

Acknowledgments

San Bernardino Public Health Department used Title V block grant funding from California Maternal, Child and Adolescent Health Division to develop a “Labor Induction Toolkit” in collaboration with local hospitals and health experts. Their work contributed to the development of this statewide toolkit. We thank Lony Castro, MD for her leadership as Chair of the Maternal Morbidity and Mortality Labor Induction Education Project Advisory Council. The public health department and hospitals in San Bernardino continue to implement and field test tools to improve maternal and neonatal outcomes.

Review Committee

Diane Ashton, MD, MPH, FACOG; March of Dimes, Deputy Medical Director (White Plains, NY)

Jennifer Baptiste-Smith, MPH; San Bernardino Public Health Department (San Bernardino)

Scott Berns, MD, MPH, FAAP; March of Dimes, Senior VP Chapter Program Support (White Plains, NY)

Debra Bingham, DrPH, RN, LCCE; California Maternal Quality Care Collaborative (CMQCC), Executive Director (Palo Alto)

James Byrne, MD; Santa Clara Valley Medical Center, Chief, Obstetrics and Maternal Fetal Medicine (San Jose)

Brenda Chagolla, RNC, MSN, CNS; Catholic Healthcare West, Manager, Patient Safety & Clinical Risk (Rancho Cordova)

Leona Dang-Kilduff, RN, MS, CDE, CDAPP; Mid-Coastal Regional California Diabetes and Pregnancy Coordinator at Stanford University School of Medicine (Palo Alto)

William Gilbert, MD; Sutter Health Sacramento, CMQCC Executive Committee (Sacramento)

Jeffrey B. Gould, MD, MPH, PI California Perinatal Quality Care Collaborative (CPQCC); CMQCC Executive Committee (Stanford)

Rory Jaffe, MD, MBA; Executive Director, California Hospital Patient Safety Organization (Sacramento)

Leslie Kowalewski, March of Dimes, California Chapter Associate State Director & Director Big 5 State Prematurity Initiatives (San Francisco)

Elliott Main, MD; CMQCC, Chairman and Chief of Obstetrics Department of OB/GYN California Pacific Medical Center (San Francisco)

Peyton Mason-Marti, MPH; March of Dimes, California Chapter, State Director of Programs (San Francisco)

Connie Mitchell, MD, MPH; CDPH, California Maternal, Child and Adolescent Health Division (Sacramento)

Barbara Murphy, MS, RN; Director of Perinatal Programs, CMQCC Executive Committee (Palo Alto)

Bryan Oshiro, MD; Vice-Chairman, Dept. OB/GYN Medical Director, Perinatal Institute, Loma Linda University Medical Center/Children’s Hospital (Loma Linda)

Gretchen Page, MPH CNM; Manager, Community Grants, Loma Linda University Medical Center/Children’s Hospital (Loma Linda)

Steven Parry, MD; FACOG, MCBWARD, Medi-Cal Benefits Branch, Medical Consultant II (Sacramento)

Karen Ramstrom, DO, MSPH; CDPH, Maternal, Child and Adolescent Health Division Policy Branch Chief (Sacramento)

Leona Shields, PHN, RN, NP, MFT; Nurse Consultant III Specialist, Maternal, Child and Adolescent Health Division (Sacramento)

Stephanie Turner, Senior Vice President, Risk Management; Optima Healthcare Insurance Services (Roseville)

Lucy Van Otterloo, RN, MSN; Community Perinatal Network, CMQCC (Whittier)

John Wachtel, MD, FACOG; Adjunct Clinical Professor Department of OB/GYN at Stanford Medical School, ACOG District IX Patient Safety Officer and Chair, Patient Safety and Quality Improvement Committee (Menlo Park)

Conflict of Interest: The contributing authors and reviewers do not have any affiliations or financial involvement that conflict with the material or recommendations presented in this toolkit.

Supporting Organizations

Multiple professional associations are in support of this quality improvement toolkit designed to eliminate non-medically indicated (elective) deliveries before 39 weeks gestational age. Signed letters from the following organizations can be found in Appendix D.

- American Congress of Obstetricians and Gynecologists
District II (New York)
- American Congress of Obstetricians and Gynecologists
Illinois Section (District VI)
- American Congress of Obstetricians and Gynecologists
District IX (California)
- American Congress of Obstetricians and Gynecologists
FACOG (Florida)
- American Congress of Obstetricians and Gynecologists
District XI (Texas)
- Association of Women's Health, Obstetric and
Neonatal Nurses (AWHONN)
 - National
 - California

Executive Summary

Efforts to improve the quality and safety of perinatal care have received increased focus during recent years.¹⁻⁸ Research has shown that early elective delivery without medical or obstetrical indication is linked to neonatal morbidities with no benefit to the mother or infant.⁷ The American Congress of Obstetricians and Gynecologists (ACOG) publications, (1979, 1999, 2009) have consistently advised against non-medically indicated elective deliveries prior to 39 weeks gestation.⁹⁻¹¹

Despite ACOG guidelines, elective early labor inductions and cesarean sections are common and increasing in the United States and are creating concern about trends in current obstetric practice.^{7, 12-15} Educating healthcare providers about morbidities associated with practice trends fosters evidence-based decision-making and leads to improved practices that reduce harm. *There are numerous maternal and fetal medical indications for deliveries prior to 39 weeks gestation. This toolkit, developed for clinicians, focuses on reducing non-medically indicated elective inductions and cesarean sections. In addition, the focus of this toolkit on less than (<) 39-week non-medically indicated elective deliveries is not meant to imply that elective deliveries after 39 weeks have been proven to be without risks for mothers and infants.*

Definitions of “full-term” and weeks of gestation that define safe birth are commonly misunderstood by the general public. A survey of insured women who recently gave birth found that only 25.2% of women defined full-term as 39-40 weeks.¹⁶ But, more importantly, 92.4% of women reported that giving birth before 39 weeks was safe.¹⁶ It is important to educate women about the potential negative outcomes of early deliveries and the critical fetal development that occurs during the last weeks of pregnancy.

Multiple national quality organizations, including The Joint Commission (TJC), National Quality Forum (NQF), and The Leapfrog Group (LFG), identified elective deliveries prior to 39 weeks (induction of labor and cesarean section) as a key quality indicator for obstetric hospital care.⁸ This toolkit is applicable to singleton pregnancies only, similar to national quality measures. Medical indications for deliveries <39 weeks, as defined by these national quality organizations, are listed in the Data Collection / QI Measurement section of the toolkit.

This toolkit incorporates policies and tools used successfully at multiple hospitals in the United States. It outlines best practices and provides support materials and guidance for implementing a quality improvement (QI) project around reducing elective deliveries before 39

weeks gestation. In addition, the toolkit provides methods to identify improvement opportunities and outlines techniques for measuring process and outcome improvements. It is organized into the following sections to facilitate improvements in hospitals at any stage of change for eliminating births <39 weeks.

- **Making the Case:** A comprehensive literature review about the importance of eliminating elective deliveries before 39 weeks.
- **Implementation:** A step-by-step guide to assist hospital leaders with implementation efforts.
- **Data Collection and Quality Improvement:** A guide for measuring and tracking QI effectiveness over time.
- **Clinician and Patient Education:** Educational tools for clinicians and staff about consequences of early elective delivery; educational tools for patients about the importance of the last weeks of pregnancy.
- **Appendices and References:** Sample Forms, Hospital Case Studies, QI Implementation Tools, Plan-Do-Study-Act (PDSA) Methodology, Implementation Resources and References.

The March of Dimes, the California Maternal Quality Care Collaborative, and the California Department of Public Health, Maternal, Child, and Adolescent Health Division collaborated to develop and disseminate this toolkit. Academic and clinical leaders in California and across the United States contributed as writers and reviewers. The goal of this toolkit is to guide and support obstetrical providers, clinical staff, hospitals, and healthcare organizations to develop efficient and successful quality improvement programs to eliminate elective deliveries <39 weeks gestation.