CMQCC
CALIFORNIA MATERNAL
QUALITY CARE COLLABORATIVE

Perinatal Quality Collaboratives: State and National Successes

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Objectives:

- Describe the national initiatives to improve safety and performance in OB
- Understand the power of perinatal collaboratives
- Describe the California experience with perinatal collaboartives
- Present the California Maternal Data Center and how it can be used to drive maternal QI efforts.

Presenter Disclosure(s):

- No conflicts

Acknowledgement of Support:

- California HealthCare Foundation
- Centers for Disease Control
- California Department of Public Health, Maternal Child Health Branch (Title V)

CPQCC and CMQCC

California Perinatal Quality Care Collaborative (CPQCC)

- Expertise in data capture from hospitals
- Established Perinatal Data Center in 1996, works with VON
- Data use agreements in place with 130 hospitals with NICUs
- Model of working with state agencies to provide data of value

California Maternal Quality Care Collaborative (CMQCC)

- Expertise in maternal data analysis
- Developer of QI toolkits: Early Elective Delivery, OB Hemorrhage, Preeclampsia, Primary Cesarean
- Host of collaborative learning sessions
- Established Maternal Data Center in 2011

California Perinatal Quality Care Collaborative

- Multi-stakeholder (providers, state agencies, public groups like MOD)
- Pioneered partnering with state agencies to use state data for QI
- Lead neonatal quality and safety collaboratives (>10 QI initiatives since 1996)
- Data submission from 131 of 136 Level 2 and Level 3 NICUs in CA (~17,000 infants), started as a branch of VON

California Perinatal Quality Care Collaborative
QI Initiatives since 2000

- Antenatal Steroids
- Postnatal Steroids
- Neonatal Hospital Acquired Infection Prevention
- Improving Initial Lung Function
- VLBW Nutritional Support Parts 1&2
- Perinatal Group B Streptococcus
- Severe Hyperbilirubinemia Prevention
- Perinatal HIV Prevention
- Delivery Room Management of the VLBW
- Care and Management of the Late Preterm Infant

California Maternal Quality Care Collaborative

CMQCC is a multi-stakeholder organization that drives improvement in maternal and infant outcomes through rapid-cycle data analytics and collaborative actions.

- Development and validation of perinatal quality metrics and QI tools
- Lead (with partners) maternal quality and safety collaboratives
- QI implementation to scale: all 260 CA maternity hospitals
- All driven by the California Maternal Data Center

CMQCC Key Partner/Stakeholders

State Agencies:

- MCAH, Dept Public Health
- OSHPD Healthcare Information Division
- Office of Vital Records (OVR)
- Regional Perinatal Programs of California (RPPC)
- DHCS, Medi-Cal

Public and Consumer Groups

- California Hospital Accountability and Reporting Taskforce (CHART)
- California HealthCare Foundation
- Kaiser Family Foundation
- March of Dimes (MOD)

Professional groups

- American College of Obstetrics and Gynecology (ACOG)
- Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN)
- American College of Nurse Midwives (ACNM),
- American Academy of Family Physicians (AAFP)

Key Medical and Nursing Leaders

- Universities and Hospital Systems
- Kaisers, Sutter, Sharp, Dignity, Scripps, Providence, Public hospitals,

CMQCC Key Partner/Stakeholders (con't)

Hospital Associations:

- California Hospital Association / HQI
- Regional Hospital Associations

Payers

- Aetna
- Anthem Blue Cross
- Blue Shield
- Cigna
- Health Net

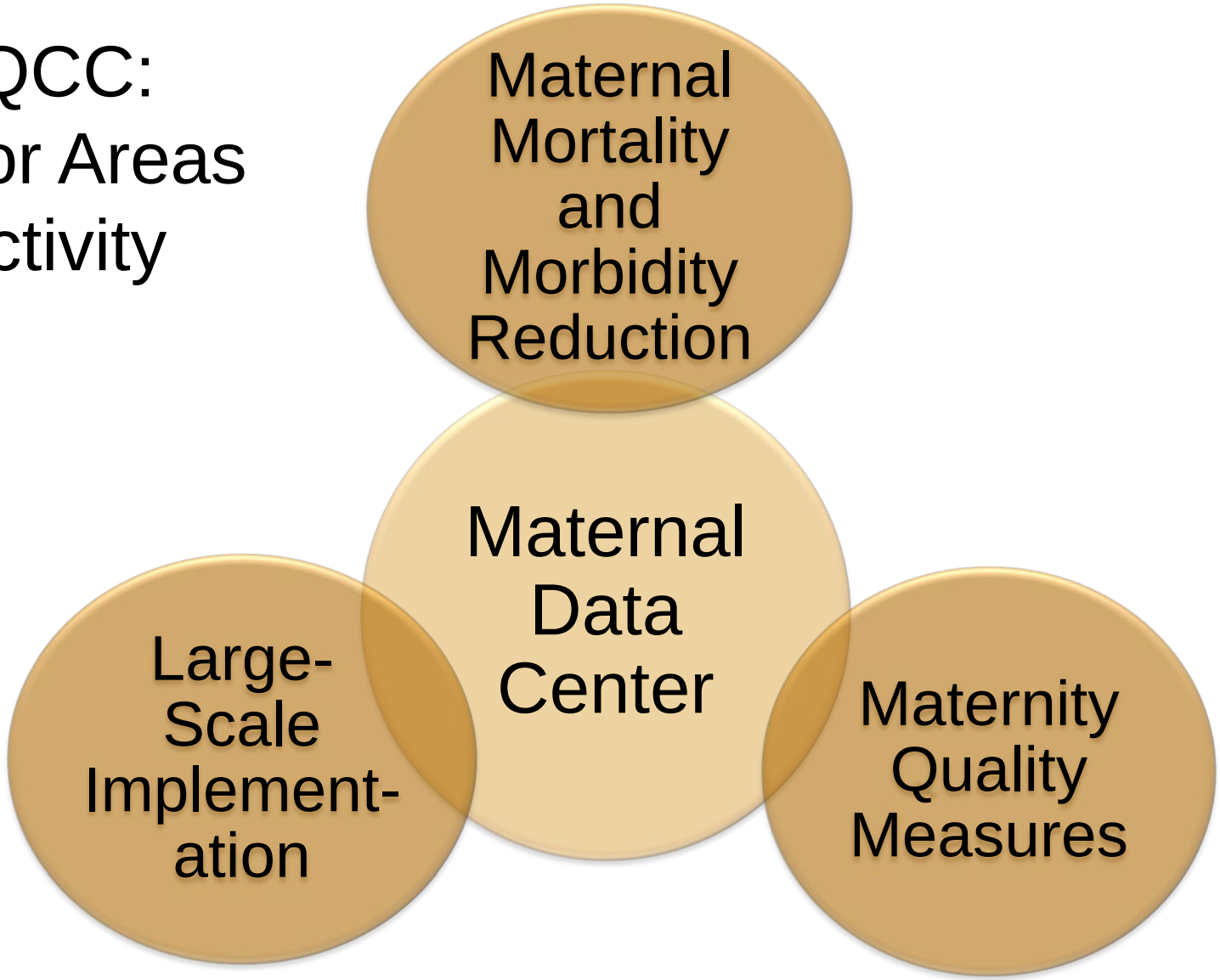
Purchasers

- CALPERS (State and local government employees and retirees)
- Medi-Cal (for managed care plans)
- Pacific Business Group on Health/ Silicon Valley Employers Forum
- Cover California (ACA entity)

<<Considerations>>

- Importance of including as many stakeholders as possible in the collaborative
- Creating value for each stakeholder—thinking thru “what can the collaborative do for each stakeholder category?”

CMQCC: Major Areas of Activity



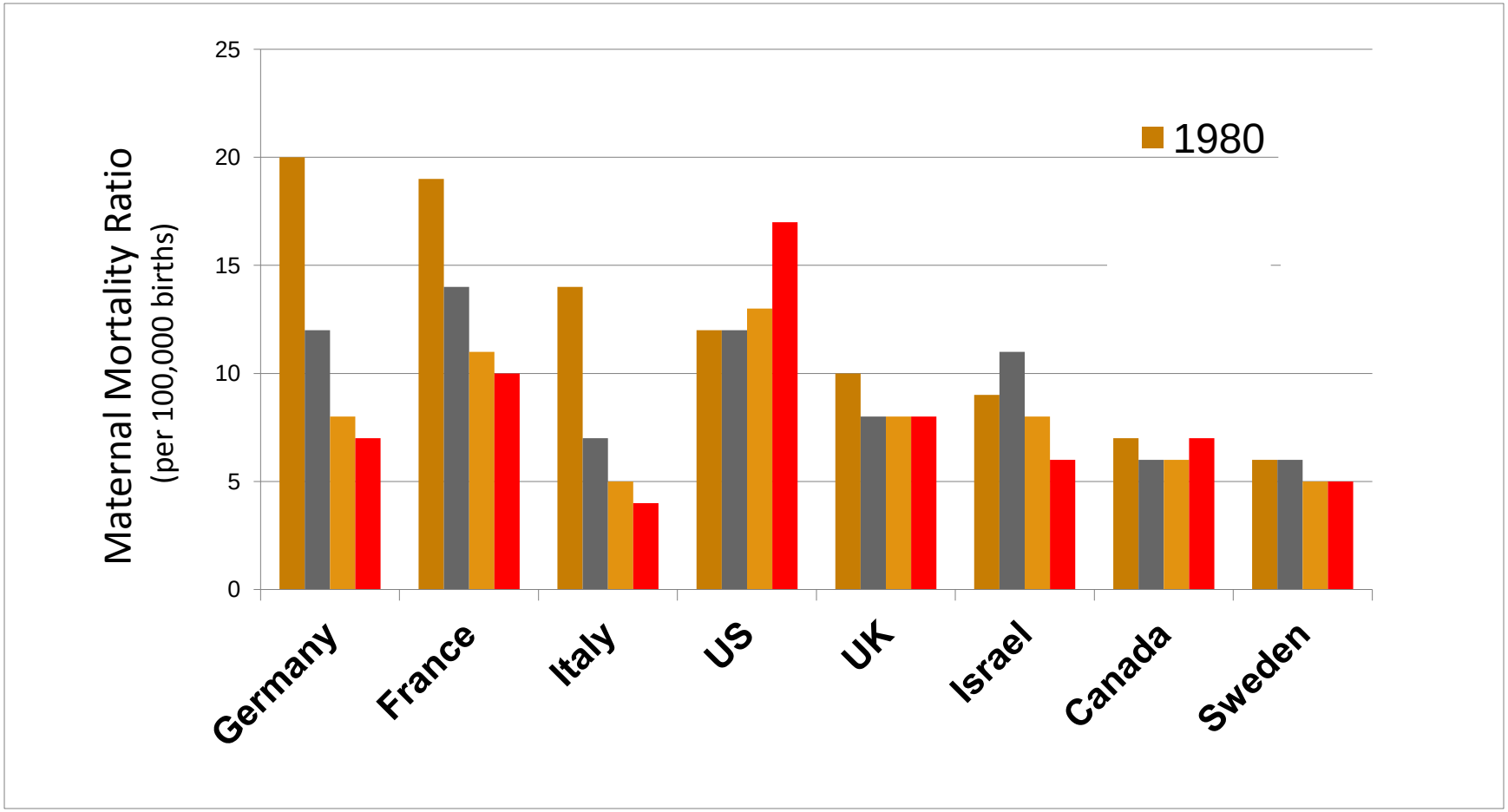
<<Considerations>>

- Important for Quality Collaboratives to do BOTH performance and safety projects
- Maximize stakeholder engagement
- Builds recognition and respect

Maternal Mortality and Morbidity Reduction

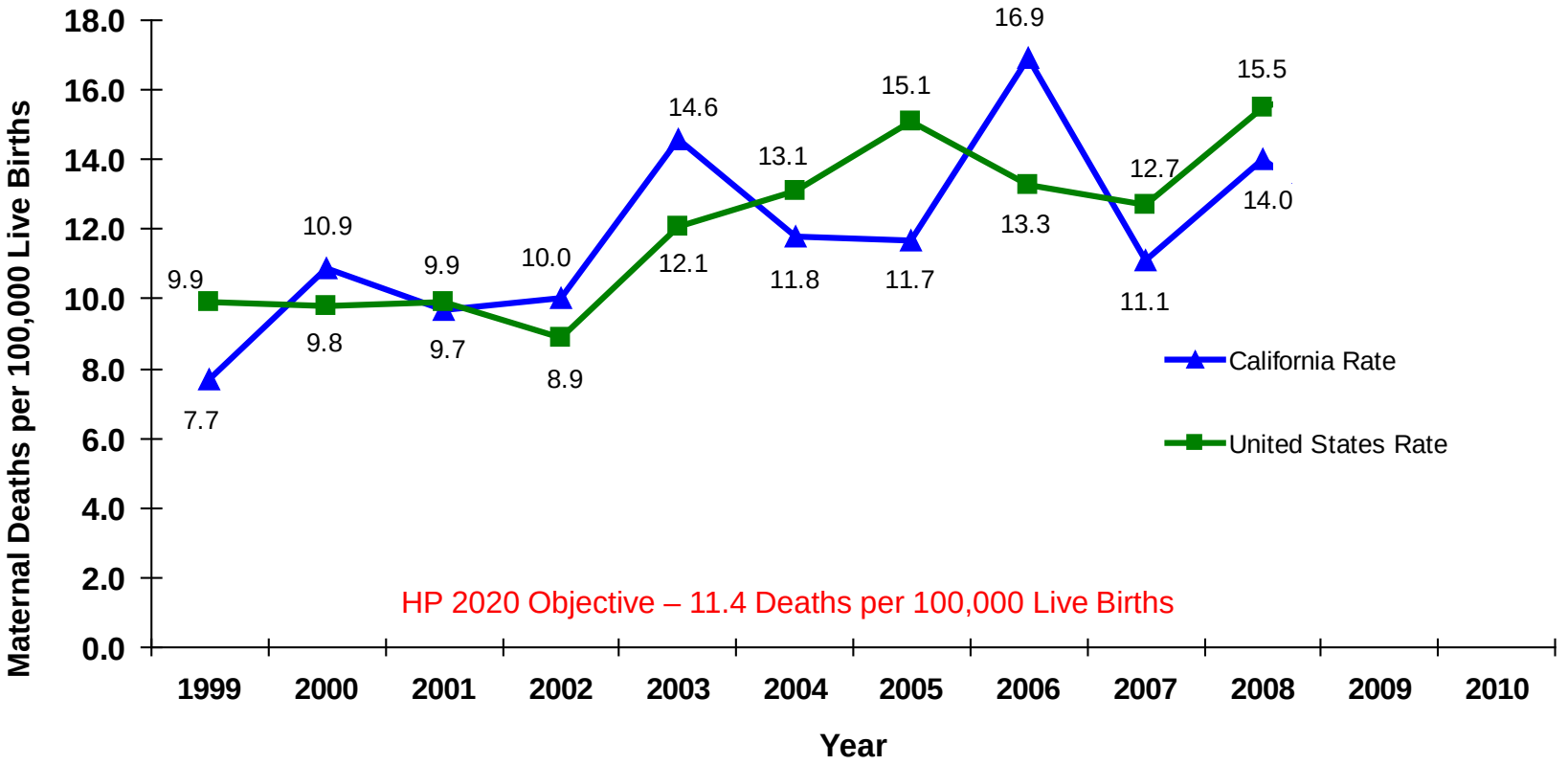
- Ongoing reviews of pregnancy-related deaths
  - To identify causes and improvement opportunities
  - Important driver of QI toolkits
  - Severe maternal morbidity represents an accessible more frequent metric

Maternal Mortality Ratios in Selected Countries over the Past 30 Years

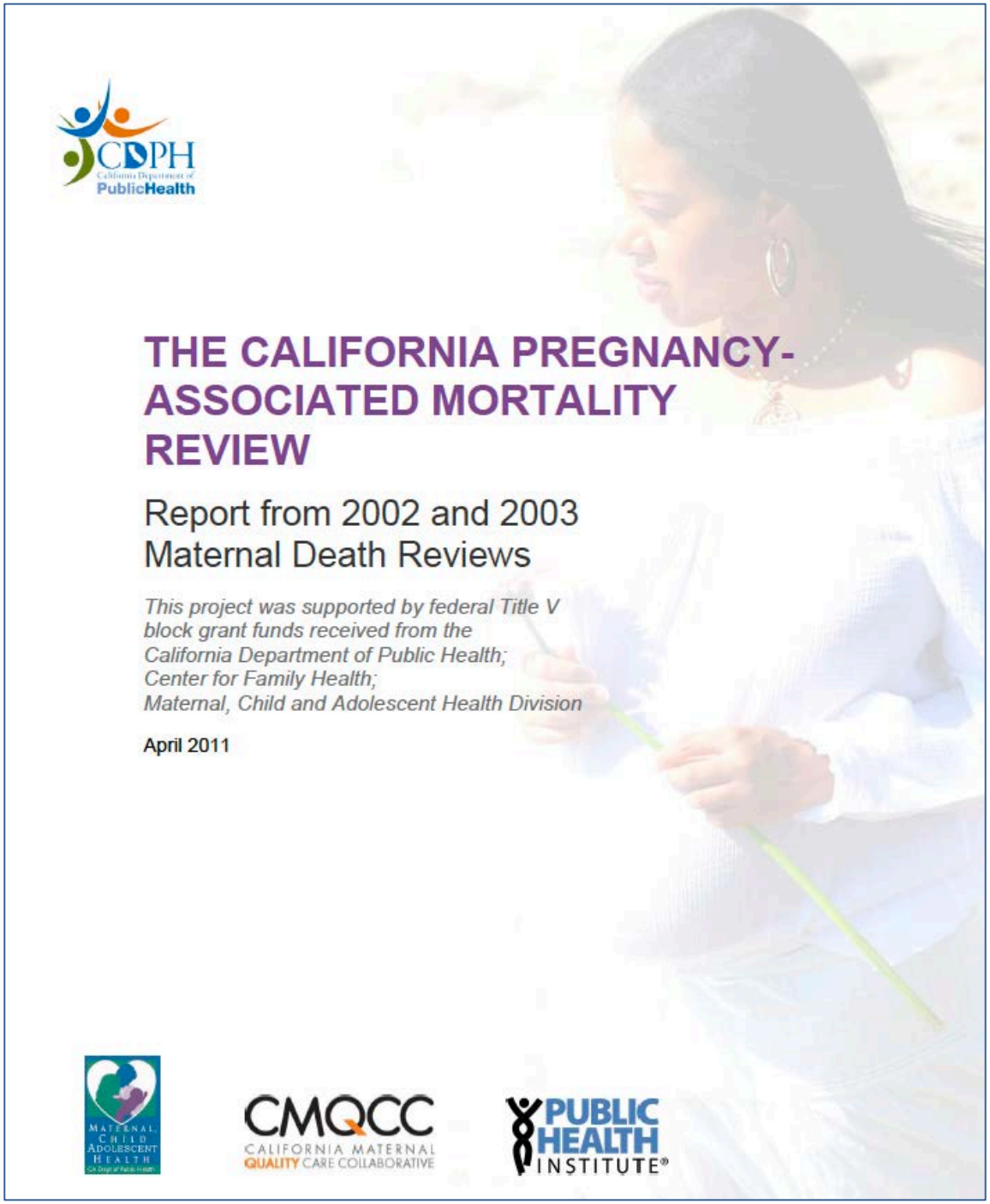


Hogan et al, Lancet 2010; 375:

Maternal Mortality Rate, California and United States; 1999-2010



SOURCE: State of California, Department of Public Health, California Birth and Death Statistical Master Files, 1999-2010. Maternal mortality for California (deaths ≤ 42 days postpartum) was calculated using ICD-10 cause of death classification (codes A34, O00-O95,O98-O99) for 1999-2010. United States data and HP2020 Objective were calculated using the same methods. U.S. maternal mortality rates are published by the National Center for Health Statistics (NCHS) through 2007 only. Rates for 2008-2010 were calculated using NCHS Final Birth Data (denominator) and CDC Wonder Online Database for maternal deaths (numerator). Accessed at http://wonder.cdc.gov/ucd-icd10.html on Apr 17, 2013 8:00:39 PM. Produced by California Department of Public Health, Center for Family Health, Maternal, Child and Adolescent Health Division, April, 2013.



THE CALIFORNIA PREGNANCY-ASSOCIATED MORTALITY REVIEW

Report from 2002 and 2003 Maternal Death Reviews

This project was supported by federal Title V block grant funds received from the California Department of Public Health; Center for Family Health; Maternal, Child and Adolescent Health Division

April 2011

CA-PAMR: Chance to Alter Outcome

Grouped Cause of Death; 2002-2004 (N=145)

Grouped Cause of Death	Chance to Alter Outcome			
	Strong / Good (%)	Some (%)	None (%)	**Total** N (%)
Obstetric hemorrhage	69	25	6	16 (11)
Deep vein thrombosis/ pulmonary embolism	53	40	7	15 (10)
Sepsis/infection	50	40	10	10 (7)
Preeclampsia/eclampsia	**50**	**50**	**0**	**25 (17)**
Cardiomyopathy and other cardiovascular causes	25	61	14	28 (19)
Cerebral vascular accident	22	0	78	9 (6)
Amniotic fluid embolism	0	87	13	15 (10)
All other causes of death	46	46	8	26 (18)
Total (%)	**40**	**48**	**12**	**145**

Dominance of Provider QI Opportunities: Hemorrhage and Preeclampsia

- California Pregnancy Associated Mortality Reviews
  - Missed triggers/risk factors: abnormal vital signs, pain, altered mental status/lack of planning for at risk patients
  - Underuti[Present in >95% of cases]tments
  - Difficulties getting physician to the bedside
  - "Location of care" issues involving Postpartum, ED and PACU
- University of Illinois Regional Perinatal Network
  - Failure to identify high-risk status
  - Incompl[Present in >90% of cases]t

CDPH/CMQCC/PHI. The California Pregnancy-Associated Mortality Review (CA-PAMR): Report from 2002 and 2003 Maternal Death Reviews. 2011 (available at: CMQCC.org)

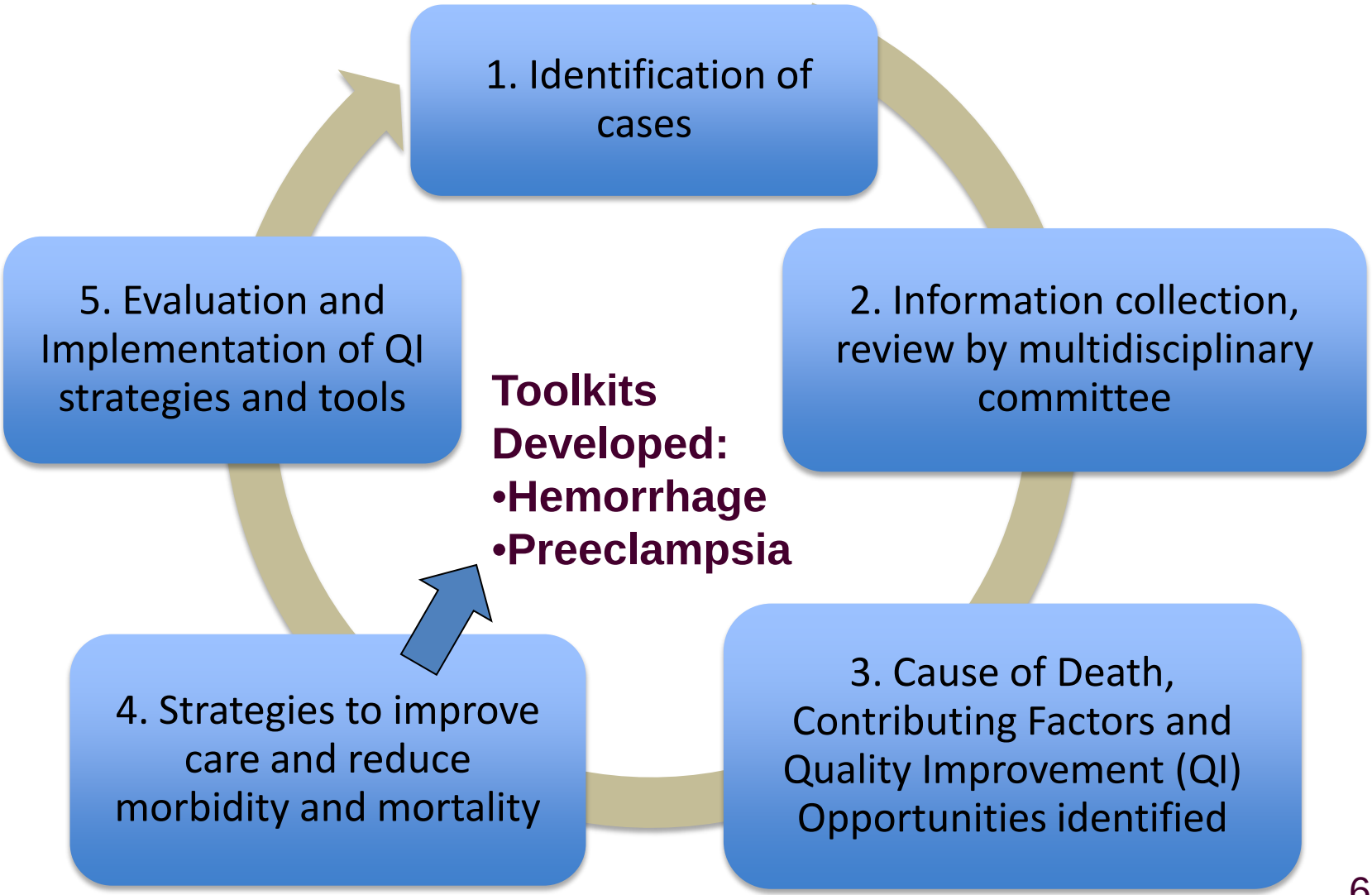
Geller SE etal. The continuum of maternal morbidity and mortality: Factors associated with severity. Am J Obstet Gynecol 2004; 191: 939-44

Maternal Mortality and Severe Morbidity

Approximate distributions, compiled from multiple studies

Cause	Mortality (1-2 per 10,000)	ICU Admit (1-2 per 1,000)	Severe Morbid (1-2 per 100)
VTE and AFE	15%	5%	2%
Infection	10%	5%	5%
Hemorrhage	15%	30%	45%
Preeclampsia	15%	30%	30%
Cardiac Disease	25%	20%	10%

California Pregnancy-Associated Mortality Review (CA-PAMR) Quality Improvement Review Cycle



A California Toolkit to Transform Maternity Care

Improving Health Care Response to Obstetric Hemorrhage

THIS COLLABORATIVE PROJECT WAS DEVELOPED BY:

THE OBSTETRIC HEMORRHAGE TASK FORCE
THE MATERNAL QUALITY IMPROVEMENT PANEL
CALIFORNIA MATERNAL QUALITY CARE COLLABORATIVE
MATERNAL, CHILD AND ADOLESCENT HEALTH DIVISION; CENTER FOR FAMILY HEALTH
CALIFORNIA DEPARTMENT OF PUBLIC HEALTH

v2.0 available soon

CMQCC PREECLAMPSIA TOOLKIT
PREECLAMPSIA CARE GUIDELINES
CDPH-MCAH Approved: 12/20/13

ERRATA 5.13.14

A California Toolkit to Transform Maternity Care

Improving Health Care Response to Preeclampsia: A California Quality Improvement Toolkit

THIS COLLABORATIVE PROJECT WAS DEVELOPED BY:

THE PREECLAMPSIA TASK FORCE

CALIFORNIA MATERNAL QUALITY CARE COLLABORATIVE

MATERNAL, CHILD AND ADOLESCENT HEALTH DIVISION; CENTER FOR FAMILY HEALTH

CALIFORNIA DEPARTMENT OF PUBLIC HEALTH

www.CMQCC.org

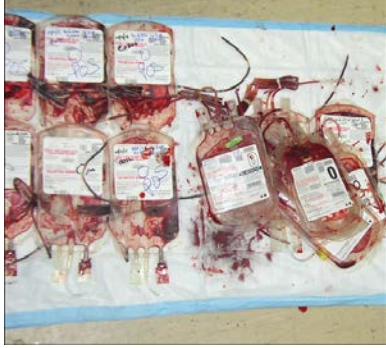
CMQCC **Obstetric Hemorrhage Care Guidelines: Table Chart Format** Release 1.2 6/16/09

	Assessments	Meds/Procedures	Blood Bank
Stage 0	**Every woman in labor/giving birth**		
Stage 0 focuses on risk assessment and active management of the third stage.	• Assess every woman for **risk factors** for hemorrhage • **Ongoing quantitative evaluation of blood loss** on every birth	**Active Management 3rd Stage:** • **Oxytocin** IV infusion or 10u IM • **Fundal Massage**- vigorous, 15 seconds min.	• If **Medium Risk:**T&Scr • If **High Risk:** T&C 2 U • If **Positive Antibody Screen** (prenatal or current, exclude low level anti-D from RhoGam):T&C 2 U
Stage 1	**Blood loss: >500 ml vaginal or >1000 ml Cesarean, or VS changes (by >15% or HR ≥110, BP ≤85/45, O2 sat <95%)**		
Stage 1 is short: activate hemorrhage protocol, initiate preparations and give Methergine IM.	• Activate OB Hemorrhage Protocol and Checklist • Notify Charge nurse, Anesthesia Provider • VS, O2 Sat q5' • Calculate **cumulative** blood loss q5-15' • **Weigh** bloody materials • Careful inspection with good exposure of vaginal walls, cervix, uterine cavity, placenta	• **IV Access:** at least 18gauge • Increase **Oxytocin** rate, and repeat **fundal massage** • **Methergine** 0.2mg IM (if not hypertensive) May repeat if good response to first dose, BUT otherwise **move on** to 2nd level uterotonic drug (see below) • Empty bladder: straight cath or place foley with urimeter	• **T&C 2 Units PRBCs** (if not already done)
Stage 2	**Continued bleeding with total blood loss under 1500ml**		
Stage 2 is focused on sequentially advancing through medications and procedures, mobilizing help and Blood Bank support, and keeping ahead with volume and blood products.	**OB back to bedside** (if not already there) • **Extra help**: 2nd OB, Rapid Response Team (per hospital), assign roles • VS & **cumulative** blood loss q 5-10 min • Weigh bloody materials • **Complete evaluation** of vaginal wall, cervix, placenta, uterine cavity • Send additional labs, including DIC panel • If in Postpartum: Move to L&D/OR • Evaluate for special cases: -Uterine Inversion -Amn. Fluid Embolism	**2nd Level Uterotonic Drugs:** • **Hemabate** 250 mcg IM or • **Misoprostol** 800-100 mcg PR **2nd IV Access** (at least 18gauge) Bimanual massage **Vaginal Birth:** (typical order) • Move to OR • Repair any tears • D&C: r/o retained placenta • Place intrauterine balloon • Selective Embolization (Interventional Radiology) **Cesarean Birth:** (still intra-op) (typical order) • Inspect broad lig, posterior uterus and retained placenta • B-Lynch Suture • Place intrauterine balloon	• **Notify Blood Bank of OB Hemorrhage** • **Bring 2 Units PRBCs to bedside, transfuse per clinical signs – do not wait for lab values** • Use blood warmer for transfusion • Consider thawing 2 FFP (takes 35+min), use if transfusing >2u PRBCs • Determine availability of additional RBCs and other Coag products
Stage 3	**Total blood loss over 1500ml, or >2 units PRBCs given or VS unstable or suspicion of DIC**		
Stage 3 is focused on the Massive Transfusion protocol and invasive surgical approaches for control of bleeding.	• **Mobilize team** -Advanced GYN surgeon -2nd Anesthesia Provider -OR staff -Adult Intensivist • **Repeat labs** including coags and ABG's • Central line • Social Worker/ family support	• **Activate Massive Hemorrhage Protocol** • Laparotomy: -B-Lynch Suture -Uterine Artery Ligation -Hysterectomy • Patient support -Fluid warmer -Upper body warming device -Sequential compression stockings	**Transfuse Aggressively** Massive Hemorrhage Pack • Near 1:1 PRBC:FFP • 1 PLT pheresis pack per 6units PRBCs **Unresponsive Coagulopathy:** After 10 units PRBCs and full coagulation factor replacement: may consider **rFactor VIIa**

California Maternal Quality Care Collaborative (CMQCC): Hemorrhage Taskforce (2009) visit: www.CMQCC.org for details
Programs funded by grants from the California Department of Public Health, Center for Family Health, Maternal, Child and Adolescent Health Division

CMQCC OB Hemorrhage Care Guidelines

www.CMQCC.org



STAGE 1: OB Hemorrhage

Cumulative Blood Loss >500ml vaginal birth or >1000ml C/S -OR- Vital signs >15% change or HR ≥110, BP ≤85/45, O2 sat <95% -OR- Increased bleeding during recovery or postpartum

MOBILIZE	ACT	THINK
Primary nurse, Physician or Midwife to: ☐ Activate OB Hemorrhage Protocol and Checklist **Primary nurse to:** ☐ Notify obstetrician (in-house and attending) ☐ Notify charge nurse ☐ Notify anesthesiologist	**Primary nurse:** ☐ Establish IV access if not present, at least 18 gauge Increase IV fluids rates (Lactated Ringers preferred) and increase Oxytocin rate (500 mL/hour of 10-40 units/1000mL solution), Titrate Oxytocin infusion rate to uterine tone ☐ Continue vigorous fundal massage ☐ Administer Methergine 0.2 mg IM per protocol (if not hypertensive), give once, if no response, move to alternate agent; if good response, may give additional doses q 2 hr ☐ Vital Signs, including O2 sat & level of consciousness (LOC) q 5 minutes ☐ Weigh materials, calculate and record cumulative blood loss q 5-15 minutes ☐ Administer oxygen to maintain O2 sats at >95% ☐ Empty bladder: straight cath or place Foley with urimeter ☐ Type and Crossmatch for 2 units Red Blood Cells STAT (if not already done) ☐ Keep patient warm **Physician or midwife:** ☐ Rule out retained Products of Conception, laceration, hematoma **Surgeon (if cesarean birth and still open)** ☐ Inspect for uncontrolled bleeding at all levels, esp. broad ligament, posterior uterus, and retained placenta	Consider potential etiology: • Uterine atony • Trauma/Laceration • Retained placenta • Amniotic Fluid Embolism • Uterine Inversion • Coagulopathy • Placenta Accreta • Uterine Rupture **Once stabilized:** Modified Postpartum management with increased surveillance

If: Continued bleeding or Continued Vital Sign instability, and <1500 mL cumulative blood loss proceed to STAGE 2

These tools are adapted for each hospital's circumstances

123(5):973-977, May 2014

OBSTETRICS & GYNECOLOGY

Current Commentary

The National Partnership for Maternal Safety

Mary E. D'Alton, MD, Elliott K. Main, MD, M. Kathryn Menard, MD, and Barbara S. Levy, MD

Recognition of the need to reduce maternal mortality and morbidity in the United States has led to the creation of the National Partnership for Maternal Safety. This collaborative, broad-based initiative will begin with three priority bundles for the most common preventable causes of maternal death and severe morbidity: obstetric hemorrhage, severe hypertension in pregnancy, and peripartum venous thromboembolism. In addition, three unit-improvement bundles for obstetric services were identified: a structured approach for the recognition of early warning signs and symptoms, structured internal case reviews to identify systems improvement opportunities, and support tools for patients, families, and staff that experience an adverse outcome. This article details the formation of the National Partnership for Maternal Safety and introduces the initial priorities.

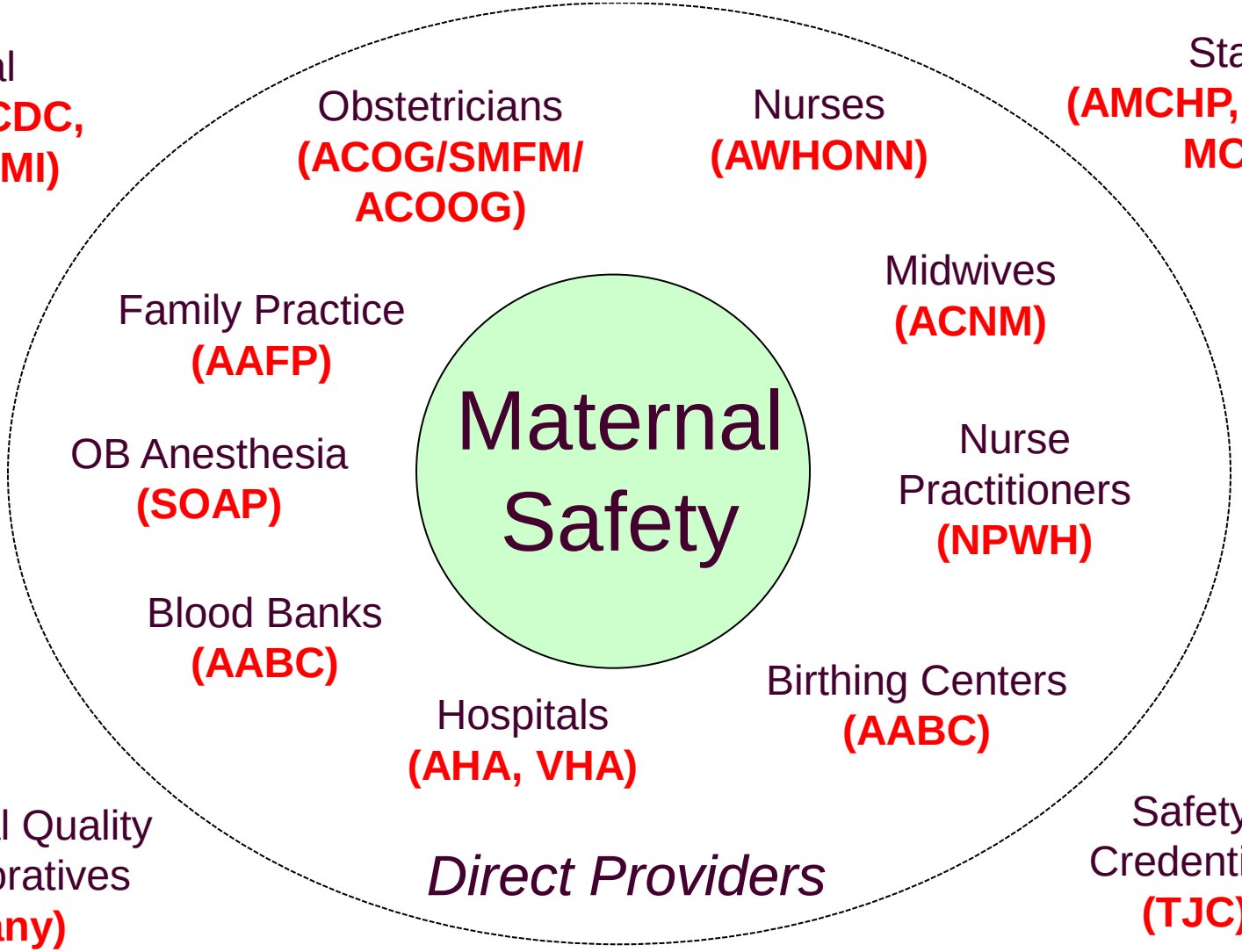
(Obstet Gynecol 2014;123:973–7)
DOI: 10.1097/AOG.0000000000000219

issued a Sentinel Alert entitled "Preventing Maternal Death"[2] and proposed various initiatives to decrease maternal mortality including case reporting and review, health care provider education, team training and drills, and thromboembolism prophylaxis.

During the past 2 years, several organizations–including the American College of Obstetricians and Gynecologists (the College), the Centers for Disease Control and Prevention, the Society for Maternal–Fetal Medicine, the Health Resources and Services Administration, the Association of Women's Health, Obstetric, and Neonatal Nurses, and the American College of Nurse-Midwives–have collaborated to identify priorities for maternal safety. Universal recognition of the need for action to reduce U.S. maternal mortality and morbidity led to the creation of the National Partnership for Maternal Safety. This report outlines a national initiative for every birthing facility

COUNCIL ON PATIENT SAFETY IN WOMEN'S HEALTH CARE

safe health care for every woman



National Partnership for Maternal Safety: 3 Maternal Safety Bundles

"What every birthing facility in the US should have…"

- Obstetric Hemorrhage
- Preeclampsia/ Hypertension
- Prevention of VTE in Pregnancy

*Note: The bundles represent outlines of recommended protocols and materials important to safe care **BUT** the specific contents and protocols should be individualized to meet local capabilities. Example materials are available from perinatal collabortives and other organizations.*

COUNCIL ON PATIENT SAFETY
IN WOMEN'S HEALTH CARE
safe health care for every woman

PATIENT SAFETY BUNDLE

Obstetric Hemorrhage

READINESS

Every unit

- Hemorrhage cart with supplies, checklist, and instruction cards for intrauterine balloons and compressions stitches
- Immediate access to hemorrhage medications (kit or equivalent)
- Establish a response team - who to call when help is needed (blood bank, advanced gynecologic surgery, other support and tertiary services)
- Establish massive and emergency release transfusion protocols (type-O negative/uncrossmatched)
- Unit education on protocols, unit-based drills (with post-drill debriefs)

RECOGNITION & PREVENTION

Every patient

- Assessment of hemorrhage risk (prenatal, on admission, and at other appropriate times)
- Measurement of cumulative blood loss (formal, as quantitative as possible)
- Active management of the 3rd stage of labor (department-wide protocol)

RESPONSE

Every hemorrhage

- Unit-standard, stage-based, obstetric hemorrhage emergency management plan with checklists
- Support program for patients, families, and staff for all significant hemorrhages

REPORTING/SYSTEMS LEARNING

Every unit

- Establish a culture of huddles for high risk patients and post-event debriefs to identify successes and opportunities
- Multidisciplinary review of serious hemorrhages for systems issues
- Monitor outcomes and process metrics in perinatal quality improvement (QI) committee

The American College of
Obstetricians and Gynecologists
WOMEN'S HEALTH CARE PHYSICIANS

COMMITTEE OPINION

Number 526 • May 2012

Committee on Patient Safety and Quality Improvement

This document reflects emerging concepts on patient safety and is subject to change. The information should not be construed as dictating an exclusive course of treatment or procedure to be followed.

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The American College of
Obstetricians and Gynecologists
WOMEN'S HEALTH CARE PHYSICIANS

COMMITTEE OPINION

Number 590 • March 2014 *(Replaces Committee Opinion Number 487, April 2011)*

Committee on Patient Safety and Quality Improvement

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Preparing for Clinical Emergencies in Obstetrics and Gynecology

ABSTRACT: P
It iss important tha
ing early warning s
staff after actual e
may reduce or prevent the severity of medical emergencies.

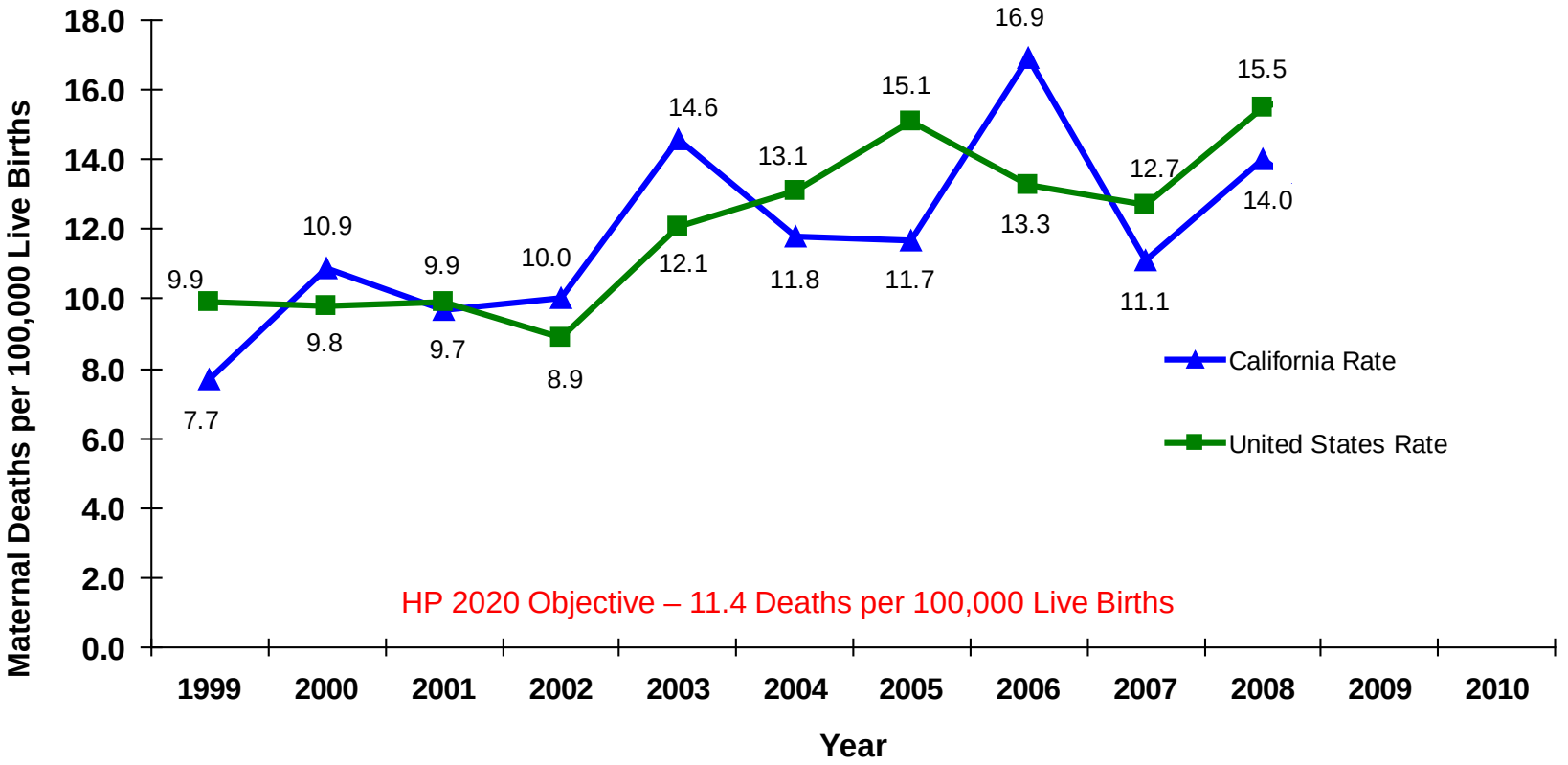
Importance of Drills and Debriefs

Reduce Maternal Mortality and SMM (CA-PAMR)

CMQCC
CALIFORNIA MATERNAL QUALITY CARE COLLABORATIVE

- Hemorrhage Taskforce (2009)
- Hemorrhage QI Toolkit (2010)
- Multi-hospital QI Collaborative(s) (2010-11)
  - Test the “tools” and implementation strategies
- State-wide Implementation (2013-2014)
- Preeclampsia Taskforce (2012)
- Preeclampsia QI Toolkit (2013)
- Multi-hospital QI Collaborative (2013-2014)
- Cardiovascular Detailed Case Analysis (2013)
- Cardiovascular QI Toolkit (2014)

Maternal Mortality Rate, California and United States; 1999-2010



SOURCE: State of California, Department of Public Health, California Birth and Death Statistical Master Files, 1999-2010. Maternal mortality for California (deaths ≤ 42 days postpartum) was calculated using ICD-10 cause of death classification (codes A34, O00-O95,O98-O99) for 1999-2010. United States data and HP2020 Objective were calculated using the same methods. U.S. maternal mortality rates are published by the National Center for Health Statistics (NCHS) through 2007 only. Rates for 2008-2010 were calculated using NCHS Final Birth Data (denominator) and CDC Wonder Online Database for maternal deaths (numerator). Accessed at http://wonder.cdc.gov/ucd-icd10.html on Apr 17, 2013 8:00:39 PM. Produced by California Department of Public Health, Center for Family Health, Maternal, Child and Adolescent Health Division, April, 2013.

Improving Maternal Quality Measures

- Development of national quality measures with endorsement by NQF
- Support for collection and reporting of NQF and other quality measures
- Toolkits and Collaboratives for reducing:
  - Early Elective Delivery (EED)
  - First-birth Low-risk (NTSV) Cesarean birth

NQF National Consensus Standards for Perinatal Care 2013 (12 OB measures)

OB/ Mom

- ★ #0469 Elective delivery prior to 39 weeks — QITools
- #0470 Episiotomy rate
- ★ #0471 NTSV Cesarean rate, aka "low-risk" first births — CMQCC
- #0472 Prophylactic antibiotics for Cesarean birth (< 1hr)
- #0473 DVT prophylaxis for women having a Cesarean birth

OB/ Baby

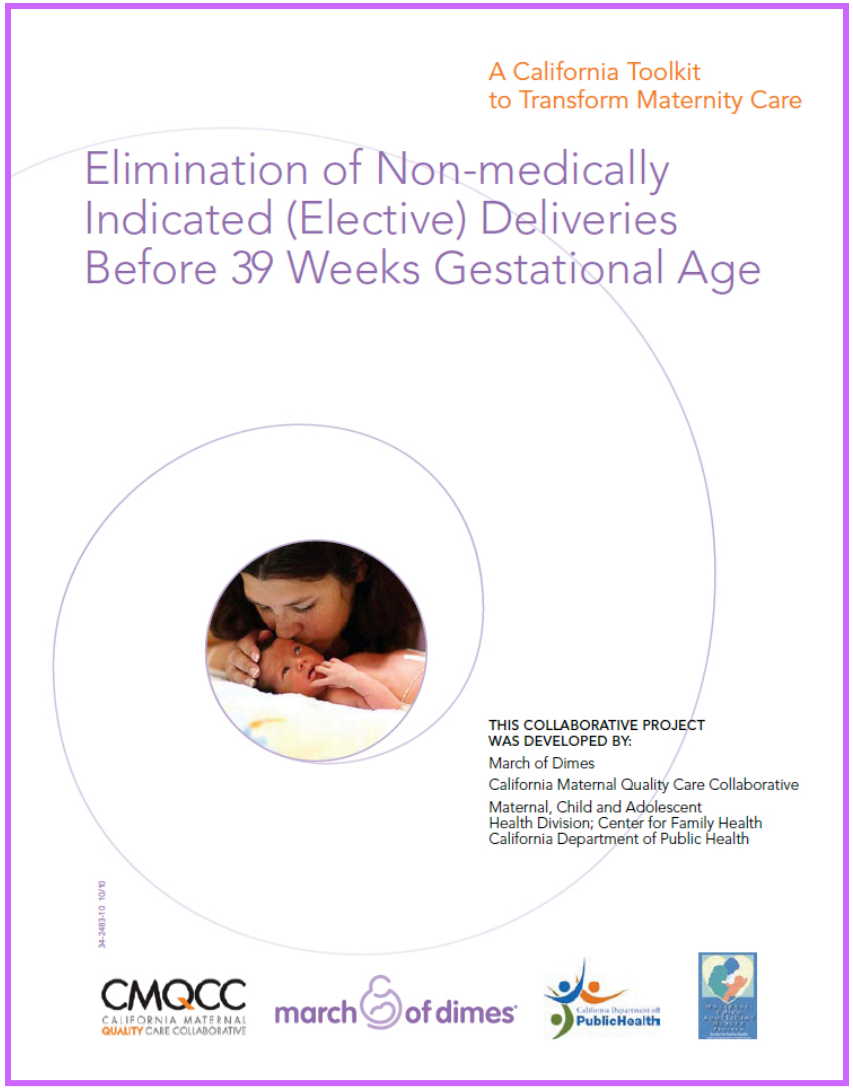
- #0475 Hepatitis B Vaccine for all newborns
- ★ #0476 Rate of antenatal steroids for under 34 week bir — QITools
- #0477 Infants under 1500g (VLBW) not delivered at Lev — CMQCC
- #0480 Exclusive breastfeeding at hospital discharge — CMQCC
- #0716 Healthy Term Newborn (aka Unexpected Newborn Com — CMQCC
- #1402 Newborn Hearing Screening
- #1746 Intrapartum GBS antibiotic prophylaxis

★=Measures that are highest value (Quality + Savings)==CMS

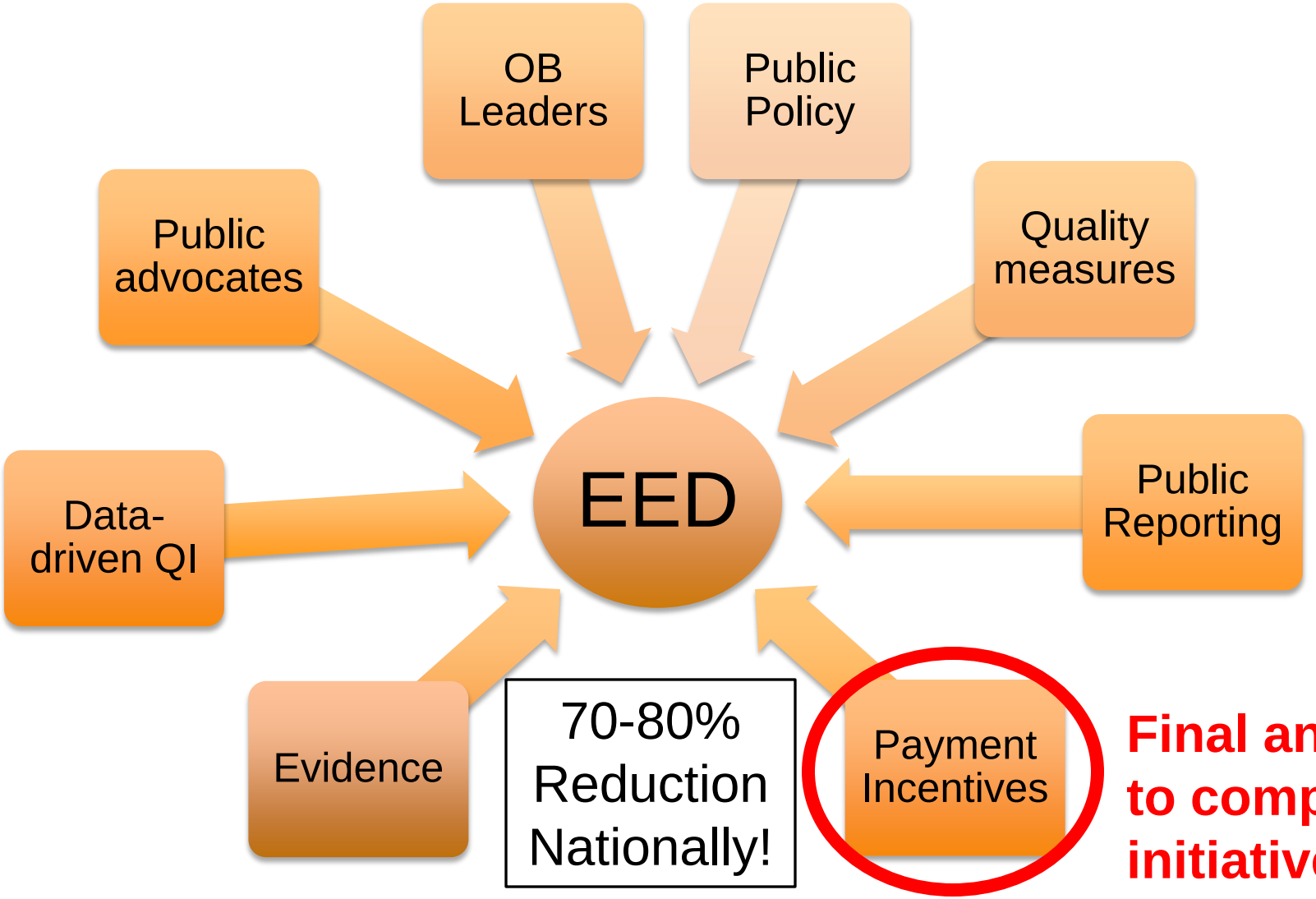
JC Core Measure Set

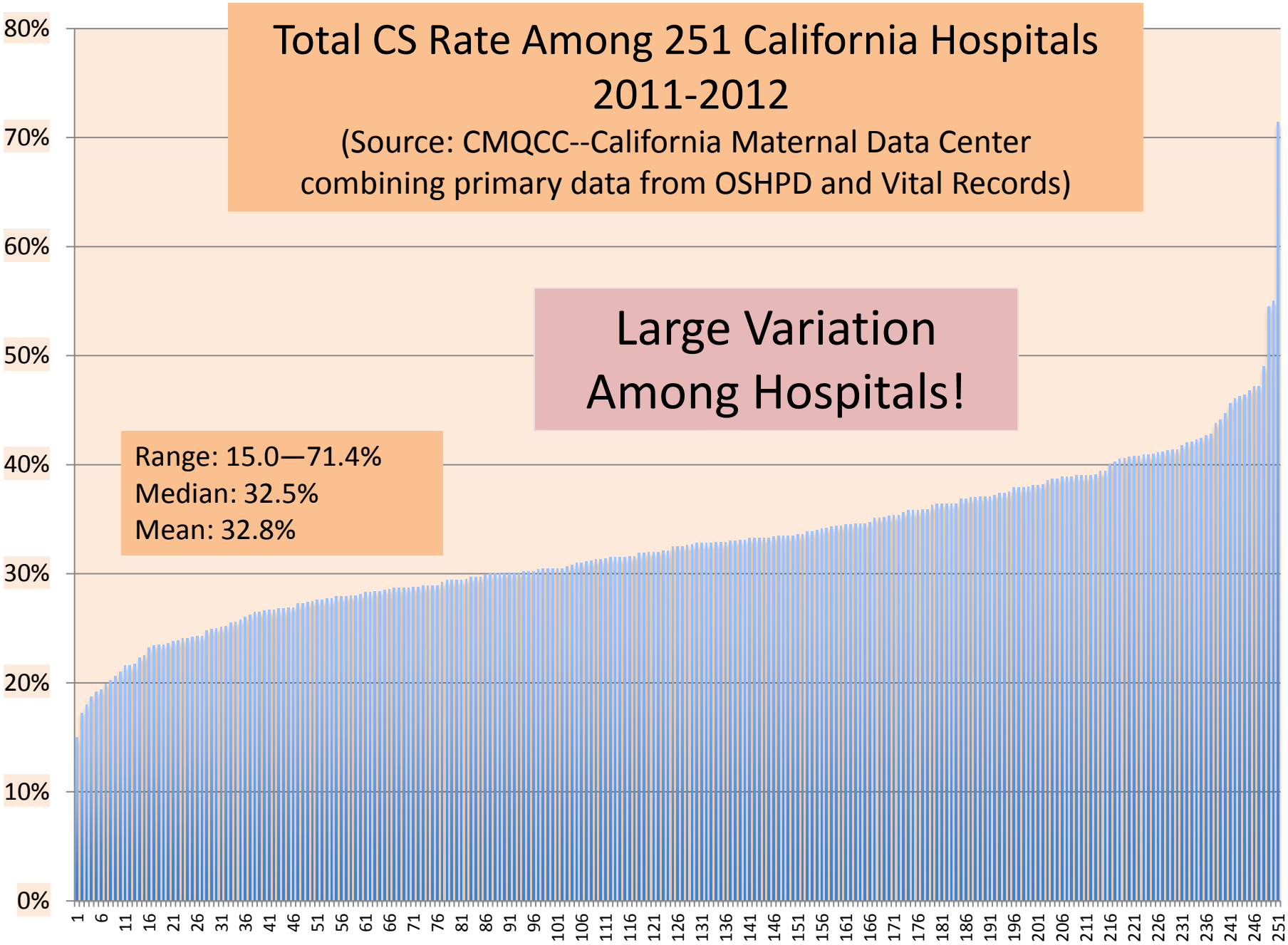
Leapfrog Group Measures

CMQCC Perinatal QI Toolkits Adopted Nationally



EED Success: Collective Impact




Total CS Rate Among 251 California Hospitals 2011-2012
(Source: CMQCC--California Maternal Data Center combining primary data from OSHPD and Vital Records)
Large Variation Among Hospitals!
Range: 15.0—71.4%
Median: 32.5%
Mean: 32.8%
80%
70%
60%
50%
40%
30%
20%
10%
0%
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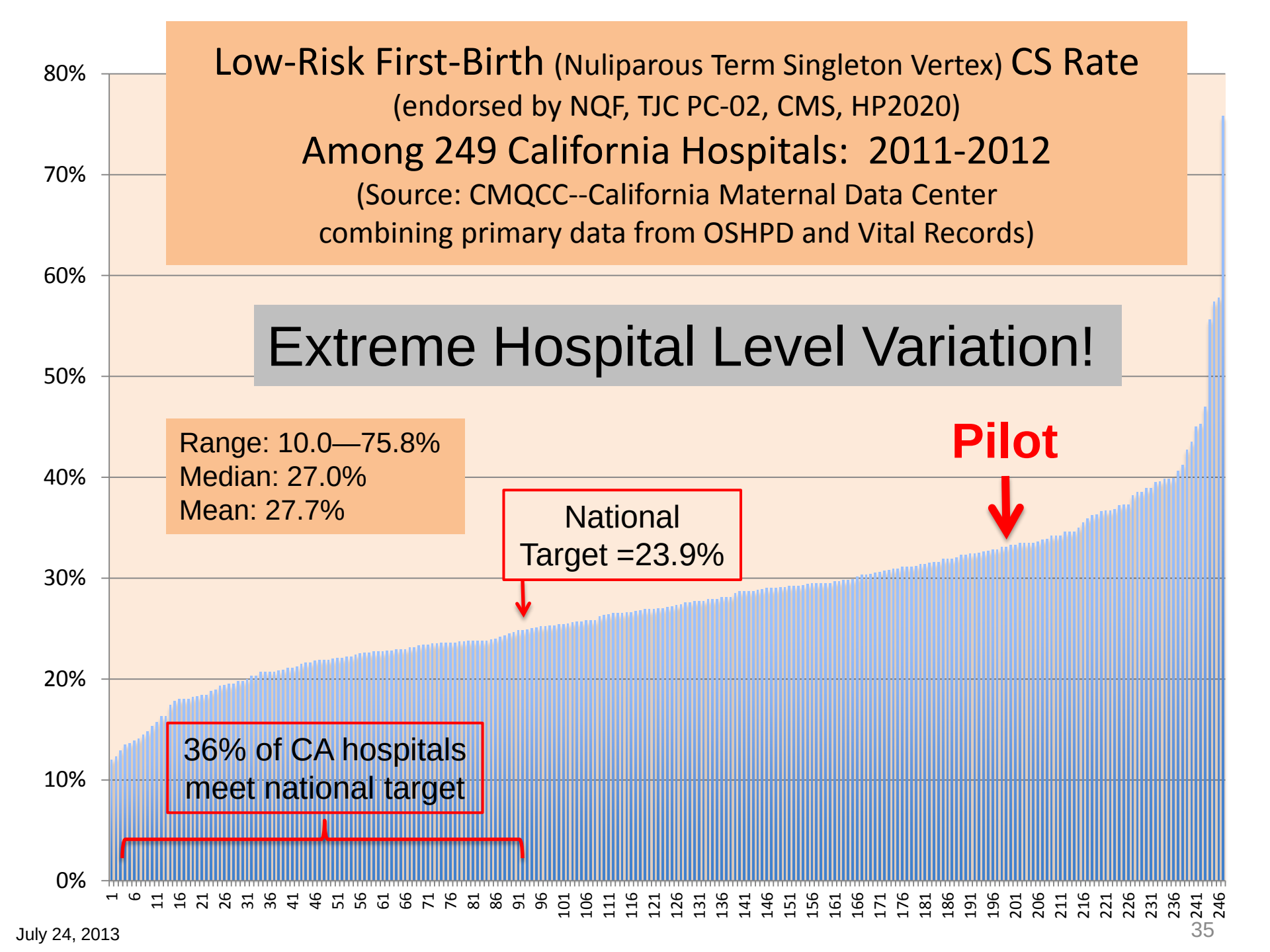
Low-Risk First-Birth (Nuliparous Term Singleton Vertex) CS Rate
(endorsed by NQF, TJC PC-02, CMS, HP2020)
Among 249 California Hospitals: 2011-2012
(Source: CMQCC--California Maternal Data Center
combining primary data from OSHPD and Vital Records)
Extreme Hospital Level Variation!
Range: 10.0—75.8%
Median: 27.0%
Mean: 27.7%
Pilot
National
Target =23.9%
36% of CA hospitals
meet national target
80%
70%
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The American College of Obstetricians and Gynecologists
WOMEN'S HEALTH CARE PHYSICIANS

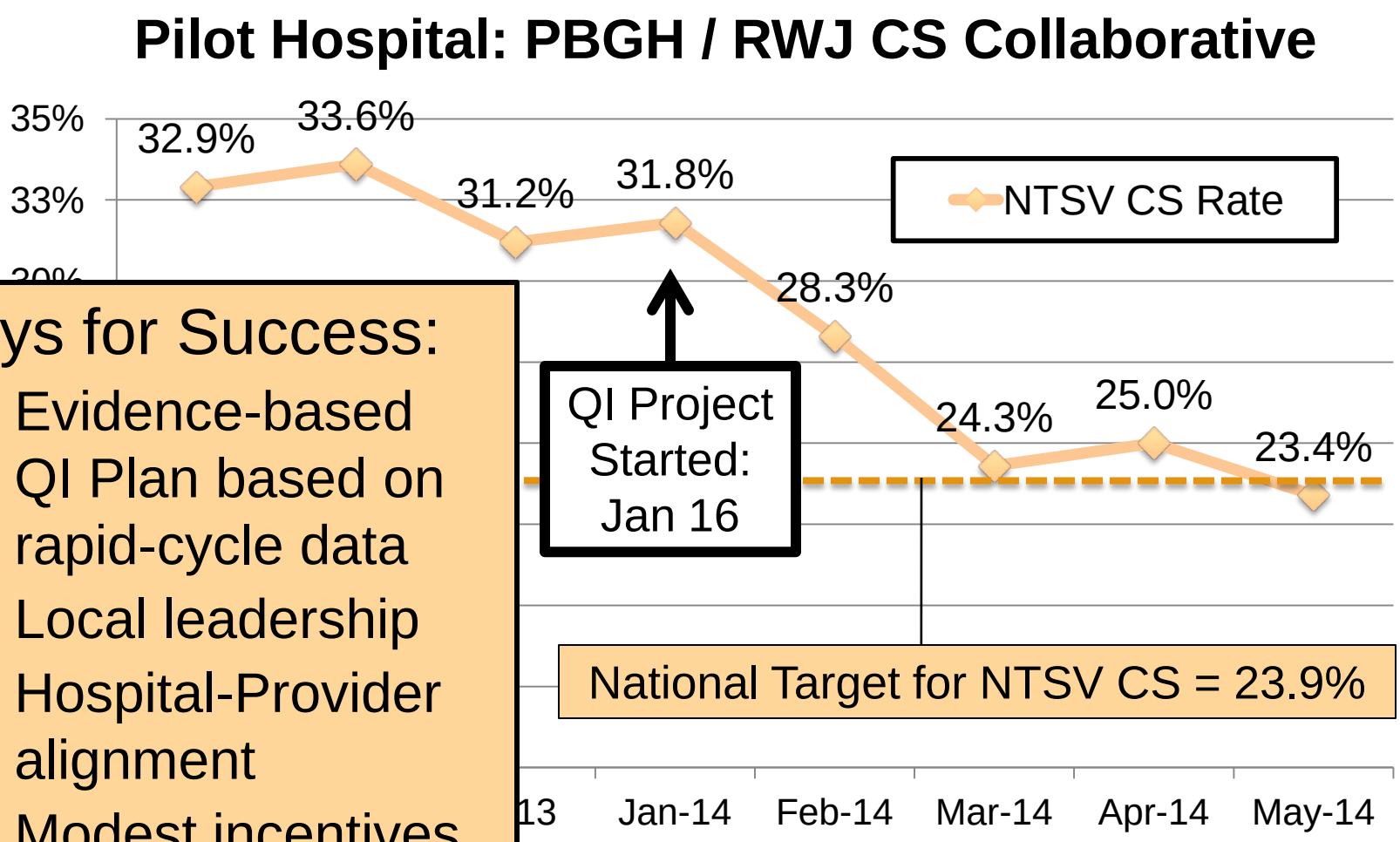
Society for Maternal-Fetal Medicine

OBSTETRIC CARE CONSENSUS

Number 1 • March 2014

Safe Prevention of the Primary Cesarean Delivery

CMQCC Data-Driven QI: NTSV CS



Keys for Success:

1. Evidence-based QI Plan based on rapid-cycle data
2. Local leadership
3. Hospital-Provider alignment
4. Modest incentives (shared savings)

CMQCC Maternal Data Center (CMDC)

- Vision: Data ←→ Action
- Steering committee includes leaders from DHCS, MCH, CHSI, Payers, Providers and Public
- Subcommittees for Measures, Users
- Supported by grants from the CDC and CHCF
- Approved by several state IRBs / VSAC

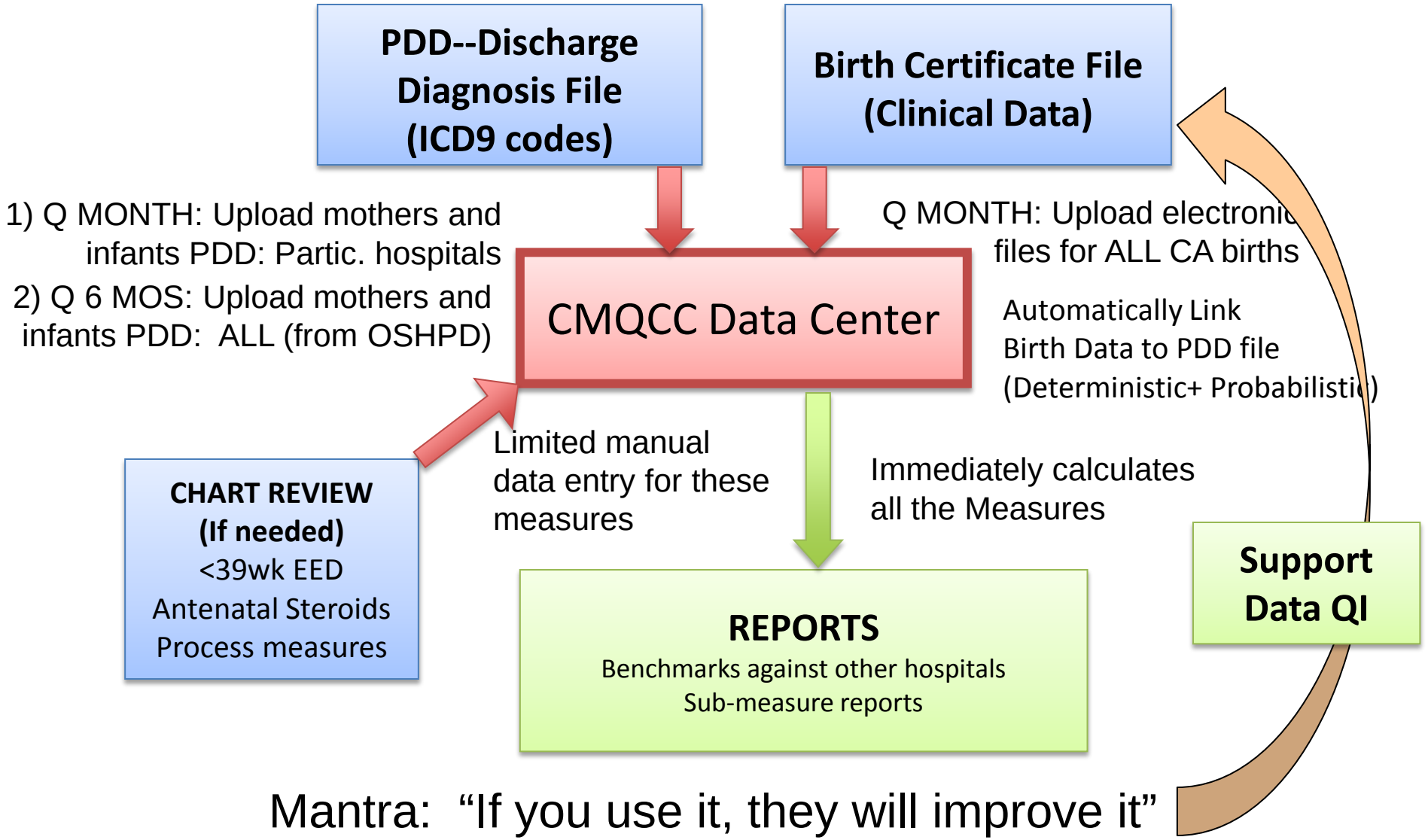
What is the CMDC?

Low-burden/High-value

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

- Overall hospital obstetric performance measures (>40)
- Benchmarking statistics--to compare your hospital to regional, state, and like-hospital peers
- Facilitating reporting to Leapfrog, HEN, and CMS IQR
- Provider-level statistics—to assess variation within a hospital

CMQCC Maternal Data Center



Mantra: "If you use it, they will improve it"

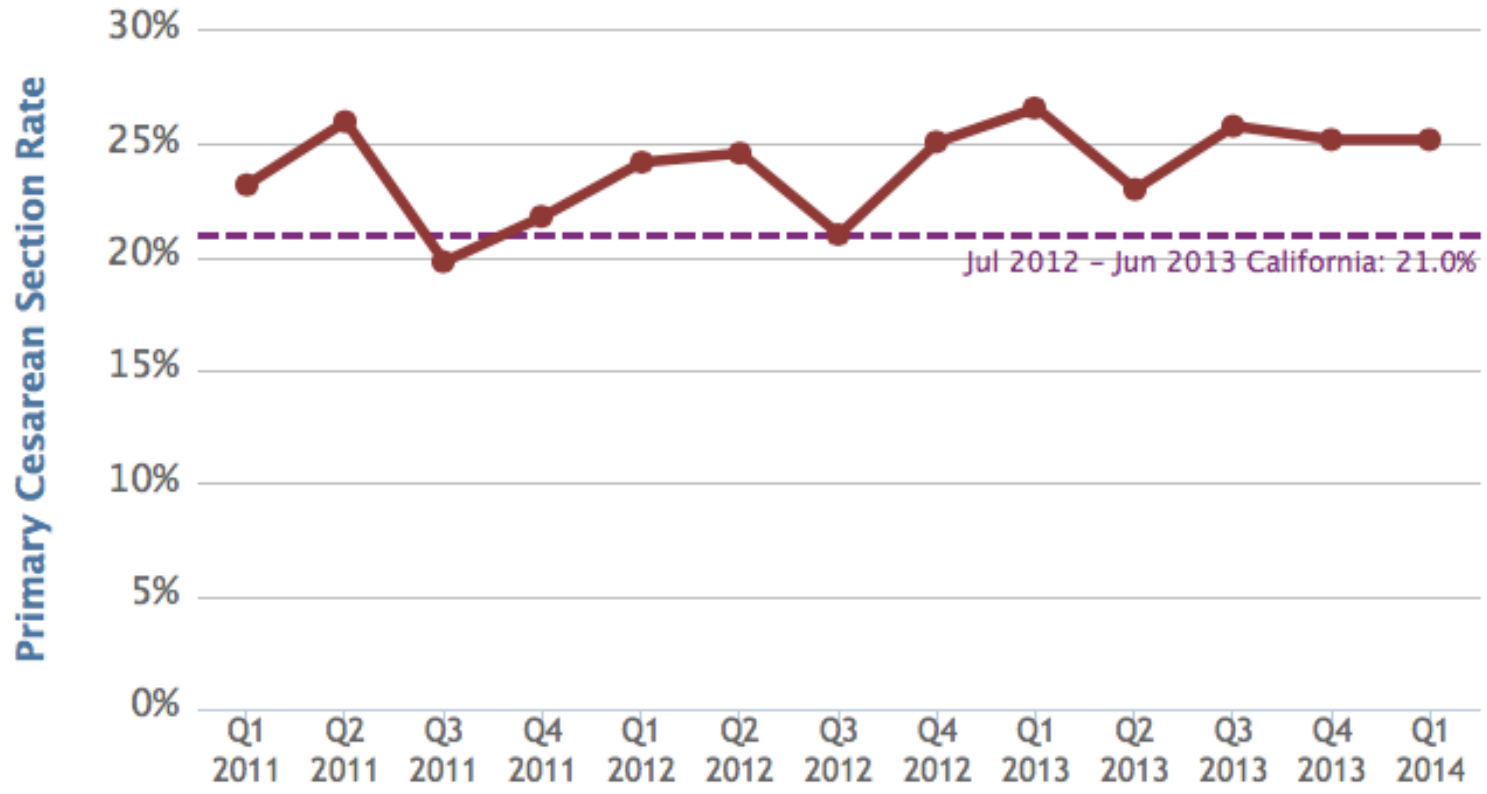
Sample Hospital

Hospital Trend | Benchmark Comparisons | System Comparisons | Payer Comparisons | Provider Comp

CMDC receives birth certificate data approximately 45 days after the end of each month. This means the data for April 2014 available around June 15th 2014.

Rate of Cesarean Section among women with no prior Cesarean.

See full definition.



Measure Analysis

Frequency

- Monthly
- Quarterly
- Annually

Corrected

Also Display

Download As

PNG (image)

CSV (Excel)

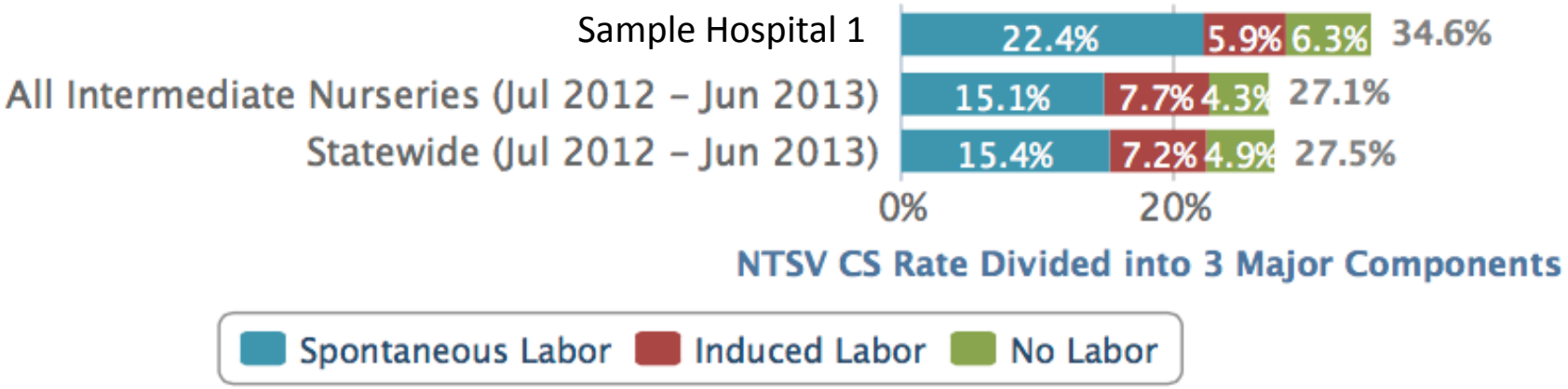
<<Considerations>>

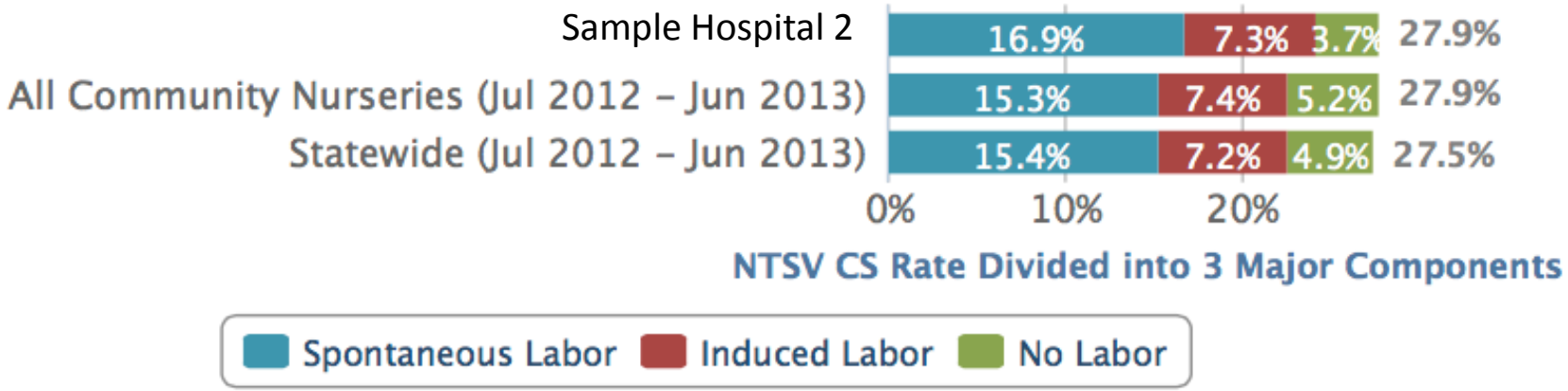
- Important to move beyond reporting metrics to addressing WHY?
- Need to have timely data (months old rather than years old)
- Need a base of the entire population and then build projects requiring special data collection on that foundation

Beyond Reporting Rates
(Numerator/Denominator)

- Automated Measure analysis using nested sub-measures to guide and focus your QI journey
- Drill-down to the patient level with Case Review Worksheets to understand quality improvement opportunities—for both clinical quality and data quality
- Trend analyses of both measures and sub-measures

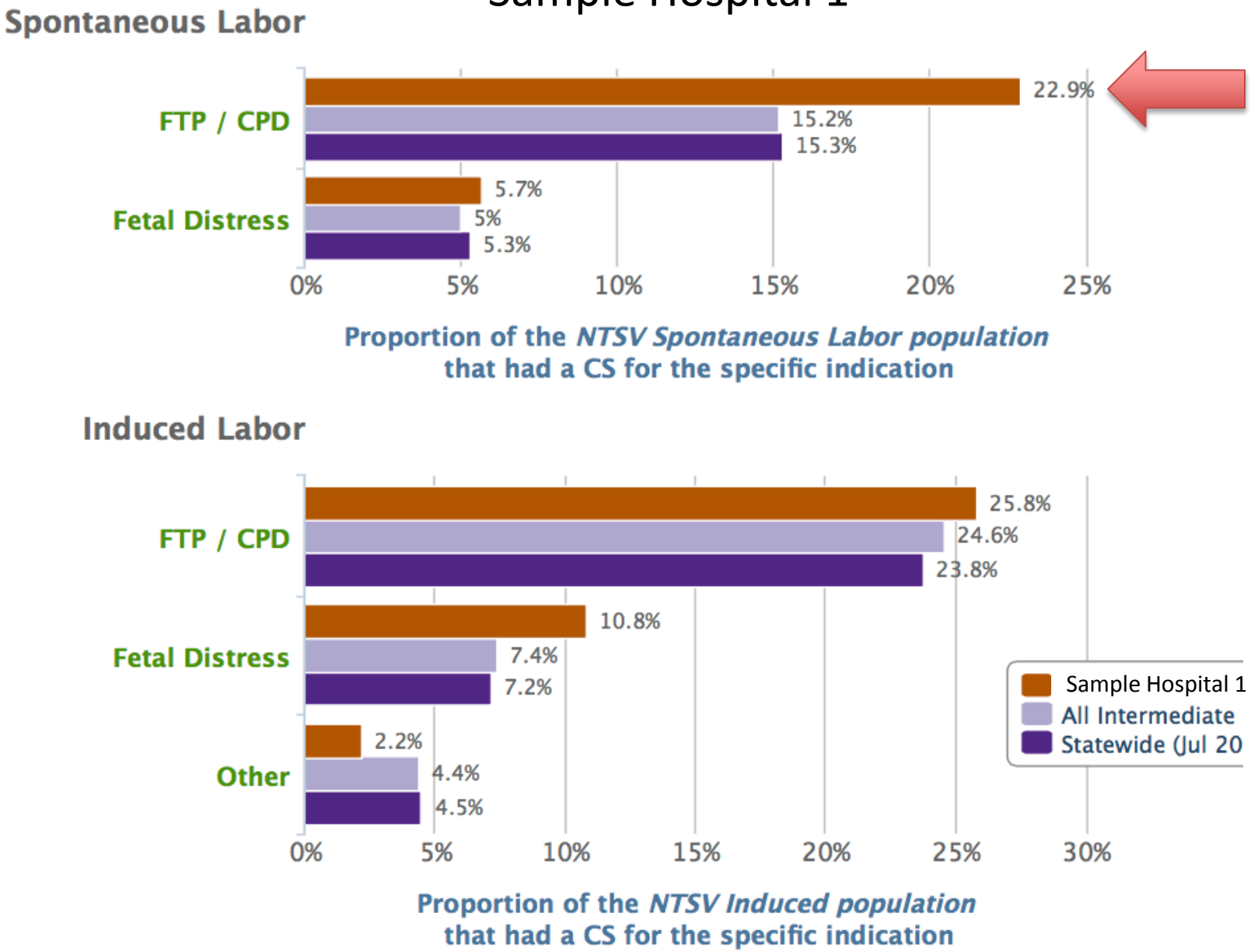
3 Major Drivers of the NTSV CS Rate





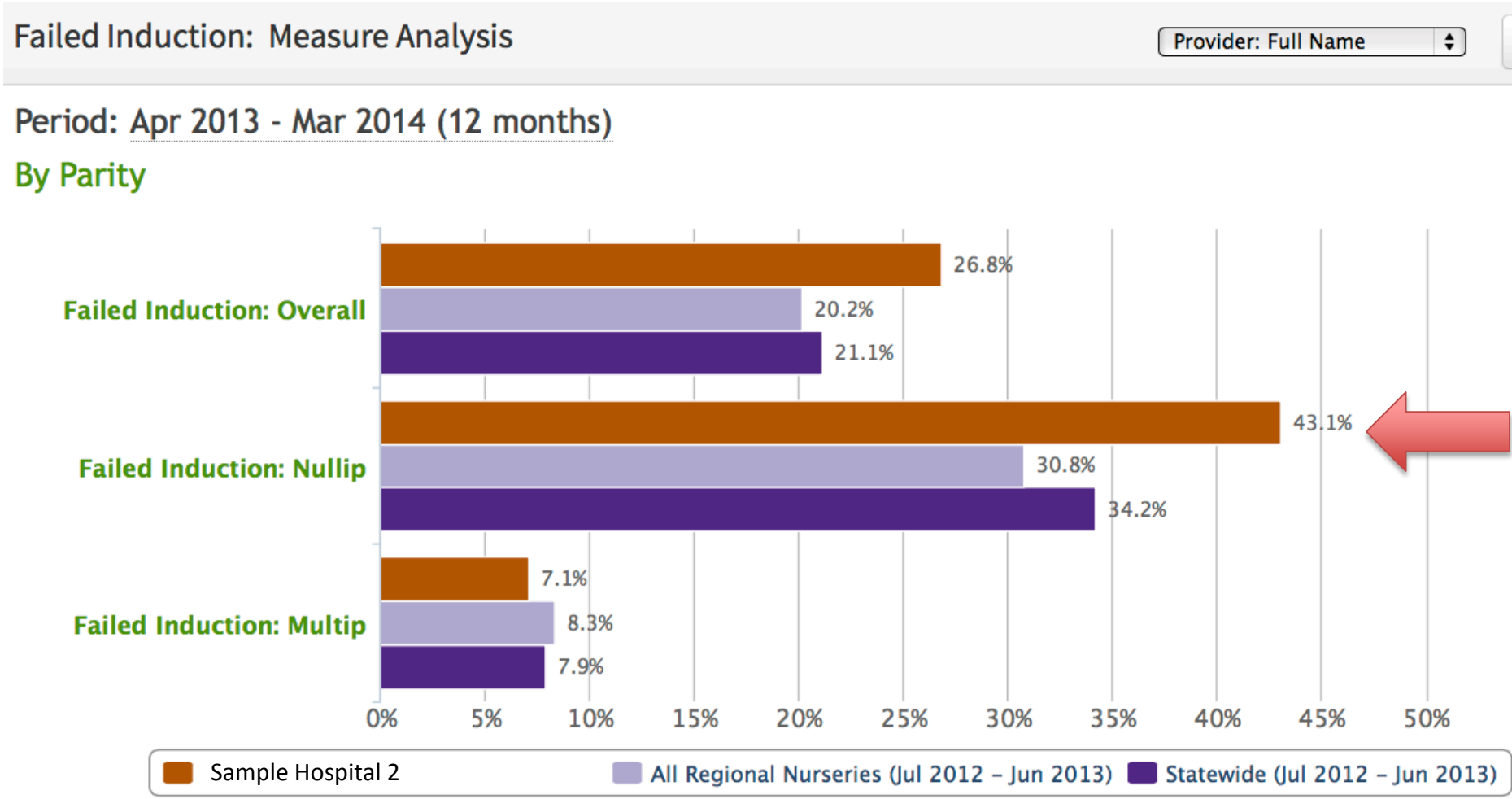
Comparison Rates for the 3 Major NTSV Drivers

Sample Hospital 1

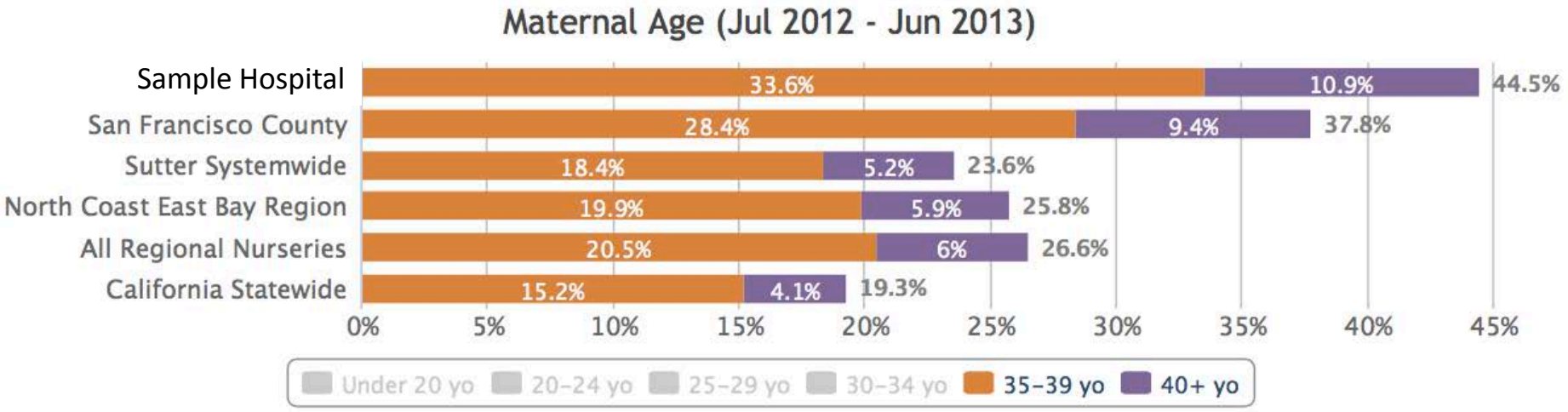


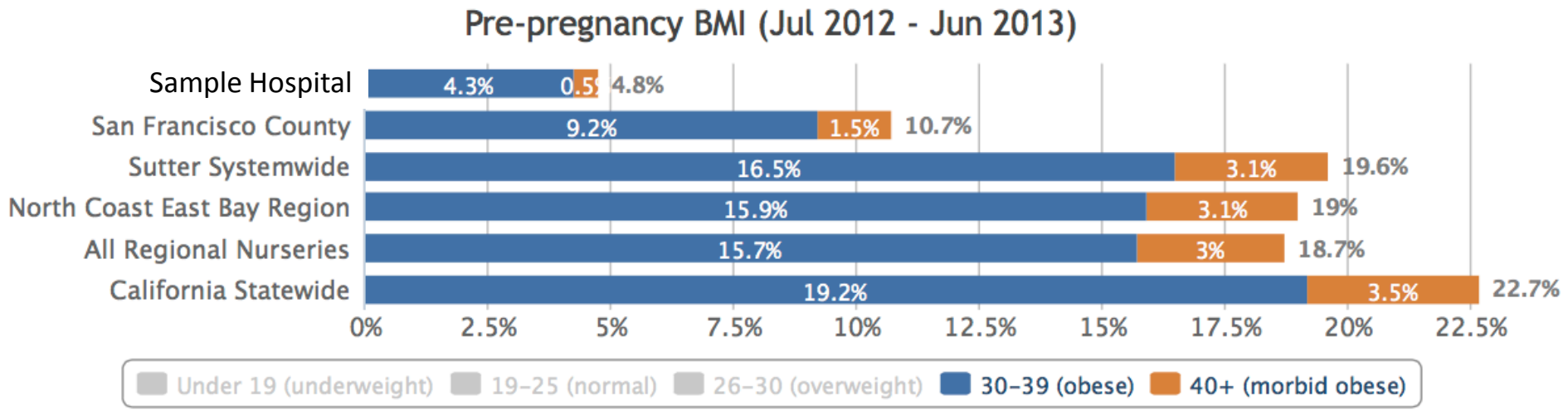
Comparison Rates for the 3 Major NTSV Drivers

Sample Hospital 2



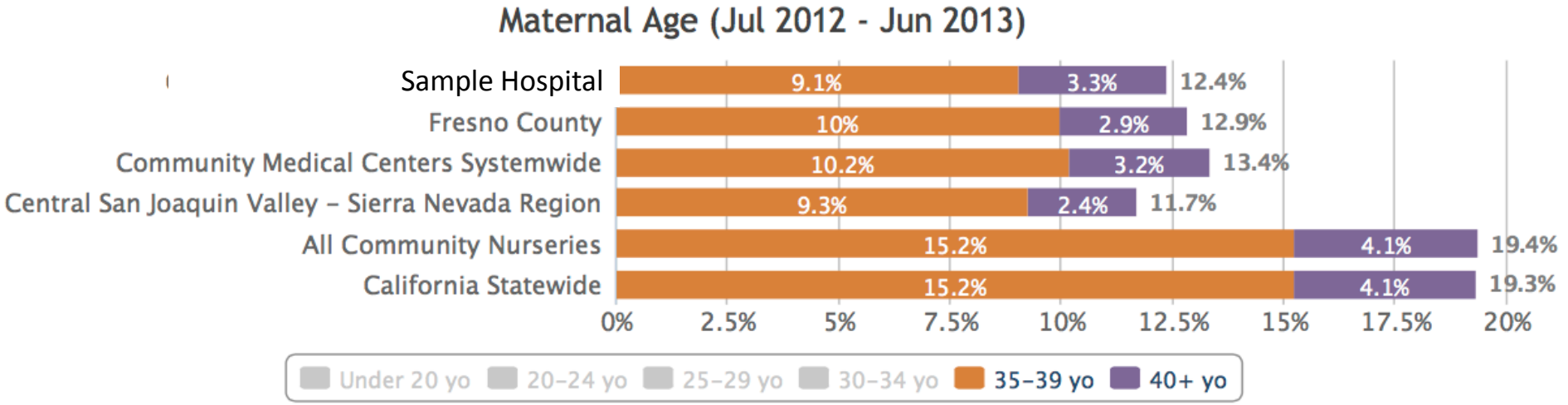
Are there confounding factors needing risk adjustment? A Bay Area Story

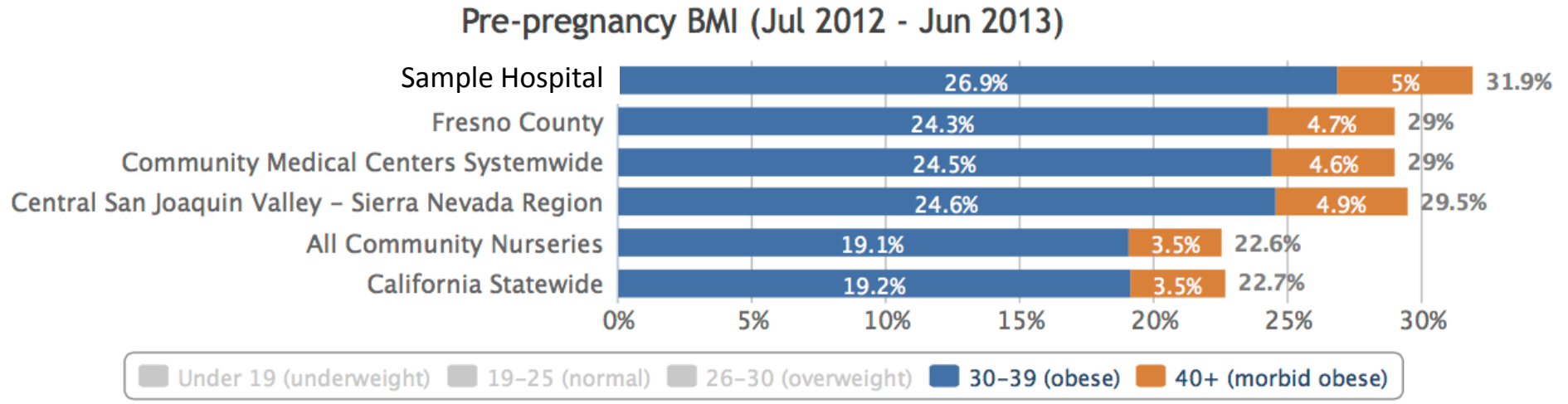




NTSV CS=24.0%

Are there confounding factors needing risk adjustment? A Central Valley Story



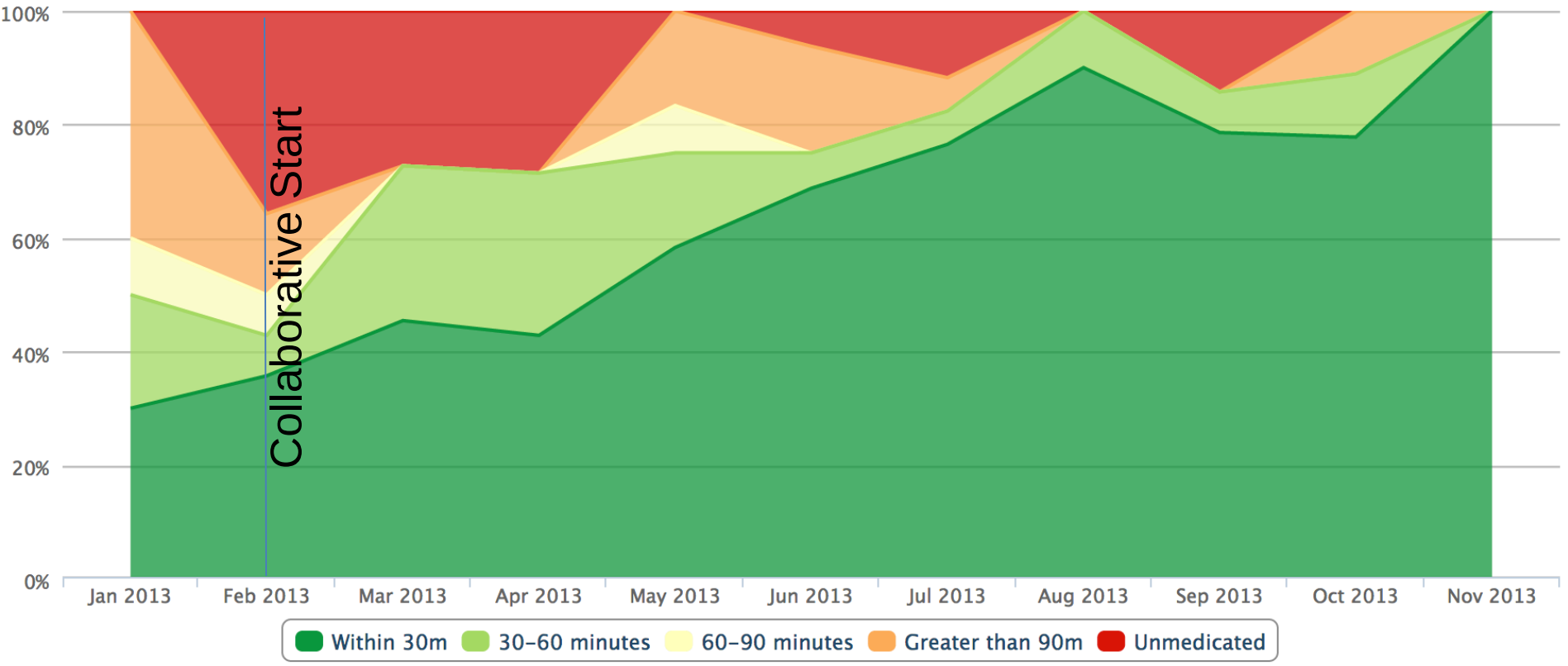


NTSV CS=25.9%

CMQCC Maternal Data Center:

- Supports QI collaboratives
  - Outcome and process measures (CDC funding)
  - Severe Maternal Morbidity Validation (HRSA/MCH-B)
- Release for public reporting: (CHCF funding)
  - First-Birth Cesarean, Episiotomy, VBAC rates (CHART)
  - Levels: Hospital, Medical Group, Health Plan
- Linkage to claims data (IHA funding)
- Linkage to Medi-Cal data sets (CMS / DHCS funding)

Timing for Treatment of Gravidas with sBP≥160 or dBP≥110



Sample hospital from CMQCC Preeclampsia Collaborative 2013

CMQCC
CALIFORNIA MATERNAL QUALITY CARE COLLABORATIVE

Data Quality Measures

Show: ☐ Last 12 Month

Sample Hospital 3

Measure	Nov 2013 – Jan 2014 Rate
Missing / Inconsistent Delivery Method	0.3%
Missing / Inconsistent V27 (Outcome of Delivery)	0.1%
Missing / Inconsistent Fetal Presentation	2.7%
Inconsistent Mother's Date of Birth	0.5%
Inconsistent Parity	0.1%
Inconsistent Induction	11.9%
Missing Maternal Diabetes ICD9 Code	26.7%
Missing Maternal Hypertension ICD9 Code	36.4%
Unlinked Mothers	0.1%

Large-Scale Implementation Projects

- Merck for Mothers
  - Implementation of hemorrhage and preeclampsia safety bundles in all California hospitals
  - Set up a state-wide implementation model
- Cal-SIM (maternity domain)
  - Consensus maternity performance measures
  - Incentives focused on identified metrics
  - CMQCC to do data collection and QI support

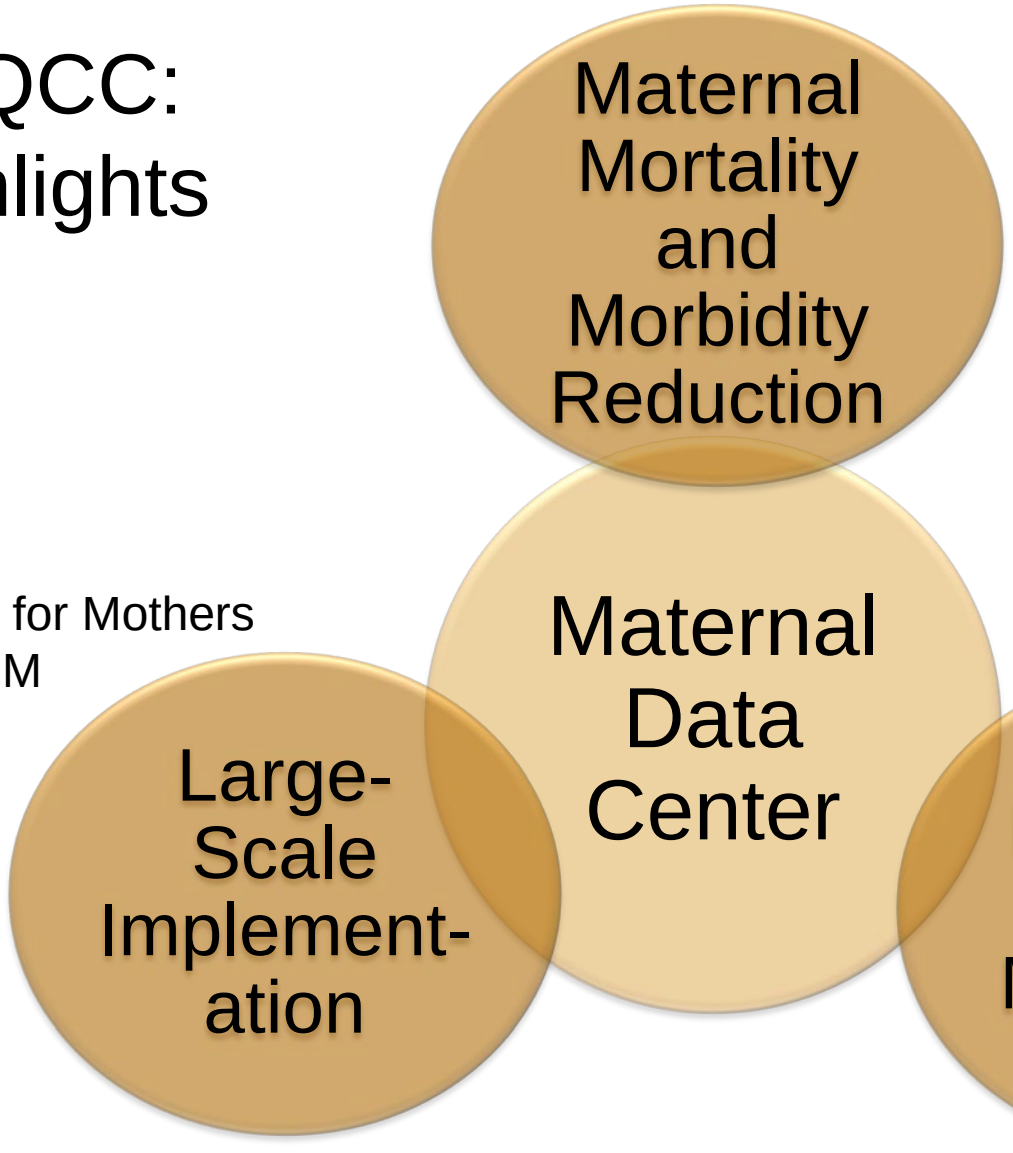
Merck for Mothers: Large-scale QI Model

- QI Mentors (paired MD and RN)
  - To support a group of 6-8 hospitals thru implementation of both bundles
  - Grouped by system, referral network, or size
  - Mentor training in early October (North and South)
- Identified metrics (CMDC capture and report)
- Comprehensive web support
- Key partners
  - California Hospital Association
  - Patient Safety First (Anthem Blue Cross)
  - ACOG, AWHONN, ACNM, RPPC

Cal-SIM: Model

- Partnering between purchasers, plans and providers around quality/value
- Identified metrics (CMDC capture and report)
  - NTSV (first-birth) CS, Episiotomy, VBAC rates
  - Unexpected Newborn Complications (balancing metric)
- Expand existing QI project and toolkit for NTSV Cesarean reduction (in collaboration with WA)
- Key partners
  - Purchasers: Calpers, Cover California, PBGH, DHCS
  - Health plans
  - ACOG, AWHONN, ACNM, RPPC

CMQCC: Highlights



- Hemorrhage
- Preeclampsia
- Cardiovascular

- VTE prevention
- Violent deaths
- Severe Morbidity

- Merck for Mothers
- Cal-SIM

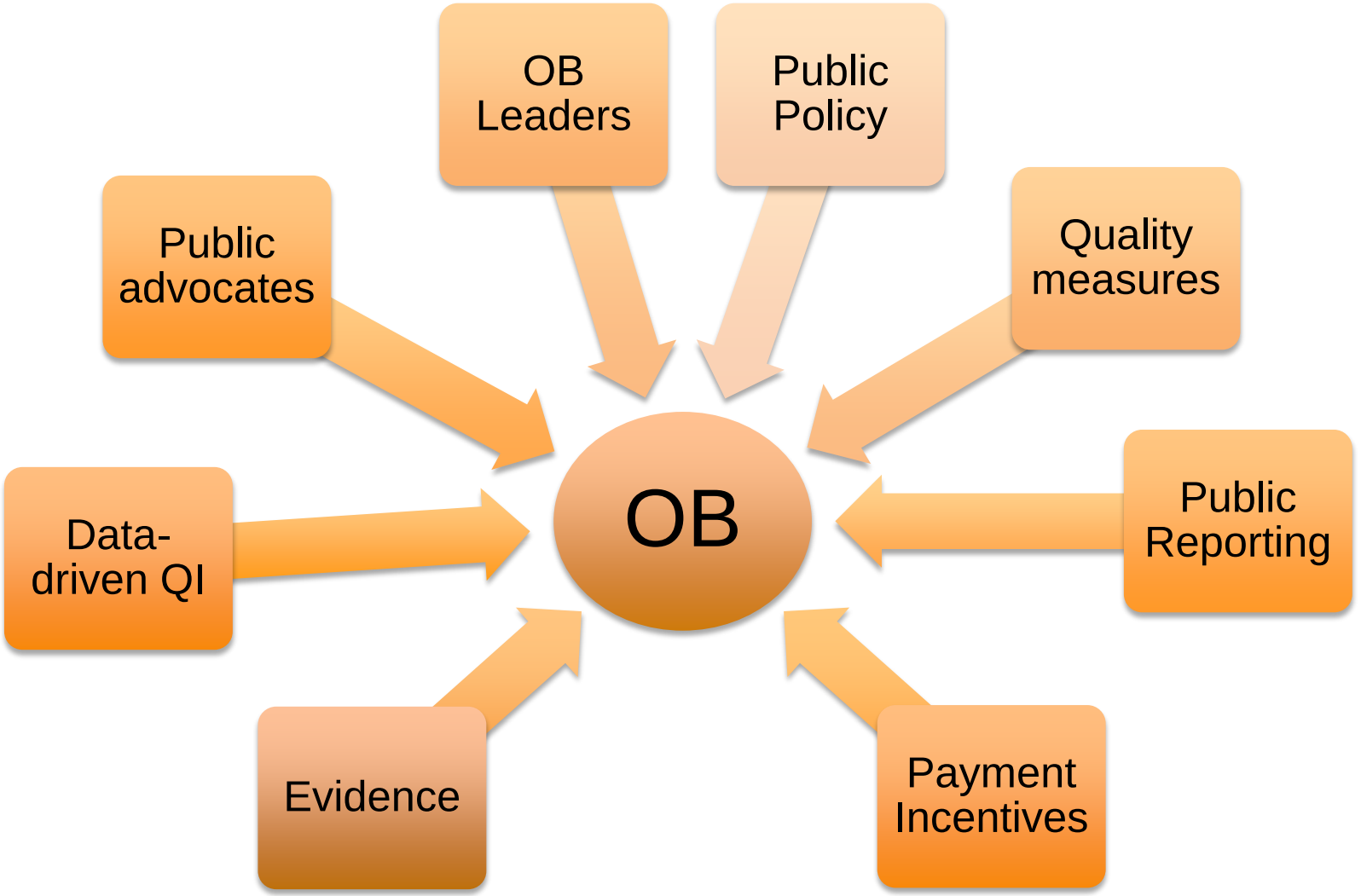
- EED
- NTSV CS
- Unexpected Neonatal Complications

- Preterm Birth Prevention

A model for Rapid-cycle Improvement

- Maternity care has unusually large variation in care, even after risk adjustment
- Examine the drivers for successful projects:
  - multi-organization collaboration
  - alignment of goals
- Central role for data-driven QI / State-wide data system
  - Not just reporting hospital rates and provider rates
  - Multiple tools to allow intelligent analysis to allow providers to answer why their rate is high

Collaborative Action: Collective Impact



Thank You!

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