

Perinatal Health in Los Angeles: A Vision of Healthy Births through Healthy Communities

*By Carolina Reyes, MD and Janice French,
CNM, MS*

Introduction

Optimizing the state of perinatal health in Los Angeles County is an investment in our future - our future children. Helping babies to be born on time and at a healthy birthweight are the two important factors needed to optimize an individual child's potential for early childhood development, intellectual capacity and lifelong good health.

Yet today in Los Angeles County:

- One in 10 babies is born premature and the rate of prematurity is increasing
- Approximately 10% of preterm newborns will have a life long disability or handicap like cerebral palsy, blindness or deafness.
- 1 out of 7 women begin prenatal care late
- 1 out of 16 births is to a teen
- 1 out of 185 infants dies before its first birthday
- 29.5% of low income pregnant women report food insecurity

Babies born too soon or too small are more likely to experience serious complications. They may suffer from life long health problems, developmental and learning disabilities. The earlier a baby is born the higher the risk of serious complications.

These babies are less likely to succeed in school. They frequently experience difficulties during their school years due to learning and attention disorders, as well as social and emotional problems. Later in life they have a higher risk of developing diabetes and heart disease. The average cost of healthcare during the first year of life for U.S. infants born prematurely was almost fifteen times greater than for infants without any complications. The long term economic and societal costs are great.

Los Angeles County faces significant challenges in supporting families and providing equitable quality care so that all children have the chance of being born healthy and thrive. Providing every opportunity to prepare and have a healthy baby in Los Angeles County is an investment that has long term societal and economic costs that is more costly if ignored.

Over the last 35 years, significant strides have been made in understanding factors that interact in complex ways to contribute to adverse pregnancy outcomes. No longer can the primary focus be on improving access to prenatal care. Addressing adverse pregnancy outcomes requires investment in the communities where families live, in the quality of health care provided and the promotion of health and well-being for each woman and her family.

The Uniqueness of Los Angeles County Poses Several Challenges

Both its vastness and its diversity bring uniqueness and challenges to providing quality health care. Los Angeles County is the most populated county in the nation. While the County covers only approximately 4,081 square miles, it has over 9.5 million residents, greater than the population of 43 of the 50 states.

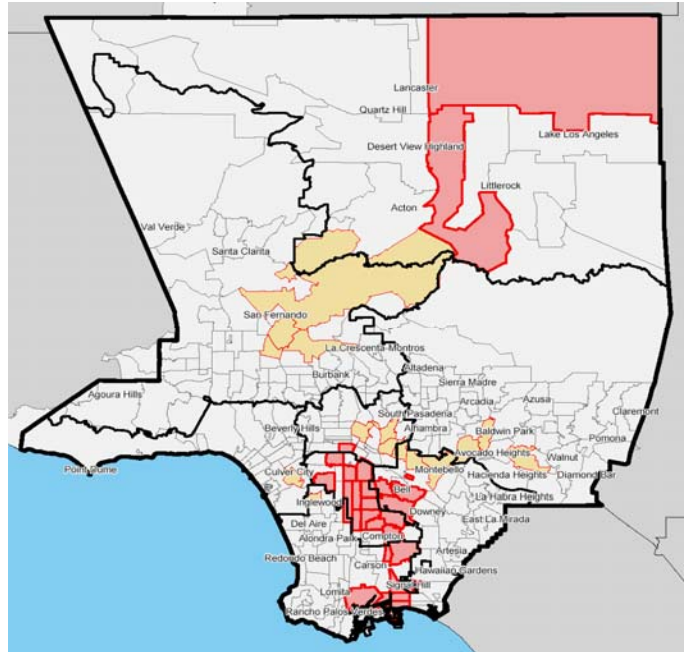
Each year over 150,000 babies are born in Los Angeles County. This translates to one in every 25 babies born in the United States and one in every 4 babies born in California is born in Los Angeles County.

Los Angeles County is divided into eight Service Planning Regions (SPAs). The SPAs differ in size, number of residents and population density.

Six of the SPAs (2, 3, 4, 6, 7 and 8) have over one million residents. Whereas, SPAs 2 and 3 are the most heavily populated, accounting for nearly 40% of the County's total population. SPA 1 accounts for only 3% of the population.

Over 1.8 million individuals and families live below the federal poverty level. For female-headed families, 28.5% live below the federal poverty level. Approximately 33% of pregnant women have less than 12 years of education. Across Los Angeles County, there is significant disparity in poverty and education attainment.

Los Angeles County is also highly diverse, with 45% identified as Latino; 31% as White; 12% as Asian or Pacific Islander; 10% as African American and <1% as American Indian. While over 38% of residents speak more than one language fluently, nearly one in three residents report that they do not speak English well or at all.



The perinatal indicators used to identify the top 10th percentile of risk are: infant mortality, low birth weight births, teen births, and percent without adequate prenatal care.

The State of Perinatal Health¹ for Angelenos Depends on Region

LA County on average performs better than national averages, but slightly worse than California averages on most perinatal indicators and they fail to meet Healthy People 2010 goals in most areas.

In some regions of LA County, there is considerable room for improvement. See Table 1.

A map of the four perinatal indicators of Los Angeles County clearly demonstrates that:

- Each Service Planning region has areas in the top 10th percentile of need (shown in red and tan)
- There is significant disparity throughout Los Angeles County

Selected Perinatal Health Statistics by Service Planning Area (SPA), 2003¹

SPA	IMR ¹	FMR	LBW	PTB	1 st Trimester PNC
1	9.7	4.0	7.8%	12.2%	85%
2	4.3	4.5	6.6%	10.2%	93%
3	4.9	4.2	6.8%	9.4%	90%
4	5.1	5.5	6.9%	10.0%	91%
5	4.5	4.3	7.1%	9.0%	95%
6	6.5	5.7	8.4%	12.2%	86%
7	4.8	5.6	6.5%	11.0%	88%
8	5.9	5.0	7.2%	10.0%	91%
LAC	5.4	4.9	7.1%	10.5%	90%

¹ IMR=Infant mortality rate per 1000 live births
 LBW= Low birthweight (weight 5 1/2 lbs or less)
 VLBW= weight under 3 lbs 4 oz
 PTB=preterm birth (born before 37 weeks gestation)

¹ Los Angeles County Department of Health Services, Maternal, Child and Adolescent Programs, Data 2002 and 2003.

Over 90% of LA County mothers begin prenatal care in the first trimester; this represents a 4.6% increase between 2000 and 2003. This has finally achieved the HP2010 goal of 90% first trimester prenatal care. Similar improvements are noted in the birth rate among teens age 15 to 19 which declined from 50.8 to 41 births per 1,000 adolescent females in this age range between 2000 and 2003. Approximately 19% of 15 to 19 year olds have given birth to two or more children.

Favorable comparisons to national rates, tend to mask the concerning changes that have occurred in Los Angeles County over the past few years, and the considerable disparity that exists between regions and populations within LA County. Significant disparity exists by racial and ethnic groups and often the gap is widening:

- African American infants have nearly twice the risk of dying before the first birthday.
- The rate of preterm birth in African Americans is 60 percent higher than Caucasians.
- The total number of preterm births is greatest for Hispanics, as 62.5 percent of premature births are Hispanic.
- Birth rates for 15 to 19 year olds were highest for Hispanics (59.7/1000 females) and African Americans (39.1 births/1000 females.)

Significant regional disparities also exist. The perinatal indicators for SPA 6 consistently rank in the highest percentiles. For instance, the teen birth rate in SPA 6 is 82% higher than the LA County rate and teen births to the youngest teens is even higher. Approximately 1 in 4 teen births (age 10-17) occurred in SPA 6. The proportion of LBW births in SPAs 1, 6 and 8 is higher than the County average. The infant mortality rate in SPA 1 is consistently higher than other regions at 9.7 deaths/1000.

Approximately 2 out of three births in Los Angeles County are to mothers who have had at least one child. Hence, there is significant opportunity to identify women with risks during the first pregnancy and provide appropriate

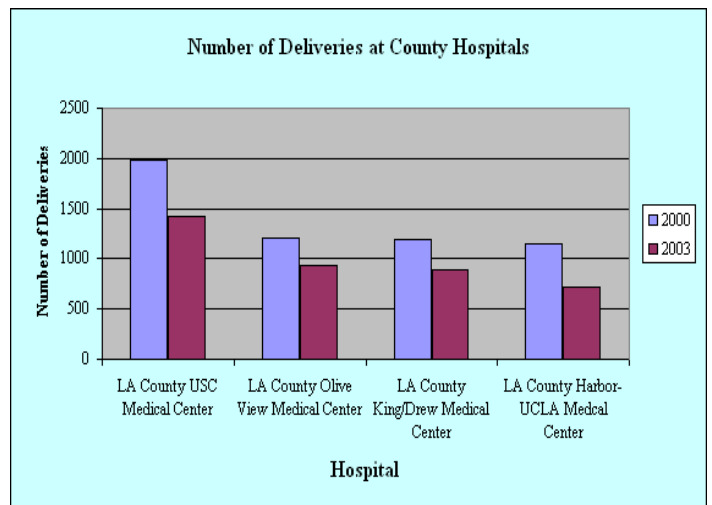
preparation to avert the same risks for the subsequent pregnancies.

Overall, there is ample room for improving perinatal health in Los Angeles County. Many conditions that contribute to the adverse birth outcomes are preventable. And any life lost or compromised when it is preventable is unacceptable.

Delivery of Services Relies Heavily on Public Financing: A Threatened Resource

Over the last five years there is an increasing reliance on public financing for health care costs related to pregnancy. From 1999 to 2002 the percent of births in Los Angeles County insured by Medi-Cal increased from 47% to 51%. The reliance on public health programs and Medi-Cal coverage is expected to increase in spite of significant fiscal pressures on local and state governments. Given that health care expenditures are expected to continually rise, the safety net health care system has never been more threatened in the last forty years.

The four LA County teaching hospitals, once delivering the majority of babies in Los Angeles County, have significantly reduced numbers of deliveries. Figure 2 demonstrate the decreasing trend in deliveries at County Hospital facilities.²



² Only mothers who resides in LA County were selected for analysis; Source of payment status is based on expected source of payment for delivery; Note: Hospitals with <50 Total Live Births were excluded from analyses; Source: California Department of Health Services, Center for Health Statistics, Birth Records 2000 and 2003.

Many deliveries have been distributed within hospitals throughout Los Angeles. This was primarily a result of the Public-Private Partnership program, a collaborative effort between the Los Angeles County Department of Health Services and private, community based providers, designed to provide needed medical, dental and specialized services complementary to the DHS safety net system.³

The obstetrical patient in County Hospitals tends to have a higher number of risk factors that require a higher level of specialized care. About 99% of the births at the County hospital facilities are financed by Medi-Cal. A higher level of dependence on public financing can severely compromise the ability of these facilities to provide the comprehensive specialized care in a timely manner.

The financial burden is also deeply recognized in the private hospital system. Other hospitals also share the burden of threatening reductions in public financing. In 2003, approximately fifteen of the delivering hospitals in LA County deliver about 60% live births financed by Medi-Cal. With decreasing number of live-births, these facilities face a significant burden striving to provide quality service, in the face of increasing health care costs, nursing workforce shortage and potentially dwindling funding streams.

A significant proportion of women on Medi-Cal during pregnancy lose financial access to health care 60 days postpartum when access to Medi-Cal is terminated. Providing continuity of care after delivery is compromised with loss of financial access to health care. For women with risks identified in pregnancy, appropriate consultation and follow through to help avert those risks in the subsequent pregnancies is significantly hindered.

³ Leong, Darryl: The Power of Partnership: Solutions Created and Lessons Learned by the Public Partnership Program in Los Angeles County, Community Clinic Association of Los Angeles County. May 2005. www.ccalac.org.

With a trend toward decreasing birth rates and increased reliance on the public health system for financing care, recognition of the burden on the public health system and the need to proactively plan for future trends in expected deliveries is dire.

Equitable Quality Health Care

There is ample room for improvement in the delivery of quality perinatal health care. Work over the last decade demonstrates that health care quality can be improved by regular measurement of health outcomes and public reporting of quality data.⁴ Through these efforts, more people received preventive care and treatment for chronic illness, and fewer were prescribed unnecessary medications. These changes account for thousands of lives saved. Yet, not all U.S. health care consumers benefit from these results.

A few measures tracked by participating health plans address important women's health issues, (breast and cervical cancer screening, screening for *Chlamydia trachomatis* cervical infection, and tobacco cessation). Yet, there are currently only two measures that address pregnancy related care⁵, neither of which addresses the content of care provided. Experts agree that comprehensive health, nutritional and psychosocial assessment of the pregnant woman is an essential component of quality prenatal care. How the comprehensive assessment is completed, how risk factors are identified, appropriately screened, treated, and referred varies significantly. Further efforts to standardize the content of prenatal care, as well

⁴ National Committee for Quality Assurance. The State of Health Care Quality 2005. Industry Trends and Analysis. Washington D.C.

⁵ Pregnancy related Healthplan Employment Data and Information Set (HEDIS®) measures: (1) Timeliness of Prenatal Care-The percentage of women beginning their prenatal care during their first trimester or within 42 days of enrollment if already pregnant at the time of enrollment into the health plan. (2) Checkups after delivery- The percentage of women who had a visit to a health care provider on or between 21 days and 56 days after delivery.

as monitoring and publicly reporting outcomes could benefit the systems ability to provide quality care in a timely manner.

A second area for improvement involves consumer awareness and use of quality reporting information as they select their health care options. Health care consumers have several options for health care through their employers and Medi-Cal managed care. Due to rising costs and health care consumer preference for selecting their own providers, many employers are choosing health care options that have not been required to monitor and publicly report their performance. Consumers must be made aware of improvements in safety, quality and accountability, so that they may make informed choices for their family's health care whether it is paid for through personal, private or public funds. Lastly, providers, institutions and health plans should be supported in their efforts to provide safe and quality care for their patients. Systems of care that reward high volume must be addressed and traded for those that reward high quality.

A third area focus for improvement is reducing medical errors and duplication of service and minimizing the administrative burden on providers in order to reduce unnecessary costs.

Healthier Communities Means Healthier Babies

Significant changes over the past several decades have altered the understanding of conditions that influence the outcome of newborns and their ability to get off to a right start. *From Neurons to Neighborhoods* concludes that children are born wired and ready to learn.⁶ From the time of conception through the first years of life the pace of development far exceeds that of any other stage of life. Effects during the prenatal period and the first years of life can significantly affect the life course of the newborn.

⁶ Shonkoff, JP, Phillips DA, and the Committee on Integrating the Science of Early Childhood Development. National Research Council and Institute of Medicine. *From Neurons to Neighborhoods. The Science of Early Childhood Development.* National Academy Press. Washington, DC 2000.

Abundant evidence from behavioral and neurobiological sciences documents a wide range of environmental threats to the development of the central nervous system. These include poor nutrition to the mother and fetus, environmental toxins, drug exposures, chronic stress, infection and lack of a nurturing environment. Providing appropriate nutrition, strengthening family resiliency, enhancing family literacy, building safe and environmentally sound neighborhoods, providing nurturing environments home and in society are also essential elements to improving the health and well-being of newborns and their life course.

Towards a Unified Commitment to Action

Success in improving birth outcomes in Los Angeles County will require connecting leadership and uniting efforts. There is power in partnerships. The Perinatal Summit “Healthy Births through Healthy Communities: Connecting Leadership to Achieve a Unified Commitment to Action” seeks to provide a forum for key stakeholders to collectively discuss the current and future state of maternal and perinatal health outcomes in Los Angeles County and discuss the significant gaps in our current efforts. We are expecting to galvanize support around timely and relevant strategies that are achievable in the short term. We hope to have an engaging discussion around the key challenges to optimizing the health and well being of every pregnant woman and their children.

Below are several areas recommended for improvement

- Preparing women for pregnancy; address risk factors before and between pregnancy to support optimal birth outcomes
- Improving Access to Quality Health Care by reducing medical error, duplication, improving quality of health care and reducing administrative burden.

- Enhancing measurement and public reporting of health care reduces variation and improves quality
- Building the Capacity of the Safety Net of which over 51% of deliveries depend on.
- Building a coordinated seamless system of care
- Financing of health care between pregnancies to prepare women for the next pregnancy.
- Eliminating racial/ ethnic and regional disparities in health care and health status
- Strengthening family resiliency

Carolina Reyes, MD is Executive Director of the Los Angeles Best Babies Collaborative Center for Healthy Births and Visiting Associate Professor of Obstetrics and Gynecology, Keck School of Medicine at USC. Janice I. French, CNM, MS is the Director of Programs of the Los Angeles Best Babies Collaborative Center for Healthy Births, an epidemiologist and a midwife.