

A New Tool to Assist Busy Clinicians to Deliver Preconception Care: The Gabby Preconception Care System

Best Start Resource Center Annual Conference
Hilton Toronto Airport & Suites
Mississauga, ON
February, 26, 2015

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BU School of Medicine/

Boston Medical Center

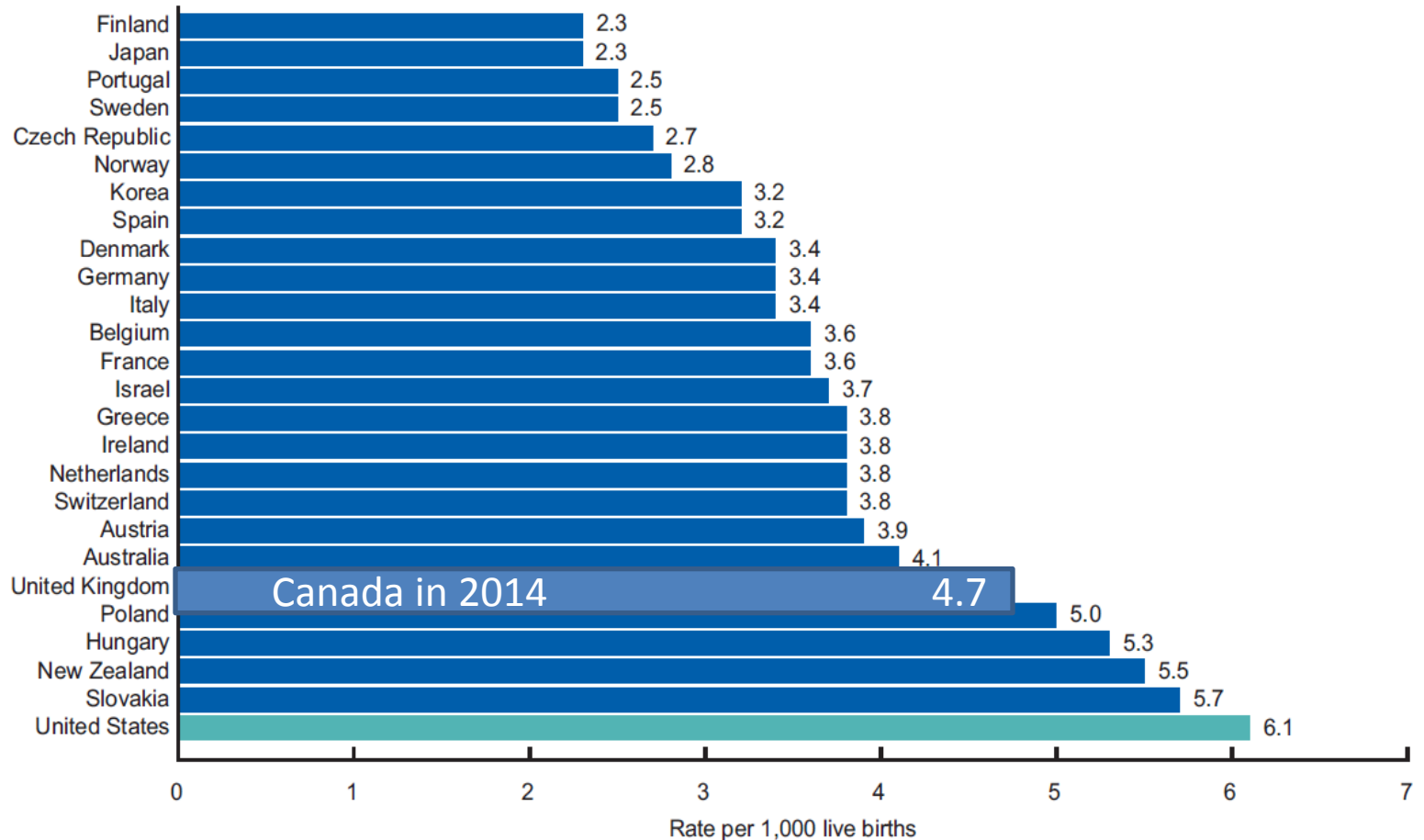


EXCEPTIONAL CARE. WITHOUT EXCEPTION.

Objectives

- Present the rationale for a focus on preconception health
- Review the National Initiative on Preconception Care (PCC)
- Discuss the Content of PCC and guidelines in the AJOG supplement
- Demonstrate a new health information systems called “Gabby” that is proven to decrease preconception risk
- Show how Gabby can create a “My Reproductive Life Plan” and can be integrated into practice

International Ranking of IMRs



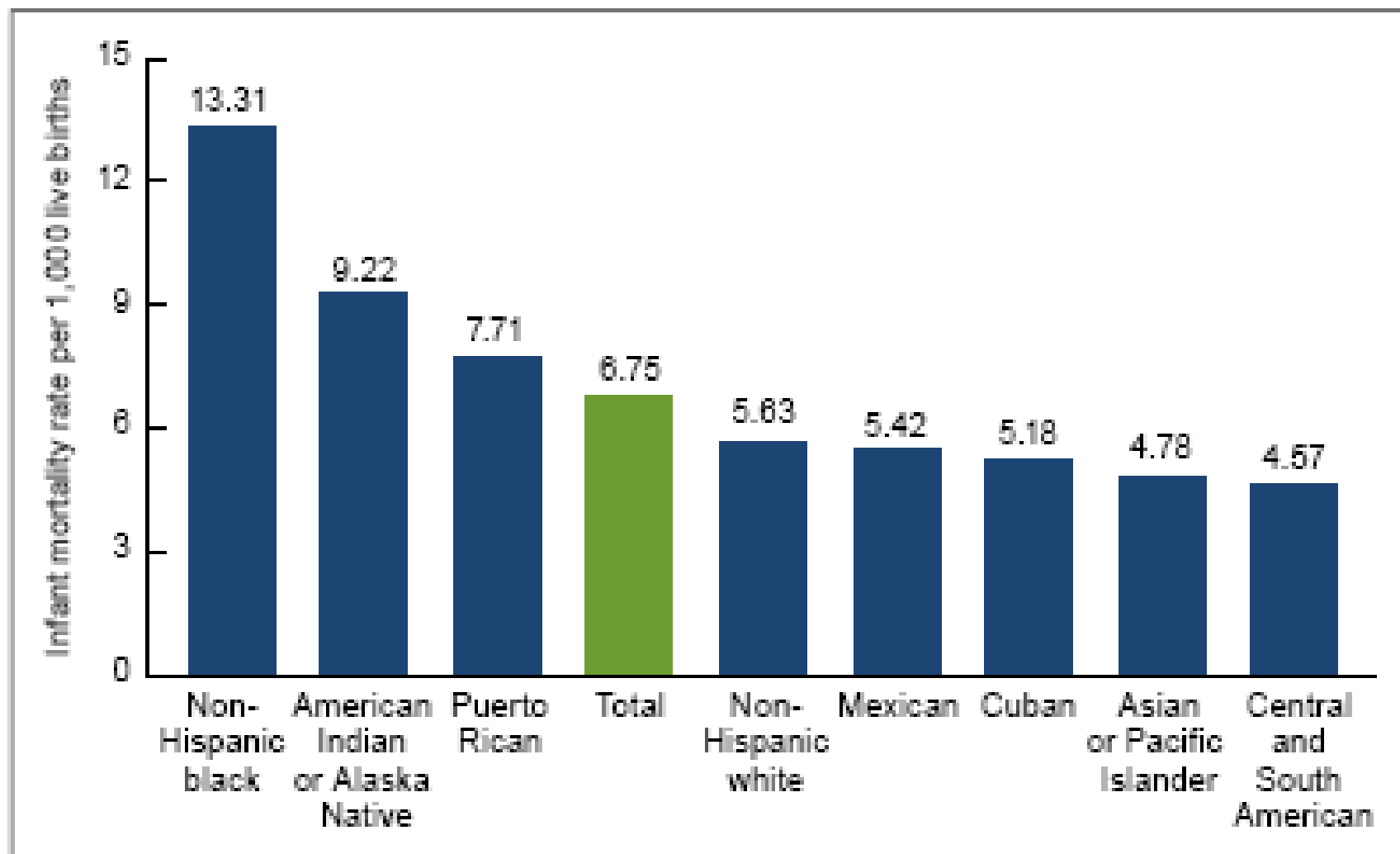
NOTES: Canada's 2010 data were not available from the Organisation for Economic Co-operation and Development (OECD) at the time of manuscript preparation. The 2009 infant mortality rate for Canada was 4.9. If the 2010 data for Canada had been available, the U.S. ranking may have changed. Deaths at all gestational ages are included, but countries may vary in completeness of reporting events at younger gestational ages.

SOURCES: CDC/NCHS, linked birth/infant death data set (U.S. data); and OECD 2014 (all other data). Data are available from: <http://www.oecd.org>.

Figure 1. Infant mortality rates: Selected Organisation for Economic Co-operation and Development countries, 2010

Infant Mortality Rates Vary Greatly By Race and Ethnicity

Figure 1. Infant mortality rates, by race and Hispanic origin of mother: United States, 2007



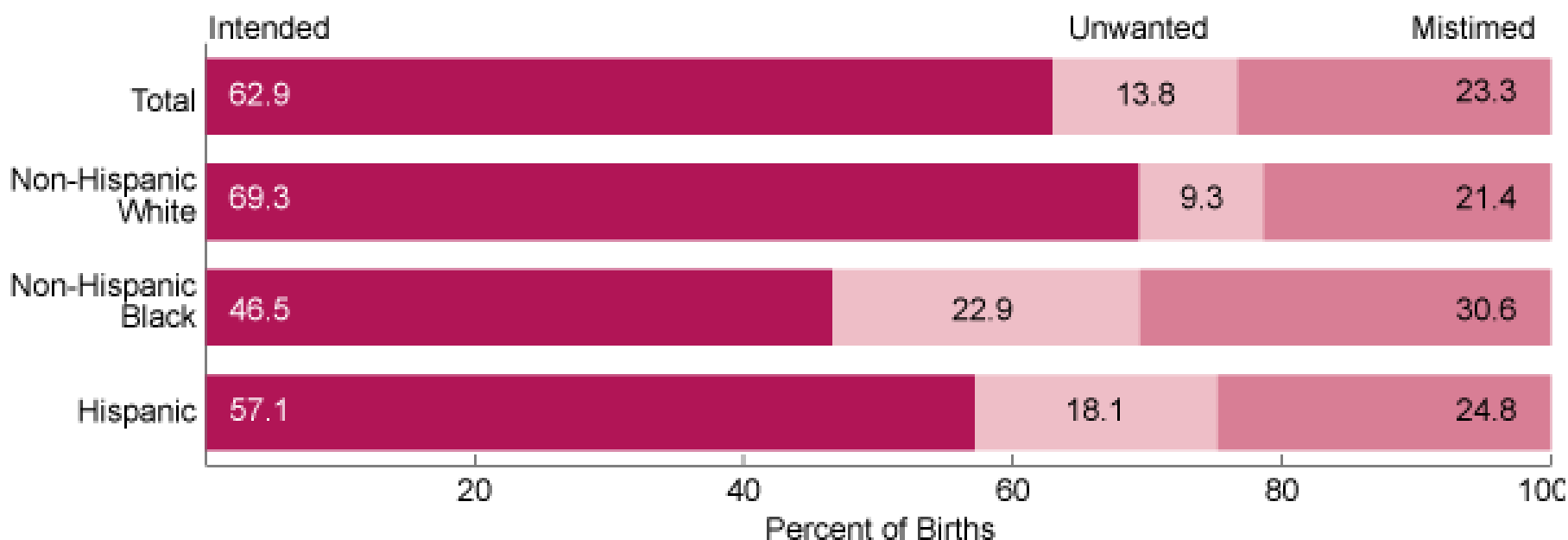
SOURCE: CDC/NCHS, linked birth/infant death data set, 2007.

Risk Factors Are Common

At birth	Smoked during pregnancy	11.0%
	Consumed alcohol in pregnancy	10.1%
	Preexisting medical conditions	4.1%
	Rubella seronegative	7.1%
	HIV/AIDS	0.2%
	Received inadequate prenatal care	15.9%
At risk of getting pregnant	Cardiac Disease	3%
	Hypertension	3%
	Asthma	6%
	Dental caries or oral disease (women 20-39)	>80%
	Diabetic	9%
	On teratogenic drugs	2.6%
	Overweight or Obese	50%
	Not taking Folic Acid	69.0%

About Half of All Pregnancies are not Planned

Intendedness of Births at Conception* Among Women Aged 15–44, by Race/Ethnicity,** 2006–2010



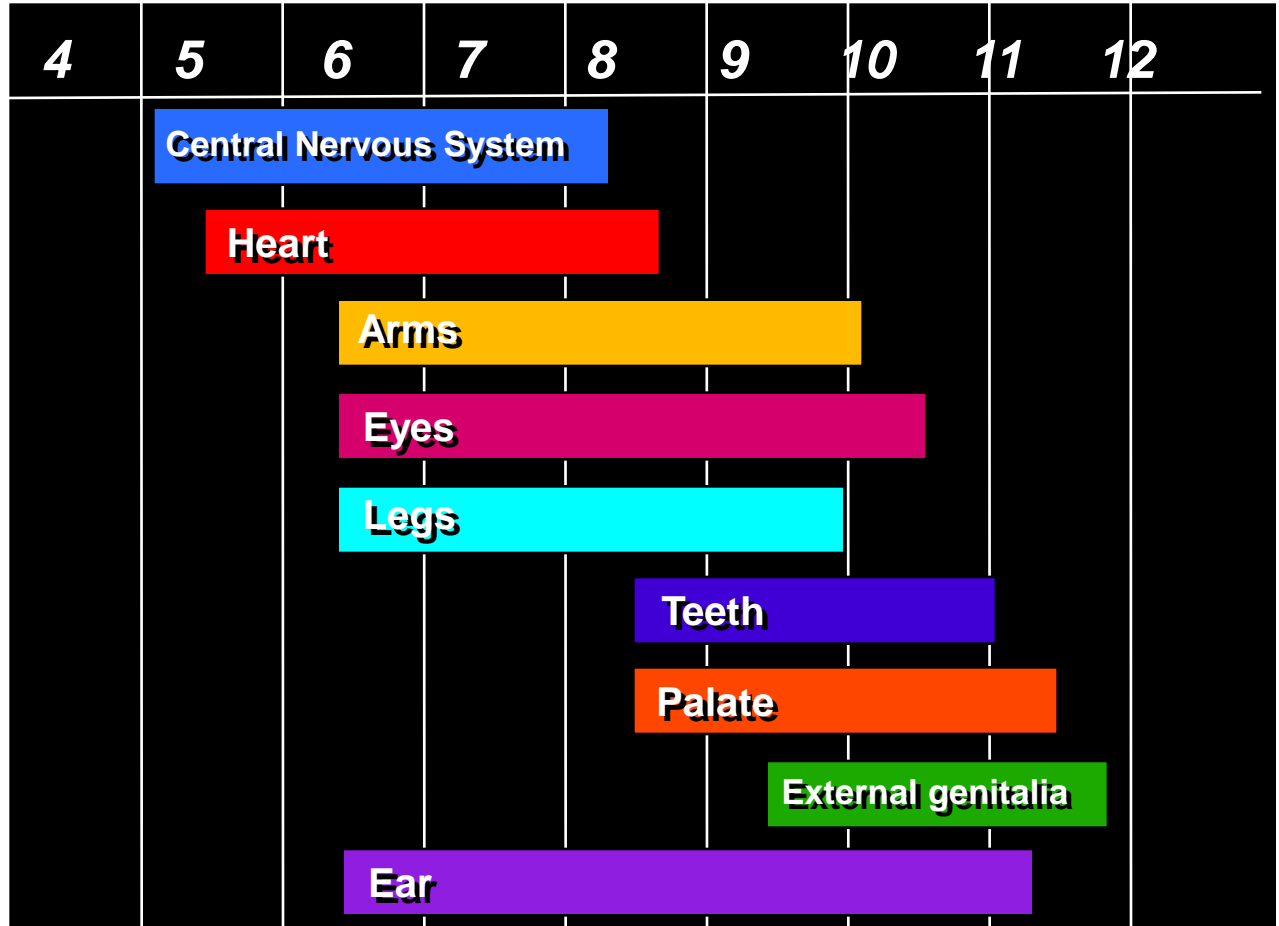
Source: Mosher WD, Jones J, Abma JC. Intended and unintended births in the United States: 1982–2010. National health statistics reports; no 55. Hyattsville, MD: National Center for Health Statistics. 2012.

We Currently Intervene Too Late

Critical Periods of Development

Weeks gestation from LMP

Most susceptible time for major malformation



Missed Period

Mean Entry into Prenatal Care

Why Preconception Care?

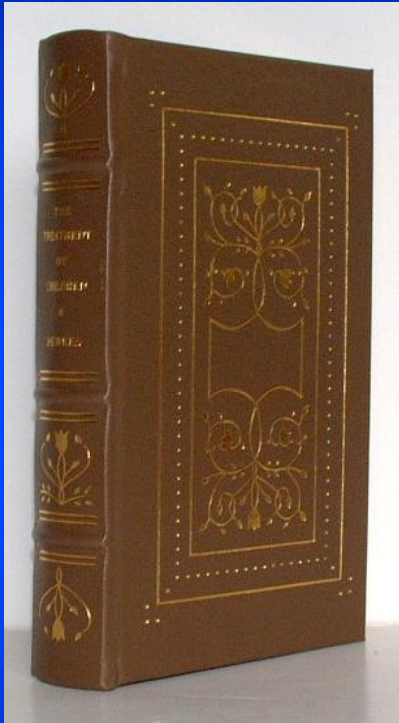
- **Poor pregnancy outcomes continue to be higher than acceptable**
- **Women entering pregnancy are “at risk” for adverse pregnancy outcomes**
- **There is evidence that intervening before pregnancy will improve outcomes**
- **We currently intervene too late**

Preconception Health (PCH) (including Interconception Health)

Preconception health and health care focuses on **taking steps now to protect the health of a baby in the future**. However, preconception health is important for **all women and men**, whether or not they plan to have a baby one day.

CDC. Preconception Health and Health Care. Retrieved March 27, 2014, from:
<http://www.cdc.gov/preconception/index.html>

Not a New Concept



“The physical treatment of children should begin as far as may be practicable, with the earliest formation of the embryo; it will, therefore, necessarily involve the conduct of the mother, even before her marriage, as well as during her pregnancy.”

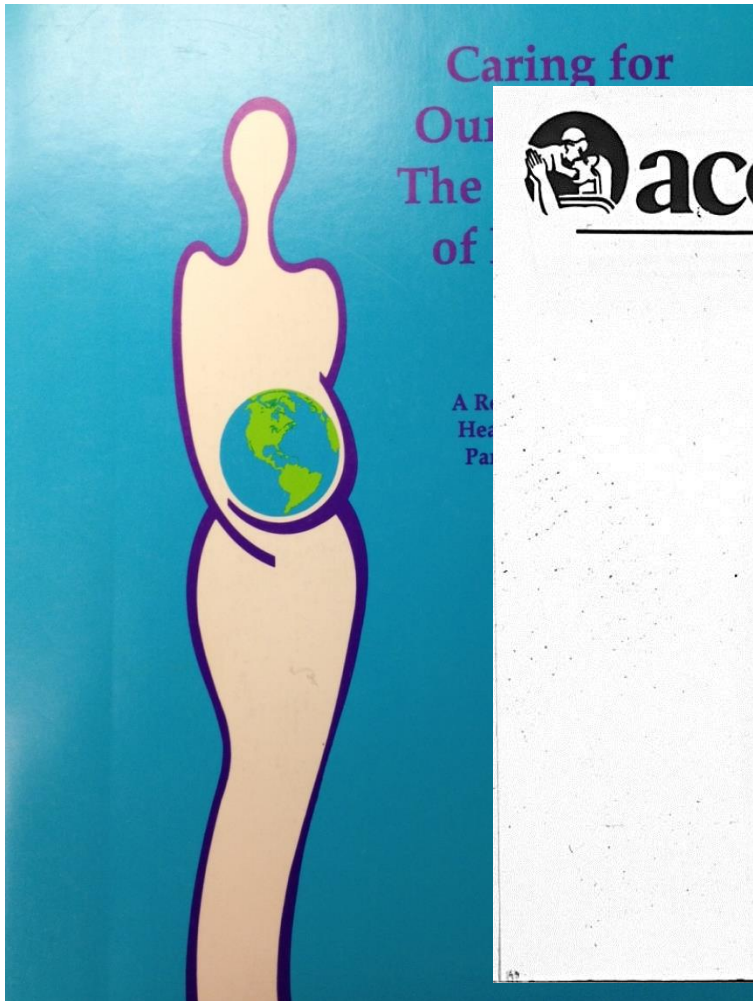
THE PHYSICAL AND MEDICAL
TREATMENT OF CHILDREN
The Classics of Pediatrics Library
Gryphon Editions

Author: William P. Dewees, M. D. (1768-1841)
credited with having written the first American
pediatric textbook

William Potts Dewees 1825

first American textbook on Pediatrics

Some History



acog *Techni*

Components of Preconception

- Systematic identification of preconception through assessment of reproductive and medical histories; nutritional exposures; and social concerns of women
- Provision of education based on risks
- Discussion of possible effects of preexisting medical conditions for both prospective mother and the fetus
- Reduction of interventions, if appropriate and desired
- Discussion of genetic concerns and appropriate and desired
- Determination of immunity to rubella immunization, if indicated
- Determination of hepatitis status and zation, if indicated
- Laboratory tests, as indicated
- Nutritional counseling on appropriate height, sources of folic acid, and vitamin oversupplementation; refer depth counseling, if appropriate
- Discussion of social, financial, and personal issues in preparation for pregnancy
- Discussion regarding desired birth control and perceived barriers to contraceptive use
- Emphasis on importance of early prenatal care and discussion of how to be structured based on the woman's concerns
- Recommendation to patient to keep calendar

Modified from Jack B, Culppepper L. Preconception care. In: Merkatz IR, Thompson JE, eds. Perspectives on prenatal care. New York 1990:84

1995

ACOG
Committee on Gynecologic Practice
Reaffirmed 2012

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. Alrash, MD, MPH; Alfred Beane 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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Washington, DC 20090-6920

The importance of preconception care in the continuum of women's health care. ACOG Committee Opinion No. 313. American College of Obstetricians and Gynecologists. Obstet Gynecol 2005;106:665-6

2005 and reaffirmed 2012

Committee Opinion



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.

Although most pregnancies result in good maternal and fetal outcomes, some pregnancies may result in adverse health effects for the woman, fetus, or neonate. Although some of these outcomes cannot be prevented, optimizing a woman's health and knowledge before planning and conceiving a pregnancy—also referred to as preconception care or prepregnancy care—may eliminate or reduce the risk. For example, initiation of folic acid supplementation at least 1 month before pregnancy reduces the incidence of neural tube defects such as spina bifida and anencephaly (1–3). Similarly, adequate glucose control in a woman with diabetes before conception and throughout pregnancy can decrease maternal morbidity, spontaneous abortion, fetal malformation, fetal macrosomia, intrauterine fetal death, and neonatal morbidity (4).

Nearly half of all pregnancies in the United States are unintended (5). Therefore, the challenge of preconception care lies not only in addressing pregnancy planning for women who seek medical care and consultation specifically in anticipation of a planned pregnancy but also in educating and screening all reproductively capable women on an ongoing basis to identify potential maternal and fetal risks and hazards to pregnancy before and between pregnancies.

This Committee Opinion reinforces the importance of preconception care, provides resources for the woman's health care clinician, and proposes that every reproductively capable woman create a reproductive health plan. The specific clinical content of preconception care is outlined elsewhere (6–8).

Several national and international medical organizations and advocacy groups have focused on the optimization of health before conception, result-

Why such slow progress in PCC?

- (1) those most in need of services are those least likely to receive them
- (2) provision of services is often badly fragmented
- (3) there is a lack of available treatment services for high-risk behaviors
- (4) reimbursement for risk assessment and health promotion activities is inadequate
- (5) health promotion messages are not effective unless received by a motivated couple
- (6) for only a few conditions are there data that intervention prior to conception is better than intervention early in pregnancy
- (7) many clinical training programs do not emphasize risk assessment and health promotion skills.

Jack and Culpepper. JAMA 1990; 264:479.

U.S. Centers for
Disease Control and
Prevention,
Department of Health
and Human Services
2005

**Select Panel on
Preconception
Health and Health
Care**

National Summit
on
Preconception Care
Select Panel Meeting



June 21 - 22, 2005

The Atlanta Marriott Century Center
Atlanta, Georgia





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

- 3 national preconception summits
- In 2006, the CDC Select Panel put forth 4 goals, 10 recommendations, and more than 50 action steps for the national preconception initiative.

Workgroups

- Clinical
- Public Health
- Consumer
- Policy/Finance
- Research and Surveillance

Focus of the CDC Clinical Work Group - June '05 - present

- 1. What clinical conditions should be addressed as part of PCC?**
- 2. What is the evidence?**
- 3. How can the conditions be best identified?**
- 4. What interventions are available?**
- 5. How can we deliver this material in clinical practice?**

Content of Preconception Care: 2008

SUPPLEMENT TO

AJOG

American Journal of Obstetrics & Gynecology

The Gray Journal DECEMBER 2008 ■ Volume 199, Number 6B Founded 1869


**Preconception Health and Health Care:
The Clinical Content of Preconception Care**

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Health promotion

Immunization

Infectious disease

Medical conditions

Psychiatric conditions

Parental exposure

Family and genetic history

Nutrition

Environmental exposure

Psychosocial risk

Medication

Reproductive history

Special populations

Preconception Interventions Reviewed

Category

Potential Components of Preconception Care

Family planning

Physical Activity, Weight Status, Nutrient Intake, Folate, Immunizations, Substance Use, Sexually Transmitted Infections, Human Papillomavirus (HPV), Hepatitis B, Varicella, Measles/Mumps/Rubella, Influenza, Diphtheria/Tetanus/Pertussis (DTaP)

Infectious diseases

HIV, Hepatitis C, Tuberculosis, Toxoplasmosis, CMV, Listeriosis, Parvovirus, Malaria, Gonorrhea, Chlamydia, Syphilis, History of Genital Herpes, Asymptomatic bacteriuria, Periodontal disease, Bacterial Vaginosis, Group B Strep

Medical conditions

Diabetes, Thyroid Disease, PKU, Seizures, Hypertension, Rheumatoid Arthritis, Lupus, Renal Disease, Cardiovascular, Thrombophilia, Asthma

Psychiatric

Depression/Anxiety, Bipolar disease, Schizophrenia

Exposures

Alcohol, Tobacco, Illicit Substances

Family History

All Individuals, Ethnicity-based, Family history, Personal history

Nutrition

Dietary Supplements, Vitamin A, Folic Acid, Multivitamins, Vitamin D, Calcium, Iron, Essential Fatty Acids, Iodine, Underweight, Overweight, Eating Disorders

Environmental

Mercury, Lead, Soil and Water Hazards, Workplace Exposure, Household Exposure

Psychosocial Risks

Inadequate Financial Resources, Access to Care, Physical / Sexual Abuse

Medications

Prescription, Over-the-counter, Medication, Dietary Supplements

Reproductive History

Prior Preterm Birth Infant, Prior C-Section, Prior Miscarriage), Prior Stillbirth, Uterine Anomalies

Special Populations

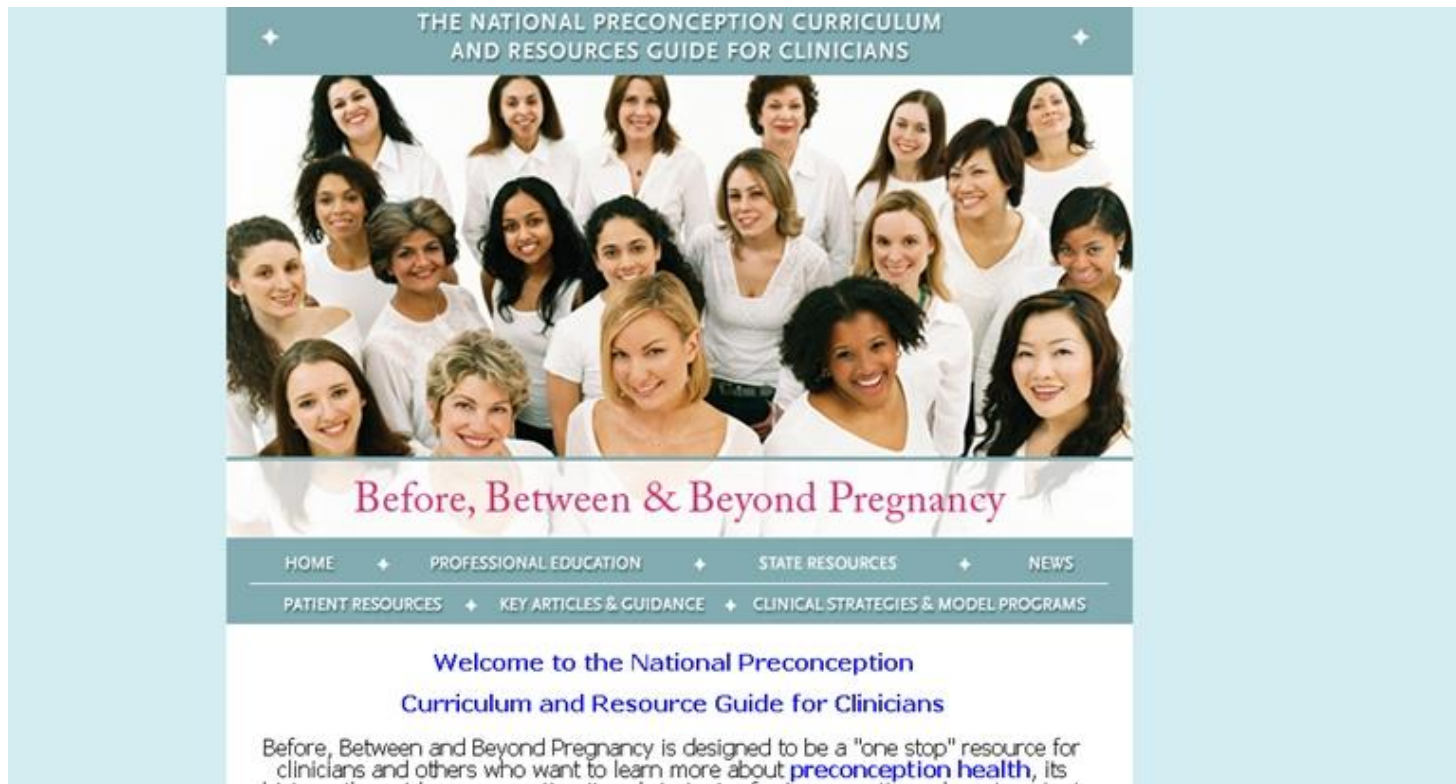
Women with Disabilities, Immigrant and Refugee Populations, Cancer

Each Component Presented in a Standard Format

- Burden of suffering
- How to identify
- Description of effective treatments
- Impact of treating in the preconception period.
- Recommendation
- Related recommendations by other groups.
- Strength of Recommendation + Quality of Evidence

Am J Obstet Gynecol Volume 199, Issue 6, 2008
Available as a full text and free download at:

<http://www.beforeandbeyond.org/>



THE NATIONAL PRECONCEPTION CURRICULUM
AND RESOURCES GUIDE FOR CLINICIANS

Before, Between & Beyond Pregnancy

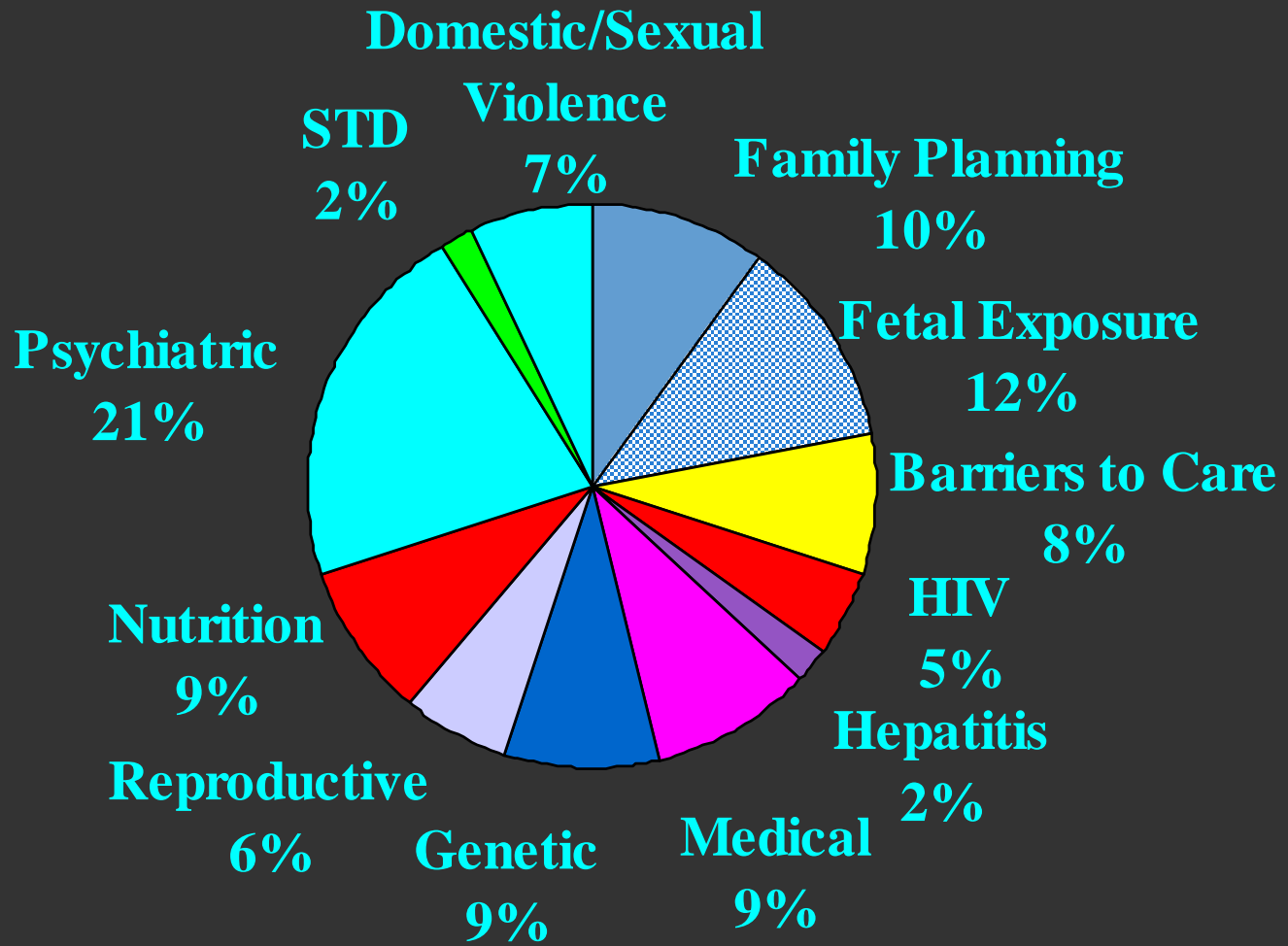
HOME + PROFESSIONAL EDUCATION + STATE RESOURCES + NEWS
PATIENT RESOURCES + KEY ARTICLES & GUIDANCE + CLINICAL STRATEGIES & MODEL PROGRAMS

Welcome to the National Preconception
Curriculum and Resource Guide for Clinicians

Before, Between and Beyond Pregnancy is designed to be a "one stop" resource for
clinicians and others who want to learn more about **preconception health**, its

<http://www.beforeandbeyond.org/>

Preconception Risk Identified at the Time of a Negative Pregnancy Test



Preconception Interventions Work

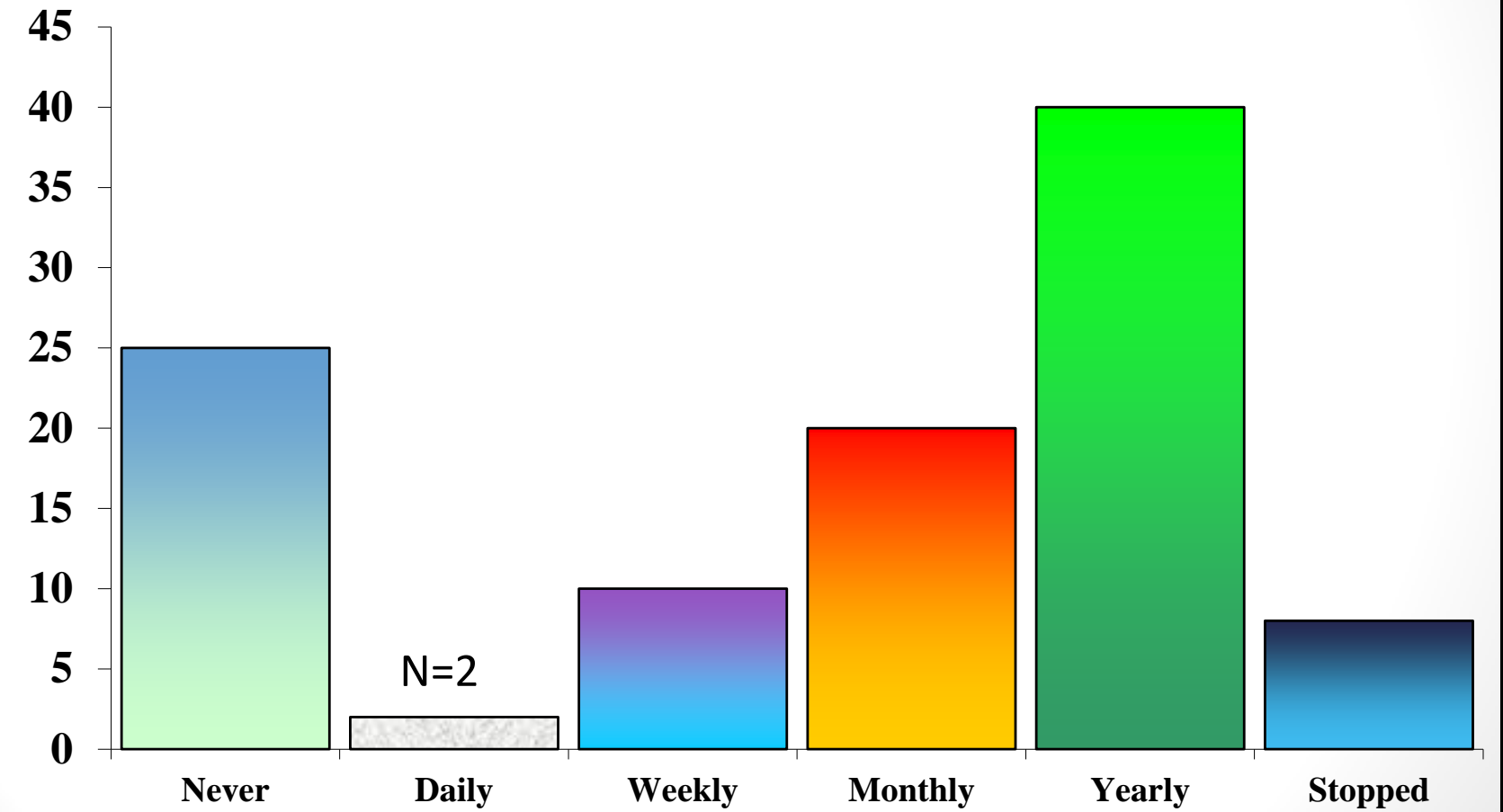
- Smoking
- Alcohol
- Diabetes
- Medications
- NTDs
- HIV
- Rubella
- Family Planning



The Effect of Maternal Cigarette Smoking on Pregnancy Complications

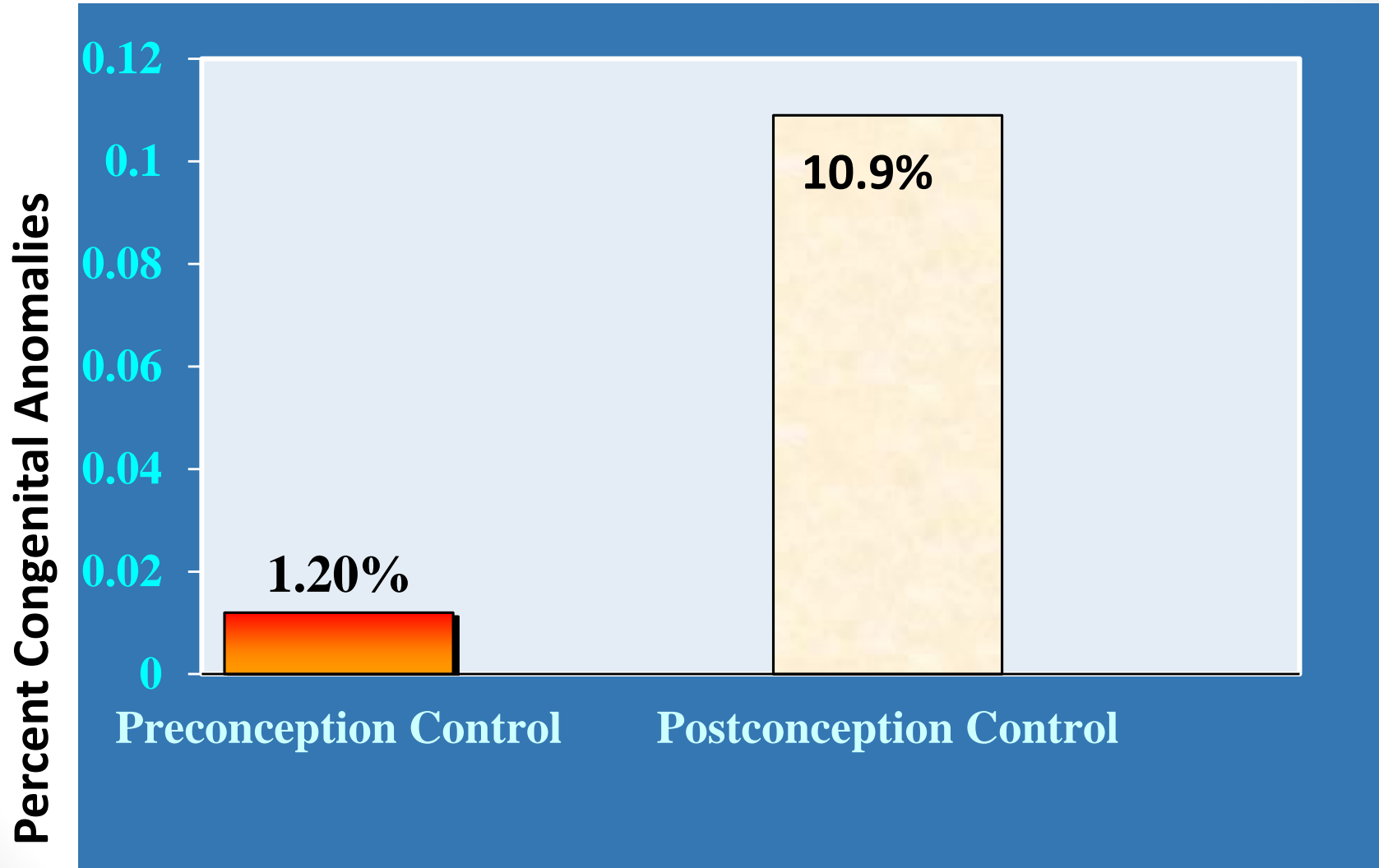
Fetal/Infant Outcome	No. of Studies	Pooled Risk	CI	P - value	% of All Cases	No. of Cases
Spontaneous abortion	7	1.24	1.19-1.30	<.001	3-8	19,000-141.00
	6	1.32	1.18-1.48	<.001		
Low birthweight	22	1.82	1.67-1.97	<.001	11-21	32,000-61,000
	1	1.99	1.74-2.28	<.001		
Perinatal morality	23	1.26	1.19-1.34	<.001	3-8	1900-4800
	2	1.23	1.12-1.41	<.001		

Frequency of Alcohol Consumption Among Patients with a Negative Pregnancy Test n=136



Jack JFP 1991

Congenital Anomalies in Infant's of Women with Preconception Control of Diabetes vs. Postconception Control



Kitzmiller JL et. al. JAMA 1991;245;731-734

Exposure to Teratogens

Occupational Exposures

heavy metals – lead, mercury
inorganic solvents

Medications

Gold

Lithium

Isotretinoin (Acutane)

Valproic acid

ACE inhibitors

Quinolones

Tetracycline

Warfarin

Nutrition

- **Overweight or Underweight**
- **Availability**
- **Eating Disorders**
- **Pica**
- **NTDs**

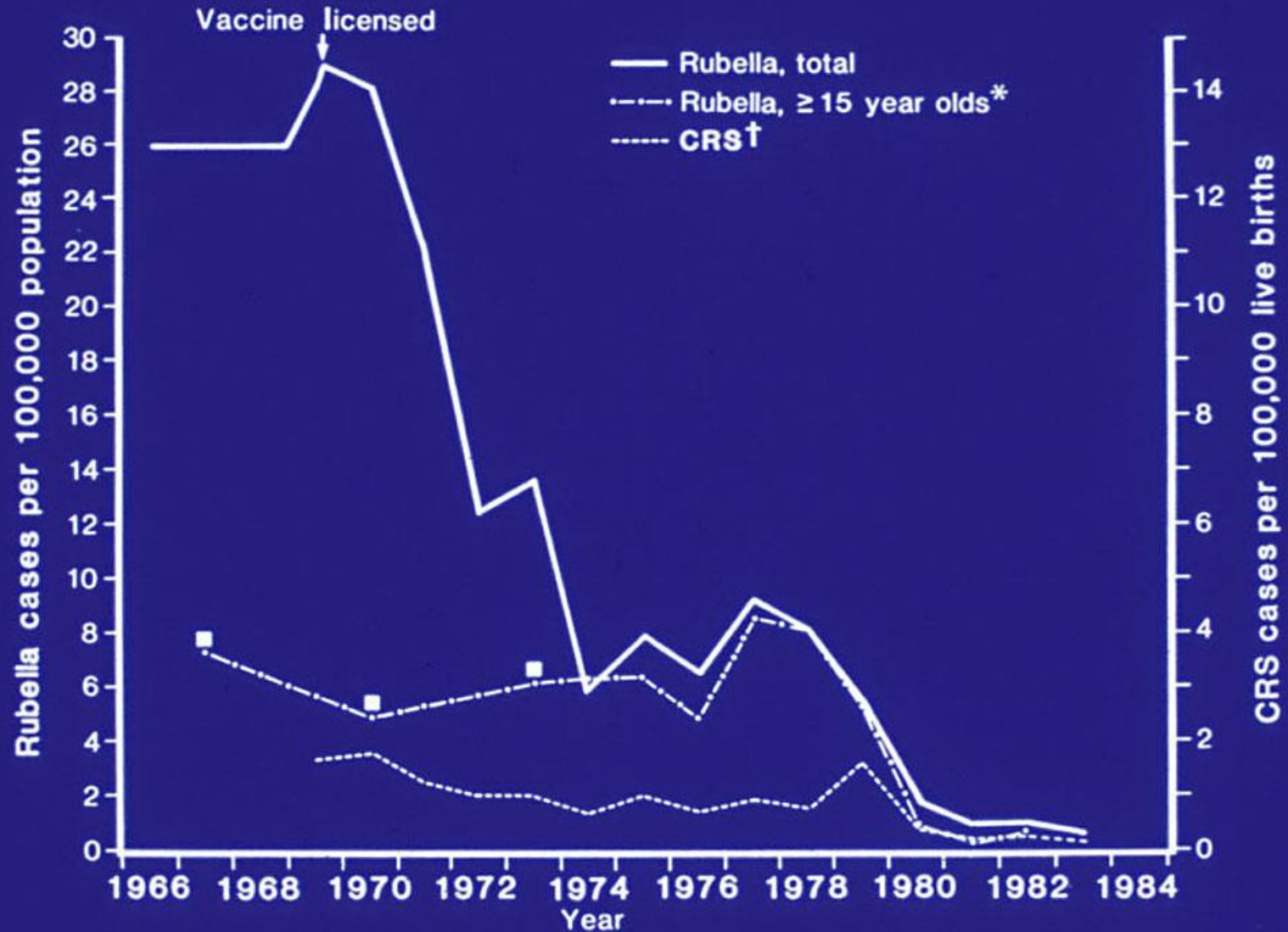
“All women of child bearing age in the United States who are capable of becoming pregnant should consume 0.4 mg of folic acid per day for the purpose of reducing their risk of having a pregnancy affected with spina bifida or other NTDs”

US Public Health Service

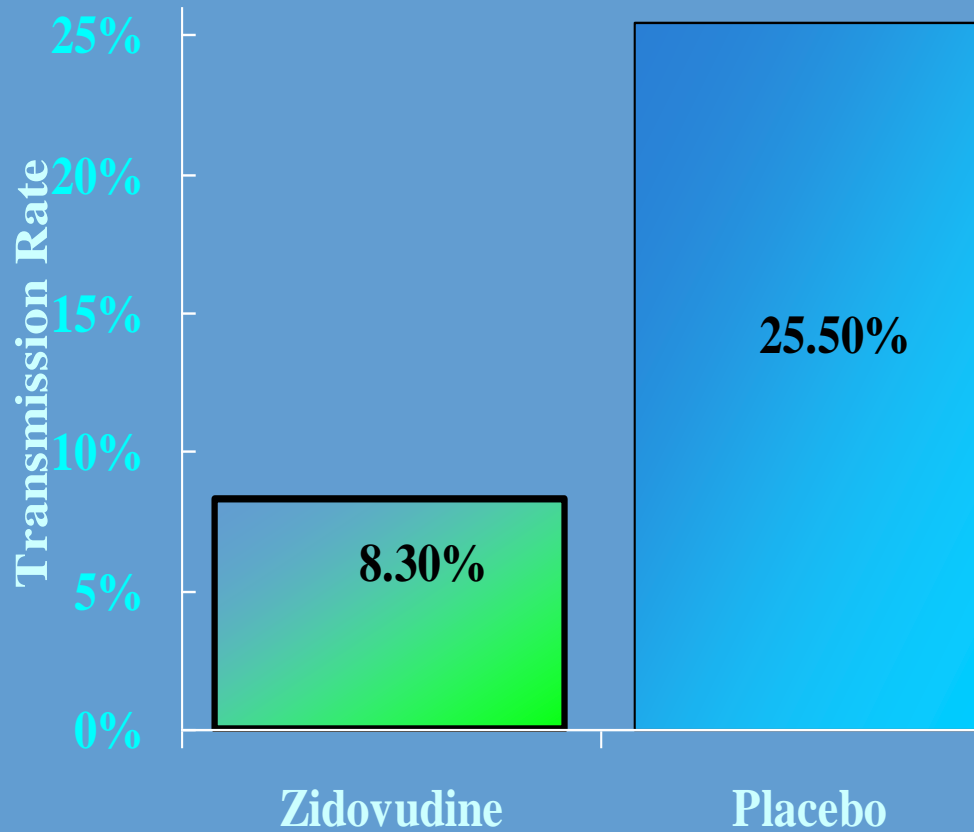




Rubella

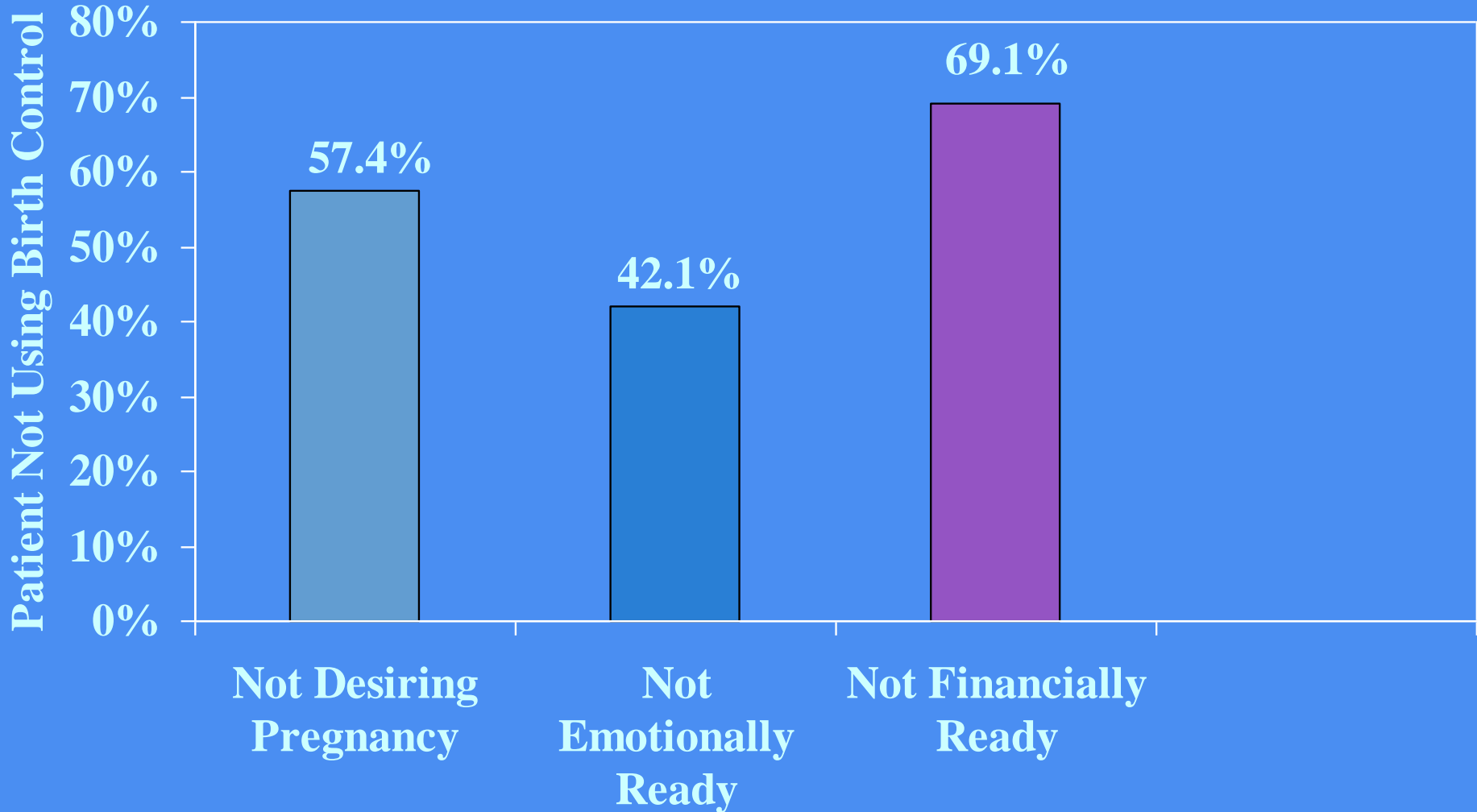


Probability of Vertical Transmission of HIV According to Treatment Group



Family Planning

Patients Not Using BC and Not Ready for Pregnancy with a Negative Pregnancy Test



One Key Question[®] (OKQ) Campaign

- Will be launched by BPHC in 2015
- Part of the Boston Healthy Start Initiative (BHSI)
- To be asked of all women 18-50 as a routine part of care

“Would you like to become pregnant in the next year?”

The need

There is a need for an efficient way to assess a woman's preconception risks, in order to prioritize valuable appointment time with a provider, and to support the woman in taking action to minimize her risks.



Now Introducing: Gabby

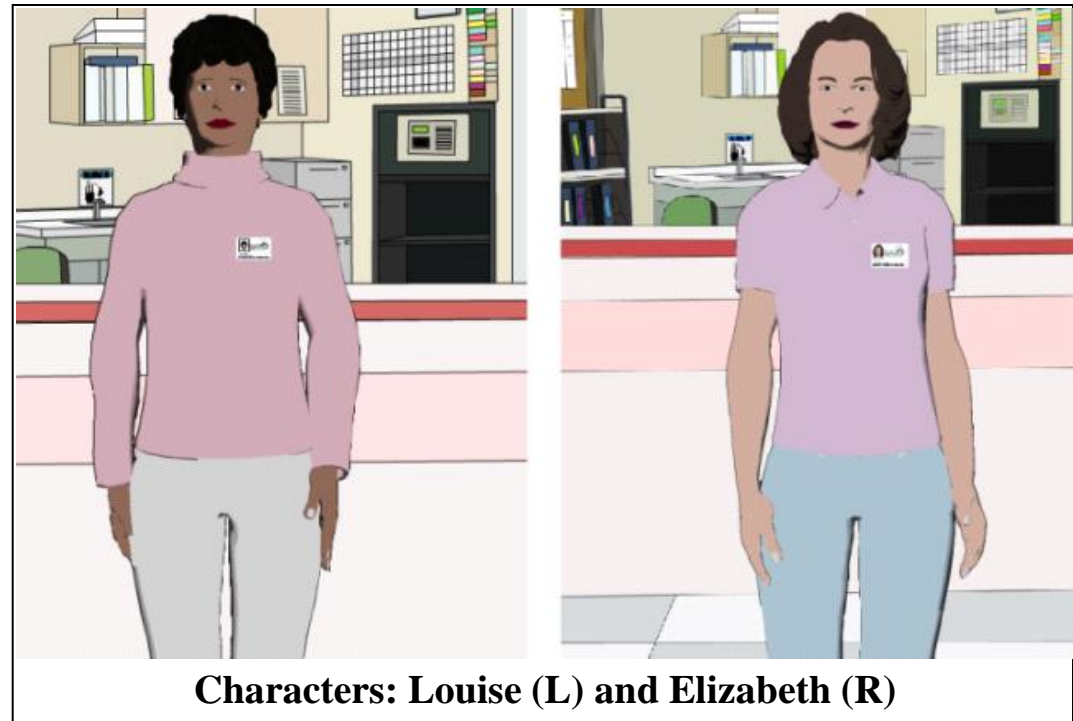


Using Health IT to Overcome Challenge of Clinician Time



Virtual Patient Advocates

- Emulate face-to-face communication
- Develop therapeutic alliance-empathy, gaze, posture, gesture
- Teach AHCP
- Tailored to Individual
- Do “Teach Back”
- Can drill down
- Print Reports
- High Risk Meds
 - Lovenox
 - Insulin



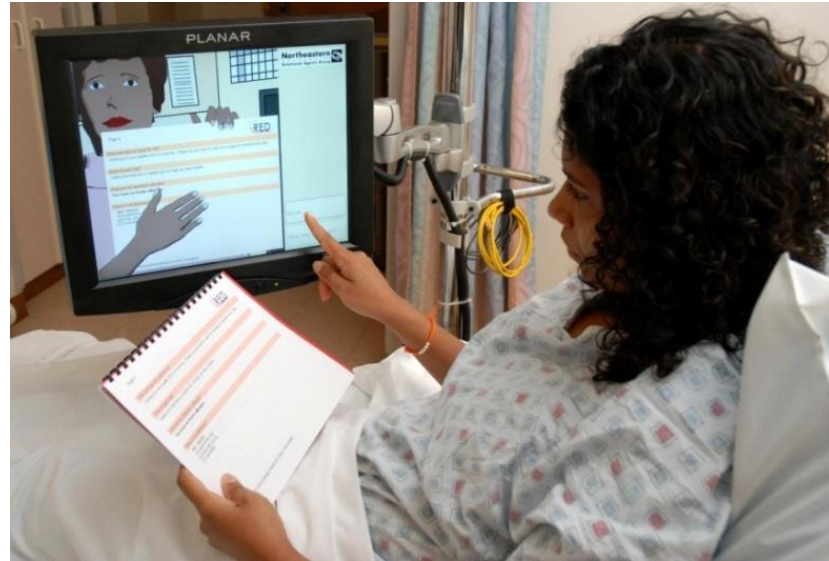
Characters: Louise (L) and Elizabeth (R)

Patient Interacting with Louise

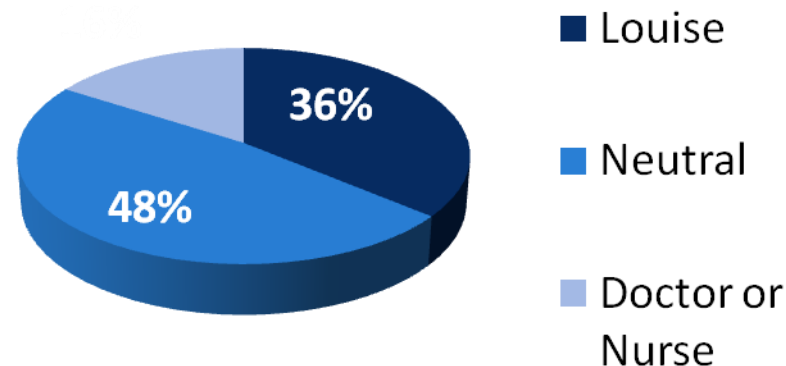


Twice as Many Pts Prefer Louise than RN/MD

“It was just like a nurse, actually better, because sometimes a nurse just gives you the paper and says ‘Here you go.’ Louise explains everything.”



“I prefer Louise, she’s better than a doctor, she explains more, and doctors are always in a hurry.”



Video: Meet Gabby

Preconception Care Project Demonstration



EXCEPTIONAL CARE. WITHOUT EXCEPTION.



Relational
Agents
Group



<http://www.bu.edu/familymed/programs-and-research/project-preconception-care/meet-gabby/>

Creating Gabby: Focus Group Feedback

- Clothing
 - “Layering”
 - Blue scrubs with institution’s logo or lab coat
 - “Fitted” shirt that shows curves
- Accessories
 - Glasses
 - Badge or Stethoscope
 - Wedding ring, earrings, necklace
- Hairstyle
 - “Honey” colored highlights or dark brown hair
 - Short bob with “professional” side bangs OR shoulder length wavy curls

Top 10 Name Suggestions:

- Gabrielle “Gabby” for short
- Layla
- Vanessa/Venessa
- Angela
- Maria
- Jeanette
- Annie
- Lisa
- Nicole
- Natalie



La-La (MTV host)



Rihanna (singer)



Gabrielle Union (actress)

PCC Risk Assessment

Firefox | Sex and Reproductive Health | wonder.ccs.neu.edu/PCC2Testing/Intake.php?D=3 | Google

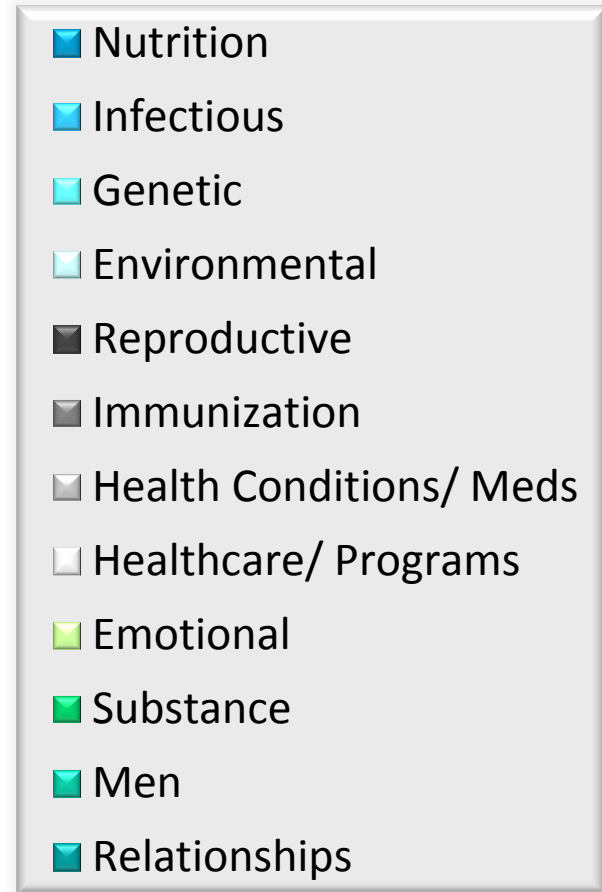
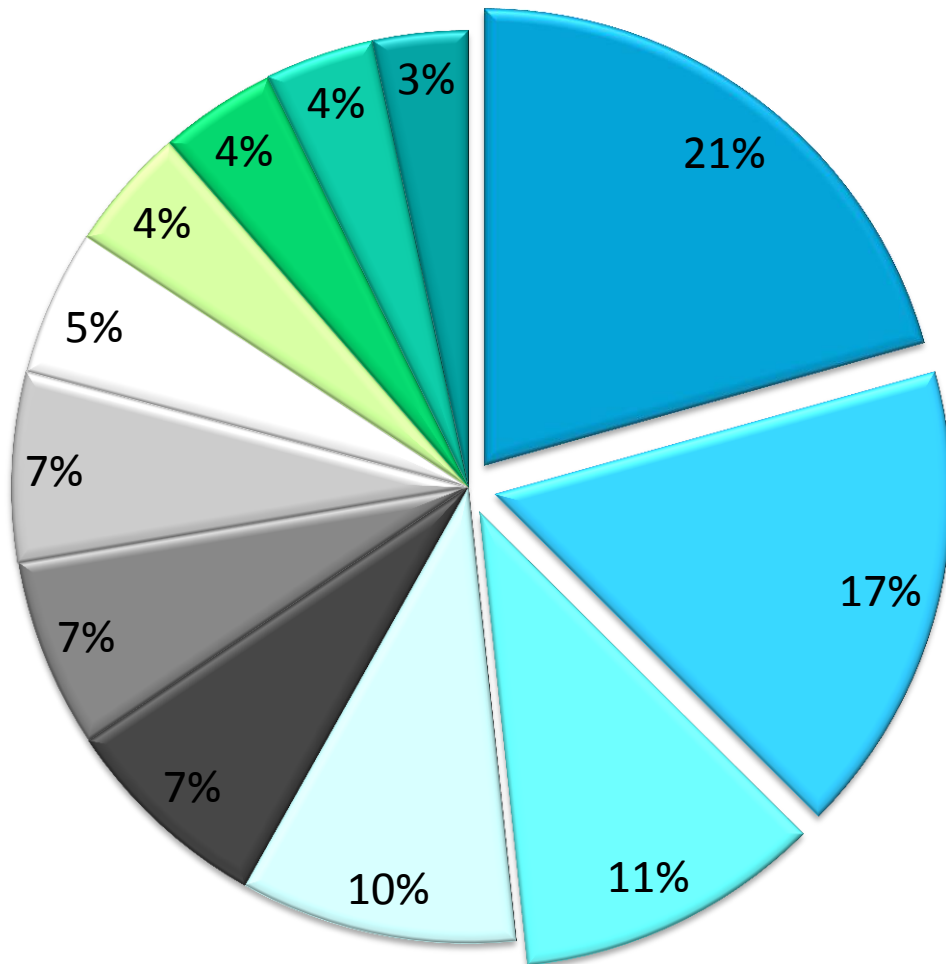
Most Visited | Getting Started | Latest Headlines | Zimbra | RAG | Bookmarks

Sex and Reproductive Health

1. Have you ever had sex, like vaginal intercourse, oral sex, or anal sex?
 - Yes
 - No
2. Do you use birth control on a regular basis?
 - Yes
 - No
- 2a. Check all the types that you use now.

<input type="checkbox"/> Birth control pills	<input type="checkbox"/> IUD
<input type="checkbox"/> Birth control patch	<input type="checkbox"/> Abstinence
<input type="checkbox"/> Birth control ring	<input type="checkbox"/> Implant
<input type="checkbox"/> Birth control shot	<input type="checkbox"/> Vasectomy
<input type="checkbox"/> Male Condom	<input type="checkbox"/> Spermicide
<input type="checkbox"/> Female Condom	<input type="checkbox"/> Morning after pill
<input type="checkbox"/> Withdrawal	<input type="checkbox"/> Rhythm/natural family planning
<input type="checkbox"/> Diaphragm	<input type="checkbox"/> Other
<input type="checkbox"/> Tubes tied	
3. Do you want to have a baby in the next year?
 - Yes
 - No
 - Don't Know
4. Have you ever been pregnant?
 - Yes
 - No
- 4a. How many times have you been pregnant? This includes all miscarriages and abortions.
- 4b. How many live births have you had?
- 4c. How many stillbirths have you had? This is when a baby dies in the womb after the 20th week of pregnancy.
- 4d. How many miscarriages have you had?
- 4e. How many times have you had a miscarriage after 14 weeks of pregnancy?

Risk Assessment: Risks by Domain



Version 1: Info + Advice About Identified Risks



V.1 Results of Gabby System Risks Reduced

Risks Identified (per woman)

23 (100%)

Risks Discussed

11 (48%)

Risks Added to MHTDL

7.2 (65%)

Status at 2 months

Resolved –
3.5 (54%)

Took Action –
2.2 (29%)

No action –
1.5 (17%)

V.1 Results of Gabby System: Stage of Change

All Risks discussed with Gabby, n=67

Initial Stage	# risks (%)	Pre-contemplation	Contemplation	Preparation	Action / Maintenance
Pre-Contemplation	16 (23)	5 (31.2)	3 (18.6)	0 (0)	4 (25.0)
Contemplation	12 (17.9)	1 (18)	2 (8.3)	0 (16.7)	8 (66.7)

All Risks Discussed with Gabby and Added to MHTDL, n=43

Initial Stage	# risks (%)	Pre-contemplation	Contemplation	Preparation	Action / Maintenance
Pre-contemplation	1 (2.3)	0 (0)	0 (0)	0 (0)	1 (100)
Contemplation	11 (25.5)	1 (9.1)	2 (18.2)	0 (0)	8 (72.7)

- Gabby best at moving those in “Contemplation” to “Action/Maintenance”
- V2 programming to move from “Pre-contemplative” to “Contemplative”

Gabby Version 2: New Content

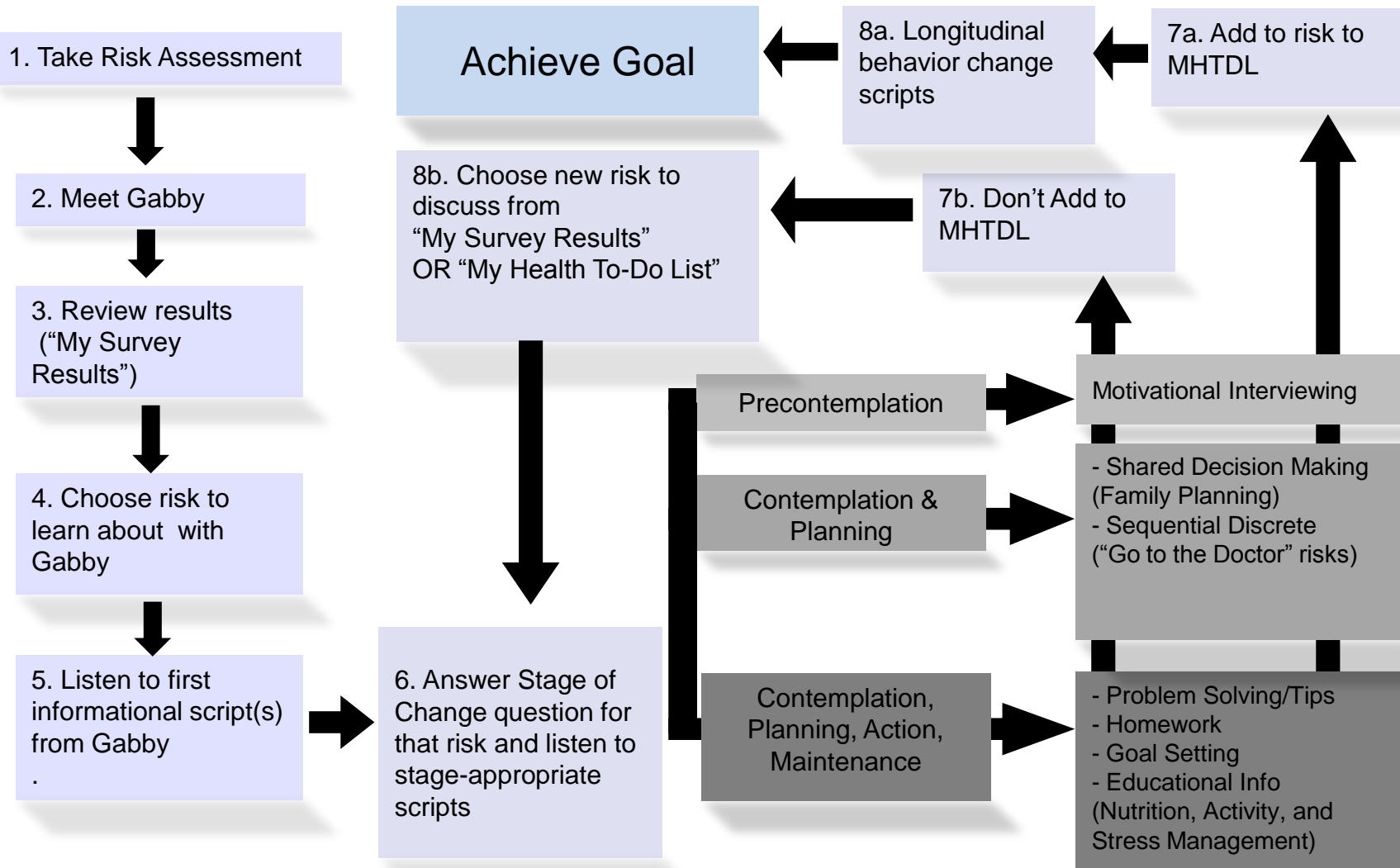
Longitudinal behavior change:

- Motivational Interviewing to reach out to precontemplators
- Shared Decision Making to assist with complicated decisions (i.e. contraceptive choice)
- Problem Solving to provide solutions to common barriers
- Goal setting to provide long-term motivation
- Homework to keep users engaged outside of system
- “Sequential Discrete” to walk users through processes step-by-step (i.e. making and going to a healthcare appointment)
- Tips, Direct Observation, Social Reinforcement, etc

Supporting the user with information, tools, and encouragement throughout the behavior-change process

Funding: HRSA B-MCH: R40 MC21510

Gabby Version 2



Video 2 and 3 : SDM and MI

Motivational Interviewing

[MI family planning 092512 3.wmv](#)

Shared Decision Making

[SDM family planning 092812 clip1 attempt2.wmv](#)

Gabby V2: RCT (n=100)

Enrolled March – July 2013

- 100 participants
- Used Gabby for 6-month
- Recruited from OMH PCC Peer Educators and Healthy Start sites
- Female, African American, 18-34, speak English, not currently pregnant
- Enrolled over the phone, answered baseline questionnaires, then given a link to the online risk assessment.
 - Controls: received a letter in the mail with their results
 - Interventions: given a link to talk to Gabby about their results
- All participants contacted for outcome call at 6-months.

Results: Risks Identified & Resolved

	N	Mean Identified	% Risks Resolved	Mean Resolved	Std Dev
Control	43	24.2	20.5	5.5	4.4
Intervention	36	23.2	27.8	8.3	4.5

p < 0.05

>25% Reduction in Risks by Gabby compared to Taking Risk list to a clinician

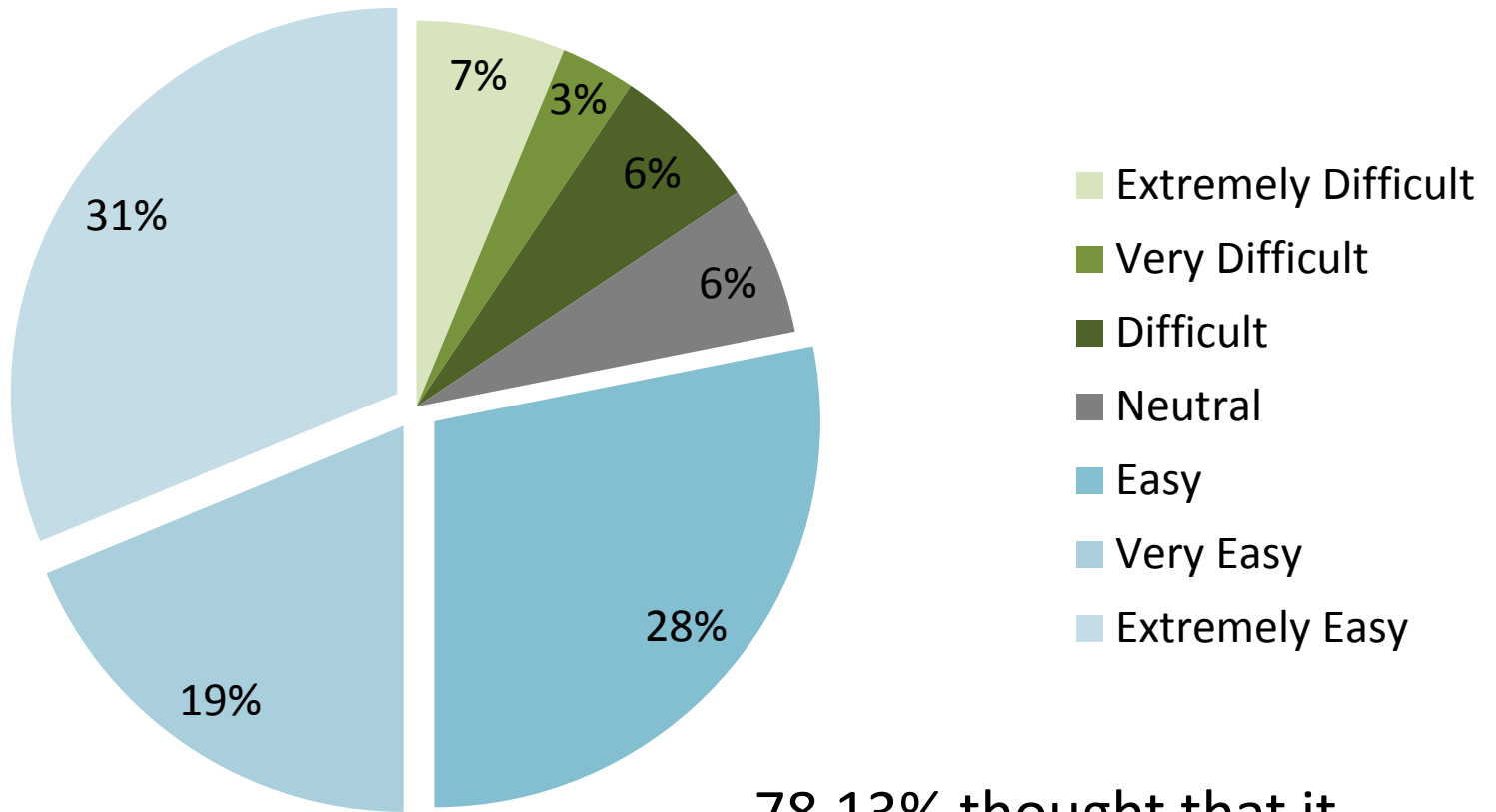
Those who had access to Gabby resolved approximately **3 more risks** than those who did not.

V2 Results: Knowledge Scores, Nutrition and Contraceptives

	Controls			Interventions			p-value
	Baseline Score (% correct)	6-month Score (% correct)	% Increase	Baseline Score (% correct)	6-month Score (% correct)	% Increase	
Nutrition	78.23	80.23	1.16%	78.66	87.39	9.01%	0.06

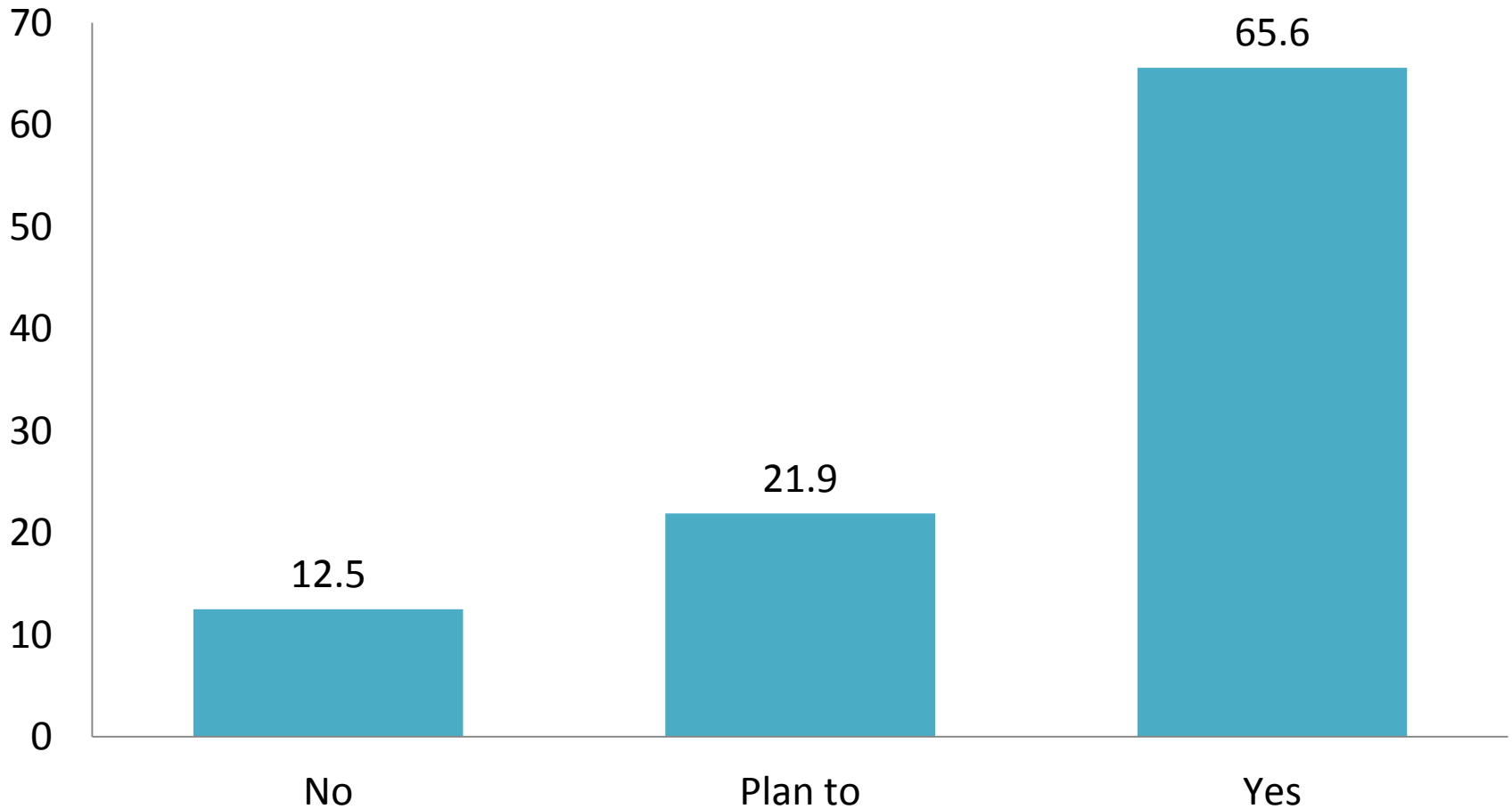
Those who talked to Gabby increased their Nutrition knowledge score by an average of **9%**, while Controls saw an increase of **1.16%**.

How easy was it to talk to Gabby?

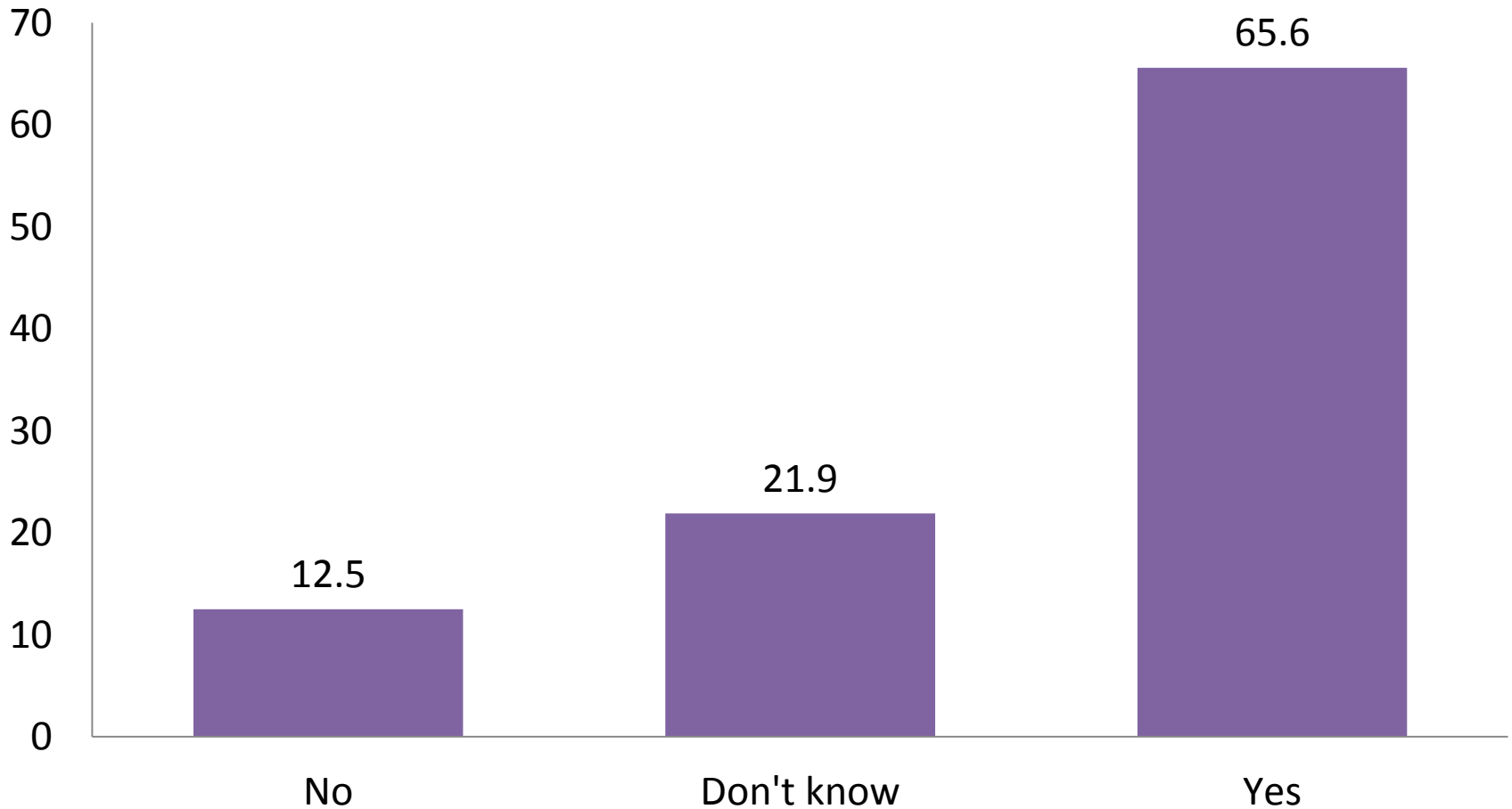


78.13% thought that it was easy to talk to Gabby

Have you used info from Gabby to improve your health?



Would you recommend Gabby to someone you know?



What's next?

RCT of 530 participants (NIMHD, R01MD006213)

- Enrollment began March 2014
- National sample, enrolled via phone
- One-year intervention period

Kellogg Foundation (P3024018) – 2 years of development to Prepare for Implementation at Healthy Start Sites

- Comprehensive content overview and update
- Expand Family Planning Discussion
- Make connections between risks to leverage past success

PCC for Men – Administrative Supplement from HRSA-BMCH

- Created a Men's Health Survey; focus groups (n=17); pilot testing (n=29)
- Create Gabe

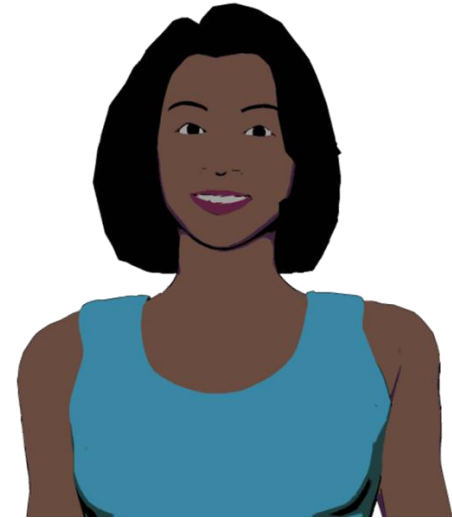
Preconception Care: Baby of the Future



Final Comments

- Societal need to improve reproductive outcomes
- Preconception Care offers an opportunity to impact outcomes
- HIT offers a way to provide this care
- Gabby shown to engage women and reduce health risk
- Larger studies underway targeting younger, lower income women

Thank you!



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...and more...

END

Final Comment About Preconception Care



Goals for Improving Preconception Health

- ▶ **Goal 1.** Improve the knowledge and attitudes and behaviors of men and women related to preconception health
- ▶ **Goal 2.** Assure that all women of childbearing age in the United States receive preconception care services (i.e., evidence-based risk screening, health promotion, and interventions) that will enable them to enter pregnancy in optimal health
- ▶ **Goal 3.** Reduce risks indicated by a previous adverse pregnancy outcome through interventions during the interconception period, which can prevent or minimize health problems for a mother and her future children, and
- ▶ **Goal 4.** Reduce the disparities in adverse pregnancy outcomes

CDC Definition of Preconception Care

- Preconception care is a set of interventions that aims to identify and modify biomedical, behavioral and social risk 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

Evidence-Based Preconception Interventions

Giving Protection:

- Folic Acid Supplements
- Rubella Immunization
- Testing for HIV/AIDS
- Hepatitis B Vaccination

Manage Pre-existing Conditions:

- Diabetes
- Hypothyroidism
- Maternal PKU
- Obesity
- STDs/STIs
- Oral Health

Avoid Teratogens:

- Alcohol use
- Anti-epileptic drugs
- Acutance use
- Oral anticoagulants
- Smoking and SHS

Goals of OKQ

- **Start a conversation** about preventive reproductive health with each woman capable of becoming pregnant
- **Prevent** unintended pregnancies that are unwanted or mistimed
- **Increase the proportion of all pregnancies preceded by preconception care**

Deborah Allen, ScD

Director, Bureau of Child, Adolescent and Family Health

Boston Public Health Commission

Actions Based on OKQ Response

YES- Promote Preconception Care

- Screen for conditions that can affect pregnancy
- Medication Review
- Counsel on nutrition, exercise, substance use
- Recommend folic acid daily
- Recommend early, comprehensive prenatal care

NO- Stress Family Planning and Contraception

- Ask whether she is using a contraceptive method
- Check satisfaction with current method
- Offer contraception option, emphasizing LARC
- Offer emergency contraception

Actions Based on OKQ Response

OK Either Way- Provide Follow-up

- Ensure she is prepared for a pregnancy
- Recommend Preconception counseling and early prenatal care

Unsure- Provide Follow-up

- Offer a combination of contraception and preconception care, depending on her needs and circumstances
- Discuss ambivalence and relevant issues

The Role of Providers

- Start asking women OKQ
- Build OKQ into the institution's EMR
- Develop protocols for OKQ follow-up
- Promote OKQ within and across medical disciplines
- Promote pregnancy intendedness as a quality measure in health care reform discussions
- Support efforts to build a social culture around planned pregnancy and preconceptional health

Gabby V3 National Study



Currently recruiting 530 women from across the country who are:

- Black or African American
- Ages 18-34
- Not currently pregnant

And have access to a computer with internet and a telephone.

Gabby V3 Study: Steps for Participants



1. Enrollment:

- Contact study team to set up enrollment call
- Enrollment phone call takes ~ 30 minutes
 - Staff explains the study, makes sure woman understands, then collects information like demographics and baseline questionnaires (e.g. self-efficacy, social support, discrimination)
- After the call, receive an email with username and password and link to the online health survey

Gabby V3 Study: Steps for Participants



2. Using the system

- All participants take the online health survey, which takes ~15-20 minutes
- Gabby group: can click button to meet Gabby and can log in to talk to Gabby any time for the next year
- Control group: receives letter via mail or e-mail with their health survey results

Gabby V3 Study: Steps for Participants



3. Follow-up calls

- Study staff contact all participants to set up calls at 6 months and 12 months
- Collect:
 - Updates on their PCC risks
 - Feedback on Gabby (Gabby group only)
 - Re-do some of the questionnaires from the enrollment phone call (e.g. General Self-Efficacy Scale)

Gabby V3 Study: Incentives

- All participants can earn **\$25 Target gift cards** for completing each of the follow-up calls (\$50 total if they complete both calls)
- Gabby group participants are entered in to a monthly raffle for a **\$100 Target gift card**. They can earn one entry per week that they log in at least once (4 raffle entries maximum per month)



How you can help us recruit!

Be part of a Women's Health Research Study

Help us test a computer program and learn more about your health

What is it?

We are inviting African American women to be a part of a study about an online women's health program, called **The Gabby Project**. It's all about being healthy for yourself *now*, and also to help you have a healthier pregnancy and baby in the *future*.

What will you do?

There will be about 530 women in the study. About half will use the online program for one year, and the other half will not. The group you will be in will be chosen at random. After 6 months and 12 months we will call the women from both groups to talk about their health status and ask the group that used the online program for feedback.

Are you eligible?

You may be eligible if you speak English and are:

- 18-34 years old
- Black or African American
- Not currently pregnant

All participants are eligible to receive **\$50 in gift cards** for completing both the 6-month and 12-month follow up phone calls. You may also be eligible to win **\$100 gift card(s)** in a monthly raffle. Feel free to share this information with friends who might also be eligible and want to participate. Thank you!

For more information contact
our research team at:
pccstudy@bmc.org
Or text GabbyStudy to: 857-293-9874



Gabby



Boston University School of Medicine



How you can help us recruit!

- Tell women about the study!
- Give them flyers or “Gabby cards” with our contact info – they reach out to us.
- Provide basic info if they ask: it’s a one-year study using a computer program to learn about health before pregnancy.
- Once they sign up, encourage them to take the online survey, log in, and do the follow up calls

Link to Gabby demo: <https://agentserver.bmc.org/pcc3/webAgentTanya.swf>

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