

# Examining Immigrant Healthcare Access Inequalities in France: An Intersectional Approach

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Extended Abstract for EPC 2026

## Abstract

Immigrants often arrive in better health than the native population of their host country, a phenomenon known as the ‘healthy immigrant effect’. However, this initial advantage tends to decline over time, partly due to unequal access to healthcare. This study examines disparities in healthcare access among immigrants in France, with a particular focus on women’s use of preventive services, specifically cervical cancer screening. These inequalities are often attributed to demographic and socioeconomic factors. While such determinants are frequently analyzed separately, I adopt an intersectional approach to explore how they interact and contribute to compounded disadvantages. Drawing on the recent *Trajectoires et Origines 2* survey (N = 27,181), I apply the Multilevel Analysis of Individual Heterogeneity and Discriminatory Accuracy (MAIHDA), a recent quantitative advancement that enhances the study of intersectionality beyond conventional intercategory models. This study examines how age, geographical origin, educational attainment, and social class intersect to shape inequalities in access to this form of preventive care among immigrant women in France. By identifying complex patterns of exclusion, this research underscores the need for frameworks that capture the multidimensional nature of healthcare access disparities. Using this approach, I reveal substantial heterogeneity between groups in their uptake of preventive care. Further analyses will identify which groups face the greatest barriers to healthcare access and will compare observed MAIHDA outcomes with additive predictions, highlighting the variability arising from complex interactions.

# Motivation and research question

Immigrants are healthier than comparable native populations (Ichou and Wallace, 2019), but this advantage for immigrants appears to diminish in the long run (Kennedy et al., 2015). One key explanation for this fading health advantage is immigrants' lower utilization of healthcare services when needed. The underlying causes of these disparities are diverse, they vary within the immigrant population itself, and are largely shaped by demographic, socio-economic factors and migration background (Berchet and Jusot, 2012). I propose here to improve the understanding of the dynamics driving socio-economic and demographic disparities in healthcare access, by taking a further step applying intersectionality theory to healthcare access outcomes.

Intersectionality, rooted in Black feminist theory (Crenshaw, 1989, 1991), highlights how individuals' positions at the crossroads of multiple social positions shape distinct experiences of privilege and oppression. I state here that this perspective is essential in understanding healthcare access disparities, as they cannot be fully understood by examining each axis of inequality in isolation. Intersectionality challenges the assumption that social position have independent, additive effects, as seen in main-effects regression models.

This study focuses on four key variables —age, migratory background, social class, and education— that may interact with each other, asking: **how do age, migratory background, social class and education combine to shape healthcare access disparities in France?** By adopting an intersectional approach, this work contributes to deeper understanding of healthcare access inequalities in France, emphasizing the heterogeneity of experiences and the overlapping mechanisms driving inequalities.

## Data and methods

*Trajectoires et Origines* is a cross-sectional, nationally representative survey conducted by INED and INSEE in 2019 among individuals who have immigrated to France at any point in their lives, as well as those born in France to immigrant or non-immigrant parents ( $N = 27,181$ ). The survey is specifically designed to study the immigrant population in France, providing detailed information on the characteristics of immigrants and their descendants, while also including French natives (Beauchemin et al., 2023).

For this study, I focus on women aged 25—60 who have been living in France for more than three years, including both natives and first-generation immigrants ( $N = 8,076$ ). The main outcome is having had a cervical smear test in the last three years (self-reported, yes/no). Explanatory sociodemographic variables include age, social class, level of education, and migratory origin.

I apply the Multilevel Analysis of Individual Heterogeneity and Discriminatory Accuracy (MAIHDA) to explore intersectional inequalities in healthcare access in France.

MAIHDA is an innovative method for examining complex inequalities, accounting for interactions among multiple intersecting social positions (Evans et al., 2018, 2024). This method uses a two-level hierarchical model with individuals (level 1) nested within social strata (level 2). Here, an intersectional stratum is defined as the combination of age, geographical origin, educational attainment, and social class. Unlike traditional multilevel models, where variables as individual-level covariates, they are considered in MAIHDA as properties of the strata. Interaction effects are captured by strata-level residuals, allowing us to quantify how intersecting social positions shape preventive care utilization.

## First results

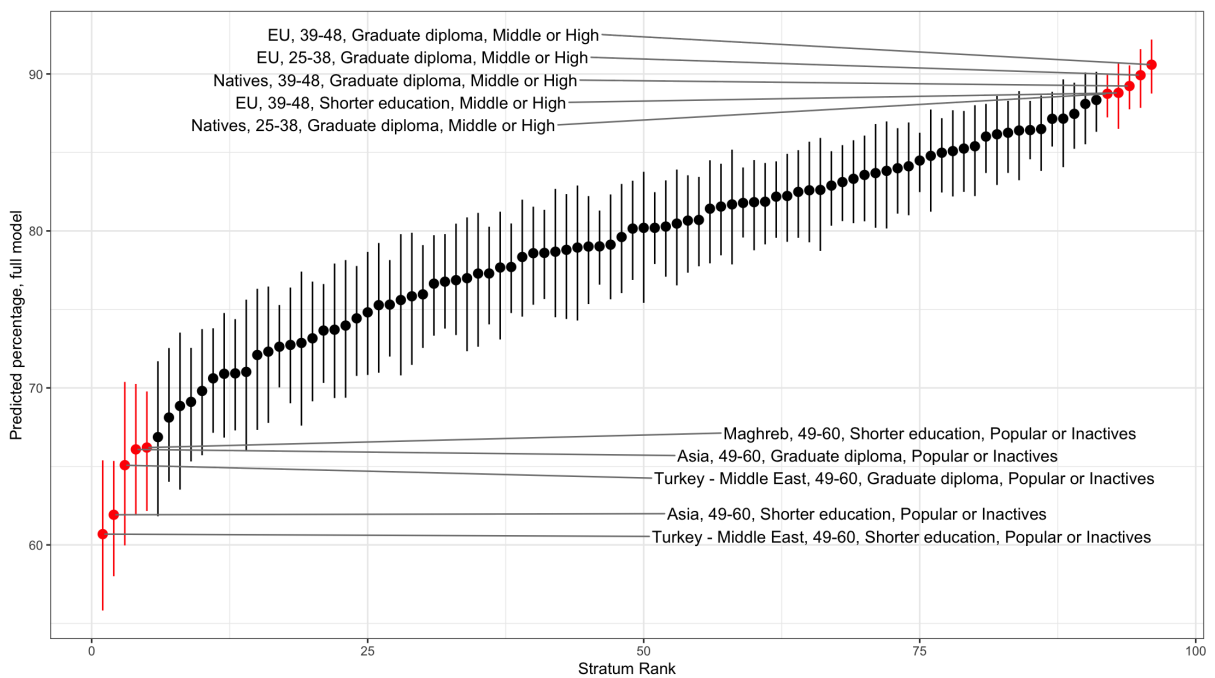


Figure 1: Predicted percentage of women that have done the test in each stratum

A way to present part of the preliminary results is by ranking all 96 strata according to their predicted percentage of women who have had a cervical smear test. Each point in the figure represents a stratum, with the y-axis showing the predicted percentage. The bottom and top 5 strata, highlighted in red, correspond to the lowest and highest predicted percentages, respectively, and the characteristics of these strata are indicated alongside these points.

We observe that the strata with the lowest predicted percentages are characterized by inactive women or women from lower social classes, often older, and predominantly first-generation immigrants from the Maghreb, Asia, or the Turkey–Middle East region. Conversely, the strata with the highest predicted percentages consist mainly of non-immigrant women from middle or high social classes, most of whom hold a graduate diploma.

## Further steps

MAIHDA models also allow to assess the extent to which the observed outcome deviates from the value expected based on the additive main effects of each stratum. In practice, this involves comparing the predicted probability of having had a cervical smear test within a given stratum to the probability estimated from additive effects alone. Such differences can reveal variability that arises from more complex interactions between social positions and can be investigated through stratum-level random effects or residuals. This approach helps to determine whether stratum membership contributes additional explanatory power beyond additive effects. Exploring these stratum-level deviations constitutes the next step of our descriptive work on intersectional inequalities in preventive healthcare utilization.

## References

- Beauchemin, C., Ichou, M., Simon, P., the TeO2 survey design team, and Dutreuilh, C. (2023). Trajectories and origins 2 (2019–2020): A survey on population diversity in france. Vol. 78(1):11–28. Place: Paris Publisher: Ined Éditions.
- Berchet, C. and Jusot, F. (2012). État de santé et recours aux soins des immigrés en france : une revue de la littérature. *Journal de Pédiatrie et de Puériculture*, 25(2):120–125.
- Crenshaw, K. (1989). Demarginalizing the intersection of race and sex: A black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics. 1989(1).
- Crenshaw, K. (1991). Mapping the margins: Intersectionality, identity politics, and violence against women of color. 43(6):1241–1299. Publisher: Stanford Law Review.
- Evans, C. R., Leckie, G., Subramanian, S. V., Bell, A., and Merlo, J. (2024). A tutorial for conducting intersectional multilevel analysis of individual heterogeneity and discriminatory accuracy (MAIHDA). 26:101664.
- Evans, C. R., Williams, D. R., Onnela, J.-P., and Subramanian, S. (2018). A multilevel approach to modeling health inequalities at the intersection of multiple social identities. 203:64–73.
- Ichou, M. and Wallace, M. (2019). The healthy immigrant effect: The role of educational selectivity in the good health of migrants. *Demographic Research*.
- Kennedy, S., Kidd, M. P., McDonald, J. T., and Biddle, N. (2015). The healthy immigrant effect: Patterns and Evidence from four countries. *Journal of International Migration and Integration*, 16(2):317–332.