



The California Maternal Data Center (MDC)

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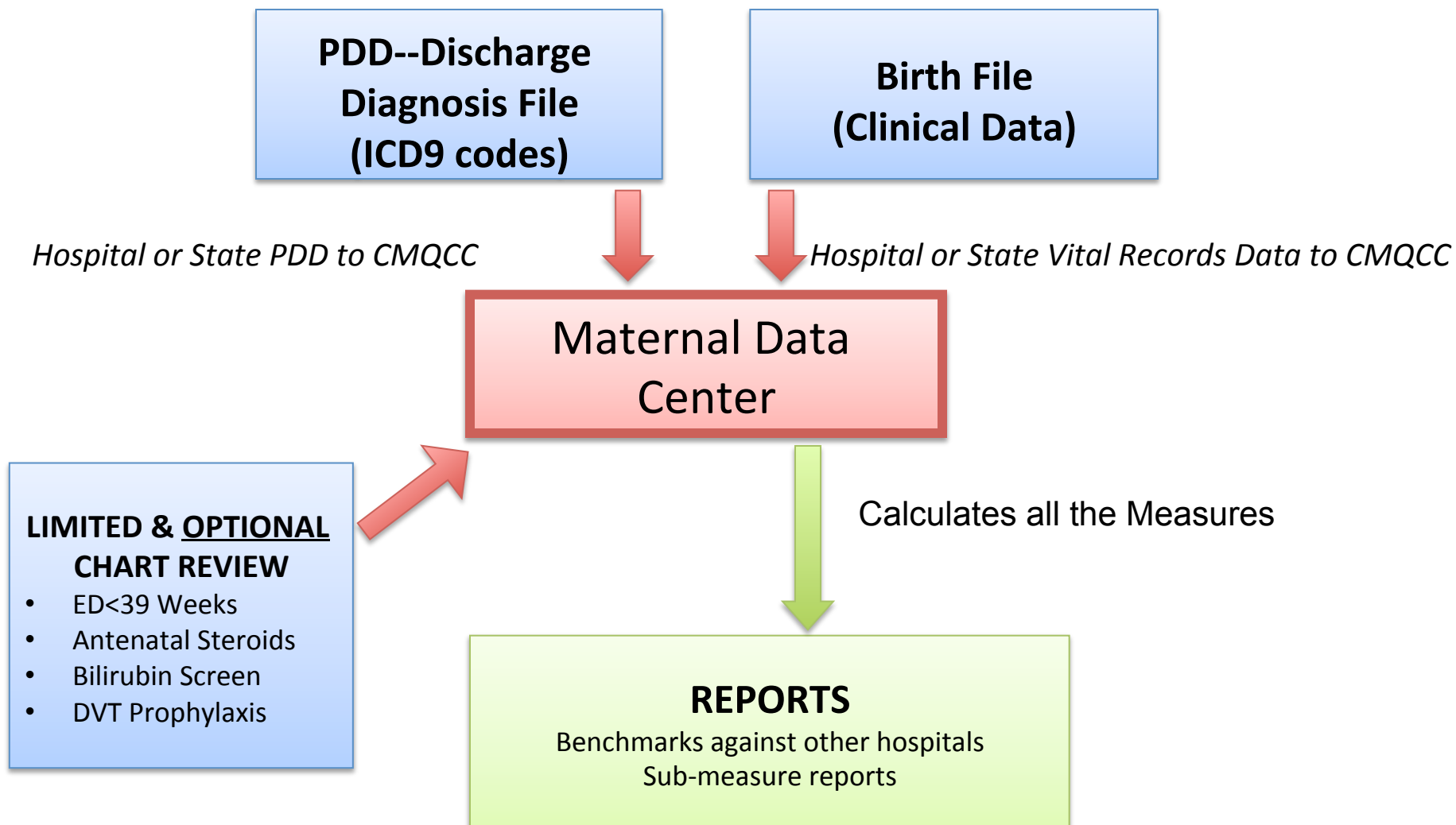
What is the MDC?

A one-stop shop to support hospitals' obstetric quality improvement initiatives and service line management

- Overall hospital performance measures
- Drill-down to the patient level and case review worksheets to identify quality improvement opportunities—for both clinical quality and data quality
- Provider-level statistics—to assess variation within a hospital
- Benchmarking statistics--to compare your hospital to regional, state, and like-hospital peers
- Facilitating reporting to Leapfrog, Cal-HEN and PSF

Maternal Data Center

Includes all Moms and Babies



Two Tracks: Active and View Only

MDC Features	View Only	Active
Hospital-Level Clinical Quality Metrics	✓	✓
Hospital-Level Data Quality Metrics	✓	✓
Provider-Level Metrics		✓
Option for Chart Review Measures (Elective Delivery and Antenatal Steroids)		✓
Statistics on the demographic, clinical characteristics and utilization of hospital maternity population	✓	✓
Statewide benchmarks	✓	✓
Regional, County, Like-Hospital benchmarks		✓
Drill-down patient-level information		✓
Drill-down statistics to identify QI opportunities		✓
Data editing tool		✓
Reporting to Cal-HEN and Patient Safety First		✓
CCS Reports	✓	✓
Timeliness of Data	8-14 months	45 days
Data Source	OSHPD PDD & BC	Hospital PDD & BC
Cost	Free	Free

Participation Requirements

Coordination

- Complete a Participation Agreement with CMQCC
- Appoint Project Coordinator for the hospital.

Data Submissions

- Identify IT staff to upload patient discharge data to the MDC on a monthly or quarterly basis: Best to delegate to department responsible for OSHPD PDD submission—MDC file is almost identical to file already reported to OSHPD.
- Identify staff to perform OPTIONAL chart review (for 1-3% of birth records) for the OPTIONAL measures

Use Results for Clinical and Data QI

- Participate in quality review sessions with CMQCC staff.

MDC Clinical Quality Measures

Labor and Birth Measures

*Requires additional limited chart review

- Elective Delivery <39 Weeks (PC-01)*
- Episiotomy Rate
- OB Trauma (3/4th Laceration)-Cesarean Delivery (AHRQ EXP-2)
- OB Trauma (3/4th Laceration)-Vaginal Delivery w/ Instrument (AHRQ PSI 18)
- OB Trauma (3/4th Laceration)-Vaginal Delivery w/o Instrument (AHRQ PSI 19)
- Cesarean Section--Nulliparous, Term, Singleton, Vertex (PC-02)#
- Cesarean Section--Nulliparous, Term, Singleton, Vertex, Age Adjusted
- Cesarean Section--Term, Singleton, Vertex (AHRQ IQI 21)
- Cesarean Section—Primary (AHRQ IQI 33) #
- Total Cesarean Rate
- Induction Rate
- Failed Induction Rate
- Appropriate DVT Prophylaxis in Women Undergoing C-Section (Leapfrog)*
- Vaginal Birth After Cesarean (VBAC) Rate, All (AHRQ IQI 34)
- Vaginal Birth After Cesarean (VBAC) Rate, Uncomplicated (AHRQ IQI 22)

Newborn Measures

- Newborn Bilirubin Screening Prior to Discharge (Leapfrog)*
- 5 Minute APGAR <7 Among All Deliveries >= 39 weeks
- 5 Minute APGAR <7 in Early Term Newborns
- Birth Trauma - Injury to Neonate (AHRQ PSI 17)
- Unexpected Newborn Complications (Total, Severe, Moderate) (NQF #716) #

Prematurity Measures

- Antenatal Steroids (PC-03)*
- Antenatal Steroids-Leapfrog
- VLBW (<1500g) NOT delivered at a Level III NICU

Severe Maternal Morbidity Measures

- ICU Admissions among Pre-eclampsia Cases*
- Time to Treatment for Pre-eclampsia*
- OB Hemorrhage: Total Transfusions*
- OB Hemorrhage: Number of Massive Transfusions*

Maternal Data Center Screen Shots

Springfield General

[Data Entry Status](#)

Measures

Period: **Q1 2014**

To submit data files or identify cases requiring chart review, click "Data Entry Status" button above.

Hospital Clinical Performance Measures

Elective Delivery <39 Weeks (PC-01)	4.4% *
Cesarean Section Rate-Nullip, Term, Singleton, Vertex (PC-02)	34.5%
Vaginal Birth After Cesarean (VBAC) Rate, Uncomplicated (AHRQ IQI 22)	8.0%
Total Cesarean Section Rate	36.8%
Primary Cesarean Section	26.6%
Failed Induction	13.7%

View **all 31** Hospital Clinical Performance Measures

Provider Performance Measures

Cesarean Births
Elective Deliveries
Vaginal Births

Hospital Data Quality Measures

Missing / Inconsistent Delivery Method	1.1%
Missing / Inconsistent V27 (Outcome of Delivery)	0.2%

View **all 12** Hospital Data Quality Measures

[Approve Mar 2014 CHA HEN Data Release](#)

Hospital Statistics

Demographic Statistics
Delivery Statistics
Maternal Comorbidity Statistics
Baby/Prematurity Statistics
Utilization Statistics
CCS Report

Case Lookup by MRN

Input the MRN below and click the Search button

[MRN Search](#)

View Delivery Logbook

Enter the date of delivery below

[View Logbook](#)

Hospital Clinical Performance Measures: By Name

<div> By Name By Organization By Topic </div> <div> Show: <input type="checkbox"/> Last 12 Months <input checked="" type="checkbox"/> Last 3 Months <input checked="" type="checkbox"/> Last Month </div>				
Measure	Q1 2014 Rate	Mar 2014 Rate	Jul 2012 - Jun 2013 Statewide	Target
3rd & 4th Degree Lacerations in Instrument-Assisted Vaginal Deliveries	2.4%	0.0%	13.4%	
3rd & 4th Degree Lacerations in NON-Instrument-Assisted Vaginal Deliveries	0.3%	1.0%	2.4%	
3rd & 4th Degree Lacerations in Vaginal Deliveries	0.6%	0.9%	3.4%	
5 Minute APGAR <7 Among All Deliveries >39 weeks (HEN)	0.5%	0.0%	0.4%	
5 Minute APGAR <7 in Early Term Newborns (HEN)	0.0%	0.0%	0.4%	
Antenatal Steroids (PC-03)	80.0%	0.0%	N/A	
Appropriate DVT Prophylaxis in Women Undergoing CS	N/A	N/A	N/A	
Birth Trauma - Injury to Neonate (AHRQ PSI 17)	0.0%	0.0%	0.1%	
Cesarean Section Rate-Nullip, Term, Singleton, Vertex (PC-02)	34.5%*	30.6%*	28.5%	
Cesarean Section Rate-Nullip, Term, Singleton, Vertex: Age Adjusted (PC-02)	26.7%*	26.9%*	25.9%	
Cesarean Section Rate-Term, Singleton, Vertex (AHRQ IQI 21)	33.3%	32.5%	29.7%	
Elective Delivery <39 Weeks (PC-01)	4.4%	5.6%	N/A	<5.0%
Episiotomy Rate	9.3%*	3.5%*	9.4%	<12.0%
Exclusive Breastfeeding (PC-05)	N/A	N/A	N/A	
Exclusive Breastfeeding with Mother's Choice (PC-05a)	N/A	N/A	N/A	
Failed Induction	13.7%	7.9%	23.0%	
Induction Rate	17.7%	21.0%	14.3%	
Newborn Bilirubin Screening Prior to Discharge	N/A	N/A	N/A	
OB Hemorrhage Risk Assessment on Admission	N/A	N/A	N/A	
Operative Vaginal Delivery	7.6%	5.5%	6.4%	
Preeclampsia ICU Admissions	N/A	N/A	N/A	
Preeclampsia Total ICU Days	N/A	N/A	N/A	
Primary Cesarean Section	26.6%	23.6%	22.6%	
Timely Treatment for Severe Hypertension	75.0%*	100.0%*	N/A	
Total Cesarean Section Rate	36.8%	35.9%	34.0%	
Transfusions - Massive	N/A	N/A	N/A	
Transfusions - Units Per 1,000 Women	N/A	N/A	N/A	
Unexpected Newborn Complication	3.9%	1.1%	3.5%	
VLBW (<1500g) NOT delivered at a Level III NICU	No Cases	No Cases	0.9%	
Vaginal Birth After Cesarean (VBAC) Rate, All (AHRQ IQI 34)	9.4%	9.1%	14.1%	
Vaginal Birth After Cesarean (VBAC) Rate, Uncomplicated (AHRQ IQI 22)	8.0%	6.9%	14.9%	

CSV (Excel)

31 Hospital Clinical Quality Measures

Choose any measure to see more!

Unexpected Newborn Complications measure demonstrated on next screens

Unexpected Newborn Complication

Newborn Complication

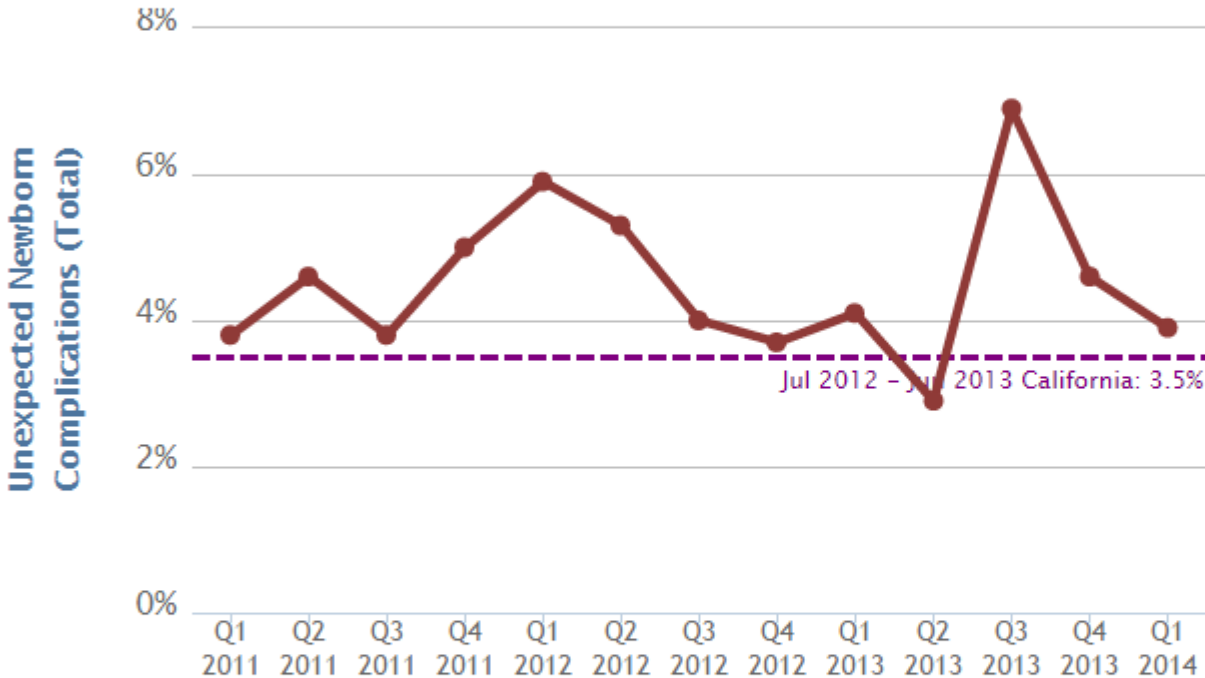
Hospital Trend

Benchmark Comparisons

System Comparisons

Payer Comparisons

Severe or moderate neonatal complications among babies without preexisting conditions (birth defects, prematurity, small for dates, multiples, maternal drug use, etc). [See more detailed information on this measure.](#)



Measure Analysis

Frequency

- ☐ Monthly
- ☒ Quarterly
- ☐ Annually
- ☐ Rolling 3 mos.
- ☐ Rolling 12 mos.

Corrected

Also Display

Download As

PNG (image)

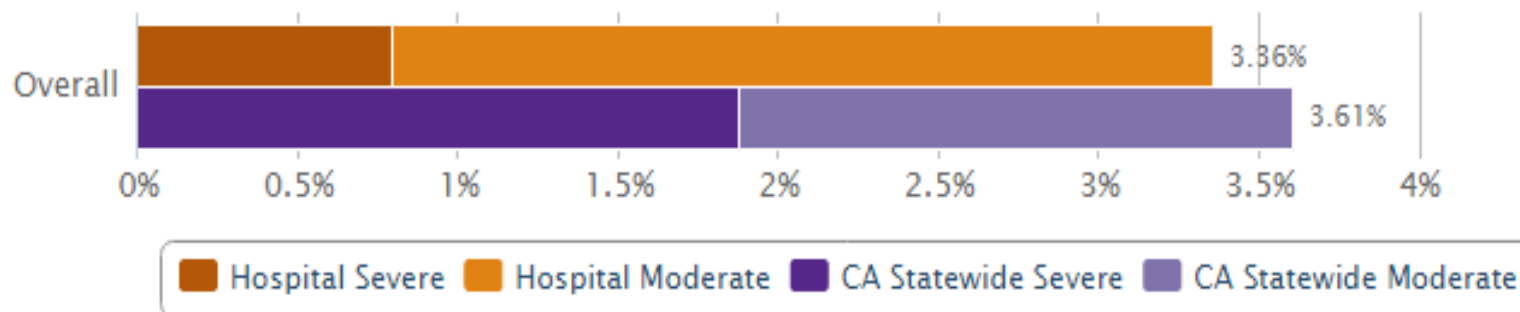
CSV (Excel)

Period	Springfield General
Q1 2014	3.9%
Q4 2013	4.6%
Q3 2013	6.9%
Q2 2013	2.9%

Measure Analysis

Unexpected Newborn Complications

By Morbidity Level

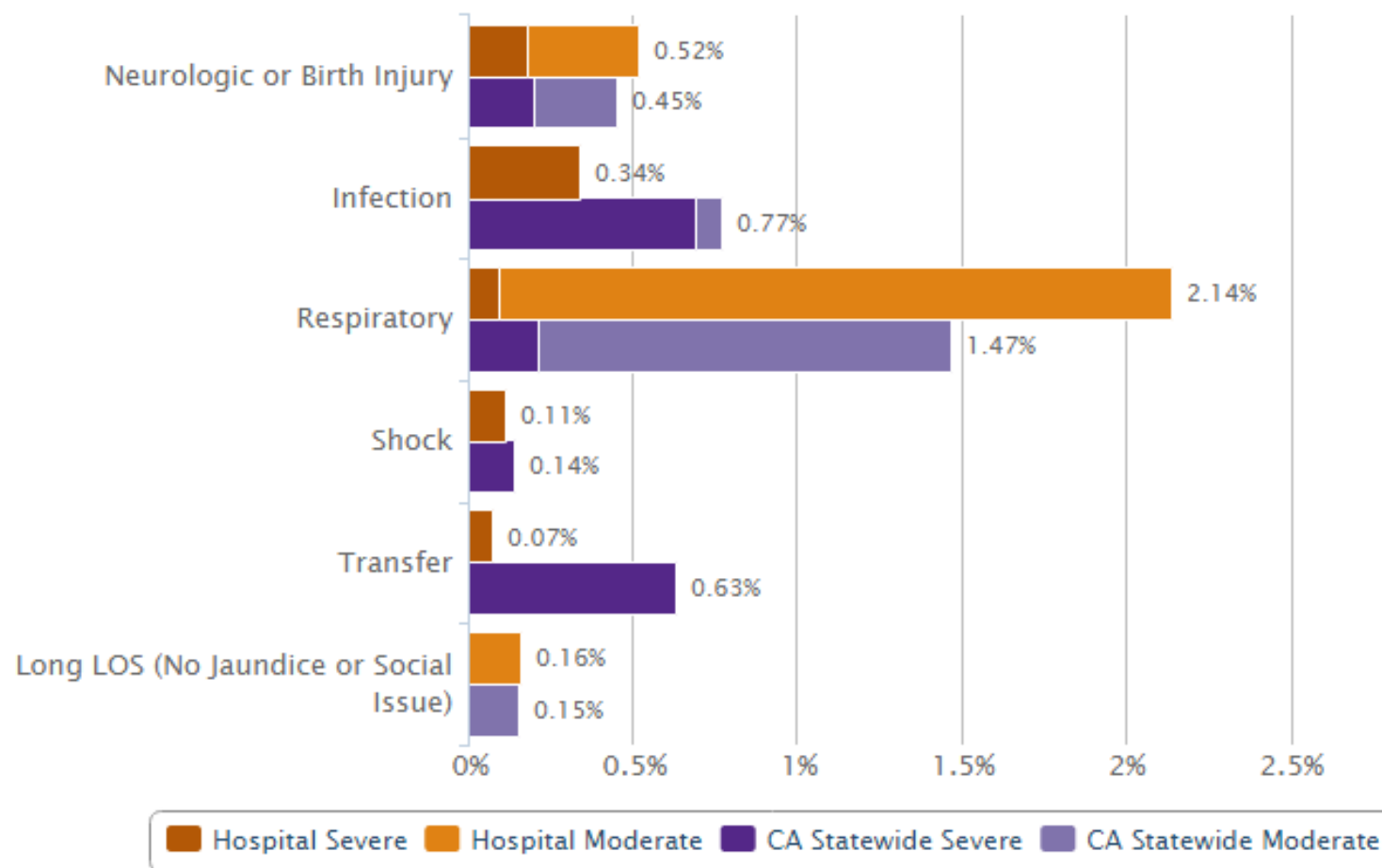


		Lambda Epsilon Hospital	CA Statewide
Overall	Severe	0.8%	1.9%
	Moderate	2.6%	1.7%

Measure Analysis

Unexpected Newborn Complications

By Subcategory



Drill-Down for *Unexpected Newborn Complications*

Unexpected Newborn Complication: Respiratory

Encrypt Case Numbers

[Back to Chart](#)

Discharge Dates: 10/01/2013-12/31/2013

Print

Download CSV

Numerator Cases (5)

Denominator Cases (262)

Displaying **all** 5 numerator cases

Case Number	Level	Category	Gestational Age	LOS	Deliv	Apgars 5' (10')	Diagnoses	Procedures	Disposition (if not "routine")
90967186	Moderate	Respiratory	40	3	CS	9	V30.01, 770.2, 771.81, 766.1, 770.89		
393944391	Moderate	Respiratory	40	3	Vag	9	V30.00, 770.6, V04.81		
430223829	Moderate	Respiratory	38	3	Vag	8	V30.00, 770.6, 774.30		
525639099	Severe	Respiratory	42+0	10	CS	5	V30.01, 770.2, 770.0, 771.81, 775.81, 770.5, 766.1, 774.6	38.92, 96.71, 96.04, 99.29, 99.83	
333577806	Moderate	Respiratory	43+4	3	CS	9	V30.01, 771.81, 770.6, V05.3	93.90, 99.55	

Provider-Level Rates for 11 Clinical Quality Measures

Provider	Total Deliveries	NTSV Cesarean Section		Total CS	
		Rate	D	Rate	D
Oct 2012 – Sep 2013 Statewide		27.6%	163090	33.2%	478231
Sample Hospital	5844	32.2%	2369	37.9%	5844
G5xxxx	52	13.6%	22	9.6%	52
G6xxxx	47	36.8%	19	40.4%	47
G7xxxx	68	20.8%	24	42.6%	68
G8xxxx	60	15.4%	26	21.7%	60
A8xxxx	190	42.7%	75	44.7%	190
A6xxxx	52	35.0%	20	42.3%	52
A5xxxx	2	No Cases	0	100.0%	2
A4xxxx	114	35.3%	51	46.5%	114
A8xxxx	214	18.3%	82	28.0%	214
A9xxxx	481	36.2%	163	43.2%	481

Uploading Data Files

- CMQCC receives Birth Certificate Data from California Office of Vital Records.
- Hospital uploads Admin Data (Patient Discharge Data) for one or more months
- After both files uploaded, linkage occurs instantaneously.
- If additional record review required, notation “Action Needed” appear

DATA STATUS		Upload Supplemental Data		Upload Administrative Data	
	February '13	March '13	April '13	May '13	June '13
Birth Data	✓ <u>Complete</u>	✓ <u>Complete</u>	✓ <u>Complete</u>	✓ <u>Complete</u>	
Admin Data	✓ <u>Complete</u>	✓ <u>Complete</u>	✓ <u>Complete</u>		
Data Linkage	✓ <u>Complete</u>	✓ <u>Complete</u>	✓ <u>Complete</u>		
Elective Delivery	✓ <u>Complete</u>	✓ <u>Complete</u>	✓ <u>Complete</u>		
Antenatal Steroids	✓ <u>Complete</u>	✓ <u>Complete</u>	✓ <u>Complete</u>		
Antenatal Steroids- Leapfrog					
Bilirubin Screening	⚠ <u>Action Needed</u>	⚠ <u>Action Needed</u>	✓ <u>Complete</u>		
DVT Prophylaxis	✓ <u>Complete</u>	✓ <u>Complete</u>	⚠ <u>Action Needed</u>		

Data Entry for Chart Review

- Once the data linkage is complete, the system performs the preliminary analysis for any chart review measures and identifies the subset of charts to be reviewed.
- A worksheet can be printed for use in review
- Data is entered by clicking into this interactive screen

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CHART REVIEW [Print Worksheet](#)

Time Period: Delivery Discharges from 08/01/2012 to 08/31/2012

Chart review is necessary for 4, or 0.8% of all linked deliveries during this period.

- Uncomplicated Patients (After Joint Commission Algorithm Applied)
- 37/38 weeks gestational age AND
- C/S

Remaining to complete: 0

Case Number	Delivery Date	Discharge Date	Gest. Age	Prior Uterine Surgery? [?]		Labor Present? [?]	SROM Before? [?]	Neither Present?	Review Complete?
				Yes	No				
123456	07/26/2013	07/29/2013	38	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Drill Down Information

- Can drill down to see case-level information
- Hover boxes show definitions for ICD-9 codes

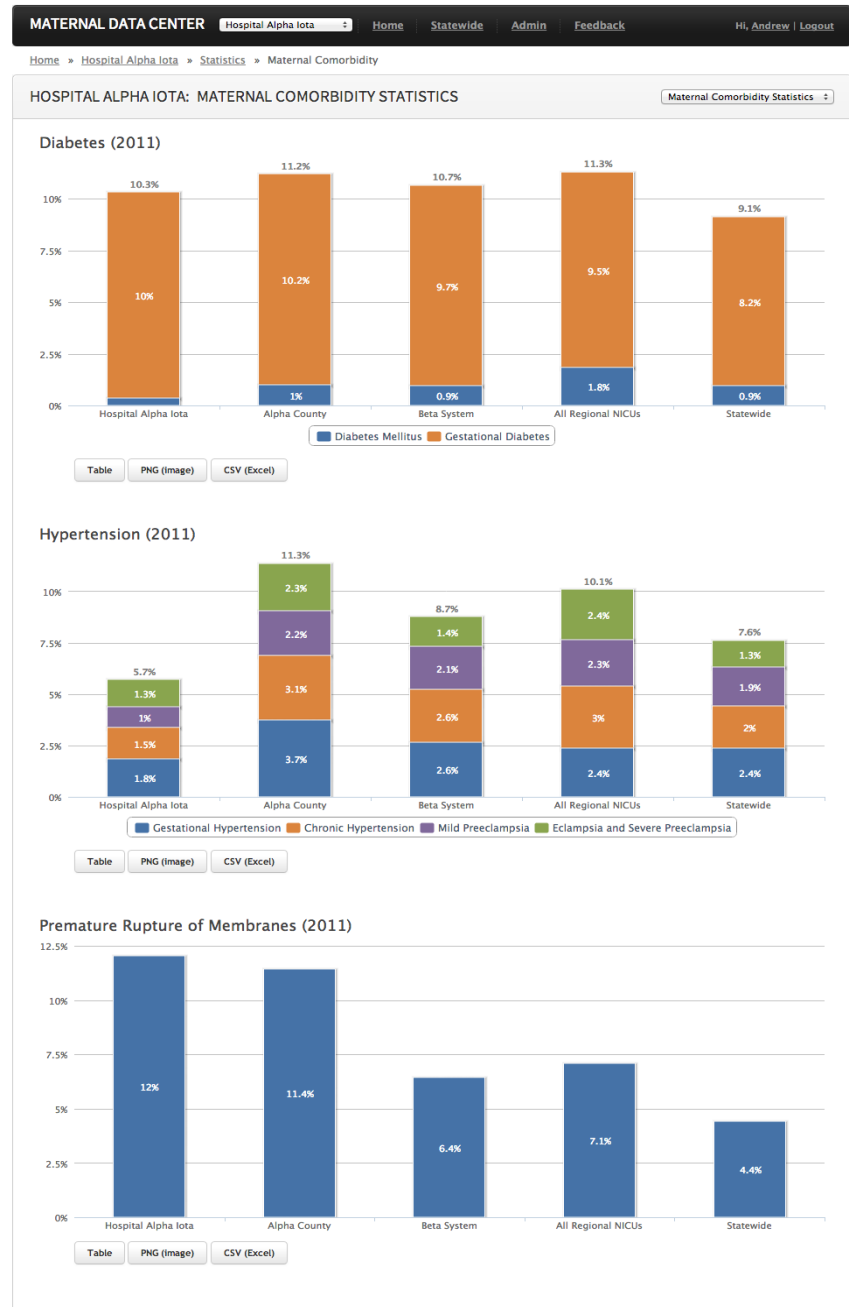
Data Status Report Center Users Hello, Andrew Carpenter Logout				
R 39 WEEKS (JOINT COMMISSION) DRILL DOWN (NUMERATOR CASES) Back to Chart				
10-10/31/2010 (N=6)			PRINT	DOWNLOAD CSV
Gestational Age	Diagnoses	Induced	Cesarean Section	Provider ID
38+4	656.61, 664.01, 659.61, V27.0	Yes	No	
37+5	654.21, 659.61, V27.0	No	Yes	
37+6	654.21, 648.91, 614.8, V02.51, 659.61, V27.0	No	Yes	
38+6	661.21, 659.61, V27.0	Yes	No	
38+2	660.31, 654.21, 663.31, 659.61, V27.0	No	Yes	
37+6	654.21, 663.31, 648.91, V02.51, 659.61, V23.49, V27.0	No	Yes	

Excessive fetal growth, affecting management of mother, delivered, with or without mention of antepartum condition

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Comparative Statistics on:

- Demographic Indicators
- Maternal Conditions
- Delivery Methods
- Prematurity Rates
- Length of Stay



Data Quality Reports

- Identify discrepancies or missing data in Birth Certificate and Discharge data files
- Use to target data performance/quality improvement

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DATA QUALITY MEASURES

Report	Q4 2011 Rate	Dec 2011 Rate	State Average
Missing / Inconsistent Delivery Method	3.1%	4.9%	
Missing / Inconsistent V27 (Outcome of Delivery)	40.0%	40.7%	
Missing / Inconsistent Fetal Presentation	33.6%	34.9%	
Inconsistent Mother's Date of Birth	0.0%	0.0%	
Inconsistent Parity	1.8%	1.6%	
Inconsistent Plurality	0.0%	0.0%	
Errant Cholestasis Coding	N/A	N/A	
Unlinked Mothers	0.0%	0.0%	
Unlinked Babies	0.0%	0.0%	

Data Quality Reports Trend Lines

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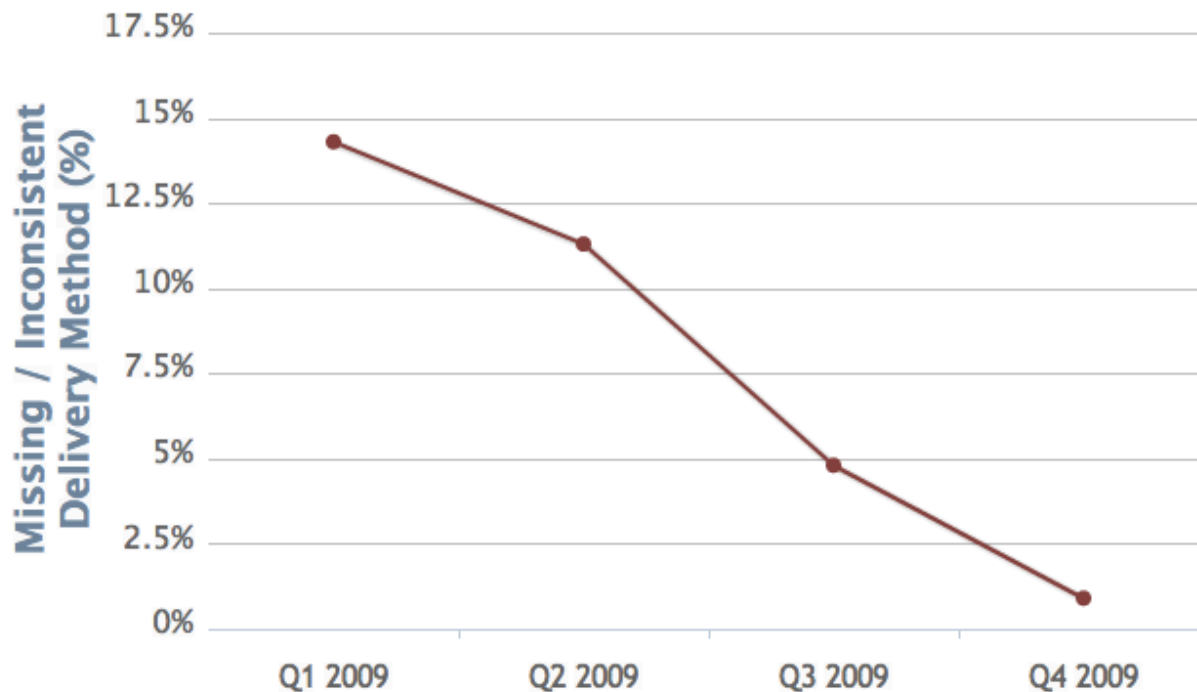
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MISSING / INCONSISTENT DELIVERY METHOD

Missing / Inconsistent Delivery Method

Cases where the BC method of delivery is missing or doesn't match the admin data



Frequency

- ☐ Monthly
- ☒ Quarterly
- ☐ Annually

Download As

[PNG \(image\)](#)

[CSV \(Excel\)](#)

Data Edit Tool: To allow data corrections

EDIT PATIENT ID# 00DCB23D24

Gestational Age

39+2

Use '37+4' to indicate 37 weeks and 4 days;
 Birth certificate value was 38

Diagnoses

V02.51: Carrier or suspected carrier of group B streptococcus x
 648.91: Other current conditions classifiable elsewhere of mother, delivered, with or without mention of antepartum condition x
 V27.0: Outcome of delivery, single liveborn x
 654.21: Previous cesarean delivery, delivered, with or without mention of antepartum condition x

Procedures

Add:

previa

641.01: Placenta previa without hemorrhage, delivered, with or without mention of antepartum condition
 99.2 641.11: Hemorrhage from placenta previa, delivered, with or without mention of antepartum condition
 74.1 663.51: Vasa previa complicating labor and delivery, delivered, with or without mention of antepartum condition
 641.03: Placenta previa without hemorrhage, antepartum condition or complication
 Add: 641.13: Hemorrhage from placenta previa, antepartum condition or complication
 762.0: Placenta previa affecting fetus or newborn
 Save 663.53: Vasa previa complicating labor and delivery, antepartum condition or complication
 663.50: Vasa previa complicating labor and delivery, unspecified as to episode of care or not applicable
 641.10: Hemorrhage from placenta previa, unspecified as to episode of care or not applicable
 641.00: Placenta previa without hemorrhage, unspecified as to episode of care or not applicable

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