

Kansas Perinatal Quality Collaborative





## Welcome & Role of the KPQC

Kourtney Bettinger



## **KPQC**

Vision: Kansas is the best place to be born and to be a mother

Mission: To improve Kansas' maternal and infant health outcomes by assuring quality perinatal care using data-driven, evidence-based practice, and quality improvement processes.

#### Goals:

- 1. Establish and provide oversight for multiple state-wide quality improvement initiatives to improve birth outcomes
- 2. Promote system changes by gathering data resources and increasing use of evidence-based practices for perinatal health
- 3. Bring personalized support to Kansas communities by providing education and resources for perinatal health



Past Chair Jodi Jackson



Chairperson Kourtney Bettinger



Chair Elect **Devika Maulik** 



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Maria Imelda Bautista-Navarro, M.D.
Neonatology
Stormont Vail Health
Level III NICU Medical Director



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Wesley Medical Center
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Manager, Maternal-Fetal Health Center
AWHONN Kansas



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Officer
Karen Braman, RPh, MS
Kansas Hospital Association
Senior Vice President
Healthcare Strategy and Policy

## **KPQC NAS Initiative AIMS**

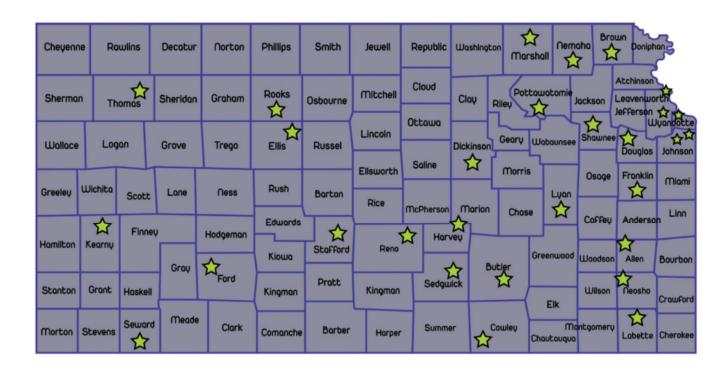
Neonatal Abstinence Syndrome Kansas State Initiative SMART AIMS	
AIM 1	By October 2020, 85% of all Kansas birth centers enrolled in VON NAS Universal Training Program will have achieved "Center of Excellence" designation
AIM 2	By October 2020, less than 50% of infants at risk for NAS will be directly admitted to the NICU
AIM 3	By October 2020, the number of infants at risk for NAS who require pharmacological treatment will decrease by 25%
AIM 4	By October 2020, the LOS of Kansas infants with NAS treated pharmacologically will decrease by 2 days

\*32 participating hospitals, representing ~84% of Kansas births



## Recruitment and engagement

NAS Initiative Participant Map









## Maternal QI Initiative Leadership Team

Anne Maack



## **You Were Selected**

- Academic medical center
- Clinic with obstetric services
- Community Health Center
- Hospital or Birth Center
- Kansas Department of Health and Environment
- Kansas Maternal Mortality Review Committee
- Kansas Perinatal Quality Collaborative

- Local Health Department
- Local MCH program
- Malpractice insurer
- Patient/Family
- Payer or managed care organization
- Professional Organization



## Soliciting your Feedback

At the conclusion of this meeting, I am going to ask you six questions



### One

1. How well does this Maternal Safety Bundle address the problems identified by the KMMRC?



### Two

- 1. How well does this Maternal Safety Bundle address the problems identified by the KMMRC?
- 2. If KPQC participants across the state made progress on this Maternal Safety Bundle, how likely are we to prevent maternal mortality and morbidity?



### **Three**

- 1. How well does this Maternal Safety Bundle address the problems identified by the KMMRC?
- 2. If KPQC participants across the state made progress on this Maternal Safety Bundle, how likely are we to prevent maternal mortality and morbidity?
- 3. How would you rate the implementation feasibility of this Maternal Safety Bundle?



### Four

- 1. How well does this Maternal Safety Bundle address the problems identified by the KMMRC?
- 2. If KPQC participants across the state made progress on this Maternal Safety Bundle, how likely are we to prevent maternal mortality and morbidity?
- 3. How would you rate the implementation feasibility of this Maternal Safety Bundle?
- 4. How would you rate the measurement feasibility of this Maternal Safety Bundle?

## **Five**

5. If we move forward with this Maternal Safety Bundle, in your opinion how willing will clinicians be to make practice changes?



## Six

- 5. If we move forward with this Maternal Safety Bundle, in your opinion how willing will clinicians be to make practice changes?
- 6. If we move forward with this Maternal Safety Bundle, will you serve on the leadership team?







# KMMRC Role & KPQC's Next Initiative

Kasey Sorell



## State PQCs & MMRCs\*

PQCs and MMRCs function to improve maternal and perinatal health (investing in mother's health leads to a healthier birth outcome)

#### **Roles & Functions**

- PQCs: Focus on efforts during the maternal and perinatal periods intended to improve birth outcomes and strengthen perinatal systems of care for mothers and infants
- MMRCs: Focus on reviewing maternal and pregnancy-associated deaths (pregnancy through 1 year after delivery) to identify gaps in health services and make actionable recommendations to prevent future deaths, improving maternal and perinatal health

\*PQC: Perinatal Quality Collaborative; MMRC: Maternal Mortality Review Committee

Conduct detailed Review of deaths to get complete and comprehensive data on pregnancy-associated deaths to prioritize efforts

**KMMRC** 

KS MCH

**KPQC** 

Provide the vision and essential supports to monitor/assess and implement efforts to improve the health and well-being of mothers and infants

Support MMRC Support PQC Fund Interventions Disseminate Messages

Mobilize state networks to implement evidence-based and data-drive quality improvement initiatives aimed at increasing safety and improving the health and well-being of mothers and infants



## **Maternal Mortality Review Committee**

#### **Purpose:**

• To determine the factors contributing to maternal mortality and identify public health and clinical interventions to improve systems of care. Maternal Mortality includes deaths occurring during pregnancy and up to one year after pregnancy.

#### **Vision:**

• Eliminate preventable maternal deaths in Kansas.

#### Mission:

 Identify pregnancy-associated deaths, review those caused by pregnancy complications and other associated causes, identify the factors contributing to these deaths, and recommend public health and clinical interventions to prevent deaths.

## **KS Maternal Mortality Website**

Home About v Membership Resources v Contact



Working to eliminate preventable maternal deaths in Kansas.



#### **PURPOSE**

The purpose of the review is to determine the factors contributing to maternal mortality in Kansas and identify public health and clinical interventions to improve systems of care. Maternal Mortality includes deaths occurring during pregnancy and up to one year after pregnancy.

Kansas Maternal Mortality Review Committee **Guidance Document** 

July 2019



#### **MISSION**

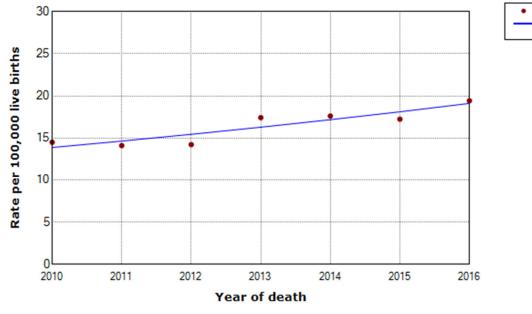
The mission is to increase awareness of the issues surrounding pregnancy-related death and to promote change among individuals, communities, and healthcare systems in order to reduce the number of deaths.



http://www.kansasmch.org/mmr.asp



## CDC PMSS: Trends in pregnancy-related mortality ratios, Kansas 2006-2016 (5-year rolling average)



Observed 2010-2016 APC = 5.5\*

\* Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level. Final Selected Model: 0 Joinpoints.

Note: Five-year rolling average estimate is provided to improve precision and reportability; Year of death represents 5-year rolling average (i.e., 2010 represents 2006-2010, 2011 represents 2007-2011, etc.) Source: Center for Disease Control and Prevention, Pregnancy Mortality Surveillance System. Kansas occurrence data



## What the MMRC data show

Kansas Maternal Mortality Review Committee

Completed Reviews of 2016, 2017, 2018\*

- 51 Pregnancy Associated Deaths Reviewed
- 12 Deaths were Pregnancy Related

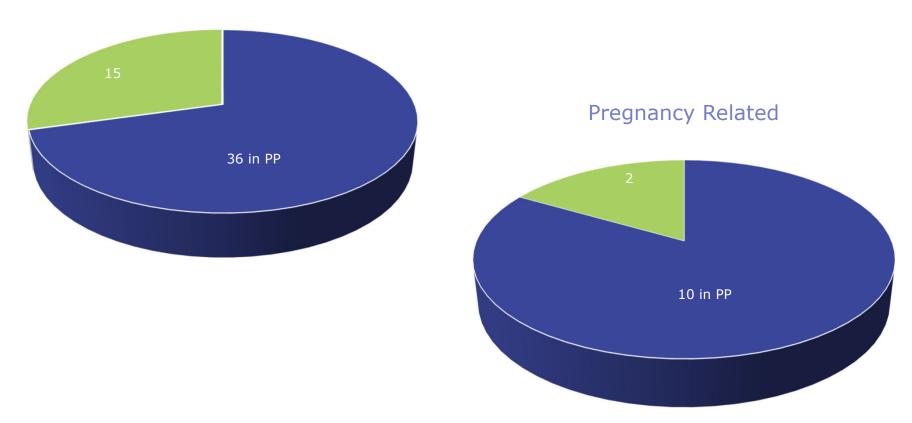
Currently abstracting 2019 cases

\*Data does not include six 2018 cases reviewed 7/15



## **Death occurred Postpartum**

**Pregnancy Associated** 



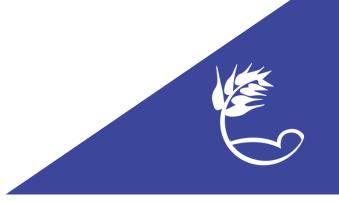
## Of 12 Pregnancy Related Deaths

- 3 Preeclampsia/eclampsia contributed
- 5 Obesity contributed 1 possibly contributed
- 3 Underlying chronic conditions
- 1 Known underlying mental health condition 5 unknown
- 3 Substance use disorder contributed



## Of 12 Pregnancy Related Deaths

- 7 Racial or Ethnic minorities
- 7 attained a high school diploma or less education



## Of 12 Pregnancy Related Deaths

- 34 % Medicaid
- 50 % Private Insurance
- 8 % No Insurance
- 8 % Unknown Insurance



## MMRC Recommendations: Based on 12 pregnancy related cases

- Screen for comorbidities and chronic illness
- Screen for:
  - Intimate Partner Violence
  - Intent of pregnancy
  - Mental Health
- Better communication and collaboration between providers, including referrals
- Patient education and empowerment



## **MMRC Findings - Trends**

The MMRC abstractor noted that in many cases, screening wasn't documented in the records as part of the postpartum visit.

- Postpartum anxiety and depression
- Substance use
- Intimate partner violence



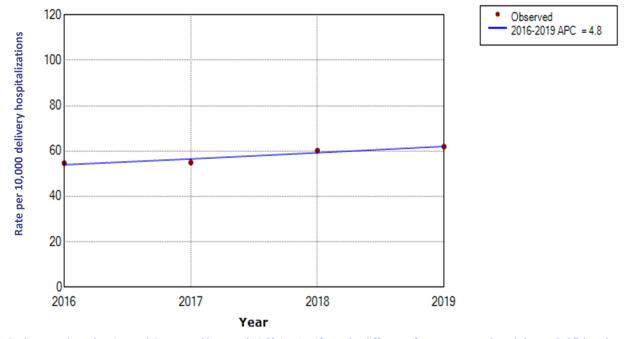
## **Severe Maternal Morbidity Data**

- Severe maternal morbidity was highest among women aged 40+ years and lowest for those aged 25-29 years
- On average non-Hispanic black mothers were younger than non-Hispanic white mothers. Yet the rate of severe maternal morbidity was 87.3% higher for non-Hispanic blacks than for non-Hispanic whites
- Compared with other deliveries, those involving severe maternal morbidity were more likely paid by Medicaid and from lower-income communities.

(Source: Kansas Hospital Discharge Data, 2016-2019)

## NOM 2: Rate of severe maternal morbidity per 10,000 delivery hospitalizations

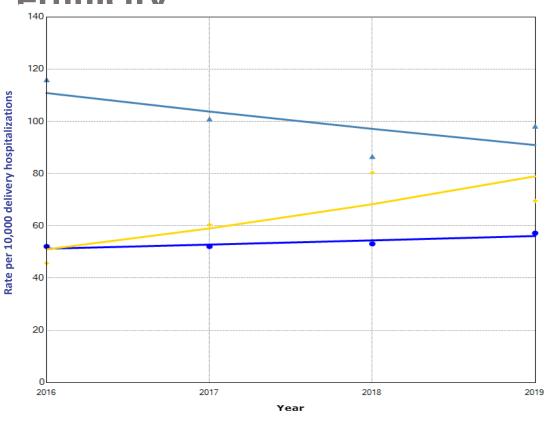
\*Preliminary data – subject to change



^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level. Source: Kansas Hospital Discharge Data (Resident)



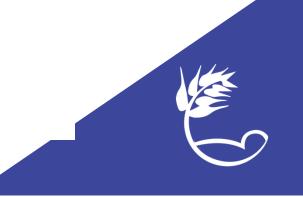
## NOM 2: Rate of severe maternal morbidity per 10,000 delivery hospitalizations by race and ethnicity



White Non-Hispanic - 0 Joinpoints 2016-2019 APC = 3.1
 Black Non-Hispanic - 0 Joinpoints 2016-2019 APC = -6.4
 Hispanic - 0 Joinpoints 2016-2019 APC = 15.7

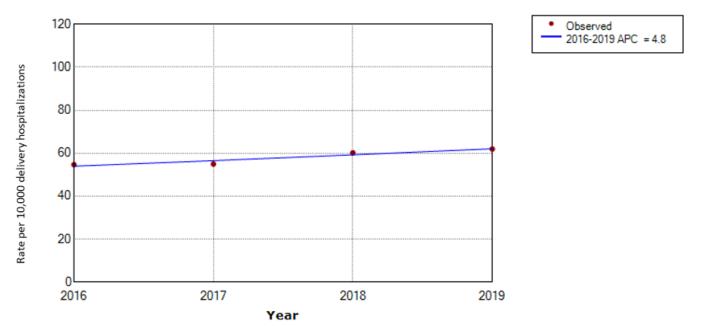
\*Preliminary data – subject to change





## **Trend Data**

Figure 2. Trends in delivery hospitalizations involving severe maternal morbidity, Kansas, 2016-2019



<sup>^</sup> Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.

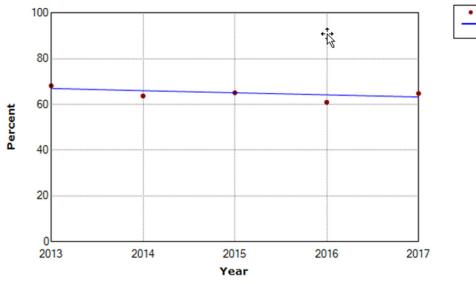
Source: Kansas Department of Health and Environment, Bureau of Epidemiology and Public Health Informatics, Kansas Hospital Discharge Data (Resident)

The SMM rate steadily increased by 4.8% per year (95% Confidence Interval: -0.0%, 9.8%), although this increase was not statistically significant.



## **Other Related MCH Measures**

## NPM 1: Well-Women Visit (The percent of women with a past year preventive medical visit)



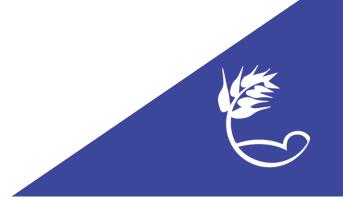
Observed 2013-2017 APC = -1.4

In 2018, an estimated 71.4% of Kansas women aged 18-44 years reported having a routine checkup within the past year.

Data note: The routine checkup items changed in 2018 and is not comparable to previous survey years.

^ Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level. Final Selected Model: 0 Joinpoints.

Source: Kansas Behavioral Risk Factor Surveillance System (BRFSS)



## Alliance for Innovation on Maternal Health (AIM)

AIM is a national data-driven maternal safety and quality improvement initiative based on proven implementation approaches to improving maternal safety and outcomes in the U.S





# AIM Patient Safety Bundles

(+Aim = National Support/TA Available)

#### PATIENT SAFETY BUNDLES Maternal Safety Bundles Maternal Mental Health: Depression and Anxiety Maternal Venous Thromboembolism (+AIM) Obstetric Care for Women with Opioid Use Disorder (+AIM) Obstetric Hemorrhage (+AIM) Postpartum Care Basics for Maternal Safety: Transition From Maternity to Well-Woman Care (+AIM) Postpartum Care Basics for Maternal Safety: From Birth to the Comprehensive Postpartum Visit (+AIM) Prevention of Retained Vaginal Sponges After Birth Reduction of Peripartum Racial/Ethnic Disparities (+AIM) Safe Reduction of Primary Cesarean Birth (+AIM) Severe Hypertension in Pregnancy (+AIM) Support After a Severe Maternal Event (+AIM) Non-Obstetric Bundles Prevention of Surgical Site Infections After Gynecologic Surgery





# AIM Patient Safety Bundle Recommendation:

**Postpartum** care basics for maternal safety: **Transition** from maternity to well-woman care



## **Postpartum Transition**

- Seeks to address the period from the comprehensive postpartum visit through the first well-woman visit to provide continuity of care.
- Addresses the patient, setting, and system needs which aligns with the MMRC data and findings.
- Existing work addresses components of the Postpartum Care Basics Bundle.
- Other bundles, such as the Hypertension Bundle, are limiting.



## Postpartum Transition Bundle Components



### Readiness

- Every health care system:
  - Establishes a mechanism to provide discharge planning,
  - Develops a catalogue of community resources
  - Develops a mechanism to assist in accessing ongoing comprehensive insurance coverage
- Every health care team:
  - Develops a customized plan of care,
  - Distributes appropriate and up to date patient education to every woman,
  - Educates clinicians and office staff on implementation of standardized assessment protocols, screening tools, and referral mechanisms.
- Every woman identifies their care team and engages in their plan of care



## **Recognition and Prevention**

- Every health care team
  - Obtains a comprehensive personal and family health history,
  - Assesses if a woman is currently breastfeeding or has been pregnant in past year,
  - Formulates a reproductive health plan for each woman,
  - Engages the woman in discussions that support shared decision making.
  - Screens and treats/refers for common medical and behavioral health morbidities and SDOH.
- Every woman knows how to access maternity care and her birth records and attends a subsequent well woman visit



### Response

- Every Provider and Health Care Team:
  - Provides or refers every woman for well woman and specialty care.
  - Utilizes the catalogue of community and system resources
- Every Woman:
  - Understands, can access and maintains her family and personal health history
  - Understands the importance of her role in communicating health concerns, history and intentions



## Reporting

- Well woman quality measures
  - Attendance at postpartum visit
  - Cervical cancer screening
  - Contraceptive access
- Prepregnancy and interpregnancy wellness measures
  - Screening rates, including screening for
    - Intimate partner violence
    - Postpartum depression
    - Mental health
    - Substance use disorder
    - Social determinants of health





## How This Bundle Could Look in Kansas



## **OB/GYN & Family Practice**

- Use standard assessment and valid screening tools and document
- Develop an individualized care plan with every woman and include her input and includes a comprehensive health history.
- Develop and use a catalogue of community resources
- Use culturally appropriate and up to date education materials
- Communicates and collaborates with other providers involved in the woman's care



## Local Health Departments & Health Centers/Safety Net Clinics

- Work with physician offices to develop a catalogue of community resources
- Use standard assessment and screening tools and document appropriately in the chart for every woman seen.
- Has up to date education materials that are culturally appropriate



### Hospitals

- Has policies and procedures in place for standardized assessment and screening tools to be used.
- Encourages collaboration and communication between providers (ER, birthing centers and PCP or Ob/gyn offices).
- Has up to date education materials that are culturally appropriate





## **Kansas Bright Spots**

The opportunity is now to leverage promising activities already underway and increase impact through AIM.

## What can we spread and scale?

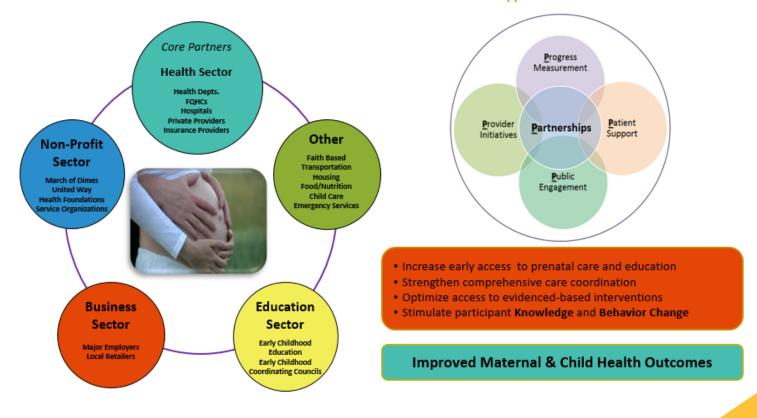
- Hospitals, FQHCs, local health departments, and private practices serving pregnant women, mothers and infants working together (Perinatal Community Collaboratives)
- Coordinated and connected community-based clinics and practices – bring others into an existing referral network
- Utilize and spread critical state public health programming and tools, innovation, private partnerships, national resources
  - HRSA, ACOG, AWHONN, March of Dimes, CDC, AAP, etc.
  - Women's Health (new and expanded programming)
  - Reproductive Life Planning Tool(s)
  - Pregnancy Intention Interventions (e.g., One Key Question®)
  - Efficient referral tools for connections at the local level (e.g., IRIS)
  - Integration Toolkits (LARC, Mental Health, Substance Use, IPV)



#### **Kansas Perinatal Community Collaborative Model**

#### Collaborative Partnerships & Program Design

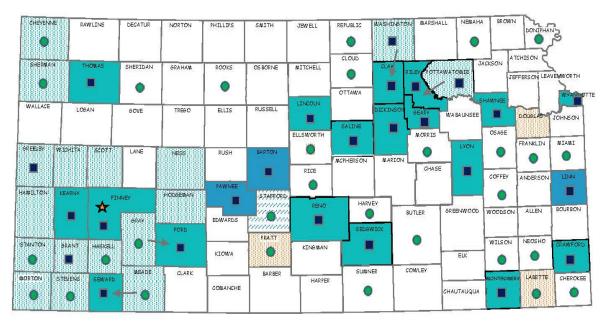
Perinatal Care + Perinatal Education + Perinatal Support





#### Kansas Perinatal Community Collaboratives

Utilizing the March of Dimes Becoming a Mom® Curriculum





Regional Collaborative Lead

SFY18/19 MCH - application includes model (22)

SFY18/19 MCH - interested in implementation (31)



## State-Level Evaluation Findings

- Increase in knowledge pre-to-post survey
  - Signs of preterm labor
  - Safe sleep practices
  - Breastfeeding
  - Depression and anxiety
- Reported improvement in personal health habits
- Early prenatal care/access
- Highest-risk populations served
- Reduced disparities
- Increased breastfeeding initiation
- Program satisfaction (84.8% Excellent)
- Reduced infant mortality
- Improved birth outcomes



## **Promising Results**

#### **Reduced Infant Mortality Rates\***

- Geary County est. 2012: 11.9 to 5.8
- Saline County est. 2010: 9.0 to 5.5

#### Other outcomes worth noting...

- Preterm birth rate of 4.9% vs. state rate of 9.5%
- Low birthweight rate of 6.9% vs. state rate of 7.4%
- Cesarean rate of 27.4% vs. state rate of 29.7%
- Infant sleep position (back) knowledge change of 82.4% pre-intervention to 96.4% post-intervention



<sup>\*</sup>Source: Kansas Vital Statistics 2005-2009 and 2014-2018

53 Bureau of Epidemiology and Public Health Informatics analysis of Becoming a Mom program data 2018



## **IRIS State Report**







#### **6,148** KANSAS FAMILIES

Unduplicated number of individuals who were the subject of at least one referral in IRIS.



#### 8,950 REFERRALS

Many families were involved in multiple referrals.



#### 42.1% ENROLLED IN SERVICES

Families connected with needed services in IRIS communities.





### **Next Steps**

- Enroll KS as a state in the national AIM initiative
- Identify AIM bundle implementation leadership team
- Convene the team to develop the implementation plan and timeline
- Launch AIM in target locations
- Hold kick of meeting for the KPQC Maternal Quality Initiative







Anne Maack



1. How well does this Maternal Safety Bundle **address the problems** identified by the KMMRC?



2. If KPQC participants across the state made progress on this Maternal Safety Bundle, how likely are we to prevent maternal mortality and morbidity?



3. How would you rate the **implementation feasibility** of this Maternal Safety Bundle?



4. How would you rate the **measurement feasibility** of this Maternal Safety Bundle?



5. If we move forward with this Maternal Safety Bundle, in your opinion how willing will clinicians be to make practice changes?



## Maternal QI Leadership Team

- Recruitment
- Incentives
- Identifying Faculty and Staff
- Finalizing QI aims



6. If we move forward with this Maternal Safety Bundle, will you serve on the leadership team?





## **KPQC General Meeting starts at 9:00**

Leave this Zoom event and open the next Zoom event

