Extending health care coverage to immigrants who only have access to urgent care could **reduce hospital costs** and **length of stay** by 10 to 15%

Comparison of the characteristics and costs of hospital stays among vulnerable immigrants in France with respect to the type of health care coverage between 2011 and 2021

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OBJECTIVES

France has two programs to provide care for undocumented immigrants:

• Urgent and vital care (**SUV**) for undocumented adult immigrants with less than six months of residency, providing access to urgent in-hospital care, obstetrical care, abortion, and prevention/treatment of communicable diseases, delivered free of charge in public hospitals

• State medical aid (**AME**) for all other undocumented immigrants, providing access to the whole health care system (hospitalizations, outpatient visits outside of the hospitals, medications, transport)

Once documented, the immigrants join the universal compulsory health insurance (**AMO**) with all of France's residents. The aim of this study was to compare the characteristics of patients, their hospitalizations and the costs depending on the patients' coverage type.

METHODS

This retrospective cohort study used the French national database for all acute care hospital admissions (PMSI) from 2011 to 2021.

All hospital stays of patients covered by SUV and AME and a random sample of patients covered by AMO were extracted.

Patients were grouped (stratified) by:

• sex
• primary diagnosis category (ICD-10)
• whether the hospitalization was planned or not,
• the category of hospitalization (among 23, such as obstetrics, cardiology, etc)

We only selected strata for which at least one individual of each coverage type was present.

We used a linear mixed model to explain the **cost**, the **length of stay** and the **number of days within a ICU**, using logarithmic transformation. We considered the strata as the random effect. The fixed effects were:

• the coverage type
• the age (transformed to a natural spline with four degrees of freedom)[1]
• the region (Metropolitan France or overseas territories)

RESULTS

Descriptive Analysis

• 3,144,333 stays for 1,319,350 patients
• Average (standard deviation) age: 34.6 (18.4), 31.4 (18.9), and 48.0 (28.2) for immigrant patients covered by SUV, AME and AMO respectively (fig. 1).
• 48%, 38% and 44% were male

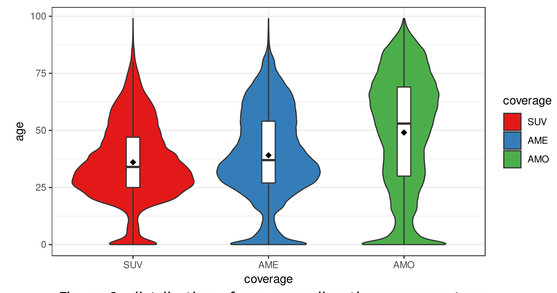

Figure 1: distribution of age regarding the coverage type

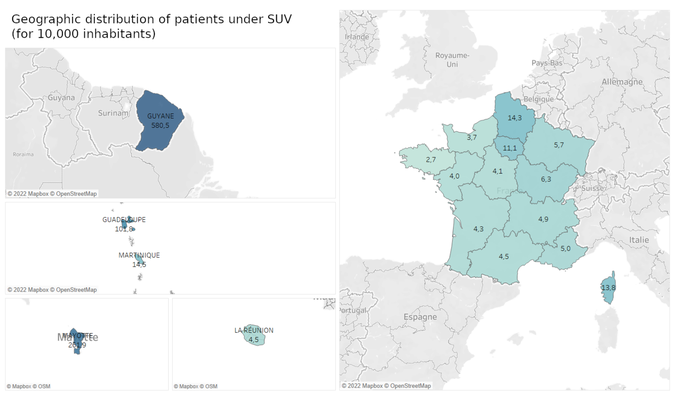

Figure 2: Average incidence of hospital stays for patients covered by SUV

• Incidence of hospital stays for SUV and AME were 26 and 7 times higher, respectively, in the overseas territories than in the rest of the country (fig. 2), whereas AMO stays were evenly distributed
• The proportion of obstetrics represented 21.1%, 19.5% and 8.3% of stays

Multivariable Analysis

4,961 strata of homogeneous stays

Outcome variable		Exp. Estimate [95% CI]	t value
Length of stay			
	AME vs AMO	**1.07 [1.07; 1.07]**	79.1
	SUV vs AMO	**1.21 [1.20; 1.21]**	95.2
Cost			
	AME vs AMO	**1.05 [1.04; 1.05]**	45.4
	SUV vs AMO	**1.16 [1.16; 1.17]**	66.6
Length of stay in ICU			
	AME vs AMO	**1.01 [1.01; 1.01]**	14.7
	SUV vs AMO	**1.02 [1.02; 1.02]**	22.1

CONCLUSION

• For similar patients and hospitalization type, **undocumented immigrant's length of stay is longer and cost more than the general population**.
• **Patients covered by SUV stay longer during hospitalization and cost more** than patients covered by AME
• The existence of both coverage types for undocumented immigrants is historical and driven by political reasons. For the aim of reducing health care expenditure for undocumented noncitizens, **the current strategy of limiting access to only urgent care for this population may lead to a delay in the management of the disease, and thus increase the overall costs for the health care system.**

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