

# Neonatal intensive care in Mexico is cost effective

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Neonatal intensive care provides substantial population health benefits in Mexico relative to its costs, even for very premature babies, and as such offers exceptional value for money within the country's Popular Health Insurance (Seguro Popular) program, which offers free access to a specific set of health care interventions. Furthermore, neonatal intensive care could also be cost effective in other middle-income countries.

These are the findings of a study by Jochen Profit from Baylor College of Medicine, Houston, USA, Joshua Salomon from the Harvard School of Public Health, Boston, USA, and colleagues, and published in this week's *PLoS Medicine*.

The authors conducted a detailed data analysis using a decision analytic model—a mathematical model that combines evidence on the outcomes and costs of alternative treatments to help inform decisions about health care policy—to estimate the cost effectiveness of neonatal intensive care in Mexico. The results showed that compared to no intensive care, neonatal intensive care for infants born at 24 - 26, 27 - 29, and 30 - 33 weeks gestation prolonged life expectancy by 28, 43, and 34 years respectively, and averted 9, 15, and 12 DALYs (disability-adjusted life years; one DALY represents the loss of a year of healthy life), at incremental costs of US\$1,200, US\$650, and US\$240 for each DALY averted, respectively.

Interventions with incremental costs per DALY of less than a country's per capita gross domestic product are considered highly cost-effective; incremental costs of 1-3 times the per capita GDP are potentially cost-

effective. Since Mexico's per capita GDP was approximately US\$8,200, this study suggests that including neonatal intensive care in Mexico's Seguro Popular is highly efficient in terms of the overall benefits it provides compared to the resources it consumes.

The authors say, "Our economic evaluation indicates that [neonatal intensive care](#) for preterm infants in Mexico is likely to be exceedingly cost-effective." They add, "While improving the survival of infants above 30 weeks gestation provides the greatest overall population [health benefits](#), and at the highest value for money, intervention among all preterm infants above 24 weeks gestation should be considered as a cost-effective use of health care resources."

**More information:** Profit J, Lee D, Zupancic JA, Papile L, Gutierrez C, et al. (2010) Clinical Benefits, Costs, and Cost-Effectiveness of Neonatal Intensive Care in Mexico. PLoS Med 7(12): e1000379. [doi:10.1371/journal.pmed.1000379](https://doi.org/10.1371/journal.pmed.1000379)

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