC goals.
- Team discussion and analysis:
- Describe the results and speculate about causes behind increases or decreases in results. What additional questions do you have about the data? If these results were being presented at the next clinical quality committee meeting, what would you recommend for action items?

- Situation: The graph to the right shows microalbumin measure results for all eligible diabetics.
- Team discussion and analysis:
- What are all possible issues that could be causing a decline in the measure? How would you address each of these issues in the short, intermediate and long term?

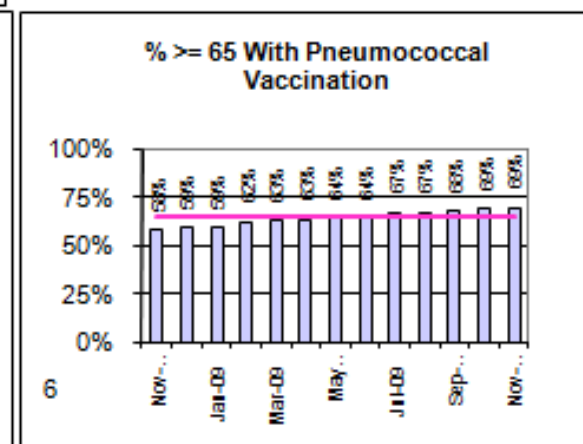
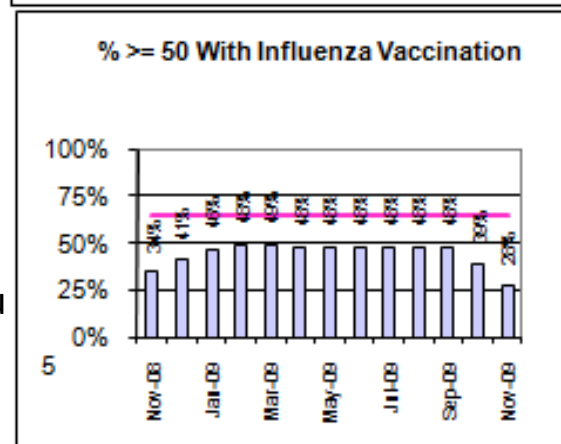
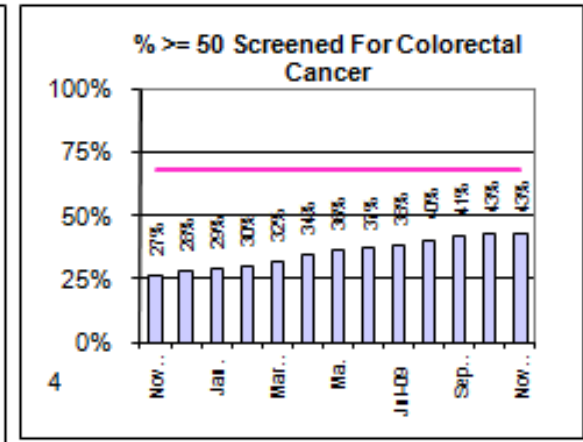
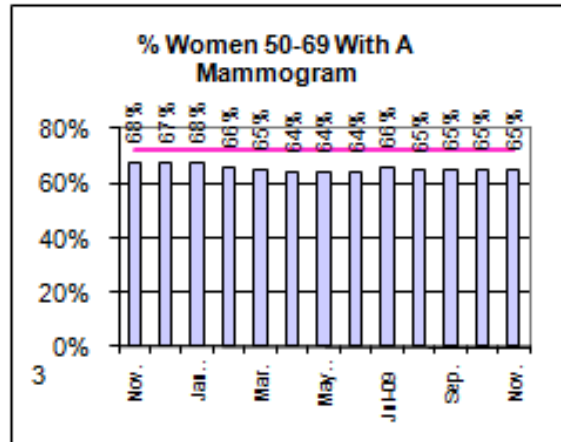


6) Meaningful Use clinical measures - Preventive Care

- Situation: The graphs to the right show Helping Hands preventive care results compared against CDC benchmarks.

- Team discussion and analysis:

- Describe the results and speculate about causes behind increases or decreases in results.
- What additional questions do you have about the data?
- If these results were being presented at the next clinical quality committee meeting, what would you recommend for action items? Why?



- If these results were being used to plan clinical quality priorities for the upcoming year, what would your recommendations be? Why?
- Describe at least one intervention that could be used to improve performance on each measure.