PRECONCEPTIONAL HEALTH

What Are the Challenges and Knowledge Gaps for Implementation?

First Central And Eastern European Summit on Preconception Health and Prevention of Birth Defects

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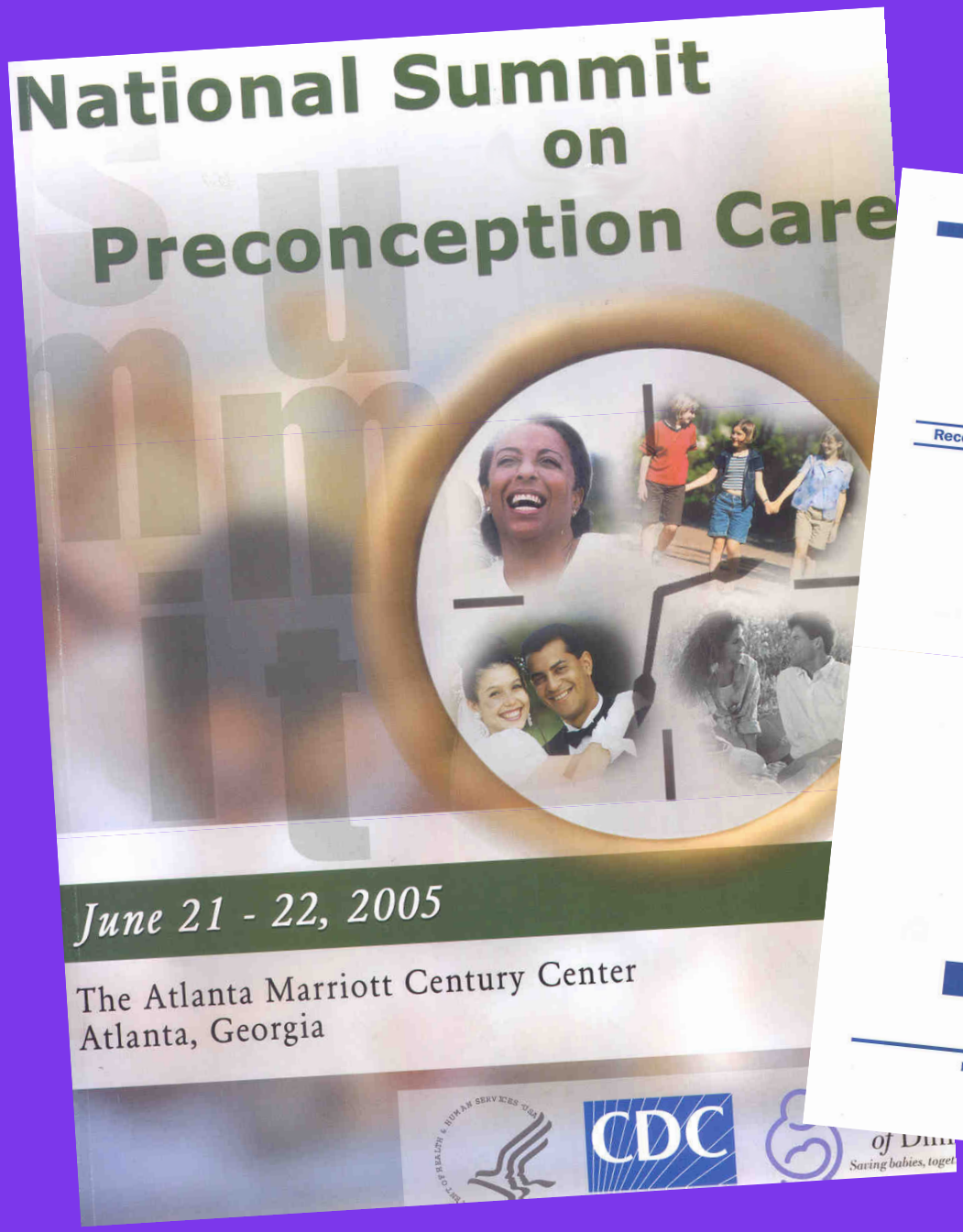

National Summit
on
Preconception Care
June 21 - 22, 2005
The Atlanta Marriott Century Center
Atlanta, Georgia
CDC


CDC
MMWR
Morbidity and Mortality Weekly Report
Recommendations and Reports
April 21, 2006 / Vol. 55 / No. RR-6
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
INSIDE: Continuing Education Examination
DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION

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

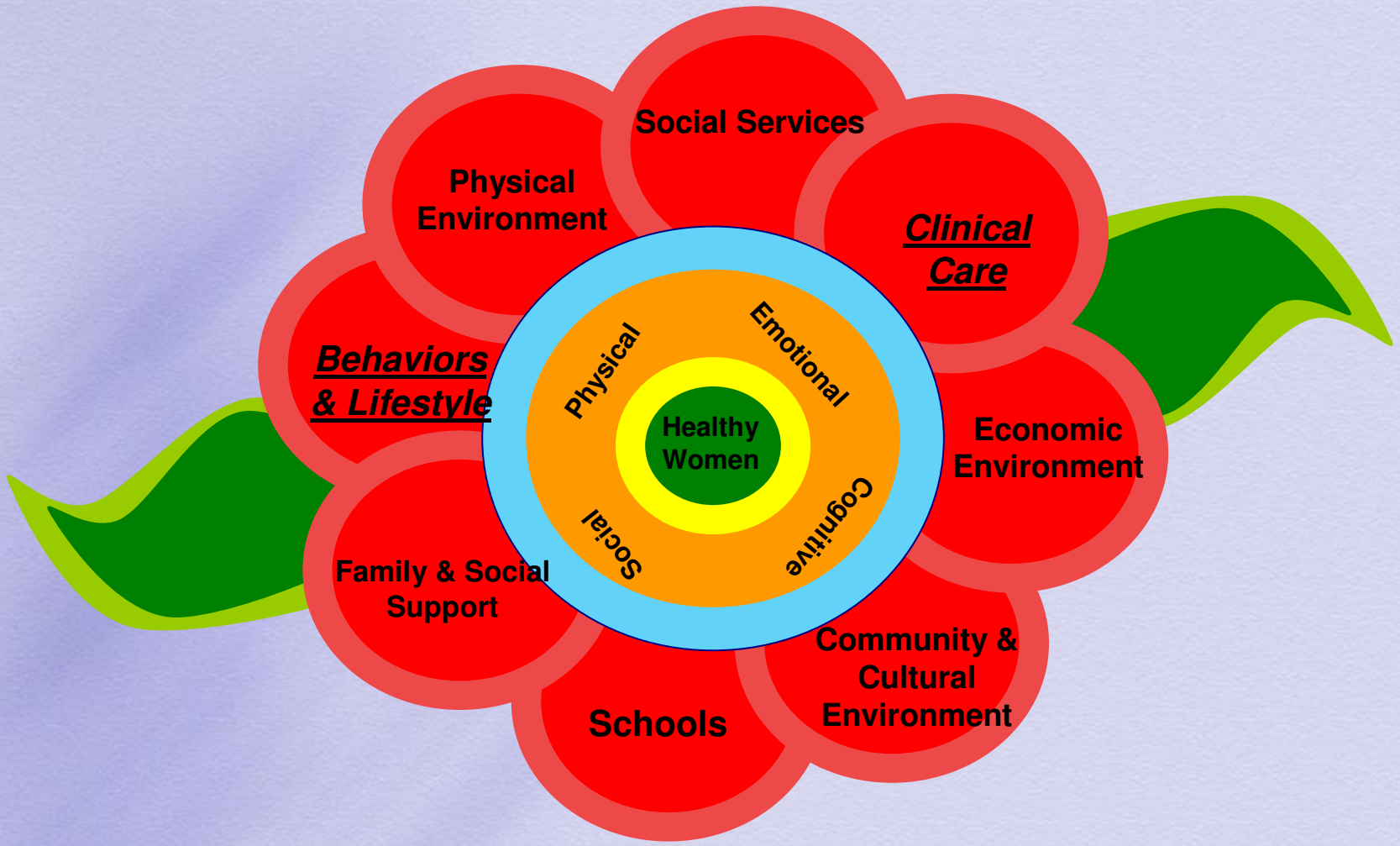
Public health programs and strategies

Research

- Surveillance of impact
- Increase the evidence base

We have evidence, consensus and guidelines-- The next step is IMPLEMENTATION

Contributors to Preconceptional Health Status



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Objectives for this talk:

- Examine knowledge gaps in translating science into health promoting behaviors for women of childbearing age
- Examine knowledge gaps in translating science into clinical practice
- Stimulate research to improve the impact of the preconceptional/interconceptional agenda

CDC Recommendation

- Increase consumer awareness of the importance of preconception health behaviors and preconception care services.

Example of Science Leading to Recommendation

SCIENCE:

- Folate levels associated with reduction in NTDs

RECOMMENDATIONS:

- All women of childbearing age in the US who are capable of becoming pregnant should consume 0.4 mg of folic acid per day. . .(CDC, 1992)
- Every woman in her childbearing years should take 400 mcg of synthetic folic acid daily, obtained from fortified foods and/or supplements, as well as consume a balanced, healthy diet of folate-rich foods (IOM, 1998)

Strategies Employed to Achieve Recommendations

- National Council on Folic Acid
  - Partnership of 100 organizations
  - Focused on strategies to impact:
    - Health care providers
    - Policy makers
    - **Consumers**
- Public awareness campaigns for public at large and women in particular

COMPARISON KNOWLEDGE/USE OF FOLIC ACID TO PREVENT BIRTH DEFECTS—Women of childbearing age

Year	Knowledge about ↓ NTDs	Knowledge take before pregnant	Non-Pregnant women who take
1995	4%	2%	25%
2000	14%	10%	32%
2005	19%	7%	31%
2007	18%	12%	40%

MODs, 2000,2004, 2005, 2007

What Questions Does this Raise about Translating Science into Practice?

- Are there barriers to women acting on recommendations?
  - Not receiving messages
  - Messages not perceived as relevant
  - Costs associated with implementing recommendations
  - Receiving competing messages

Insights from Research

(from Prue/Biermann presentation at CDC Expert Panel Meeting, 2007)

- Need to avoid "vessel" communications suggesting that woman are more important when pregnancy is considered than when it is not
- "Just in case" woman could become pregnant is not a compelling reason for behavioral change
- Women want non-pregnancy related reasons for performing many preconception health behaviors

A short list of important unknowns about "increasing consumer awareness"

- Who is the target population—all women ages 10-50? All women, irrespective of age? Grandmothers? All men and women? Some men and women?
- How do we impact social norms to reframe the perinatal prevention paradigm away from the "9 months" of conventional teachings?
- How do we motivate a "consumer" to adopt health promoting behaviors to protect a pregnancy not yet conceived?

- How do we provide messaging that sensitively engages people from various age groups, literacy levels, cultures and languages?
- What are the unintended consequences of a preconception health agenda:
  - Charges of pronatalism;
  - Concerns about government or medical influences on who should and should not become pregnant;
  - Increases in health disparities between subpopulations;
  - Unrealistic expectations,
  - Etc.

- How to effectively change health behaviors—
  - The 5A model (assess, advise, agree, assist, arrange) has demonstrated effectiveness for some behaviors such as smoking—can the model be employed repeatedly without losing effectiveness?
- The impact of non-traditional avenues for health promotion (e.g. internet prompts, wellness support groups, contracts, worksite wellness programs, individualized prescriptions for wellness, etc.)
- How to avoid over-promising or instilling guilt

CDC Recommendation:

- Each woman, man and couple should be encouraged to have a reproductive life plan

What is the Rationale for a Reproductive Life Plan?

- Approximately 49% of pregnancies in US are classified as unintended
- In US, 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?

Status of Research

- SER* of US studies conducted between 1985-2000 found **NO** quality evidence to guide best practices about counseling in clinical setting to prevent unintended pregnancies (Moos, et al., 2003)
- Cochrane SER* of RCTs** including international studies found little quality research to guide best practices (Halpern, et al., 2006)
- No studies on impact or process of reproductive life plans have been published

*Systematic evidence review **Randomized control trials

Some problems with the research

- No standard definition of contraceptive counseling exists (Weisman, et al, 2002)
- Little research has addressed the relationship between counseling and contraceptive use (Weisman, et al, 2002)
- Research to guide best practices for impacting intendedness with women is scant; for men it is virtually nonexistent

A short list of important unknowns about promoting reproductive life plans to impact preconceptional health

- What are the best approaches for impacting intendedness (is it clinical, is it social, is it economic? What balance of these is most effective?)
- Whether a preconception emphasis in health care impacts rates of intendedness, planning or positive behaviors (one study has investigated and suggested impact Moos, 1996)

- Whether reproductive life plans impact intendedness
- The relationship between pregnancy intention, pregnancy planning and positive periconceptional behaviors

CDC Recommendations:

- 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.
- Increase the proportion of women who receive interventions as follow-up to preconception risk screening, focusing on high-priority interventions

Returning to the Use of Folic Acid: The Clinician's Influence

- 71% of women who received folic acid counseling from their clinician took the supplement;
- 17% of those who did not receive a specific recommendation from their provider took a FA supplement

Patuzsak et al, Canadian Family Physician, 1999

Insights from Research

- Majority of providers aware that folic acid is protective against NTDs
- Majority of providers do not clearly recommend to every female patient that she supplement her diet with folic acid

Examining an “at risk” condition: Diabetes

- Tight control of blood sugars in periconception period results in decreased incidence of congenital anomalies for women with diabetes

Research findings

- Managed Care Study:
  - 52% of women of reproductive age with pregestational diabetes recalled being counseled about blood sugars and conception
  - 37% reported discussion about using contraceptive method until optimal glucose control achieved

Kim, et al AJOG, 199, 227-232, 2005

- Postpartum study of women with pregestational diabetes (n=85 women)
  - 79% knew advantages of optimizing blood sugar
  - 41% had “planned” pregnancies
  - 10.6% had no knowledge of relationship of diabetes in pregnancy
  - Attitude of provider identified as important to planning status

Holing, et al. Diabetes Care 21: 880-895, 1998

Some problems with the research specific to implementation of preconceptional care in clinical encounters:

- Little research exists that examines the content or processes of providing preconception care
- Most research is retrospective or based on self-report

Some Barriers to Translating Science into Practice

- Providers:
  - Lack knowledge
  - Indifferent or negative about importance
  - Doubt that health promotion and prevention activities will make a difference
  - Competing priorities
  - Perceived or actual costs
  - Don’t know how to incorporate efficiently or effectively

Potential Interventions to Translate Science into Practice

- Educational materials
- Conferences
- Local consensus processes
- Educational outreach visits
- Local opinion leaders
- Patient-mediated interventions
- Audit and feedback
- Reminders—manual or computerized
- Marketing
- Multifaceted interventions (two or more of the above)

Grimshaw, et al., 2001

Research Findings

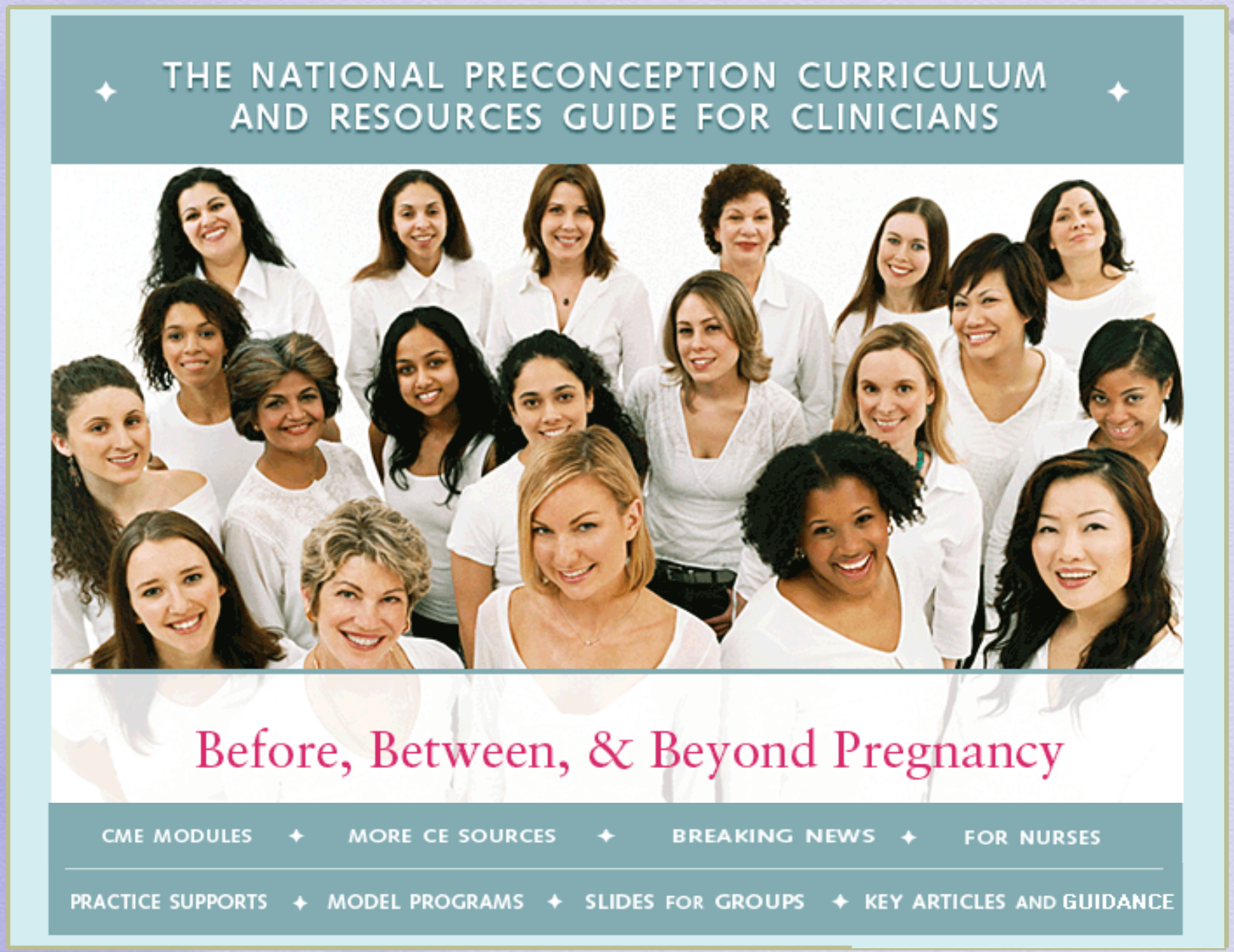
- Several literature reviews and SERS of strategies to impact clinical practice provide no conclusive evidence on effective strategies
- Most find that educational materials and meetings are ineffective
- Audit/feedback effects generally small
- Reminders for preventive care have small impact (may be greater when employ computer prompts)
- Multifaceted interventions more likely to have impact

Some Problems with the Research

- Weak designs
- Frequent methodological flaws
- Rarely include economic evaluations
- Inability to assess individual impact of multifacited interventions
- Lack longitudinal assessment of practice behaviors (including replacing today's best practices with tomorrow's)

A short list of important unknowns about translating science into practice

- How to position primary prevention as worthy of clinician focus
- How to enlist members of the health care team beyond OB providers into the new prevention paradigm
- Effectiveness of various strategies including newer approaches
  - Enriching basic professional education
  - Electronic CME
  - Tying demonstration of best practices to certifications
  - Government/payer incentives (e.g. Pay for Performance)
  - Maintenance of licensure/certification requirements
- Costs/benefits of various approaches



www.mombaby.org/beforeandbeyond

CME Modules

- **Module 1:** Preconception Care: What It Is and What It Isn't
- **Module 2:** Every Woman, Every Time: Integrating Health PromotionInto 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

“We have evidence, consensus, and guidelines –

The next step is:

translational research

People won't change their priorities or behaviors until it makes a difference for them to do so . . .