

Preconception Care: Missed Opportunities to Improve Pregnancy Outcomes

Secretary's Advisory Committee on Infant Mortality
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*Promoting the health of babies,
children, and adults, and enhancing
the potential for full, productive living*

Improving Preconception Health

“Optimizing a woman’s health before and between pregnancies is an ongoing process that requires full participation of all segments of the health care system.”

*The Importance of preconception care in the continuum of women’s health care.
ACOG Committee Opinion, Number 313, September 2005*

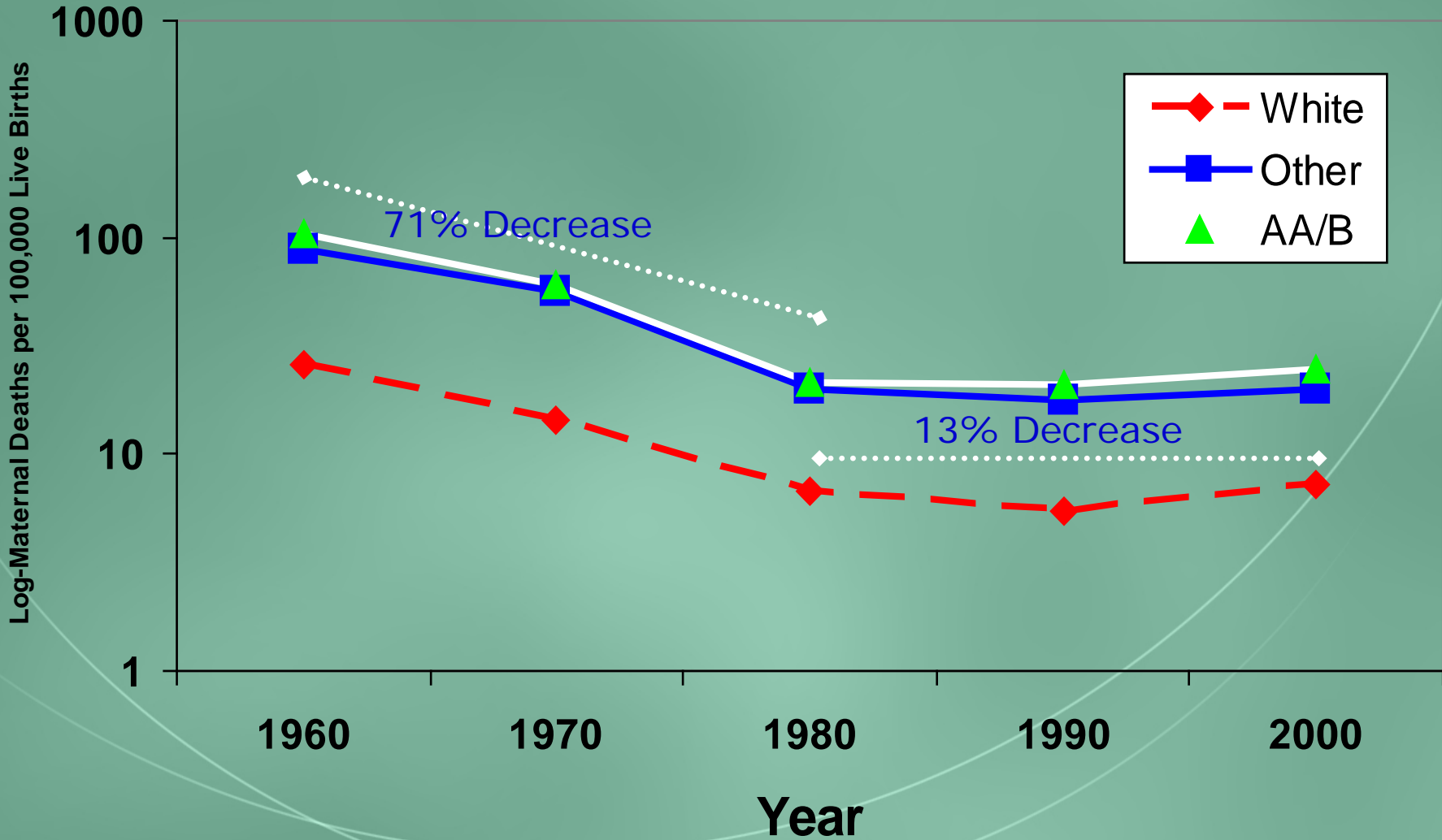
Combined Definition of PCC

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**, emphasizing those factors which must be acted on before conception or early in pregnancy to have maximal impact.

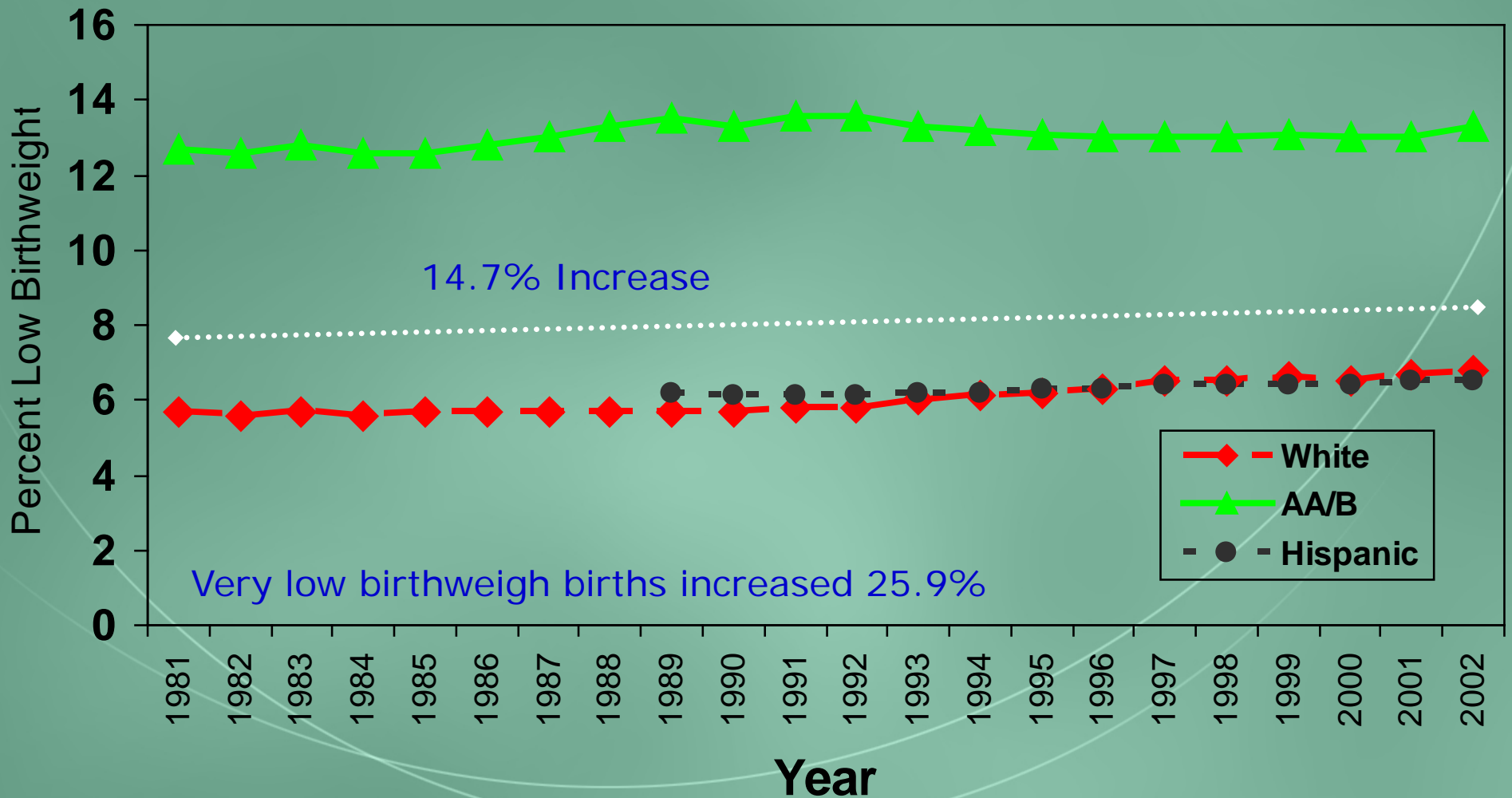
CDC's Select Panel on Preconception Care, June 2005

Why do we need Preconception Care?

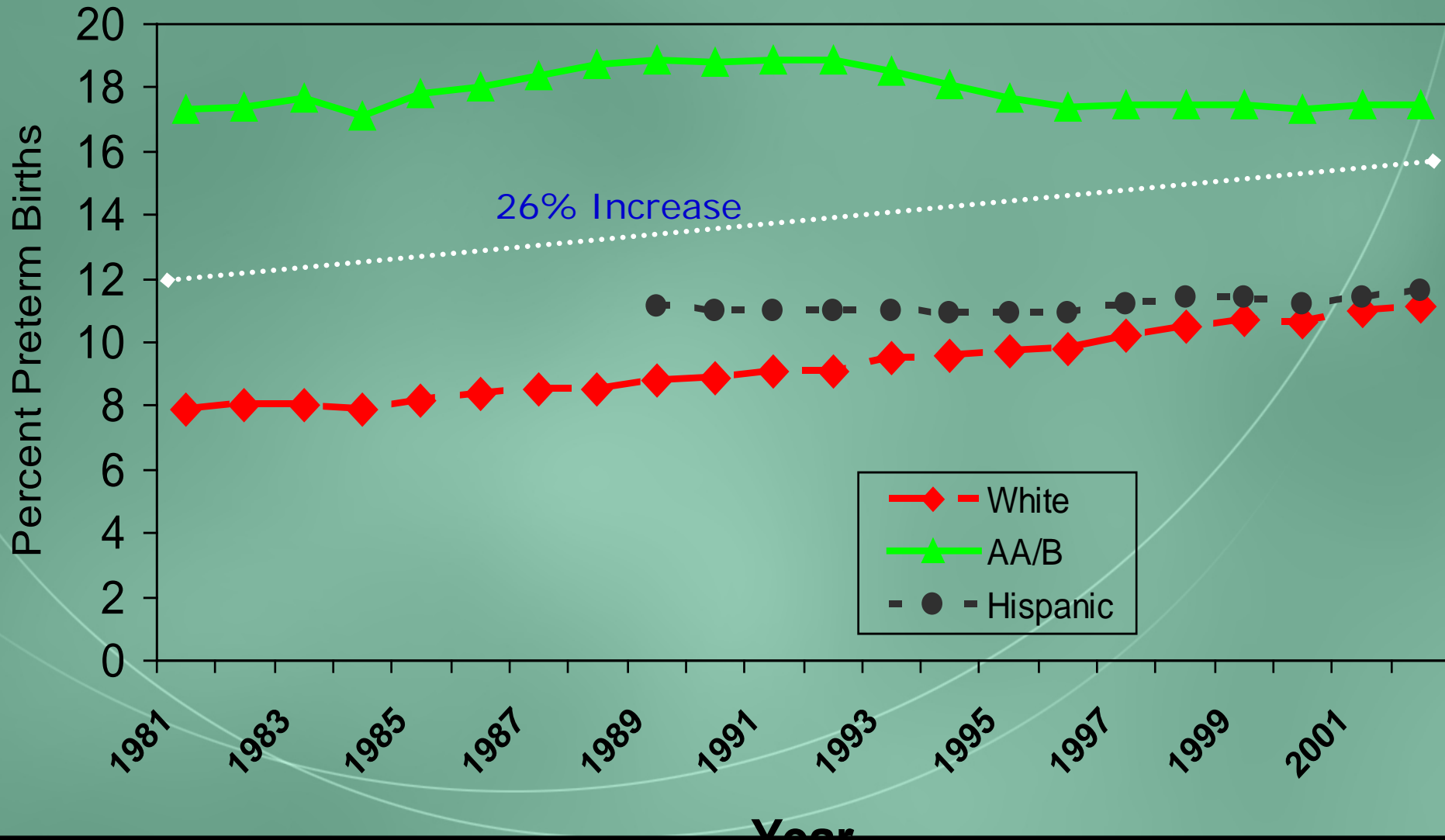
Maternal Mortality Rates, United States 1960-2000



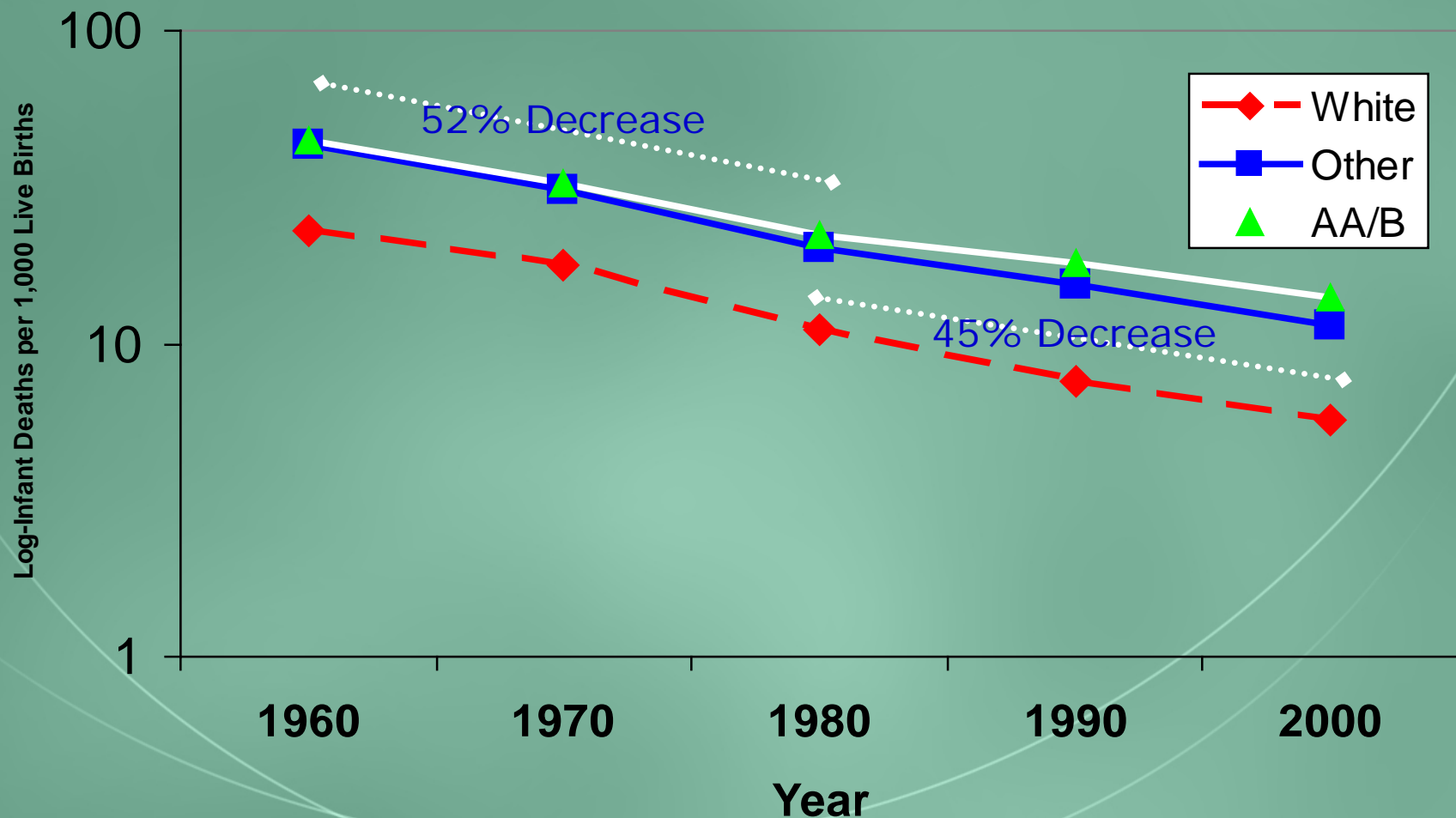
Low Birthweight, United States 1980-2002



Preterm Delivery, United States 1980-2002

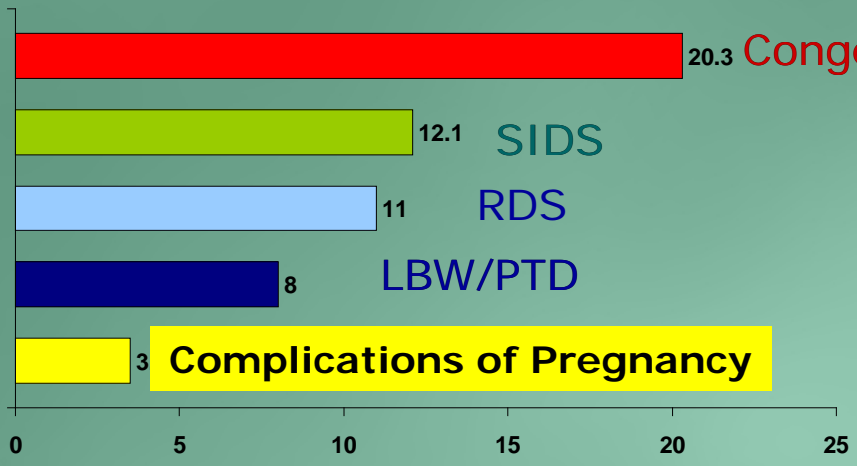
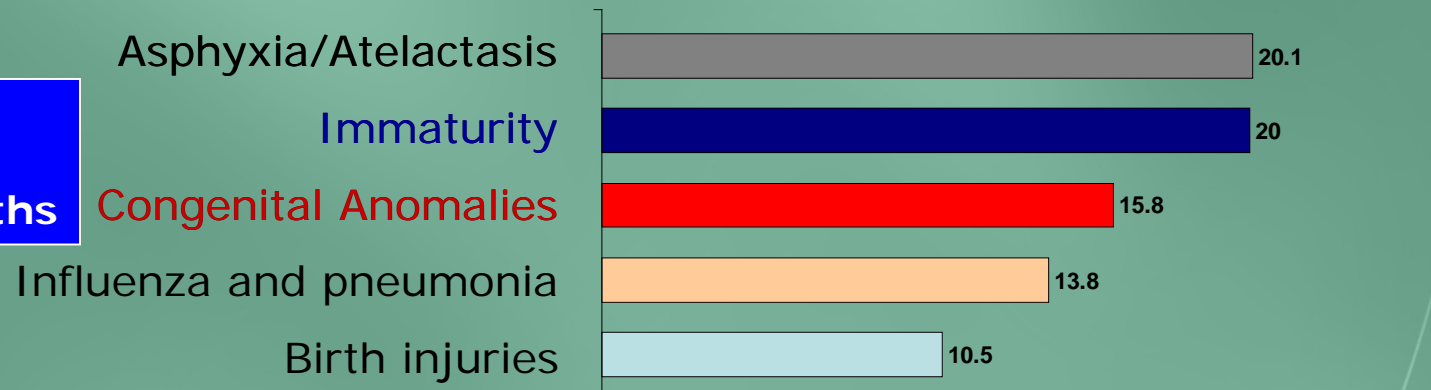


Infant Mortality Rates, United States 1920-2000

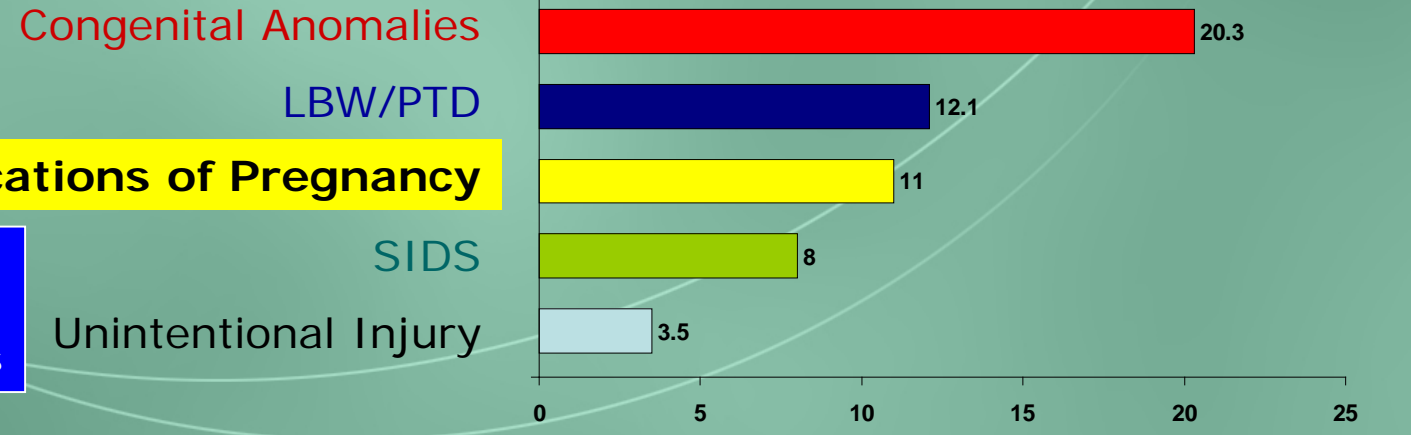


Five Leading Causes of Infant Death, United States, 1960, 1980 and 2002

1960
IMR = 26.0
110,873 Infant Deaths



1980
IMR = 12.6
45,526 Infant Deaths



2002
IMR = 7.0
28,034 Infant Deaths



Incidence of Adverse Pregnancy Outcomes

Major birth defects	3.3% of births
Fetal Alcohol Syndrome	0.2-1.5 /1,000 LB
Low Birth Weight	7.9% of births
Preterm Delivery	12.3%
Complications of pregnancy	30.7%
C-section	27.6%
Unintended pregnancies	49%
Unintended births	31%

Prevalence of Risk Factors

Pregnant or gave birth	Smoked during pregnancy	11.0%
	Consumed alcohol in pregnancy	10.1%
	Had preexisting medical conditions	4.1%
	Rubella seronegative	7.1%
	HIV/AIDS	0.2%
	Received inadequate prenatal Care	15.9%
At risk of getting pregnant	Diabetic	3.8%
	On teratogenic drugs	2.6%
	Obese	30.8%
	Not taking Folic Acid	69.0%

**Early prenatal care
is not enough,
and in many cases
it is too late!**

Current Status

**Science, Guidelines,
Recommendations, Practice**

Science: There is evidence that individual components of Preconception Care work:

- ➔ Rubella vaccination
- ➔ HIV/AIDS screening
- ➔ Management and control of:
 - @ Diabetes
 - @ Hypothyroidism
 - @ PKU
 - @ Obesity
- ➔ Folic Acid supplements
- ➔ Avoiding teratogens:
 - @ Smoking
 - @ Alcohol
 - @ Oral anticoagulants
 - @ Accutane

Clinical Practice Guidelines Exist

Clinical practice guidelines for preconception care of specific maternal health conditions have been developed by professional organizations:

- ☛ **American Diabetes Association (Diabetes -2004)**
- ☛ **American Association of Clinical Endocrinologists (Hypothyroidism – 1999)**
- ☛ **American Academy of Neurology (Anti-epileptic drugs)**
- ☛ **American Heart Association/American College of Cardiologists (Anti-epileptic drugs - 2003)**

Recommendations

**There is consensus that
Preconception Care
is important**

ACOG/AAP (2002)

All health encounters during a woman's reproductive years, particularly those that are a part of preconceptional care should include counseling on appropriate medical care and behavior to optimize pregnancy outcomes.

ACOG/AAP Guidelines for perinatal care, 5th edition, 2002

ACOG

Committee on
Gynecologic Practice

Committee Opinion



This document reflects emerging clinical and scientific advances as of the date issued and is subject to change. The information should not be construed as dictating an exclusive course of treatment or procedure to be followed.

The Committee wishes to thank the ACOG Preconception Care Work Group co-chairs, Michele G. Curtis, MD, and Paula J. Adams Hillard, MD, and members, Hani K. Atrash, MD, MPH; Alfred Brann Jr, MD; Siobhan M. Dolan, MD, MPH; Ann Lang Dunlop, MD; Ann Weathersby, CNM, MSN; and Gerald Zelinger, MD, for their assistance in the development of this opinion.

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Number 313, September 2005

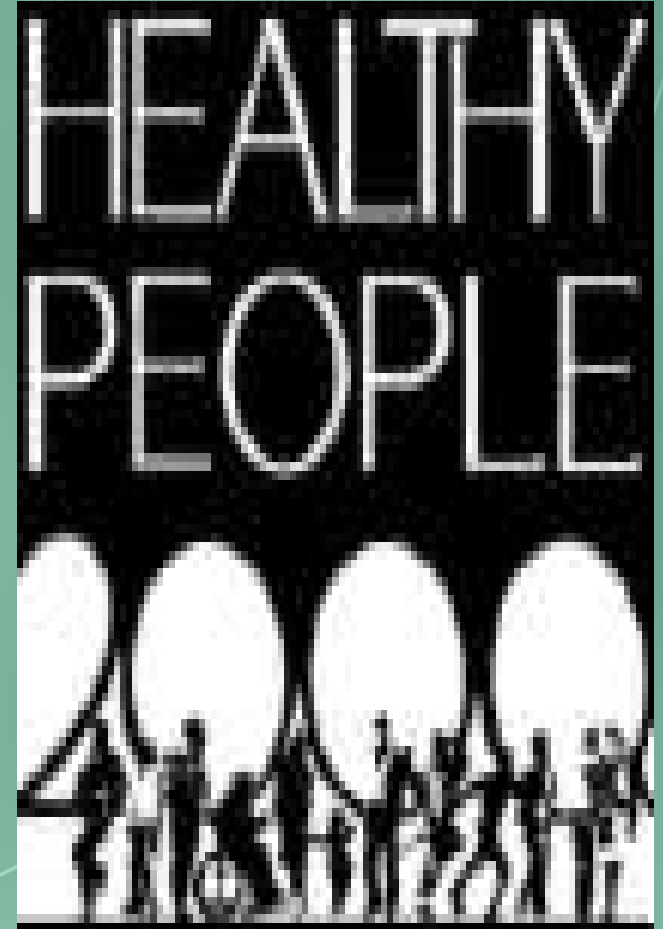
The Importance of Preconception Care in the Continuum of Women's Health Care

ABSTRACT: The goal of preconception care is to reduce the risk of adverse health effects for the woman, fetus, or neonate by optimizing the woman's health and knowledge before planning and conceiving a pregnancy. Because reproductive capacity spans almost four decades for most women, optimizing women's health before and between pregnancies is an ongoing process that requires access to and the full participation of all segments of the health care system.

US Public Health Service

➡ HP 2000 Objectives 5.10 and 14.12

Increase to at least 60 percent the proportion of primary care providers who provide age-appropriate preconception care and counseling.



USPHS

“Every woman (and, when possible, her partner) contemplating pregnancy within one year should consult a prenatal care provider. Because many pregnancies are not planned, providers should include preconception counseling, when appropriate, in contacts with women and men of reproductive age....Such care should be integrated into primary care services.”

*USPHS Expert Panel on the
Content of Prenatal Care, 1989*



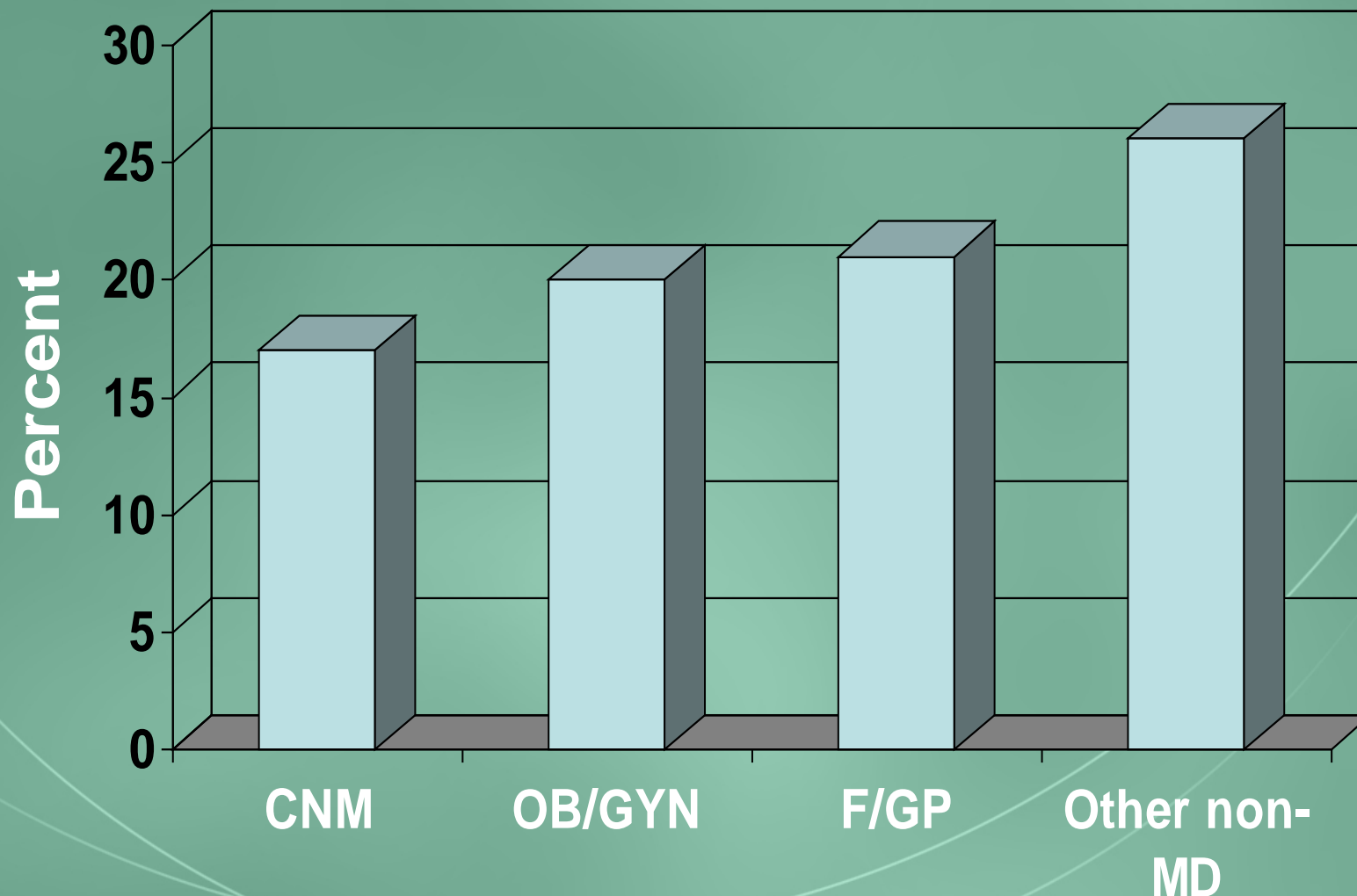
Current Practice

Preconception care is not being delivered today!

- ☞ **Most providers don't provide it**
- ☞ **Most insurers don't pay for it**
- ☞ **Most consumers don't ask for it**



Percent Eligible Patients Seen for Preconceptional Care by Type of Provider (2002-2003)



CNM = Certified Nurse Midwives; OB/GYN = Obstetricians/ Gynecologists;
F/GP = Family / General Practitioners;

**We have evidence,
consensus, and
guidelines.**

So, why don't we do it?

Challenges to Implementation

- ① **Absence of a national policy**
- ① **Lack of clinical tools**
- ① **Few proven delivery models / programs**
- ① **Inadequate education of providers and consumers**

What has CDC done?

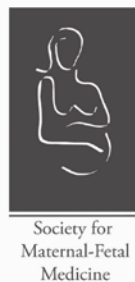
Convening
Studying
Reporting

The Preconception Care Initiative

A Collaborative Effort of over 35 National Organizations



national society
of genetic
counselors, inc.



Purposes of CDC Initiative

- **Develop national recommendations to improve preconception health**
- **Improve provider knowledge, attitudes, and behaviors**
- **Identify opportunities to integrate PCC programs and policies into federal, state, local health programs**
- **Develop tools and promote guidelines for practice**
- **Evaluate existing programs for feasibility and demonstrated effectiveness**

What Have We Done?

- **Established CDC (internal) and external work groups** (2004)
- **Convened a meeting of work groups** (Nov. 2004)
- **Held a National Summit on Preconception Care** (June 2005)
- **Convened a Select Panel** (June 2005)
- **Developed recommendations to improve preconception health** (June- Nov. 2005, publication March 2006)
- **Commissioned a supplement to MCH Journal** (anticipated March-April 2006)

Next Steps

- **Publish and disseminate the recommendations**
- **Increase awareness among public/private providers**
- **Identify opportunities to integrate PCC programs and policies into state, local, and community health programs**
- **Develop tools and guidelines for practice**
- **Evaluate existing programs for feasibility and demonstrated effectiveness**

Preconception Care Framework



Themes / Areas for Action

- **Social marketing and health promotion for consumers**
- **Clinical practice**
- **Public health and community**
- **Public policy and finance**
- **Data and research**

A Vision for Improving Preconception Health and Pregnancy Outcomes

- All women and men of childbearing age have high reproductive awareness (i.e., understand risk and protective factors related to childbearing).
- All women have a reproductive life plan (e.g., whether or when they wish to have children, how they will maintain their reproductive health).
- All pregnancies are intended and planned.
- All women of childbearing age have health coverage.
- All women of childbearing age are screened prior to pregnancy for risks related to outcomes.
- Women with a prior pregnancy loss (e.g., infant death, VLBW or preterm birth) have access to intensive interconception care aimed at reducing their risks.

Goals for Improving Preconception Health

- ➔ **Goal 1.** To improve the knowledge, attitudes, and behaviors of men and women related to preconception health.
- ➔ **Goal 2.** To assure that all U.S. women of childbearing age receive preconception care services – screening, health promotion, and interventions -- that will enable them to enter pregnancy in optimal health.
- ➔ **Goal 3.** To reduce risks indicated by a prior adverse pregnancy outcome through interventions in the interconception (inter-pregnancy) period that can prevent or minimize health problems for a mother and her future children.
- ➔ **Goal 4.** To reduce the disparities in adverse pregnancies outcomes.

Recommendations for Improving Preconception Health (1-2)

- ➔ **Recommendation 1. Individual responsibility across the life span.** Encourage each woman and every couple to have a reproductive life plan.
- ➔ **Recommendation 2. Consumer awareness.** Increase public awareness of the importance of preconception health behaviors and increase individuals' use of preconception care services using information and tools appropriate across varying age, literacy, health literacy, and cultural/linguistic contexts.

Recommendations for Improving Preconception Health (3-4)

- ➡ **Recommendation 3. Preventive visits.** As a part of primary care visits, provide risk assessment and counseling to all women of childbearing age to reduce risks related to the outcomes of pregnancy.
- ➡ **Recommendation 4. Interventions for identified risks.** Increase the proportion of women who receive interventions as follow up to preconception risk screening, focusing on high priority interventions.

Recommendations for Improving Preconception Health (5-6)

- ➡ **Recommendation 5. Interconception care.** Use the interconception period to provide intensive interventions to women who have had a prior pregnancy ending in adverse outcome (e.g., infant death, low birthweight or preterm birth).
- ➡ **Recommendation 6. Pre-pregnancy check ups.** Offer, as a component of maternity care, one pre-pregnancy visit for couples planning pregnancy.

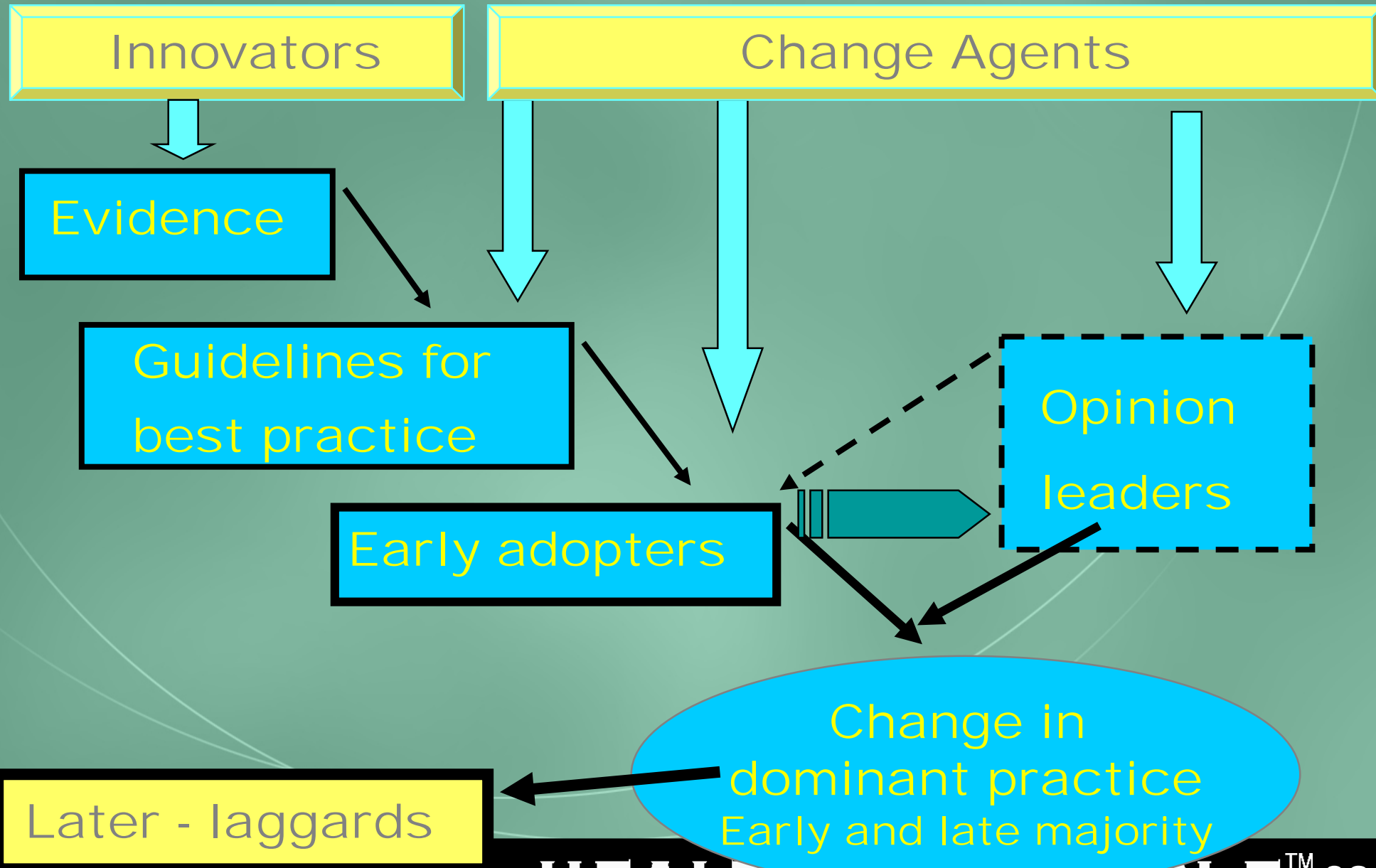
Recommendations for Improving Preconception Health (7-8)

- ➔ **Recommendation 7. Health coverage for low-income women.** Increase Medicaid coverage among low-income women to improve access to preventive women's health, preconception, and interconception care.
- ➔ **Recommendation 8. Public health programs and strategies.** Infuse and integrate components of preconception health into existing local public health and related programs, including emphasis on those with prior adverse outcomes.

Recommendations for Improving Preconception Health (9-10)

- ➔ **Recommendation 9. Research.**
Augment research knowledge related to preconception health.
- ➔ **Recommendation 10. Monitoring improvements.** Maximize public health surveillance and related research mechanisms to monitor preconception health.

Diffusion of Innovation Theory



Opportunities for SACIM

- ➡ What might the SACIM recommend to the Secretary of HHS?
 - Ⓜ Permit states to use family planning waivers for more interconception care.
 - Ⓜ Permit coverage of more uninsured women using Medicaid and SCHIP.
 - Ⓜ Direct public health agencies to use resources to:
 - ☞ Develop programs, test models, fill gaps
 - ☞ Evaluate and monitor progress

