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Patients like any others? Providing coverage to undocumented migrants in France: effects on access to care and usual source of care

Antoine Marsaudon (1,*, Florence Jusot², Jérôme Wittwer³, Paul Dourgnon¹

¹Research and Information in Health Economics (Irdes), Paris, France

²PSL, Université Paris-Dauphine, Leda-Legos, Irdes, Paris, France

³Bordeaux Population Health (Inserm U, 1219), Université de Bordeaux, Bordeaux, France

*Corresponding author. Research and Information in Health Economics (Irdes), 21-23 avenue des ardennes, Paris 75019, France. E-mail: marsaudon@irdes.fr

Abstract

Medical State Assistance is a French public health insurance programme that allows undocumented migrants (UM) to access primary, secondary, and tertiary care services free of user charge, either premium or out-of-pocket. The objective of this study is to assess the effect of Medical State Assistance on access to healthcare services and on usual source of care (USC). We rely on representative data of 1,223 UM attending places of assistance to vulnerable populations in Paris and in the greater area of Bordeaux (France). In this sample, 51% of UM are covered by Medical State Assistance. We use probit and ordinary least square regressions to model healthcare uses of undocumented migrants. The results show that UM covered by Medical State Assistance are more likely to access outpatient healthcare services (by +22.4 percentage points) and less likely to do so on non-governmental organizations (by -6.7 percentage points) than their eligible but uncovered counterpart. Additionally, covered undocumented migrants made 36.9% more medical visits in outpatient healthcare services and 65.4% fewer visits in non-governmental organizations than eligible but uncovered ones. Moreover, covered UM are also more likely to report that primary care services are their USC, in preference to emergency departments and other outpatient care services.

Introduction

As of 2017, undocumented migrants (UM) represented slightly less than 1% of European population, and 12%–16% of non-European migrants in Europe [1]. UM (individuals residing in a country without legal documentation, such as individuals who entered France without inspection and proper permission from the government, or those who entered with a legal visa that is no longer valid) are systematically excluded from the formal labour market, often endure deprivation, sometimes extreme hardship, and face poor health status as evidenced by high prevalence rates of cardiovascular diseases, infectious diseases (e.g. HIV/AIDS, tuberculosis, and hepatitis), diabetes, and mental health problems [2, 3]. UM have also limited access to health care services. A large body of quantitative and qualitative European studies shows that UM have lower primary care utilization than documented migrants and natives [4].

Their lower access to outpatient healthcare services, including primary care services, can be attributed to a series of factors, first, the lack of health insurance. In several European countries, UM are excluded from public health insurance and therefore remain uncovered. They can access care only through emergency departments (ED), public hospitals or services of non-governmental organizations (NGO) [5]. France, however, is one of the few European countries that have implemented a public health insurance program specifically dedicated to UM: The Medical State Assistance (MSA—also translated as the State Medical Aid). The MSA provides UM access to most health care services, such as primary, secondary, and tertiary care along with medications. Since January 2021, some care is only covered 9 months after MSA admission for new beneficiaries or for those who have not benefited from the MSA for more than a year. Further restrictions could come due to the growing pressure exercised by right-wing populism in France.

To be granted with MSA coverage, applicants must demonstrate that they have low financial resources (e.g. earning less than 756 euros per month for a single person) and that they have continuously resided in France for at least 3 months [6]. MSA is granted for 1 year, after which one needs to reapply. It is worth noting that other migrants, such as regular migrants, refugees, and asylum seekers are not eligible to the MSA but can be covered by the public health insurance.

By enabling access to regular health care services, MSA is expected to have a positive impact on efficiency, equity, and health outcomes. In terms of efficiency, MSA may reduce actual inefficient ED use, which is of particular importance in a context of ongoing demand surge and structural crisis within ED services in France [7]. Additionally, improved access to primary healthcare services is likely to increase the probability of treating diseases at an early stage, which may prevent or reduce future costly hospital stays. MSA should also contribute to greater equity in access to care, entitling documented and undocumented individuals to the same healthcare services and treatments. In terms of population health, better access to health care should enhance the health status of UM as well as the rest of the resident population health. Protecting UM health can indeed reduce the spread of communicable diseases to the rest of the population.

Providing access to primary care services is a key feature of MSA, which should contribute to UM becoming patients like any others in the health system. Primary care is regarded as a key component of healthcare systems and health policies, improving the population' health by reducing morbidity and mortality, and also contributing to reduce social health inequalities [8], especially in France where social health inequalities are high. Providing access to primary care to UM, a population both unhealthy and deprived, appears fundamental from both a public health and an equity point of view. In France, primary care is provided mostly in private practices, group practices, and health centres (community health centres, and other private non-profit and for-profit health centres).

By reducing the out-of-pocket payments, the MSA program is expected to increase health care utilization. However, reducing financial costs of outpatient healthcare services may in itself be insufficient to increase utilization. It would leave unchanged other costs, such as information costs, the potential cost of being identified as undocumented and deported, the opportunity cost of seeking care instead of seeking food or shelters, and discrimination costs by healthcare professionals [9]. These costs may exceed the decrease in healthcare financial costs induced by insurance coverage. Furthermore, patients who are satisfied by the care they receive at ED or public hospitals, may be more inclined to continue receiving that care rather than re-orientated themselves to outpatient services. Consequently, it is important to investigate whether the MSA improves access to outpatient care and primary care. While the MSA was implemented in 2000, only very few studies have addressed its outcomes, beyond investigating the determinants for MSA uptake [10, 11]. Our study is the first to investigate the potential influence of MSA on healthcare services' utilization.

The existing literature has largely demonstrated a positive association between health insurance and outpatient healthcare services' utilization among low-income US individuals [12-19]. Similar results are observed in France. Health insurance dedicated to low-income individuals is significantly associated with a higher probability of relying on outpatient healthcare services, especially for those who were previously uninsured and for young adults [20-25]. Furthermore, investigated the role of the usual source of care (USC) is of first importance as it is correlated with fewer unmet needs, greater access to care, an increased and more adequate access to preventive care services [26], even when controlling for insurance status [27] and healthy behaviours [28]. In California, a smaller proportion of UM than documented migrants have a USC, and insurance coverage does not fully account for this discrepancy [29]. The type of provider also plays a role. Individuals who report a doctor's practice or health maintenance organization as a USC report fewer barriers to care and fewer unmet needs than do individuals who report a hospital ED as a USC [30].

The effect of health insurance on healthcare utilization of UM is a topic that has received little attention in the literature. To the best of our knowledge only two studies have investigated this issue ([31], for Spain and [32], for USA). The former study exploits the 2012 Spanish health reform that restricted the health care system access for UM [31]. Their findings indicate that UM living in regions where the restrictions were more strictly enforced had a lower probability to visit doctor in primary care services and a fewer number of hospital visits than those living in other regions. The latter implements a randomized controlled trial allocated UM to have primary care appointments for free [32]. By doing so, they artificially randomized a health insurance with no out-of-pocket payments for UM. In their trial, treated individuals had a free appointment in one of the nine clinics participating in the program, while individuals in the control group only received information about safetynet services and were not supported to access primary care. Authors found that UM receiving an appointment have a higher primary care services utilization and lower ED visits.

This study builds upon this existing literature by analysing the association between health insurance and health care services utilization among UM living in France. In addition, we explore how MSA may orient UM toward primary care services as their main entry point to the health care system.

Methods

The premiers pas survey

The data used for our empirical analysis were derived from the Premiers pas survey. It is primary data providing a representative sample of 1223 UM attending places of assistance to vulnerable populations. We designed and conducted this survey from February to April 2019 in Paris and in the greater Bordeaux area. It worth noting that UM is a very difficult population to reach. Premier pas is the first dataset in France, to date, that do not exclusively focus on UM attending healthcare facilities. Consequently, this dataset is not subject to the bias that arises from the inclusion of individuals with healthcare needs, a limitation that is commonly observed in previous studies.

The survey protocol followed a two-stage procedure [33]. First, we selected places that provide assistance to vulnerable populations. These places offer various assistance services, including administrative support, food distribution, hygiene, health, educational, and cultural services. Among these places, 63 received UM and agreed to administer our questionnaire. Second, interviewers (speaking at least French and English, and at least one additional language spoken by the UM) collected questionnaires in these places of assistance.

At each place, respondents were randomly selected. Questionnaires were displayed in 14 languages, collected using touch pads and uploaded on an ongoing basis.

A total of 1223 UM individuals were initially sampled. However, 456 individuals were excluded from the study due to having resided in France for a duration of less than 1 year (as our health care utilization outcome variables are measured within the last 12 months), 3 due to missing information on MSA and 10 due to missing information on health care utilization outcomes. Missing values on control variables are coded as such, and therefore, no other restrictions of the sample are made. The final analysis sample contains 754 individuals. A large proportion of this population are male (67.7%) and originates from Sub-Saharan Africa or North Africa (79.0%). This sample contains a young population (55.3% are under 40 years old) facing social vulnerabilities (e.g. 1/4 are homeless). Additionally, 58.8% of the respondents are covered by MSA. Twenty-five percent of UM arrived in France less than two years ago, 36% arrived between two and four years ago, and 39% have been in France for more than 5 years ago. Information on UM health status shows that 67.8% report having at least one (chronic or acute) disease, 16.3% report having at least one functional limitation, and almost one third have severe mental health issues.

Health care utilization outcomes

We use several self-reported health care utilization outcomes. First, we use a binary indicator equals to 1 if UM report having visited at least one doctor in outpatient healthcare services, Hospital Medical Social Services (HMSS) (i.e. hospital-based services providing healthcare and social assistance to vulnerable populations), ED, NGO or during one hospital stay over the last 12 months, and 0 otherwise. Second, we use a binary indicator equal to 1 if UM report having visited at least one doctor in each of the above-mentioned places separately, and 0 otherwise. Third, we calculate, for each patient who had at least one visit, and for each type of healthcare facility, the logarithm of the number of visits. Fourth, we rely on a categorical variable distinguishing five USC (primary care services, HMSS, ED, hospitals and those who do not visit doctors). This is another way to measure the regularity and adequacy of healthcare services.

Medical state assistance

Our main explanatory variable is MSA coverage. It is measured by two categorical variables. The first is a binary variable equal to 1 if UM are covered by MSA, and 0 otherwise. The second is a categorical variable that distinguishes between UM who are eligible but uncovered by MSA, those who have been covered for less than 2 years, those who have been covered for more than 2 years but less than 5 years, and those covered for 5 years and more. We hypothesized that the longer the coverage duration, the better the MSA use. We, therefore, expect that UM covered for longer duration have a higher probability to use primary care services, and a lower probability to consult in other places.

Other explanatory variables

We report three sets of control variables that are likely to influence both health care utilization and MSA take-up. These variables are related to: Migration history (i.e. length of stay in France, legal status when arriving in France, whether reporting coming in France for health-related reasons, and the region of the country of origin), health status (i.e. reported at least one disease from a comprehensive list of chronic and acute diseases, whether this disease was diagnosed in their country of origin, whether they have severe mental health issues, and whether they report having functional limitations), and socioeconomic status (i.e. gender, age group, whether UM are homeless, the level of French language proficiency, and the daily net household income). For the analysis of USC, we consider in addition the USC the UM have in their country of origin. This allows to control for the potential selection of individuals who were familiar with health care services. Descriptive statistics of all these variables can be found in Supplementary Tables S1-S3.

Methods

To investigate the association between MSA and health care service utilization, we rely on the following multivariable analysis.

$$D_i^* = \beta_0 + \beta_1 MSA_i + \beta_2 SE_i' + \beta_3 IH_i' + \beta_4 H_i' + \varepsilon_i$$
(1)

$$C_i = \alpha_0 + \alpha_1 MSA_i + \alpha_2 SE'_i + \alpha_3 IH'_i + \alpha_4 H'_i + \gamma_i$$
(2)

In a first step, we estimate several probit models to separately analyse the association between MSA coverage and each binary outcome variable of health care use (Equation 1). In a second step, ordinary least squares (OLS) regressions are employed to quantify the association between MSA coverage and each continuous variable measuring the number of doctor visits in each type of facility, among those who had at least one corresponding visit (log-transformed numbers of visits) (Equation 2). In a third step, several probit models are estimated to analyse the associations between MSA coverage and each binary outcome variable of USC. MSA_i is the variable of interest and measured by the categorical variables presented in section 'Medical state assistance'. The socioeconomic status, migration history, and the health status control variables are respectively included in SE'_i , IH'_i , H'_i .

Results

Table 1 shows the results of the association between MSA coverage and health care services utilization (Equation 1). It shows that UM covered by MSA are more likely to have visited at least one doctor during the last 12 months, regardless of the facility. Those who are covered are 8.9 percentage points (pp) more likely to visit a doctor. The effect of coverage decreases with the coverage duration. The decreasing effect of MSA coverage on health care services utilization reflects opposite associations according to the healthcare services. Those covered for 5 years or more have a 22.1 pp increased probability of consulting a doctor in outpatient healthcare services, a 6.9 pp, and a 13.2 pp decreased probability of doing so in NGO and HMSS, respectively. Conversely, UM covered for less than 2 years are more likely to visit a doctor in ED (+16.2 pp) and during a hospital stay (+15.7 pp). These results are robust to a measurement change of the MSA exposure (see Supplementary Table S4).

Table 2 presents the estimates of the effect of MSA coverage on the number of doctor visits, conditional on making at least one such visit, for each of the health care services (Equation 2). We transform these coefficients to interpret them as the percentage increase in health care services (i.e. corresponding to 100^* (exponential of the OLS coefficient – 1)). Results show that UM covered by MSA for 5 years and more make 36.9% more visits in outpatient healthcare services but 65.4% fewer doctor visits in NGO.

Table 3 shows the results for the USC reported by UM. The results show that UM covered by MSA for 5 years or more have a 25.1 pp higher probability of reporting primary care services as their USC than eligible but uncovered UM and a lower probability of

Table 1. Health care utilization and MSA (marginal effects of probit models)

Variables	Visiting at least one doctor		Visiting at least one doctor in					
	regardless of (1)	the place (2)	Primary care services (3)	HMSS (4)	ED (5)	NGO (6)	Hospital stay (7)	
Covered by MSA (bin.)	0.089*** (0.031)							
Covered by MSA (cat.) ^a								
For <2 years		0.173***	0.297***	-0.009	0.162***	-0.032	0.157***	
		(0.036)	(0.060)	(0.054)	(0.064)	(0.058)	(0.052)	
From 2 to 4 years		0.085**	0.276***	-0.097***	0.061**	-0.061**	0.027	
		(0.035)	(0.045)	(0.035)	(0.026)	(0.026)	(0.027)	
From 5 years and over		0.039	0.221***	-0.132***	-0.052	-0.069**	0.064	
		(0.052)	(0.062)	(0.039)	(0.035)	(0.022)	(0.061)	
Socioeconomic variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Health status variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Migration history variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Observations	752	754	754	747	752	754	747	

Control variables include migration history (i.e. length of stay in France, legal status when arriving in France, whether reporting coming in France for health-related reasons, and the region of the country of origin), health status (i.e. morbidity by having reported at least one disease from a comprehensive list of chronic and acute diseases, whether this disease was diagnosed in their country of origin, whether they have severe mental health issues, and whether they report having functional limitations), and socioeconomic status (i.e. gender, age group, whether UM are homeless, and the daily net household income). Regressions report robust standard errors. It worth noting that categories 1, 2, and 3 of MSA coverage do not significantly differ from each other for primary care services and for NGO. Categories do differ for HMMS and ED which might indicate a gradient of MSA coverage for these healthcare services.

a: The reference category is composed by all MSA eligible individuals, but uncovered.

*** p<0.01, ** p<0.05.

Table 2. Number of consultations among health care users and MSA

Variables	Total number of doctor visits in						
	All health care services	Primary care services	HMSS	ED	NGO		
Covered by MSA (cat.) ^a							
For <2 years	0.370***	0.237*	0.171	0.370**	-0.143		
-	(0.165)	(0.094)	(0.117)	(0.109)	(0.155)		
From 2 to 4 years	0.390***	0.298**	0.257	0.227	-0.068		
-	(0.024)	(0.031)	(0.162)	(0.160)	(0.516)		
From 5 years and over	0.071	0.314**	-0.085	-0.079	-1.063**		
	(0.157)	(0.135)	(0.412)	(0.155)	(0.328)		
Socioeconomic variables	Yes	Yes	Yes	Yes	Yes		
Health status variables	Yes	Yes	Yes	Yes	Yes		
Migration history variables	Yes	Yes	Yes	Yes	Yes		
Observations	604	389	140	226	85		

Control variables include migration history (i.e. length of stay in France, legal status when arriving in France, whether reporting coming in France for health-related reasons, and the region of the country of origin), health status (i.e. morbidity by having reported at least one disease from a comprehensive list of chronic and acute diseases, whether this disease was diagnosed in their country of origin, whether they have severe mental health issues, and whether they report having functional limitations), and socioeconomic status (i.e. gender, age group, whether UM are homeless, and the daily net household income). Regressions report robust standard errors.

a: The reference category is composed by all eligible individuals uncovered by MSA.

** p<0.05, * p<0.1.

Table 3. Usual sources of care and MSA (marginal effects of probit models)

Variables	Usual source of care declared						
	Primary care services	ED	HMSS	Hospital	NGO	Do not visit docto	
Covered by MSA (cat.) ^a							
For <2 years	0.246***	-0.014	-0.015	0.033	-0.029		
	(0.054)	(0.057)	(0.050)	(0.078)	(0,016)		
From 2 to 4 years	0.288***	-0.012	-0.062***	-0.004	-0.070***	-0.087***	
2	(0.038)	(0.036)	(0.021)	(0.025)	(0.017)	(0.024)	
From 5 years and over	0.251***	-0.070***	-0.086**	0.135**		-0.072**	
	(0.016)	(0.012)	(0.042)	(0.054)		(0.034)	
Socioeconomic variables	Yes	Yes	Yes	Yes	Yes	Yes	
Health status variables	Yes	Yes	Yes	Yes	Yes	Yes	
Migration history variables	Yes	Yes	Yes	Yes	Yes	Yes	
Observations	745	715	726	742	557	652	

Control variables include migration history (i.e. length of stay in France, legal status when arriving in France, whether reporting coming in France for health-related reasons, and the region of the country of origin), health status (i.e. morbidity by having reported at least one disease from a comprehensive list of chronic and acute diseases, whether this disease was diagnosed in their country of origin, whether they have severe mental health issues, whether they report having functional limitations, and the USC in the country of origin), and socioeconomic status (i.e. gender, age group, whether UM are homeless, and the daily net household income). Regressions report robust standard errors.

a: The reference category is composed by all eligible individuals uncovered by MSA.

*** p<0.01, ** p<0.05.

reporting ED or HMSS as their USC (-7.0 pp and -8.6 pp, respectively). We observe a homogeneous and large impact of coverage duration on the probability to report primary care services as USC. Results also show that UM covered for 5 years or more are less likely to report never visiting a doctor (-7.2 pp) than eligible but uncovered ones.

Discussion

The aim of this article is to assess the effect of MSA on both the access to healthcare services and the usual source care of UM living in France. Our results show that UM covered by MSA are more likely to access outpatient healthcare services both on the intensive and the extensive margins. Individuals covered for longer duration are more likely to consult doctors in outpatient healthcare services, and less likely to consult a doctor in NGO or in ED than those uncovered. Among those covered, UM covered for 5 years or

more have more doctor visits in outpatient healthcare services and less in NGO. We also find that covered UM are more likely to report primary care services as their USC, and less likely to do so for ED. These results are in line with those found by the two other studies investigating the effect of health insurance on health care services utilization of UM [31, 32]. Overall, our results show that the longer the duration coverage, the more likely UM rely on outpatient healthcare services.

Reasons explaining why UM covered by MSA for longer duration rely more on outpatient healthcare services and less on other places might be twofold. First, they are more likely to know how to navigate the health care system and to understand the purpose of the MSA. Second, they might face less discrimination or care refusal from healthcare professionals because their demand has become financially solvent [9]. Qualitative research would also be needed for analysing in greater details how UM experience doctor visits in ED, hospital, NGO, and in outpatient healthcare services. Ethnographic approaches could provide a better understanding of healthcare pathway patterns. This would also lead to a better perception of the MSA's contribution to access healthcare services.

Individuals covered for less than 2 years are more likely to consult a doctor in ED or in hospitals. This result may reflect some reverse causality. That is, we are not able to disentangle whether the coverage allows to visit a doctor in these places, or whether visiting these places allows to be covered, as hospitals may provide social support to apply for MSA. However, if visiting these places allows UM to be covered, then those in poor health should be covered more than others, which are not supported by previous studies. None of the health status variables (i.e. having functional limitations, having at least one disease among a list of chronic and acute diseases, and whether this disease has been diagnosed in the country of origin) are correlated with MSA take-up rate [11]. The authors also found that the main determinant of MSA take-up rate is not the health status, but the length of stay in France. Thus, MSA coverage seems to reflect a better integration in France.

Another possible explanation for this reverse causality is the existence of a pent-up demand associated with MSA enrolment. This could take the form of an increase in consumption right immediately after take-up to compensate for previous unmet needs [34]. This existing literature in France shows that such a pent-up effect can exist, but it is concentrated on specific care, especially dental care. Documented lowincome individuals covered by another public health insurance scheme, very similar to MSA, consume more dental care immediately after enrolment. This effect does not persist after previous unmet needs have been satisfied [35–37]. Furthermore, a large body of evidence shows that the endogeneity of the relationship between health insurance and healthcare use remains marginal. The existing literature shows that insured individuals are more likely to use outpatient healthcare services, not the other way around [12–15, 17, 18, 20, 25, 38, 39].

Our study suffers from other limitations due the selection of UM living in France for more than 1 year, and also because we selected those attending places of assistance to vulnerable populations. UM temporarily residing in France, those who are more integrated, and those who are more marginalized are not included in our survey. Our results may, therefore, not be generalizable to the UM population.

An interesting avenue of research would be to investigate why and how UM get covered by MSA. If current health status is not associated with take-up rate, then how do UM get covered? Furthermore, as health insurance is only weakly correlated with better health status [17, 38, 40], should public health policies solely focus on reducing its non takeup? Or, should they focus on improving other health determinants, such as the access to the formal labour market, better housing and living conditions? However, these questions are beyond the scope of this study, and are left for future research.

Acknowledgements

We are grateful to Stéphanie Guillaume, Constance Prieur, Nicolas Vignier, Sohela Moussaoui, for helpful comments and discussions. We also thanks all participants of the Welfare and Policy Conference, the French Health Economics Days, the Migration and Health seminar, the European Health Economics Association, and of the Applied Economics Days. We warmly thank the three reviewers for all their suggestions.

Supplementary data

Supplementary data are available at *EURPUB* online.

Conflict of interest: All authors declare that they have no conflicts of interest.

Funding

This study has received financial support from the French State in the framework of the Investments for the Future programme IdEx université de Bordeaux/GPR HOPE (call results of the French National Research Agency: https://anr.fr/Projet-ANR-16-CE36-0008).

Data availability

The data underlying this article will be shared on reasonable request to the corresponding author.

Key points

- Medical State Assistance is a unique health insurance in Europe allowing undocumented migrants to access healthcare services for free.
- Undocumented migrants covered by Medical State Assistance are more likely to rely on access outpatient healthcare services than those not covered.
- Eliminating this health insurance program would have a major impact on undocumented migrants' healthcare service access and utilization patterns.

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European Journal of Public Health, 2024, 00, 1-6 https://doi.org/10.1093/eurpub/ckae143 Original Manuscript