OUR MISSION

MARCH OF Dimes leads the fight for the health of all moms and babies.

TOO MANY TRENDS IN THE WRONG DIRECTION

PRETERM BIRTH RATES have risen for 3 consecutive years
INFANT MORTALITY RATES unacceptably high in many communities
OPIOID EXPOSURE rising among newborns
STARK DISPARITIES in maternal-child outcomes among African American women and babies

OUR CURRENT FOCUS

THE MATERNAL HEALTH CRISIS

OVER 700 WOMEN die in the US each year from complications related to childbirth.
2 WOMEN will die from childbirth in the US today. And every day.
50,000 WOMEN in the US suffer life-threatening complications every year during pregnancy.
WOMEN OF COLOR more likely than white women to die from pregnancy-related causes.

#BlanketChange
WHAT IS MARCH OF DIMES DOING AROUND HEALTH EQUITY?

CONVENING

Bringing partners together

IMPLEMENTING

Developing & delivering programs

DRIVING CHANGE

Using data to address disparities

CT 17P/LOW DOSE ASPIRIN CPQC WORKGROUP

- Chris Nold, MD – Hartford Health Care (HHC)
- Beth Deckers, MD – HHC
- Erica Hammer, MD – St. Francis
- Veronica Pimental, MD – St. Francis
- Mary Beth Janicki, MD – St. Francis
- Shefali Pathy, MD – Yale New Haven Health (YNHH)
- Doreen Picagli, DNP, APRN – Yale Women’s Health Center
- Jordana Frost, DrPH, MPH – March of Dimes
- Chris Morosky, MD – UCONN Health & Co-Chair of Connecticut Perinatal Quality Collaborative (CPQC)

* CPQC is staffed and administered by Connecticut Hospital Association (CHA)

Connecticut Perinatal Quality Collaborative

An initiative of the Connecticut Hospital Association, focused on:

- Promoting high quality maternal and newborn care
- Cooperation between hospitals and providers
- Supporting evidence-based practices
- Sharing educational and training resources
- Gathering critical data
CT ACTIVITIES THUS FAR

➢ 2015 – March of Dimes issued Prematurity Prevention Intervention Roadmap, which included 17P and Low Dose Aspirin
➢ Spring 2017 – Developed workgroup as part of CPQC
➢ Fall 2017 – Collected provider survey responses
➢ Jan. 2018 – Hosted provider educational conference through CPQC
➢ Nov. 2018 – Participated in regional convener meeting (CT, MA, RI, NY) hosted by March of Dimes

LOW DOSE ASPIRIN FOR PREVENTION OF PREECLAMPSIA AND WOMEN’S CARDIAC HEALTH REGIONAL CONVENER

NOVEMBER 27TH 2018 BURLINGTON, MA CT, MA, NY, RI

CARDIOVASCULAR DISEASE IN PREGNANCY

Dr. Nandita Scott, MD, FACC
Co-Director - MGH Corrigan Women’s Heart Health Program
Cardiovascular Disease and Pregnancy Program
Pregnancy-related mortality ratio is the number of pregnancy-related deaths per 100,000 live births. A pregnancy-related death is the death of a woman during pregnancy or within one year of the end of pregnancy from a pregnancy complication, a chain of events initiated by pregnancy, or the aggravation of an unrelated condition by the physiologic effects of pregnancy. Source: CDC, 1987-2013 (https://www.cdc.gov/reproductivehealth/maternalinfanthealth/pmss.html) Prepared by March of Dimes Perinatal Data Center, March, 2018.

**TREND IN MATERNAL MORTALITY**

Pregnancy-related death has more than doubled over the past 25 years.

**Maternal Mortality in Developed Countries**

**Causes of Pregnancy –Related Death**

CDC data

54.3% cardiovascular cause
Background

- As maternal age advances, preexisting heart conditions more likely
- Rise in multifetal pregnancies
- Increase in obesity and diabetes in population increase risk of CV complications during pregnancy
- Patients with congenital heart disease are surviving to reproductive age
- Childhood cancer survivors with cardiotoxic effects from therapy

Normal Hemodynamics of Pregnancy

How to Risk Stratify

Risk of Primary Cardiac Event:

- 0 – 1%: 5%
- 2 – 10%
- 3 – 15%
- 4 – 22%
- > 4 – 41%
### Modified WHO Classification of Pregnancy Risk

<table>
<thead>
<tr>
<th></th>
<th>mWHO I</th>
<th>mWHO II</th>
<th>mWHO II-III</th>
<th>mWHO III</th>
<th>mWHO IV</th>
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</thead>
<tbody>
<tr>
<td>Diagnosis</td>
<td>Mild PS</td>
<td>Mild PS</td>
<td>Mild PS, moderate PS</td>
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<td>Severe PS</td>
</tr>
<tr>
<td></td>
<td>ASD/VSD</td>
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<td>ASD/VSD</td>
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<tr>
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<td>moderate LV dysfunction</td>
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<td>PDA, ASD/VSD, AS</td>
<td>PDA, ASD/VSD, AS</td>
<td>PDA, ASD/VSD, AS</td>
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<td>Turner syndrome with normal aorta</td>
<td>Turner syndrome with normal aorta</td>
<td>Turner syndrome with normal aorta</td>
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<td>Marfan without dilatation</td>
<td>Marfan without dilatation</td>
<td>Marfan without dilatation</td>
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<td>AVSD</td>
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<tr>
<td></td>
<td>Replaced aortic valve</td>
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<td>Moderate LV systolic dysfunction</td>
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<td></td>
<td>Prior PPCM with normal LV EF</td>
<td>Prior PPCM with normal LV EF</td>
<td>Prior PPCM with normal LV EF</td>
<td>Prior PPCM with normal LV EF</td>
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</tr>
<tr>
<td></td>
<td>Severe LV systolic dysfunction</td>
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</tr>
<tr>
<td></td>
<td>Moderate coarctation</td>
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<td>Moderate coarctation</td>
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<tr>
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<td>Moderate MS</td>
<td>Moderate MS</td>
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<tr>
<td></td>
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<td>Severe AS</td>
<td>Severe AS</td>
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<td></td>
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<td>Moderate HCM</td>
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<td>Native or tissue valve disease not WHO I or IV</td>
<td>Native or tissue valve disease not WHO I or IV</td>
<td>Native or tissue valve disease not WHO I or IV</td>
<td>Native or tissue valve disease not WHO I or IV</td>
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<tr>
<td></td>
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<td>Severe aortic disease</td>
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<tr>
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<td>Fontan circulation</td>
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<td>Fontan circulation</td>
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<tr>
<td></td>
<td>Moderate RV systolic dysfunction</td>
<td>Moderate RV systolic dysfunction</td>
<td>Moderate RV systolic dysfunction</td>
<td>Moderate RV systolic dysfunction</td>
<td>Moderate RV systolic dysfunction</td>
</tr>
<tr>
<td></td>
<td>Severe RV systolic dysfunction</td>
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<td>Severe RV systolic dysfunction</td>
<td>Severe RV systolic dysfunction</td>
<td>Severe RV systolic dysfunction</td>
</tr>
<tr>
<td></td>
<td>Severe atrial septal defect</td>
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<td>Severe atrial septal defect</td>
<td>Severe atrial septal defect</td>
<td>Severe atrial septal defect</td>
</tr>
<tr>
<td></td>
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<td>Severe PS</td>
<td>Severe PS</td>
<td>Severe PS</td>
<td>Severe PS</td>
</tr>
<tr>
<td></td>
<td>Moderate AS</td>
<td>Moderate AS</td>
<td>Moderate AS</td>
<td>Moderate AS</td>
<td>Moderate AS</td>
</tr>
<tr>
<td></td>
<td>Severe MR</td>
<td>Severe MR</td>
<td>Severe MR</td>
<td>Severe MR</td>
<td>Severe MR</td>
</tr>
<tr>
<td></td>
<td>Severe VSD</td>
<td>Severe VSD</td>
<td>Severe VSD</td>
<td>Severe VSD</td>
<td>Severe VSD</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mortality Risk</th>
<th>None</th>
<th>Small increase</th>
<th>Intermediate</th>
<th>Significant increase</th>
<th>Extremely high</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morbidity Risk</td>
<td>None</td>
<td>Non/mild</td>
<td>Moderate</td>
<td>Severe</td>
<td>Severe</td>
</tr>
<tr>
<td>Maternal cardiac event rate</td>
<td>≤ 5%</td>
<td>≤ 10-15%</td>
<td>15-20%</td>
<td>20-25%</td>
<td>25-30%</td>
</tr>
<tr>
<td>Mode of Delivery</td>
<td>Vaginal delivery remains optimal method of delivery</td>
<td>Cesarian section increases risk of maternal infection, has greater hemodynamic shifts and blood loss, risk of surgical injury and greater risk for thrombotic events</td>
<td>Option for assisted 2nd stage</td>
<td>No consensus absolute contra indications to vaginal delivery, in a few unique situations, can be considered first</td>
<td>Preterm labor in the presence of full oral anticoagulation</td>
</tr>
<tr>
<td>Multidisciplinary Care</td>
<td>Managing pregnant women with heart disease implicates several stakeholders, all with different perspectives but COMMON goals</td>
<td>Team should include Cardiologist with expertise, OB anesthesia, Maternal-Fetal Medicine and Nursing</td>
<td>Meet regularly to discuss, anticipate and plan for any potential difficulties</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Hypertensive Disorders of Pregnancy

- Preeclampsia (5% incidence) can lead to significant pregnancy complications:
  - IUGR
  - Preterm birth
  - Hemorrhage
  - Placental Abruption
  - Ruptured Liver
  - Eclampsia
  - Renal failure

- Preeclampsia responsible for 50,000 to 60,000 deaths worldwide and there are many near misses that result in significant health risk and care cost

- Preeclampsia is a risk factor for future cardiovascular and neurological disease

- Etiology remains unclear

How can we prevent preeclampsia?

- B: high certainty that net benefit is moderate, or moderate certainty that net benefit is moderate to substantial
ACOG COMMITTEE OPINION

Low-Dose Aspirin Use During Pregnancy

“Low dose aspirin prophylaxis is recommended in women at high risk of preeclampsia and should be initiated...optimally before 16 weeks and continued daily until delivery.”

“Low dose aspirin prophylaxis should be considered for women with more than one...moderate risk factor for preeclampsia.”

Who should receive low dose aspirin?

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>Risk Factors</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>History of Preeclampsia</td>
<td>Low dose aspirin if any one of these risk factors</td>
</tr>
<tr>
<td></td>
<td>Multifetal gestation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Chronic hypertension</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Diabetes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Renal Disease</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Autoimmune disease</td>
<td></td>
</tr>
<tr>
<td>Moderate</td>
<td>Nulliparity</td>
<td>Low dose aspirin if “several” of these risk factors</td>
</tr>
<tr>
<td></td>
<td>Obesity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Family history (mother, sister)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Socio economic factors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Age ≥ 35</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Personal history (low birthweight or SGA, prior adverse pregnancy outcomes, interpregnancy interval &gt; 15 years)</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>Previous uncomplicated full-term delivery</td>
<td>Do not recommend low dose aspirin</td>
</tr>
</tbody>
</table>

THE BOSTON MEDICAL CENTER PRENATAL ASPIRIN PROJECT

Dr. Jodi Abbott, MD, MSc, MHCMD
Asst. Dean for Patient Safety and Quality Improvement
Boston Medical Center (BMC)
Epidemiology

National
• Preeclampsia in 2-5% of all pregnancies in the U.S.
• Leading cause of maternal morbidity and up to 19% maternal mortality
• Rates of hypertension in pregnancy are increasing

BMC
• Approximately 30% of pregnancies complicated by preeclampsia/ Gestational HTN and/or IUGR
• Approximately 40% of preterm births are due to preeclampsia/ Gestational HTN and/or IUGR

Epidemiology

National
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BMC
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• Approximately 40% of preterm births are due to preeclampsia/ Gestational HTN and/or IUGR

The answer is 17 years, what is the question: understanding time lags in translational research

Zob Skrotzki Mora,1 Steven Wooding,2 and Jonathan Grant3

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See editorial "Knowledge, but in translation" in volume 104 on page 481.
This article has been cited by other articles in PMC.
Framework for Analyzing the Adoption of Innovations

Health Belief Model Applied to Aspirin

Perceived risk of HTN/PTD

Perceived danger due to HTN/PTD

Self Determination Regarding Aspirin for HTN/PTD risk reduction

Perceived benefits of Aspirin for risk reduction

Perceived barriers to Aspirin
Classification of Professional interventions

- DISTRIBUTION OF EDUCATIONAL MATERIALS
- EDUCATIONAL MEETINGS
- LOCAL CONSENSUS PROCESSES
- LOCAL OPINION LEADERS
- PATIENT MEDIATED INTERVENTIONS; NEW INFORMATION FROM PATIENT COLLECTED INFORMATION
- AUDIT AND FEEDBACK
- REMINDERS (PROMPTS)
- MARKETING
- MASS MEDIA

EPOC TAXONOMY: Cochrane Effective Practice and Organization of Care

Most Effective:
HARD STOPS IN THE EHR
AUDIT AND FEEDBACK

Preeclampsia, gHTN, and/or IUGR in current pregnancy

- 83 cases of the following:
  - 24 cases of preeclampsia
  - 37 cases of gHTN
  - 24 cases of IUGR

- 79 of these patients qualified for PNA

60% patients had complications that were potentially preventable if on prenatal aspirin

71% of qualified pts with IUGR and/or preeclampsia or gHTN were not on Prenatal Aspirin
Patient Survey Data

% of surveyed about aspirin safety in pregnancy?

<table>
<thead>
<tr>
<th>Language</th>
<th>Safe</th>
<th>Not Safe</th>
<th>Not Sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>19</td>
<td>15.5</td>
<td>15.5</td>
</tr>
<tr>
<td>Spanish</td>
<td>58</td>
<td>41.5</td>
<td>35.5</td>
</tr>
<tr>
<td>Grand Total</td>
<td>11</td>
<td>46.5</td>
<td>12</td>
</tr>
</tbody>
</table>

Aspirin is NOT safe to use in pregnancy

Causes of “aspirin in pregnancy-is-unsafe” preconceived notions

- Midwife
- Family/Cultural
- Physician
- Own Research
What the patient (and pharmacist) sees

Pharmacist Survey Data

Two Pharmacist Surveys
- Survey of Pharmacists at BMC
  - (n=22)
  - Staff working at the outpatient pharmacies in the hospital
  - The survey, conducted via email using SurveyMonkey, was sent to 26 staff and 22 responded, which included a mix of both pharmacists and pharmacy technicians.
- MA Pharmacists Needs Assessment Survey
  - Sent out to over 4,000 pharmacists in New England, and 50 responded
  - The majority of respondents reported working in a hospital inpatient or outpatient pharmacy (48.9%), 22.4% in a community pharmacy, 14.2% in ambulatory care, and 12.2% in Other.
  - Most pharmacists had been in practice for 21+ years (48.9%), between 11 and 20 years (22.4%), and between 0 and 5 years (20.4%).
Low Dose Aspirin is safe in pregnancy…

<table>
<thead>
<tr>
<th></th>
<th>(Strongly) Disagree</th>
<th>(Strongly) Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>27</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>27</td>
<td></td>
</tr>
</tbody>
</table>

Low Dose Aspirin can prevent hypertensive disease in pregnancy…

<table>
<thead>
<tr>
<th></th>
<th>(Strongly) Disagree</th>
<th>Neutral</th>
<th>(Strongly) Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>32</td>
<td>36</td>
<td>32</td>
</tr>
</tbody>
</table>

Hesitations in filling prescription?

- < 30% report feeling (very) comfortable filling a prescription of aspirin for a patient who is pregnant
- Self-reported hesitations
  - Bleeding, harm to fetus, risk vs. benefit, lack of knowledge

% aware of USPSTF guidelines for Aspirin in pregnancy to prevent hypertensive disorders of pregnancy?

- No: 73%
- Yes: 27%

If a pregnant patient came to my pharmacy with a prescription for aspirin (81mg), I would feel comfortable dispensing her prescription

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9</td>
<td>18</td>
<td>50</td>
<td>14</td>
<td>9</td>
</tr>
</tbody>
</table>
Pharmacist Intervention

Most effective way to reach pharmacists is to:

- Recruit pharmacy liaisons
- Attend, present, and table at pharmacy conferences
- Pass on all of our educational materials

Stakeholder Directed Implementations

Sample of Education Materials

What You Need To Know: Aspirin in Pregnancy

- For 39 years research has shown that prenatal aspirin has many benefits.
- It does not harm men or babies.
- It's safe to take during pregnancy.
- Helps to reduce the chance of miscarriage.
- Helps to reduce the chance of premature delivery.
- Helps to reduce the chance of low birth weight babies.

<table>
<thead>
<tr>
<th>Benefits of prenatal aspirin</th>
<th>Side effects of prenatal aspirin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helps to reduce the chance of miscarriage</td>
<td>May cause harm to the mother and fetus</td>
</tr>
<tr>
<td>Helps to reduce the chance of premature delivery</td>
<td>May cause harm to the mother and fetus</td>
</tr>
<tr>
<td>Helps to reduce the chance of low birth weight</td>
<td>May cause harm to the mother and fetus</td>
</tr>
<tr>
<td>Helps to reduce the chance of preterm delivery</td>
<td>May cause harm to the mother and fetus</td>
</tr>
</tbody>
</table>

Show this Card to Your Pharmacist

- Take aspirin as instructed.
- Take aspirin as instructed.
- Take aspirin as instructed.
- Take aspirin as instructed.
- Take aspirin as instructed.
- Take aspirin as instructed.
BMC Toolkit is available at: prenatalaspirin.com

Posters
Patient Education
Provider screening tools

English
Spanish
Haitian Creole

LOW DOSE ASPIRIN PROVIDER SURVEY – A PROJECT OF THE CONNECTICUT PQC

Dr. Christopher Morosky, MD
UCONN Health
CPQC Provider Survey 2017-2018
• Survey Monkey and in-person paper surveys
• CPQC list-serv and local resources
• Provider practices and beliefs related to Low Dose Aspirin (LDA) and 17-OH progesterone (17P)
• Rolled out October 2017 – January 2018
• n = 163 total survey respondents

---

Primary Profession
- Majority: OBGYN and MFM

Practice Type
- Majority: Private Office with Hospital and Academic tied for second
Percent Medicaid
Pretty well split, but overall majority Medicaid

Do you currently recommend LDA for the prevention of pre-eclampsia?
Yes: 95.2%
No: 4.8%

Do you believe that LDA is effective to prevent pre-eclampsia?
Very effective: 22.8%
Somewhat effective: 75.8%
Not at all effective: 4.8%
What can the CPQC and MOD do to support increased use of indicated LDA?

<table>
<thead>
<tr>
<th>Provider CME</th>
<th>Patient education materials</th>
<th>Advocacy</th>
<th>QI Projects</th>
<th>Other program activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>77.7%</td>
<td>81.1%</td>
<td>26.5%</td>
<td>25.1%</td>
<td>3.4%</td>
</tr>
</tbody>
</table>

Open Comments

- “Advocate pharmacy staff that this is safe and recommended in pregnancy.”
- “Many patients are hesitant about safety. Advocacy in pharmacies would be helpful.”
- “Signs at the pharmacy.”
- “Public service announcements.”
Strategy for Postpartum Hypertension

• During the postpartum period, there are marked cardiovascular and hemodynamic shifts

• There are few standardized approaches for identification and management of women most at risk for postpartum hypertensive complications leading to variability in practice

• Opportunities for inequities in care
  • practitioners vulnerable to management errors
  • women at risk of harm

---

Strategy for Postpartum Hypertension

• ACOG provides detailed protocols for management of severe and acute hypertension during pregnancy

• There are no specific guidelines for the initiation of antihyertensive medications in the postpartum period for women with blood pressure elevations that are not severe.

• MGH Plan: Electronically-Integrated Management Strategy in women with hypertension or preeclampsia post partum

---

What we can do about history of preeclampsia?
Brigham and Women’s Hospital
Cardiometabolic Clinic in
Maternal Fetal Medicine
2011-present
Ann C. Celi MD, MPH
Assistant Professor Harvard Medical School
Division of General Medicine and Primary Care,
Department of Medicine, Brigham and Women’s Hospital

BWH Cardiometabolic Clinic in MFM
Thursday mornings 732-4840
Clinical Care for Postpartum women with complex
hypertensive pregnancies
• started October 2011
• >600 patients seen and followed
Louise Wilkins-Haug MD, PhD- Maternal Fetal Medicine
Ann Celi MD, MPH – Primary Care Medicine

BWH Cardiometabolic Clinic Design
• Early postpartum hypertension medical management
• Patient and provider education around cardiovascular risk
• Clinical bridge with primary obstetric and medicine providers
• Sustainable clinical model reimbursed by private and public insurances
Innovations

- Blood pressure monitors
- Medical Home and Primary Care
- Breastfeeding education/support: includes compatibility of medications
- Contraception counseling informed by complex pregnancy/delivery and hypertension history
- Resources including housing, WIC, food stamps, summer camp, Globe Santa
- Nutrition to optimize heart healthy lifestyle
- Paternal leave to help care for maternal and infant medical issues
- Maternal leave and transition back to work.
- Community engagement- family, friends, church to provide additional help after complex pregnancy

CONCLUSIONS

CT OPPORTUNITIES

- Greater coordination of care throughout the life course, and particularly before, during, and after/between pregnancies
- Women’s health care providers (gynecology, obstetrics, midwifery)
- Primary care providers (internal medicine and pediatrics)
- Family medicine providers
- Paid family medical leave?
CT OPPORTUNITIES

- Patient education
  - Acceptability and tailored messaging
  - Patient education handout (MOD → HH)
  - Patient education video clips (DPH)
  - CHNCT perinatal intensive care management program?

- Clinical provider education and quality measures
  - Traveling grand rounds (CPQC workgroup)
  - Effectiveness, safety, indications, Medicaid OTC coverage
  - Video? Podcast episode? (DPH)
  - Uniform screening

CT OPPORTUNITIES (CONT’D)

- Pharmacy professional education
  - Professional association conferences & meetings?
  - Partnership with major pharmaceutical companies (CVS, Walgreens, Walmart, RiteAid, etc.)?

- Pharmaceutical labeling
  - “Prenatal aspirin” (PNA)?
  - Public health approaches to chronic disease prevention, pre-/interconception health, and pregnancy intentionality

Video: Visit www.prenatalaspirin.com
THANK YOU

2018 PREMATURE BIRTH REPORT CARD
PRETERM BIRTH TREND IN CONNECTICUT, 2007-2017

Percentage of live births born preterm
2007 2017
10.1 10.1 10.0 9.9 9.8 9.7 9.3 9.2 9.3 9.4 9.5

Preterm is less than 37 weeks gestation based on obstetric estimate.
Source: National Center for Health Statistics, 2007-2017 natality data

MARCHOFDIMES.ORG/REPORTCARD

CONNECTICUT
GRADE C 9.5%

Premature birth and its complications are the largest contributors to infant death in the U.S., and a major cause of long-term health problems in children who survive. March of Dimes aims to reduce preterm birth rates and increase equity, and monitors progress through Premature Birth Report Cards. Report Card grades are assigned by comparing the 2017 preterm birth rate in a state or locality to March of Dimes' goal of 8.1 percent by 2020. Report Cards provide county and race/ethnicity data to highlight the importance of addressing equity in areas and populations with elevated risk of prematurity. March of Dimes is working to expand solutions to help all mothers and babies have healthy, full-term births.

MARCHOFDIMES.ORG/REPORTCARD
COUNTIES IN CONNECTICUT

Counties with the greatest number of births are graded based on their 2016 preterm birth rates.

<table>
<thead>
<tr>
<th>COUNTY</th>
<th>GRADE</th>
<th>PRETERM BIRTH RATE</th>
<th>CHANGE FROM LAST YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fairfield</td>
<td>B</td>
<td>9.2%</td>
<td>Improved</td>
</tr>
<tr>
<td>Hartford</td>
<td>F</td>
<td>10.5%</td>
<td>Worsened</td>
</tr>
<tr>
<td>Litchfield</td>
<td>A</td>
<td>7.8%</td>
<td>Improved</td>
</tr>
<tr>
<td>Middlesex</td>
<td>A</td>
<td>7.5%</td>
<td>Improved</td>
</tr>
<tr>
<td>New Haven</td>
<td>C</td>
<td>9.6%</td>
<td>Worsened</td>
</tr>
<tr>
<td>New London</td>
<td>B</td>
<td>8.3%</td>
<td>Improved</td>
</tr>
</tbody>
</table>

Preterm is less than 37 weeks gestation based on obstetric estimate.

Source: National Center for Health Statistics, 2016 natality data

RACE & ETHNICITY IN CONNECTICUT

In Connecticut, the preterm birth rate among black women is 37% higher than the rate among all other women.

<table>
<thead>
<tr>
<th>RACE/EThNICITY</th>
<th>PRETERM BIRTH RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian/Pacific Islander</td>
<td>8.4%</td>
</tr>
<tr>
<td>White</td>
<td>9.2%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>10.3%</td>
</tr>
<tr>
<td>Black</td>
<td>12.2%</td>
</tr>
</tbody>
</table>

Preterm is less than 37 weeks gestation based on obstetric estimate.

Race categories include only women of non-Hispanic ethnicity.

Source: National Center for Health Statistics, 2014-2016 natality data

2018 PREMATURE BIRTH REPORT CARD
MARCHOFDIMES.ORG/REPORTCARD