

Incentivizing Pregnancy Follow-Up among Vulnerable Populations: Analysis of Financial Compensations in Antenatal Care

Violette Delisle[1], Carine Franc¹, Lise Rochaix[2], Isabelle Le Ray[3], Maxime Luu[4],
Marc Bardou⁴ *on behalf on the NAITRE study group.*

Abstract

Although antenatal care in France is universally accessible and free of charge, substantial social inequalities persist in its utilisation. Regular antenatal follow-up is essential for the early identification of risk factors and the prevention of adverse maternal and neonatal outcomes. The NAITRE trial aims at reducing these inequalities by offering women in situations of vulnerability a €30 financial incentive for each antenatal care consultation attended. Eligible participants were beneficiaries of the Couverture Médicale Universelle (CMU) and State Medical Coverage (AME).

The final sample is composed of 3,521 women (1,658 women in the control group and 1,863 in the intervention group). For each participant, an antenatal care attendance rate was computed as the proportion of completed consultations relative to those expected. We estimated an inverse probability weighting (IPW) quasi-binomial model to assess the causal impact of the intervention on this success rate and derived the average marginal effect. Heterogeneity analyses were conducted to examine whether treatment effects differed across sociodemographic profiles.

The financial incentive increased antenatal care attendance by an average of 8.8 percentage points among treated women. Individual treatment effects ranged from 3 to 11 percentage points. Women presenting with moderate vulnerability (according to the EPICES score) benefited more from the incentives scheme than non-vulnerable women, suggesting meaningful heterogeneity in responsiveness to the intervention.

Financial incentive schemes appear to be an effective tool for improving antenatal care utilisation among socially vulnerable women. By reducing inequalities in antenatal care attendance, this intervention has the potential to contribute to improved maternal and fetal health outcomes.

[1] CESP, Inserm UMR-U1018, 16 av. Paul Vaillant Couturier, 94800 Villejuif, France

[2] Paris School of Economics (Hospinnomics) - Paris 1 Panthéon-Sorbonne, Paris, France

[3] Department of Neonatal Medicine, University Hospital of Strasbourg, University of Strasbourg, Strasbourg, France

[4] CIC1432, CHU Dijon Bourgogne and Université Bourgogne Europe, Dijon, France