Pregnancy Outcomes

Stakeholder Working Group Questions
- How does KanCare impact pregnancy outcomes?

Research Questions
- **RC7.** Have members enrolled in KanCare shown improved pregnancy outcomes?

Measures, Data Sources and Reports by Research Question
- **RC7.** Have members enrolled in KanCare shown improved pregnancy outcomes?

Measure	Data Source	Report
Birth weight Gestational Age Length of Stay Rate of Infant Morality Rate of Maternal Mortality NAS diagnosis at birth SUD treatment during pregnancy NICU admission at birth by NICU tier	MCO claims or encounters - Each MCO submits claims data to the state as encounters. An encounter is a subset of the full claims data. - Measures are available for current and prior years but are either not publicly reported or not publicly reported for KanCare mothers or infants specifically. - Resources may be needed to risk adjust comparisons between groups or geographies, normalize data between multiple sources, and set up data exchange agreements.	Not available
Timeliness of Prenatal Care: What percentage of deliveries received a prenatal care visit as a member of the organization in the first trimester, on the enrollment start date, or within 42 days of enrollment in the organization? Postpartum care: What percentage of deliveries had a postpartum visit on or between 21 and 56 days after delivery?	Healthcare Effectiveness Data and Information Set (HEDIS) - A nationally standardized set of performance measurements based on claims/encounters, chart review or a hybrid approach. - Measures published in the KanCare Annual Report since 2015 and are current pay for performance measures. - Minimal additional resources needed to assess.	KanCare Annual Report
What percentage of KanCare mothers received a dental cleaning during their most recent pregnancy? What percentage of KanCare mothers reported a condition of anxiety or depression before or during their most recent pregnancy. What percentage of KanCare mothers reported a need for treatment or counseling for depression after giving birth, but did not receive treatment or counseling (includes the reason for not receiving treatment)?	Pregnancy Risk Assessment Monitoring System (PRAMS) survey - A randomly sampled survey of Kansas-resident mothers who delivered a live infant in Kansas. - Measures available in Kansas since 2017. Results for KanCare mothers specifically are not reported but are available from KDHE. - Small sample size may be a challenge depending on the measure. - In Kansas, the overall response rate for PRAMS is usually at or above 60%, while the response rate among Medicaid mothers is closer to 50%.	Kansas PRAMS 2017 Surveillance Report

KMMC Measure Assessment Tool *(Note: In each category, check all that apply)*	

Measures:
    1.)   Birth weight
    2.)   Gestational age
    3.)   Length of stay
    4.)   Rate of infant mortality
    5.)   Rate of maternal mortality
    6.)   NAS diagnosis at birth
    7.)   SUD treatment during pregnancy
    8.) NICU admission at birth by NICU tier	

Data Source(s): Claims Data *(based on MCO perspective)*	
Source of Report: n/a	
Availability ☐ Measure available in public reports ☐ Measure available but not for public consumption ☒ Measure not currently available ☐ Other _____	*Summary notes and clarifying comments here.* For several of these measures data exists for Kansas, however it is not specific to the KanCare population. In other cases where KanCare participants can be included the sample size is too small.

Methods
 Study Population
    ☒ KanCare members overall/in general
    ☒ Subgroup, (specify: <u>rate cell</u>)
 Data Source
    ☐ Administrative reports
    ☒ Claims data
    ☐ Survey with random sampling
    ☐ Survey with convenience sampling
    ☐ Other _____
 Data collection frequency
    ☒ Ongoing
    ☐ Monthly (for annual reporting)
    ☐ Annually
    ☐ Other _____
 ☐ Potential for longitudinal analysis. Data has been consistently measured since:
	Summary notes and clarifying comments here.
	
	 Each MCO submits claims data to the state as encounters. The encounter is a subset of the full claims data.

Standards
 Derivation meets industry standard
    ☒ Yes (specify sources _literature review and clinical expert opinions_)
 Benchmark
    ☒ National benchmark
    ☒ Peer state benchmark
    ☒ Private payer benchmark
    ☒ Prior performance as benchmark
    ☒ Other <u>Standards of Care and DRG</u>
    ☐ Not available	

Resources/Effort Required ☐ Direct application ☐ Some transformation/revision ☐ Moderate transformation/revision ☐ Significant transformation/revision ☒ New measure needed	*Summary notes and clarifying comments here.* Resources required for the initial measure, i.e., distribution of gestational age or percentage of pre-term birth, should be light. However, moderate resources could be needed if the question is expanded to include risk adjustment or comparisons between groups or geographies. Depending on data source, additional resources could be required to normalize data between multiple sources. Additional time could also be needed to set up a data exchange and get the needed agreements in place.
Limitations ☐ Data quality issues (e.g., missing, consistency) ☐ Generalizability ☐ Certain groups are not represented ☐ Other _____	*Summary notes and clarifying comments here.* If we have access to the claims data or data at the similar level, we can link moms and babies. Some database platforms, e.g., DAI (retired; previous KanCare data query-able database), do not allow this.

Other Notes:

standard length of stay for newborns:

http://www.ncsl.org/research/health/final-maternity-length-of-stay-rules-published.aspx

https://www.aap.org/en-us/about-the-aap/aap-press-room/aap-press-room-media-center/Pages/Appropriate-Newborn-Hospital-Stays.aspx

https://www.cdc.gov/mmwr/preview/mmwrhtml/00043388.htm

https://www.kmap-state-ks.us/Documents/Content/Provider/Hospital_DRG_Weights-Rates.xlsx

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3336902/

Pre-Term Birth definition from WHO:

https://www.who.int/en/news-room/fact-sheets/detail/preterm-birth

Kansas Low Birth weight statistics

https://muse.jhu.edu/article/579451

http://www.kansashealthmatters.org/indicators/index/view?indicatorId=1372&localeId=19

https://www.marchofdimes.org/Peristats/ViewSubtopic.aspx?reg=20&top=4&stop=51&lev=1&slev=4&obj=1

http://www.kdheks.gov/phi/download/Preliminary_Birth_Report_2017.pdf

Infant Mortality:

http://www.kdheks.gov/phi/AS_Tables/AS_2016_Tables_and_Figures/fetal/2016InfantMortalityResearchBrief.pdf

http://www.kansashealthmatters.org/indicators/index/view?indicatorId=1364&localeId=19

https://www.khi.org/policy/article/18-08

Maternal Mortality:

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

http://www.kslegislature.org/li/m/statute/065_000_0000_chapter/065_001_0000_article/065_001_0077_section/065_001_0077_k.pdf

https://khap2.kdhe.state.ks.us/NewsRelease/PDFs/09-18-2018%20Maternal%20Mortality%20Review%20Launches%20in%20Kansas.pdf

NAS:

http://www.kansasmch.org/documents/meetings/2017-04-05/Dr.%20Jackson%20NAS%20Presentation.pdf

https://www.hcup-us.ahrq.gov/reports/Trends_NeonatalAbstinenceSyndrome_Births_UnitedStates.pdf

https://www.drugabuse.gov/opioid-summaries-by-state/kansas-opioid-summary

https://kansaspqc.org/neonatal-abstinence-syndrome-nas-initiative/

KMMC Measure Assessment Tool *(Note: In each category, check all that apply)*	
Measures: 1.) Prenatal and Postpartum Care (PPC)	
Data Source(s): HEDIS	
Source of Report: KanCare Annual Report, pages 108-111	
Availability ☒ Measure available in public reports ☐ Measure available but not for public consumption ☐ Measure not currently available ☐ Other _____	*Summary notes and clarifying comments here.* This measure has been published in the KanCare Annual Report and this measure included since 2015.

Methods
Study Population
    ☒ KanCare members overall/in general
    ☐ Subgroup, (specify: <u>rate cell</u>)
Data Source
    ☒ Administrative reports
    ☒ Claims data
    ☒ Survey with random sampling
    ☐ Survey with convenience sampling
    ☐ Other _____
Data collection frequency
    ☐ Ongoing
    ☐ Monthly (for annual reporting)
    ☒ Annually
    ☐ Other _____
☒ Potential for longitudinal analysis. Data has been consistently measured since:
	Summary notes and clarifying comments here.
	
	KFMC has audited this measure each year, in additional to the measure audit required prior to NCQA submission.
	
	Potential variances are include:
	• Admin (claims only) or Hybrid rates (chart review for a sample)
	• Other variances called out in the measure audit reports.

Standards
Derivation meets industry standard
    ☒ Yes (specify sources _literature review and clinical expert opinions_)
Benchmark
    ☒ National benchmark
    ☒ Peer state benchmark
    ☒ Private payer benchmark
    ☒ Prior performance as benchmark
    ☒ Other <u>Standards of Care and DRG</u>
    ☐ Not available	

Resources/Effort Required ☒ Direct application ☐ Some transformation/revision ☐ Moderate transformation/revision ☐ Significant transformation/revision ☒ New measure needed	Minimal resource/effort required.

Research Question: Have members enrolled in KanCare shown improved pregnancy outcomes?

Limitations	
☐ Data quality issues (e.g., missing, consistency) ☐ Generalizability ☐ Certain groups are not represented ☐ Other _____	
Other Notes:	

KMMC Measure Assessment Tool *(Note: In each category, check all that apply)*	
Measures:	
1.)	Percent of KanCare mothers who received a dental cleaning during their most recent pregnancy.
2.)	Percent of KanCare mothers reporting a condition of anxiety or depression before or during pregnancy.
3.)	Percent of KanCare mothers reporting a need for treatment or counseling for depression after giving birth, but not receiving treatment and reason for not receiving treatment.

Data Source(s): Kansas Pregnancy Risk Assessment Monitoring System Survey (PRAMS)

Source of Report: Kansas Department of Health and Environment (KDHE)

Availability	KDHE provides this measure for all Kansas mothers but does not report the sub-group of KanCare mothers.
☐ Measure available in public reports	
☒ Measure available but not for public consumption	Kansas PRAMS 2017 Surveillance Report
☐ Measure not currently available	Data from questions 9, 11, and 12 will be used to subset responses for each measure:
☐ Other _____	
	9 – During the month before you got pregnant with your new baby, what kind of health insurance did you have?
	11– During your most recent pregnancy, what kind of health insurance did you have for your prenatal care?
	12 – What kind of health insurance do you have now?
	Measure 1 will be calculated from responses to question 21 – During your most recent pregnancy, did you have your teeth cleaned by a dentist or dental hygienist?
	Measure 2 will be calculated from responses to questions 4 and 22 – During the 3 months before you got pregnant with your new baby (or "During your most recent pregnancy"), did you have any of the following health conditions?
	Measure 3 will be calculated from responses to questions 76 – Since your new baby was born, was there a time when you thought you needed treatment or counseling for depression but didn't get it? And 77 – What were your reasons for not getting treatment or counseling for depression?
Methods	PRAMS is sent monthly to a stratified random sample of Kansas-resident mothers who delivered a live infant in Kansas. Infants of low birthweight (<2,500 grams) are over-sampled compared to infants of normal or high birthweight, to ensure that adequate information is collected on this high-risk subgroup.
Study Population	
☒ KanCare members overall/in general	
☐ Subgroup, (specify: see Other Notes below_____)	Kansas has issued the survey since 2017. The 2017 data are available currently and the 2018 data will be available soon. A combined 2017-2018 sample will most likely be needed for analysis of data on KanCare mothers to ensure a good response rate. Data are unreportable if the
Data Source	
☐ Administrative reports	
☐ Claims data	
☒ Survey with random sampling	

☐ Survey with convenience sampling ☐ Other _____ Data collection frequency ☐ Ongoing ☒ Monthly (for annual reporting) ☐ Annually ☐ Other _____ ☐ Potential for longitudinal analysis. Data has been consistently measured since: 2017.	denominator is less than 30 respondents and/or the numerator is less than 6, while any denominator with less than 60 respondents should be interpreted with caution.
Standards Derivation meets industry standard ☒ Yes (specify sources _literature review and clinical expert opinions_) Benchmark ☒ National benchmark ☒ Peer state benchmark ☐ Private payer benchmark ☐ Prior performance as benchmark ☐ Other _____ ☐ Not available	PRAMS is a surveillance project of the Centers for Disease Control and Prevention (CDC) and state health departments. Developed in 1987, PRAMS collects state-specific, population-based data on maternal attitudes and experiences before, during, and shortly after pregnancy. PRAMS surveillance currently covers about 83% of all U.S. births in 47 states. PRAMS data is the source for many fact sheets, *Morbidity and Mortality Weekly Report* articles, and peer-reviewed journal articles. • https://www.cdc.gov/prams/index.htm • https://www.cdc.gov/prams/pdf/methodology/PRAMS-Design-Methodology-508.pdf
Resources/Effort Required ☐ Direct application ☐ Some transformation/revision ☒ Moderate transformation/revision ☐ Significant transformation/revision ☐ New measure needed	KDHE will need to produce the data for the measures of interest. Analysis of the subgroups requires SAS or specialized software (SUDAAN) to calculate the standard errors and confidence intervals for the estimates. KHI has access to SAS and SUDAAN, or KDHE could provide the standard errors and confidence intervals with the data.
Limitations ☐ Data quality issues (e.g., missing, consistency) ☒ Generalizability ☐ Certain groups are not represented ☐ Other _____	KDHE notes two limitations with generalizing findings to all mothers with KanCare. 1. The Medicaid population tends to be hard to reach for surveys. In Kansas, the overall response rate for PRAMS is usually at or above 60%, while the response rate among Medicaid mothers is closer to 50% (based on Medicaid status in the infant's birth certificate, as determined from payment source for delivery). 2. The insurance variables in PRAMS are self-reported and subject to information bias. It is possible that the actual percentage of moms on Medicaid before/during/after pregnancy will be slightly different from what is found in PRAMS.
Other Notes: Additional data by subgroups such as urban/rural or race/ethnicity are also available. The same limitations with sample size would apply (not reportable if the denominator is less than 30 and/or the numerator is less than 6, and caution is needed if the denominator is less than 60).	