## Systems for Action

Systems and Services Research to Build a Culture of Health



#### PHSSR Research In Progress Webinar

Thursday, March 24, 2016

1:00-2:00pm ET

Cost, Quality and Value of Public Health Services

# Quality Improvement for Cost Effective Sexually Transmitted Infection Prevention Services



## Agenda

**Welcome:** CB Mamaril, PhD, RWJF <u>Systems for Action</u> National Coordinating Center, University of Kentucky College of Public Health

"Quality Improvement for Cost Effective Sexually Transmitted Infection Prevention Services"

**Presenters:** William Livingood Jr, PhD, Senior Research Scientist william.livingood@jax.ufl.edu and

Lori Bilello, PhD, Associate Director Lori.Bilello@jax.ufl.edu

Center for Health Equity and Quality Research, University of Florida College of Medicine-Jacksonville

**Commentary:** Gulzar Shah, PhD, Associate Professor, Georgia Southern University <u>gshah@georgiasouthern.edu</u>

**Thomas Bryant III, MSW**, Director, Office of Informatics & Research, Florida Department of Health-Volusia County <u>Thomas.BryantIII@flhealth.gov</u>

**Questions and Discussion** 

## Presenters



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University of Florida College of Medicine-Jacksonville Florida Public Health Practice Based Research Network

# Quality Improvement for Cost Effective STI Services



Florida Public Health PBRN



**Center for Health Equity and Quality Research** 

# Background

- Funding crisis for Florida County Health Departments (CHD) for STI services – reductions in federal, state and local funding.
- STI rates continue to be one of the highest in the country, especially for gonorrhea, chlamydia and HIV.
- Florida had formed the PH PBRN in 2010 to research key issues that affect public health practice.
- Received funding by the Robert Wood Johnson Foundation Delivery and Costs Project (DACS) in 2013 and PHSSR in 2015.

# **Building on DACS Study**

<u>Goal</u>: To identify the unit costs of delivering STI prevention and control services and examine the effects of variations in delivery system characteristics.

Key findings of DACS study showed:

- Wide variability in discretionary or local tax funding for county health departments which impacted services and costs.
- Cross jurisdiction sharing of DIS and surveillance staff for some counties, especially small rural counties.
- Variation in the extent of STI investigations of certain populations due to funding and staffing constraints.
- Some services redundant to what is provided by the private sector.
- Variation in screening and testing procedures some more labor intensive than others.

## QI Interventions to Improve Costs

- Utilizes a Participatory Research process with engagement in the practice community.
- Purpose is to study the effects of program changes designed to improve cost effectiveness of delivering STI services
- Partners with the Florida Dept. of Health's STD Subcommittee of the Statewide Disease Control Program Council.

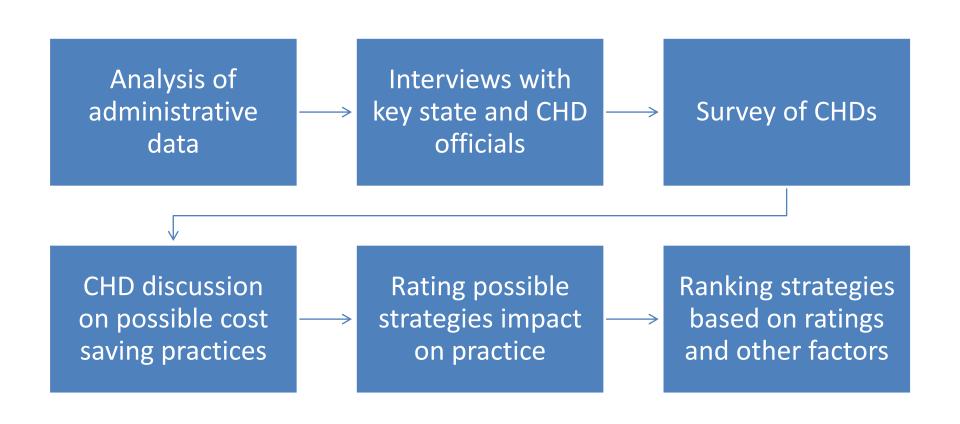
## Aims

<u>Aim 1</u>: to identify opportunities for reducing the cost of STI services by reducing or replacing inefficient and wasteful practices.

 Review DACS results with the practice community and use Nominal Group and Delphi techniques to select the focus of the QI studies. This process will attempt to identify "universal" cost saving measures that will be used for Aim 2.

<u>Aim 2</u>: To use QI evaluation and comparative effectiveness methods to determine impact of dissemination using QI methods and impact of cost saving measures based on identified cost saving strategies in Aim 1.

# Participatory Process for Identifying Cost Saving Practices



## Possible Cost Saving Strategies

- Eliminate partner notification for GC and CT
  - for all non-pregnant (both public and private).
  - for private (non-ED) clients (except Preg & <15 child).</li>
- Eliminate private provider (non-ED) verification for
  - all GC & CT
  - GC & CT for all non-pregnant
  - GC & CT (except for Preg & <15 child)</p>
- Provide presumptive treatment for partners of GC and CT w/o added tests.
- Text GC and CT results instead of calling/clinic return visit.
- Consolidate DIS across service lines (STD, HIV, TB)

## Rating of Strategies

Health Department Directors and STI managers were asked to rate the strategies through a web based survey based on the following criteria:

- Have a negative impact (disease would increase if implemented) on the current system?
- Save time, money and resources within the current system?
- Be easily implemented within the current system?

# Ratings

Proposed Change in STD Service Delivery  (55 of 67 counties reporting)	Adverse Impact High/Very	Savings High/Very High	Implementation Easy/Min difficulty
	High		
Eliminate partner notification for GC and CT for all	50%	53.8%	65.4%
non-pregnant (both public and private).			
Eliminate partner notification for GC and CT for	50%	53.8%	65.4%
private (non-ED) clients (except Preg & <15child).			
Eliminate private provider (non-ED) verification for	44.1%	67.6%	70.6%
all GC & CT			
Eliminate private provider (non-ED) verification for	46.2%	57.7%	65.4%
GC & CT for all non-pregnant			
Eliminate private provider (non-ED) verification for	42.3%	50.0%	61.5%
GC & CT (except for Preg & <15 child).			
Provide presumptive treatment for partners of GC	17.6%	64.7%	70.6%
and CT who come to the clinic w/o added tests.			
Text GC and CT results instead of calling/clinic	14.7%	52.9%	58.8%
return visit.			
Consolidate DIS across service lines (STD, HIV, TB)	23.5%	24.2%	30.3%

Red = Undesirable/negative assessment

Yellow = concern

Green = Substantial/positive assessment

# Ranking

- Texting test results was ranked #1 by practitioners.
- Other options were rated well but received less support due to concerns about:
  - Presumptive treatment may reduce STI funding due to decrease in testing.
  - Eliminating private provider treatment verification may send the wrong message to providers.

## Phase 2 – Dissemination of Intervention

Intervention: Use of QI methods to implement texting of chlamydia and gonorrhea positive and negative results, and negative syphilis results of consenting clients tested at CHDs.

- 30 potential CHDs will implement texting intervention and 30 counties are potential comparison group
- Baseline data collection underway to assess cost savings
- Forming QI Teams within each participating CHD

## **Texting Performance Measures**

#### **Process measures:**

- Client Uptake: percent of clients who opt to receive texts
- Percent who called back for an appointment after receiving a positive test result text
- Text transmission failure rate

#### **Outcome measures:**

- Rate of positive clients who received a text and received treatment compared to the rate of positive clients who were notified in person or by phone and received treatment (only if the was not presumptive treatment).
- Treatment timeframe: compare time of treatment from initial lab date to treatment date for texters and non-texters.
- Reduction in staff time in notifying patients of their results (average number of minutes to contact patient by phone/in person).

## QI Process & Reporting

- Identify QI Team to include key personnel in the testing/ consent process, PRISM and notification processes.
- Set targets for texting performance measures per county.
- Meet regularly (at least monthly) to review performance metrics and discuss progress in achieving objectives.
- Meet regularly (at least monthly) to resolve problems through root-cause analysis or other problem solving in achieving objectives.
- Maintain records of activities and report monthly to QI Collaborative and Research Team.

# **Current Status of Implementation**

- IRBs approved (FDOH and UF)
- FDOH master MOU approved to cover all CHDs
- Rolling implementation due to key hub county desire to work out any problems before multicounty implementation
- 14 CHDs in process (includes 3 hub counties)
- 16 ancillary CHDs (counties that rely extensively on another county for STD services) to be added approximately 1 month later

## **Next Steps**

- Launch QI based dissemination of texting in April with participating CHDs.
- Track data for 6 months and meet with QI Collaborative monthly to make adjustments if needed.
- Analyze preliminary results and engage practice community in interpreting the results.
- If successful, implement texting protocol in remaining health departments.

## **Project Information & Updates**

# **Quality Improvement for Cost Effective Sexually Transmitted Infection Prevention Services**

http://www.publichealthsystems.org/quality-improvement-costeffective-sexually-transmitted-infection-prevention-services

# Comparative Cost Study of STD Services in Florida (Delivery and Cost Study-DACS)

http://publichealthsystems.org/projects/comparative-cost-study-std-services-florida

## Commentary



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## **Questions and Discussion**

### Webinar Archives & Upcoming Events

go to: <a href="http://www.publichealthsystems.org/phssr-research-progress-webinars">http://www.publichealthsystems.org/phssr-research-progress-webinars</a>

### **Upcoming Webinars**

Wed, April 6 (12-1p ET/ 9-10a PT)

ACCOUNTABLE COMMUNITY OF HEALTH STRUCTURES AND CROSS-SECTOR COORDINATION

Nadine Chan, PhD, MPH, and Eli Kern, MPH

Public Health-Seattle and King County

Wed, April 13 (12-1p ET)

INTERORGANIZATIONAL RELATIONSHIP AND INFRASTRUCTURE VARIATION AND PUBLIC

HEALTH SYSTEM EFFORTS TO ADDRESS PRESCRIPTION DRUG ABUSE

Lainie Rutkow, JD, PhD, MPH, and Katherine C. Smith, PhD, MA

Johns Hopkins University Bloomberg School of Public Health

Thurs, April 21 (1-2p ET/ 10-11a PT)

CROSS JURISDICTIONAL SHARING ARRANGEMENTS BETWEEN TRIBES AND COUNTIES FOR

**EMERGENCY PREPAREDNESS READINESS** 

Maureen A. Wimsatt, PhD, MSW

California Tribal Epidemiology Center and California Rural Indian Health Board

### Thank you for participating in today's webinar!



For more information about the webinars, contact:
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## Speaker Bios

**William Livingood, PhD** is a Senior Research Scientist in the Center for Health Equity and Quality Research (CHEQR) at the University of Florida College of Medicine-Jacksonville (UFCOM-J). He has an extensive public health research and evaluation career spanning both public health academe and practice. Building on a successful academic career in public health and health promotion, he has led public health agency and healthcare institutional efforts in policy and program monitoring and evaluation. Dr. Livingood also led the recently completed comparative cost study of sexually transmitted disease services in conjunction with the Florida Public Health Practice Based Research Network.

Lori Bilello, PhD is a Research Assistant Professor and Associate Director for the Center for Health Equity and Quality Research at UFCOM-J, where she conducts and oversees applied research on clinical care and health disparities with a focus on the public health and healthcare delivery systems. She has over 25 years of experience in healthcare administration including community-based health initiatives which provides her with the ability to understand complex health systems and health delivery processes. Dr. Bilello has also been integral to the work of the Florida Public Health Practice Based Research Network.

**Gulzar H. Shah, PhD, MStat, MS**, is an Associate Professor and Associate Dean for Research at the Jiann-Ping Hsu College of Public Health, Georgia Southern University. His interdisciplinary training and multisector work experience spans over 20 years with appointments in both academia and public health practice agencies both nationally and internationally. His research interests include data improvement tools; practice-based PHSSR; eHealth and public health informatics; public health finances; and maternal and child health.

**Thomas Bryant III, MSW,** is Director of Informatics and Assessment at the Florida Department of Health-Volusia County. Since 2013, he has worked to use data to facilitate healthy lifestyle choices for the Volusia County community and improve department programs. Mr. Bryant started his public health career in 2001, founding the Duval County Institute for Public Health Informatics and Research, and has directed evaluation programs for public health and planning agencies, published widely in public health journals, and presented at numerous public health conferences.