

# Texas HIV Coalition Meeting Anatomy of a Public Health Journey

May 3, 2013  
Austin, Texas

James L. Holly, MD  
CEO SETMA, LLP  
[www.setma.com](http://www.setma.com)





# Healthcare Provider Workflow

How many tasks can you get a healthcare provider to complete at each patient encounter?

The answer depends upon:

1. How important is the task or its result?
2. How much time does it take to complete?
3. How much energy does it take?



# Healthcare Provider Workflow

- If the task is very important and of great benefit to the patient and to the provider, and
- If the task takes very little time, and
- If the task takes very little energy, it is possible to get a provider to do a number of tasks consistently.

Illustration: Framingham Risk Scores

**The task is very important to the provider and patient but how much energy and how much time does it take?**

# Framingham Risk Scores – “What If Scenario”

## Framingham Heart Study Risk Calculators

Return

Last Updated/Reviewed 01/28/2011

### General Cardiovascular Disease, 10-Year Risk

Total Points 11

Total Risk 7.3 %

Relative Heart Age 64 years

Real Heart Age 66 years

#### WHAT IF?

All Elements To Goal	9	5.3	55
Overall 20% Improvement	9	5.3	55
Blood Pressure To Goal	11	7.3	64
Lipids To Goal	9	5.3	55
Smoking Cessation (if applicable)	0	N/A	N/A

### Global Cardiovascular Risk Score

Total Points 3.4

A score above 4 indicates increased risk of a cardiovascular event.

#### WHAT IF?

All Elements To Goal	0.5
Overall 20% Improvement	0.5
Blood Pressure To Goal	3.0
Lipids To Goal	1.4
HgbA1c To Goal	0.0
Smoking Cessation (if applicable)	0.0



# May, 1999 -- SETMA's EMR Development Principles

1. Pursue Electronic Patient Management rather than Electronic Patient Records
2. Bring to bear upon every encounter what is known rather than what a particular provider knows.
3. Make it easier to do it right than not to do it at all.
4. Continually challenge providers to improve their performance.
5. Infuse new knowledge and decision-making tools throughout an organization instantly.
6. Establish and promote continuity of care with a common data base and with personalized patient education, information and plans of care.



# May, 1999 -- SETMA's EMR Development Principles

7. Enlist patients as partners and collaborators in their own health improvement.
8. Evaluate the care of patients and populations of patients longitudinally.
9. Audit provider performance based on the Consortium for Physician Performance Improvement Data Sets.
10. Create multiple disease-management tools, integrated in an intuitive and interchangeable fashion, giving patients the benefit of expert knowledge about specific conditions while getting the benefit of a global approach to their health.



# A New Task for SETMA's Providers

Texas Department of State Health Services  
HIV/ASTD Prevention and Care Branch

In Collaboration with the  
Center for Disease Control  
Promoting Annual HIV  
Screening for ages 13-64

March 15, 2011 Should SETMA participate?



# SETMA's Public Health Journey

- On March 15, 2011, Mrs. Tam Kiehnoff, Medical Case Management Coordinator, Triangle AIDS Network, asked SETMA's CEO to meet with Mrs. Isabel Clark, Texas Department of State Health Services, Program Specialist V, HIV/ASTD Prevention and Care Branch.
- That meeting took place on March 16<sup>th</sup>. On the same day, SETMA contacted Baptist Hospital of Southeast Texas about participating.



# SETMA's Public Health Journey

- March 23rd, SETMA announced the deployment of a tool for the routine screening of HIV.
- SETMA's in-house reference laboratory was not performing HIV testing at this time.
- On July 1, the day that SETMA launched the HIV Screening Public Health Initiative, SETMA's laboratory began performing HIV testing in house.
- The following is SETMA's Clinical Decision Support for this initiative.

# HIV Screening Tool in EMR



Patient    
 Home Phone   
 Work Phone   
 Cell Phone

Sex  Age   
 Date of Birth

Patient's Code Status

**Patient has one or more alerts!**

[Click Here to View Alerts](#)

**Pre-Vist/Preventive Screening**

[Bridges to Excellence View](#)

[Intensive Behavioral Therapy Transtheoretical Model](#)

**Preventive Care**

- [SETMA's LESS Initiative](#)
- Last Updated
- [Preventing Diabetes](#)
- Last Updated
- [Preventing Hypertension](#)
- [Smoking Cessation](#)

**Care Coordination Referral**

- [PC-MH Coordination Review](#)
- Needs Attention!!**
- [HEDIS](#) [NQF](#) [PQRS](#) [ACO](#)
- [Elderly Medication Summary](#)
- [STARS Program Measures](#)

**Exercise**

- [Exercise](#)
- [CHF Exercise](#)
- [Diabetic Exercise](#)

**Patient's Pharmacy**

Phone   
 Fax

- 
- 
- 
- 

**Template Suites**

- [Master GP](#)
- [Pediatrics](#)
- [Nursing Home](#)
- [Ophthalmology](#)
- [Physical Therapy](#)
- [Podiatry](#)
- [Rheumatology](#)

**Hospital Care**

- [Hospital Care Summary](#)
- [Daily Progress Note](#)
- [Admission Orders](#)

**Pending Referrals**

Status	Priority	Referral	Referring Provider
Completed	Routine	SETMA Ophthalmology	Non Setma
Completed	Routine	SETMA Ophthalmology	Holly
Completed	Routine	Mammogram	Halbert
Completed	Routine	Dermatology	Deiparine
Completed	Routine	Echocardiogram	Deiparine

**Disease Management**

- [Diabetes](#)
- [Hypertension](#)
- [Lipids](#)
- [Acute Coronary Syn](#)
- [Angina](#)
- [Asthma](#)
- [Cardiometabolic Risk Syn](#)
- [CHF](#)
- [Diabetes Education](#)
- [Headaches](#)
- [Renal Failure](#)
- [Weight Management](#)

**Last Updated**

- 
- 
- 
- 
- 
- 
- 
- 
- 
- 
- 
- 

**Special Functions**

- [Lab Present](#)
- [Lab Future](#)
- [Lab Results](#)
- [Hydration](#)
- [Nutrition](#)
- [Guidelines](#)
- [Pain Management](#)
- [Immunizations](#)
- [Reportable Conditions](#)

**Information**

- [Charge Posting Tutorial](#)
- [Drug Interactions](#)
- [E&M Coding Recommendations](#)
- [Infusion Flowsheet](#)
- [Insulin Infusion](#)

**Chart Note**

- 
- 
- 
- 
- 
-



# HIV Screening Tool in EMR

- When the button outlined in green above is deployed, it launches SETMA's Pre Visit Screening and Prevention template.
- This is where every visit at SETMA begins. The legend is:
  1. Any item in red applies to the patient and has not been done.
  2. Any item in black applies to the patient and has been done.
  3. Any item in grey does not apply to the patient.

# HIV Screening Tool in EMR

### 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?  **No**  
 Date of Last

Has the patient ever had a pneumonias shot? (Age>50)   
 Date of Last

Does the patient have an elevated (>100 mg/dL) LDL?  **No**  
 Last

Has the patient been screened at least once for HIV? (Age 13-64)  **Yes**  
 Date of Last

Testing not required if patient refused, tested elsewhere or if diagnosis confirmed.  
 Check If Patient Refuses Testing  
 Check If Patient Tested Elsewhere

**Elderly Patients** (Patients >65)

Has the patient had an occult blood test within the last year? (Patients >50)   
 Date of Last

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

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

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

Has the patient had a glaucoma screen (dilated exam) within the last year?   
 Date of Last  *Add Referral At Right*

Does the patient have advanced directives on file or have they been discussed with the patient?   
 Discussed?  Completed?

Is the patient on one or more medications which are considered high risk in the elderly?

**Diabetes Screening**   
 Is Diabetes screening appropriate for this patient?

**Pre-Diabetes Patients**

If pre-diabetic, has the patient had a HgbA1c test within the last year?   
 Date of Last

**Diabetes Patients**

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

Has the patient had a dilated eye exam within the last year?  **No**  
 Date of Last  *Add Referral Below*

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

Has the patient had screening for nephropathy within the last year?  **No**  
 Date of Last

Has the patient had a urinalysis within the last year?  **No**  
 Date of Last

Has the patient ever been referred to DSME?  **Yes**      Has the patient been referred to DSME within the last two years?  **Yes**  
*Add Referrals Below*

**Female Patients**

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

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

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

**Male Patients**

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

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

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

Referral	Status	Referring
SETMA Diabetes Education	In Progress	Holly

# HIV Screening Tool in EMR

## Pre-Visit/Preventive Screening

**General Measures (Patients >18)**

Has the patient had a tetanus vaccine within the last 10 years?

Date of Last

Has the patient had a flu vaccine within the last year?

Date of Last

Has the patient ever had a pneumonia shot? (Age>50)

Date of Last

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

Last

Has the patient been screened at least once for HIV? (Age 13-64)

Date of Last

Testing not required if patient refused, tested elsewhere or no diagnosis confirmed.

Check If Patient Refuses Testing

Check If Patient Tested Elsewhere

**Elderly Patients (Patients >65)**

Has the patient had an occult blood test within the last year? (Patients >50)

Date of Last

Has the patient had a fall risk assessment completed within the last year?

Date of Last

Has the patient had a functional assessment within the last year?

Date of Last

Has the patient had a pain screening within the last year?

Date of Last

Has the patient had a glaucoma screen (dilated exam) within the last year?

Date of Last  Add Referral At Right

Does the patient have advanced directives on file or have they been discussed with the patient?

Discussed?  Completed?

Is the patient on one or more medications which are considered high risk in the elderly?

**Diabetes Screening**

Is Diabetes screening appropriate for this patient?

**Pre-Diabetes Patients**

If pre-diabetic, has the patient had a HgbA1c test within the last year?

Date of Last

**Diabetes 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  Add Referral Below

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

Has the patient had a urinalysis within the last year?

Date of Last

Has the patient ever been referred to DSME?

Has the patient been referred to DSME within the last two years?

Add Referrals Below

**Female Patients**

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

Date of Last  Add Referral Below

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

Date of Last  Add Referral Below

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

Date of Last  Add Referral Below

**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  Add Referral Below

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

Referral	Status	Referring
SETMA Diabetes Education	In Progress	Holly

◀  ▶



# HIV Screening Tool in EMR

On the template above, when the button outlined in green is clicked, the following happens:

1. The HIV test is ordered.
2. The order is sent to the chart, billing and the lab.
3. Determines whether the patient's insurance will pay for test, or if bill goes to state grant (this was prepared when it was still thought that SETMA would participate in the CDC program).
4. Release is automatically populated with patient information.
5. The consent form is printed.



# HIV Screening Tool in EMR

- Outlined in green below is a function whereby the provider can denote that the patient refuses HIV testing, or that the patient has been tested in the past.
- When the patient has previously been tested, the patient's report of the result is recorded and an effort is made to obtain the documentation of the laboratory result.

# HIV Screening Tool in EMR

## Pre-Visit/Preventive Screening

**General Measures (Patients >18)**

Has the patient had a tetanus vaccine within the last 10 years?

Date of Last

Has the patient had a flu vaccine within the last year?

Date of Last

Has the patient ever had a pneumonis shot? (Age>50)

Date of Last

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

Last

Has the patient been screened at least once for HIV? (Age 13-64)

Date of Last

Testing not required if patient refused, tested elsewhere or if diagnosis confirmed.

Check If Patient Refuses Testing  
 Check If Patient Tested Elsewhere

**Elderly Patients (Patients >65)**

Has the patient had an occult blood test within the last year? (Patients >50)

Date of Last

Has the patient had a fall risk assessment completed within the last year?

Date of Last

Has the patient had a functional assessment within the last year?

Date of Last

Has the patient had a pain screening within the last year?

Date of Last

Has the patient had a glaucoma screen (dilated exam) within the last year?

Date of Last  *Add Referral At Right*

Does the patient have advanced directives on file or have they been discussed with the patient?

Discussed?  Completed?

Is the patient on one or more medications which are considered high risk in the elderly?

**Diabetes Screening**

Is Diabetes screening appropriate for this patient?

**Pre-Diabetes Patients**

If pre-diabetic, has the patient had a HgbA1c test within the last year?

Date of Last

**Diabetes 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  *Add Referral Below*

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

Has the patient had a urinalysis within the last year?

Date of Last

Has the patient ever been referred to DSME?

Has the patient been referred to DSME within the last two years?

*Add Referrals Below*

**Female Patients**

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

Date of Last  *Add Referral Below*

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

Date of Last  *Add Referral Below*

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

Date of Last  *Add Referral Below*

**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  *Add Referral Below*

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

Referral	Status	Referring
SETMA Diabetes Education	In Progress	Holly

◀ ▶



# HIV Screening Tool in EMR

- SETMA uses the same EMR and database in the hospital and clinic, and one of our major hospitals participates in the screening program, therefore, we capture HIV testing done outside of SETMA.
- This eliminates redundant testing and increases provider compliance with the screening protocol.
- The following slides show the method by which hospital-HIV testing is captured so that it interacts actively with SETMA's entire data base, i.e., HIV test done at Baptist Hospital will be captured in SETMA's audit of performance.





# HIV Screening Tool in EMR

- In September, 2010, SETMA changed the name of the “discharge summary” to “Hospital Care Summary and Post Hospital Plan of Care and Treatment Plan.” In the past 3 years, SETMA has discharged over 14,000 patients from the hospital. 98.7% of the time the Summary and Plan has been received by the patient prior to leaving the hospital.
- In the template above and those to follow, we demonstrate how test results are captured in SETMA’s EMR from the hospital for continuity of care including HIV Screening.

# HIV Screening Tool in EMR

**Discharge Summary Lab Entry**

**Admission Labs**

Option 1 -- Select Existing Labs

**Option 2 -- Enter New Labs** (highlighted in green)

   2. Enter Results in Lab Module    3. Edit Date   

**Discharge Labs**

Option 1 -- Select Existing Labs

**Option 2 -- Enter New Labs** (highlighted in green)

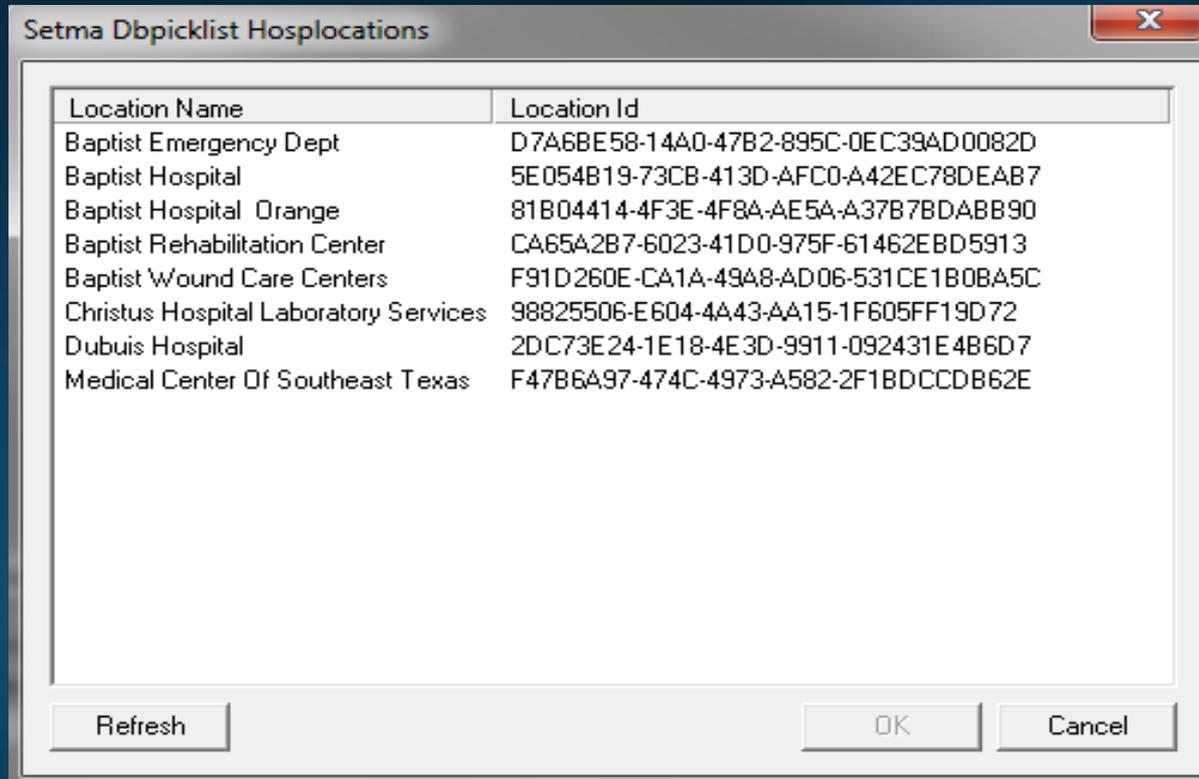
   2. Enter Results in Lab Module    3. Edit Date   

**Additional Labs**

<b>CKMB Set 1</b> <input type="button" value="1. Create Order"/> 2. Enter Results in Lab Module 3. Enter Date/Time <input type="text" value="//"/> <input type="text"/>	<b>CKMB Set 2</b> <input type="button" value="1. Create Order"/> 2. Enter Results in Lab Module 3. Enter Date/Time <input type="text" value="//"/> <input type="text"/>	<b>CKMB Set 3</b> <input type="button" value="1. Create Order"/> 2. Enter Results in Lab Module 3. Enter Date/Time <input type="text" value="//"/> <input type="text"/>
---	---	---

\*\* Times must be entered in military time. (e.g. 22:45) \*\*  
\*\* You must enter the colon between the hours and minutes. \*\*

# HIV Screening Tool in EMR



Location Name	Location Id
Baptist Emergency Dept	D7A6BE58-14A0-47B2-895C-0EC39AD0082D
Baptist Hospital	5E054B19-73CB-413D-AFC0-A42EC78DEAB7
Baptist Hospital Orange	81B04414-4F3E-4F8A-AE5A-A37B7BDABB90
Baptist Rehabilitation Center	CA65A2B7-6023-41D0-975F-61462EBD5913
Baptist Wound Care Centers	F91D260E-CA1A-49A8-AD06-531CE1B0BA5C
Christus Hospital Laboratory Services	98825506-E604-4A43-AA15-1F605FF19D72
Dubuis Hospital	2DC73E24-1E18-4E3D-9911-092431E4B6D7
Medical Center Of Southeast Texas	F47B6A97-474C-4973-A582-2F1BDCCDB62E

# HIV Screening Tool in EMR

Results (new results entry)

New Result Refresh Clear Delete Save Result Status Final

Comp. Key	Component	Result	Unit	Flag	Range
FOLATE	FOLATE		ng/mL		
FERRITIN	FERRITIN		ng/mL		
IRON	IRON		ug/dL		
CA199	CA199				
CEA	CEA				
HIV1O2AbQI	HIV1O2AbQI	NEGATIVE			
AMYLASE	AMYLASE				
LIPASE	LIPASE				
OB	OB				
AMMONIA	AMMONIA				



# Texas State Reportable Conditions

- Simultaneously, with the development and deployment of the HIV Clinical Decision Support tool, SETMA developed a tool for enhancing our compliance with Texas State Reportable Conditions.
- Two of those reportable conditions are HIV and AIDS.
- This tool is the link between HIV Screening and provider responsibility to report confirmed positive outcomes to the Texas Department of State Health Services.



# Texas State Reportable Conditions

- April 30, 2011, Dr. Edward J. Sherwood, Professor of Medicine at the Texas A&M School of Medicine delivered a CME lectured entitled, “The Ethics of Infectious Disease.”\* He distributed a publication of the Texas Department of State Health Services which detailed 78 reportable conditions. The list included HIV and AIDS.
- Rather than ask providers to memorize 78 conditions, SETMA designed a Clinical Decision Support tool to do this reporting electronically.

\*This lecture was the best CME lecture I have ever heard.



# Texas State Reportable Conditions

SETMA's Information Technology department was charged with designing a functionality which would:

1. Display the reportable conditions for provider review.
2. Detail the time frame for reporting each disease.
3. Automatically, denote on the reportable conditions template the diagnosis which is identified by the provider when it is documented on the assessment template in the EMR.
4. Simultaneously, with number three, send an e-mail to SETMA's Care Coordination Department which would report the condition to the State.
5. The fact that the reporting requirement has been completed will be reported to the provider and will be stored in the EMR in a searchable fashion.

# Texas State Reportable Conditions

[PDM](#)
[NURSE](#)
[HISTORIES](#)
[HEALTH](#)
[QUIZES](#)
[HPI](#)
[ROS](#)
[P.E.](#)
[X-RAY](#)
[ASSESS](#)
[PLAN](#)
[PROCS](#)

**Acute Assessments** [Re-Order](#)

Assessment	Status	HCC Risk Cat
Measles W/o Complications	Acute	

[Detailed Comments](#)

[Diagnosis Categories](#)

[Dx Category Abbrevs](#)

[Abbrevs in Descriptions](#)

**Chief Complaints**


[Additional Acute Assessments](#)

**Chronic Conditions** [Re-Order](#)

Condition	Status	HCC Risk Cat
Renal Stage I Chron Disease		HCC HPI - 1,2
CHF Unspecified		HCC
Hypothyroidism Unspecified		RxHCC HPI - 3,4
RA, Rheumatoid Arthritis		HCC
Fibromyalgia Fibrositis		RxHCC HPI - 5,6
DM II Renal Manifestat Uncontr		HCC
Hyperten Benign Essential		RxHCC HPI - 7,8
Abd Pain Rebound Tender Perium		
Elev Troponin Renin		HPI - 9,10
Abd Pelv Mass Swell Lump LUQ		
HDL Deficiency Familial		RxHCC HPI -11,12
Joint Calcification Hand		RxHCC
Lipid Hyperlipidemia NOS		RxHCC HPI - 13...
DM Pre-Diab Or Hyperglycemia		
		HPI - 15

**Assessments into Problem List**

**General Comments**

**Chronic Condition Comments**

**Master GP**

Nursing

Histories

Health

Questionnaires

HPI Chief

System Review

Physical Exam

Radiology

Plan

Procedures

**Chart Note**



# Texas State Reportable Conditions

- As seen above, outlined in green, the provider completes the assessment of the patient.
- When that assessment documents a reportable condition, including HIV or AIDS, the provider's responsibility for complying with Texas Reportable Conditions is done.
- The following template shows the diagnoses of "measles" documented on SETMA's electronic version of the Texas State Department of Health Services Reporting Guidelines.

# Texas State Reportable Conditions

## Texas Department of State Health Services Reporting Guidelines

The following conditions must be report to the Texas Department of State Health Services within the timeframe specified. Reports should be made by fax to 512-458-7616. [Click here to download the form.](#)

ANY outbreak, exotic disease or unusual group expression of disease that may be of public health concern should be reported by the most expeditious means possible.

### The following must be reported IMMEDIATELY.

- |  |  |
|--|--|
| <input type="checkbox"/> Anthrax                         | <input type="checkbox"/> Polio                                     |
| <input type="checkbox"/> Botulism, Foodborne             | <input type="checkbox"/> Rabies                                    |
| <input type="checkbox"/> Controlled Substance Overdose   | <input type="checkbox"/> SARS                                      |
| <input type="checkbox"/> Diphtheria                      | <input type="checkbox"/> Smallpox                                  |
| <input type="checkbox"/> Influenza, Type B               | <input type="checkbox"/> VISA and VRSA                             |
| <input type="checkbox"/> Lead, Any Level, Child or Adult | <input type="checkbox"/> Tularemia                                 |
| <input checked="" type="checkbox"/> Measles (Rubeola)    | <input type="checkbox"/> Viral Hemorrhagic Fever (Including Ebola) |
| <input type="checkbox"/> Meningococcal Invasive          | <input type="checkbox"/> Yellow Fever                              |
| <input type="checkbox"/> Plague                          |  |

These items should be reported immediately by phone to 1-800-252-8239!

### The following must be reporting within ONE WORKING DAY.

- Brucellosis
- Hepatitis A, Acute
- Hepatitis B, Perinatal
- Influenza-Associated Pediatric Mortality
- Pertussis
- Q Fever
- Rubella, Including Congenital
- Syphilis, Primary and Secondary
- Tuberculosis
- Vibrio Infection, Including Cholera

### The following must be reported within ONE WEEK.

- |  |  |   |
|--|--|---|
| <input type="checkbox"/> AIDS                            | <input type="checkbox"/> Escherichia Coli                        | <input type="checkbox"/> Pesticide Poisoning                                    |
| <input type="checkbox"/> Amebiasis                       | <input type="checkbox"/> Gonorrhea                               | <input type="checkbox"/> Relapsing Fever  |
| <input type="checkbox"/> Arbovirus                       | <input type="checkbox"/> Hansen's Disease (Leprosy)              | <input type="checkbox"/> Salmonellosis, Including Typhoid Fever                 |
| <input type="checkbox"/> Asbestosis                      | <input type="checkbox"/> Hantavirus                              | <input type="checkbox"/> Shigellosis  |
| <input type="checkbox"/> Botulism - Infant, Wound, Other | <input type="checkbox"/> Hemolytic Uremic Syndrome (HUS)         | <input type="checkbox"/> Silicosis  |
| <input type="checkbox"/> Campylobacteriosis              | <input type="checkbox"/> Hepatitis B, C, D, E and unspecified    | <input type="checkbox"/> Spotted Fever Group Rickettsioses                      |
| <input type="checkbox"/> Chancroid                       | <input type="checkbox"/> Hepatitis B (Prenatally or at delivery) | <input type="checkbox"/> Streptococcal Disease, Invasive (Group A, B, S Pneumo) |
| <input type="checkbox"/> Chickenpox                      | <input type="checkbox"/> HIV                                     | <input type="checkbox"/> Syphilis   |
| <input type="checkbox"/> Chlamydia                       | <input type="checkbox"/> Legionellosis                           | <input type="checkbox"/> Taenia Solium  |
| <input type="checkbox"/> Creutzfeldt-Jacob Disease       | <input type="checkbox"/> Leishmaniasis                           | <input type="checkbox"/> Tetanus  |
| <input type="checkbox"/> Cryptosporidiosis               | <input type="checkbox"/> Listeriosis                             | <input type="checkbox"/> Trichinosis  |
| <input type="checkbox"/> Cyclosporiasis                  | <input type="checkbox"/> Lyme Disease                            | <input type="checkbox"/> Typhus   |
| <input type="checkbox"/> Cystercercosis                  | <input type="checkbox"/> Malaria                                 | <input type="checkbox"/> West Nile Fever  |
| <input type="checkbox"/> Dengue                          | <input type="checkbox"/> Meningitis                              | <input type="checkbox"/> Yersiniosis  |
| <input type="checkbox"/> Ehrlichiosis                    | <input type="checkbox"/> Mumps                                   |   |
| <input type="checkbox"/> Encephalitis                    |  |   |

### The following must be reported within TEN WORKING DAYS.

- Drowning, Near Drowning
- Spinal Cord Injury
- Traumatic Brain Injury

### The following must be reported within ONE MONTH.

- Contaminated Sharps Injury

OK

Cancel

[Click Here To Document Reporting Details](#)



# Texas State Reportable Conditions

- The checking of “measles” was done automatically when the ICD-9 code (soon to be ICD-10) was selected in the assessment of the patient.
- SETMA’s electronic version of the Texas State Department of Health Services Reporting Guidelines is also an excellent educational tool as the provider can review the reportable-conditions template without a diagnosis.
- **Principle:** What a healthcare provider must remember, i.e., 78 reportable conditions, can often be forgotten; however, when the provider does not have to remember those conditions, they often don’t forget them.



# Texas State Reportable Conditions

- When the button on SETMA's AAA Home template, outlined in green below, is deployed, the Texas State Department of Health Services Reporting Guidelines template appears.
- The template can be used as a review for providers or nurses of what needs to be reported and/or to note that the diagnosed infectious condition, in this case "measles," has been automatically checked as a result of the provider having selected this diagnoses on the assessment template.

# Texas State Reportable Conditions



Patient

Sex  Age

Home Phone

Work Phone

Cell Phone

Date of Birth

Patient's Code Status

[Pre-Vist/Preventive Screening](#)

[Bridges to Excellence View](#)

[Intensive Behavioral Therapy Transtheoretical Model](#)

**Preventive Care**

- [SETMA's LESS Initiative I](#)
- Last Updated
- [Preventing Diabetes I](#)
- Last Updated
- [Preventing Hypertension I](#)
- [Smoking Cessation I](#)
- [Care Coordination Referral](#)
- [PC-MH Coordination Review](#)
- Needs Attention!!**
- [HEDIS](#) [NQF](#) [PQRS](#) [ACO](#)
- [Elderly Medication Summary](#)
- [STARS Program Measures](#)

**Template Suites**

- [Master GP I](#)
- [Pediatrics](#)
- [Nursing Home I](#)
- [Ophthalmology](#)
- [Physical Therapy](#)
- [Podiatry](#)
- [Rheumatology](#)
- Hospital Care**
- [Hospital Care Summary I](#)
- [Daily Progress Note](#)
- [Admission Orders I](#)

**Disease Management**

- [Diabetes I](#)
- [Hypertension I](#)
- [Lipids I](#)
- [Acute Coronary Syn I](#)
- [Angina I](#)
- [Asthma](#)
- [Cardiometabolic Risk Syn I](#)
- [CHF I](#)
- [Diabetes Education](#)
- [Headaches](#)
- [Renal Failure](#)
- [Weight Management I](#)

**Last Updated**

<input type="text" value="03/21/2013"/>
<input type="text" value="03/21/2013"/>
<input type="text" value="03/18/2013"/>
<input type="text" value="//"/>

**Special Functions**

- [Lab Present I](#)
- [Lab Future I](#)
- [Lab Results I](#)
- [Hydration I](#)
- [Nutrition I](#)
- [Guidelines I](#)
- [Pain Management](#)
- [Immunizations](#)
- [Reportable Conditions](#)**
- Information**
- [Charge Posting Tutorial](#)
- [Drug Interactions I](#)
- [E&M Coding Recommendations](#)
- [Infusion Flowsheet](#)
- [Insulin Infusion](#)

**Exercise**

- [Exercise I](#)
- [CHF Exercise I](#)
- [Diabetic Exercise I](#)

**Patient's Pharmacy**

Phone

Fax

**Pending Referrals I**

Status	Priority	Referral	Referring Provider
Completed	Immediate	Mammogram	Anwar
Completed	Routine		Abbas
Completed	Stat	Arterial Blood Gas	Holly
Completed	Routine	Abdullah, Nabeel	Holly
Completed	Routine	Abdullah, Nabeel	Holly
Completed	Routine	Sleep Studies	Abbas

**Chart Note**

- 
- 
- 
- 
- 
-

# Texas State Reportable Conditions

## Texas Department of State Health Services Reporting Guidelines

The following conditions must be report to the Texas Department of State Health Services within the time frame specified. Reports should be made by fax to 512-458-7616. [Click here to download the form.](#)

ANY outbreak, exotic disease or unusual group expression of disease that may be of public health concern should be reported by the most expeditious means possible.

### The following must be reported IMMEDIATELY.

- Anthrax
- Botulism, Foodborne
- Controlled Substance Overdose
- Diphtheria
- Influenza, Type B
- Lead, Any Level, Child or Adult
- Measles (Rubeola)
- Meningococcal, Invasive
- Plague
- Polio
- Rabies
- SARS
- Smallpox
- VISA and VRSA
- Tularemia
- Viral Hemorrhagic Fever (Including Ebola)
- Yellow Fever

These items should be reported immediately by phone to 1-800-252-8239!

### The following must be reporting within ONE WORKING DAY.

- Brucellosis
- Hepatitis A, Acute
- Hepatitis B, Perinatal
- Influenza-Associated Pediatric Mortality
- Pertussis
- Q Fever
- Rubella, Including Congenital
- Syphilis, Primary and Secondary
- Tuberculosis
- Vibrio Infection, Including Cholera

### The following must be reported within ONE WEEK.

- AIDS
- Amebiasis
- Arbovirus
- Asbestosis
- Botulism - Infant, Wound, Other
- Campylobacteriosis
- Chancroid
- Chickenpox
- Chlamydia
- Creutzfeldt-Jacob Disease
- Cryptosporidiosis
- Cyclosporiasis
- Cystercercosis
- Dengue
- Ehrlichiosis
- Encephalitis
- Escherichia Coli
- Gonorrhea
- Hansen's Disease (Leprosy)
- Hantavirus
- Hemolytic Uremic Syndrome (HUS)
- Hepatitis B, C, D, E and unspecified
- Hepatitis B (Prenatally or at delivery)
- HIV
- Legionellosis
- Leishmaniasis
- Listeriosis
- Lyme Disease
- Malaria
- Meningitis
- Mumps
- Pesticide Poisoning
- Relapsing Fever
- Salmonellosis, Including Typhoid Fever
- Shigellosis
- Silicosis
- Spotted Fever Group Rickettsioses
- Streptococcal Disease, Invasive (Group A, B, S Pneumo)
- Syphilis
- Taenia Solium
- Tetanus
- Trichinosis
- Typhus
- West Nile Fever
- Yersiniosis

### The following must be reported within TEN WORKING DAYS.

- Drowning, Near Drowning
- Spinal Cord Injury
- Traumatic Brain Injury

### The following must be reported within ONE MONTH.

- Contaminated Sharps Injury

OK

Cancel

[Click Here To Document Reporting Details](#)



# Texas State Reportable Conditions

To review, when the reportable diagnosis is selected:

- The system automatically checks the diagnosed disease on the Texas Department of State Health Services Reporting Guidelines template where the list of 78 reportable conditions are displayed.
- A message is sent to the Care Coordination Department.
- The message appears in the workflow of the Care Coordination team.
- Once the report to the state is made, a note is added to the patient's chart noting that Health Department notification has been done and the provider is notified of that fact.
- The beauty of this solution is that the provider simply diagnoses a suspected reportable condition and the process is completed without further action by the provider.

# Texas State Reportable Conditions

- This is the Care Coordination telephone alert which is automatically sent to SETMA's Care Coordination Department when the reportable diagnosis is made.

**New Task**

Due Date: 5/10/2011

Priority: High  Completed

Subject: Reportable Condition Present

Description: This patient has one more conditions that must be reported to the Texas Department of Health Services within a timely manner.  
Please open the attached template to review the conditions which are present along with the required timeframe for reporting.

Assigned: Care Coordination;

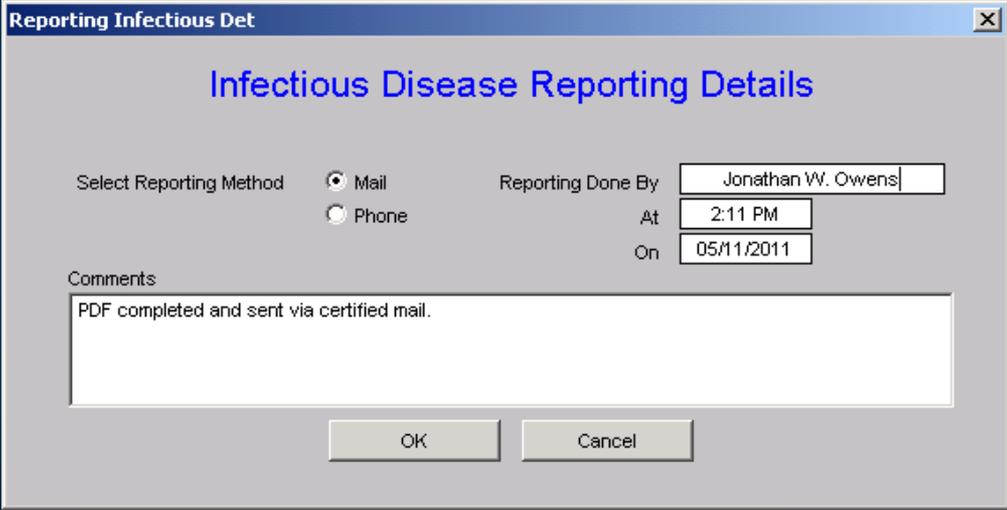
Patient: Test, Greg

Attach: Template AAA Home

Task Categories

# Texas State Reportable Conditions

- When the Care Coordination department reports the infection, this template allows for the documentation of that report and for sending notice of the report to the treating provider.



The screenshot shows a software window titled "Reporting Infectious Det" with a close button (X) in the top right corner. The window contains the following fields and controls:

- Select Reporting Method:** Two radio buttons are present: "Mail" (which is selected) and "Phone".
- Reporting Done By:** A text input field containing "Jonathan W. Owens".
- At:** A time input field containing "2:11 PM".
- On:** A date input field containing "05/11/2011".
- Comments:** A text area containing the text "PDF completed and sent via certified mail."
- Buttons:** "OK" and "Cancel" buttons are located at the bottom of the window.



# Texas State Reportable Conditions

- To print the Department of Health reporting form, SETMA's Care Coordination Department goes to SETMA's electronic version of the Texas Department of State Health Services Reporting Guidelines template and clicks on the link which is outlined in green.
- This deploys a printable version of the Initial Provider Disease Reporting form.

# Texas State Reportable Conditions

## Texas Department of State Health Services Reporting Guidelines

The following conditions must be report to the Texas Department of State Health Services within the time frame specified. Reports should be made by fax to 512-458-7616.

[Click here to download the form.](#)

ANY outbreak, exotic disease or unusual group expression of disease that may be of public health concern should be reported by the most expeditious means possible.

### The following must be reported IMMEDIATELY.

- Anthrax
- Botulism, Foodborne
- Controlled Substance Overdose
- Diphtheria
- Influenza, Type B
- Lead, Any Level, Child or Adult
- Measles (Rubeola)
- Meningococcal, Invasive
- Plague
- Polio
- Rabies
- SARS
- Smallpox
- VISA and VRSA
- Tularemia
- Viral Hemorrhagic Fever (Including Ebola)
- Yellow Fever

These items should be reported immediately by phone to 1-800-252-8239!

### The following must be reporting within ONE WORKING DAY.

- Brucellosis
- Hepatitis A, Acute
- Hepatitis B, Perinatal
- Influenza-Associated Pediatric Mortality
- Pertussis
- Q Fever
- Rubella, Including Congenital
- Syphilis, Primary and Secondary
- Tuberculosis
- Vibrio Infection, Including Cholera

### The following must be reported within ONE WEEK.

- AIDS
- Amebiasis
- Arbovirus
- Asbestosis
- Botulism - Infant, Wound, Other
- Campylobacteriosis
- Chancroid
- Chickenpox
- Chlamydia
- Creutzfeldt-Jacob Disease
- Cryptosporidiosis
- Cyclosporiasis
- Cystercercosis
- Dengue
- Ehrlichiosis
- Encephalitis
- Escherichia Coli
- Gonorrhea
- Hansen's Disease (Leprosy)
- Hantavirus
- Hemolytic Uremic Syndrome (HUS)
- Hepatitis B, C, D, E and unspecified
- Hepatitis B (Prenatally or at delivery)
- HIV
- Legionellosis
- Leishmaniasis
- Listeriosis
- Lyme Disease
- Malaria
- Meningitis
- Mumps
- Pesticide Poisoning
- Relapsing Fever
- Salmonellosis, Including Typhoid Fever
- Shigellosis
- Silicosis
- Spotted Fever Group Rickettsioses
- Streptococcal Disease, Invasive (Group A, B, S Pneumo)
- Syphilis
- Taenia Solium
- Tetanus
- Trichinosis
- Typhus
- West Nile Fever
- Yersiniosis

### The following must be reported within TEN WORKING DAYS.

- Drowning, Near Drowning
- Spinal Cord Injury
- Traumatic Brain Injury

### The following must be reported within ONE MONTH.

- Contaminated Sharps Injury

OK

Cancel

[Click Here To Document Reporting Details](#)

# Texas State Reportable Conditions



## Initial Provider Infectious Disease Report

Form is published at  
<http://www.dshs.state.tx.us/idcu/investigation/conditions/>

### General Instructions

This form may be used to **report suspected cases and cases of notifiable conditions** in Texas, listed with their reporting timeframes on the current *Texas Notifiable Conditions List* available at <http://www.dshs.state.tx.us/idcu/investigation/conditions/>. In addition to specified reportable conditions, **any outbreak, exotic disease, or unusual group expression of disease that may be of public health concern should be reported by the most expeditious means available**. A health department epidemiologist may contact you to further investigate this Infectious Disease Report.



*Suspected cases and cases* should be reported to your local or regional health department.

Contact information for your local or regional health department can be found at:

<http://www.dshs.state.tx.us/idcu/investigation/conditions/contacts/>

As needed, cases may be reported to the Department of State Health Services by calling 1-800-252-8239.

Disease or Condition		Date: _____ (Check type) <i>(Please fill in onset or closest known date)</i>		<input type="checkbox"/> Onset	<input type="checkbox"/> Specimen collection
				<input type="checkbox"/> Absence	<input type="checkbox"/> Office visit
Physician Name		Physician Address <input type="checkbox"/> See Facility address below		Physician Phone <input type="checkbox"/> See Facility phone below (____) _____ - _____	
Diagnostic Criteria (Diagnostic Lab Result and Specimen Source or Clinical Indicators)					
Patient Name (Last)		(First)	(MI)	Telephone (____) _____ - _____	
Address (Street)		City	State	Zip Code	County
Date of Birth (mm/dd/yyyy)	Age	Sex <input type="checkbox"/> Male <input type="checkbox"/> Female	Ethnicity <input type="checkbox"/> Hispanic <input type="checkbox"/> Not Hispanic	Race <input type="checkbox"/> White <input type="checkbox"/> Black <input type="checkbox"/> Asian <input type="checkbox"/> Other <input type="checkbox"/> Unknown	
Notes, comments, or additional information such as other lab results/clinical info, pregnancy status, occupation (food handler), school name/grade, travel history					



# Texas State Reportable Conditions

Since SETMA designed this solution, several issues have arisen which were unanticipated.

- Does the Department of Health want previously reported incidences of chronic infectious diseases such as hepatitis and HIV to be “re-reported?”
- Does the Department of Health want infectious diseases previously reported in other states reported when the patient moves to Texas?
- Does the state have a way of determining that a chronic infectious disease has been previously reported or not?
- In regard to EMR solutions, the diagnosis of “Coumadin Toxicity” is reported as an “overdose.” Obviously, this is not the intent of public health officials to know the incidence of narcotic or psychotropic drug overdoses. The power of electronics has to be guided so as not to report conditions not intended to be reported.



# SETMA's Public Health Journey

- Remember, all of the above only takes us to March 23, 2011 but our public health journey continues.
- In the course of the next several months, one academician said:

*“In the years I have worked in public health, I have never before encountered practicing physicians so committed to supporting public health with timely, complete and accurate reporting of reportable conditions.”*



# SETMA's Public Health Journey

- In April and May of 2011, SETMA reviewed the contract which the Texas Department of State Health Services and the Centers for Disease Control required for our participation.
- On May 13, 2011, SETMA notified the Texas Department of State Health Services that the complexities of their contract made it impossible for us to join their program.
- However, we determined to move forward with a screening program independent of the CDC program.



# SETMA's Public Health Journey

For May 26<sup>th</sup> and June 2, 2011, my weekly newspaper columns were about SETMA's HIV Screening project. They can be read at:

- <http://www.setma.com/your-life-your-health/hiv-why-should-i-be-tested>
- <http://www.setma.com/your-life-your-health/texas-state-reportable-infectious-disease>



# SETMA's Public Health Journey

- In close collaboration with the Texas Department of State Health Services, but without a contractual relationship, SETMA set a start date of July 1, 2011, for the routine screening of HIV.
- Our progress was slower than expected but has gained momentum, so that it is now a sustainable part of our work flow, our quality improvement and our auditing and reporting activities.
- As we approach the second anniversary of our launch date, we look forward to meeting our expectation of exceeding an 80% compliance with the standards of our program by the end of our third year in July, 2014.



# Deployment Events: Provider Response

- “I have found every patient in the age groups amenable to the testing – no resistance at all.”  
June 30, 2011 (While the official program began July 1, 2011, some providers started addressing this with patients before that date.)
- July, 2011 – first month of reporting -- 2,600 eligible patients only 152 were tested but one unknown HIV patient was found. (August 10, 2011)
- E-mail sent to all providers, “May I appeal to you to initiate the HIV testing on all patients 13-64. (August 10, 2011)



# Deployment Events: Provider Response

- “One of the questions the patients are asking is who is paying for the testing. We are getting a lot of refusals if the patient has to pay for the test.” (August 11, 2011)
- “They don’t; if insurance doesn't pay, SETMA will write off the cost.” (SETMA’s CEO, August 11, 2011)
- On public television in October, 2011, and in a personal letter to all patients who refused the testing, SETMA’s commitment to screening for HIV without a personal cost to patients was repeated.



# August 23, 2011 – Who's Paying?

SETMA's Central Billing Office reported that we are receiving reimbursement from the majority of the larger commercial insurances.

- Aetna
- BCBS
- Humana
- Humana Military
- Health Select
- Medicare if we have a payable diagnosis
- Medicaid



# The Results

- In our first month, while the overall result was not wonderful, we did discover one previously unknown positive result. We were all pleased to be able to intervene successfully in that patient's life for it is a fact that as in all areas of life, so in having HIV and not knowing it:

**THE ONLY THING WHICH CAN HURT YOU IS  
WHAT YOU DON'T KNOW!**

# The Results

## HIV Testing Compliance (%)

<b>Provider</b>	<b>2011</b>	<b>2012</b>	<b>2013 (Jan-Apr)</b>
Anthony	71.7	82.2	89.1
Anwar	74.6	58.5	59.0
Aziz	65.7	71.0	75.1
Castro	--	28.6	31.3
Darden	--	55.6	69.1
Deiparine	52.5	69.2	74.3
Duncan	78.5	84.9	89.5
Halbert	37.5	42.3	75.2
Henderson	81.1	75.5	88.9
Holly	74.7	82.8	87.5
Horn	69.2	78.3	93.4
Le	--	--	56.4
Leifeste	63.2	56.2	52.9
Murphy	29.7	35.3	45.9
Palang	30.2	54.8	67.9
Qureshi	78.5	77.1	85.2
Read	--	51.7	63.0
Shepherd	--	62.0	69.4
Thomas	38.3	44.1	39.9
Vardiman	78.6	46.8	57.1
Wheeler	44.6	48.0	57.1
<b>TOTAL</b>	<b>58.4</b>	<b>62.4</b>	<b>66.2</b>



# Following-Up On Those Who Refuse Testing

- In October, 2011, SETMA sent a letter to all patients who had declined HIV testing. It stated:

“I grew up hearing an adage which stated, ‘What you don’t know can’t hurt you.’...In healthcare what you don’t know can kill you...The good news is that with the right medical management HIV can be treated and a person who is HIV positive can live a normal life...If your insurance company does not pay for the HIV Screening...SETMA will pay for your testing. That’s how much we care for you. If there is a co-pay for the testing we will pay the fee. You will pay nothing for being screened for HIV.”



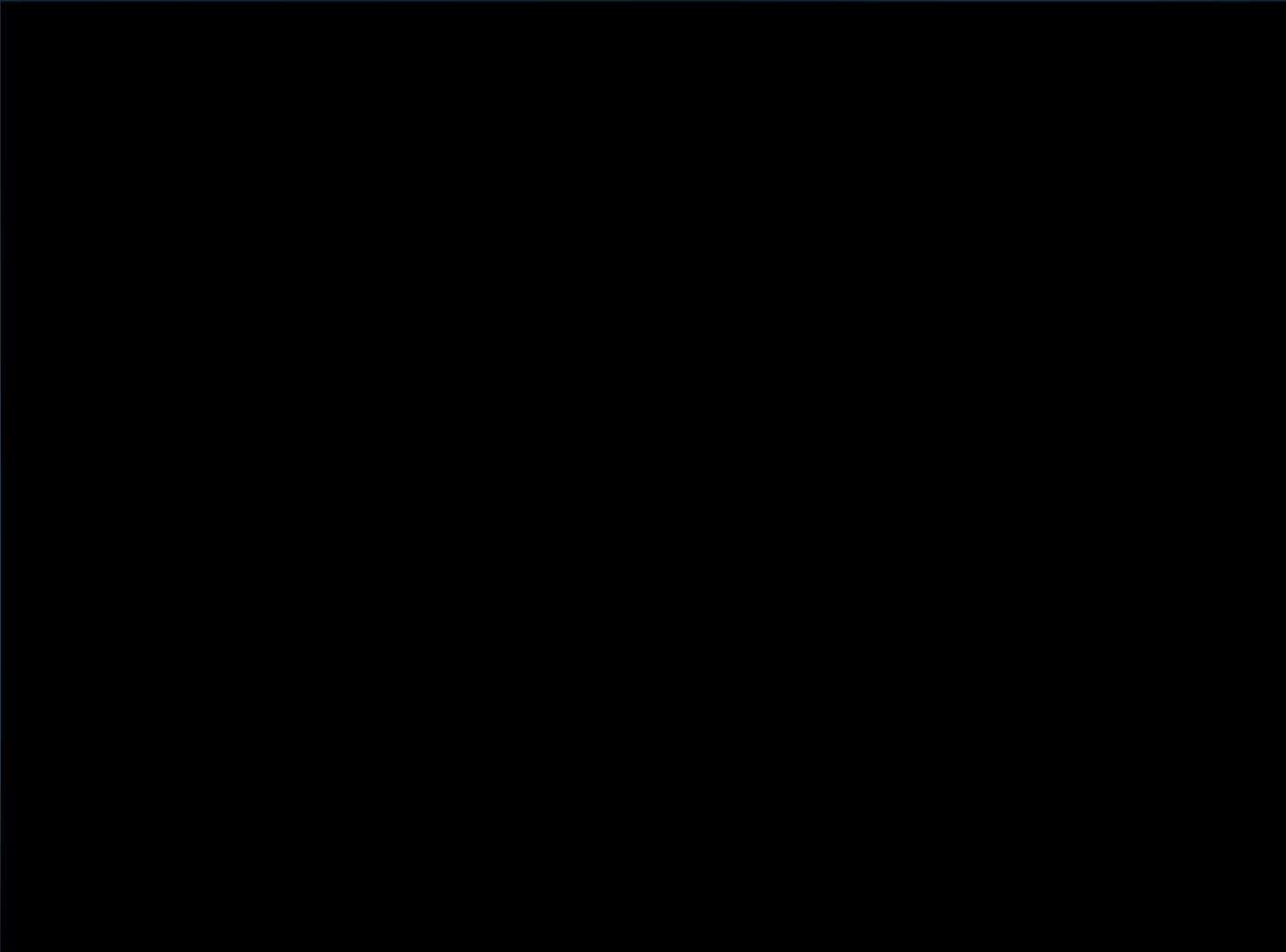
# Public Appeal

- SETMA sponsored three television segments on HIV Screening.
- In October, SETMA's CEO had his blood drawn for HIV screening on live television. He announced that the following week, he would disclose his result.
- The following week, a SETMA partner announced that Dr. Holly was not going to reveal his results. The reasons are explained in a video which is to follow.

# Dr. Holly's HIV Test Drawn On Live TV



# Dr. Holly's HIV Results On Live TV





# Barriers To Patient Participation

I have been somewhat surprised at how difficult it has been to get general acceptance of the screening, although it is improving. The following are the barriers, we have experienced:

1. Patients do not want to pay anything for the test so if there is any doubt, they will decline testing. We have remedied this by our willingness to pay for the cost if their insurance does not.



# Barriers To Patient Participation

2. We have had some examples of a provider who thought it was easier to simply say the patient refused than it was to get their permission. We have remedied this by sending a letter every three months to the patients who declined and making sure they knew they did not have to pay for the test and inviting them to come in at no charge to have the HIV screening test.



# Barriers To Patient Participation

3. Because there have only been two positives, some providers harbor an unspoken prejudice that the value of the screening is less than other matters which vie for their attention.
4. We are remedying this by reinforcing that there is good scientific evidence supporting the value of HIV screening.
5. Each month, SETMA closes its office for a half day for practice-wide conferences where we review quality performance, healthcare transformation and the use of clinical decision support. Our HIV Screening is a part of those sessions.



# The Cost

- SETMA started reporting patient HIV results done in SETMA's in-house lab on July 1, 2011. To date, we have completed 4549 HIV tests in house. Cost to perform each test is \$12.88 cost per reportable.
- Between July, 2011 and March, 2013, the HIV Screening project has cost SETMA \$58,591.
- In that time, SETMA has been reimbursed for 1534 tests for a total reimbursement of \$54,102.68. This shows a monthly direct cost to SETMA of \$224.41.
- In that SETMA originally allocated \$60,000 of revenue to this project when we determined not to work with the CDC, this is an outstanding return.



# The Future

- HIV Screening is now a part of SETMA's healthcare DNA. We will continue this program until we can report that 100% of those who look to SETMA for healthcare have been screened. By our own example – my grandchildren were tested when they visited SETMA – and by evidenced-based medicine, we will continue this program.
- Nothing speaks more to our commitment than the statement, “Even if you don't want to pay or can't, we want you to be tested such that SETMA will pay the cost.” We continue that commitment.