The National Gestational Diabetes Network
February 18, 2014 Webinar

Sponsored by
National Association of Chronic Disease Directors and
The Centers for Disease Control and Prevention Divisions of Diabetes Translation and Reproductive Health
The National Gestational Diabetes Network Webinar presents “Collaborative Efforts to Improve Pregnancy Outcomes: 3 Partnerships Utilizing A Continuous Quality Improvement Process.” The webinar is scheduled for Tuesday February 18, 2014 from 1:30 to 3:00 PM EST.

This webinar discusses three different clinical situations and the collaborative efforts of partners to improve pregnancy outcomes. One partnership focuses on tele-health efforts to expand access to care for high risk pregnancies. The second group focuses on increasing the post-partum visit rate among pregnant Latino women visiting maternity clinics by two different out-reach methods. The third partnership focuses on clinic management changes and outreach to increase screening of women for Gestational Diabetes, educating these women during the prenatal period about GDM and risk of type 2 diabetes and improving the clinical documentation by healthcare providers.

After attending this interactive webinar, the participants will:

1. be able to articulate the quality improvement process: Plan, Do, Study and Act,

2. gain an understanding of the importance of utilizing partners to make change, and

3. increase appreciation for the variety of scenarios available improvement outcomes.
Gestational Diabetes: Data, Awareness, Feedback, Change

Mary K. Emmett, PhD, FACHE
Dara Seybold, MAA
(304) 388-9914
mary.emmett@camc.org
Disclosure

- I have nothing to disclose.
- Before beginning, I want to thank the following organizations and individuals for their support and opportunity to collaborate on behalf of women and children:
  - The Center for Disease Control (Michelle Owens-Gary)
  - The Association of Chronic Disease Directors (Joan Ware)
  - West Virginia Diabetes Prevention and Control Program (Peggy Adams, Gina Wood, Jessica Wright)
  - West Virginia Maternal and Child Health (Denise Smith)
  - West Virginia Parinatal Project
  - West Virginia Gestational Diabetes Advisory Committee
  - My colleague – Dara Seybold, April Barnes
Cumulative incidence of type 2 diabetes in women with a history of gestational diabetes.

- 5% within six months after delivery
- 60% within 10 years after delivery

Source: AHRQ, 2009
Percentage of Pregnant Women Affected

- Approximately 7% (national)

Gestational Diabetes: Percentage West Virginia for Years 2000 – 2009

<table>
<thead>
<tr>
<th>Years</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>4%</td>
</tr>
<tr>
<td>2002</td>
<td>4%</td>
</tr>
<tr>
<td>2003</td>
<td>4%</td>
</tr>
<tr>
<td>2004</td>
<td>5%</td>
</tr>
<tr>
<td>2005</td>
<td>5%</td>
</tr>
<tr>
<td>2006</td>
<td>6.94%</td>
</tr>
<tr>
<td>2007</td>
<td>6.47%</td>
</tr>
<tr>
<td>2008</td>
<td>6.4%</td>
</tr>
<tr>
<td>2009</td>
<td>5.5%</td>
</tr>
<tr>
<td>2010</td>
<td>13.4%</td>
</tr>
<tr>
<td>2011</td>
<td>12.7%</td>
</tr>
</tbody>
</table>

Data from Hospital Discharge Report – (%) of all deliveries in WV
DATA: Setting the Stage for Change

- **Phase 1 – Pregnancy and Diabetes in West Virginia.** (2007) www.wvdiabetes.org

- **Key Findings:**
  - Hospital Discharge Data (GDM increased from 3% to 5% during the period 2000 – 2005.
  - WIC (2006) “During this pregnancy, were you told by a doctor that you had gestational diabetes?”
    - 7.4% (< 30 = 5.6%) (40 & older = 24.4%)
    - Ranged from 8.5% to 11.3% in 2004.
DATA: A Broader Perspective

- **Phase 2: Better Data, Better Care (5 state collaborative)** Year -- 2008

Women who reported having “high blood sugar (diabetes) that started during this pregnancy” on the Pregnancy Risk Assessment Monitoring System (PRAMS). These records were matched with the birth certificate data.

A collaborative sponsored by Association of Chronic Disease Directors (ACDD) and CDC. (Michigan, Oklahoma, North Carolina, Utah, WV)
### Women with diabetes that started during pregnancy (PRAMS) and No GDM (Birth Certificate)

<table>
<thead>
<tr>
<th>Chart Review</th>
<th>WV</th>
<th>Collaborative</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDM diagnosed</td>
<td>23 (37.7%)</td>
<td>105 (37.9%)</td>
</tr>
<tr>
<td>Elevated glucose but no documented follow-up/diagnosis</td>
<td>1 (1.6%)</td>
<td>46 (16.6%)</td>
</tr>
<tr>
<td>No documented testing or results</td>
<td>15 (24.6%)</td>
<td>64 (23.2%)</td>
</tr>
<tr>
<td>No GDM diagnosed</td>
<td>22 (36.1%)</td>
<td>62 (22.4%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>61</strong></td>
<td><strong>277</strong></td>
</tr>
</tbody>
</table>
DATA: Transforming Practice

- **Phase 3** – DATA DRIVEN CHANGE.
- Can we learn from our data how to make a difference in the practice of care within a clinic and for women? (focus on changing culture)
Process of Change

- Interdisciplinary team
  - Physician leader
  - Nursing manager
  - Public health expert
  - Diabetes educator
  - Facilitators
  - Resident in OBGYN

- Rapid cycle process improvement
  - Plan, Do, Study, Act (PDSA) cycles of change
Documentation

Initial System

- Use ACOG prenatal form for testing documentation

Cycle of Change

- Developed separate data collection form for project
- Fabricated “GDM” labels for charts
- Encounter form includes GDM in Diagnosis List
- Electronic Capture of Documentation
MEASURING CHANGE
Screening for GDM

- All patients screened at 24 to 28 wks with 1 hr non-fasting glucose test
  - >140 triggers 3 hour glucose tolerance test
  - >200 patient is considered GDM
- If 3 hr glucose tolerance test positive (or fasting blood sugar >105), then GDM
- Baseline Data: 18% failed 1 hour (55% compliance with 3 hour testing)

Cycle of Change

- Lab comes to clinic for blood draws when necessary (major policy change); working on having phlebotomist in clinic
- A1C testing or random glucose in clinic (>250)
- Studied use of other means of screening
- Weekly report data warehouse (patients tested and lab values)
MEASURING CHANGE: Screening for GDM

Patients failing the 1 hour test
MEASURING CHANGE: Screening for GDM

Compliance with 3 hour testing
Patient Education

Initial System

• Provide educational materials and refer women with GDM to diabetes education class
• Baseline Data: 73% of chart had documentation of diabetes education

Cycle of Change

• Additional educational materials that are more user friendly
• Moved the site of education
• Patients with GDM sign a form educating them about GDM and the importance of the postpartum screening
• Encounter form check box for “Diabetes education”
MEASURING CHANGE:
Patient Education

Baseline Year 1 Year 2 Year 3 Year 4
73% 95% 92% 90% 75%
Post-Partum Care

Initial System

- 2 hr GCT ordered on encounter form (written in)
- Baseline data
  - 50% show rate for postpartum visit
  - 10% labs ordered
  - 0% completed labs

Cycle of Change

- Incentivized post-partum lab test completion
- Encounter form has all glucose testing labs listed (check box)
- Adding prenatal care and delivery information on postpartum chart
- Changing discharge orders--automatically document follow-up visits
- Providing education about “what to do during a post-partum visit”

Measuring Change

- Year 1 Data: 89% show rate for PP visit, 39% labs ordered, 22% completed labs
- Year 2 Data: 69% show rate for PP visit, 46% labs ordered, 8% completed labs
- Year 3 Data: 70% show rate for PP visit, 25% labs ordered, 15% completed labs
- Year 4 Data: 55% show rate for PP visit, 10% labs ordered, 10% completed labs
CLINICAL PRACTICE CHANGE: Additional Cycles of Improvement

- Adding to the check list GDM, just another reminder
- Documentation that the ACOG form is on the Electronic Health Record
- Documentation that the inpatient electronic process includes GDM and that the discharge summary includes this information
- Physician and resident engagement through the QIPs process
Lessons Learned

- Observations should be substantiated with data if they are to inform project
- Need to evaluate if change resulted in improvement
- Some changes take longer than others, go after the low hanging fruit first
- There are structural and overarching policies that may make change difficult
- Sometimes need a change of mindset or skills building (ex: postpartum visit is important time to provide comprehensive care and make referrals)
- Need champions of the cause
DATA: Transforming Practice

- Phase 4 – West Virginia Prenatal Risk Screening
- Data – Gestational Diabetes – distributed to all physician offices along with guidelines.
DATA: Transforming Practice

- **Phase 5 – Women Infant and Children’s Program (WIC)**
  - We learned from the report of 2007 that approximately 66% of all women receive support from WIC.
  - Surveying all women who receive WIC services post-partum (6-8 weeks following delivery)
  - Survey completed, results shared with WIC
  - Engaged WIC on Advisory Committee
  - Results will drive practice change.
DATA: Transforming Practice

- Webinar for physicians
- CDs for physicians containing the webinar
- Survey in place – evaluation of the affect of the webinar plus additional information
Resources

- Agency for Healthcare Research and Quality
  - www.ahrq.gov
- CDC – Center for Disease Control
- Association of Chronic Disease Directors
- Association of Maternal and Child Health (AMCHP)
- State Diabetes Prevention and Control Programs
- State Maternal and Child Health Programs
Georgia Telehealth Initiative

Suleima Salgado, MBA
Telehealth Director
January 10, 2014
Background

- Georgia is ranked 40th in the nation in physician distribution in terms of specialty and geographic location, according to the Georgia Board of Physician Workforce.

- Fifty-two percent of all physicians are located in five primary areas that serve just 38% of the population.

- In 2008, 32 of the state’s 159 counties had fewer than five physicians.

- In Georgia, obesity is more prevalent among non-Hispanic blacks at 37.6% than non-Hispanic whites at 26.1%.
America’s Health Rankings

**GEORGIA**

**Ranking:** Georgia is 36th this year; it was 38th in 2011.

**Highlights:**
- In Georgia, 2 million adults are obese and almost 750,000 adults have diabetes.
- In the past 5 years, the high school graduation rate increased from 61.2 percent to 67.8 percent of ninth graders who graduate in 4 years.
- While Georgia is still challenged by a high infant mortality rate, in the past 10 years it has declined from 8.4 to 7.7 deaths per 1,000 live births.
- In the past 5 years, the rate of preventable hospitalizations decreased from 82.0 to 68.4 discharges per 1,000 Medicare enrollees.
- In the past 10 years, the rate of uninsured population increased from 15.0 percent to 19.3 percent.

**Health Disparities:**
In Georgia, obesity is more prevalent among non-Hispanic blacks at 37.6 percent than non-Hispanic whites at 26.1 percent; smoking is more prevalent among non-Hispanic whites at 18.8 percent than Hispanics at 13.6 percent; and sedentary lifestyle is more prevalent among Hispanics at 30.1 percent than non-Hispanic whites at 22.6 percent.

**State Health Department Website:** www.health.state.ga.us

**Overall Rank:** 36

**Change:** ▲ 2
**Determinants Rank:** 37
**Outcomes Rank:** 39

**Strengths:**
- Low prevalence of binge drinking
- High immunization coverage

**Challenges:**
- Low high school graduation rate
- High levels of air pollution
- High prevalence of low birthweight
- High infant mortality rate
# America’s Health Rankings

## Economic Environment

<table>
<thead>
<tr>
<th>Measure</th>
<th>GA 2012</th>
<th>U.S. 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Unemployment Rate (2011)</td>
<td>10.1%</td>
<td>8.9%</td>
</tr>
<tr>
<td>Annual Underemployment Rate (2011)</td>
<td>17.1%</td>
<td>19.9%</td>
</tr>
<tr>
<td>Median Household Income (2011)</td>
<td>$45,973</td>
<td>$50,054</td>
</tr>
</tbody>
</table>

## MEASURE

<table>
<thead>
<tr>
<th>Measure</th>
<th>Adult Population Affected 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoking</td>
<td>1,553,000</td>
</tr>
<tr>
<td>Obesity</td>
<td>2,051,000</td>
</tr>
<tr>
<td>Diabetes</td>
<td>747,000</td>
</tr>
<tr>
<td>Sedentary Lifestyle</td>
<td>1,956,000</td>
</tr>
</tbody>
</table>

## SMOKING

<table>
<thead>
<tr>
<th>Year</th>
<th>Percent of Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>30%</td>
</tr>
<tr>
<td>1992</td>
<td>25%</td>
</tr>
<tr>
<td>1994</td>
<td>20%</td>
</tr>
<tr>
<td>1996</td>
<td>18%</td>
</tr>
<tr>
<td>1998</td>
<td>16%</td>
</tr>
<tr>
<td>2000</td>
<td>15%</td>
</tr>
<tr>
<td>2002</td>
<td>14%</td>
</tr>
<tr>
<td>2004</td>
<td>12%</td>
</tr>
<tr>
<td>2006</td>
<td>10%</td>
</tr>
<tr>
<td>2008</td>
<td>9%</td>
</tr>
<tr>
<td>2010</td>
<td>7%</td>
</tr>
</tbody>
</table>

## OBESITY

<table>
<thead>
<tr>
<th>Year</th>
<th>Percent of Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>15%</td>
</tr>
<tr>
<td>1992</td>
<td>18%</td>
</tr>
<tr>
<td>1994</td>
<td>20%</td>
</tr>
<tr>
<td>1996</td>
<td>22%</td>
</tr>
<tr>
<td>1998</td>
<td>24%</td>
</tr>
<tr>
<td>2000</td>
<td>26%</td>
</tr>
<tr>
<td>2002</td>
<td>28%</td>
</tr>
<tr>
<td>2004</td>
<td>30%</td>
</tr>
<tr>
<td>2006</td>
<td>32%</td>
</tr>
<tr>
<td>2008</td>
<td>34%</td>
</tr>
<tr>
<td>2010</td>
<td>36%</td>
</tr>
</tbody>
</table>

## Determinants

<table>
<thead>
<tr>
<th>Determinants</th>
<th>Value</th>
<th>Rank</th>
<th>No. 1 State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoking (Percent of Adult Population)</td>
<td>21.2</td>
<td>25</td>
<td>11.8</td>
</tr>
<tr>
<td>Binge Drinking (Percent of Adult Population)</td>
<td>16.6</td>
<td>14</td>
<td>10.0</td>
</tr>
<tr>
<td>Obesity (Percent of Adult Population)</td>
<td>28.0</td>
<td>27</td>
<td>20.7</td>
</tr>
<tr>
<td>Sedentary Lifestyle (Percent of Adult Population)</td>
<td>26.7</td>
<td>31</td>
<td>16.5</td>
</tr>
<tr>
<td>High School Graduation (Percent of Incoming Ninth Graders)</td>
<td>67.8</td>
<td>45</td>
<td>90.7</td>
</tr>
</tbody>
</table>

## Community & Environment

<table>
<thead>
<tr>
<th>Determinants</th>
<th>Value</th>
<th>Rank</th>
<th>No. 1 State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Violent Crime (Offenses per 100,000 Population)</td>
<td>403</td>
<td>32</td>
<td>122</td>
</tr>
<tr>
<td>Occupational Fatalities (Deaths per 100,000 workers)</td>
<td>3.7</td>
<td>15</td>
<td>2.4</td>
</tr>
<tr>
<td>Infectious Disease (Cases per 100,000 Population)</td>
<td>11.9</td>
<td>38</td>
<td>2.8</td>
</tr>
<tr>
<td>Children in Poverty (Percent of Persons under Age 18)</td>
<td>24.7</td>
<td>43</td>
<td>8.8</td>
</tr>
<tr>
<td>Air Pollution (Micrograms of Fine Particles per Cubic Meter)</td>
<td>11.5</td>
<td>45</td>
<td>5.1</td>
</tr>
</tbody>
</table>

## Policy

<table>
<thead>
<tr>
<th>Determinants</th>
<th>Value</th>
<th>Rank</th>
<th>No. 1 State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of Health Insurance (Percent without Health Insurance)</td>
<td>19.3</td>
<td>43</td>
<td>4.5</td>
</tr>
<tr>
<td>Public Health Funding (Dollars per Person)</td>
<td>$58</td>
<td>37</td>
<td>$236</td>
</tr>
<tr>
<td>Immunization Coverage (Percent of Children Ages 19 to 35 Months)</td>
<td>93.6</td>
<td>4</td>
<td>94.2</td>
</tr>
</tbody>
</table>

## Clinical Care

<table>
<thead>
<tr>
<th>Determinants</th>
<th>Value</th>
<th>Rank</th>
<th>No. 1 State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Birthweight (Percent of Live Births)</td>
<td>9.6</td>
<td>46</td>
<td>5.7</td>
</tr>
<tr>
<td>Primary Care Physicians (Number per 100,000 Population)</td>
<td>102.3</td>
<td>35</td>
<td>194.5</td>
</tr>
</tbody>
</table>

## Outcomes

<table>
<thead>
<tr>
<th>Determinants</th>
<th>Value</th>
<th>Rank</th>
<th>No. 1 State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes (Percent of Adult Population)</td>
<td>10.2</td>
<td>33</td>
<td>6.7</td>
</tr>
<tr>
<td>Poor Mental Health Days (Days in Previous 30 Days)</td>
<td>3.9</td>
<td>28</td>
<td>2.3</td>
</tr>
<tr>
<td>Poor Physical Health Days (Days in Previous 30 Days)</td>
<td>3.8</td>
<td>19</td>
<td>2.9</td>
</tr>
</tbody>
</table>

## Preventable Hospitalizations (Number per 1,000 Medicare Enrollees)

<table>
<thead>
<tr>
<th>Determinants</th>
<th>Value</th>
<th>Rank</th>
<th>No. 1 State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preventable Hospitalizations</td>
<td>0.15</td>
<td>37</td>
<td>0.95</td>
</tr>
</tbody>
</table>

## All Determinants

<table>
<thead>
<tr>
<th>Determinants</th>
<th>Value</th>
<th>Rank</th>
<th>No. 1 State</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Outcomes</td>
<td>-0.08</td>
<td>39</td>
<td>0.31</td>
</tr>
</tbody>
</table>

## Overall

<table>
<thead>
<tr>
<th>Determinants</th>
<th>Value</th>
<th>Rank</th>
<th>No. 1 State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>-0.20</td>
<td>36</td>
<td>1.20</td>
</tr>
</tbody>
</table>

--

For a more detailed look at this data, visit: [www.americashealthrankings.org/GA](http://www.americashealthrankings.org/GA)
Plan of Action

• The future of health care has arrived, and it can happen within Georgia’s local health departments.

• Capitalize on existing infrastructure to deliver additional innovative services across Georgia.

• In 2011, DPH expanded the delivery of high-quality services to counties throughout the state via telehealth.

• The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) established the Visual Collaboration Network designed to reach more than 300,000 monthly clients who participate in program
What is Telehealth?
Telehealth vs. Telemedicine

- **Telehealth** - the use of electronic information and telecommunications technologies to support long-distance clinical health care, patient and professional health-related education, public health and health administration. Technologies include videoconferencing on a secure, private network with store-and-forward imaging, streaming media, and wireless communications.

- **Telemedicine** – the use of medical information exchanged from one site to another via electronic communications to improve a patient’s clinical health status. Telemedicine includes a growing variety of applications and services using two-way video, email, smart phones, wireless tools and other forms of telecommunications technology. May involve medical scopes, x-rays, ultrasound or other medical applications.
Telehealth Goals

• **Increase access to care**
  - Address the state’s most pressing health challenges, including infant mortality, oral health, obesity and associated diseases
  - Connect Georgians with the specialized care they need that may not exist in every community, i.e. monitoring of a high-risk pregnancy.

• **Increase capacity at DPH sites statewide**
  - Implement Telehealth in each of the state’s 18 Public Health Districts and all 159 counties
Telehealth Technology
Network Hub (Waycross, GA)

- Waycross was chosen as the State hub because of the rural location which allows us to receive the Universal Services Funds as well as a history of telehealth use and experience.
- SEHD began using Telemedicine at Ware County Health Department in 1993.
- Due to success of program, SEHD decided to build its own network.
- Funding was secured from grants, programs, and special projects.
Georgia Department of Public Health
Telehealth (Videoconferencing) Network

- Teledentistry
- Telemedicine
- Network Hub (Waycross)
- End Point Locations

Network Status
- Complete
- Projected Completion: October 2013

Legend:
1-1 Northwest
1-2 North Georgia
2 North
3-1 Cobb/Douglas
3-2 Fulton
3-3 Clayton
3-4 Gwinnett, Newton, & Rockdale
3-5 DeKalb
4 District 4
5-1 South Central
5-2 North Central
6 East Central
7 West Central
8-1 South
8-2 Southwest
9-1 Coastal
9-2 Southeast
10 Northeast

Created: September, 2013
By: Office of Health Indicators for Planning (OHIP)
Source: Department of Public Health
Projection: Georgia Statewide Lambert Conformal Conic
Telehealth Use / Benefits

- **Administrative/Operational** - employment interviews, staff meetings, HR updates, professional development,
- **Emergency Preparedness** - virtual District Operations Center, community partner engagement, language translation, planning, communication, and training;
- **Decreased travel** and lost wages for patients
- **Better utilization** of work time and decreased travel costs for staff
- **Access to specialty services** and training not available in rural settings
- **Reaches populations** that may otherwise never receive services (convenience)
Telemedicine

- **Originating Site** - the actual location where a patient is located

- **Medical Cart** – interactive and secure telecommunications system

- **Distant Site** – The site where physician or practitioner is located
Telemedicine Technology
## Telemedicine Projects

### High Risk OB Clinic
- Centering Pregnancy
- Ultrasound / Colposcopy
- Consult w/ Maternal Fetal Medicine Specialist

### Children’s Medical Services
- Asthma/Allergy
- Developmental and Genetics
- Pediatric Neurosurgery
- Endocrinology

### WIC Nutrition
- Breastfeeding Support
- Nutrition Education
- Staff Training/Development

### HIV/AIDS
- Patients at local clinics see DPH Infectious Disease specialist
- Mobile presentations from home or community setting
Centering Pregnancy®:

• National model of group prenatal care

• Shown to improve birth outcomes

• Assessment, support and education are used to provide a holistic approach to prenatal care

• Sessions include an individual assessment followed by facilitated discussions on a variety of pregnancy-related topics including nutrition, pre-term labor, birth control, stress reduction, breastfeeding, gestational diabetes, stages of labor, newborn care, infant safety, SIDS and shaken baby syndrome
Telemedicine Projects
CenteringPregnancy®: Decreasing Preterm Birth Rates
Telemedicine Projects
CenteringPregnancy®:
Decreasing Low Birth Weight Rates

[Bar chart showing decreasing low birth weight rates for different groups, with the highest rate being 15.7%.]

Ellenton Centering
District Hispanic
District NH Whites
Do Co Centering
District NH Blacks

march of dimes
We Protect Lives.
Telemedicine Projects

CenteringPregnancy®

- Access to telemedicine allows ultrasounds and Maternal Fetal Medicine consults to be done on-site
- On-site telemedicine allows for better coordination of services
- Through a partnership with Women’s Telehealth, Dr. Patterson is included in facilitated discussions in Centering sessions on pre-term labor and gestational diabetes via the telemedicine cart
- Telemedicine allows easy access to providers for many consult needs including cardiac, dermatology and mental health
Some Telemedicine Partners
Contact Information

GA Public Health Video Network
1.855.PHVIDEO

<table>
<thead>
<tr>
<th>DPH State Contacts</th>
<th>SEHD Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suleima Salgado, MBA</td>
<td>Jackie Woodard</td>
</tr>
<tr>
<td><a href="mailto:susalgado@dhr.state.ga.us">susalgado@dhr.state.ga.us</a></td>
<td><a href="mailto:jewoodard@dhr.state.ga.us">jewoodard@dhr.state.ga.us</a></td>
</tr>
<tr>
<td>404.657.2305</td>
<td>912.287.4960</td>
</tr>
</tbody>
</table>

Centering Pregnancy Program Contact

XXXXXXXXXXXXXXXX
Collaborative Efforts to Improve Pregnancy Outcomes Utilizing A Continuous Quality Improvement Process

USE OF PDSA
In improving gestational diabetes and infant mortality outcomes

Rupa Sharma, M.Sc., MSPH
Office of Minority Health & Health Disparities
Arkansas Department of Health
Objectives

• Plan, Do, Study and Act; part of the quality improvement process
• Understanding the importance of utilizing partners to make changes
• Various ways of improving health outcomes
ASTHO/UHF Learning Collaborative Funding, 2013-2014

Association of State and Territorial Health Officials (ASTHO) United Health Foundation (UHF)

- Arkansas ranked 48th in America’s Health Ranking
- ASTHO funding - 2013-2014
- Learning Collaborative
- Improve disease outcomes (Latino population)
  - Infant mortality
  - Gestational diabetes
Gestational Diabetes Mellitus (GDM)

Pregnant women who have never had diabetes before but who have high blood glucose (sugar) levels during pregnancy are said to have gestational diabetes.

Latino women are most impacted by GDM in Arkansas, more than twice that of NH African American women.
GDM by race-ethnicity, Arkansas

Data source: Health Statistics Branch, Arkansas Department of Health
Infant Mortality (IM)

- Death of an infant before his/her first birthday (IM)
- Measured by IMR or no. of deaths per 1,000 live births
- Arkansas rate higher than the national average
- African American rate more than twice that of white infants
- Higher for AA babies born with LBW or low gestational age

Data source: Health Statistics Branch, Arkansas Department of Health
IMR per 1,000 live births, by race & ethnicity, Arkansas, 2011

Data source: Health Statistics Branch, Arkansas Department of Health
African American babies born with <2,500 grams weight or <36 weeks gestational age

Data source: Health Statistics Branch, Arkansas Department of Health
Trained Graduate AA Graduate Sorority Chapter members provided video based education to their respective communities. Pre and Post survey results showed significant improvement in knowledge.

Using Sisters United format for video based education and knowledge assessment - trained Bilingual Community Health Workers (BCHW) are currently providing education to the clients of two ADH maternity clinics. Early intervention efforts ..
Educational modules and narrators

**Introduction**: Dr. Michelle Smith / Dr. Rosa Hatch

**Gestational diabetes**: Dr. Francesca M Verges

**Folic acid**: Dr. Estelle Rutledge / Dr. Francesca M Verges

**Influenza shot**: Dr. Susan Ward-Jones / Dr. Rosa Hatch

**Breastfeeding**: Dr. Katrina Davis / Dr. Eduardo Ochoa

**Safe sleep**: Dr. Zenobia Harris / Dr. Eduardo Ochoa
Knowledge assessment- pre and post surveys

Sisters United; Arkansas Department of Health

Directions: Answer the following statements for the videos you watched. For example, if you watched the video about the flu, answer section B. If you watched more than one video, answer the questions for all the sections you watched. Please write T for True or F for False for each statement.

Section A: Folic Acid
9. T It is only important to take folic acid after you get pregnant.
10. T Taking vitamin B-3 (folic acid) helps prevent birth defects.
11. F Folic acid costs a lot of money.

Section B: Flu Shot
12. F A flu shot can give you the flu.
13. F If a pregnant woman gets a flu shot, it is safe for the baby she is carrying.
14. F If a women catches the flu when she’s pregnant, it can hurt the baby.

Section C: Breastfeeding
15. T Breastfed babies are more likely to get sick.
16. T Baby formula is just as good as a mother’s breast milk.
17. F A breastfed baby is less likely to die of Sudden Infant Death Syndrome (SIDS).
18. T Breastfeeding helps new mothers lose weight.

Section D: Safe Sleep
19. T The safest place for a baby to sleep is in his/her own crib.
20. T Babies are likely to choke if they sleep on their back.
21. T You should always put your baby on their stomach to sleep.

Thank you for completing our Survey!!

For Official Use ONLY:

ID# __________________________
Date: ______ / ______ / 2014
Utilizing partners to make change

**ADH-State**
- Nathaniel Smith, MD, MPH
  Director, ADH
  General Oversight

**ADH-Local**
- Randy Lee
  CLPH Director
  Oversight - LHU

**UAMS-State**
- Sherian Kwanisai
  CLPH Nursing
  Director
  Oversight - LHU

**HOSPITAL-Regional**
- Don Murray
  NW Regional Director
  Oversight - NW Region

**MC-State**
- Jan Layton
  Patient Care Manager, LHU
  Text4Baby Reminder

**Church/BW-Community**
- Kenneth Ridgway
  IT, ADH
  IT/Video Conferencing

**OUT OF STATE PARTNERS**
- Needs Assessment:
  Policymaker - 1
  State Partner /Agency - 5
  Local/Regional – 1
  Community - 3

**ASTHO**
- Elizabeth Walker Romero, MS
  Lynn Shaul, MA
  Katie Sellers, DrPH, CPH

**Other States**
- Georgia
- Kansas
- Oklahoma
- Rhode Island

**United Health Group, Arkansas**
- Martha M. Hill
- Derrick W. Smith
- Sherri Georgio

**Other States**
- Georgia
- Kansas
- Oklahoma
- Rhode Island

**Other States**
- Georgia
- Kansas
- Oklahoma
- Rhode Island
Utilizing partners to make change

- ASTHO, other states - Out of State Partners
- ADH - Policy Makers
- ADH Branch / Center - State Level
- UAMS - State Level
- Mexican Consulate - State Level
- Regional Hospital - Region Level
- Local Health Units - Local Level
- Church/BCHW - Community Level
The Plan-Do-Study-Act (PDSA) cycle is implemented to test changes in real work settings. The PDSA cycle guides the test of a change to determine if the change is an improvement.
Establish contacts with Washington & Sebastian Local Health Units (LHU), PDSA (1 & 2)

Improve communications with LHU partners

- Contact by phone and/or email
- Reiterate mission of the collaborative
- Describe activities of Families United
- Establish contacts, primary & secondary
- Get LHU buy in for future activities
- Document and prepare for the next cycle
Site visits to Washington & Sebastian LHUs, PDSA (3 & 4)

Get the buy in/understanding from LHU

- Meet LHU contacts, check venue
- Introduce Bilingual Community Health Workers (BCHW), provide training
- Discuss logistics of IM/GDM education
- Document results, prepare for next cycle
Test effectiveness of Text4Baby reminders on Post Partum Visit (PPV) rates, PDSA (5)

Assess effectiveness of Text4Baby reminders

- Recruit two groups Latino pregnant women
- Enroll 15 into Text4Baby
- Designate non-text group as control
- Track them until delivery and PPV
- Compare PPV rate of the two groups
- Results: 9 out of 15 text group kept PPV
Why Washington & Sebastian Counties?

The proportion of Hispanic people living in Washington County increased from eight percent in 2000 to 15 percent in 2010 and remained considerably above the state average in 2000 and 2010. The Hispanic population may be of any race: white, black or any other combination of races.

The proportion of Hispanic people living in Sebastian County increased from about seven percent in 2000 to twelve percent in 2010 and remained above the state average in 2000 and 2010. The Hispanic population may be of any race: white, black or any other combination of races.
• Younger population
• Higher no. of women of child bearing age
• Access to health care matters
  – Low income
  – Lack of health insurance
  – Unable to pay out of pocket cost for health care
  – Lack of trust in the health care system
  – Immigration matters
  – Lack of transportation
  – Prioritize needs of other household members
  – Lack of flexible work hours
Form a coalition to share strategies

- Contact agencies/organizations promoting Text4Baby in Arkansas
- Identify contacts
- Describe objectives of coalition
- Invite to a meet & greet seminar
- Text4Baby experience
- Document and prepare for the next cycle
Various ways to improve outcomes:

OMHHD Mission

To provide leadership in improving health outcomes by advocating for health equity for at-risk populations (disparate) as defined by race or ethnicity, age, education, disability, gender, geographical location, income, and sexual orientation.
Various ways to improve outcomes

• Through Collaborations
  • ASTHO
  • Sisters United
  • Arkansas Minority Barber Beauty Shop Health Initiative

• Research
  • Effectiveness of Text4Baby reminders on PPV
  • Sisters United – IM knowledge improvement
    (Arkansas Medical Society Journal - JAMS)
Various ways to improve outcomes

• Community Needs Assessment
  • Red County Initiative – counties with lower life expectancies

• Policies and procedures
  • Act 790
  The 2011 Arkansas Act 790, entitled “an act to define Arkansas Red Counties; to establish a reporting system; and for other purposes.”
  • Act 798
  The 2011 Arkansas Act 798, entitled “an act to define Red Counties; to request collaborative initiatives; to report on collaborative initiatives established; and other purposes.”
Various ways to improve outcomes

• Outreach and education
  • Sisters United
  • Families United

• Access to preventive care
  • STAR.Health
  • Arkansas Minority Barber Beauty Shop Health Initiative

Thank you!