



### Faculty Disclosure

- ❖ Ms. Moos has no financial affiliations to disclose
- ❖ Note: Additional disclosure information is located within the program



### Objectives

- ❖ Describe the value of preconception and interconception care in pregnancy and overall health of women and families
- ❖ Discuss the CDC's guidelines for preconception and interconception care
- ❖ Explore recurrent themes and concerns regarding development of the new prevention paradigm
- ❖ Develop strategies to view every encounter with a woman of childbearing age as an opportunity for health promotion and disease prevention through the life cycle



**In obstetrics. . .**

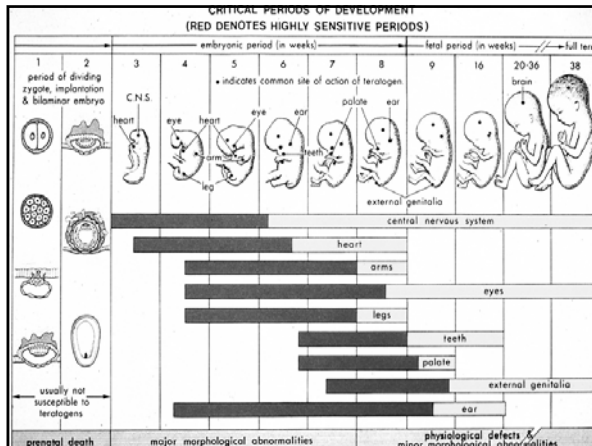
most of the outcomes or their determinants are already present before we ever meet our pregnant patients



### Important Examples

- ❖ Intendedness of conception
- ❖ Interpregnancy interval
- ❖ Maternal age
- ❖ Exposure ART/ovulation stimulation
- ❖ Spontaneous abortion
- ❖ Abnormal placentation
- ❖ Chronic disease control
- ❖ Congenital anomalies
- ❖ Timing of entry into prenatal care

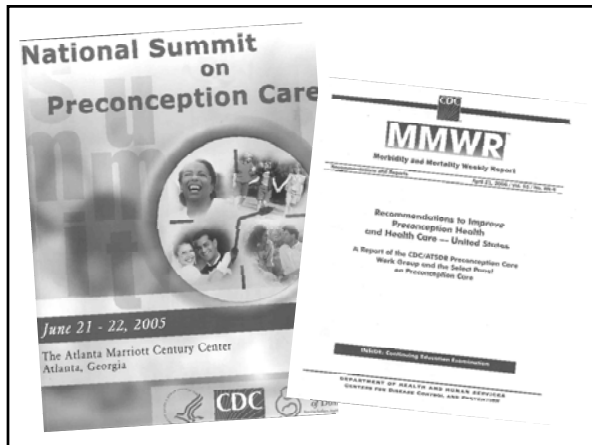
### IMPORTANCE OF FIRST TRIMESTER ON PREGNANCY OUTCOMES



Over time, it has come to be recognized that **Preconceptional Health and Health Care** provide pathways to

↓

the **Primary Prevention** of many poor pregnancy outcomes beyond that available through traditional prenatal care



**CDC Definition**

- Preconception care is a set of interventions that aim to identify and modify biomedical, behavioral and social risks to a woman's health or pregnancy outcome through prevention and management
- It is more than a single visit and less than all well-woman care

CDC and Select Panel, 2006

**Foundation for CDC Initiative**

Evidence-base clinical guidelines exists for:

- Folic acid
- Rubella seronegativity
- Diabetes
- PKU
- Oral anticoagulants
- Anti-epileptic treatments
- Isotretinoids
- Alcohol use
- STDs
- Etc.

**Summary of CDC/Select Panel's Recommendations  
to Improve Preconception Health  
and Health Care**

**Consumer**

- ❖ Individual responsibility across the lifespan
- ❖ Consumer awareness

**Clinical**

- ❖ Preventive visits
- ❖ Interventions for identified risks
- ❖ Interconception care
- ❖ Prepregnancy checkup

**Financing**

- ❖ Health insurance coverage for women with low incomes

**Public health programs and strategies**

**Research**

- ❖ Surveillance of impact
- ❖ Increase the evidence base

Preconception health promotion and health care are not new concepts; they have been gaining momentum for the last three decades.

Freda, Moos & Curtis. MCHJ, 2006;10:543

**What Is Preconception Care?**

- **Giving protection**
- **Managing conditions**
- **Avoiding exposures known to be teratogenic**

**Giving Protection**

- **Examples of giving protection**
  - Folic acid supplementation to protect against neural tube defects and other congenital anomalies
  - Protection against infectious diseases
    - Rubella
    - Varicella
    - Hepatitis B
    - HIV/AIDS

**Managing Conditions**

- **Examples of conditions known to be detrimental to reproductive outcomes if in poor control before conception**
  - Diabetes
  - Maternal PKU
  - Obesity
  - Hypothyroidism
  - Sexually transmitted infections

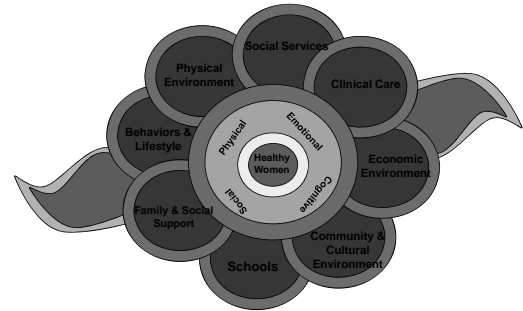
**Avoiding Exposures**

- **Examples of exposures known to be teratogenic or otherwise harmful in early pregnancy**
  - Medications
    - Many antiseizure medications
    - Oral anticoagulants
    - Accutane
    - etc
  - Alcohol
  - Tobacco

**Amidst the Enthusiasm are Recurrent Themes of Concern and Push Back**

1. Preconception health is being framed as a clinical initiative but there are many other equally or more important influences.
2. Preconceptional health promotion is pronatalist—it has the potential to frame women as vessels.
3. Women are already getting the care they need.
4. This initiative will have no impact because women don't plan their pregnancies.
5. Where are the men in this agenda?
6. The word "preconception" doesn't resonate with the public.
7. I (we) already have too much to do.

**Theme 1: Why Is Preconception Framed as a Clinical Activity?**



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**Theme 2: The preconception health movement reduces women to nothing more than vessels**

- ❖ Major determinants of poor health status in women are also important risk factors for poor pregnancy outcomes

**The Link Between Women's Health and Reproductive Outcomes**

**NUTRITIONAL STATUS: Overweight**

- ❖ Obesity and Women's Health:
  - Diabetes
  - Hypertension
  - Cardiovascular disease
  - Disabilities
- ❖ Obesity and Pregnancy:
  - Glucose intolerance of pregnancy
  - Pregnancy induced hypertension
  - Thrombophlebitis
  - Neural tube defects
  - Prematurity

**NUTRITIONAL STATUS: Specific nutrients**

- ❖ Inadequate **folic acid** intake and Women's Health:
  - Heart disease
  - ? Colon cancer
  - ? Breast cancer
  - ? Some forms of dementia
- ❖ Inadequate maternal **folic acid** intake and reproductive outcomes:
  - Increased incidence of neural tube defects
  - Increased incidence of other birth defects
  - Some anemias—mother and infant

There are benefits of higher levels of women's wellness. . . *irrespective of reproductive plans*


- ❖ Higher levels of women's wellness will result in healthier women across the lifespan
- ❖ By focusing on women's wellness preconceptional health promotion will be achieved
- ❖ Higher levels of women's wellness will increase the likelihood of healthier pregnancy outcomes for those women who do become pregnant



**Theme 3: Women are already getting appropriate preventive care**

In fact, the evidence is very contrary to the assumption. . .

- ❖ 1996 report (Wynn & Yu)
  - 50% of women received preventive services every year
- ❖ 2001 report (NCHS)
  - Women ages 15-44 average 3.8 medical visits annually

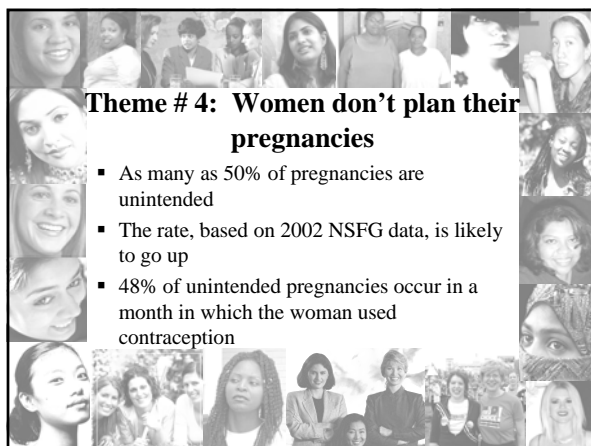



**Missed Opportunities for Promoting Women's Wellness Abound**

- In 2005 KFF report:
  - Just over 50% of women surveyed had talked to a health care professional in the last 3 years about diet, exercise or nutrition
  - Fewer than 50% had talked about calcium intake (43%), smoking (33%) and alcohol (20%)
  - Only 31% of women ages 18-44 had talked with a provider about their sexual history in the preceding three years.

Discussion of more specific topics was even more rare:

- STDs (28%)
- HIV/AIDS (31%)
- Emergency contraception (14%)
- Domestic and dating violence (12%)



**Theme # 4: Women don't plan their pregnancies**

- As many as 50% of pregnancies are unintended
- The rate, based on 2002 NSFG data, is likely to go up
- 48% of unintended pregnancies occur in a month in which the woman used contraception

**Example of a Reproductive Life Plan**

1. Do you hope to have any (more) children?
2. How many children do you hope to have?
3. How long do you plan to wait until you (next) become pregnant?
4. How much space do you plan to have between your pregnancies?
5. What do you plan to do until you are ready to become pregnant?
6. What can I do today to help you achieve your plan?

- Impacting on the rate of unintendedness is more complex than the content of a single clinical encounter
- Addressing and promoting intentional decision making around if and when to have children is an appropriate health promotion and disease prevention activity for every provider
- Knowing a woman's intentions can focus much of the rest of the encounter

**Theme 5: Where are the men in this agenda?**

**Theme 6: The word "preconception" doesn't resonate with the public.**

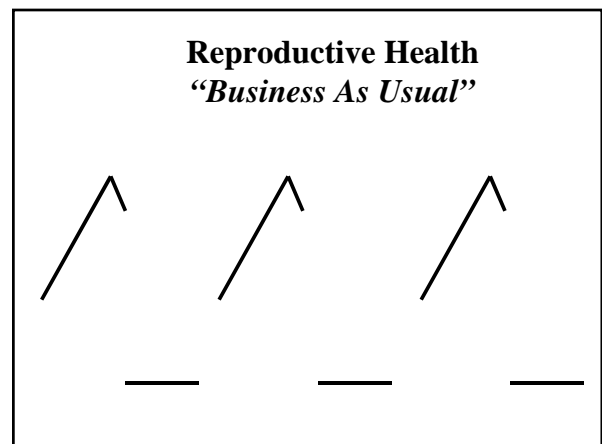
**Theme 7: We already have too much to do**

If you take care of women of reproductive age, it's 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


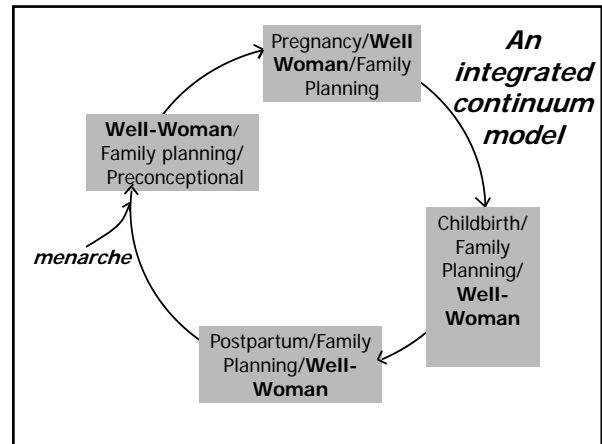
**Dominant Perinatal Prevention Paradigm**

- Features categorical focus with little integration with woman's preexisting care or with her future health needs
- Initiated at first prenatal visit with
  - Risk assessment
  - Health promotion and disease prevention education
  - Prescription for prenatal vitamins
- Ends with the postpartum visit




### An Integrative Model

- Builds on a continuum
- Emphasis on health promotion throughout the lifespan
- Emphasis on primary and secondary disease prevention
- Emphasis on woman, first, rather than her reproductive status
- Allows providers to work smarter

### Promoting Integrated Services

A meaningful integration or continuum of service must be conceptualized and operationalized to overcome traditional boundaries



### Traditional Silos

- Maternity related care
- Family planning services
- Chronic disease care
- Well woman care
- Inpatient/outpatient care
- Specialty services
- Nutrition services

### What We Don't Need. . .

A new categorical service called the  
[routine]  
"Preconception visit"

### What We Do Need. . .

Reorientation of services to  
"Every Woman. . .Every Time"

**“Every Woman—Every Time” is  
Opportunistic Care**

- Takes advantage of all health care encounters to stress prevention opportunities throughout the lifespan
- Addresses conception and contraception choices at every encounter
- Involves all medical specialties—not only those directly involved in reproductive health



**Rename the  
Annual Visit to Underscore the Prevention  
Agenda for Providers and for Women**


- Promote the “well woman visit” (to replace the “annual visit”)
  - Use the well established and well respected “well child visit” as the model
  - Expectation of well child visit includes extension beyond the traditional medical model, a focus on prevention, an assessment of milestones and anticipatory guidance—which are frequently reinforced with handouts including specific suggestions for achieving high levels of wellness.

**Can we really  
do More with Less time?**

**Absolutely: if we are creative and focused**

**Promote Self Efficacy**

❖ Reorient our encounters [clinical and nonclinical] from “doing at” to “doing with” the women we care for.



**Working Smarter, not Harder, is  
Possible**

- Previsit preparation (e.g. what are your three health goals for the coming year?)
- Incorporation of empowering messages into pamphlets and posters
- Workbooks: online and off (e.g. Surgeon General’s Family History)
- Wellness contracts and prescriptions
- Referrals to behavior change support programs
- Use of evidence-based counseling strategies
  - “. . . brief interventions designed to fit into everyday practice have been found to produce clinically meaningful changes. . .”  
Whitlock et al Am J Prev Med, 2002



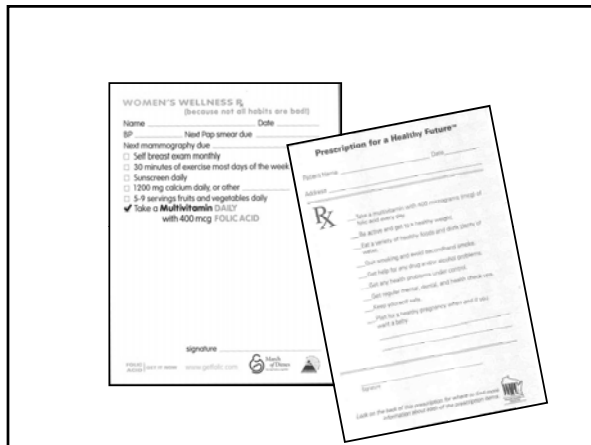
### Promoting Partnerships

Cross the silos:

- Authorize WIC to include interconceptional messages in all counseling to postpartum women
- Engage well baby visits to include promoting the advantages of interpregnancy spacing and targeted interconceptional care for mothers of special needs infants
- Engage pharmacists in more active “outreach” to women with known risks for poor pregnancy outcomes

### Promoting Integrated Well Woman Services

- Expect every well woman visit to:
  - Directly address nutritional health
    - BMI
    - Nutrient consumption
  - Address substance use
  - Screen for teratogenic risks
  - Include an individually constructed “wellness prescription”
  - Introduce/update/reinforce/address “reproductive life plan”



### Key Content of Every Woman, Every Time

- Does **every** woman (including the 13 year old, the 45 year old and everyone in between) leave your unit/practice with a clear message of the benefits of exogenous folic acid? And a clear message to start taking **NOW**?

### Use Existing Encounters Wisely

Example: Woman presents for a pregnancy test:

- If no desire for conception, provide contraceptive counseling, agreed upon contraceptive method and education/prescription for EC, encourage folic acid supplementation
- If desires conception, thoroughly assess preconceptional health status and refer for intensive services, if needed, and encourage folic acid supplementation

### Exploit the opportunities of technology

- Test innovations to facilitate integrated care
  - Use of computer to track health profile across life span with built in alerts regarding reproductive risks
  - Use of computerized prompts to guide clinician to appropriate routine counseling based on woman's age, health profile and reproductive life plan

### But Don't Wait for Technology to Catch Up With Need

- Empower and engage women by having them carry their own health profile cards and expecting their providers across all silos to address and update

### Promoting Integrated Care by Increasing Utilization of Postpartum Visit

- Do active marketing/outreach for postpartum visit
- At postpartum visit
  - Address reproductive health plan
  - Address health risks identified in pregnancy
  - Address interconceptional issues, especially if a previous poor pregnancy outcome

### CDC Recommendation

- The interconception period should be used to provide intensive interventions to women who have had a previous pregnancy that ended in an adverse outcome

Pregnancy is a stress test for life. . .what are we doing with the information we have?

### Examples of Recurrence Poor Pregnancy Outcomes

- **Pregnancy affected by ONTD**
  - One previous ONTD (as isolated birth defect) 3-5% recurrence risk
  - Two previous ONTDs (as isolated defect) 6-9% recurrence risk
- **Preterm delivery**
  - One previous PTD 15% recurrence risk
  - Two previous PTD 41% recurrence risk
- **Genetic related anomaly**
  - May be same as background, may be 50%

### Examples of Women's Health Risks/Problems Identifiable from a Previous Pregnancy

- Anemias and hemoglobinopathies
- Hypertensive disorders
- Thromboembolic disease
- Depression, Domestic violence
- Periodontal disease
- Preexisting obesity/Excessive weight gain
- GDM
- Smoking, alcohol or other drug use/exposures
- Immune status

### What We Know:

- Postpartum follow-up of identified problems is often absent, leaving women at risk for their own health and the health of their future children
- Example: Gestational diabetes mellitus
  - Studies estimate the risk of pp glucose intolerance to be as high as 36% and type 2 diabetes to be 2-16%;
  - The 10 year risk for type 2 diabetes is as high as 70%

- The ADA and ACOG recommend postpartum glucose testing:
  - ACOG does not identify specific processes
  - ADA recommends that all women who had GDM have a FBS or an oral glucose tolerance test at 6-8 weeks pp and that follow-up frequency be based on history

Either way, women are not being tested

- In one small study, only 37% of 197 at-risk women received appropriate screening (with the mean time from delivery to testing being 428 days.)
- In another study of 344 women only 45% of women were screened
- What about other appropriate health promotion/disease prevention clinical interventions regarding primary and secondary prevention of Type II diabetes mellitus:
  - Efforts to reduce postpartum weight retention;
  - Education about appropriate food choices;
  - Education about the signs/symptoms of diabetes?

**There is no evidence these are being addressed**

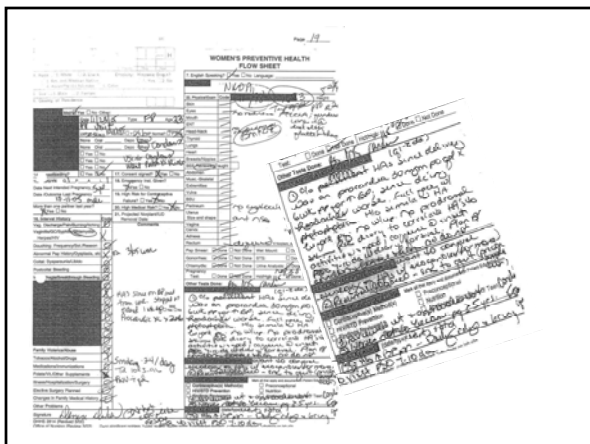
**An Illustration of Missed Interconceptional Opportunities**

- SW is g1 p1 who had a 1500 gm infant 7 months ago who is presenting for a new ob visit. During her previous pregnancy she was noted to be
  - Underweight (BMI 17.5)
  - Smoker at 1 ppd
  - Experiencing an unintended pregnancy
  - Depressed

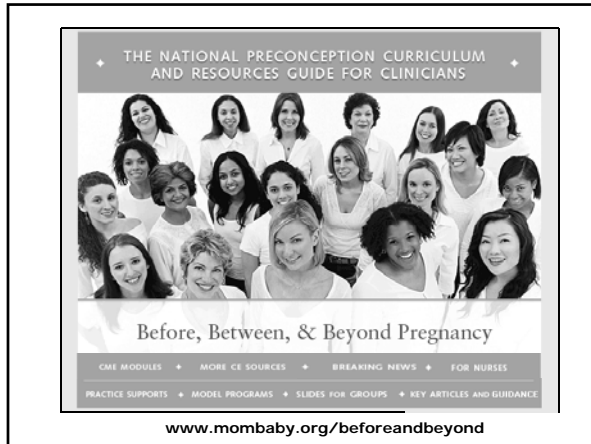
As you review her record you note that none of these issues has been revisited since her last delivery—**despite** a routine postpartum visit and a family planning encounter

**Examine Our Current Clinic Processes for “Roadblocks to Integrated Care”**

- Silo organization (without shared records and shared goals)
- Restrictive scheduling system
- Staff who insist “not my job”
- Clinical tools that undermine integrated care



**Stay Current Regarding Best Practices**



### CME Modules

- **Module 1:** Preconception Care: What It Is and What It Isn't
- **Module 2:** Every Woman, Every Time: Integrating Health Promotion into Primary Care
- **Module 3:** Maximizing Prevention: Targeted Care for Those with High Risk Conditions
- **Module 4:** In Between Time: Interconceptional Care for Those with Previous Poor Outcomes
- **Module 5:** Babies to Adolescents: Incorporating Preconception Health Promotion into the Pediatric Visit

### The Benefits of Higher Levels of Women's Wellness

- It is very likely that we will achieve better preconceptional health by addressing women's wellness irrespective of reproductive plans
- Because most pregnancies aren't planned in the US new approaches are needed for all women (and men, too)
- Higher levels of women's wellness will result in healthier pregnancy outcomes
- Higher levels of women's wellness will result in healthier women across the lifespan

### Well-Women's Care for Women of Reproductive Age

