



The KyPQC and Implementation of the Alliance for Innovation on Maternal Health (AIM) “Care for Pregnant and Postpartum People with SUD” Patient Safety Bundle

Presented By: Monica Clouse, MPH, CPH
June 16, 2025



Learning Objectives



- ✓ Describe the role of Perinatal Quality Collaboratives (PQCs) and the Alliance for Innovation on Maternal Health (AIM) in improving care and outcomes for mothers and babies.
- ✓ Outline the magnitude of substance use disorder (SUD) during pregnancy as an important public health problem in Kentucky and explain how the Kentucky Perinatal Quality Collaborative (KyPQC) SUD initiative seeks to address SUD in the perinatal period.
- ✓ Explain how KyPQC supports pilot hospitals implementing universal SUD screening, with a validated screening tool, on Labor and Delivery (L&D) Units and how KyPQC supports hospital team in connecting mothers with SUD to resources and treatment options.



Overview of PQCs and AIM





Perinatal Quality Collaboratives

- ❖ State or multistate networks of teams and stakeholders that work to improve the quality of care during pregnancy, delivery, postpartum, and throughout the first year of the infant's life.
- ❖ PQCs use data-driven approaches to identify healthcare processes in need of improvement and research the best evidence-based methods available to make those improvements quickly.
- ❖ PQCs implement specific initiatives with healthcare teams that address a wide-variety of adverse maternal and infant outcomes, with the goal of improving care for ALL populations.
- ❖ PQCs receive state, federal, and or private foundation funds to operationalize their quality improvement work.



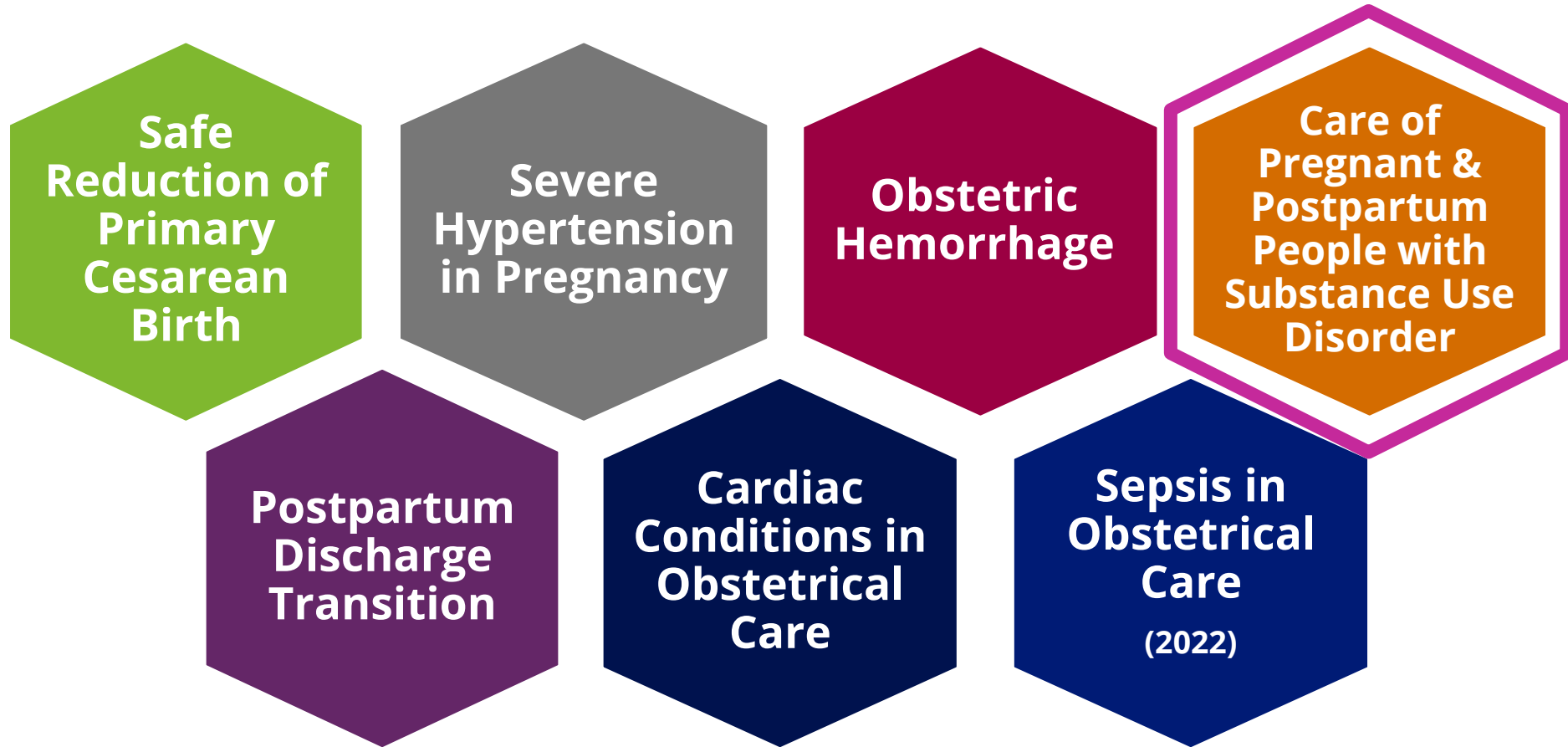


ALLIANCE FOR INNOVATION
ON MATERNAL HEALTH

<https://saferbirth.org/>

The Alliance for Innovation on Maternal Health (AIM) is the national, cross sector commitment to promote safe maternal care for every US birth and lowering the high US rates of maternal mortality and morbidity. This is achieved through the engagement of multidisciplinary partners at the national, state and hospital levels who together, utilizing data driven continuous quality improvement strategies, develop and implement patient safety bundles within birthing facilities. This cross-sector collaboration of partners aligns existing efforts and develop resources to support a national evidence-based standard approach to improving maternal care.

AIM Patient Safety Bundles





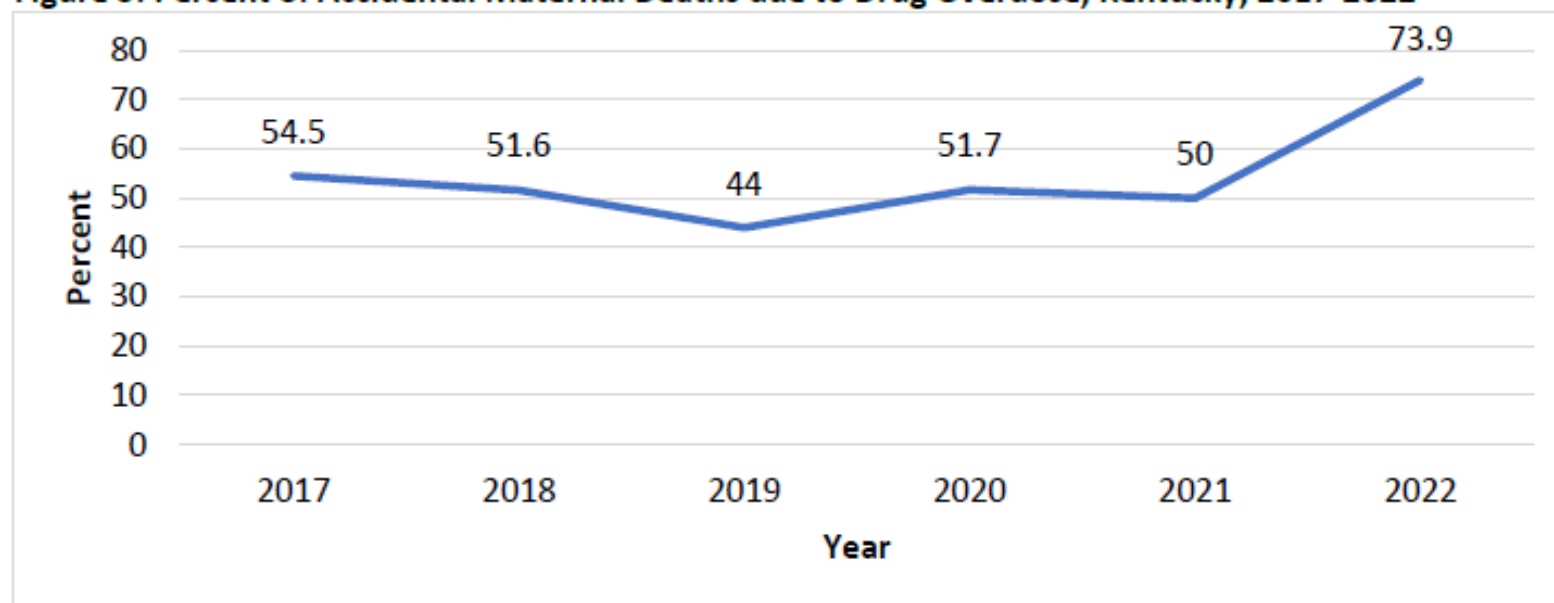
SUD in the Perinatal Period





SUD Leading Cause of Maternal Death

Figure 3: Percent of Accidental Maternal Deaths due to Drug Overdose, Kentucky, 2017-2022*



*Maternal death is defined as any female between the ages of 15-55 that was pregnant within one year prior to death or pregnant at death and died from any cause. Drug overdose is defined by the ICD-10 code X40-X49. The 2020-2022 data is preliminary, and numbers may change.

Data Source: KY Vital Statistics files, linked live birth, and death certificate files years 2017-2022.

Source: Kentucky Maternal Mortality Review Annual Report 2024

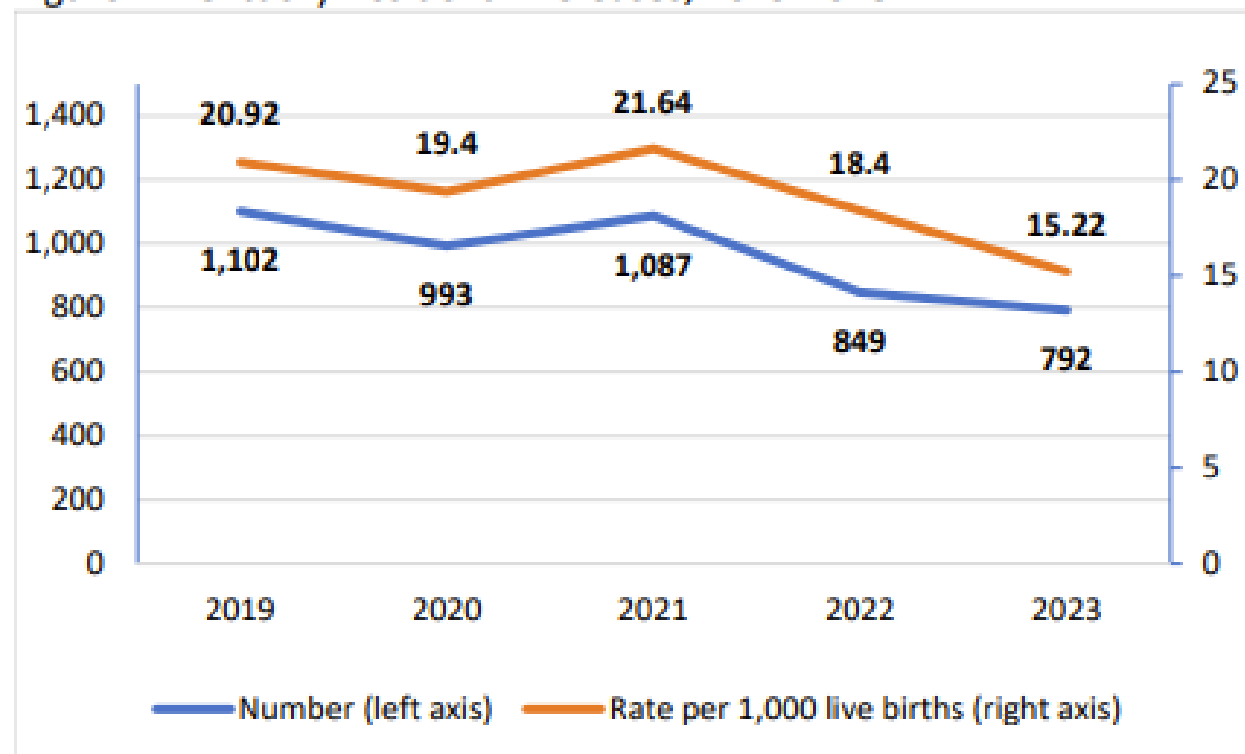
On average from 2017 to 2022, over 50% of all maternal deaths had substance use as a contributing factor



SUD in Pregnancy and Infant Outcomes

- The rate of Kentucky infants with Neonatal Abstinence Syndrome (NAS) remains over 2x higher than the National Rate!

Figure 1. Kentucky Resident NAS Cases, 2019-2023



Source: Kentucky NAS Annual Report 2024



Development of the Kentucky Perinatal Quality Collaborative (KyPQC)





ASTHO's Opioid Use Disorder, Maternal Outcomes, and NAS Initiative (OMNI)

In 2018, Kentucky was selected to participate in the first class of the ASTHO OMNI Learning Community (LC), which supports systems change and capacity building in 12 states to address maternal outcomes and NAS.

➤ Kentucky OMNI Action Plan Goals:

- Develop a statewide PQC to support development of clinical protocols for treatment and management of infants born with NAS.
- Create and disseminate SUD treatment resources and support services for pregnant patients in healthcare system and community settings.
- Provide Kentucky infants a supportive, unimpaired caregiver.



Initial Funding to Support the KyPQC

- In 2019, Kentucky Injury Prevention Research Center (KIPRC), a bona fide agent for the Kentucky Department for Public Health (KDPH) was awarded Overdose Data to Action (OD2A) funding.
- KDPH was a subrecipient of OD2A under Strategy 7: Provider and Health Support System Activities
- Official LAUNCH of the KyPQC held at Churchill Downs Louisville, Kentucky on October 22, 2019



And we're off.....!



KyPQC Vision

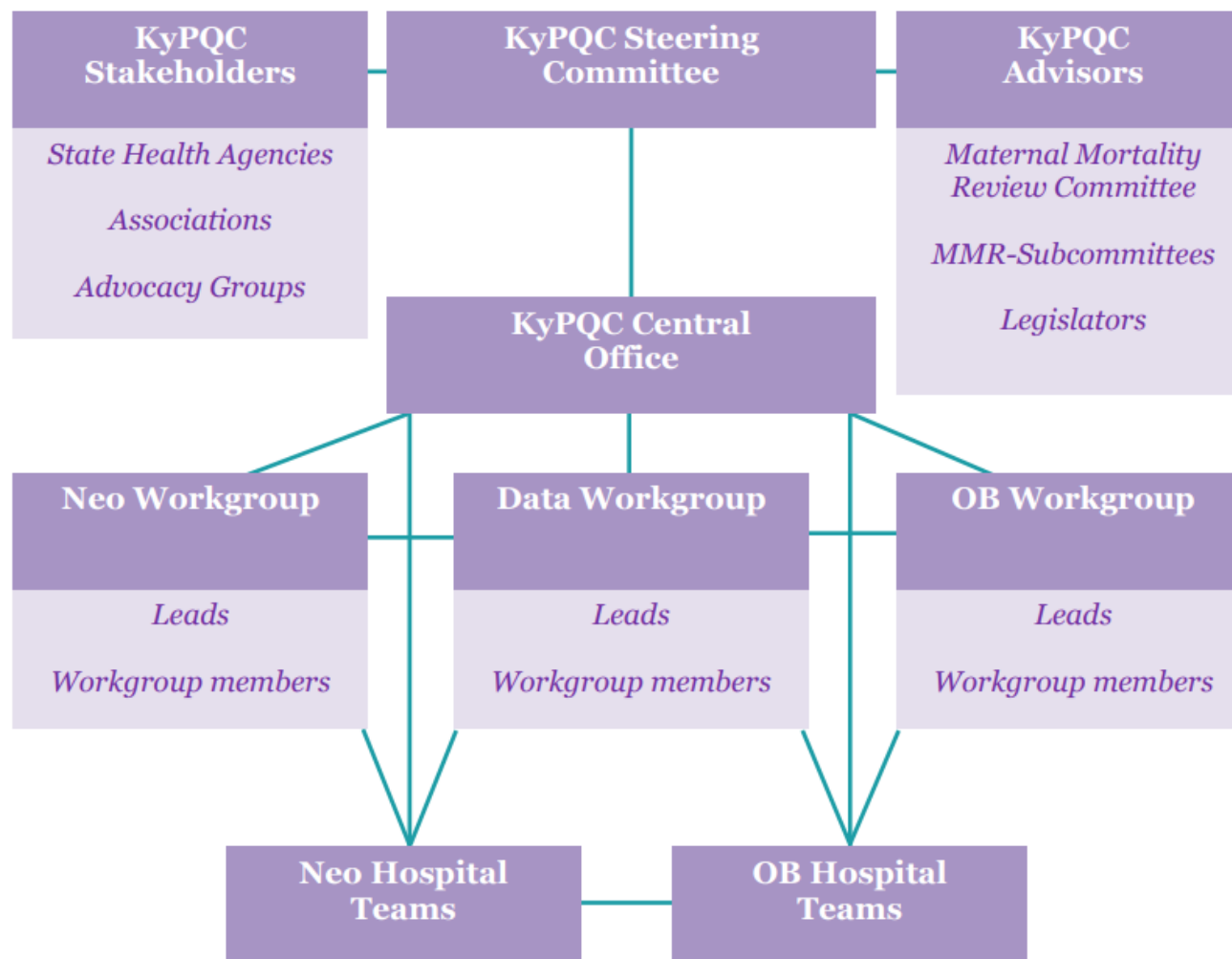


***Working together to
make Kentucky a great
place to have a baby
and a great place for
every baby to be born!***

<https://kypqc.org/>



KyPQC Organizational Structure Chart

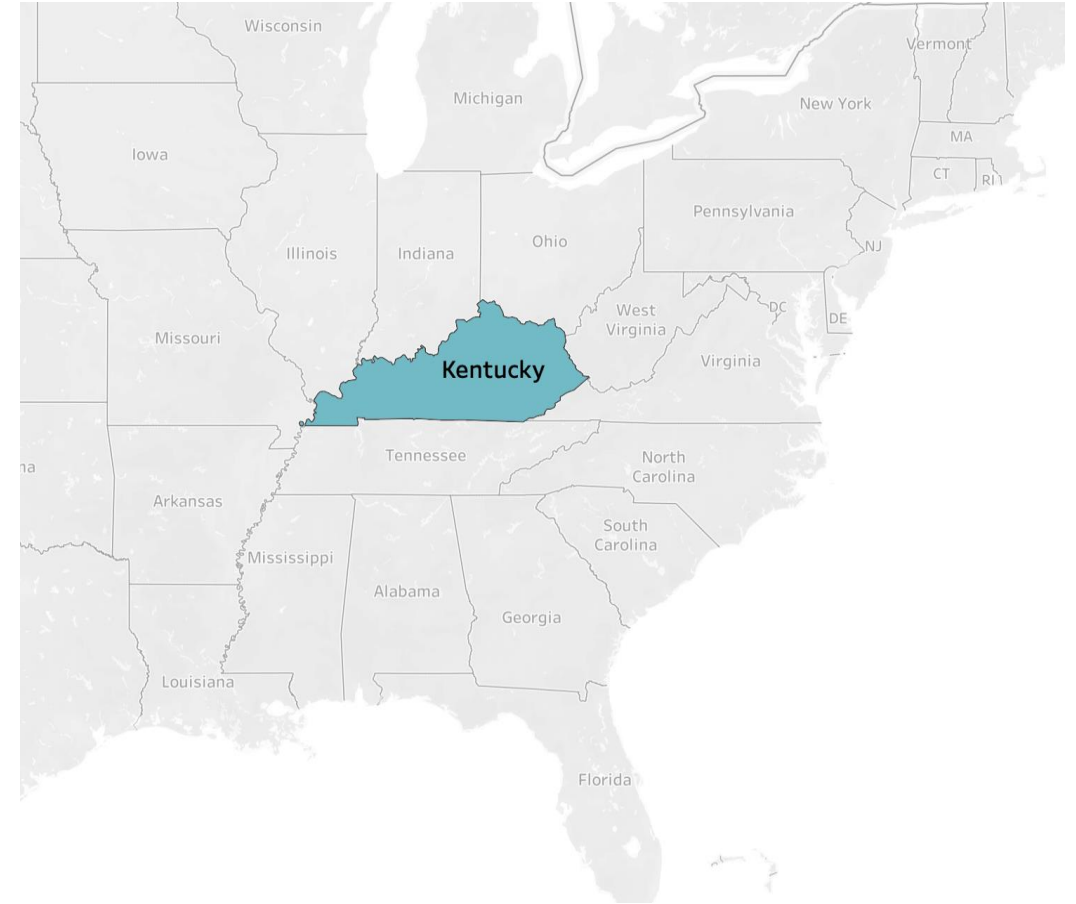




AIM

ALLIANCE FOR INNOVATION
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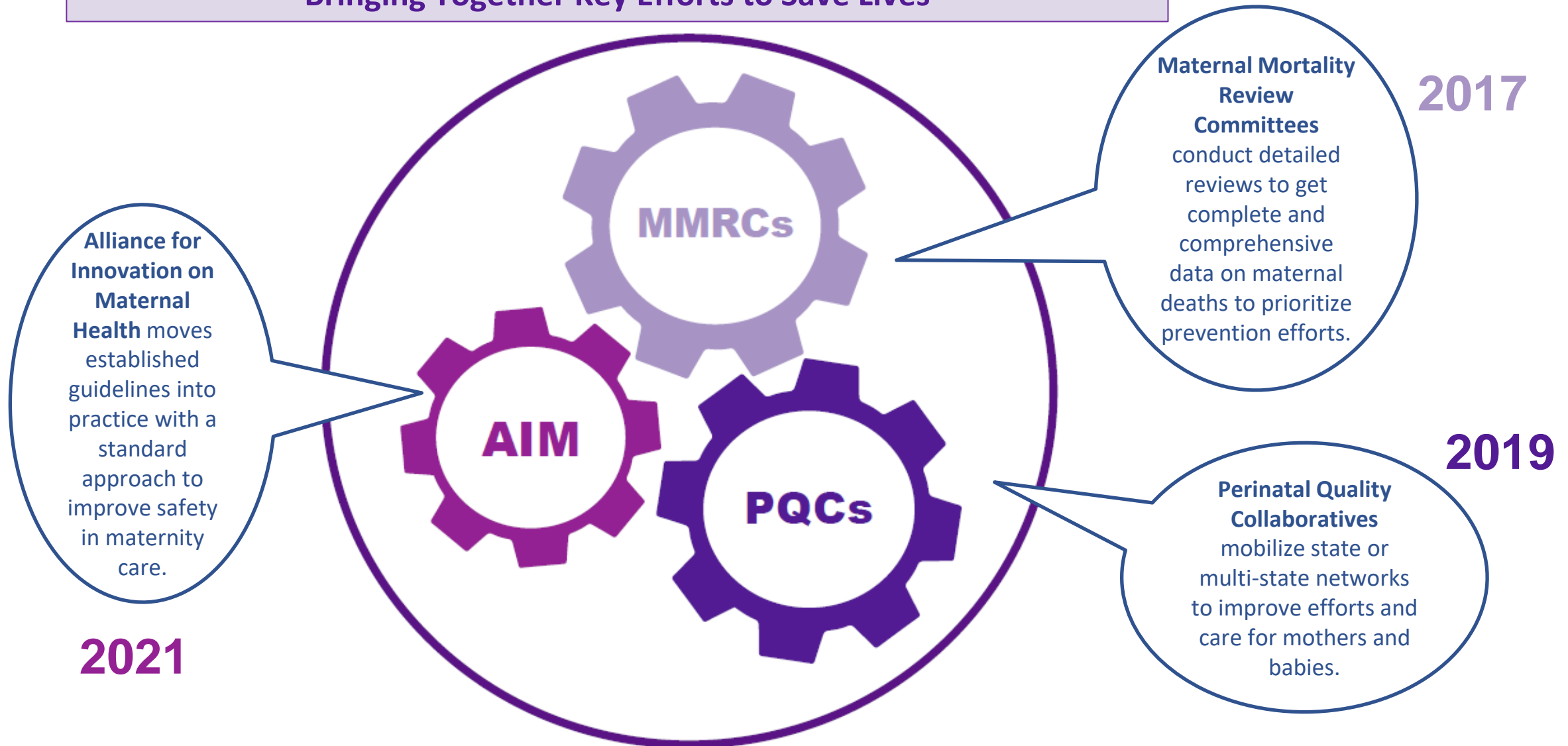
- ✓ Kentucky officially became the **41st state** to join AIM in March of 2021



Critical Perinatal Quality Infrastructure



Bringing Together Key Efforts to Save Lives





Using Data to Inform KyPQC First QI Initiatives





January 2021 Baseline Survey

KyPQC distributed both baseline surveys to all 46 birthing hospital in Kentucky

Neonatal

NAS Baseline Survey

To learn about birthing hospitals current reporting practices of NAS to the Kentucky Department for Public Health's NAS Registry.

Obstetrical

- ***Perinatal***
- ***Pain***
- ***Relief for***
- ***Opiate***
- ***Use***
- ***Disorder***

To learn about birthing hospitals current screening, pain management, and evaluation protocols/practices for pregnant people with SUD.



Baseline Survey Results

Neonatal

- Response Rate: 87% (40/46)
- 33 Respondents are familiar with KRS 211.676
- 37 individuals responsible for reporting were identified
- Reporting practices varied
- Definitions of NAS varied
- Majority of facilities were interested in training

Obstetrical

- Response Rate: 89% (41/46)
- 13 Facilities reported current use of SUD Screening Tool
- 4 Facilities reported current protocol for pain management in patients with SUD
- Majority of facilities were interested implementing screening and protocols



Baseline Survey Conclusions

Neonatal

KyPQC established the need to do the following:

- Provide education and guidance on reporting NAS cases and substance exposed newborns
- Establish standard definition of NAS and substance exposed newborns for reporting purposes

Obstetrical

KyPQC established the need to do the following:

- Promote use of screening tools to improve the identification of pregnant patients with SUD
- Establish a standard protocol of care for these patients with SUD



Desired Outcomes of Initiatives

Neonatal

Decrease the percentage of pilot hospitals with no NAS case reports or under-reporting to zero by **December 2024**

Obstetrical

100% increase in the percentage of pilot hospitals utilizing a **SUD validated screening tool** for patients who are admitted to L&D by **December 2024**



UofL Hospital
Center for Women & Infants
UL Health

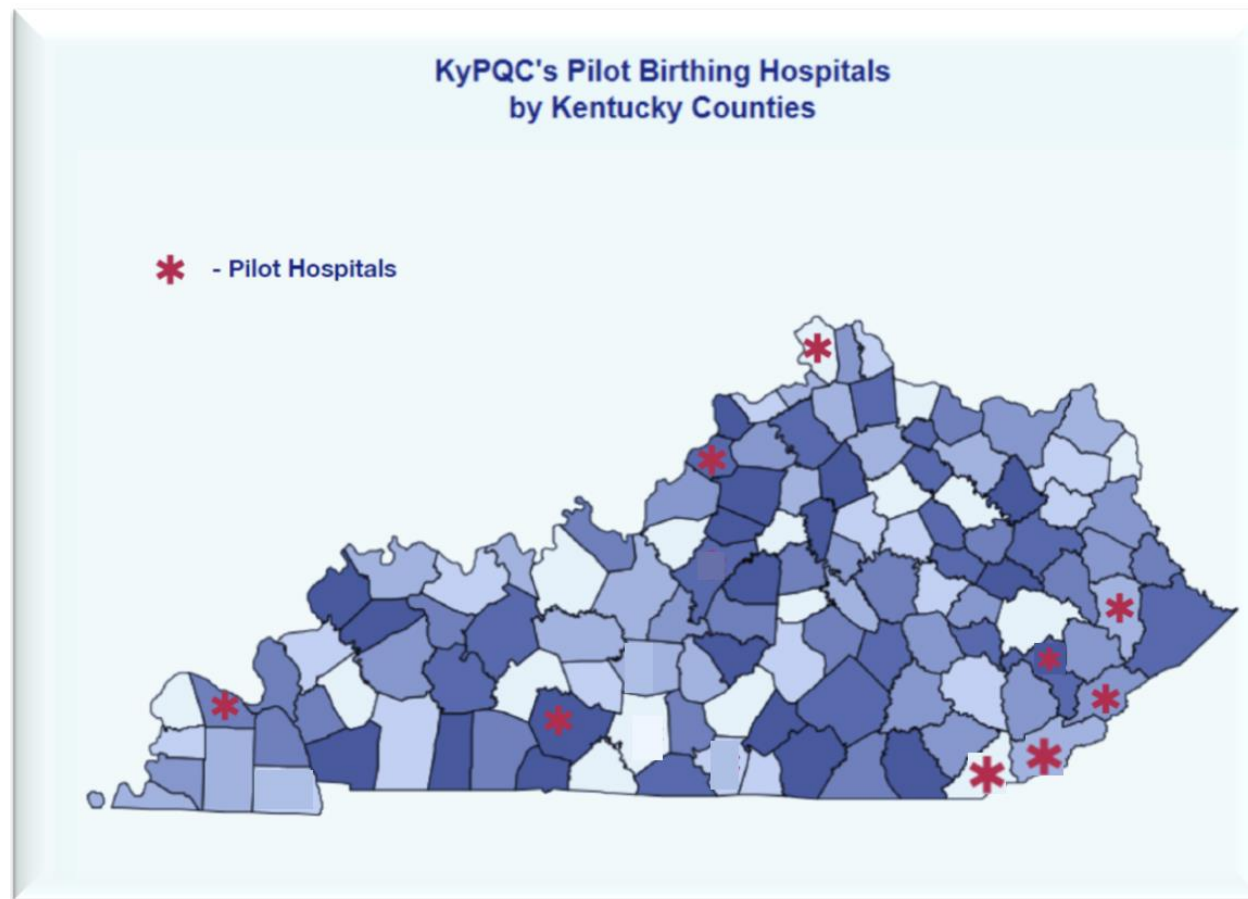


Selection of Pilot Hospitals

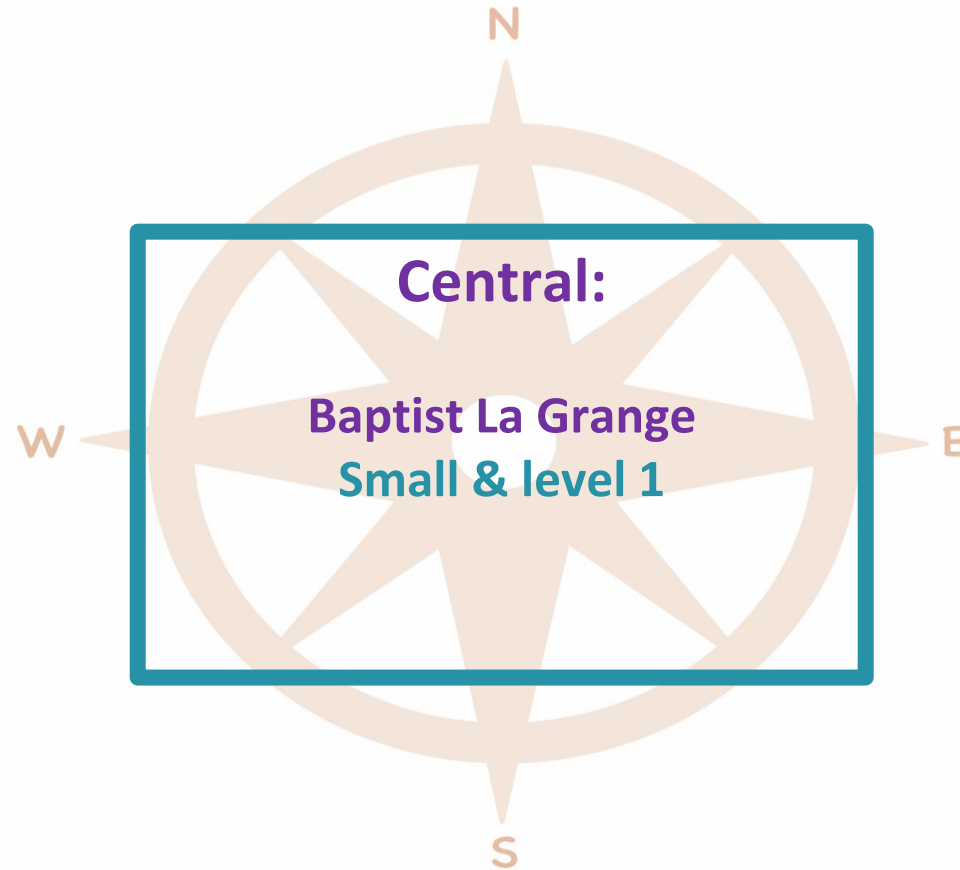


Pilot Cohort 1 Recruitment

- Geographical
- Patient volume
- Levels of care
- Baseline Survey Responses



North:
St. Elizabeth Large & level 3



East:
Highlands ARH Regional Center
Small & level 2

Harlan ARH Hospital
Small & level 1

Tug Valley ARH Regional
Medical Center
Small & level 1

West:
The Medical Center
at Bowling Green
Large & level 2

Baptist Health Paducah
Large & level 3

South:
Whitesburg ARH Hospital Small & level 2

Middlesboro ARH Hospital Small & level 1

Large Hospital = 800+ Births/Year
Small Hospital = <800 Births/Year
Level = NICU level



Pilot Cohort 2 Recruitment

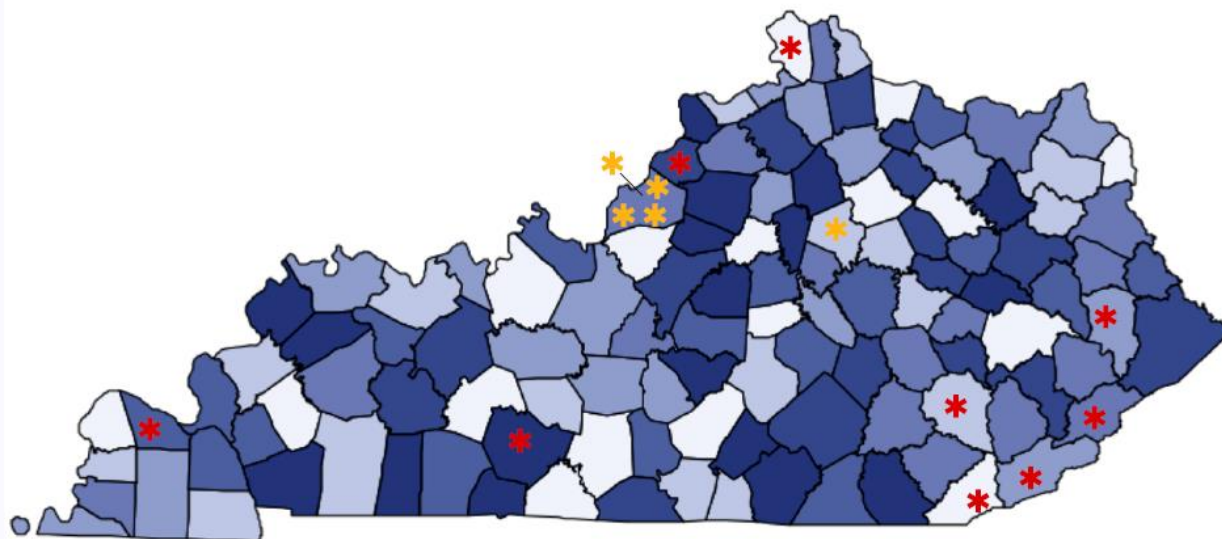
- Leverage Relationships with Workgroup Leads
- Serve Large Diverse Patient Population
- Teaching Hospitals

Implementation of the KyPQC's First Initiatives

Participating Pilot Hospitals

Cohort 1 - *

Cohort 2 - *





Pilot Hospital Participation

Cohort 1

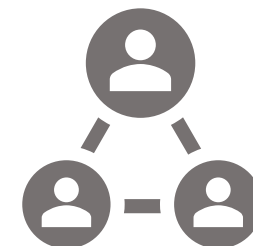
- ✓ St. Elizabeth Healthcare
- ✓ MedCenter Bowling Green
- ✓ Baptist Health LaGrange
- ✓ Baptist Health Paducah
- ✓ Appalachian Regional Healthcare (ARH)
 - Hazard
 - Harlan
 - Highlands
 - Middlesboro
 - Whitesburg

Cohort 2

- ✓ UofL Hospital
- ✓ Baptist Health Louisville
- ✓ UK Healthcare
- ✓ Norton Hospital
- ✓ Norton Women's and Children's Hospital
- ✓ Baptist Health Corbin



SUD Initiative Tools and Resources

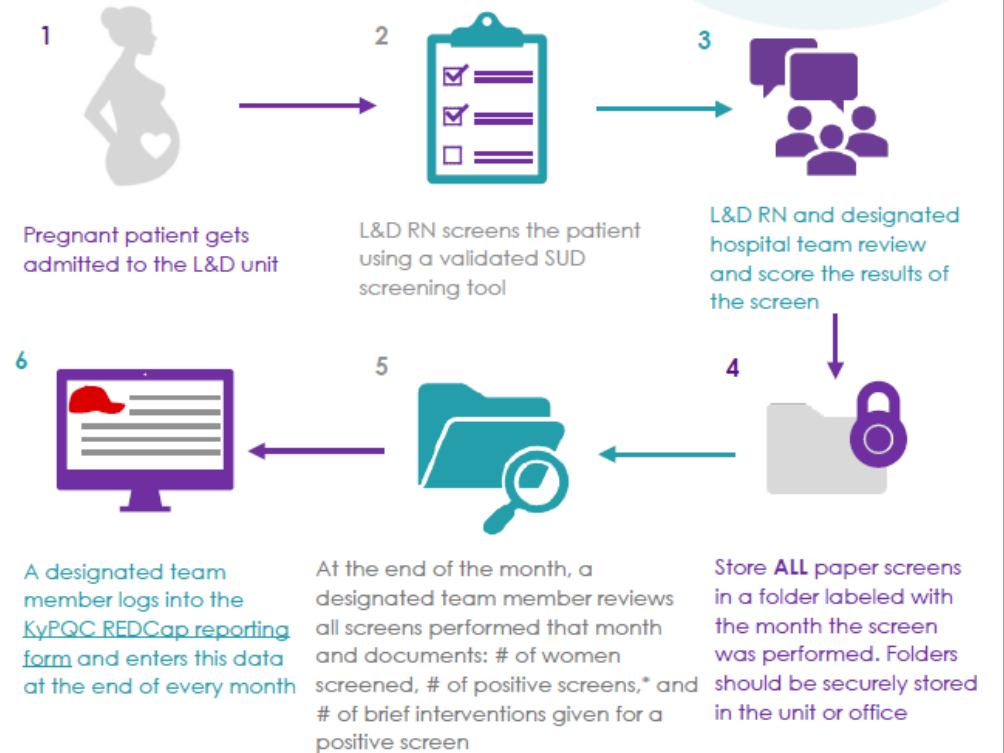


Process Flow Chart



KyPQC's Perinatal First Initiative

Monthly Reporting of Process Measures for SUD Screening



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*Positive screen is defined by specific validated screening tool that is applied
Glossary: SUD - substance use disorder; L&D - labor and delivery

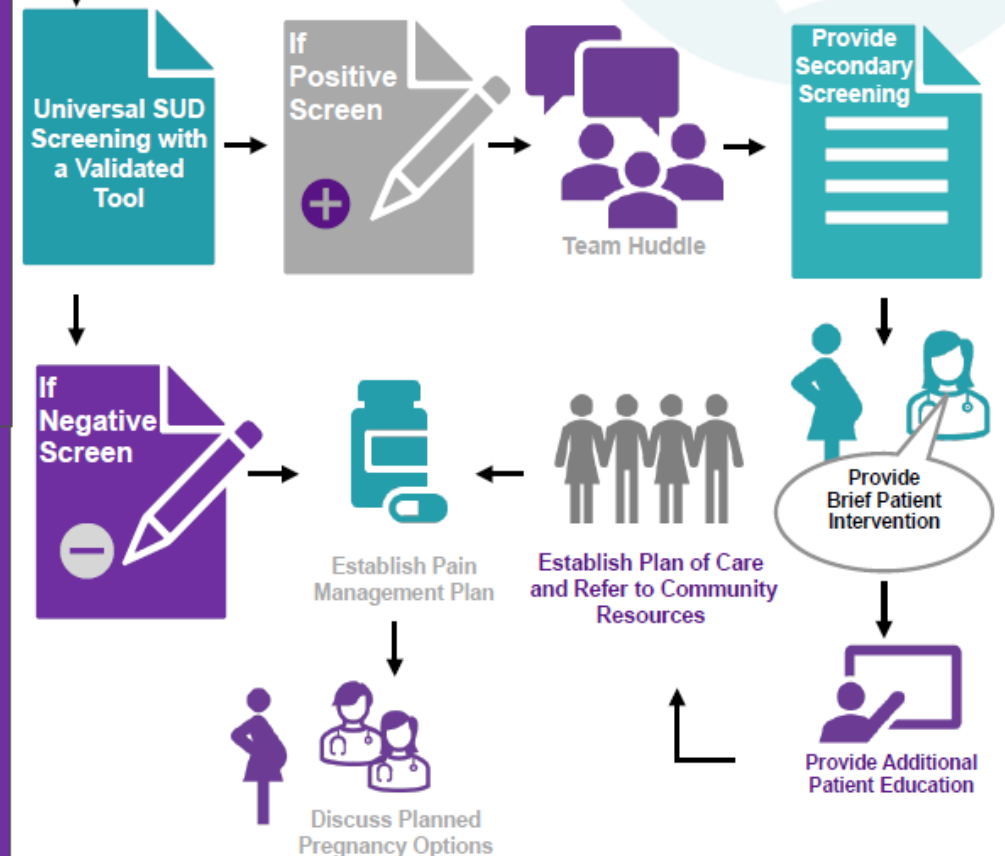
SUD Screening Diagram



KyPQC's Perinatal SUD Screening Diagram

Process flow for SUD Screening on Labor & Delivery

Pregnant patient is admitted to L&D for delivery



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5Ps Screening Tool



The 5Ps Perinatal Substance Use Screen for Alcohol and Drugs

The 5Ps* is an effective tool of engagement for use with pregnant patients who may use alcohol or drugs. This screening tool poses questions related to substance use by the patient's 5Ps: parents, peers, partners, past, and during pregnancy. These non-confrontational questions elicit genuine responses which can be useful in evaluating the need for a more complete assessment and possible treatment for substance use.

State at the beginning that the patient's responses are confidential (*Refer to script*)
A **single "Yes"** to any of these questions indicates further assessment is needed.

1. Did any of your parents have problems with alcohol or drug use?
☐ No ☐ Yes
2. Do any of your friends (peers) have problems with alcohol or drug use?
☐ No ☐ Yes
3. Does your partner have problems with alcohol or drug use?
☐ No ☐ Yes
4. Before you were pregnant did you have problems with alcohol or drug use? (past)
☐ No ☐ Yes
5. In the past month, did you drink beer, wine, liquor, or use any other drugs? (pregnancy)
☐ No ☐ Yes

Staff Signature: _____ Date: _____

Interpreter Used: ☐ No ☐ Yes Interpreter's Name: _____

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*The 5Ps was adapted by the Massachusetts Institute for Health and Recovery in 1999 from Dr. Hope Ewing's 4Ps (1990).

Interpreting Responses to 5Ps Tool



Interpreting the 5Ps Screening Tool

A single "yes" to any of the 5P questions results in a positive screen and should be followed-up with a secondary screening tool

Answers	Zone	Indicated Action
"No" to all 5P Questions	Low Risk	Positive reinforcement
"Yes" to Parents Question	Risky	Review Risk
"Yes" to Peer Question		Perform Brief Intervention / Referral
"Yes" to Partner, Past, or Present Questions	Harmful or Severe	Refer for further assessment and possible specialized treatment

Screening Brief Intervention Refer Treatment - SBIRT

SBIRT is a model which supports preventive care and the identification of health concerns early in treatment before they become chronic, acute, or require more costly medical treatment, such as emergency services or hospital care. Please note that managed care plans have the flexibility to negotiate mutually agreed upon rates with providers.

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SURP-P Follow – up Screening Tool



Items and Scoring for the Substance Use Risk Profile- Pregnancy Scale

State at the beginning that the patient's responses are confidential (*Refer to script*)

1) Low risk if they never used alcohol; 2) average risk if they had used alcohol in the past but consumed no alcohol and smoked fewer than three cigarettes in month before pregnancy; 3) high risk if they consumed any alcohol or smoked at least three cigarettes in the month before pregnancy

Items:

1. Have you ever smoked marijuana?

☐ No ☐ Yes

2. In the month before you knew you were pregnant, how many beers, how much wine, or how much liquor did you drink?

☐ None ☐ Yes, _____

3. Have you ever believed that you needed to cut down on your alcohol and or drug use (including the non-medical use of prescription medication)?

☐ No ☐ Yes

Scoring:

Classify the number of alcoholic drinks before pregnancy as none compared to any, and count the number of affirmative items.

0 = low risk

1 = moderate risk

2-3 = high risk

In low-risk populations, one or more affirmative items indicate a positive screen, whereas, in high-risk populations, two or more affirmative items indicate a positive screen.

Staff Signature: _____ Date: _____

Interpreter Used: ☐ No ☐ Yes Interpreter's Name: _____

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*Screening for prenatal substance use: Development of the Substance Use Risk Profile-Pregnancy scale. Yonkers et al. Obstet Gynecol 2010; 116:827-33

Secondary Follow – up Screening Tool



Substance Use Screener Follow-Up Questions

Women who answered yes to any of the 5Ps should be further assessed for opioid or any other drug use.

1. Have you used opioids, narcotics, or pain medication in the last year?

☐

No

☐

Yes

2. If yes, please define the length of time and frequency:

Length of time and frequency: _____

3. If yes, were they prescribed or unprescribed?

☐

Prescribed

☐

Unprescribed

4. Have you used any other drugs or unprescribed medications in the last year?

☐

No

☐

Yes

Patients with positive responses who have used unprescribed drugs in pregnancy or used prescribed opioids for longer than a month need the referral protocol to link them to services and medication for opioid use disorder (MOUD), if indicated.

(For positive responses to 5Ps, also document that Kentucky All Schedule Prescription Electronic Report [KASPER] has been reviewed.)

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*Substance Use Screener Follow-up Questions adapted from Illinois Perinatal Quality Collaborative

SUD Screening Diagram Checklist



Care Checklist	Clinical Team Initials/Notes/Date
L&D RN screens <u>All</u> patients using a validated SUD screening tool	
Determine if the screen is <u>Positive</u> or <u>Negative</u>	
If <u>Negative</u> , proceed to step of establish a Pain Management Plan	
If <u>Positive</u> , proceed with a Hospital Team Huddle include: maternal and infant healthcare providers, social work, charge & bedside RNs	
Follow with Secondary Screenings , including: <ul style="list-style-type: none"> Follow-up secondary SUD screening Hep C, Hep B, HIV, and other recommended screening Domestic violence screening Mental health screening 	
Once secondary screening is complete, provide Brief Intervention : <ul style="list-style-type: none"> Raise the subject in nonthreatening manner Provide feedback and discuss risks Enhance motivation for a health pregnancy Negotiate a plan of reaching patient's goal of a health pregnancy 	
Next, provide additional Patient Education : <ul style="list-style-type: none"> Discuss risk of continued substance use to mother/baby and importance of mom and family self-care Discuss caring for a baby with NAS Determinate patient's readiness for MOUD Counsel on Naloxone 	
After providing patient education, Establish POC and Refer to Community Resources : <ul style="list-style-type: none"> Provide Naloxone Prescription Refer to SUD counseling, including peer support Refer to behavioral health counseling Refer to MOUD counseling Refer to HANDS and other community family support resources Schedule follow-up appointment with healthcare provider for 1-2 weeks postpartum 	
Establish Pain Management Plan (All Patients) <ul style="list-style-type: none"> Develop a plan for managing pain during labor and postpartum Follow recommended guidelines 	
Discuss Planned Pregnancy Options <ul style="list-style-type: none"> Recommend and discuss benefits of immediate postpartum LARC Other options 	
Prior to Discharge	Clinical Team Initials/Notes/Date
<ul style="list-style-type: none"> Ensure patient receives date and time of postpartum appointment & contact information of the healthcare provider's office 	

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Glossary: SUD - substance use disorder; L&D - labor & delivery; POC - plan of care; NAS - Neonatal Abstinence Syndrome; MOUD - medications for opioid use disorder; HANDS - health access nurturing development services; LARC - long-acting reversible contraception

SUD Screening Guidelines and Script



Brief Intervention Steps

1	Raise Subject	<p>State your medical concern:</p> <ul style="list-style-type: none"> Being warm and nonjudgmental and using information gathered in the screening, give brief feedback about how the patient's behavior might affect the outcome of the pregnancy. No matter what substance needs to be addressed, it is important to use an "I am concerned" message and be nonjudgmental. Be direct, but avoid pushing too hard. Thank you for answering my questions. "You mentioned that you have used ____ (marijuana/ heroin/ pain pills/ methamphetamines/ etc.) in the past. I am concerned because we know that when (specific substance) ____ is used during pregnancy, it can cause the baby to go through withdrawal when it is born." Is it OK if we talk more about XX and pregnancy? OR "You said that you used some alcohol during the last month. I am concerned because research shows that alcohol exposure during pregnancy can cause a child to have serious learning problems, or even developmental disabilities. Help me understand, through your eyes, what connection (if any) do you see between your use of XX and this pregnancy? People use drugs for many reasons: what do you like most/least about using XX?
2	Provide Feedback	<p>Advise abstinence:</p> <ul style="list-style-type: none"> Suggest abstinence, and then ask for the patient's reaction, negotiating what they are willing/ ready to do. It is important to listen and refrain from arguing or trying to convince her. Simply return to statements of your concern. Offer change options that match her readiness for change. Be realistic: recommend abstinence, but if they are not ready, accept harm reduction. Because of those risks, I recommend avoiding drugs and alcohol use during pregnancy. For women using opioids regularly, medication assisted therapy, such as Methadone or Buprenorphine is recommended during pregnancy and after to improve outcomes for both mom and baby. "The best thing you can do for your child is to stop using (specific substance) (pause and see if the patient will respond to your statement). How difficult do you think that might be for you?" (Listen and reflect.) Sometimes patient's who give similar answers are continuing to use drugs and alcohol during their pregnancies. I have some information on risks substance use in pregnancy. Would you mind if I shared them with you? Share Education Handouts
3	Investigate Readiness	<p>Discuss her reaction:</p> <ul style="list-style-type: none"> Using open-ended questions, explore her readiness to change. Accept where they are, but accentuate any indication that they see a problem or that they think they can make a change. What are your thoughts about the information I just shared and do you have any concerns? On a scale of 1-10, with 10 very ready and 1 not ready, how ready are you to make any kind of changes in your use of XX? You marked _____. That's great. Why did you choose _____ and not a lower number like a 1 or 2?
4	Create Action Plan	<p>Agree on a plan of action:</p> <ul style="list-style-type: none"> Find a plan of action that they are willing to take, and agree on it. Accept that they may only be ready to take a small step. A menu of options might include: talking with someone (i.e., accepting a referral to the KY-Moms MATR case manager or a KY-Moms MATR prevention education, meeting with a behavioral health provider, or calling Kentucky's Tobacco Quit Line); reducing her level of use; enlisting the help of a supportive friend or family member; and/or thinking about it and checking in with you at her next appointment. What are some steps you could take to reduce the things you don't like about using that you shared with me earlier like ____? Related answers the patients shared earlier What steps can you take today to reach your goals of having a healthy pregnancy and healthy baby? Those are great ideas! Is it OK for me to write down. The steps/plan you just shared with me? What exactly should I write? I have additional resources and people that patients often find helpful, would you like to meet with them? Discuss options, schedule consults, identify navigator and make referrals to MAT/ BH counseling/ recovery services. Introduce SW. Thank you for talking with me. Can we schedule a date to check in again

*Brief Intervention Steps adapted from Kentucky Moms Maternal Assistance Towards Recovery and Illinois Perinatal Quality Collaborative



Thank you!
Monica Clouse
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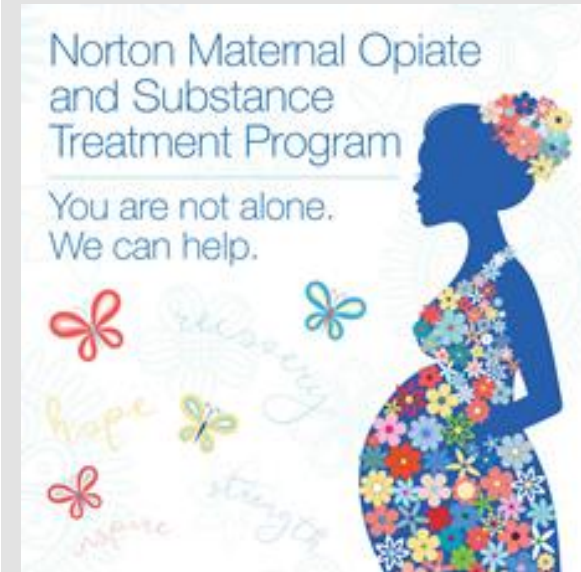
KyPQC is supported by Cooperative Agreement number 1NU17CE010186 and Cooperative Agreement number 1NU58DP007489, funded by the Centers for Disease Control and Prevention (CDC).



Norton Maternal Opiate and Substance Treatment Program

Helping Moms Get The M.O.S.T. out of Recovery

By: Cierra Williams, CSW and Meagan Janes, APSS



Learning Objectives

- Outline Norton Hospital and Norton Women's and Children's Hospital participation in the KyPQC SUD Initiative
- Restate the importance of The Prenatal Substance Abuse Screening(5P's)
- Describe the background on the MOST program and details regarding inpatient and outpatient care

Norton Hospital & Norton Women's and Childrens Work with Kentucky Perinatal Quality Collaborative (KyPQC)

- Both Norton Hospitals Enrolled as a Participant with KyPQC
 - **Date Enrolled: February 2023**
- Facilities Began Implementation of 5Ps
 - **Start Date: September 2023**
- Facilities Moved Initiative to Sustainability
 - **Sustainability Reached: March 2024**
 - **Integrated 5Ps Screening Tool into EMR**



Norton Hospital & Norton Women's and Children's Hospital Receive KyPQC QI Initiative Awards



Norton Women's and Children's Hospital

is committed to improving quality of care for moms and babies

KyPQC 1st QI Initiative AWARD

Working together to make Kentucky a great place for every woman to have a baby, and a great place for every baby to be born

KyPQC
Kentucky Perinatal Quality Collaborative



Norton Hospital

is committed to improving quality of care for moms and babies

KyPQC 1st QI Initiative AWARD

Working together to make Kentucky a great place for every woman to have a baby, and a great place for every baby to be born

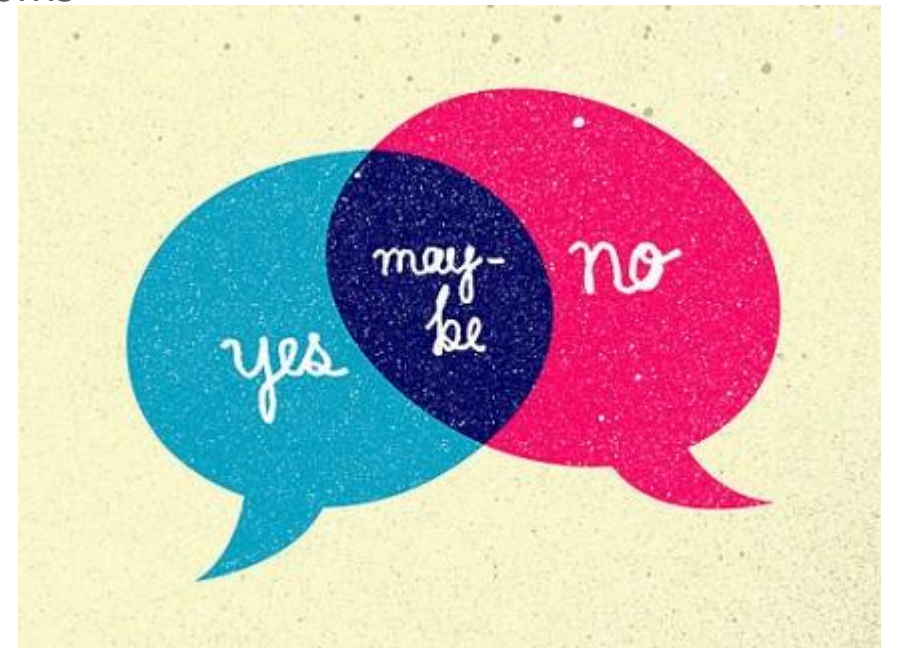
KyPQC
Kentucky Perinatal Quality Collaborative

The Prenatal Substance Abuse Screen(5P's)

- ❖ American College of Obstetricians and Gynecologists(ACOG) initiative
- ❖ Effective tool screening for substance use with pregnant and postpartum patients
- ❖ Hospital rate improvement protocol (HRIP) requires us to screen all Medicaid patients
 - ❖ Norton is screening all delivering patients regardless of insurance payor, as a participating hospital in the KyPQC SUD Initiative
- ❖ Screened during admission and postpartum
- ❖ 5 questions: parents, peers, partner, past, pregnancy
- ❖ Postpartum screening is completed by RN from Norton Women's Mental Health Services as patients are also screened for postpartum depression
- ❖ Any "yes" answer is an automatic referral to the MOST program

5P's Statistics

- 2024 Statistics
 - 258 positive 5P's referrals
 - Established contact with 207 moms
 - Additional 5 were "screened out"
 - Contact rate: 80.2%
- 2025 Statistics as of 5/23/2025
 - 75 positive 5P's referrals
 - Established contact with 62 moms
 - 2 still in process
 - Contact rate: 85%



PATIENT EXPERIENCE

- Current struggles with substance use- further assessment is completed (DAST or AUDIT)
- Screened for depression- Edinburgh screening – referrals sent to Norton Women Mental Health Services
- If there is a return to use, we can readmit for medical stabilization up to 6 weeks post-partum
- Offer outpatient therapy services-in person or virtually
 - Harm Reduction cases
 - Therapeutic interventions
 - Motivational interviewing
 - Solution-focused therapy
 - Naltrexone or Vivitrol
 - Referrals for MOUD
 - Linkage to community referrals (WIC, SNAP, 3C's, housing)

The Norton MOST Program

- ❖ MOST stands for **M**aternal **O**piate and **S**ubstance **T**reatment
- ❖ How we define excellence...
 - ❖ We help the MOST pregnancies
 - ❖ We have the MOST desirable outcomes
 - ❖ We have the MOST comprehensive family planning
 - ❖ We have the MOST complete medical and behavioral health care

What is the Norton MOST program?

<u>INPATIENT</u>	<u>OUTPATIENT</u>	<u>CONSULTS</u>
Medical stabilization for opiates, alcohol, benzodiazepines	Peer Support	Outpatient consults for moms with hx of SUD, who are stable in treatment with community partners, or actively using substances that do not require inpatient stabilization
Management of withdrawal sx	SMART recovery	
MOUD	Individual & group therapy	
Witnessed Urine Drug Screens	MOUD	MFM consult
High-risk pregnancy supervision & fetal monitoring	Witnessed Urine Drug Screens	UDS
Recovery treatment planning, care coordination, follow up appointments	High-risk pregnancy supervision & extensive care coordination	LCSW support
	Parenting support & Education	Education
		Harm Reduction

Meagan Jane's Story





QUESTIONS?