



# The Use of Business Intelligence in the Process of Designing Quality Improvement Initiatives

*Dr. James L. Holly, MD  
CEO, Southeast Texas Medical Associates, LLP*

*University of Health Science Center at San Antonio School of Medicine  
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# About SETMA



Southeast Texas Medical Associates, LLP (SETMA) was founded August 1, 1995.

SETMA currently has 29 healthcare providers in the following specialties:

- Internal Medicine
- Family Practice
- Pediatrics
- Nurse Practitioners
- Cardiology
- Neurology
- Infectious Disease
- Ophthalmology

# SETMA's Landmarks



- March 1998 – Acquired Electronic Health Records (EHR)
- January 1999 – All patients seen using EMR
- May 1999 – Began thinking in terms of “Electronic Patient *Management*” (EPM), rather than EHR
- October 2009 – Began “Business Intelligence Project”
- June 2010 – NCQA Tier 3 Patient-Centered Medical Home (PCMH)
- August 2010 – Affiliate of Joslin Diabetes Center, an Affiliate of Harvard Medical School
- August 2010 – NCQA Diabetes Recognition

# Systems Thinking and Health



“Systems-thinking” (Senge, *The Fifth Discipline*) and the data display designed on those principles allow the provider to “see” the patient as a whole: as a “granular portrait”, rather than as a faceless “silhouette.”

# Data Display



Data display can obscure effective management, if it simply presents more detail while ignoring or obscuring the dynamic interaction of one part of a biological system with another.

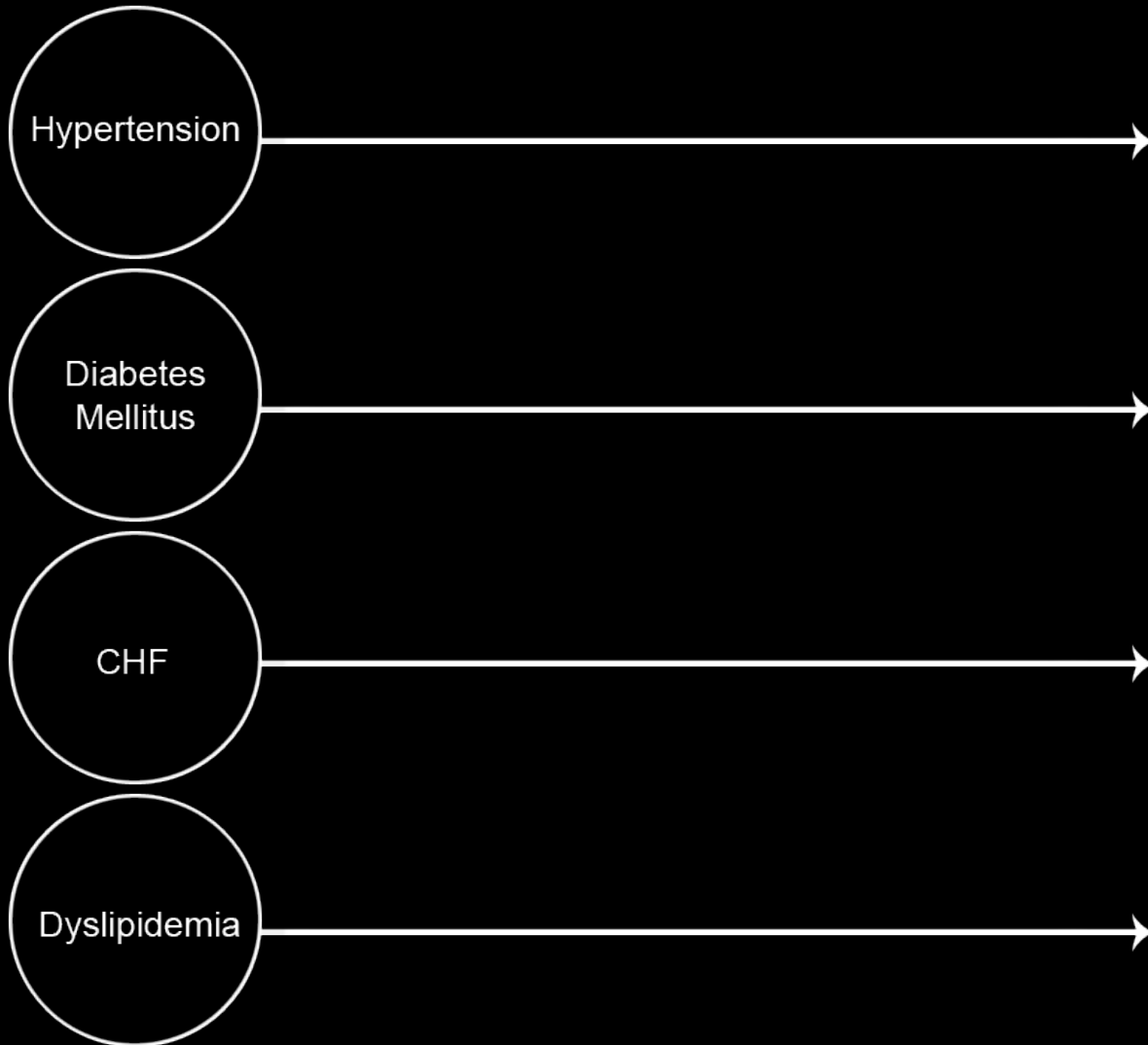
# Seeing Circles of Causality



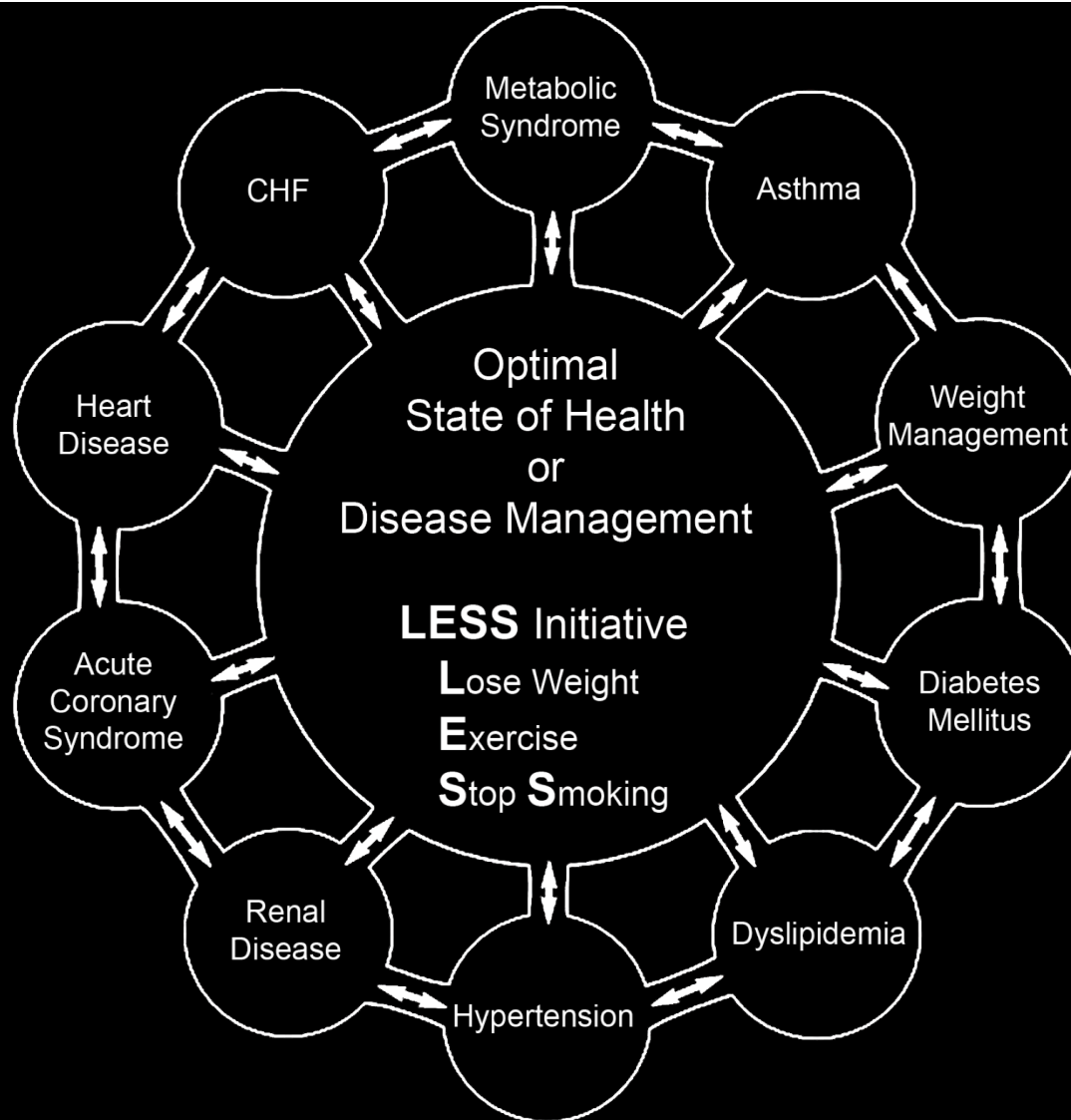
“Reality is made up of circles, but we see straight lines...Western languages...are biased toward a linear view. If we want to see system-wide interrelationships...we need a language of interrelationships, a language of circles.”

*(The Fifth Disciple, Dr. Peter Senge)*

# Linear Thinking



# Circular Causality





# SETMA's Diabetes Management



## Diabetes Management

Type I  
  Type II  
  GDM  
  Pre-Diabetes  

Diabetes Since    Month  Year

Patient    ZTest

Age    Sex

[Joslin Treatment Goals](#)

[Diagnostic Criteria](#)  
 [Screening Criteria](#)  
 [Imp Diabetes Concepts](#)  
 [Evidenced-Based Recs](#)

**Compliance**

[Dental Care](#)     
 [Smoker](#)   E-mail    +    -

Dilated Eye Exam     
 [Metabolic Syndrome](#)    +    -

Flu Shot     
 [Framingham Risk Scores](#)

Foot Exam     
 10-Year General Risk    %

HgbA1C     
 10-Year Stroke Risk    %

Pneumovax     
 Global Cardio Score    pts

Urinalysis     
 [Weight Management](#)   [Lipids Management](#)

Aspirin    Yes    No  
 [HPT Management](#)   [Immunizations](#)

Statin    Yes    No

**Vital Signs**

Height	<input type="text" value="70.00"/>	Waist	<input type="text" value=""/>	Finger Stick	<input type="text" value=""/>
Weight	<input type="text" value=".00"/>	Hips	<input type="text" value=""/>	Glucose	<input type="text" value=""/>
BMI	<input type="text" value=""/>	Chest	<input type="text" value=".00"/>	Pulse	<input type="text" value=""/>
Body Fat %	<input type="text" value="19.6"/>	Abdomen	<input type="text" value="0"/>	Blood Pressure	<input type="text" value=""/>
Protein Req	<input type="text" value=""/>	Ratio	<input type="text" value=".00"/>	BP In Diabetics	<input type="text" value=""/>
BMR	<input type="text" value=""/>	BER	<input type="text" value=""/>	Vitals Over Time	<input type="text" value=""/>

**Current SQ Insulin Dose as of**

Time of day	Units	Type	Units	Type	Blood Sugars
	<input type="text" value=".00"/>		<input type="text" value=".00"/>		<input type="text" value=""/>
	<input type="text" value=".00"/>		<input type="text" value=".00"/>		<input type="text" value=""/>
	<input type="text" value=".00"/>		<input type="text" value=".00"/>		<input type="text" value=""/>
	<input type="text" value=".00"/>		<input type="text" value=".00"/>		<input type="text" value=""/>

**Most Recent Labs**  

<a href="#">HqA1C</a>	<input type="text" value="8.5"/>	<input type="text" value="08/25/2010"/>
Previous	<input type="text" value="1.2"/>	<input type="text" value="01/21/2008"/>
	<input type="text" value="9.6"/>	<input type="text" value="01/16/2008"/>
<a href="#">eAG</a>	<input type="text" value="197"/>	
<a href="#">Mean Plasma Glucose</a>	<input type="text" value="225.3"/>	<input type="text" value="Insulin"/>
<a href="#">C-Peptide</a>	<input type="text" value=""/>	<input type="text" value=""/>
Fructosamine	<input type="text" value=""/>	<input type="text" value=""/>
Cholesterol	<input type="text" value="250"/>	<input type="text" value="09/01/2009"/>
LDL	<input type="text" value="97"/>	<input type="text" value="08/19/2010"/>
HDL	<input type="text" value="10"/>	<input type="text" value="09/01/2009"/>
Triglycerides	<input type="text" value="500"/>	<input type="text" value="09/01/2009"/>
<a href="#">Trig/HDL Ratio</a>	<input type="text" value="50.00"/>	
Glucose	<input type="text" value="107"/>	<input type="text" value="02/18/2010"/>
Fasting	<input type="text" value=""/>	<input type="text" value=""/>
Insulin	<input type="text" value=""/>	<input type="text" value=""/>
<a href="#">HOMA-IR</a>	<input type="text" value=""/>	
Na	<input type="text" value="135"/>	<input type="text" value="02/18/2010"/>
K	<input type="text" value="5.2"/>	<input type="text" value="02/18/2010"/>
<a href="#">Magnesium</a>	<input type="text" value="21.2"/>	<input type="text" value="02/06/2008"/>
BUN	<input type="text" value="21"/>	<input type="text" value="02/18/2010"/>
Creatinine	<input type="text" value=".5"/>	<input type="text" value="02/18/2010"/>
<a href="#">U Microalbumin</a>	<input type="text" value=""/>	<input type="text" value=""/>
Albumin/Creat	<input type="text" value=""/>	<input type="text" value=""/>

**Navigation**

Diabetes  
  General

**Home**

**Lifestyle Changes**

**Diabetes Plan**

Education Booklet Given On

Last DE

# SETMA's Model of Care



1. Performance Tracking – one patient at a time
2. Performance Auditing – by panel or population
3. Analysis of Provider Performance Data
4. Public Reporting by Provider Name
5. Quality Assessment/Performance Improvement

# Tracking Performance At The Point of Care



SETMA tracks multiple Physician Consortium for Performance Improvement (PCPI) measurement sets:

- Chronic Stable Angina
- Congestive Heart Failure
- Diabetes
- Hypertension
- Chronic Renal Disease
- Weight Management
- Care Transitions

# Tracking Performance At The Point of Care



SETMA also tracks the following published quality performance measure sets:

- HEDIS
- NQF
- AQA
- PQRI
- BTE

Each is available to the provider, interactively at each patient encounter.

**National Quality Forum (NQF)  
National Voluntary Consensus Standards**

**Legend**    Measures in red are measures which apply to this patient that are not in compliance.  
Measures in black are measures which apply to this patient that are in compliance.  
Measures in gray are measures which do not apply to this patient.

<b>General Health Measures</b>	<b>Care for Older Adults</b>
<a href="#">View</a> Body Mass Index Measurement	<a href="#">View</a> Counseling on Physical Activity
<a href="#">View</a> Smoking Cessation	<a href="#">View</a> Urinary Incontinence in Older Adults
<a href="#">View</a> Proper Assessment for Chronic COPD	<a href="#">View</a> Colorectal Cancer Screening
<a href="#">View</a> Adult Immunization Status	<a href="#">View</a> Fall Risk Management
<b>Blood Pressure Measures</b>	<b>Diabetes Measures</b>
<a href="#">View</a> Blood Pressure Measurement	<a href="#">View</a> Dilated Eye Exam
<a href="#">View</a> Blood Pressure Classification/Control	<a href="#">View</a> Foot Exam
<b>Medication Measures</b>	<a href="#">View</a> Hemoglobin A1c Testing/Control
<a href="#">View</a> Current Medication List	<a href="#">View</a> Blood Pressure
<a href="#">View</a> Documentation of Allergies/Reactions	<a href="#">View</a> Urine Protein Screening
<a href="#">View</a> Therapeutic Monitoring of Long Term Medications	<a href="#">View</a> Lipid Screening
<a href="#">View</a> Drugs to Avoid in the Elderly	<b>Female Specific Measures</b>
<a href="#">View</a> Appropriate Medications for Asthma	<a href="#">View</a> Breast Cancer Screening
<a href="#">View</a> Inappropriate Antibiotic Treatment for Adults with Acute Bronchitis	<a href="#">View</a> Cervical Cancer Screening
<a href="#">View</a> LDL Drug Therapy for Patients with CAD	<a href="#">View</a> Chlamydia Screening
<a href="#">View</a> Warfarin Therapy for Atrial Fibrillation	<a href="#">View</a> Osteoporosis Management
	<b>Pediatric Measures</b>
	<a href="#">View</a> Appropriate Screening for Children with Pharyngitis
	<a href="#">View</a> Childhood Immunization Status

# Tracking Performance At The Point of Care



This tool allows the provider to assess comprehensive quality measures for “screening” and “prevention” of each patient.

**Audit Previsit** [X]

### Pre-Visit/Preventive Screening

**General Measures** (Patients >18)

Has the patient had a tetanus vaccine within the last 10 years?  **Yes**  
 Date of Last

Has the patient had a flu vaccine within the last year?  **Yes**  
 Date of Last

Has the patient ever had a pneumonia shot?  **Yes**  
 Date of Last

Does the patient have an elevated (>100 mg/dL) LDL?  **Yes**  
 Last

**Elderly Patients** (Patients >65)

Has the patient had an occult blood test within the last year? (Patients >50)  **No**  
 Date of Last

Has the patient had a fall risk assessment completed within the last year?  **Yes**  
 Date of Last

Has the patient had a functional assessment within the last year?  **Yes**  
 Date of Last

Has the patient had a pain screening within the last year?  **Yes**  
 Date of Last

Has the patient had a glaucoma screen (dilated exam) within the last year?  **Yes**  
 Date of Last

Does the patient have advanced directives on file or have they been discussed with the patient?  **No**  
 Discussed?  Yes  No    Completed?  Yes  No

Is the patient on one or more medications which are considered high risk in the elderly?  **No**

**Diabetic Patients**

Has the patient had a HgbA1c within the last year?   
 Date of Last

Has the patient had a dilated eye exam within the last year?   
 Date of Last

Has the patient had a 10-gram monofilament exam within the last year?   
 Date of Last

Has the patient had screening for nephropathy within the last year?   
 Date of Last

**Female Patients**

Has the patient had a pap smear within the last two years? (Ages 21 to 64)   
 Date of Last

Has the patient had a mammogram within the last two years? (Ages 40 to 69)   
 Date of Last

Has the patient had a bone density within the last two years? (Age >50)   
 Date of Last

**Male Patients**

Has the patient had a PSA within the last year? (Age >40)   
 Date of Last

Has the patient had a bone density within the last two years? (Age >65)   
 Date of Last

**Referrals** (Double-Click To Add/Edit)

Referral	Status	Referring

# Tracking Performance At The Point of Care



## 2009 HEDIS Technical Specifications for Physician Measurement

**Legend**    Measures in red are measures which apply to this patient that are not in compliance  
Measures in black are measures which apply to this patient that are in compliance.  
Measures in gray are measures which do not apply to this patient.

[Return](#)  
[Tutorial](#)

### Information

[NCQA](#)  
[CAHPS](#)  
[HEDIS](#)

### Effectiveness of Preventive Care

- [View](#) Adult BMI Assessment  
Weight Assessment and Counseling for Nutrition and Physical Activity for Children/Adolescents  
Childhood Immunization Status  
Immunizations for Adolescents  
Lead Screening in Children
- [View](#) Colorectal Cancer Screening  
Breast Cancer Screening  
Cervical Cancer Screening  
Chlamydia Screening in Women
- [View](#) Glaucoma Screening in Older Adults
- [View](#) Use of High-Risk Medications in the Elderly
- [View](#) Care for Older Adults

### Effectiveness of Acute Care

- [View](#) Appropriate Treatment for Children with Upper Respiratory Infection
- [View](#) Appropriate Testing for Children with Pharyngitis  
Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis

### Effectiveness of Chronic Care

- [View](#) Persistence of Beta-Blocker Therapy After a Heart Attack
- [View](#) Controlling High Blood Pressure
- [View](#) Cholesterol Management for Patients with Cardiovascular Disease
- [View](#) Comprehensive Adult Diabetes Care  
Use of Appropriate Medications for People with Asthma
- [View](#) Use of Spirometry Testing in the Assessment and Diagnosis of COPD
- [View](#) Pharmacotherapy Management of COPD Exacerbation
- [View](#) Follow-Up After Hospitalization for Mental Illness
- [View](#) Antidepressant Medication Management  
Follow-Up Care for Children Prescribed Attention-Deficit/Hyperactivity Disorder Medication  
Osteoporosis Management in Women  
Disease Modifying Anti-Rheumatic Drug Therapy for Rheumatoid Arthritis
- [View](#) Annual Monitoring for Patients on Persistent Medications
- [View](#) Medication Reconciliation Post-Discharge

# Tracking Performance At The Point of Care



## PQRI

### PQRI Submittal Summary

#### Diabetes Measures Group

This patient  **IS** eligible for submittal of the measures in the diabetes group.

Patients 18 to 79 with Diabetes Mellitus are eligible for this measure.

#### Hemoglobin A1c Target < 9.0

Most recent value less than 7.0.

#### Blood Pressure

Systolic Target < 140

Most recent value less than 130.

Diastolic Target < 80

Most recent value less than 80.

#### Foot Exam

Completed this visit.

#### Lipids Target < 100

Most recent value less than 100.

#### Nephropathy

Not assessed since January 1st.

#### Eye Exam

Dilated eye exam results reviewed.

#### Preventive Measures Group

This patient  **IS** eligible for submittal of the measures in the preventive group.

Patients ages 50 and older are eligible for this measure.

#### Tobacco Use Assessment

Patient is current tobacco non-user.

#### Tobacco Cessation Assessment

Patient is not a tobacco user.

#### Body Mass Index

Body Mass Index measured/assessed.

#### Influenza Immunization

Influenza immunization administered within the last year.

#### Colorectal Cancer Screening

Appropriate screening performed.

#### Pneumococcal Vaccination

Pneumococcal vaccination previously administered.

#### Mammography Screening

Measure not applicable for this patient.

#### Urinary Incontinence Assessment

Measure not applicable for this patient.

# Clusters and Galaxies



- A “*cluster*” is seven or more quality metrics for a single condition, i.e., diabetes, hypertension, etc.
- A “*galaxy*” is multiple clusters for the same patient, i.e., diabetes, hypertension, lipids, CHF, etc.
- Fulfilling a single or a few quality metrics does not change outcomes, but fulfilling “clusters” and “galaxies” of metrics at the point-of-care can and *will* change outcomes.



# Auditing Performance After the Visit

## A “Cluster” -- Multiple Metrics on a Single Condition



# Auditing Performance After the Visit



A "Galaxy" -- Multiple "Clusters" Tracked on a Single Patient at a Single Visit



# Auditing Performance After the Visit



Unlike a single metric, such as “was the blood pressure taken,” which will not improve care, fulfilling and then auditing a “cluster” or a “galaxy of clusters” in the care of a patient **will** improve treatment outcomes and **will** result in quality care.

# Auditing Performance After the Visit



What is most often missing in quality improvement initiative is real-time, auditing with comparative display of results, and public reporting.

The screenshot shows the website for Southeast Texas Medical Associates (SEMA). The header includes the SEMA logo and the tagline "Healthcare Where Your Health is the O". Below the header is a navigation menu with the following items: "About Us", "Letters", "In The News", "Providers", and "Your Life You". A secondary menu is open, showing "Electronic Patient Management Tools", "Public Reporting", and "Medical Home". The "Public Reporting" menu is expanded, listing the following options: PQRI, NQF, HEDIS, NCQA, PCPI, SETMA Lipid Audit, AQA, COGNOS Project, SETMA Audit for CKD Stages I III, and Patient Satisfaction Survey. The main content area on the left contains a link titled "Healthcare improvement will re:" and a paragraph about SEMA's services, including a clinical lab and a growing provider base in "Practitioners and Family Practice".

# Auditing Performance After the Visit



SETMA employed Business Intelligence (BI) software to audit provider performance and compliance.

SETMA's BI Project allows all providers to:

1. Display their performance for their entire patient base
2. Compare their performance to all practice providers
3. See outcome trends to identify areas for improvement
4. See this at the point-of-care

# Auditing Performance After the Visit



- SETMA contracted with a Business Intelligence consulting firm to build our auditing tools.
- The consultants designed a data warehouse to minimize the impact on our production servers.

# Analyzing Provider Performance

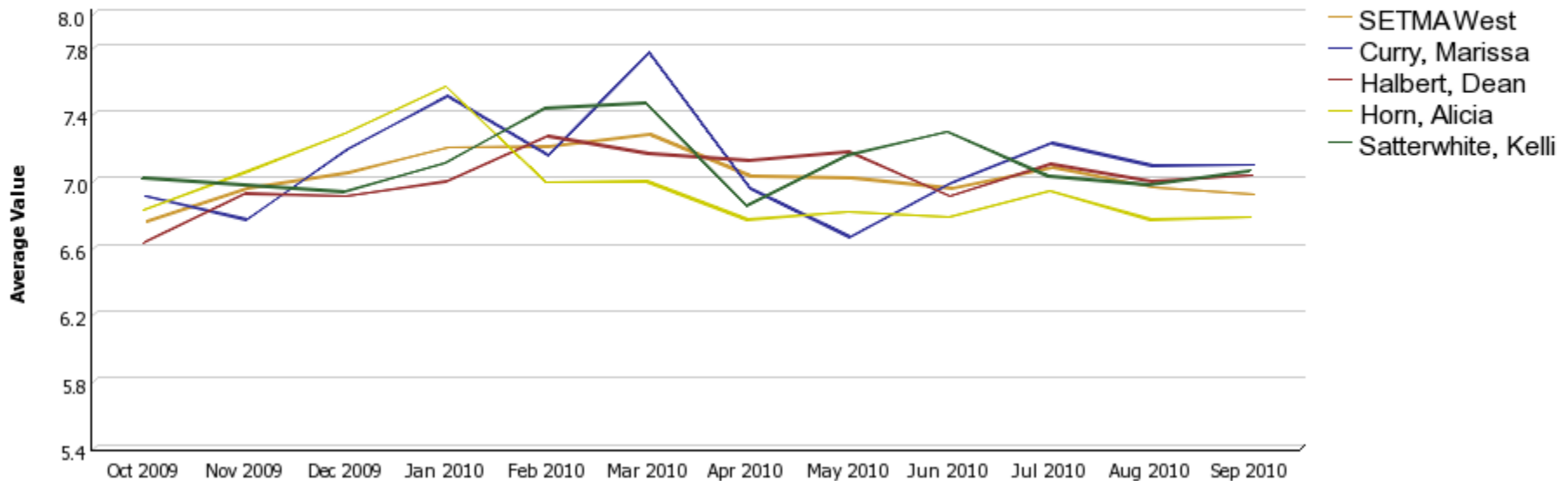


- The consultant used SQL Server Integration Services (SSIS) to clean and scrub the hundreds of data points we needed for our audit rather than having to process the millions of data points contained in our EHR.
- SSIS scrubs and preloads our EHR data into the warehouse, which gives us both speed in reporting and confidence in the results in our Business Intelligence reports.

# Auditing Performance After the Visit



## Chronic Diabetes - HgbA1c Trending

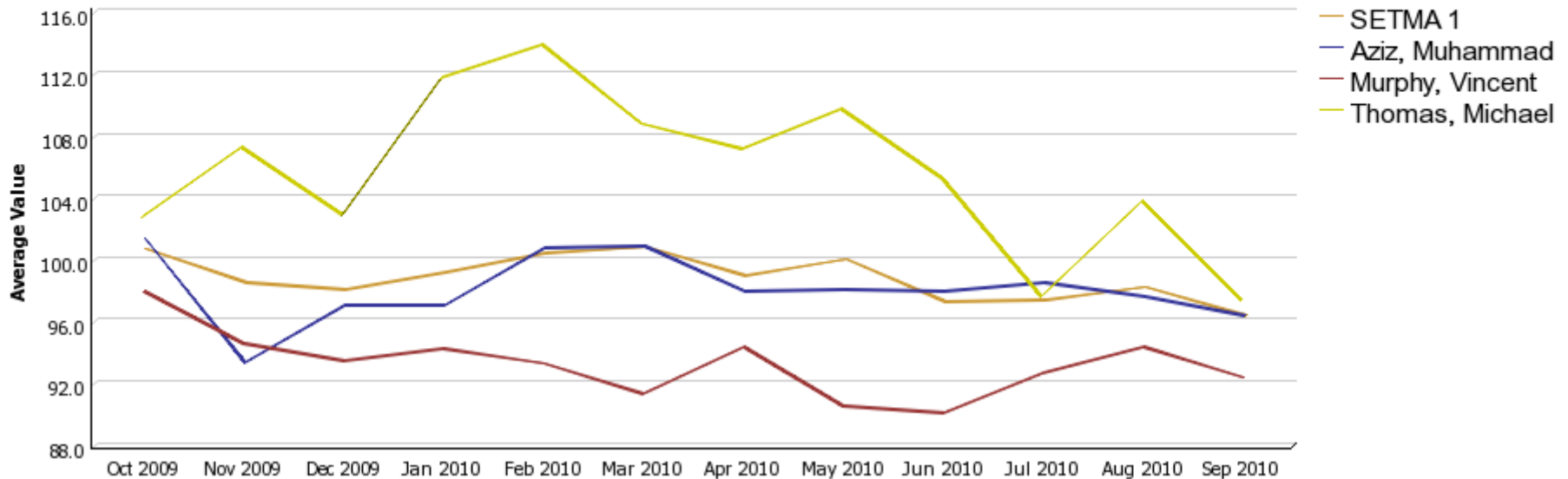




# Auditing Performance After the Visit



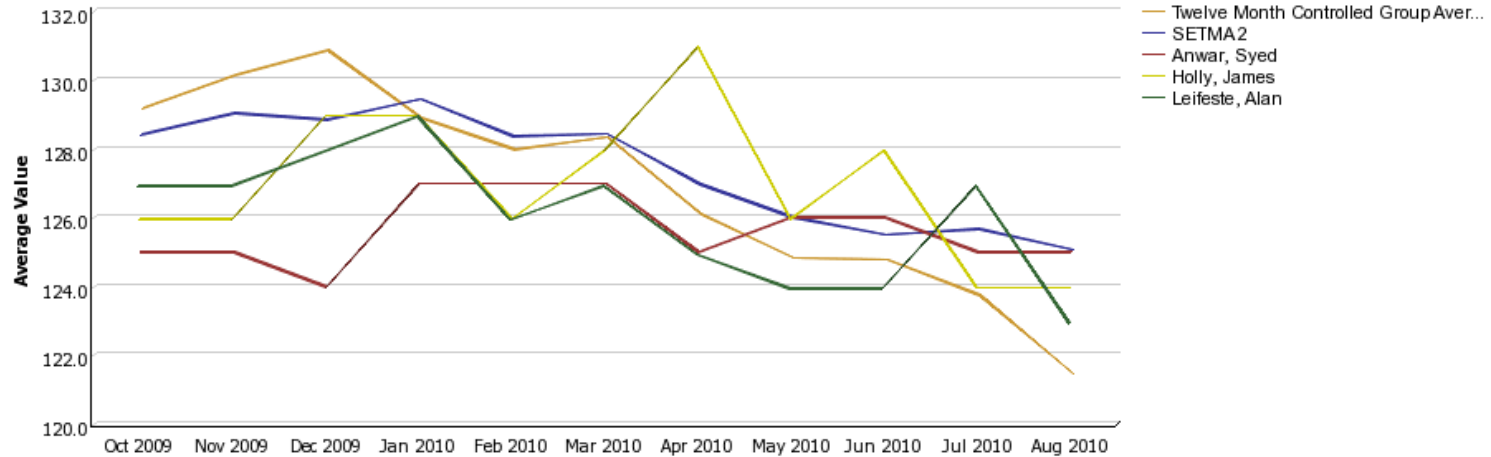
## Chronic Hyperlipidemia - LDL Trending



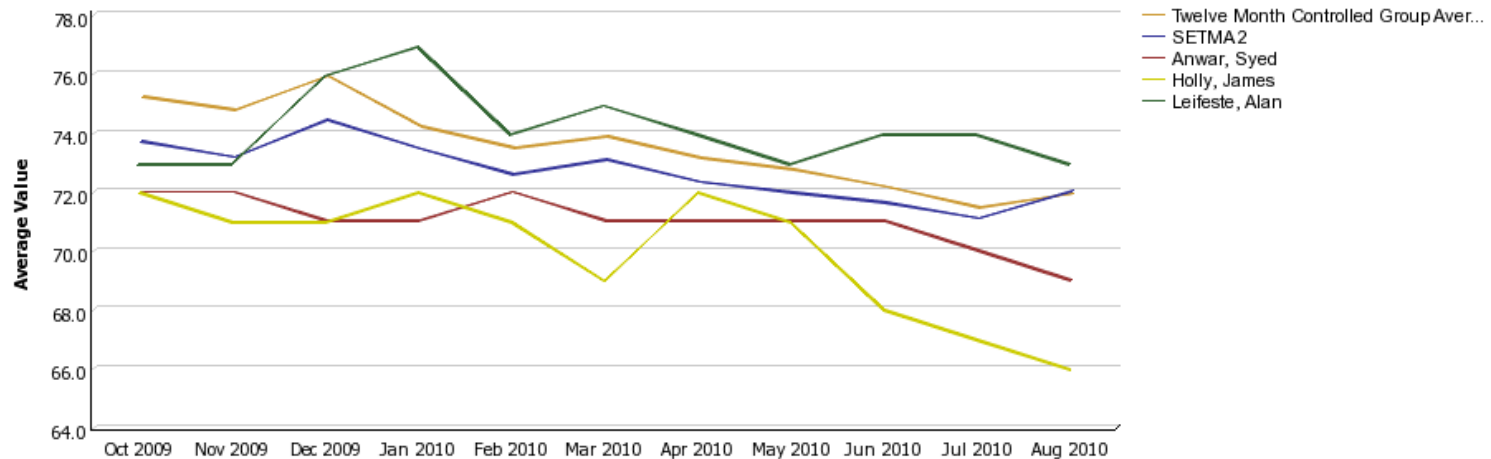
# Auditing Performance After the Visit



## Systolic Trending



## Diastolic Trending



# Auditing Performance After the Visit



Beyond how one provider performs (tracking and auditing), SETMA looks at data as a whole (analyzing) from which to develop new strategies for improving patient care.

We analyze patterns which may explain why one population is not to goal while another is. Some of the parameters, we analyze are:

- Frequency of visits
- Frequency of key testing
- Number of medications prescribed
- Were changes in treatments made, if patient not to goal
- Referrals to educational programs
- Etc.

# Analyzing Provider Performance



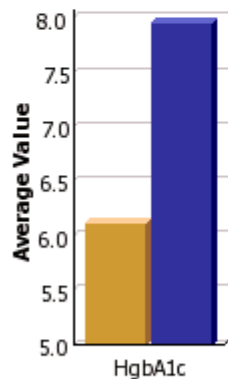
## Chronic Diabetes - Measures Comparison (Most Recent 12 Months)

Controlled Group ■

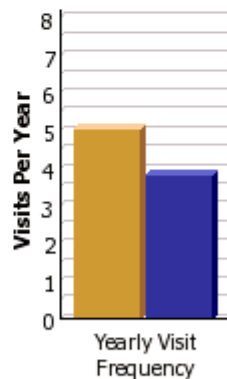
Population: **All SETMA**  
Time Basis: **Prior 12 Months**

Selected Group ■

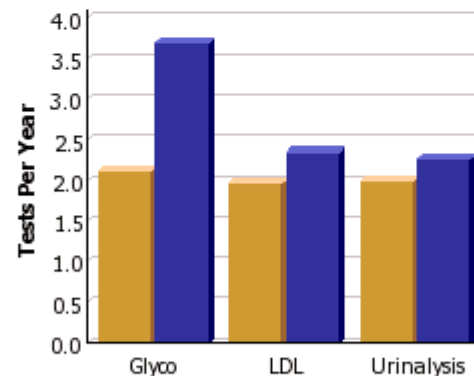
Practice: **SETMA 1, SETMA 2, SETMA West**  
Provider: **None**  
Controlled or Not Controlled: **Not Controlled**



	HgbA1c Avg	Standard Deviation
Controlled	6.1	0.7
Selected	8.0	1.7



	Visit Frequency
Controlled	5.1
Selected	3.8



	Yearly Glyco Tests	Yearly LDL Tests	Yearly UA Tests
Controlled	2.1	2.0	2.0
Selected	3.7	2.4	2.3

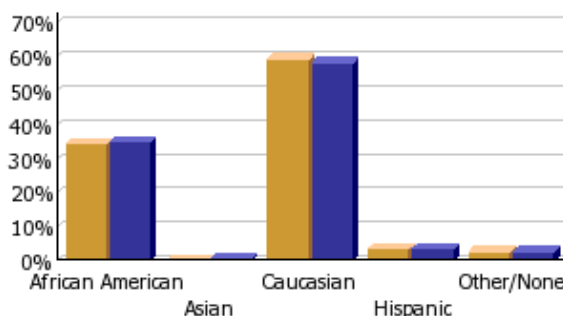
# Analyzing Provider Performance



## Chronic Hypertension - Measures Comparison (Most Recent 12 Months)

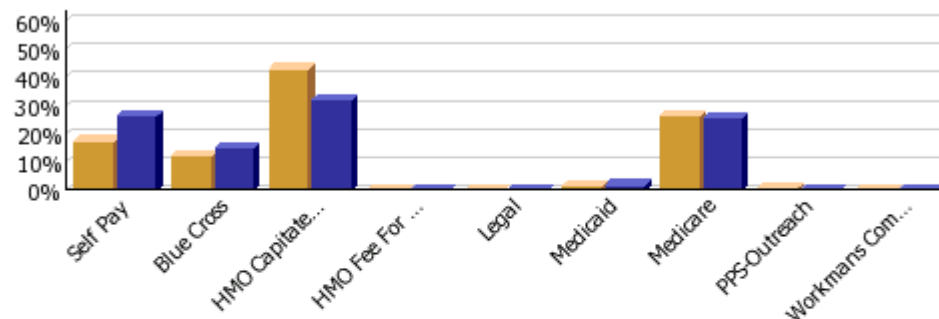
<p><b>Controlled Group</b> <span style="color: #C47A3B;">■</span></p> <p>Population: <b>All SETMA</b></p> <p>Time Basis: <b>Prior 12 Months</b></p>	<p><b>Selected Group</b> <span style="color: #003366;">■</span></p> <p>Practice: <b>SETMA 1, SETMA 2, SETMA West</b></p> <p>Provider: <b>None</b></p> <p>Controlled or Not Controlled: <b>Not Controlled</b></p>
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**Ethnicity**



	African American	Ethnicity Asian	Caucasian	Hispanic	Other/None
Controlled	34.6%	0.1%	59.3%	3.4%	2.6%
Selected	34.9%	0.8%	58.3%	3.4%	2.7%

**Financial Class**



	Self Pay	Blue Cross	HMO Capitated	HMO Fee For Service	Legal	Medicaid	Medicare	PPS-Outreach	Workmans Comp
Controlled	17.3%	11.8%	43.0%	0.0%	0.0%	1.2%	26.2%	0.5%	0.0%
Selected	26.0%	14.7%	32.0%	0.0%	0.0%	1.6%	25.4%	0.1%	0.0%

# Analyzing Provider Performance

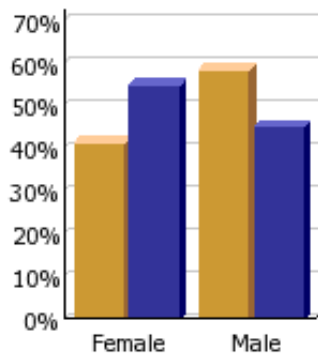


## Chronic Hyperlipidemia - Measures Comparison (Most Recent 12 Months)

Controlled Group Time Basis: **Prior 12 Months**  
 Controlled Group Constrained to: **All SETMA**  
 Practice: **SETMA 1, SETMA 2, SETMA West**  
 Provider: **None**

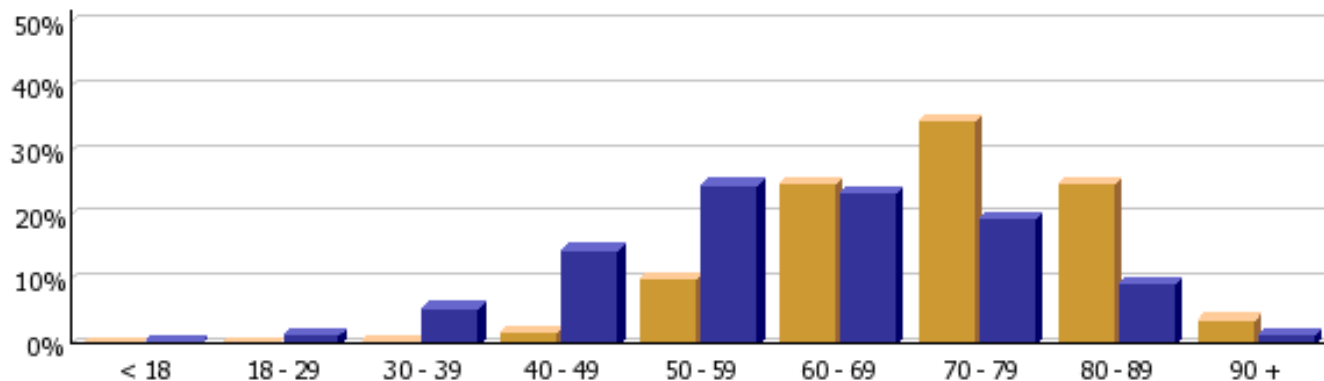
Controlled Group  
 Selected Group

**Gender**



	Female	Male
Controlled	41.4%	58.5%
Selected	55.0%	45.0%

**Age**



	< 18	18 - 29	30 - 39	40 - 49	50 - 59	60 - 69	70 - 79	80 - 89	90 +
Controlled	0.0%	0.0%	0.2%	1.8%	10.0%	24.8%	34.7%	24.9%	3.7%
Selected	0.2%	1.4%	5.5%	14.5%	24.7%	23.4%	19.5%	9.3%	1.4%

# Analyzing Provider Performance



Raw data can be misleading. For example, with diabetes care, a provider may have many patients with very high HgbA<sub>1c</sub>s and the same number with equally low HgbA<sub>1c</sub>s which would produce a misleadingly good average. As a result, SETMA also measures the:

- Mean
- Median
- Mode
- Standard Deviation

# Analyzing Provider Performance



SETMA's average HgbA<sub>1c</sub> has been steadily improving for the last 10 years. Yet, our standard deviation calculations revealed that a subset of our patients were not being treated successfully and were being left behind.

By analyzing the standard deviation of our HgbA<sub>1c</sub> we have been able to address the patients whose values fall far from the average of the rest of the clinic.



# Public Reporting of Performance



One of the most insidious problems in healthcare delivery is reported in the medical literature as “treatment inertia.” This is caused by the natural inclination of human beings to resist change. As a result, when a patient’s care is not to goal, often no change in treatment is made.

To help overcome this “treatment inertia,” SETMA publishes all of our provider auditing (both the good and the bad) as a means to increase the level of discomfort in the healthcare provider and encourage performance improvement.

# Public Reporting of Performance



## NQF Diabetes Measures



### NQF - Diabetes Measures

E & M Codes: Clinic Only  
Encounter Date(s): Jan 1, 2010 through Jul 16, 2010

Location	Provider	Dilated Eye within 12 Months	Micral Strip within 12 Months	Foot Exam within 12 Months
SETMA 1	Aziz	48.9%	64.3%	61.5%
	Duncan	55.9%	44.9%	79.1%
	Groff	56.2%	53.5%	81.9%
	Henderson	58.3%	65.4%	83.8%
	Murphy	35.5%	67.9%	86.1%
	Sims	46.5%	50.7%	79.9%
	Thomas	41.3%	49.6%	69.3%
<b>SETMA 1 Totals:</b>		<b>46.9%</b>	<b>58.9%</b>	<b>77.2%</b>
SETMA 2	Ahmed	68.3%	38.1%	98.2%
	Anthony	67.4%	88.3%	97.5%
	Anwar	76.7%	84.2%	90.4%
	Cricchio	66.3%	81.9%	75.5%
	Holly	77.6%	89.1%	90.5%
	Leifeste	72.7%	84.5%	78.6%
	Wheeler	55.6%	76.3%	84.6%
<b>SETMA 2 Totals:</b>		<b>69.2%</b>	<b>64.8%</b>	<b>91.1%</b>
SETMA West	Curry	50.7%	62.2%	85.1%
	Deiparine	52.9%	46.6%	89.9%
	Halbert	47.9%	29.3%	59.6%
	Horn	42.9%	63.6%	96.4%
	Satterwhite	67.0%	81.2%	72.1%
	Vardiman	43.1%	35.4%	72.3%
	Young	48.7%	44.0%	84.1%
<b>SETMA West Totals:</b>		<b>49.9%</b>	<b>50.3%</b>	<b>78.9%</b>
<b>SETMA Totals:</b>		<b>58.8%</b>	<b>59.8%</b>	<b>84.6%</b>

# Public Reporting of Performance



## NQF Diabetes Measures



### NQF - Diabetes Measures - Blood Pressure Control

E & M Codes: Clinic Only  
Encounter Date(s): Jan 1, 2010 through Jul 16, 2010

Location	Provider	Blood Pressure on Last Visit			
		< 120 / 70	< 130 / 80	< 140 / 90	> 140 / 90
SETMA 1	Aziz	16.6%	41.6%	64.9%	35.1%
	Duncan	32.3%	77.2%	92.4%	7.6%
	Groff	13.2%	41.0%	64.6%	35.4%
	Henderson	32.9%	67.9%	89.2%	10.8%
	Murphy	27.2%	53.8%	78.8%	21.2%
	Sims	29.9%	52.8%	77.8%	22.2%
	Thomas	11.0%	57.5%	83.1%	16.9%
<b>SETMA 1 Totals:</b>		23.6%	56.0%	78.8%	21.2%
SETMA 2	Ahmed	29.3%	62.9%	90.3%	9.7%
	Anthony	20.6%	56.0%	78.6%	21.4%
	Anwar	16.8%	76.3%	91.9%	8.1%
	Cricchio	31.8%	72.7%	92.5%	7.5%
	Holly	23.8%	68.0%	93.2%	6.8%
	Leifeste	24.1%	61.0%	85.0%	14.1%
	Wheeler	22.6%	58.3%	85.0%	15.0%
<b>SETMA 2 Totals:</b>		25.5%	64.7%	88.7%	11.3%
SETMA West	Curry	22.9%	54.2%	79.6%	20.4%
	Deiparine	21.6%	55.8%	76.4%	23.6%
	Halbert	16.9%	43.7%	69.0%	31.0%
	Horn	18.8%	65.3%	92.2%	7.8%
	Satterwhite	8.6%	37.1%	61.4%	38.6%
	Vardiman	12.3%	26.2%	55.4%	44.6%
	Young	7.3%	33.6%	70.3%	29.7%
<b>SETMA West Totals:</b>		16.2%	48.0%	74.7%	25.3%
<b>SETMA Totals:</b>		22.8%	58.4%	82.8%	17.2%

# Public Reporting of Performance



## NCQA Diabetes Recognition



### NCQA Diabetes Measures

Encounter Date(s): January 1, 2010 to July 16, 2010

Location	Provider	Encounters	HgbA1c > 9.0	HgbA1c < 8.0	HgbA1c < 7.0	BP > 140/90	BP < 130/80	Eye Exam	Smoking Cessation	LDL >= 130	LDL < 100	Nephropathy	Foot Exam
SETMA 1	Aziz	505	10.3%	82.2%	65.1%	37.4%	38.8%	47.5%	57.5%	11.5%	67.7%	67.3%	60.4%
	Duncan	366	8.7%	79.5%	63.4%	9.8%	77.0%	58.2%	66.1%	13.1%	66.1%	51.6%	80.6%
	Henderson	330	13.0%	78.8%	58.5%	11.5%	69.7%	57.6%	77.6%	16.4%	67.9%	70.0%	87.3%
	Murphy	749	7.5%	80.9%	65.6%	20.3%	56.6%	37.5%	41.7%	9.6%	72.2%	72.0%	85.0%
	Sims	223	12.1%	74.9%	58.3%	23.8%	49.8%	46.2%	73.1%	15.7%	62.3%	53.8%	76.7%
	Thomas	353	12.5%	67.4%	49.9%	15.9%	57.8%	43.9%	64.0%	15.6%	50.7%	51.6%	70.8%
SETMA 2	Ahmed	1,937	19.1%	62.4%	38.9%	10.1%	61.8%	67.3%	36.5%	11.4%	66.6%	40.7%	98.1%
	Anthony	549	11.8%	80.0%	63.0%	22.0%	55.2%	65.2%	51.6%	14.6%	62.8%	88.3%	97.4%
	Anwar	811	6.4%	82.0%	57.8%	7.5%	77.4%	77.8%	52.9%	12.6%	61.9%	82.4%	90.0%
	Cricchio	468	10.5%	79.9%	63.2%	8.3%	72.9%	66.7%	50.6%	16.5%	61.5%	83.5%	75.4%
	Holly	232	11.2%	77.6%	62.9%	7.8%	68.1%	75.0%	59.1%	11.6%	60.3%	89.7%	90.5%
	Leifeste	554	10.5%	76.7%	61.6%	15.2%	61.0%	71.8%	60.6%	11.6%	62.5%	85.0%	79.1%
	Wheeler	333	9.6%	80.8%	60.1%	18.0%	54.1%	56.2%	66.7%	16.8%	58.9%	74.2%	86.2%
SETMA West	Curry	271	10.7%	67.9%	50.9%	19.9%	55.7%	56.5%	54.2%	10.0%	63.5%	67.5%	86.7%
	Deiparine	256	8.2%	50.0%	37.9%	24.2%	55.1%	54.3%	80.0%	8.2%	42.6%	47.3%	87.9%
	Halbert	633	10.9%	72.7%	56.4%	31.1%	44.4%	49.0%	28.6%	16.6%	54.0%	34.1%	61.9%
	Horn	456	6.6%	76.1%	58.1%	7.2%	63.6%	44.3%	72.2%	14.7%	51.5%	64.5%	95.4%
	Satterwhite	229	12.7%	66.8%	47.2%	37.6%	38.9%	65.1%	75.0%	13.1%	48.9%	77.3%	70.3%

# Quality Assessment & Performance Improvement



**Quality Assessment and Performance Improvement (QAPI)** is SETMA's roadmap for the future. With data in hand, we can begin to use the outcomes to design quality initiatives for our future.

We can analyze our data to identify disparities in care between

- Ethnicities
- Socio-Economic Groups
- Age Groups
- Genders

# Quality Assessment & Performance Improvement



SETMA's Model of Care along with Business Intelligence Software -- this pairing of medicine and technology -- can transform the delivery of healthcare and is worthy of being adopted by others.

# Quality Assessment & Performance Improvement



By expanding SETMA's *Business Intelligence Project*, we are also designing a quality improvement initiative for the elimination of preventable readmissions to the hospital.

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Please visit us at [www.jameshollymd.com](http://www.jameshollymd.com) where you will find all of our public reporting, electronic patient management and medical

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Letters

In The News

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NextMD

["Healthcare improvement will result from transformation, not reformation. Reform comes from external pressure; transformation comes from internalized values and energy."](#)

(James L. Holly, MD, CEO, SETMA, LLP)

**SouthEast Texas Medical Associates, LLP** is a multi-specialty clinic located in Beaumont, Texas. SETMA has three clinical locations which are connected with a secure electronic medical record (EMR) system to store and access our patients' records. Our patients' records are also available to our providers at area hospitals so that during your in-patient care our team can make accurate decisions based on all of your historical data.

SETMA also operates a clinical laboratory, mobile x-ray services, physical therapy department, as well as a number of [Special Clinics](#). SETMA is continually developing new methods and technologies for insuring that all patients are given state-of-the-art outstanding care. SETMA's growing provider base includes [Pediatrics](#), Cardiology, Neurology, Endocrinology, [Ophthalmology](#), [Internal Medicine](#), [Nurse Practitioners](#) and [Family Practice](#). SETMA is proud of our providers' commitment to [team work](#) and [excellence](#). SETMA's Diabetes Center of Excellence continues to grow and improve the quality of care patients with diabetes receive from SETMA.

SETMA continues to expand its services to meet the growing needs of our patients and community.



## Healthcare Where Your Health is the Only Care

About Us ▾ Letters In The News Providers ▾ Your Life Your Health ▾ Patients ▾ Special Services

Electronic Patient Management Tools ▾ Public Reporting ▾ Medical Home ▾ NCQA PC-MH Application ▾ NextMD

ICD-9 Coding >

Suites of Templates >

Disease Management Tools >

Hospital Based Tools >

Preventive Health Tools >

Nursing Home >

Specialized Tools >

Electronic Tickler File >

HCC & RxHCC Risk >

Chronic Conditions Tutorial

Association of Medication and Diagnosis

Framingham Cardiovascular Risk >

Medication Module

Renal Failure >

### it Tools

ended to make available to our colleagues and medical community information about the quality of care we provide our patients. The first document is a discussion of the philosophy of EMR and which directed us to the concept of electronic patient management. (Click [Here](#) to view the document.) What we have done has been founded upon the work of Peter Senge at MIT and which was presented at the 1998 National Conference on Electronic Patient Management.

Our website, is a further step in one of SETMA's goals. It is not intended to be pretentious. We began nine years ago when a very good friend of SETMA asked the question, "What do you think of the future of healthcare?" I said, "I have never said this out loud, but I want to change how healthcare is delivered in the future. I believe in the possibility of that becoming a reality but this is the motive behind our giving unfettered access to our tools."

Our tools are not an EMR platform. In order to make the tools work as a plug-and-play function, it would be necessary to have an EMR platform that, there are no fees required to download, to study and to learn from the tools which are available.

"Electronic Patient Management" come from? In May, 1999, SETMA published a paper entitled, "[Medical Practice of Medicine With Electronic Patient Records \(EMR\)](#)". That article is still on our website.

# The Future



The future of quality metrics and the auditing of provider performance are constantly evolving. SETMA's BI Project allows us to both participate in the future and to define it; and, ultimately to pay attention to the things that matter and the things that will result in improved health for all of our patients.