

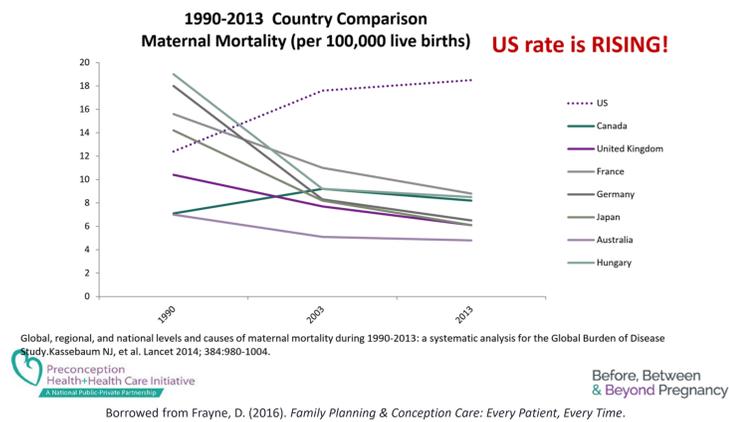


Pre-Conception Counseling : An Opportunity for Growth in Primary Care Clinics

Sarah McShane, UNC School of Medicine Class of 2021

BACKGROUND

The health of the next generation of Americans starts with the care of reproductive age women. In the US, the rate of chronic disease in young women is increasing and the access to pre-conception healthcare is limited. While other similar nations are seeing a decline in Maternal Mortality, the US rate is *rising*. This is a great opportunity for change in the way we approach care of young women (and men) and the types of conversations we begin to have with them.



Leading causes of Maternal and Infant Mortality

Maternal Mortality²

1. Cardiovascular conditions
2. Non-cardiovascular chronic conditions (e.g, Diabetes Mellitus)

Infant Mortality³

1. Congenital birth defects (20%)
2. Preterm birth / low birth weight (18%)
3. Maternal complications of pregnancy (7%)
4. SIDS (7%)
5. Accident (5%)

Traditional Preconception Counseling Practices

Reproductive plans and health were addressed as:

1. Patient had concerns and made an appointment specifically to address pregnancy plans
2. Part of an annual Well-Woman exam

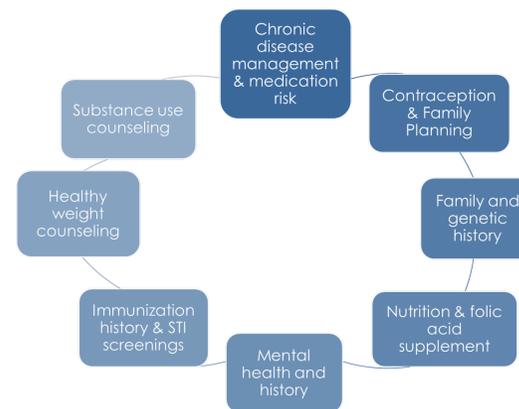
However, this model isn't serving women well anymore because:

- Pap smear recommendations now start older and are repeated less often – missing crucial opportunities
- Many young women are uninsured or underinsured and don't seek preventative care
- Half of pregnancies are unintended or unplanned
- Women are familiar with prenatal care but may not realize their health and nutrition before pregnancy matters too
- Preconception counseling is more than contraception access

THANK YOU to Kenan Charitable Fund, Dr. Charlie Baker and the Baker Center for Primary Care, Amanda Greene, Dr. Benjamin Gilmer, Dan Frayne, MAHEC, and the One Key Question*

WHAT IS PRECONCEPTION COUNSELING?

Preconception Counseling is being rethought and remodeled as a comprehensive approach to caring for a young woman's health *before* pregnancy. The aim is to identify and modify medical, behavioral, and social risks to a woman's health or pregnancy outcome.⁴ These interventions and care should be a part of all health appointments and decisions as an ongoing process towards optimizing health and preconception education.



WHAT WE KNOW : PREGNANCY HEALTH

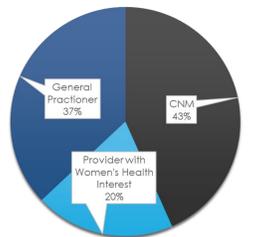
- FACT: Neural tube defects due to **folic acid deficiency** occur EARLY in pregnancy, often before a woman knows she is pregnant.
- FACT: **Diabetes, gestational diabetes, and hypertension** are associated with more complicated pregnancies. Good pre-conception control improves outcomes!
- FACT: Women who have **BMI's less than 18.5 or over 30** are more likely to have difficulty conceiving.
- FACT: **Low pre-pregnancy weight** is associated with preterm birth and low birth weight.
- FACT: Both **hypothyroidism and hyperthyroidism** are linked to increased maternal and fetal mortality if untreated.
- FACT: Many more conditions – **asthma, thrombophilia, seizure disorders, etc** – have lower risk when seeking routine care.
- FACT: **Conception within 6 months of a prior pregnancy** is associated with increased maternal mortality.
- FACT: **Domestic violence** often begins or escalates during pregnancy.
- FACT: **Alcohol and substance use** can put the neonate at risk for birth defects and fetal abstinence syndrome.
- FACT: Women with **depression or anxiety** disorders can be at risk of recurrence and/or worsening intensity during and after pregnancy.
- FACT: About 10-15% of congenital anomalies in the US are attributed to **use of teratogenic prescription medications** during pregnancy.

Healthier pregnancies start with better care of women BEFORE they are pregnant.

ASSESSING READINESS TO ADAPT

The Baker Center for Primary Care is

- located in Linville, NC in Avery County
- Cares for women from surrounding counties, eastern Tennessee, and high country vacationers
- 1,502 reproductive age women are seen primarily by Family Medicine physicians or Certified Nurse Midwives
- These providers answered a short survey about their preconception care practices



Total reproductive age women (age 12-50) by primary provider

What makes a provider more or less likely to address reproductive health and planning concerns during a patient visit?

Reasons that DECREASE providers address preconception concerns	Reasons that INCREASE providers address preconception concerns
<ul style="list-style-type: none"> • Someone else (like an OBGYN) is managing patient's reproductive care • Patient has already has sterilization procedure • Not enough time built into the appt • Patient is on a contraceptive • Patient is not sexually active 	<ul style="list-style-type: none"> • Patient is in a more sexually active age group • Patient engages in high risk sexual behaviors • Patient is on a medicine contraindicated in pregnancy • Patient is on a contraceptive • Patient has health concerns threatening to pregnancy • Patient has recently had a child / birth spacing

What do providers recognize as areas for improvement?

1. Addressing occupational and environmental exposures
2. Family planning and birth spacing counseling
3. Medication risk management and education
4. Preconception immunizations and Infectious disease screening
5. Preconception nutrition and folic acid supplementation

Use of the ONE-KEY QUESTION® screening:
Would you like to become pregnant in the next year?

If YES,

- Reduce preconception health risks
- Screen immunizations / STIs
- Folic acid supplementations

If UNSURE,

- Gain or maintain good chronic disease control
- Council on medication, behavioral, and social risks
- Approach reproductive life plan

If NO,

- Contraception counsel or reproductive planning
- General preventative health

REFERENCES

1. Frayne, D. (2016). *Family Planning & Conception Care: Every Patient, Every Time*.
2. Kassebaum NJ, Bertozzi-Villa A, Coggeshall MS, et al. Global, regional, and national levels and causes of maternal mortality during 1990-2013: a systematic analysis for the Global Burden of Disease Study 2013 [published correction appears in Lancet. 2014; 384(9947): 956]. *Lancet*. 2014; 384(9947): 980-1004.
3. Mathews TJ, MacDorman MF, Thoma ME. Infant mortality statistics from the 2013 period linked birth/infant death data set. *Natl Vital Stat Rep*. 2015; 64(9): 1-30.
4. NARGES FARAH, MD, and ADAM ZOLOTOR, MD, DrPH, University of North Carolina School of Medicine, Chapel Hill, North Carolina. *Am Fam Physician*. 2013 Oct 15;88(8):499-506.
5. Preconception Care: A Guide for Optimizing Outcomes. *ACOG, District II/NY*.
6. Avni-Barron, O., Hoagland, K., Ford, C., & Miller, L. J. (2010). Preconception planning to reduce the risk of perinatal depression and anxiety disorders. *Expert Review of Obstetrics & Gynecology*, 5(4), 421-435.