A SNAPSHOT OF PRECONCEPTIONAL HEALTH

Thoughts on What We Know, What We Don't . . . And Where We Go From Here

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Objectives:

- Reflect on the scientific evidence about preconceptional health promotion content and processes
- Examine the scope of what is still unknown
- Identify strategies for changing the perinatal prevention paradigm to a women's life course continuum

Common Definitions and Uncommon Usage

- Preconception
  - Health status and risks before first pregnancy; health status shortly before any pregnancy.
- Periconception
  - Immediately before conception through organogenesis
- Interconception
  - Period between pregnancies

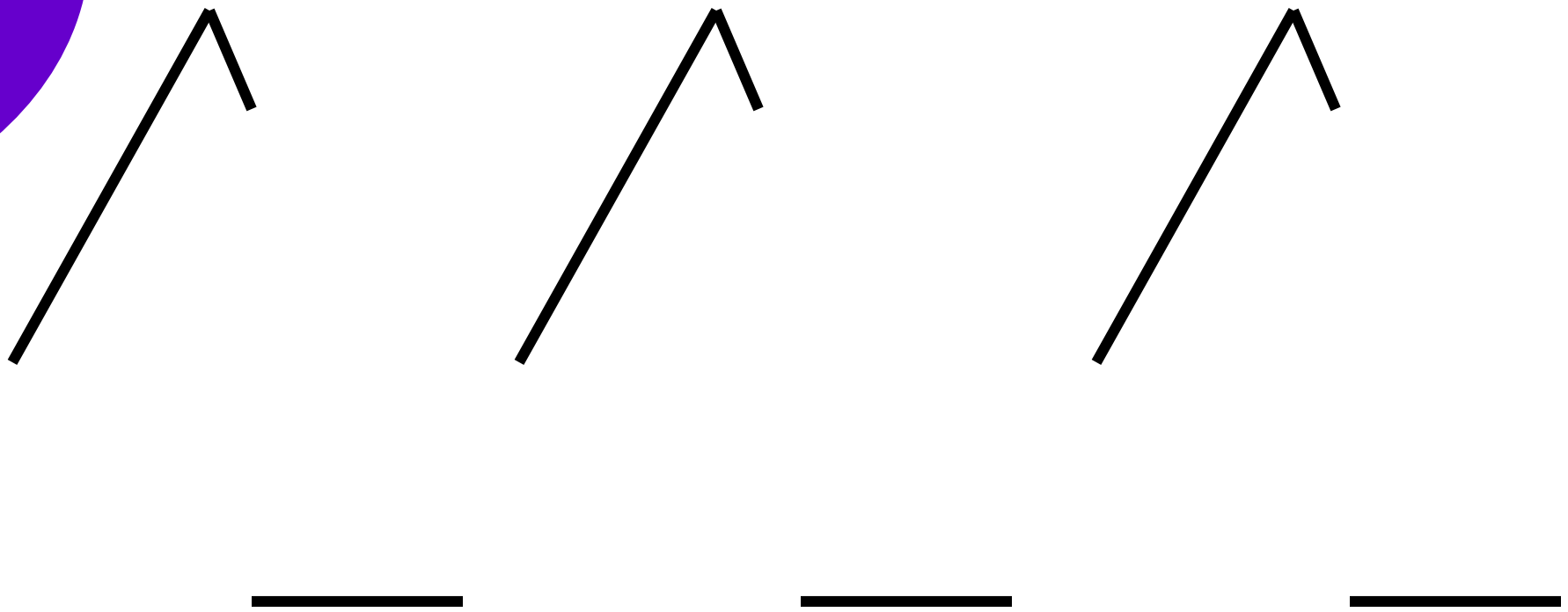
What We Know:

- The two leading causes of infant mortality in the US are relatively immune to prenatal care

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

Reproductive Health
“Business As Usual”



Features of Current Approach

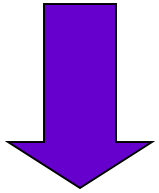
- Episodic
- Disjointed
- Inefficient
- Often ineffective. . .

. . .AND IT JUST DOESN'T MAKE SENSE

What We Know:

- Many pregnancy outcomes are determined before the obstetrical provider meets the patient
  - Intendedness of conception
  - Spontaneous abortion
  - Abnormal placentation
  - Congenital anomalies
  - Timing of first prenatal visit

Preconceptional Health Promotion



Primary Prevention

Objectives for Preconceptional Health Promotion

- To improve women's wellness
- To increase intendedness of pregnancy
- To educate women/partners about risks
- To decrease amenable risk factors

What We Know: Diabetes

- Tight control of diabetes in periconception period results in decreased incidence of congenital anomalies
- **What We Don't Know**:
  - How to reach all women with diabetes with this prevention opportunity

What We Know: Phenylketonuria

- High phenylalanine levels associated with poorer reproductive outcomes—reductions associated with improved outcomes

- **What We Don't Know:**
  - How to engage specialists in preconceptional education and interventions

What We Know: NTDs

- Folic Acid protects against neural tube defects

What We Don't Know:

- How to translate what is known into prevention opportunities for individual women
- How to avoid over-promising or instilling guilt
- Whether energy and resources should primarily be directed toward population-based prevention strategies (i.e. fortification)

What We Know: Intendedness of Conception

- As many as 50% of pregnancies are unintended (and rate, based on 2002 NSFG data, likely to go up)
- Pregnancy intendedness is associated with less likelihood of termination and with better pregnancy and parenting outcomes

Intendedness of Conception

- **What We Don't Know**:
  - The relationship between pregnancy intention, pregnancy planning and positive periconceptional behaviors
  - Whether a health care emphasis on preconception impacts rates of intendedness, planning or positive behaviors
  - How to effectively empower women to make deliberate decisions about becoming pregnant
  - Whether unintendedness/intendedness are valued concepts by the general public

Women's Health Status

- What We Know:
  - Major determinants of poor health status in women are also important risk factors for poor pregnancy outcomes

"As attractive and relatively inexpensive as prenatal care is, a medical model directed at a 6-8 month interval in a woman's life cannot erase the influence of years of social, economic, [physical] and emotional distress and hardship."

Dillard, RG NCMJ 65:3 p147 (2004)

A life course approach to prevention is likely to better serve the health of women, fetuses and infants, should the woman become pregnant

What We Know: Obesity

- **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

What We Know: Tobacco Use

- **Tobacco And Women's Health:**
  - Implicated the leading causes of death for women:
    - Heart disease (1)
    - Stroke (2)
    - Lung cancer (3)
    - Lung disease (4)
- **Tobacco and Reproductive Outcomes:**
  - Leading preventable cause of infant mortality
  - Preventable cause of low birth weight and prematurity
  - Associated with placental abnormalities

Women's Health Status

- **What We Don't Know:**
  - Can we effectively alter lifestyle and other risks prior to conception to positively impact a woman's long term health status and risks to her future pregnancies?
  - How can we implement or take to scale the effective interventions available today?

Some Thoughts on Moving Forward

Selected Strategies to:

Change the perinatal prevention paradigm by

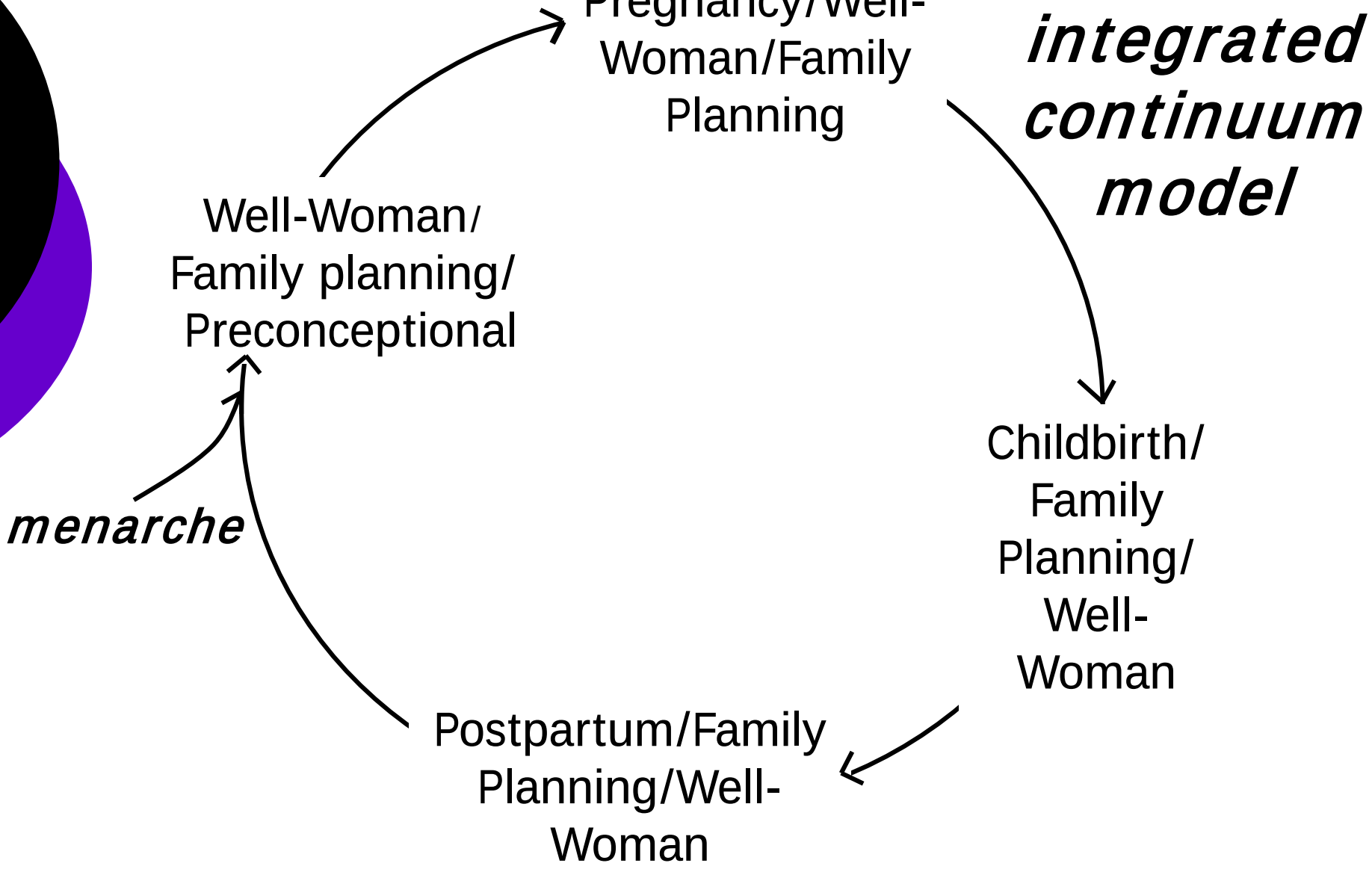
- Promoting an integrated approach to reproductive health care
- Promoting intendedness of pregnancy
- Promoting women's wellness

Promoting Integrated Services

Integrated care incorporates linkages between childbearing and women's health during the life span—it includes promoting health, preventing disease and managing chronic illness

Walker and Tinkle, 1995

An integrated continuum model



Features of an Integrated Model

- Builds on a continuum
- Emphasis on health promotion throughout the lifespan
- Emphasis on primary and secondary disease prevention
- Emphasis on woman rather than her reproductive status

Promoting Integrated Services

- A meaningful continuum 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

Promoting Integrated Services

- Avoid creating new silos such as promoting another categorical service: “the [routine] preconception visit”

Promoting Integrated Services

- Test innovations to facilitate integrated care
  - Use of computer programs to track health profile across life span with built in alerts regarding reproductive and other risks
  - Use of computerized prompts to guide clinician to appropriate counseling based on woman's age, health profile and reproductive life plan
  - Active engagement of women by having them responsible for carrying her own health profile card (paper or disk) with taught expectation that their providers will address and update

Promoting Integrated Services

- Provide clinical and financial access for high risk women (families) to specialty services (e.g. genetics counseling, diagnostic testing, therapies, etc.)
- Tie expectations to reimbursement and to quality assurance measures

Promoting Intendedness of Future Conceptions

- Make it an expectation that all negative pregnancy tests are *immediately* addressed with family planning care or preconceptional counseling
- Make it an expectation of services that all health care encounters with women of childbearing potential include a review and update of the reproductive life plan (i.e. whether or when they wish to have children) and tailored guidance

Example of a "Reproductive Life Plan" Approach

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

Promoting Intendedness of Future Conceptions

- Authorize and expect WIC to include interconceptional messages in all counseling to postpartum women
- Expand expectations of well baby visits to promote advantages of interconceptional spacing; to promote 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 Women's Wellness

- Define and promote the "well woman visit" (to replace the "annual visit")

Promoting Women's Wellness

- Tie reimbursement for well woman exam to demonstrations of health promotion and disease prevention counseling
- Start expectations with federal and state insurance plans
- Build in audit measures to assure progress is being made in meeting benchmarks of "well woman care"

Summary

- There is good rationale for the preconceptional health promotion agenda
- Research supports the benefits of preconceptional health promotion; the quality of research spans Levels A to C
- We know relatively little about successful strategies for promoting high levels of preconceptional wellness
- Promoting high levels of health in all women will result in preconceptional health promotion for those who become pregnant