

## Sub-Logic Model: Enhancing Access to Health Care and Social Supports to Reduce Infant Mortality in Kansas.

### Context/Conditions:

-Kansas ranks 40<sup>th</sup> among states in infant mortality rate  
 -Kansas ranks worst in Black IMR (BIMR is 2.7 times higher than WIMR)  
 -Highest IMR rates in high-risk places (especially in SG, WY, GE counties)  
 -Leading Causes of Infant Mortality: prematurity, low birth weight, birth defects, SIDS/sleep-related deaths

### Barriers:

-Lack of urgency for reducing IMR  
 -Limited resources for assuring access to needed health services and community-based programs

### Resources:

-Existing collaborative partnership for preventing IM, including among:  
 • State health department (including Center for Health Disparities)  
 • Health organizations (e.g., neonatal care)  
 • March of Dimes  
 • SIDS/Safe Sleep Coalition  
 • Professional associations (e.g., Kansas American Academy of Pediatrics)  
 • Academic and research partners  
 • Promising Community Initiatives (e.g., MCH Coalition of KC; Healthy Babies/FIMR/SG Co.)  
 • Sovereign nations & urban Indian populations in KS

### Risk/ Protective Factors:

#### Behavioral:

- Alcohol, tobacco, & other drug use  
 - Maternal Nutrition:  
 • Low pre-pregnancy weight (BMI < 19.8)  
 • High pre-pregnancy weight (BMI > 26.0)  
 • Inappropriate prenatal weight gain  
 • Lack of folic acid use  
 - Employment: unemployed, long work hours, prolonged standing, low job satisfaction  
 - Exercise in pregnancy  
 - Early prenatal care

#### Biological/History/Experience:

- Race/Ethnicity (African American, Native American, Puerto Rican)  
 - Foreign born mother  
 - Early (1<sup>st</sup> trimester) prenatal care: lack of access to quality prenatal care  
 - Multiple gestations, assisted reproductive technology  
 - Maternal age (teens & older age/35+)  
 - Obstetric History  
 • Previous LBW or preterm delivery  
 • Previous fetal demise/infant death  
 • Prior 1<sup>st</sup> trimester induced abortion  
 • Short inter-pregnancy interval (<6mo)  
 • Inadequate interconception care  
 • Reproductive tract abnormalities & infections  
 • Nulliparity & high parity  
 • Elective deliveries <39 weeks  
 - Medical Illnesses & Conditions  
 • Chronic Hypertension & Preeclampsia  
 • Systemic Lupus Erythematosus (Lupus)  
 • Restrictive lung disease & Asthma  
 • Hyperthyroidism  
 • Pregestational & gestational diabetes  
 • Pregestational renal disease  
 • Maternal birth weight (“Life Course Perspective”)  
 • Prior STD history  
 • Previous history of genetic risk

#### Psychosocial & Environment:

- Stress:  
 • Anxiety  
 • Depression  
 • Domestic Violence  
 - Racism  
 - Lack of Social Supports  
 - Unintended Pregnancy  
 - Environmental exposures  
 - Impoverished living conditions  
 - Single marital status  
 - Low SES & low educational attainment

### Recommended Intervention Components & Activities:

#### Providing Information and Enhancing Skills:

- Text for Baby messages  
 - PSA’s on risk of elective preterm deliveries  
 - Public campaign on benefits of folic acid & harm of alcohol, tobacco, cocaine, & other drug use  
 - Public campaign on spacing pregnancies  
 - Multi-year statewide infant mortality public awareness campaign  
 - Information on improving health literacy

#### Enhancing Services and Support:

- Implement state-wide PRAMS (Pregnancy Risk Assessment Monitoring System) to determine trends/disparities in birth outcomes of overall Kansas births  
 - Establish and maintain the FIMR projects in Wyandotte and Sedgwick counties to help identify social and medical factors that contribute to infant death  
 - Increased data collection, analysis, and dissemination of information on infant mortality related to disparities  
 - State Perinatal Periods of Risk (PPOR) (every 5 years)  
 - Identify and implement best practice models  
 - Support perinatal collaborative and surveillance systems  
 - Create neonatal-perinatal quality improvement collaborative  
 - Support evidence-based community programs including home visitation for high-risk families  
 - Promote smoking cessation programs for families and caregivers  
 - Train health care workers on screening and referral for DV/IPV, tobacco, alcohol, drugs, and anxiety/depression  
 - Improve availability of bilingual services  
 - Support funding for state genetics plan

#### Modifying Access, Barriers, and Opportunities:

- Expedite Medicaid application for prenatal care  
 - Increase Medicaid access for genetic counseling pre and postnatal  
 - Provide culturally tailored education and information  
 - Provide interconception care

#### Changing Consequences:

- Provide adequate insurance reimbursement for group visits & centering care

#### Modifying Policies & Systems:

- Promote universal provision of prenatal care for uninsured women  
 - Apply for Medicaid Family Planning Service Option for expanded post-partum coverage (or Medicaid 115 waiver in 2014)  
 - Secure full funding to assure Medicaid coverage for pregnant women to 250% FPL.  
 - Increase in state tobacco tax  
 - Increased spending on tobacco prevention for childbearing age women  
 - Change hospital/reimbursement policy for elective induced deliveries  
 - Improved linkages and coordination among public, private, and tribal entities focused on infant mortality and associated risk/protective factors

### Outcomes:

A. No elective induced labor < 39wk  
B. Increased folic acid intake for child bearing age women (100%) [consider link on prenatal vitamins to message on safe sleep]  
C. Increased access to care & utilization before, during and after pregnancy within a medical home, with optimal inter-pregnancy spacing  
 a) Access and utilization of preconception care  
 b) Access and utilization of care during and after the post-partum period  
 c) Access to care during minimal 18 month inter-pregnancy period  
 d) Access to preventive services for infant and mother  
 e) Access to genetics counseling  
D. Increased Social & Health Care Supports:  
 a) Care coordination and family support services available for all women in high risk zip codes  
 b) All prenatal women are provided with education on benefits of breastfeeding, and all post-partum women have access to breastfeeding supports  
 c) All pregnant women are screened for tobacco, substance abuse, mental health, and DV and get appropriate referrals  
E. Attain Healthy Pregnancy for All Kansas Women  
 a) No tobacco, alcohol, drug use  
 b) Appropriate physical activity  
 c) Appropriate prenatal weight gain  
F. All maternal child health providers are culturally competent  
G. Inter-pregnancy period spacing: >18mo  
H. Data available that characterizes disparities and specific state and local risk factors related to infant mortality