

**Proposed objective for Healthy People 2020 – Maternal-Child Health  
Submitted by the American College of Nurse Midwives**

**Increase physiologic birth to 70% among women with a full-term, singleton, and vertex presentation infant. Physiologic birth is defined as a spontaneous vaginal birth, without induction and without forceps or vacuum assistance.**

Rationale:

The United States lags behind most other developed nations on maternal and neonatal mortality, low birth weight, and appropriate rates of cesarean section. Reasons for these outcomes are complex and can be difficult to measure, and exist despite much higher per capita health expenditures than all other nations. Despite increasing use of childbirth interventions such as labor induction and cesarean section, we have not made substantial improvement and are actually moving further away from objectives set for Healthy People 2010 (Healthy People 2010 Midcourse Review).

The proportion of preterm births, of low birth weight infants and of very low birth weight infants have all increased. These rates are highest among Black non-Hispanic mothers. After declining for most of the last hundred years, the United States maternal mortality rate stagnated at the end of the century. Although some of the observed increase in maternal mortality may stem from improved classification of maternal deaths and more accurate estimates, the trend is concerning. The non-Hispanic Black maternal mortality rate, at 36.1 per 100,000, was 3-4 times the rate for Hispanic, for non-Hispanic White, and for Asian/Pacific Islander mothers in 2004.

The United States cesarean section rate has increased for 11 consecutive years, rising to the highest ever national rate of 31.8% in 2007. The rate of vaginal birth after cesarean has declined 73% from 1997 to a rate of 9.7% in 2006. Since 1995, black non-Hispanic women have had higher cesarean rates than any other group. “Rates for both primary and repeat cesarean births have increased ... the causes for this increase are unknown, but may include reports on the risks associated with vaginal births after cesarean delivery, more conservative practice guidelines, and legal pressures. Although C-sections have been effective in saving lives, they also can increase the risk of illness and death” (Healthy People 2010 Midcourse Review). The National Priorities Partnership (2008) specifically names unwarranted cesarean section in its Overuse Priority, calling for the elimination of unnecessary and risky care. (<http://www.nationalprioritiespartnership.org/PriorityDetails.aspx?id=598>).

The criteria established by Healthy People 2010 as a proxy for low-risk childbearing were: giving birth at greater than or equal to 37 weeks completed gestation with a single baby in a head down position. In 2003, 82.6% of women giving birth met these criteria. By 2005, only 52.7% of women meeting these criteria delivered vaginally and without induction of labor. This means that almost half of women in the United States experienced major intervention in their labor and/or birth during the first part of this

century. A significant number of other consequential interventions in labor and birth are not included in this number.

The overall rate of labor induction has more than doubled from 1990 to 2006, with a rate of 225 per 1000 live births (23%) in 2006 (National Center for Health Statistics, National Vital Statistics Reports, Sakala and Corry, 2008). However, 34% of women in the Listening to Mothers II survey reported that their provider attempted and did induce their labors. Of these, 35% described their inductions as being for convenience. (Declercq et al 2006). When data are combined for inductions of labor with cesareans performed prior to labor, they reveal that a majority of United States women do not experience spontaneous labor and childbirth (Sakala 2006).

Although evidence that directly compares induction to expectant management of labor and birth is limited, observed sequelae of induction include a twofold increase in the likelihood of cesarean delivery in first time mothers with unripe cervixes, altered progress of labor (ACOG Practice Bulletin 2009), and increased costs (Tracy and Tracy 2003, Kaufman et al. 2002). Mistimed elective delivery results in early term and preterm birth, when every week counts for brain, lung and other organ development. These early births cause avoidable NICU admissions and respiratory and other problems in otherwise healthy newborns. Increased risks of respiratory distress, NICU admissions, sepsis, and other adverse neonatal outcomes were demonstrated among infants born at 37 and 38 week as compared with those born at 39 weeks via elective repeat cesarean sections (Tita et al. 2009). An increase in late preterm births related to maternity care practice patterns and the imprecision of estimating gestational age has resulted in the “social foreshortening of the length of human gestation” (Sakala and Corry 2008), not without cost.

Rates of induction vary by hospital, and by provider; even more variation exists by hospital and by provider in rates of induction without medical rationale. These variations cannot be explained solely by the risk status of the woman (Glantz 2003). One large prospective study of low risk women seeking homebirth published in 2005 found only 9.6 percent of women had induction attempted, providing one possible benchmark labor induction rate for low risk women at term (Johnson and Daviss, 2005).

The American College of Obstetricians and Gynecologists lists no absolute indications for induction, but does identify several absolute contraindications. Expected rates of induction are not discussed. Their guideline establishes a gestational age of at least 39 weeks for inductions done for logistical or psychosocial reasons (ACOG Practice Bulletin #107, 2009). The National Quality Forum has endorsed a national consensus outcome standard that measures the number of infants delivered electively between 37 and 39 weeks gestation, providing an assessment of how well providers are adhering to the ACOG guideline (NQF 2008). A recent literature review recommends induction of labor only for very specific obstetric conditions including post dates, and premature rupture of membranes at term, or near term in presence of fetal lung maturity (Mozurkewich et al 2008). Benefits of induction for gestational hypertension and mild preeclampsia after 36

weeks have also been demonstrated (Koopmans et al, 2009). The data clearly do not support advantages of labor induction without a clear medical or obstetrical indication.

In addition to the health concerns associated with these trends, there are also significant cost implications for the United States. With more than 4.3 million births occurring annually, hospital bills for maternal and newborn care exceed those of any other condition. More than 40% of all maternity related hospital stays were billed to Medicaid in 2006. Averaged costs from 2005 reveal substantial differences between vaginal and cesarean births. Without complications, the charge for a vaginal birth in hospital is \$6973 compared to \$12,544 for an uncomplicated cesarean. Those costs increase substantially in the presence of complications (AHRQ, 2008). While actual payments are lower than charges, average payments for cesarean births (\$10,958) exceeded average payments for vaginal births (\$7737) by nearly 50% (Thomson Healthcare 2007).

At the same time that childbirth interventions have increased, the use of low technologic care has declined. Childbearing practices known to facilitate a woman's innate capacity to birth such as positions of choice for labor and birth, continuous emotional and physical support, intermittent fetal monitoring, non-pharmacologic methods of pain relief, and midwifery care are not routinely offered to women (Lothian, 2007; Sakala & Corry, 2008).

The proposed objective to increase the rate of spontaneous labor and birth in the United States is drawn from evidence that suggests unwarranted intervention in low risk women can be both harmful and costly. As noted by Sakala and Corry (2008) "an evidence-based framework does not support elective nonmedical induction or induction for a medical rationale that is not supported by strong evidence, as these expose mothers and babies to risk without clear health benefit." The specific target for physiologic labor and birth was drawn from studies of low risk women in the United States and Canada (Johnson & Daviss, 2005; Janssen, 2009; Hutton, 2009). The data suggest a range of 75-90% for physiologic labor and birth is achievable. However, the Canadian studies represent a different health care system from the United States. Thus we have lowered our proposed target for Healthy People 2020 to 70% as a direction which permits feasible movement.

**The American College of Nurse Midwives proposes this objective with the expectation that a target for appropriate and achievable rates of physiologic birth will prompt greater use of current available evidence in best practices for the most effective maternity care with the least harm. It specifically addresses the current challenges in healthcare of eliminating harm, eradicating disparities, reducing disease burden and removing waste (<http://www.nationalprioritiespartnership.org/>). The objective will help to drive changes in policy, practice, research and education across the nation to improve the health of all of the nation's mothers and babies and to further Healthy People 2020's overarching goal to achieve health equity and eliminate disparities.**

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