


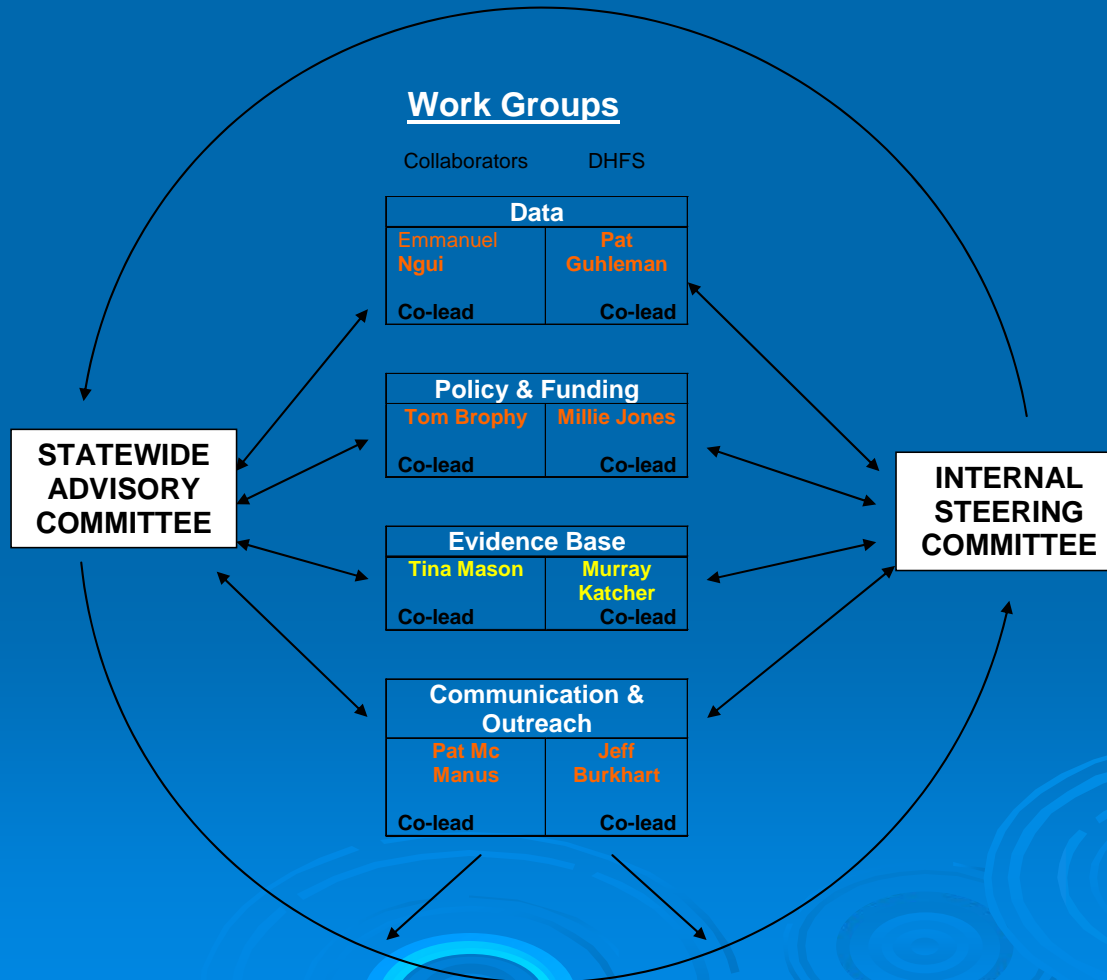
Evidence-Based Practices Workgroup

Interim Summary

effective interventions in pregnancy
with the potential to reduce
Wisconsin's Black/White infant
mortality disparity

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Eliminating Racial and Ethnic Disparities in Birth Outcomes

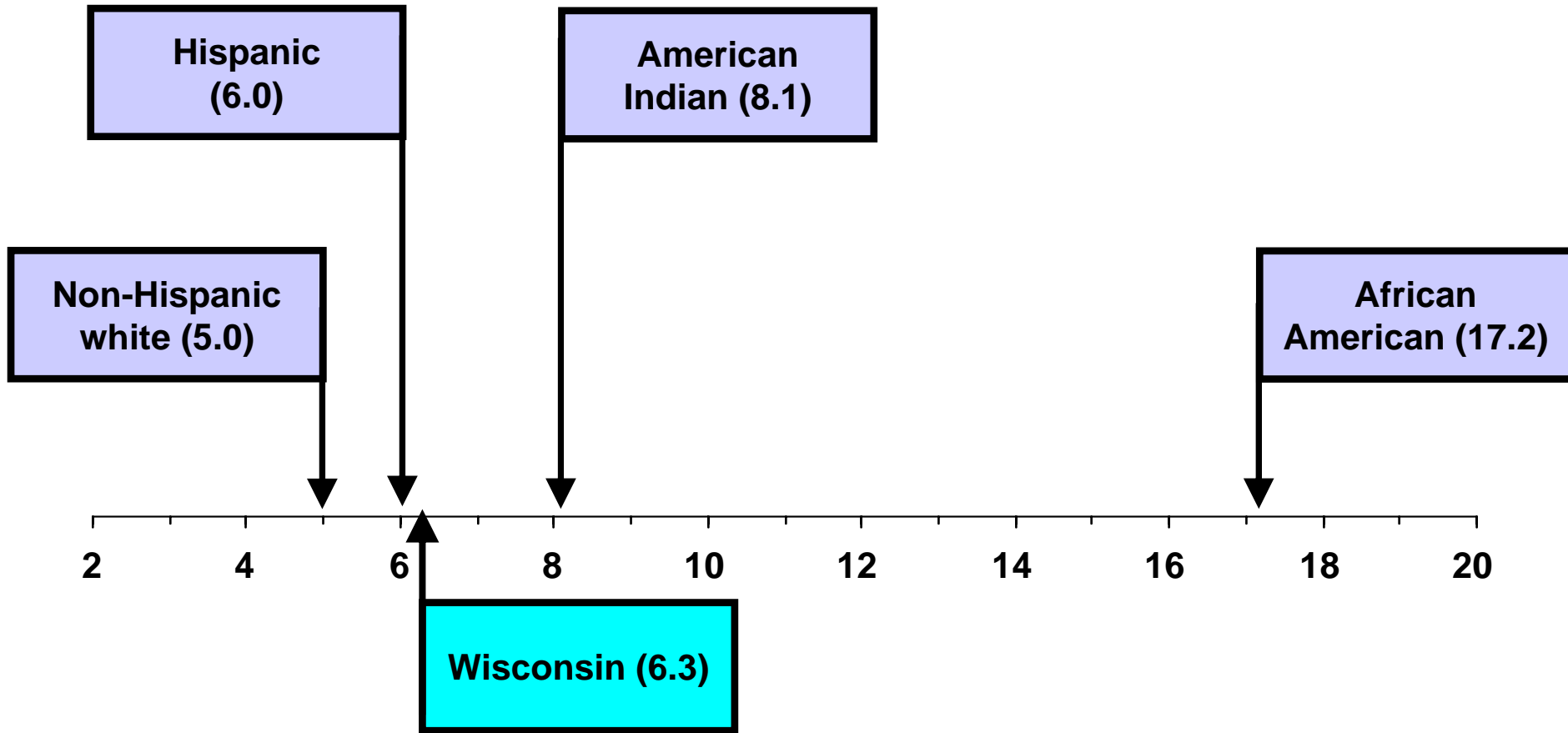


Evidence-Based Practices Workgroup (EBPW) Members:

- ❖ Murray L. Katcher, MD, PhD
(Co-Chair)
- ❖ Tina Mason, MD, MPH
(Co-Chair)
- ❖ Georgia Cameron
- ❖ Jill Denson, MSW, APSW
- ❖ Kate Gillespie, RN, BSN
- ❖ Teresa S. Johnson, PhD, RN
- ❖ Jodi Klement, RD, CD, CLE
- ❖ Alice Kramer, RN, MS-CNS
- ❖ Terry Kruse
- ❖ Kristin Lyerly, MD
- ❖ Jill Paradowski, RN, MSN
- ❖ Samantha Perry, MPH, CHES
- ❖ Angela M. Rohan, PhD
- ❖ Jennifer Runquist, PhD, RN
- ❖ Dawn Shelton-Williams, MSW,
LCSW
- ❖ Jennifer Stenger, RN
- ❖ Chris Van Mullem, RN
- ❖ Tina Watts, RN
- ❖ Janelle Wells, MD

Wisconsin Infant Mortality Rates

(Per 1,000 live births, 2004-2006)



EBPW Charges

- ❖ Explore both medical and non-medical interventions with the potential to reduce disparities in birth outcomes
- ❖ Examine the evidence, best-practices, and/or accepted guidelines behind these interventions
- ❖ Make appropriate recommendations for various audiences regarding each intervention

Methods

- ❖ Leading causes of infant mortality differ between Black and White women
- ❖ Our efforts would focus on:
 - ❖ Prevention of preterm birth (PTB) and low birthweight (LBW) babies (30.0%)
 - ❖ SIDS (12.1%)
 - ❖ Maternal complications of pregnancy (8.4%)
- ❖ List of potentially fruitful interventions was created
- ❖ Systematic method for evidence gathering
- ❖ Reports reviewed and approved by EBPW

EBPW Topics

Medical:

- ❖ Anemia
- ❖ Bacterial Vaginosis
- ❖ Chronic Diseases
- ❖ Group B Beta Strep
- ❖ Gestational Diabetes
- ❖ HIV
- ❖ Hypertensive Disorders of Pregnancy
- ❖ Oral Health
- ❖ Progesterone
- ❖ Sexually Transmitted Infections
- ❖ Urinary Tract Infections

Non-medical:

- ❖ Breastfeeding
- ❖ Community Health Worker/Doula/Home Visiting
- ❖ Domestic Violence
- ❖ Mental Health/Depression
- ❖ Patient Education/Health Literacy
- ❖ Preconception/Interconception Care
- ❖ Preterm Labor Recognition
- ❖ SIDS
- ❖ Substance Abuse
- ❖ Tobacco

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Background:

Bacterial Vaginosis

- ❖ Common infection of female reproductive tract: seen in 30% of women of reproductive age
- ❖ Usually asymptomatic
- ❖ Associated with increased risk of PTB and LBW
- ❖ More prevalent in non-Hispanic Black population

Does routine screening for bacterial vaginosis reduce the incidence of PTB and LBW in non-Hispanic Black women?

Evidence:

Bacterial Vaginosis

- ❖ USPSTF (2008): Evidence for routine BV screening in high-risk women is insufficient
- ❖ Cochrane, CDC, ACOG in agreement
- ❖ A preponderance of individual studies since 2004 have suggested that screening may be cost-effective in high-risk, non-Hispanic Black populations

Recommendation: Bacterial Vaginosis

Screen all women for bacterial vaginosis at
the first prenatal visit*

- ❖ Potential for effectiveness in our population
- ❖ Benefits outweigh harms
- ❖ Inexpensive, cost-effective

Background:

Progesterone

- ❖ Progesterone is a hormone that functions to maintain pregnancy
- ❖ As the end of pregnancy nears, progesterone levels decrease, contributing to the onset of labor

Does supplemental progesterone reduce the incidence of PTB in at-risk women?

Evidence: Progesterone

The bulk of individual studies, systematic reviews, and meta-analyses support the effectiveness of progesterone in preventing preterm labor in high risk moms

1. Would this impact upon the disparity?
2. Who would receive this intervention?

Recommendation:

Progesterone

All women with a history of PTB should be offered weekly progesterone injections. The same should be considered for women with a short cervical length.

- ❖ Potential to reduce disparity
- ❖ Benefits appear to outweigh risks
- ❖ Cost-effectiveness data difficult to determine, understudied
 - ❖ Gestiva awaiting FDA approval

Background:

Urinary Tract Infections

- ❖ Asymptomatic bacteriuria (AB) is found in 2-10% of pregnancies
- ❖ Non-Hispanic Black women are at a higher risk than the general population
- ❖ Sequelae ranges from persistent maternal infection to acute pyelonephritis

Does routine screening for asymptomatic bacteriuria reduce the incidence of PTB and LBW in non-Hispanic Black women?

Evidence:

Urinary Tract Infections

- ❖ Cochrane: Screening and treatment of AB reduced the incidence of LBW by 33%, but did not impact PTB
- ❖ Romero et al (meta-analysis): Untreated AB doubled the risk for PTB; increased the risk for LBW by 33%
- ❖ Fiscella: approximately 5% of the racial gap in PTB can be explained by prevalence differences of AB alone

Recommendation:

Urinary Tract Infections

Obtain urine culture at first prenatal visit or between 12-16 weeks of gestation for all women to ensure optimal screening for urinary tract infections in pregnancy

- ❖ Preferentially benefits our population of concern
- ❖ Benefits outweigh risks
- ❖ Urine culture is cost-effective in populations with an AB prevalence > 5%

Strengths/Limitations


❖ Limitations:

- ❖ Findings are only as good as the evidence
- ❖ PTB/LBW is a multifactorial problem, needs complex solutions (Lu's "life course perspective")

❖ Strengths:

- ❖ Evidence focuses on our population of interest - African American women
- ❖ SAC comprised of local experts from varied fields

Conclusion

- ❖ There are interventions that, if adopted as standards of care for high-risk populations, would likely result in fewer infant deaths
 - ❖ These interventions alone will not eliminate the Black/White disparity in birth outcomes
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Questions/Comments?

