
A PARADIGM SHIFT IN PRECONCEPTION AND INTERCONCEPTION CARE: ***THE RIGHT TIME IS EVERY TIME (AND IN EVERY LOCATION)***

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FOUNDATION™

A Partner With Communities Where Children Come First

RESOURCES AND COLLABORATIONS

THE NATIONAL PRECONCEPTION CURRICULUM
AND RESOURCES GUIDE FOR CLINICIANS



Oregon Foundation for
Reproductive Health



NATIONAL VISION



All women and men of reproductive age will achieve optimal health and wellness, fostering a healthy life course for them and any children they may have.

PCHHC PURPOSE



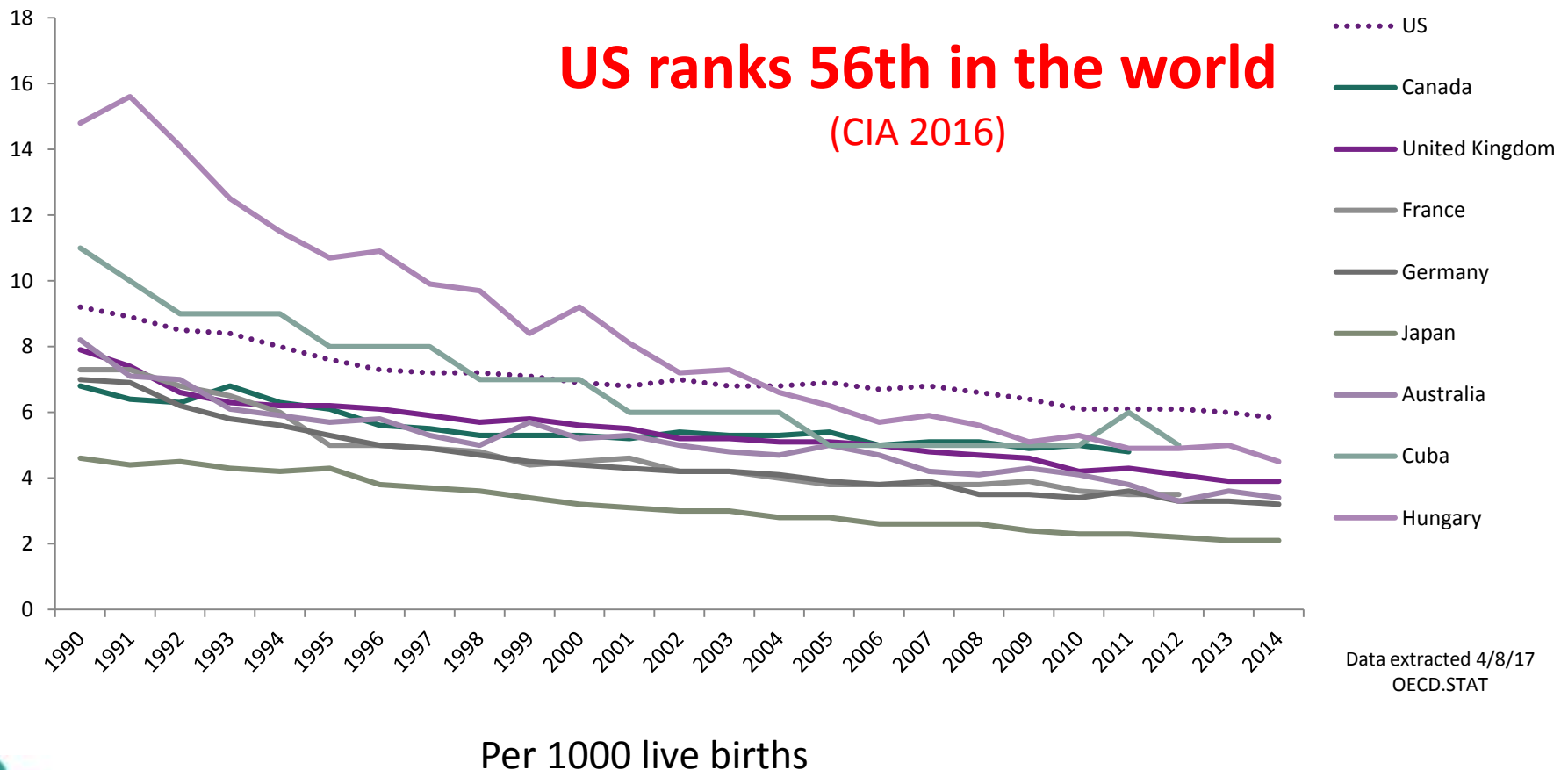
- Public-Private Partnership
- Foster connection & push momentum
- Multiply local impact through national collaborative efforts
- Support development of key PCC resources, science, policy, surveillance and messaging

OBJECTIVES

- The case for preconception care
- Why we (as providers and as a system) need to do things differently
- The content of preconception care and the reproductive life plan
- Opportunities and initiatives for an “every time” approach
- Consensus recommendations for measuring “preconception wellness”

INFANT MORTALITY

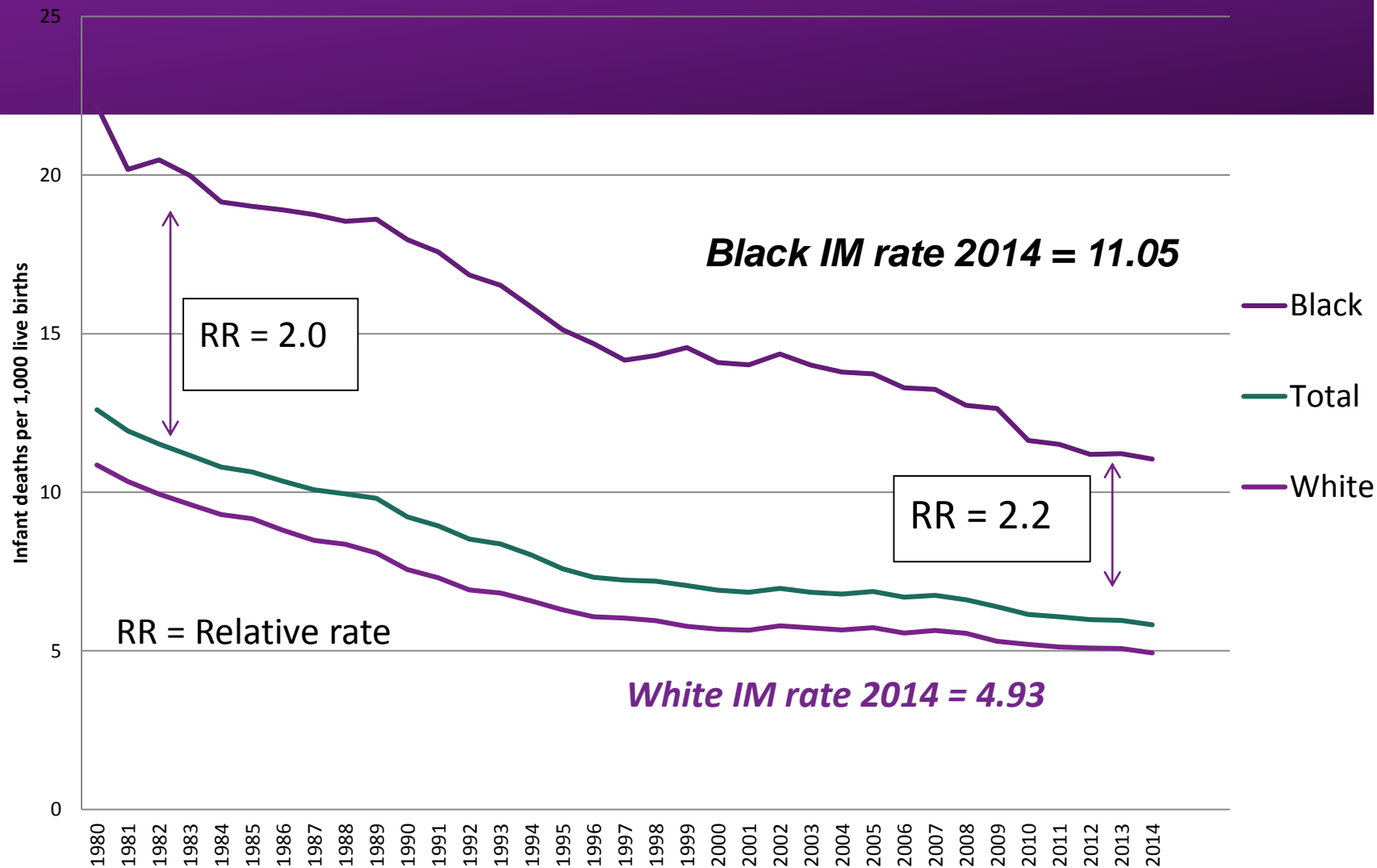
1990-2014 COUNTRY COMPARISON



NCHS DATA BRIEF: MARCH 2017

- *15% decline in infant mortality 2005-2014*
- Praised by all major MCH groups and media
 - AMCHP, MOD, NICHQ, CDC, CNN
- 39% reduction in SIDS deaths
- BUT preterm birth rates 2015 increased!
- We are getting better at caring for LBW infants...

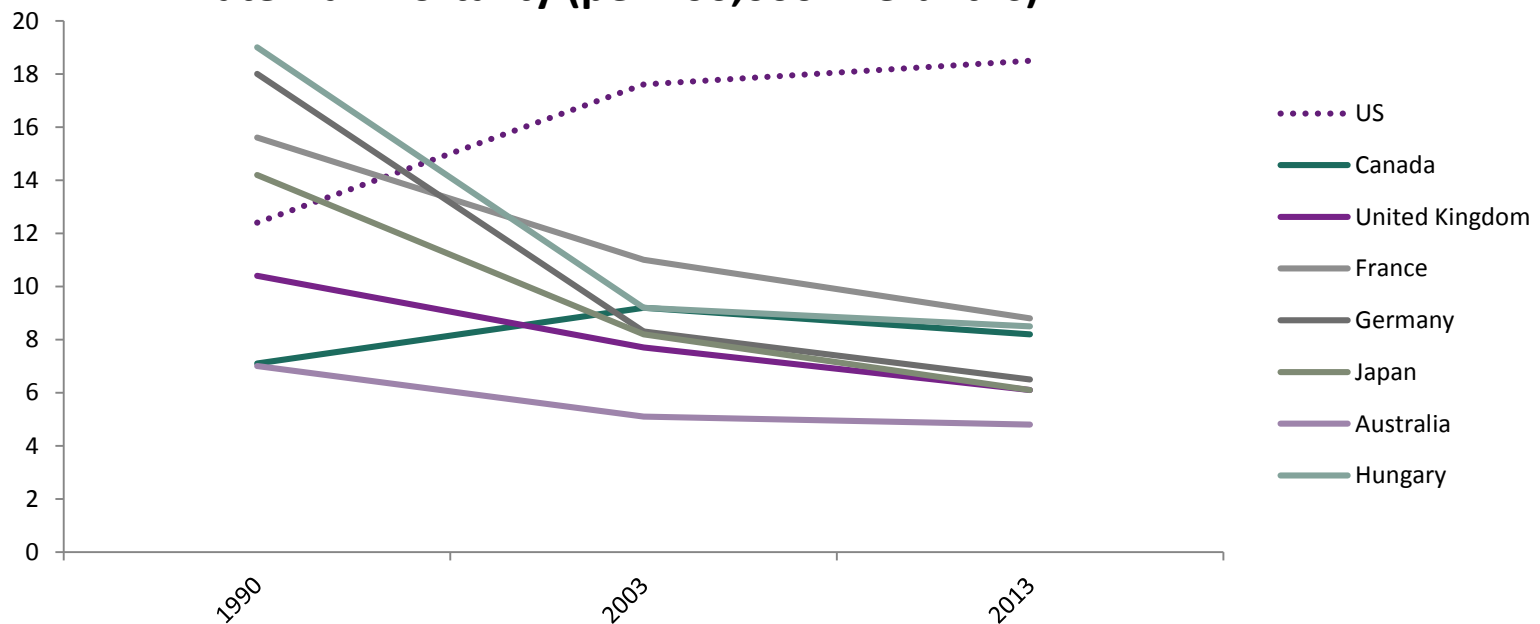
US Infant mortality by race, 1980-2014



THE BIG PICTURE: SENSE OF URGENCY

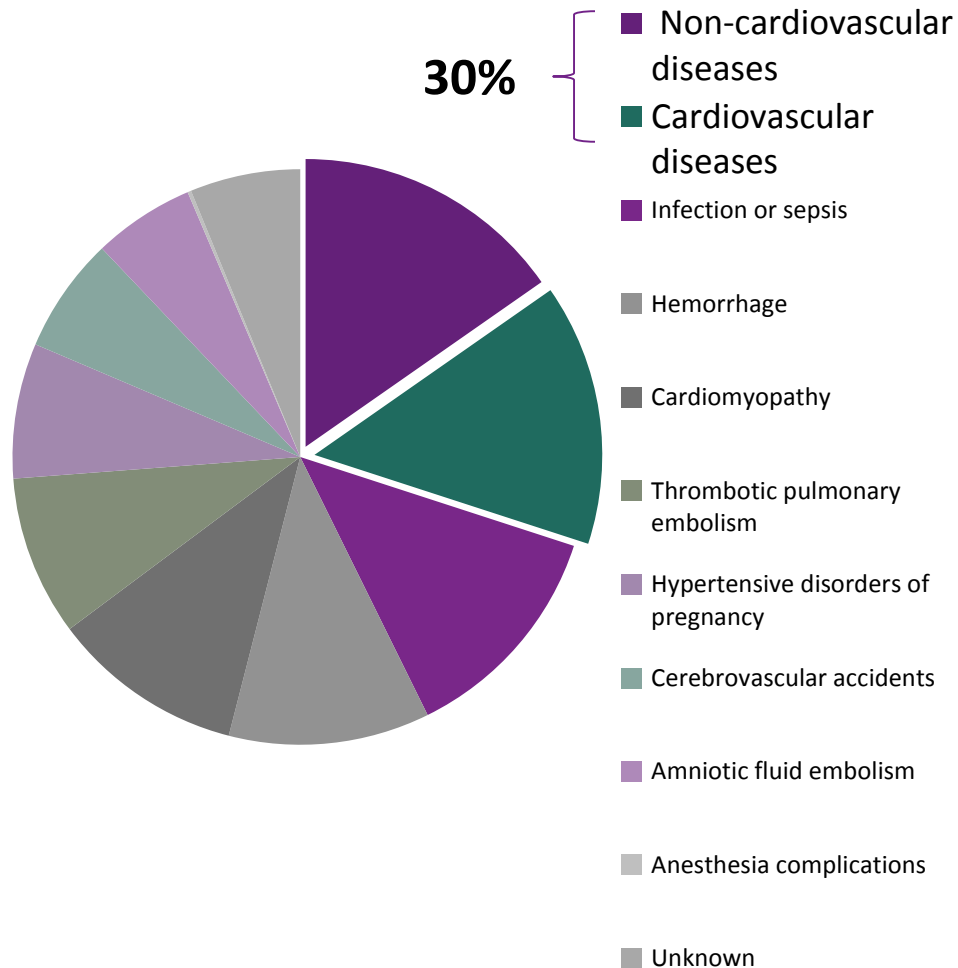
**1990-2013 Country Comparison
Maternal Mortality (per 100,000 live births)**

US rate is RISING!



Global, regional, and national levels and causes of maternal mortality during 1990-2013: a systematic analysis for the Global Burden of Disease Study. Kassebaum NJ, et al. Lancet 2014; 384:980-1004.

Causes of pregnancy-related deaths, US 2011-2012



Top 5 Causes of Infant Mortality, US, 2013 (per 100,000)

20% Birth Defects

18% PTB and LBW

7% Maternal Complic.

7% SIDS

5% Accidents (uninten.)

HOW TO IMPROVE?

- Key drivers of maternal mortality
 - Cardiovascular and other chronic conditions
- Key drivers of infant mortality
 - => Preterm birth and birth defects

HOW TO IMPROVE?

- Most efforts to reduce maternal and infant mortality focus on prenatal or intrapartum care
- These efforts alone are not achieving the results we are hoping for...
- Key drivers of chronic disease, birth defects, and preterm birth have few effective interventions during pregnancy...

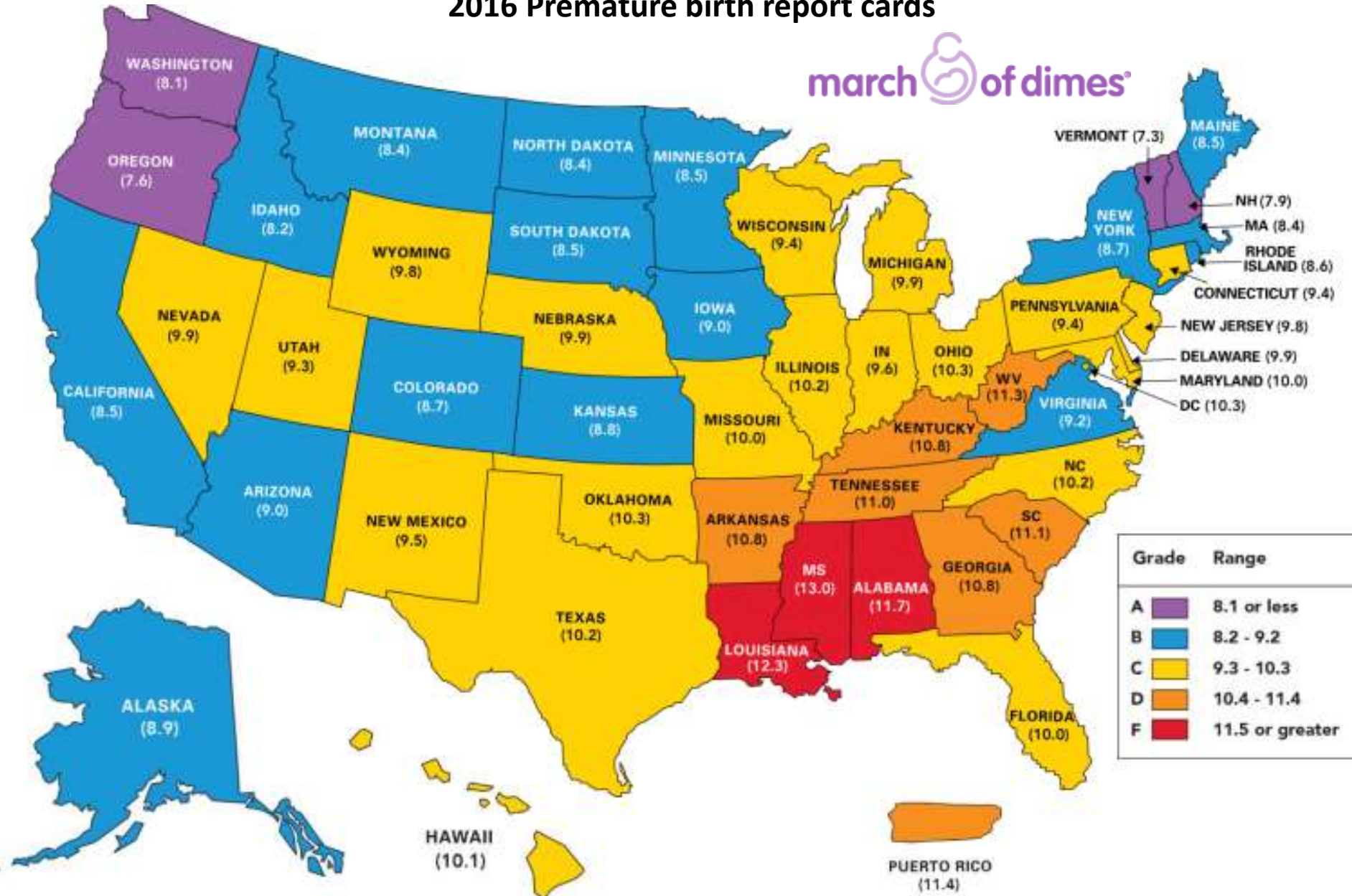
PREVALENCE OF CHRONIC CONDITIONS IN US REPRODUCTIVE AGED WOMEN

- Chronic condition requiring frequent monitoring or medication 43%
- Overweight or Obese 45%
- Smoking 21%
- Depression 10%
- Hypertension 10%
- Diabetes 3%

WHERE DOES YOUR STATE STAND?

2016 Premature birth report cards

march of dimes



PRE-CONCEPTION HEALTH

Many of the modifiable risks for adverse pregnancy outcomes
(for both moms and babies)
occur BEFORE pregnancy

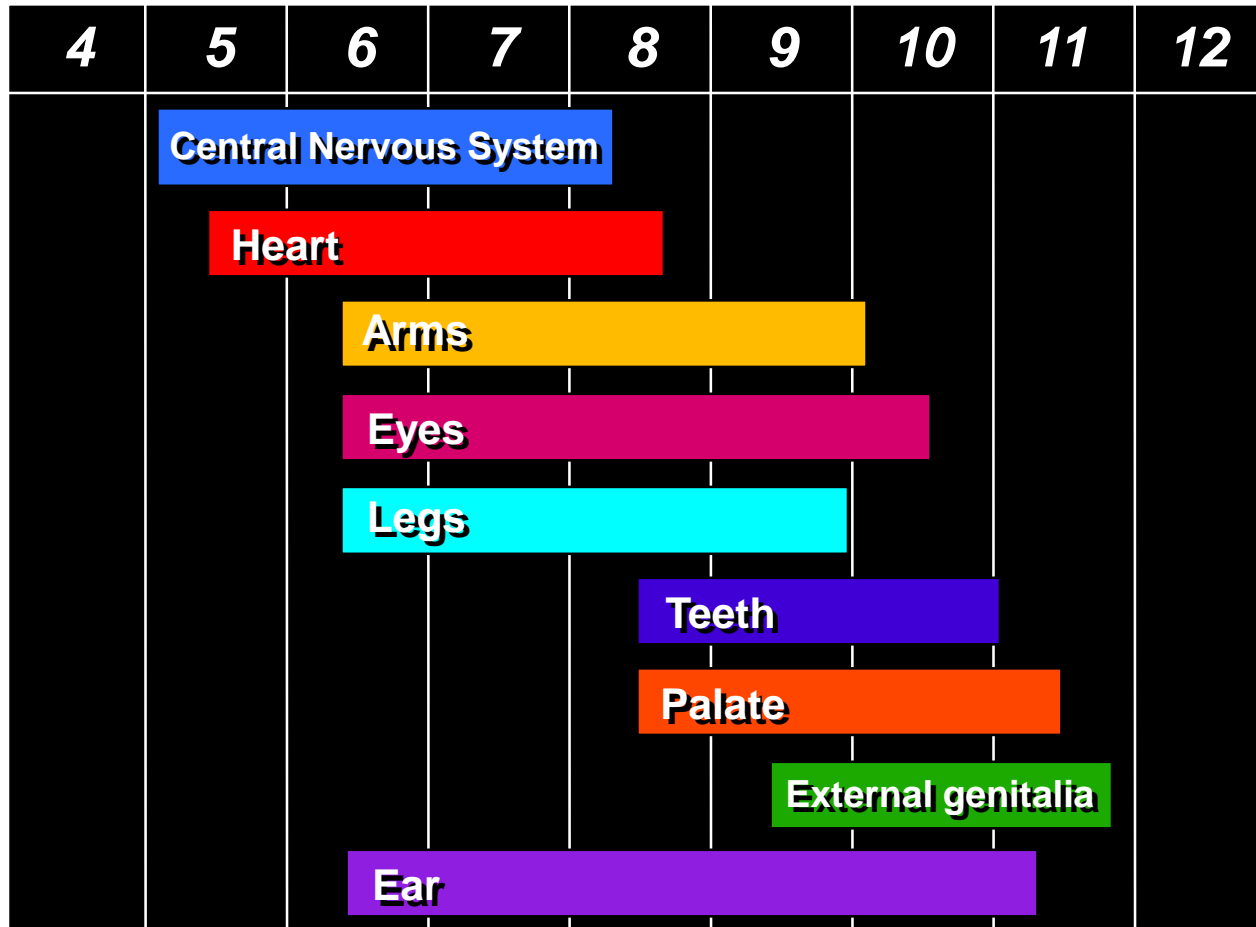
BEFORE the 1st missed menses and BEFORE prenatal care begins



[Back](#)

9 weeks gestational age by LMP (7 weeks after conception)

Critical Periods of Development



Weeks gestation from LMP

Most susceptible time for major malformation

↑
Missed Period

↑
Mean Entry into Prenatal Care

Next

EXAMPLES OF MODIFIABLE RISKS THAT DETERMINE BIRTH OUTCOMES (INFANT AND MATERNAL)

- Pregnancy intendedness
- Interpregnancy interval (<18 months or >59 months)
- Maternal age - pregnancy choice earlier in life or disease course may be healthier/safer
- Exposure to teratogenic medications
- Infections
- Exposure to substances (alcohol, tobacco, drugs)
- Chronic disease control
 - Diabetes, obesity, cardiovascular disease, hypothyroidism, etc
- Congenital anomalies
 - Neural tube defects related to folic acid

BARRIERS TO PRECONCEPTION WELLNESS

- *Unintended pregnancy 45% (2011)*
- *Had preconception counselling 22.8% (2013)*
- *No insurance 19.5% (2013)*

TRADITIONAL SOLUTION

“Preconception health visit”

Work with women who are *planning*
pregnancy

Specific prevention, discuss at annual well
woman exam

TRADITIONAL APPROACH IS SYSTEMATICALLY CHALLENGED...

- Almost half of pregnancies unintended
- Only 22.8% have had a PCC visit
 - Women may not even know how to ask for it, or its value
- Only 2 in 5 women taking folate prior
- 1 in 4 women of reproductive age have no insurance (until pregnancy)
- Many women miss their postpartum visit
- And US women of reproductive age increasingly have more risks...
 - Obesity, chronic disease, medication use, substances, mental health issues, age...

"Every system is perfectly designed to achieve exactly the results it gets."

Dr. Donald M. Berwick

(Former Administrator of the Centers for Medicare and Medicaid Services)

For U.S. = high costs, rising maternal mortality, stagnate infant mortality, and widening disparity gap

WHAT IS YOUR SOLUTION?

Devise a system to reduce maternal and infant mortality through PCC

- Caveats:
 - Most women are not seeking this type of care
 - Many women have no insurance coverage
 - Most women have competing priorities for their attention (children, work, school, etc)
 - Almost half of all pregnancies are unintended
 - Half of unintended pregnancies were using some form of birth control

2006 CDC SELECT PANEL

Recommendations to Improve Preconception Health and Health Care – United States

Recommendation #3:

“As a part of primary care visits, provide risk assessment and educational and health promotion counseling to all women of childbearing age to reduce reproductive risks and improve pregnancy outcomes.”

Kay Johnson, MPH1 , Samuel F. Posner, PhD2 , Janis Biermann, MS3 , José F. Cordero, MD4 , Hani K. Atrash, MD4 , Christopher S. Parker, PhD4 , Sheree Boulet, DrPH4 , Michele G. Curtis, MD5. CDC/ATSDR Preconception Care Work Group; Select Panel on Preconception Care. Recommendations to improve preconception health and health care—United States. A report of the CDC/ATSDR Preconception Care Work Group and the Select Panel on Preconception Care. MMWR Recomm Rep. 2006;55(RR-6):1-23.

THAT WAS 2006... IT IS 2016 – WHO IS TAKING RESPONSIBILITY?

- Few OB/GYNs are providing primary care
- <10% of FM is providing OB care
- But almost all primary care providers (FM, IM, Peds) see women and children
- Women and families are receiving services from many other health sectors (social services, WIC, childcare, home health etc)
- Preconception care is/should be important for ALL providers and in ALL locations
- We need a systematic CHANGE ...

Every Woman, Every Time

“It is not a question of whether you provide preconception care, rather it’s a question of what kind of preconception care you are providing.”

Joseph Stanford and Debra Hobbins

- Providers see women every day in multiple settings
- Need to take the opportunity when we can
 - **When she is in front of us, for whatever reason....**
 - Primary care providers should be leaders in this effort
 - And all programs that serve women have a role
 - *Need to change our paradigm*
 - **Preconception Care IS Primary Care**

I AM MORE THAN MY UTERUS!

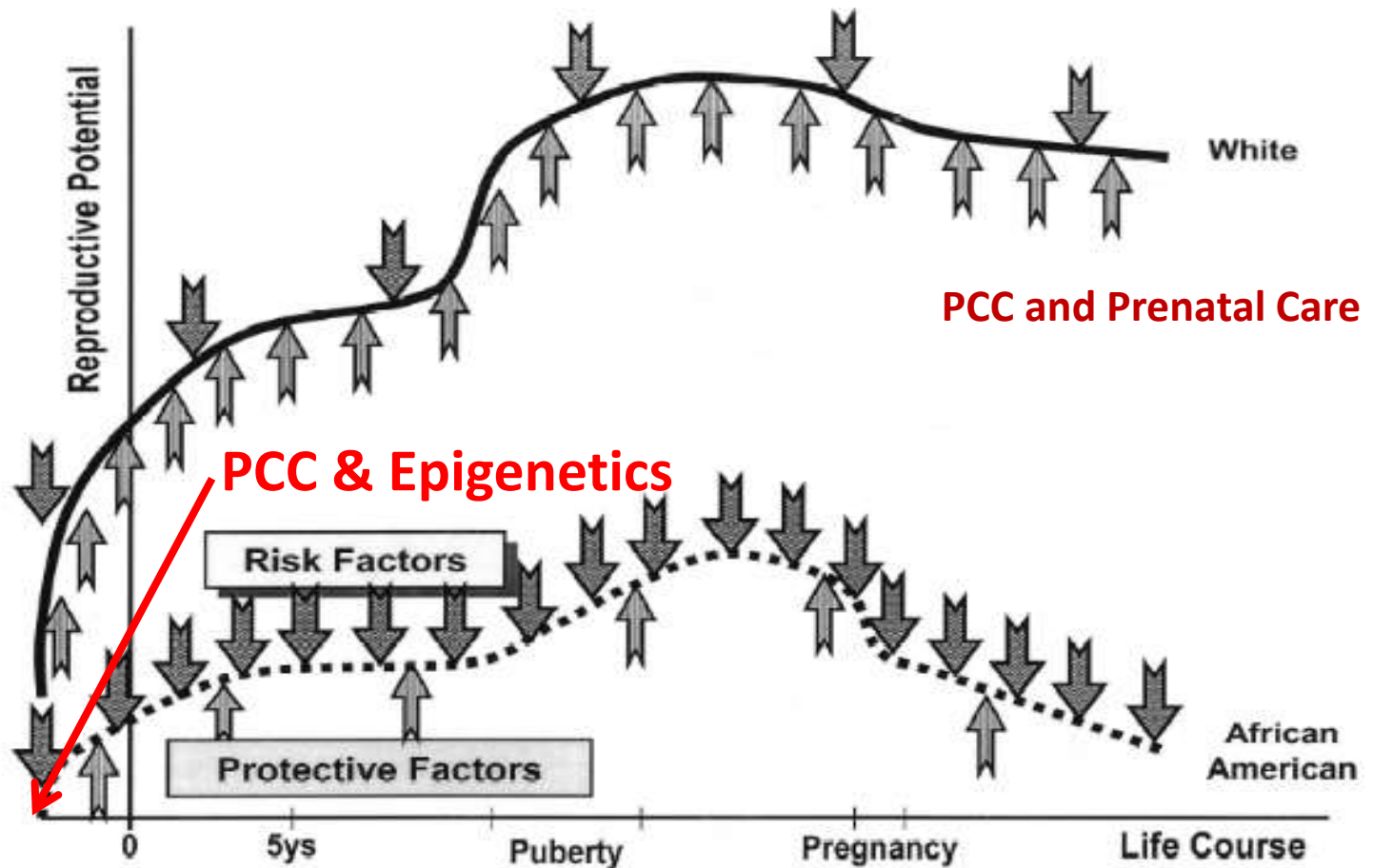
- Yes, but...
- Most preconception **health promotion** is appropriate for all **women, *irrespective*** of pregnancy plans

AND

- Almost half of pregnancies are unintended
- Be respectful of the whole woman and where they are in their life plans...

while recognizing that **good primary health prevention includes preconception care for ALL women.**

LIFE COURSE THEORY



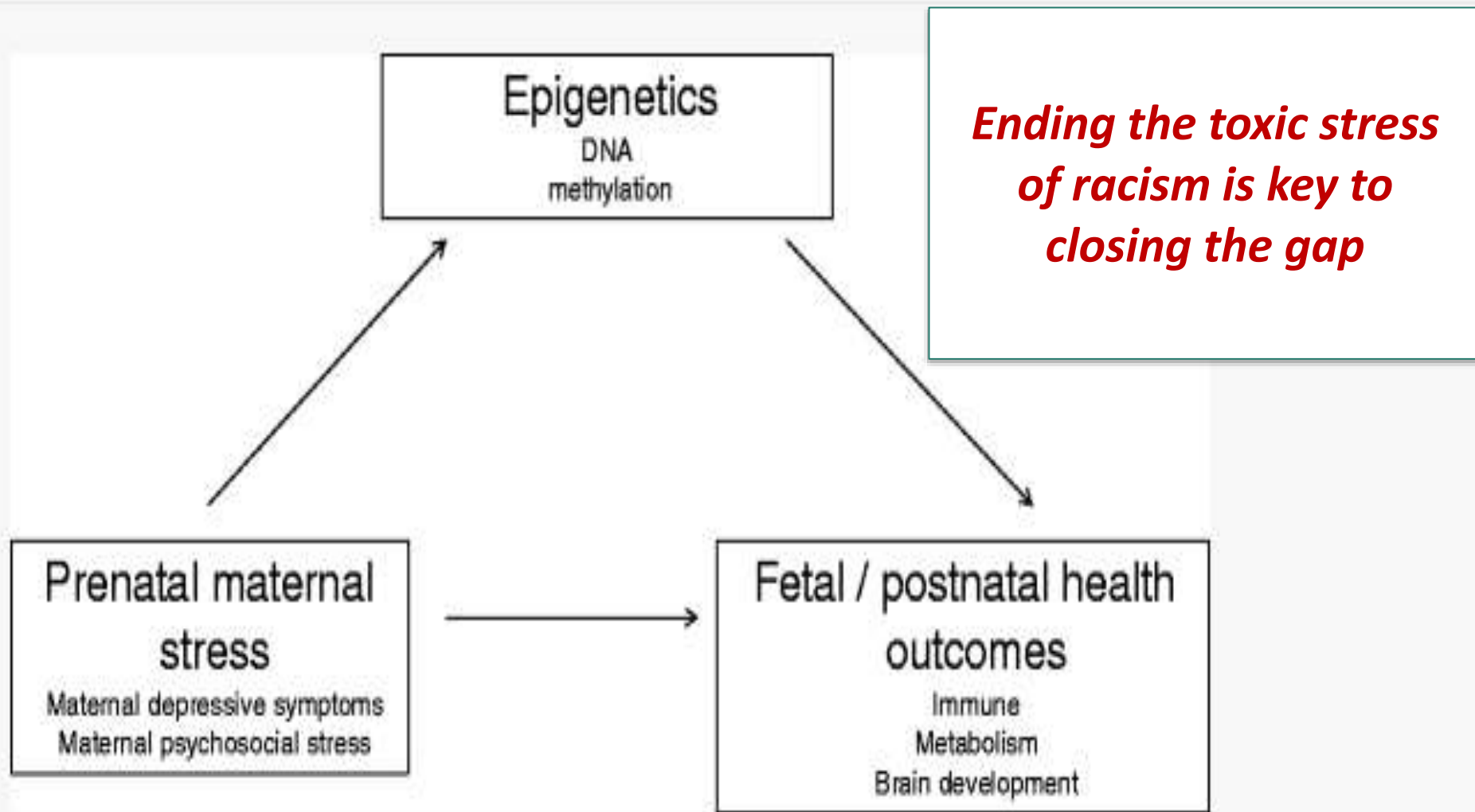


Fig. 1

The key role of epigenetic mechanisms in mediating the long-term effects of exposure to intrauterine factors on offspring's health outcomes

STRESS RELATED CONDITIONS

- Obesity
- Diabetes and other endocrine disorders
- Heart disease
- Anxiety and other mood disorders
- Digestive issues
- Decreased immune response
- ***Preterm birth...***

PRECONCEPTION CARE: CONTENT AREAS

- Family Planning
- Nutrition
- Infectious disease/
immunizations
- Chronic Disease
- Medication
exposures
- Substance Use
- Previous Pregnancy
Outcomes
- Genetic History
- Mental Health
- Interpersonal
Violence/Abuse

FRAMING THE DISCUSSION: REPRODUCTIVE LIFE PLAN

- **Do you plan to have any (more) children at any time in the future?**
- **If YES:**
 - How many?
 - How long would you like to wait until you become pregnant?
 - What family planning method would you like to use until you are ready?
 - How sure are you that you will be able to use this method without any problems?
- **If NO:**
 - What family planning method will you use to avoid pregnancy?
 - How sure are you that you will be able to use this method without any problems?
 - People's plans change. Is it possible you or your partner could ever decide to become pregnant?



Preconception Health+Health Care Initiative

A National Public-Private Partnership

Before, Between
& Beyond Pregnancy

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[CE Modules](#)

[Key Articles](#)

[Guidelines](#)

[Practice Resources](#)



THE NATIONAL PRECONCEPTION CURRICULUM
AND RESOURCES GUIDE FOR CLINICIANS

NEW PRECONCEPTION CARE
CLINICAL TOOLKIT

Tool Kit

Advancing women's
health in the primary
care setting.

Learn how to incorporate preconception health
efficiently into routine well woman care.

[Read Toolkit >](#)



NEW Quality Family Planning Guidelines have recently been released by the Office of Population Affairs and the Centers for Disease Control and Prevention. Guidelines include recommendations for preconception health services for women and men. [Click here to read more.](#)

At Risk / Unsure



At Your Fingertips

Family Planning and Contraception

Nutrition

Infectious Disease and Immunizations

Chronic Disease

Medication Use

Substance Use

Previous Pregnancy Outcomes

Genetic History

Mental Health History

Intimate Partner Violence

Desires Pregnancy

At Risk / Unsure

Does Not Desire Pre

About This Toolkit

Reproductive Life Planning Assessme

REPRODUCTIVE LIFE PLANNING CONTINUUM

Opportunistic Triage of Risk

Reproductive
Action Plan
NOW

Reproductive Plan
(1-2 years)

Life Plan (Includes Reproduction)





Pregnancy Intention Screening:

ONE KEY QUESTION[®]

**Would you like to become
pregnant in the next year?**

INTO THE WORKFLOW...

- Paradigm shift of provision of routine care to include reproductive desires and risks
- Provider vs. MA driven?
- Incorporate into EHR?
- What happens after the answer?
- Does this need to be done in a clinical setting???
- It's just a question...

Identify, engage and connect

Ask*: "Would you like to become pregnant in the next year?"

YES

**OK EITHER
WAY**

UNSURE

NO

Patient response will influence the medical decision making of prescriptions, follow up care, and preventive reproductive health services provided

Review Chronic Health Conditions, Urgent Psychosocial Concerns,
Prescribe Multi-vitamin with Folic acid

Medication Review

Review birth spacing recommendations
and optional timing for wellness

Develop follow up plan for additional
preconception care and assess
contraception needs

Screen for current
contraception use

Assess satisfaction of
method and
compliance of use

Review effectiveness,
offer all options
including LARC and
Emergency
Contraception

*Patient already
screened for medical
eligibility: age 18-45,
reproductive capacity,
etc.

REDUCE SYSTEM BARRIERS

- Need systematic ways to address identified needs in timely manner
 - May not be able to handle in the moment
 - Care for patient's agenda...
 - But it may be your only opportunity!
- QuickStart methods for immediate contraceptive use
- Emergency Contraception
- Identify ways to optimize billing for time and screenings



AND BEYOND...

EVERY WOMAN, EVERY TIME

- Every woman with a chronic disease should be aware of the potential effects of her disease and its treatments on herself, her pregnancy and her offspring (should she conceive), as well as opportunities for maximizing a healthy outcome
-
- All women of childbearing age should be taking a **MVI with folic acid** daily

The National Preconception Curriculum and Resource Guide for Clinicians: Module 3

AND BEYOND...

EVERY WOMAN, EVERY TIME

- All women/couples should be encouraged to develop a **reproductive life plan**
-
- All women should be routinely assessed and counseled about **BMI, exercise, tobacco/alcohol/other exposures, and immunizations**

NOVEL EXAMPLES OF PROVIDING PRECONCEPTION CARE “DIFFERENTLY”

- Interconception care during pediatric visits
 - The IMPLICIT Model of Interconception Care
- Public Health Programs for multivitamin distribution
- Pregnancy intendedness screening in routine care

IDEAL OPPORTUNITY FOR INTERCONCEPTION CARE: *INCORPORATE MATERNAL ASSESSMENTS INTO WELL CHILD VISITS*

- Mothers bring children to WCV though may not seek care for themselves
- Mother's health and behaviors directly impact child's health – positively and negatively
 - Tobacco use, depression
- Women accept inquiry and advice about own health at pediatric visits
 - Even if not their provider



**Focus on 4
behavioral
risks affecting
future birth
outcomes**

**Smoking
Depression
Family planning &
birth spacing
Multivitamin with
folic acid use**

IMPLICIT ICC Model

During well child visit



IMPLICIT ICC Model

- ✓ Repeatedly screen mothers during WCVs from 0-24 months of age for behavioral risk factors
- ✓ Assess current risks at each WCV 0-24 mo
- ✓ Reinforce desired behaviors
- ✓ Connect with primary providers or community resources to address risks
- ✓ Collect and analyze data
- ✓ Develop strategies to improve care delivery and patient outcomes



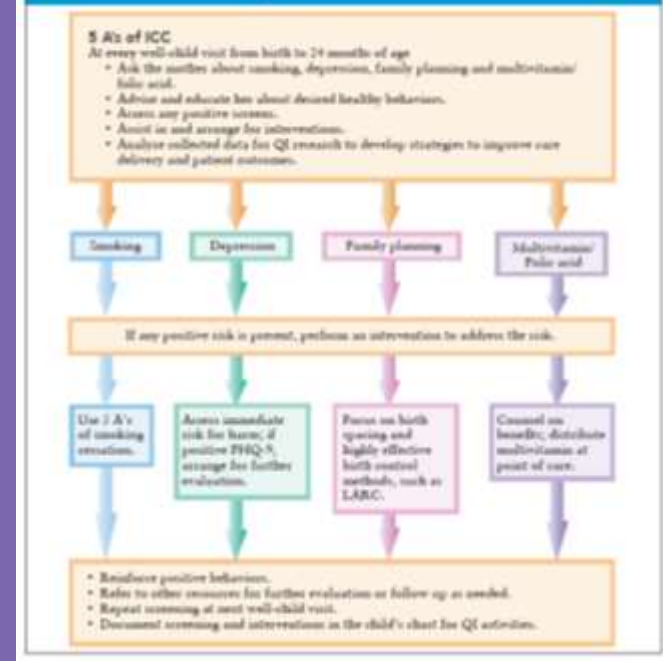
IMPLICIT interconception care toolkit

Incorporating maternal risk assessment into well-child visits to improve birth outcomes



march of dimes
A FIGHTING CHANCE FOR EVERY BAY

Figure 3. IMPLICIT ICC Model



Download the ICC Toolkit:



<https://prematurityprevention.org/Toolkits-Reports/IMPLICIT-interconception-care-toolkit>

Contact us:



implicitinfo@fmec.net



<http://www.fmec.net/implicitnetwork.htm>



Preventing Neural Tube Birth Defects in North Carolina



**A STATEWIDE MULTIVITAMIN
DISTRIBUTION PROGRAM**



STORIES FROM THE FIELD

After 4 years of pushing this message in a family medicine residency clinic, mostly during well child visits, but frequently during routine primary care visits with the NC State multivitamin distribution program as a point of care intervention strategy

STORIES FROM THE FIELD

5 new OB visits in a row which were intended, appropriately spaced, on MVIs for >3 months prior and emotionally well!

Most of these were uninsured prior to pregnancy

STORIES FROM THE FIELD

- Type 1 diabetic at 6 month well child visit not on contraception, not on MVIs, had been discharged from primary care practice for financial reasons – identified and reconnected
- (Emergency care given and started on OCPs that day to bridge to next appointment - risks averted)

STORIES FROM THE FIELD

- Mother of a 10 month old, bringing child in for “ER follow up.” Had missed the 9 month WCV.
- IMPLICIT ICC risks performed – all 4 positive
 - Restarted smoking
 - Stopped birth control pill
 - Screened positive for depression with increased stress at home
 - Stopped multivitamins
- Intervention performed that day, given MVIs, connected with beh health for assessment and support, reinforced smoking cessation and family planning risks
- Came in 2 weeks later for Nexplanon placement
- At 15 month WCV all 4 screens are now negative

MORE CASE EXAMPLES

Patient Visit	Routine Care	PCC Opportunity
Diabetes follow up	Adjust meds and assure quality measures (ACE-I, statin, A1C, foot exam, pneumonia vaccine)	Family planning, education on risks, MVI with folic acid
Asthma follow up from ED after exacerbation, has bipolar controlled on valproic acid	Counsel on appropriate inhaler use, asthma action plan, smoking cessation	Family planning, education on risks, MVI with folic acid, consider switching valproic acid
Recent sex, stopped depo due to side effects, here for pregnancy test (neg)	Reassurance, encourage routine appt for birth control, safe sex	Emergency contraception, birth control that day, STI screening, MVI with folic acid
Acute ankle sprain, college student, no meds	Ankle sprain management	Family planning, MVI with folic acid, STI screening
Chronic back pain f/u for pain med refill	Pain management, refill	Family planning, MVI with folic acid

WHAT ABOUT THE MEN?

- OKQ can be used to engage with men, too
- In men aged 35-39
 - 40% in need of family planning
 - 33% in need of PCC
- Similar health promotion
 - Reproductive Planning and Contraception
 - Infection/Immunizations
 - Genetics/Family History
 - Social and behavioral issues, domestic violence
- Opportunity to counsel about role in parenting

SO WHAT IS IT GOING TO TAKE?

- What do we need to change?
 - Buy-in (individual and organizational)
 - Education
 - Motivation
 - Financial incentives
 - Quality measures
 - System supports



“Measurement is the first step that leads to control
and eventually to improvement.

If you can’t measure something, you can’t
understand it.

If you can’t understand it, you can’t control it.
If you can’t control it, you can’t improve it.”

— H. James Harrington

CURRENT SYSTEM QUALITY MEASURES

- Focused on chronic disease management and preventive service delivery, e.g.
 - Immunizations (influenza, pneumococcal)
 - BMI assessment and dietary counselling
 - Tobacco screening and counselling
 - HTN, diabetes, CHF evidence based screens, management, and target goals
 - Colon, breast, cervical cancer screening
 - But none focus on reproductive age women as a special group

CURRENT SYSTEM QUALITY MEASURES

- For pregnancy outcomes...
 - Prenatal care (access, 17-P, STI screening)
 - Intrapartum management (no elective deliveries <39 weeks, hemorrhage, NTSV rates)
 - Birth outcomes (Apgars, prematurity, BW, neonatal and infant mortality, maternal morbidity and mortality)

CURRENT SYSTEM QUALITY MEASURES

For preconception care...



Actually, there are! Just not being addressed in this way....

Good PCC starts with good women's health...

- Immunizations, BMI, depression screening, tobacco, STI screening, diabetes management...

PRECONCEPTION CARE VS. PRECONCEPTION WELLNESS

- Preconception wellness is the state of a woman's health at the time of conception
- Preconception care is the care provided to promote and achieve preconception wellness
- Preconception care is provided in multiple settings across clinical and public health sectors
 - *Thus it is difficult to measure and difficult to hold any one group/domain accountable!*

ACCOUNTABILITY FOR CHANGE

- Women are not achieving a high level of PC wellness
- An intermediate measure of a woman's "preconception wellness" upon entering pregnancy would serve as a surrogate marker of the state of preconception care in the community – this could drive decisions on processes, programs, and quality improvement



PCHHC CLINICAL WORKGROUP CONSENSUS PANEL

- Broad expert representation
 - MFM, FM, OB-GYN, CNM, Public Health, Nursing
- Reviewed available evidence based PCC recommendations
- Current quality measure crosswalk (HEDIS, NCQA, NQF, ACO, CMS, PQRS, etc)
- Current EHR collection practices and abilities
- Feasibility and reliability of collecting and reporting data through the EHR
- Impact for improving perinatal outcomes

CLINICAL MEASURES FOR PRECONCEPTION WELLNESS*

- Intended/planned to become pregnant
- ★ Entered prenatal care in the 1st trimester
- Daily folic acid/multivitamin consumption
- ★ Tobacco free
- ★ Not depressed (mentally well / under treatment)
- ★ Healthy BMI
- ★ Free of sexually transmitted infections
- ★ Optimal blood sugar control
- Medications (if any) are not teratogenic

No single measure alone is sufficient to describe “preconception wellness”

But taken in aggregate can be a marker of wellness and receipt of quality preconception care

★ Current Quality Measure

* [Obstet Gynecol.](#) 2016 May;127(5):863-72

WOMEN'S HEALTH

CLINIC BASED DELIVERY OF HEALTH CARE

MEDICAL SYSTEM

PUBLIC HEALTH and COMMUNITY EFFORTS

SOCIAL DETERMINANTS OF HEALTH

SELF ACTIVATION

INFLUENCES
ON HEALTH
& WELL-BEING

INFLUENCES
ON HEALTH
& WELL-BEING

WELL WOMAN &
PRECONCEPTION
CARE

INTERVENTIONS

Examples of Measures:
Chronic Disease Control
Preventive Health Care

PREGNANCY

PRENATAL CARE

INTERVENTIONS

BIRTH

Examples of Measures:
Infant Mortality
Maternal Mortality
Preterm Birth Rate
Elective Delivery < 39 weeks

WELL WOMAN &
INTERCONCEPTION
CARE

INTERVENTIONS

INDICATORS/MEASURES OF PRECONCEPTION WELLNESS

intended
pregnancy

prenatal
care in the
1st
trimester

not using
tobacco

folate for
at least 3
months
prior to
conception

not
depressed

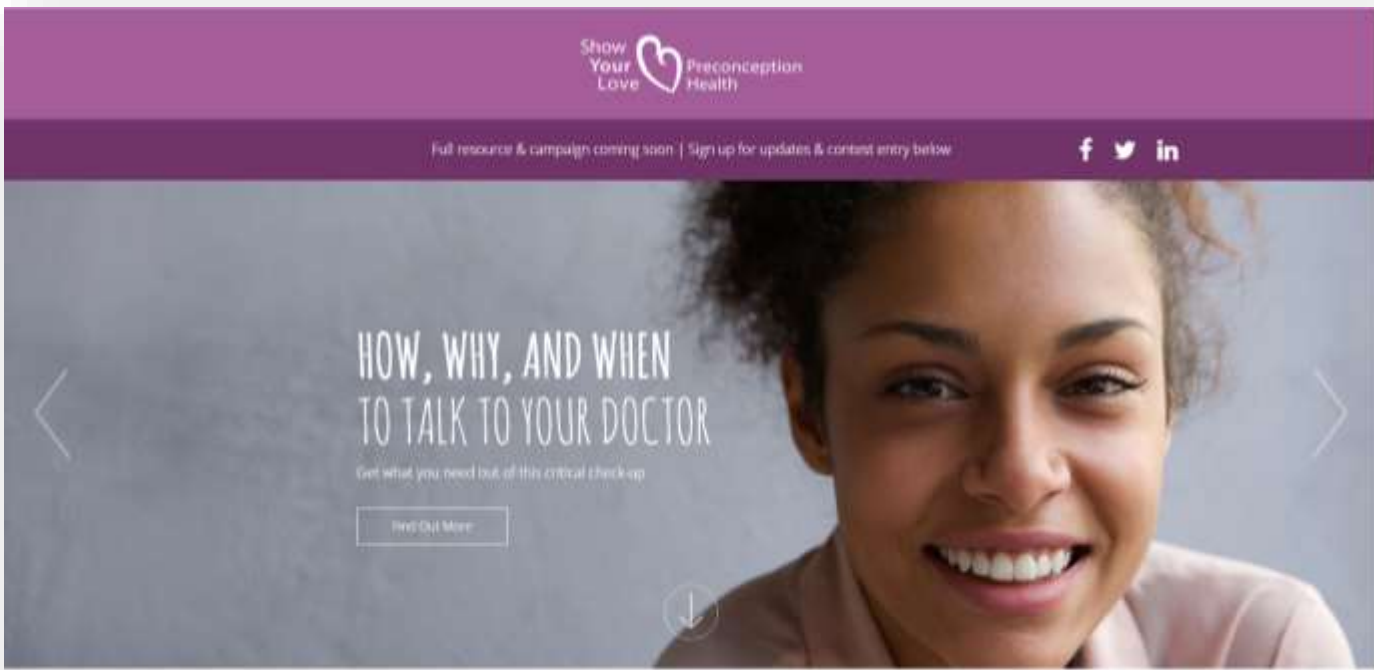
BMI >18
and <30

no STI's

HgbA1C
<6.5%

no
teratogenic
meds

*Consumer
Engagement
is KEY*





Healthy woman



Healthier pregnancy



Healthier children



Healthier community



Healthier nation



JOIN THE LOVE!

From the National Preconception Health & Health Care Initiative

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