Knowledge Café: PA PQC Data Collection and Tracking

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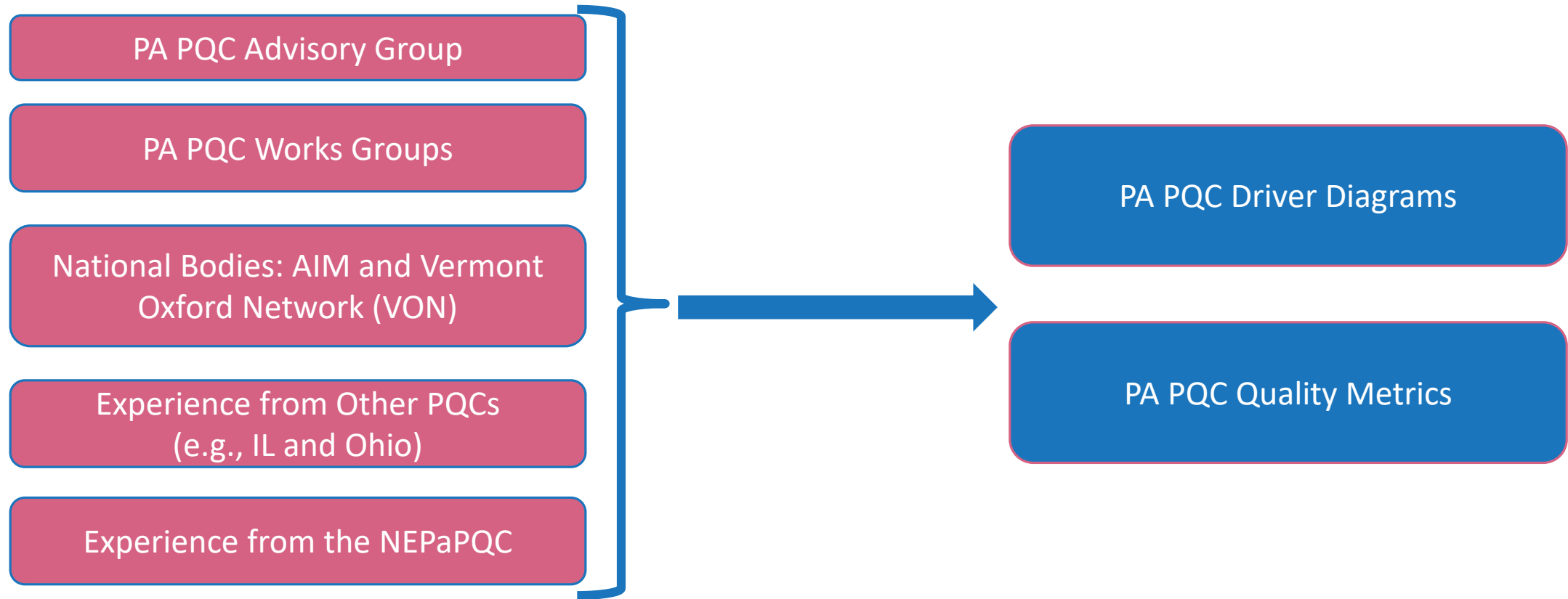
Learning Objectives

1. Describe why and how the PA PQC measures were selected and defined

2. Describe how to compile the "ask" for IT/EMR staff/whoever is pulling the data

3. Describe how to analyze the data once you receive it

4. Discuss challenges and countermeasures to overcome them

Why the PA PQC Measures Were Selected

1. Alignment with PA PQC Goals and Driver Diagrams

2. Ability to drive quality improvement projects

How the PA PQC Measures Were Selected

PA PQC Advisory Group

PA PQC Works Groups

National Bodies: AIM and Vermont Oxford Network (VON)

Experience from Other PQCs (e.g., IL and Ohio)

Experience from the NEPaPQC

→

PA PQC Driver Diagrams

PA PQC Quality Metrics

PA PQC Data Collection and Tracking

December 11, 2019

PA PQC Learning Collaborative Knowledge Café

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Disclaimers

- All data presented is fake and/or completely deidentified. All reporting numbers of Geisinger's that are presented do not represent accurate reporting numbers.

- Please send any questions or requests to kmoran3@thehealthplan.com.

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Things to Decide

Where do you have the resources to do more work:
- Data pulling (i.e., pulling multiple reports with less analysis)
- Analyzing data (i.e., pulling one report with more analysis)

Alternative: don't have EMR or access to IT to pull data → chart review

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Data Pull/Report: Compiling the "Ask"

1. Indicate a time frame and inclusion/exclusion criteria to identify your population

Date Range	1/1/19 - 11/30/19
Inclusion Criteria (use AND and OR to separate critieria)	Females with at least one prenatal appointment or birth during the indicated time frame. Infants born during the indicated time frame.
Exclusion Criteria (use AND and OR to separate critieria) Opt Out patients HIV/AIDS diagnoses 042 Deceased Prisoners Current Clinical Trial Participant diagnoses V70.7	Males, females without a prenatal appointment or birth during time frame. Infants born before or after the indicated time frame.

- If your goal is to create a monthly report, we suggest adding each new month to the existing report.
  - E.g., next month the date range would be 1/1/19-12/31/19

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2a. Provide details about the pieces of information you need and where/how to find them

VARIABLE	DESCRIPTION	FORMAT	COMMENTS
SMM_all	All cases of SMM	yes/no	Use AIM file for all ICD-10 SMM codes
SMM_excl_transf	Excludes SMM cases with *only* tranfusions	yes/no	Use AIM file for all ICD-10 SMM codes, exclude any case that *only* has a transfusion. The case would remain if it has an additional SMM code.
Delivery_date	Date of delivery	date	
Onset_HTN	Women with persistent (twice within 15mins) new-onset severe HTN (systolic >/=160 or diastolic >/=110)	yes/no	Will need to identify where within medical record BP readings can be found
HTN_Treatment	Cases with new-onset severe HTN (systolic >/=160 or diastolic >/=110) that received IV Labetalol, IV Hydralazine, or PO Nifedipine within one hour of second elevated BP reading	yes/no	Provide medication codes and/or order sets
Discharge_date	Date of mother's discharge from hospital	date	
4th_Tri_Contact	Patient received postpartum care contact within 3 weeks of discharge after delivery	yes/no	Provide codes and/or descriptions of what these appointments may be called. "Postpartum care" could be physician office visits, home health visits, nursing care, or telemedicine

Example of Maternal Morbidity metrics

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2b. Provide details about the pieces of information you need and where to find them

Gest_age_birth	Gestational age at birth	Numeric (weeks)	
NAS_Dx	Infant's Neonatal Abstinence Syndrome Diagnosis	yes/no	ICD-10 code
B_Finnegan_1	Newborn's top three consecutive Finnegan scores	Numeric	Identify where to find Finnegan scores within the medical record (e.g., in flowsheet)
B_Finnegan_2		Numeric	
B_Finnegan_3		Numeric	
Birth_admission	Newborn's birth date (admission date)	date	Provide admission department codes (e.g., newborn nursery and NICU)
Birth_discharge	Newborn's discharge date	date	
Hospital_LOS	Infant's hosptial length of stay	numeric	Subtract discharge date from admission date
Transfer_day_of_life	Day of life the newborn was transferred to a different facility	Numeric	NA if newborn was not transferred.
Transfer_facility	Name of facility newborn was transferred to	Character	NA if newborn was not transferred.

Example of Neonatal Abstinence Syndrome metrics

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2c. Provide details about the pieces of information you need and where to find them

Prenatal_(month)	Prenatal visit occurred during month	yes/no	Provide department code (e.g., OB-GYN) and visit name (e.g., New Prenatal, Return Prenatal). Would want a separate variable for each reporting month (e.g., January, February, etc.)
Delivery_date	Date of delivery	date	
SUD_screen	Screened for substance use with a validated screening tool	yes/no	Identify where to find this information in the medical record.
OUD_Dx	Mother's Opioid Use Disorder diagnosis	yes/no	ICD-10 codes
OUD_self_report	Mother's self-reported illegal use of opioids.	yes/no	Identify where to find this information in the medical record, if different from the SUD screen (e.g., social history)
M_ToxScreen_results	Results from urine toxicology tests taken by mother during pregnancy	Positive/negative for each component	LOINC code. Identify components, especially if looking for additional components beyond standard toxicology (e.g., buprenorphine, fentanyl, etc.)
Opioid_Rx_3rd_Tri	Using prescribed opioids chronically for longer than 1 month during the third trimester (i.e., week 28 to birth)	yes/no	Medication codes
NAS_Dx	Infant's Neonatal Abstinence Syndrome Diagnosis	yes/no	ICD-10 code
Newborn_tox_screen	Results from cord, urine, or meconium toxicology test collected from infant during birth admission	Positive/negative for each component	LOINC code. Identify components, especially if looking for additional components beyond standard toxicology (e.g., buprenorphine, fentanyl, etc.)
MAT_initiation	Patients who were administered or ordered an MAT medication (e.g., buprenorphine, methadone) for OUD at any time during pregnancy	yes/no	Medication codes, Department codes, Providers' names
MAT_90days	Patients who have at least 90 days of continuous pharmacotherapy with a medication prescribed for OUD (buprenorphine or methadone) without a gap of more than 7 days.	yes/no	Medication codes, Department codes, Providers' names
MAT_180days	Patients who have at least 180 days of continuous pharmacotherapy with a medication prescribed for OUD (buprenorphine or methadone) without a gap of more than 7 days.	yes/no	Medication codes, Department codes, Providers' names

Example of Opioid Use Disorder metrics

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3. Provide all relevant codes

Example code lists for OUD metrics

Variable Name	Code
OUD_Dx	F11
OUD_Dx	F11.1
OUD_Dx	F11.10
OUD_Dx	F11.11
OUD_Dx	F11.12
OUD_Dx	F11.120
OUD_Dx	F11.121
OUD_Dx	F11.122
OUD_Dx	F11.129
OUD_Dx	F11.14
OUD_Dx	F11.15
OUD_Dx	F11.150
OUD_Dx	F11.151
OUD_Dx	F11.159
OUD_Dx	F11.18
OUD_Dx	F11.181
OUD_Dx	F11.182
OUD_Dx	F11.188
OUD_Dx	F11.19
OUD_Dx	F11.2
OUD_Dx	**F11.20**
OUD_Dx	F11.21
OUD_Dx	F11.22
OUD_Dx	F11.220
OUD_Dx	F11.221
OUD_Dx	F11.222
OUD_Dx	F11.229
OUD_Dx	F11.23
OUD_Dx	F11.24
OUD_Dx	F11.25

MAT_Rx	MED91134	BUPRENORPHINE
MAT_Rx	MED40607	BUPRENORPHINE 10 MCG/HR TD PTWK
MAT_Rx	MED14325	BUPRENORPHINE 15 MCG/HR TD PTWK
MAT_Rx	MED6772	BUPRENORPHINE 20 MCG/HR TD PTWK
MAT_Rx	MED10098	BUPRENORPHINE 5 MCG/HR TD PTWK
MAT_Rx	MED92909	BUPRENORPHINE 7.5 MCG/HR TD PTWK
MAT_Rx	MED3337	BUTRANS 10 MCG/HR TD PTWK
MAT_Rx	MED78887	BUTRANS 15 MCG/HR TD PTWK
MAT_Rx	MED38084	BUTRANS 20 MCG/HR TD PTWK
MAT_Rx	MED11946	BUTRANS 5 MCG/HR TD PTWK
MAT_Rx	MED80151	BUTRANS 7.5 MCG/HR TD PTWK
MAT_Rx	MED94770	BUPRENEX 0.3 MG/ML IJ SOLN
MAT_Rx	MED36934	BUPRENORPHINE HCL (OPIOID PARTIAL AGONISTS)
MAT_Rx	MED8793	BUPRENORPHINE HCL 0.3 MG/ML IJ SOLN
MAT_Rx	MED50643	BUPRENORPHINE HCL 2 MG SL SUBL
MAT_Rx	MED44671	BUPRENORPHINE HCL 8 MG SL SUBL
MAT_Rx	MED72758	SUBUTEX 2 MG SL SUBL
MAT_Rx	MED91090	SUBUTEX 8 MG SL SUBL
MAT_Rx	MED68192	BUNAVAIL 2.1-0.3 MG BU FILM
MAT_Rx	MED89298	BUNAVAIL 4.2-0.7 MG BU FILM
MAT_Rx	MED53986	BUNAVAIL 6.3-1 MG BU FILM
MAT_Rx	MED55867	BUPRENORPHINE HCL-NALOXONE HCL
MAT_Rx	MED3164	BUPRENORPHINE HCL-NALOXONE HCL 1.4-0.36 MG SL SUBL
MAT_Rx	MED93021	BUPRENORPHINE HCL-NALOXONE HCL 12-3 MG SL FILM
MAT_Rx	MED19235	BUPRENORPHINE HCL-NALOXONE HCL 2.1-0.3 MG BU FILM
MAT_Rx	MED24459	BUPRENORPHINE HCL-NALOXONE HCL 2-0.5 MG SL FILM
MAT_Rx	MED65981	BUPRENORPHINE HCL-NALOXONE HCL 2-0.5 MG SL SUBL
MAT_Rx	MED40351	BUPRENORPHINE HCL-NALOXONE HCL 4.2-0.7 MG BU FILM
MAT_Rx	MED83806	BUPRENORPHINE HCL-NALOXONE HCL 4-1 MG SL FILM
MAT_Rx	MED95288	BUPRENORPHINE HCL-NALOXONE HCL 5.7-1.4 MG SL SUBL
MAT_Rx	MED44037	BUPRENORPHINE HCL-NALOXONE HCL 6.3-1 MG BU FILM
MAT_Rx	MED42239	BUPRENORPHINE HCL-NALOXONE HCL 8.6-2.1 MG SL SUBL
MAT_Rx	MED43930	BUPRENORPHINE HCL-NALOXONE HCL 8-2 MG SL FILM
MAT_Rx	MED65311	BUPRENORPHINE HCL-NALOXONE HCL 8-2 MG SL SUBL

Tips for Creating Your "Ask"

- Meet <u>in person</u> with the person/team pulling the data
  - Include any and everyone with relevant expertise!
- In person or via screen sharing, be able to show the person pulling data where to find specific metrics within the medical record
- Have example cases for each metric (e.g., a patient with only a transfusion, a patient with a transfusion and another morbidity)

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I got my data and it looks like this...now what?!

D	E	L	M	N	Q
ENC_ADM_DTT ▼	ENC_DIS_DTTM ▼	TRANSFUSIO ▼	SMM ▼	SMM_A ▼	FOURTH_TRIMESTE ▼
6/12/19 5:01	6/18/19 17:34	1	1	1	1
6/12/19 5:01	6/18/19 17:34	1	1	1	1
5/23/19 23:04	5/31/19 17:06	1	1	1	1
6/30/19 12:02	8/2/19 18:22	1	1	1	0
8/10/19 20:33	8/12/19 19:05	0	1	1	1
5/2/19 0:57	5/6/19 11:42	0	1	1	1
8/20/19 7:33	8/22/19 0:15	0	1	1	1
7/6/19 2:13	7/11/19 11:30	0	1	1	1
5/1/19 22:34	5/6/19 16:15	0	1	1	0
5/20/19 12:03	5/23/19 17:35	0	1	1	1
8/5/19 21:22	8/8/19 14:38	0	1	1	1
5/30/19 21:59	6/10/19 11:50	0	1	1	1
5/29/19 8:22	6/4/19 13:22	0	1	1	1
8/20/19 11:06	8/23/19 14:30	1	0	1	1
7/16/19 4:31	7/19/19 15:28	1	0	1	0
7/16/19 4:31	7/19/19 15:28	1	0	1	0
3/9/19 10:20	3/14/19 13:28	1	0	1	1
3/9/19 10:20	3/14/19 13:28	1	0	1	1
2/19/19 9:33	2/22/19 12:20	1	0	1	1

Inserting Pivot Table

#1 – select all data
#2 – insert
#3 – insert pivot table (on new tab)

Blank Pivot Table
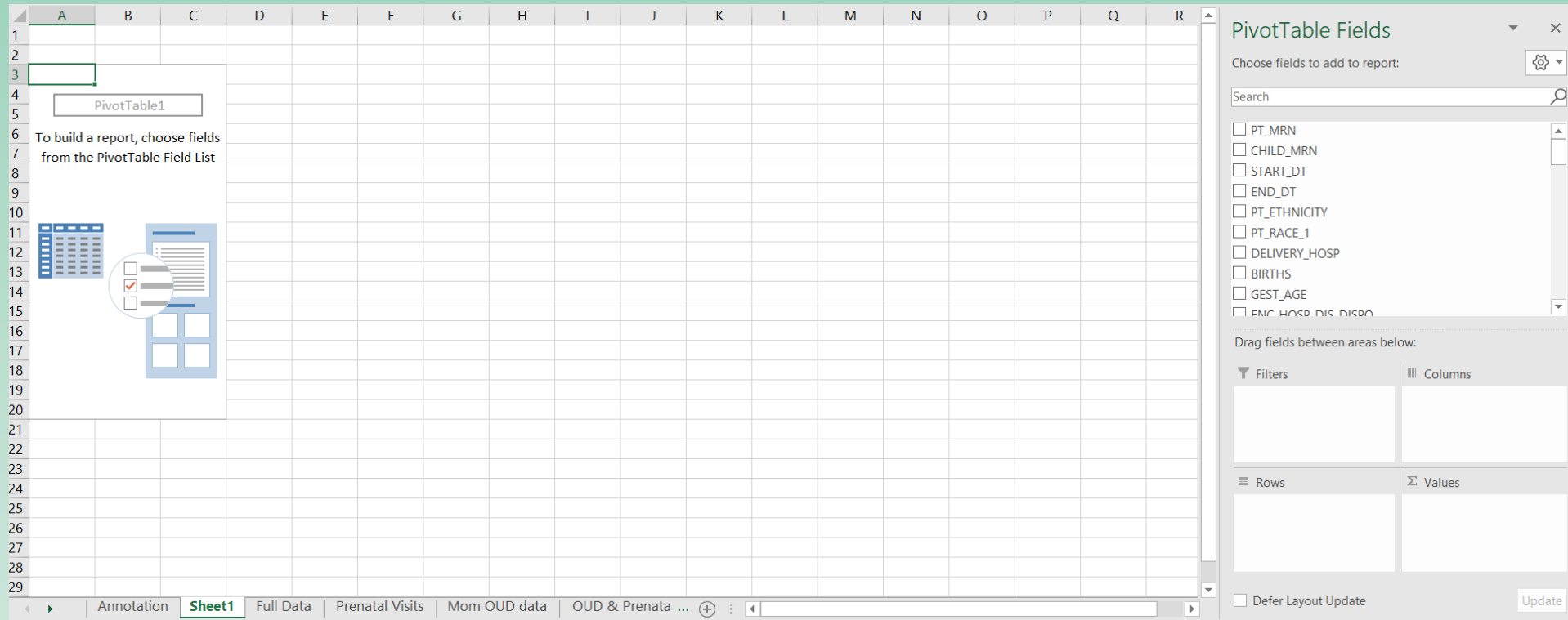
- Drag and drop your variables into the Filters, Columns, Rows, and Values boxes to create your pivot table.

- Recommended to do a separate

  pivot table/excel tab for each metric

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Example NAS LoS Pivot Table

- Filter by **NAS** diagnosis or clinical indicators (1 = yes), gestational age (> 34 weeks), and date of birth (dates for the reporting quarter; e.g., 1/1/19-3/31/19)

- Use **MRN** count for number of newborns
- Pivot table only does average, will need to manually calculate median

Assistance with Chart Review

Instructions for Chart Review Excel File

- Create a file at your site for how to conduct the chart review for each topic.

- Specify where to find each piece of information within the medical record. Be sure to include if there are multiple places the info can be found.

***This document is very important! This allows different people to chart review in a standardized manner.

Maternal Mortality Quality Metrics

	Mother MRN	Any SMM	Only transfusion	SMM excluding transfusion	New onset Severe HTN	HTN Tx	Discharge date	End date for 4th Tri	4th Trimester contact
	123456	yes	yes	no	no	no	3/2/2019	3/23/2019	yes
	234567	yes	yes	no	yes	no	3/5/2019	3/26/2019	yes
	345678	yes	no	yes	no	no	3/6/2019	3/27/2019	no
	456789	no	no	no	yes	yes	3/9/2019	3/30/2019	no
TOTALS	4	3	2	1	2	1	-	-	2

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Neonatal Abstinence Syndrome Quality Metrics

	Newborn MRN	Gestational Age at Birth (weeks)	NAS Diagnosis (P96.1)	3x Finnegan >8	Transfer (yes/no)	Transfer day of life	Transfer to/from?	Birth/Transfer Date	Discharge Date	Hospital LoS
	123456	33	yes	yes	yes	2	To: Hospital A, Dr. X	3/2/2019		
	234567	40	no	no	no	0	n/a	3/5/2019	3/7/2019	n/a
	345678	39	yes	yes	yes	6	To: Hospital A, Dr. Y	3/6/2019		TBD
	456789	41	yes	no	no	0	n/a	3/9/2019	3/20/2019	11
TOTALS	4	38.25	3	2	2	-	-	-	-	11.00

Opioid Use Disorder Quality Metrics

Mother MRN	Screened for SUD w/ validated tool	F11 Dx	Self-reported opioid use	Pos urine tox for opioids	Rx >1month in 3rd trimester	Newborn MRN	Pos newborn tox for opioids	Newborn symptoms of opioid exposure	OUD (yes/no)	Initiate MAT	90 MAT continuity	180 MAT continuity	Discharge Date	PP appoint state date	PP appoint end date	PP appoint. attended
123456	yes	no	no	no	no	789123	no	no	no							
234567	no	yes	no	no	no	891234	no	no	yes	yes	yes	yes	3/5/2019	3/26/2019	4/30/2019	yes
345678	yes	no	yes	yes	no	912345	yes	yes	yes	yes	no	no	3/6/2019	3/27/2019	5/1/2019	no
456789	yes	no	no	no	no	124578	no	no	no							
TOTALS	**3**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**2**	**2**	**1**	**1**	**-**	**-**	**-**	**1**

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