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QUALITY CARE COLLABORATIVE

The California Maternal Data Center (CMDC)

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Using Data to Drive Excellence in Maternity Care

CMQCC: **Transforming Maternity Care**

Slide 3

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CMQCC and CPQCC

Mission: Improving care for moms and newborns

California Maternal Quality Care Collaborative (CMQCC)
- Expertise in maternal data analysis
- Developer of QI toolkits
- Host of collaborative learning sessions

California Perinatal Quality Care Collaborative (CPQCC)
- Expertise in data capture from hospitals
- Established secure data center
- Data use agreements in place with 130 hospitals with NICUs
- Model of working with state agencies to provide data of value

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Rationale for Maternal Data Center

- High Volume Service
  - Childbirth the leading reason for hospitalization in U.S.
  - "Normal Newborn" highest volume MS-DRG for 60% of California hospitals

- Changing practice patterns and substantial variation
  - Maternal mortality 5.6/100K to 16.9/100K from 1996-2006
  - Inductions: 9.5% to 22.5% from 1990-2006
  - C-sections: 21% to 33% from 1996-2009

- Elective deliveries <39 Weeks becoming the "hot button" patient safety issue

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Reporting Mandates Coming

- ED<39 weeks measure included in CMS' Hospital Quality Reporting Program for FY 2015 payment determination: data collection beginning with January 2013 discharges

- TJC to require reporting of perinatal set for hospitals that perform minimum volume of deliveries—starting January 2013.

- Medi-Cal has applied for federal grant to test collection and reporting of the perinatal metrics endorsed by CMS, including *ED < 39 Weeks* and *Antenatal Steroids*

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The *Moneyball* Approach to Improving Performance

Change is Possible: Data is Essential

Health System	Results
HCA (National)	▪ ED < 39 weeks ⇩ 55% ▪ Overall NICU admissions ⇩ 14%
Intermountain Health (Utah)	▪ ED < 39 weeks ⇩ 89% ▪ Adverse neonatal events: ⇩ 20-71%
Magee (Pittsburg)	▪ Elective Inductions < 39 weeks ⇩ 64% ▪ Cesarean sections for nullips ⇩ 60%
Ohio (Statewide)	▪ Elective scheduled deliveries ⇩ 80%
North Carolina (Statewide)	▪ ED < 39 weeks ⇩ 43%

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The California Maternal Data Center (CMDC) Project Vision

- Build a statewide data center to collect and report timely maternity metrics—in way that is *low cost, low burden and high value* for hospitals
- Produce metrics that will support QI and L&D service line management
- Improve quality of administrative data
- Facilitate reporting to national performance organizations
- Over time, publicly report select set of robust measures to inform decisions of childbearing women

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CMDC's Clinical Quality Measures

		NQF	Joint Commission	Leapfrog	CMS	Medi-Cal	CHA HEN
Current	Elective Deliveries 37 - 39 week rate	✓	✓	✓	✓	✓	✓
	C-Section rate Term 1st Birth (NTSV)	✓	✓		✓		✓
	Infants < 1500 grams at appropriate level	✓					✓
Soon	Episiotomy rate	✓					
	Newborn Complications rate	✓					
	Antenatal Steroids	✓	✓	✓		✓	✓
	Neonatal Blood Stream Infections	✓	✓				
	Exclusive Breast Milk	✓	✓				

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CMQCC Approach

Minimize hospital burden by using existing data!

(1) Birth Data: Expedited birth certificate file **direct** from Vital Records (CDPH)

(2) Discharge Data: Identical to OSHPD submission BUT:
- More frequent submission than to OSHPD (monthly or quarterly vs. semi-annual)
- SSN stripped
- MRN encrypted during transmission

(3) Clinical Data for *ED <39 weeks* measure (2 only):
- Spontaneous Rupture of Membranes
- Active Labor

> Solution: CMDC applies an initial algorithm to significantly reduce the number of patient records requiring very limited chart review (3-6% of total delivery volume)

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California Maternal Data Center Web Tool

Explore the tool for yourself at:
https://demo.datacenter.cmqcc.org

OR

Screen shots at end of this presentation

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Why Participate?

- Drill-down patient information to facilitate QI
- Statewide, regional and system-wide benchmarks
- Reporting mandates for perinatal measures coming
  - ED<39 weeks measure included in Hospital IQR Program for FY 2015 payment determination: data collection beginning with January 2013 discharges
  - Likelihood that TJC will require reporting of perinatal set
  - Medi-Cal Quality Dashboard under development
- Data quality reports to identify coding issues that impact performance
- Cost effective method for generating perinatal quality metrics and facilitating reporting (Leapfrog, CHA HEN)

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Data Uses

- Confidential Hospital-level reports for benchmarking and service line management
- Aggregate analyses showing trends and associations between practices and outcomes
- With explicit hospital authorization, transmittal of aggregate metrics to external organizations (e.g., Patient Safety Collaborative, CHA HEN)
- Eventually, reporting of select measure set to inform consumer choice (like CMS Hospital Compare). "New" measure reporting to occur only after:
  - One year quality improvement cycle
  - Thorough review of measure validity by Data & Measures Group
  - Approval by multi-stakeholder Steering Committee

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Participation Requirements

Coordination
- Complete a Participation and Data Use Agreement with CMQCC
- Appoint Project Coordinator for the hospital.

Data Submissions
- Identify IT staff to upload patient discharge data to the CMDC on a monthly or quarterly basis: Best to delegate to department responsible for OSHPD PDD submission
- Identify staff to complete any required manual linkages and medical chart review for the 3-6% of birth records that require additional information for the ED < 39 weeks measure.

Use Results for Clinical and Data QI
- Participate in quality review sessions with CMQCC staff.

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CMQCC Website

For more information on CMDC:
- Step-by-step participation instructions
- Data Specifications
- Interactive Demo Site

Go to www.cmqcc.org

Select California Maternal Data Center on left-side toolbar

Contact

Anne Castles at acastles@cmqcc.org or 626-639-3044.

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The Web Tool Home Page

Uploading Data Files

- Hospital uploads Discharge Data for one or more months
- CMQCC receives Birth Data directly from the Center for Health Statistics
- After both files uploaded, linkage occurs instantaneously.
- If additional matching or record review required, notation "Action Needed" appear

Data Entry for Chart Review

- Once the data linkage is complete, the system performs the preliminary analysis for the Elective Delivery Measure and identifies ~6% of charts to be reviewed.
- A worksheet can be printed to give to Medical Records and use for review
- Data is entered by clicking into this interactive screen

Reporting Center

- Each measure is displayed graphically and as a data table
- Each measure can be downloaded either as an image for use in presentations or as a data file to be used in reports

Drill Down Information

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

Data Quality Reports

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

Targeting QI Activities

- What is driving your *Elective Delivery<39 Weeks* Rate?