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Unemployed Adults Forgoing Healthcare in France

In countries where the social protection system provides little or no coverage of medical expenses, many people are unable to afford the healthcare they need. Forgoing healthcare is less frequent in countries where the social protection system covers costs. In France, costs are covered by the social security system and by specific arrangements for the most vulnerable populations. That said, 'out-of-pocket' expenses vary and may be an obstacle to health seeking. Is occupational status, often linked to complementary health insurance coverage, a source of disparities? Drawing on data from the 2016 Health Barometer, the authors explore this question by comparing reported forgoing of healthcare among unemployed and employed people.

The health of unemployed people is a major public health issue. In 2016, 10.1% of adults aged 18–64 in France were unemployed (INSEE, 2017).⁽¹⁾ Compared with employed people, their annual risk of dying is 3 times higher for men and twice as high for women (Mesrine, 2000). Research conducted in other countries has pointed up excess mortality among the unemployed from suicide (Milner et al., 2013), cancer (Lynge, 1997), cardiovascular disease, and external causes (Brenner, 1977). They also more frequently report poor health and chronic disease (Arber, 1987). However, a literature review in 2004 noted the absence of research on the health of unemployed people in France

(1) The unemployment rate in France was 8.5% when this article was written (INSEE, 2019).

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(Sermet and Khlat, 2004), and an update in 2017 (Meneton et al., 2017) found just three new studies on the topic. These two literature reviews both highlight the poorer physical and mental health of unemployed people. But despite the specific health profile of this population, their difficulties in accessing healthcare have never been examined. This article analyses the forgoing of healthcare among unemployed people in relation to their demographic, economic, and social characteristics.

The coverage of healthcare costs by the social protection system, which may differ between unemployed and employed people, is a key factor to be considered. In France, these costs are covered by the social security system and by complementary insurance schemes. Social security coverage is becoming more universal. While funded primarily through employee and employer contributions (Willmann, 2007), it now has a broader range of income sources, including more general taxes since 2019 (generalized social contribution, taxes on alcohol and tobacco, VAT), and coverage has been extended to both employed and unemployed people. Complementary coverage, on the other hand, is still closely tied to employment; since January 2016, private-sector employers have been required to offer complementary health insurance packages to their employees. In 2016, the social security system covered 77.5% of healthcare expenses on average, with complementary insurance and the state covering 14.9% and the remainder charged directly to patients (DREES, 2018). Hence, to reduce out-of-pocket expenses and guarantee equality of access to healthcare, combined access to these two types of coverage (social security and complementary insurance⁽²⁾) is essential. However, for some people, losing a job entails losing their complementary insurance (Jusot, 2014).

The financial insecurity associated with unemployment raises the question of how to meet the healthcare needs, specific or otherwise, of the unemployed. Unemployed people's greater economic,⁽³⁾ social, and health vulnerability may hinder their access to healthcare and increase their risk of going without it, which represents a major social, political, and public health challenge. Drawing on data from the 2016 Health Barometer (Baromètre Santé), this study aims to explore the links between unemployment and forgoing healthcare, and to determine why certain characteristics of unemployed people tend to strengthen these links. Do unemployed people more often forgo healthcare than employed people? If so, is this due to specific features of their socio-economic profile? Are the characteristics associated with forgoing healthcare different for unemployed and employed people? Last, taking account of the social, demographic, economic, and health characteristics of unemployed people, and their degree

(2) The state covers healthcare for disabled war veterans and undocumented migrants, notably via a scheme known as *aide médicale de l'État* (AME). However, these necessary forms of support are a marginal component of the healthcare reimbursement system.

(3) In 2016, the median living standard of unemployed people under the ILO definition was €14,070 per year versus €22,720 for people in employment (INSEE, 2016b).

of social protection, we will analyse how the organization of reimbursement in France is liable to affect the forgoing of healthcare.

I. Unemployment, risk factors, and access to healthcare: current state of knowledge

1. Why do unemployed people forgo healthcare?

According to Maruthappu et al. (2016), increased unemployment is associated with poorer population health at the scale of the European Union, perhaps partly due to difficulties in accessing healthcare. This widening health inequality is strongly linked to the institutional context—and specifically the system of social protection—which acts as a mediator between individuals and medical care (Beckfield et al., 2015). For the unemployed, the difficulties in accessing healthcare and the reasons for going without it vary from one country to another.

The 2004 European Union Statistics on Income and Living Conditions shows that countries with the highest proportions of respondents reporting unmet healthcare needs were Sweden, Estonia, and Austria. Among the many possible reasons for not seeking care, the main answer given by respondents in most countries was that of cost. In Spain and Sweden, waiting times were mentioned, while in Norway, the distance between the respondent's home and the healthcare facility was cited (Koolman, 2007). In the United States, unemployment is a limiting factor for access to healthcare, notably due to cost and the difficulty of obtaining private or public health insurance (Driscoll and Bernstein, 2012).

Unemployment risk factors

Under the definition of the International Labour Organization (ILO), three criteria must be met to be considered 'unemployed'. An unemployed person must be without work, i.e. not in paid employment of any kind during the reference week, be available to start work within 2 weeks, and have taken specific steps to find paid employment in the previous month or have found work that begins within a period of 3 months (INSEE, 2016b).

Alongside a lower standard of living, unemployed people are also partly characterized by other sociodemographic factors. Women, young people, manual and clerical workers, and low-skilled individuals are generally at greater risk of unemployment (Demazière, 2006). For many years, the unemployment rate was higher for women than for men, but since 2008 it has been similar for both sexes: 12.0% for women and 9.3% for men in 1996; 9.9% and 10.2% in 2016 (INSEE, 2017). It is also very high among young people, reflecting the period of transition, uncertainty, and mobility between completing education and finding stable employment (Batard et al., 2012). The unemployment rate

was 24.6% at ages 15–24 in 2016, compared with 9.3% at ages 25–49 (INSEE, 2017). In addition, immigrants and their descendants are 1.5 times more frequently unemployed than people who are neither immigrants nor their descendants: 16% versus 9% for immigrants and 15% versus 8% for descendants in 2010 (INSEE, 2012).

Low-skilled individuals have the highest unemployment risk. Between 2003 and 2014, when the overall unemployment rate remained stable, this inequality widened, with unemployment increasing by 6.6 percentage points for the least educated (from 11.3% to 17.9%) and dropping by 0.7 points for the most educated (INSEE, 2016a, 2017). A similar gap is observed across the different occupations and socio-occupational categories (SOC). Between 2003 and 2016, the unemployment rate of manual workers rose from 9.4% to 14.9%, while for higher-level occupations it remained stable at 3.5% (INSEE, 2016a, 2017).

Place of residence also plays a role as French labour market dynamics vary across the country, with disparities that create a divide between the north-eastern region, coastal areas, and greater Paris (Île-de-France). Across these zones, the differences in unemployment rates are large and stable over time, with higher rates on the Mediterranean coast and in the north (Bouvard and Donne, 2020). Geographical factors also interact with other social, demographic, or economic characteristics. For example, young women in rural areas are more exposed to unemployment than young rural men and young urban women (Pinel, 2020). Jobs in large urban areas are less vulnerable to the effects of economic crises than those in small and medium-sized urban areas or isolated municipalities (INSEE, 2014).

Risk factors for forgoing healthcare

The explanatory factors of forgoing healthcare can be grouped into two broad categories: contextual or environmental factors, and individual factors (Bazin et al., 2006; Lasser et al., 2006; Cadot et al., 2008; Desprès et al., 2011a). The former includes healthcare system funding, access to medical resources, physician remuneration arrangements, and share of GDP devoted to public health spending (Renahy et al., 2011), while the latter comprises sociodemographic determinants, such as sex, age, household composition, migration status, and educational level.

Sex is an important determinant. Studies by Chaupain-Guillot et al. (2014) and Legal and Vicard (2015) show that, all else equal, women more frequently forgo all forms of healthcare for financial reasons than men. According to a survey by the national observatory of non-use of rights and services covering 18 regional health insurance funds, women account for 64% of all instances of forgoing healthcare (Revil et al., 2016). They more frequently report having done so than men, even for equivalent levels of objective health (Shmueli, 2003).

The relationship between age and forgoing care forms a bell curve, with lower levels before age 40 and after age 80, although the pattern varies across different types of healthcare. This non-use is greater over age 60 for dental care, at ages 40–80 for vision care, and at ages 50–80 for specialist care (Chaupain-Guillot et al., 2014). Certain household types are also strongly associated with forgoing care, particularly one-person (Cadot et al., 2008) and lone-parent households (Revil et al., 2016).

Migration status has little impact on forgoing healthcare. While immigrants use less healthcare than non-immigrants for equivalent needs (Renahy et al., 2011; Berchet, 2013; Legal and Vicard, 2015), these inequalities are linked primarily to low income and educational level; under equal socio-economic conditions, no significant difference exists between immigrants and non-immigrants (Jusot et al., 2009).

The least educated tend to forgo healthcare the most frequently, although levels of recourse to general practitioners are similar across all educational levels (Stirbu et al., 2011). The situation is similar across SOCs. Manual and clerical workers more frequently go without healthcare than people in higher-level and intermediate occupations (Legal and Vicard, 2015).

2. Access to healthcare: the specific features of the French model and their effects on the unemployed

The organization of the healthcare and social protection system plays a major role in inequalities of access to care. In France, healthcare expenses are reimbursed via two mechanisms: obligatory social security coverage (almost universal in scope) and complementary coverage through private organizations.

The social protection system covers the health risks of salaried and self-employed workers via affiliation to a social security fund that provides obligatory coverage and via private complementary health insurance, often provided by employers. The private health insurance schemes (mutual health insurance funds, insurance companies, and provident institutions) pursue objectives that differ from those of social security as they operate in a competitive market (Chadelat, 2016). Complementary health insurance contracts may be collective, i.e. provided by a company to all its employees (the case for 82% of private-sector employees),⁽⁴⁾ or individual, between the subscriber and the insurance provider.⁽⁵⁾

(4) Generalized provision of complementary health insurance by employers began in 2013. With the national interbranch agreement (Accord national interprofessionnel) finalized in 2017, 96% of private-sector employees are entitled to coverage. The remaining 4% are generally employees of the smallest businesses who prefer to take out private insurance. As employees are not obliged to subscribe to the complementary health insurance offered by their employer, 82% are actually covered under this agreement (Lapinte and Perronnin, 2018).

(5) Health insurance scheme website, ameli.fr, consulted in March 2019.

Social insurance contributions also serve to cover the health expenses of people who do not meet the criteria for entitlement to a social security regime via financial support targeting the lowest income groups. These include the basic universal healthcare coverage (*couverture maladie universelle* [CMU]) and the associated complementary coverage (*couverture maladie universelle-complémentaire* [CMU-C]), first introduced in 2000 and replaced in January 2016 by a new scheme entitled *protection universelle maladie* (PUMa). While only workers in salaried employment were historically eligible for coverage by one of the social security regimes, today practically everyone who lives or works in France is covered. Only undocumented foreigners are excluded. For this population, healthcare costs are covered under a state scheme entitled *aide médicale de l'État* (AME), within the limits of the social security tariffs.

The main factor in forgoing healthcare is thus a lack of complementary insurance (Berchet, 2013; Jusot et al., 2019), which covers a large share of the health costs that would otherwise be charged to patients.⁽⁶⁾ In France, having complementary insurance is strongly associated with being in salaried employment. However, as of 2016, the entitlements of unemployed people who had social security coverage while still in work are maintained via the PUMa. Under certain conditions, salaried employees remain covered by the former employer's complementary insurance for up to 12 months after expiry of their employment contract or for as long as they claim unemployment benefit. Despite continuity of coverage outside salaried employment, the CMU-C and financial support for complementary coverage (*aide au financement d'une complémentaire santé* [ACS]),⁽⁷⁾ inequality in access to health insurance persists: 24% of unemployed people had no complementary coverage in 2016 compared with just 5% of employed people (Santé publique France, Health Barometer 2016, authors' calculations). Moreover, while physicians are not authorized to charge medical fees exceeding reimbursement levels to beneficiaries of the CMU-C,⁽⁸⁾ these excess fees are a heavy financial burden for non-eligible low-income households

(6) Another important dimension is the variation in contractually agreed fees charged for different medical specialties across the various categories of medical practice. Some treatments are fully reimbursed, some are reimbursed in part, and others not at all. In 2016, 45.7% of physicians charged fees above reimbursement levels or without reference to social security rates (Caisse nationale de l'assurance maladie, 2017), and it is becoming very difficult to find physicians in certain specialties—particularly gynaecologists, surgeons, ENT specialists, dentists, and ophthalmologists—who do not charge excess fees. Forgoing healthcare appears to be more frequent in *départements* where health professionals charge higher excess fees (Desprès et al., 2011b).

(7) The portability of complementary insurance contracts depends on the type of employment contract or the terms of contract termination. After expiry of a fixed-term contract, redundancy, or resignation, if a former employee is entitled to unemployment benefit, they can remain in the employer's complementary insurance scheme subject to proof of contributions paid either by unemployment insurance or out of their own pocket, for a maximum of 12 months. Temporary agency workers are automatically covered by the *Mutuelle des intérimaires* if they work for 414 or more hours over a 12-month period. When no longer working, their coverage continues for 2 months, subject to having worked at least 8 months for the last employment contract, or until receipt of unemployment benefits.

(8) In 2020, the CMU-C and the ACS were replaced by the *complémentaire santé solidaire*, but they still existed at the time of the survey on which this article is based.

and for those with no other complementary insurance (Renahy et al., 2011; Legal and Vicard, 2015).⁽⁹⁾

Last, the vast array of schemes and the complexity of healthcare reimbursement make it difficult for patients to understand the system, creating an obstacle to exercising certain rights and hence to health service access. The most adversely affected people are those on low incomes (Bras and Tabuteau, 2012) and those with low health literacy, i.e. with a limited capacity to find and understand healthcare information (Darcovich et al., 2000). Yet, thanks to support schemes (CMU, CMU-C, ACS, PUMa) and the portability of complementary insurance after job loss, the French system provides a generally high level of protection, including for the unemployed. Overall, the main inequalities in healthcare access are linked to disparities in complementary insurance coverage.

Identifying and explaining the link between unemployment and forgoing of healthcare raises at least three questions this article seeks to address. As the profile of unemployed people is similar in several respects to that of non-users of healthcare, one might wonder if only structural effects are at play (sociodemographic and economic characteristics of populations) or if, beyond these effects, being unemployed has an intrinsic influence. Moreover, to what extent does inequality between employed and unemployed people in access to complementary insurance heighten inequalities in the forgoing of healthcare? Finally, we will examine the extent to which individual characteristics affect forgoing healthcare differently for unemployed and employed people.

II. Method

1. The notion of forgoing healthcare

First used in the 1992 health and social protection survey of the French Institute for Research and Information in Health Economics, the notion of ‘forgoing healthcare for financial reasons’ has since been taken up by the press.⁽¹⁰⁾ However, as a self-reported indicator, its subjectivity has raised controversy and produced diverse analyses. It is defined as a self-reported inability to meet all or part of one’s personal health needs; it thus tends to measure a feeling of ‘frustration’ rather than a purely economic obstacle (Bazin et al., 2006). Moreover, response rates vary considerably according to question wording: the greater the degree of detail about types of care and/or reasons for forgoing it, the more frequently people report having done so (Legal and Vicard, 2015).

(9) Some physicians may charge excess fees illegally or discriminate by refusing to treat these unprofitable patients (Chareyron et al., 2019).

(10) See, for example, ‘Un Français sur trois renonce aux soins, faute d’argent’ (One in three French people forgo healthcare because they can’t afford it), *France Info*, 10 October 2018.

However, inconsistencies in respondents' answers on self-rated health and on other indicators such as medical consultations and forgone healthcare suggest that no commonly understood definition or set of reasons for forgoing healthcare exists (Desprès, 2013). The latter may be under- or overestimated, depending on individual characteristics.

More specifically, forgoing healthcare for financial reasons stems from a mismatch between health needs and the financial means of the most economically disadvantaged populations: if the poorest people forgo healthcare, this heightens *de facto* inequalities in healthcare access. That said, 'forgoing of healthcare does not necessarily imply increased inequality—if the care is unnecessary—and increased inequality does not necessarily imply forgoing of healthcare—if care quality is unequal, for example' (Bourgueil et al., 2012). While forgoing healthcare for financial reasons is not necessarily a vector of inequality, it is nonetheless a useful indicator for analysing actual lower healthcare consumption, as the people who most often go without healthcare are those who consume less (Dourgnon et al., 2012).

Moreover, healthcare is not necessarily totally forgone; for three-quarters of those reporting an instance of it, the care is delayed rather than cancelled (Dourgnon et al., 2012). The proportion varies across different types of care. More often definitively forgone are vision care and appointments to buy glasses and, to a lesser extent, for dental care and visits to a general practitioner. Likewise, certain risk factors such as advanced age and ill health, financial insecurity, and being economically inactive, retired, or unemployed are associated with more frequent final forgoing than other factors such as having complementary insurance or not, educational level, sex, place of residence, or household composition (Dourgnon et al., 2012).

Thus, the subjective notion of forgoing healthcare is not an indicator with clearly defined boundaries. However, examined from the angle of financial reasons, it is still a useful tool for assessing the healthcare access difficulties experienced by unemployed people.

2. The 2016 Health Barometer and the study population

This study is based on data collected by the French institute of public health (Santé publique France) via the Health Barometer surveys aiming to 'understand the different health attitudes and behaviours of people living in France'.⁽¹¹⁾ The 2016 Health Barometer is the most recent survey that includes detailed questions on forgoing of healthcare and on complementary health insurance. The questionnaire was administered by phone between January and August 2016 on randomly selected households and then on an individual

(11) Santé publique France. The Health Barometers, an observatory of French people's behaviours to guide public health policy. <https://www.santepubliquefrance.fr/etudes-et-enquetes/barometres-de-sante-publique-france>

in each one. The respondents were French speakers⁽¹²⁾ aged 15–75. Selected via two-stage stratified sampling followed by census-based adjustment, the sample comprises 15,216 individuals of the French-speaking French population living in ordinary households.

The sample used here comprises individuals currently on the labour market. Economically inactive individuals⁽¹³⁾ are excluded so that unemployed people are compared with employed people only. Our study sample thus comprises 9,660 economically active employed or unemployed individuals aged 18–64.

3. Indicators of employment status, forgoing of healthcare, and health insurance

Unemployment was captured via answers to the question ‘What is your current occupational status?’ A distinction was made between people who answered ‘Unemployed (registered or not with a job centre [Pôle emploi], receiving benefits or not)’ and those who reported being in employment (salaried, self-employed, declared or not, on maternity or parental leave, on sick leave lasting less than 3 years, or on training leave). This measure based on spontaneous self-reporting is different from the standard definitions of unemployment, the objective criteria being those of the ILO, as described above. The proportion of unemployed people in our sample (11.5%) was 1.4 points higher than in the INSEE statistics for the same year. Although the definition of unemployed people in the sample is more inclusive than that of the ILO or Pôle emploi,⁽¹⁴⁾ it covers people whose socio-economic conditions are probably similar. The Health Barometer data also give the respondents’ current or previous SOC (most recent occupation), providing an overall indication of their social status. The use of income per consumption unit (CU) takes account of both disposable income and household size.⁽¹⁵⁾

The survey included two questions to identify individuals who forgo healthcare for financial reasons: ‘In the last 12 months, have you ever forgone healthcare for yourself, for financial reasons?’ The 1,554 individuals who answered ‘yes’ were then asked, ‘What kind of healthcare have you forgone for financial reasons?’ Four response categories were given: dental care; glasses, lenses, frames, contact lenses; consulting a physician;⁽¹⁶⁾ other healthcare. These details gave a more

(12) Limiting the sample to French speakers introduces bias, notably for country of birth. Of the 15,216 survey respondents, only 1,524 were born abroad, as were only 929 of the 9,660 people in our study sample.

(13) Apprentices, students who have never worked, retirees and early retirees, homemakers, and people on long-term leave or with disabilities are therefore excluded. We also excluded one individual who answered ‘don’t know’ to the question on forgoing healthcare for financial reasons.

(14) For example, a person not in work may, depending on how he or she perceives her own situation, report being a homemaker or unemployed.

(15) One CU for the first adult in the household, 0.5 CU for other members aged 14 or over, 0.3 CU for children aged under 14 (INSEE, 2016c).

(16) The Health Barometer wording did not distinguish between general practitioners and specialists. Respondents could assume that the question concerned either type of physician.

precise picture, making it possible to verify the previously documented differences in the extent to which care is forgone and to study the standard profile of people forgoing one or other type of healthcare.

To characterize respondents' health status, and hence the extent to which care is forgone among people with the greatest potential healthcare needs, we included physical and mental health indicators in the analyses. Self-reported general health status is captured via the question 'Would you say, overall, that your health is...?' to which respondents could reply using adjectives ranging from 'excellent' to 'bad'. Mental health is measured via self-reported levels of nervousity, dejection, or sadness, or, at the other extreme, peace and happiness, and the frequency of these states of mind over the previous 4 weeks (Leplège et al., 1998). Self-reported health status, while subjective, is a good indicator of general health and is consistent with objective indicators (Miilunpalo et al., 1997).

Concerning health insurance, the response categories corresponded to the system in place before 2016. Although the PUMa was introduced in January 2016, the survey year, the Health Barometer recorded coverage by the CMU and the CMU-C, and this may have confused respondents. Individuals are nonetheless categorized according to their complementary insurance, which is more discriminant than obligatory health coverage. Three categories were defined: those with private complementary insurance, those with the CMU-C or AME (i.e. free public insurance schemes), and those with no complementary insurance but among whom most have social security coverage.

4. Analysis strategy

The structural variables used for the analysis were household income (in the form of income per CU), sex, age, migration status (proxied by country of birth to compare individuals born in France with migrants from Europe, Africa, or other regions), household composition (living with a partner or alone, presence or absence of children), place of residence (living in a town or city or in a rural area) and health (general ill health and psychological distress). Linked to income, these variables were included in the analysis as major determinants of forgoing healthcare for financial reasons. Several logistic regression models were run, progressively adding SOC, income by CU, and complementary insurance coverage. They were designed to answer the following questions: Does unemployment influence forgoing healthcare for financial reasons, all else equal? Is forgoing among unemployed people linked to other factors of vulnerability?

We then introduced several interaction terms for occupational status (employed vs. unemployed) to examine whether the sociodemographic, economic, and health determinants of forgoing healthcare are the same for the unemployed population as for employed people. The variables interacting with

occupational status are household composition, general health (good or bad),⁽¹⁷⁾ SOC, and complementary insurance coverage. The predicted probabilities of forgoing healthcare among unemployed and employed people are presented on a graph for each one.

III. Results

1. An unemployed population exposed to the risk factors for forgoing healthcare

Table 1 provides the distribution of unemployed and employed people according to their sociodemographic characteristics, along with their reported forgoing of various types of healthcare for financial reasons in the 12 months preceding the survey. It shows that 29.4% of unemployed people reported forgoing healthcare versus 16.3% of employed people, and that, among specific types of healthcare, it was dental care that unemployed people forwent the most frequently (20.8% vs. 12.5% for employed people), and the gap between employed and unemployed is largest for visits to a physician (14.4% vs. 4.9%).

Except for sex, all the other characteristics vary significantly between unemployed and employed people. Unemployed people are strongly over-represented in the socio-economic groups most likely to forgo healthcare (see Section I). The unemployed are more likely to live alone without children (42.7% vs. 21.7% of employed people in this same situation), to be foreign-born (particularly from Africa, 13.6% vs. 5.3%), urban dwellers (81.9% vs. 75.6%), former manual workers (40.2% vs. 22.1%), clerical workers (36.9% vs. 28.9%), and belong to households with the lowest income per CU (53.2% of unemployed people are in the first income quintile).

Moreover, unemployed people twice as frequently report being in bad health than employed people (16.3% vs. 8.2%) and more often experience psychological distress (26.4% vs. 15.0%). They also have less health insurance coverage. Only 67.8% have complementary coverage (mutual or private insurance, provident institutions) compared with 95.8% of employed people. Last, the proportion of unemployed people covered by the CMU-C or AME schemes is more than 10 times higher than among employed people (13.5% vs. 1.1%), and almost 1 in 5 has no complementary insurance.

Unemployed people are characterized by a set of factors associated with forgoing healthcare, be it their sociodemographic characteristics, their health status, or their level of health insurance, so it seems logical that they should go without healthcare more frequently than employed people. However, while unemployed people combine a large number of risk factors for forgoing

(17) The respondents' answers about their general health status are grouped into two categories. 'Excellent', 'very good', and 'good' are qualified as 'good', while 'fair' and 'bad' are qualified as 'bad'.

Table 1. Sociodemographic and health characteristics of unemployed and employed people

| | Population % weighted | | P |
|---|-------------------------|-----------------------|--------|
| | Unemployed n = 1,112 | Employed n = 8,548 | |
| Type of care forgone for financial reasons | | | |
| Healthcare | 29.4 | 16.3 | .000 |
| Dental care | 20.8 | 12.5 | .000 |
| Visits to a physician | 14.4 | 4.9 | .000 |
| Other healthcare | 10.8 | 4.5 | .000 |
| Vision care (glasses, lenses, frames, contact lenses) | 9.9 | 5.3 | .000 |
| Sociodemographic characteristics | | | |
| Sex | | | |
| Female | 47.5 | 48.9 | } .488 |
| Male | 52.5 | 51.1 | |
| Age | | | |
| 18–34 years | 44.2 | 29.1 | } .000 |
| 35–44 years | 22.3 | 26.9 | |
| 45–54 years | 18.8 | 28.6 | |
| 55–64 years | 14.7 | 15.4 | |
| Household composition | | | |
| Couple with children | 23.7 | 34.9 | } .000 |
| Couple without children | 24.1 | 39.4 | |
| Alone without children | 42.7 | 21.7 | |
| Alone with children | 9.5 | 4.0 | |
| Country/region of birth | | | |
| France | 81.9 | 90.4 | } .000 |
| Europe (excluding France) | 2.0 | 3.0 | |
| Africa | 13.6 | 5.3 | |
| Other regions | 2.5 | 1.3 | |
| Size of locality of residence | | | |
| Rural municipality | 18.1 | 24.4 | } .000 |
| Fewer than 20,000 inhabitants | 14.5 | 16.7 | |
| 20,000 to 99,999 inhabitants | 15.3 | 11.9 | |
| 100,000 or more inhabitants | 36.0 | 30.3 | |
| Parisian agglomeration | 16.1 | 16.7 | |
| Health | | | |
| General ill health | 16.3 | 8.2 | .000 |
| Psychological distress | 26.4 | 15.0 | .000 |
| Socio-economic characteristics | | | |
| Socio-occupational category | | | |
| Manual worker | 40.2 | 22.1 | } .000 |
| Clerical/sales worker | 36.9 | 28.9 | |
| Intermediate occupation | 14.3 | 28.0 | |
| Higher-level occupation | 4.6 | 14.4 | |
| Other | 4.0 | 6.6 | |

Table 1 (cont'd). Sociodemographic and health characteristics of unemployed and employed people

| | Population % weighted | | <i>p</i> |
|---|--------------------------------|------------------------------|----------|
| | Unemployed <i>n</i> = 1,112 | Employed <i>n</i> = 8,548 | |
| Income per CU in quintiles | | | |
| 1st | 53.2 | 12.0 | } .000 |
| 2nd | 24.8 | 19.7 | |
| 3rd | 10.8 | 21.6 | |
| 4th | 6.8 | 23.6 | |
| 5th | 4.4 | 23.1 | |
| Complementary health insurance | | | |
| Mutual or private insurance, provident institution | 67.8 | 95.8 | } .000 |
| CMU-C or AME | 13.5 | 1.1 | |
| No complementary insurance | 18.7 | 3.1 | |
| <p><i>p</i> = value of <i>p</i> in Pearson's χ^2 test. Sample: Individuals aged 18–64 who report being in employment or unemployed (<i>N</i> = 9,660). Source: Health Barometer 2016.</p> | | | |

healthcare, we cannot assume these are directly linked to their unemployed status. We must therefore pursue the analysis by running logistic regression models to determine the effect of unemployment on forgoing healthcare.

2. The effect of unemployment on forgoing healthcare

Table 2 shows a series of four nested logistic regression models of the probability of forgoing healthcare for financial reasons in the last 12 months. The first model controls for individual demographic characteristics: sex, age, household composition, country of birth, size of locality of residence, and health characteristics. Model 2A adds the SOC of current employment for people in work and of the most recent employment for the unemployed. Model 2B adds the quintile of income per CU of the person's household. Model 3 adds the type of complementary insurance coverage to Model 2A. Model 4 includes all the variables of the other models.

The results of the regression models in Table 2 are consistent with those of previous research on this topic. All else equal, the risk of forgoing healthcare is significantly higher for young and middle-aged people⁽¹⁸⁾ living alone with or without children, with an SOC other than higher-level occupation, and living in cities (particularly Paris). For obvious reasons, the impact of income on forgoing healthcare for financial reasons is very strong. That said, even in Model 2B, which includes income per CU, the role of sociodemographic characteristics, especially SOC, remains explanatory.

(18) The results do not show the bell-shaped relationship between age and forgoing healthcare found elsewhere in the literature. However, our study population is aged 18–64 and therefore excludes older adults among whom forgoing healthcare is expected to be less frequent. We find, however, that people aged 45–64 do not forgo healthcare any more frequently than those aged 18–44.

Table 2. Forgoing of healthcare (all types), logistic regression coefficients

| | Percentage forgoing healthcare | Bivariate regressions | Model 1 Demog. | Model 2A Demog. + SOC | Model 2B Demog. + SOC + Income | Model 3 Demog. + SOC + Coverage | Model 4 Demog. + SOC + Income + Coverage |
|---|--------------------------------|-----------------------|----------------|-----------------------|--------------------------------|---------------------------------|--|
| Estimated coefficients | | | | | | | |
| Unemployed | 29.4 | 0.857*** | 0.608*** | 0.587*** | 0.310*** | 0.462*** | 0.253*** |
| Employed | 16.3 | Ref. | | | | | |
| Sociodemographic characteristics | | | | | | | |
| Sex | | | | | | | |
| Female | 21.1 | 0.360*** | 0.323*** | 0.286*** | 0.237*** | 0.313*** | 0.262*** |
| Male | 15.8 | Ref. | | | | | |
| Age | | | | | | | |
| 18–34 years | 21.3 | 0.179** | 0.126 | 0.108 | 0.089 | 0.081 | 0.069 |
| 35–44 years | 19.1 | Ref. | | | | | |
| 45–54 years | 17.1 | -0.115 | -0.159* | -0.183** | -0.203** | -0.172* | -0.196** |
| 55–64 years | 13.5 | -0.248*** | -0.357*** | -0.371*** | -0.311*** | -0.356*** | -0.305*** |
| Household composition | | | | | | | |
| Couple with children | 17.5 | Ref. | | | | | |
| Couple without children | 14.9 | -0.154** | -0.057 | -0.073 | 0.080 | -0.079 | 0.069 |
| Alone with children | 27.8 | 0.685*** | 0.403*** | 0.363*** | 0.173 | 0.306** | 0.159 |
| Alone without children | 22.8 | 0.460*** | 0.367*** | 0.344*** | 0.331*** | 0.304*** | 0.303*** |
| Country/region of birth | | | | | | | |
| France | 17.9 | Ref. | | | | | |
| Europe (excluding France) | 14.9 | -0.195 | -0.213 | -0.237 | -0.273 | -0.254 | -0.286 |
| Africa | 26.1 | 0.469*** | 0.258** | 0.227* | 0.006 | 0.151 | -0.047 |
| Other regions | 17.3 | 0.013 | -0.267 | -0.228 | -0.335 | -0.359 | -0.432* |
| Locality size | | | | | | | |
| Rural municipality | 14.5 | -0.456*** | -0.360*** | -0.512*** | -0.670*** | -0.485*** | -0.650*** |
| Fewer than 20,000 inhabitants | 18.9 | -0.178* | -0.111 | -0.243** | -0.380*** | -0.220** | -0.361*** |
| 20,000 to 99,999 inhabitants | 19.7 | -0.222** | -0.266** | -0.390*** | -0.533*** | -0.375*** | -0.516*** |
| 100,000 or more inhabitants | 18.1 | -0.254*** | -0.273*** | -0.349*** | -0.467*** | -0.342*** | -0.458*** |
| Parisian agglomeration | 22.8 | Ref. | | | | | |
| Health | | | | | | | |
| Psychological distress (yes) | 32.5 | 0.872*** | 0.665*** | 0.648*** | 0.635*** | 0.634*** | 0.626*** |
| General ill health (yes) | 30.8 | 0.789*** | 0.526*** | 0.478*** | 0.396*** | 0.474*** | 0.406*** |

Table 2 (cont'd). Forgoing of healthcare (all types), logistic regression coefficients

| | Percentage forgoing healthcare | Bivariate regressions | Model 1 Demog. | Model 2A Demog. + SOC | Model 2B Demog. + SOC + Income | Model 3 Demog. + SOC + Coverage | Model 4 Demog. + SOC + Income + Coverage |
|---|--------------------------------|-----------------------|----------------|-----------------------|--------------------------------|---------------------------------|--|
| Estimated coefficients | | | | | | | |
| Socio-economic characteristics | | | | | | | |
| Socio-occupational category | | | | | | | |
| Manual worker | 19.4 | 0.732*** | | 0.649*** | 0.120 | 0.600*** | 0.104 |
| Clerical/sales worker | 23.7 | 0.943*** | | 0.720*** | 0.217* | 0.717*** | 0.234** |
| Intermediate occupation | 16.2 | 0.563*** | | 0.510*** | 0.264** | 0.507*** | 0.265** |
| Higher-level occupation | 9.0 | <i>Ref.</i> | | | | <i>Ref.</i> | |
| Other | 16.5 | 0.653*** | | 0.753*** | 0.265* | 0.726*** | 0.275* |
| Income per CU in quintiles | | | | | | | |
| 1st | 32.3 | <i>Ref.</i> | | | <i>Ref.</i> | | <i>Ref.</i> |
| 2nd | 22.8 | -0.487*** | | | -0.279*** | | -0.243*** |
| 3rd | 17.7 | -0.822*** | | | -0.556*** | | -0.517*** |
| 4th | 14.7 | -1.058*** | | | -0.804*** | | -0.749*** |
| 5th | 6.5 | -1.950*** | | | -1.619*** | | -1.559*** |
| Complementary insurance | | | | | | | |
| Mutual or private insurance, provident institution | 14.68 | <i>Ref.</i> | | | | <i>Ref.</i> | |
| CMU-C or AME | 27.27 | 0.779*** | | | | 0.141 | -0.119 |
| No complementary insurance | 36.44 | 1.204*** | | | | 0.812*** | 0.622*** |
| * $p < 10\%$. ** $p < 5\%$. *** $p < 1\%$. | | | | | | | |
| <i>Sample:</i> Individuals aged 18–64 who report being in employment or unemployed ($N = 9,660$). | | | | | | | |
| <i>Source:</i> Health Barometer 2016. | | | | | | | |

Poor general or psychological health and forgoing care are also positively associated, all else equal, although the direction of causality cannot be determined. Degree of healthcare coverage is strongly correlated with forgoing of healthcare: the people at highest risk of forgoing healthcare for financial reasons are those with no complementary insurance. No significant difference was found between those with complementary insurance and those covered by the CMU-C or the AME.

But we do find a specific effect of unemployment on the probability of forgoing healthcare (significant coefficients in all models).⁽¹⁹⁾ Model 4, which contains all the variables, including household income quintile, is the one for which the coefficient associated with unemployed status is weakest ($\beta = 0.25$ vs. $\beta = 0.46$ in Model 3), but the associated effect of unemployment remains strongly significant. Put differently, even for an equal level of household income,

(19) This is even more evident in Models 2B and 4 where one of the independent variables is income per CU, which controls indirectly for the partner's income (if any) and for whether the unemployed person receives public transfers.

an unemployed person will be significantly more likely to forgo healthcare for financial reasons than an employed person.⁽²⁰⁾

Specific types of forgone healthcare are shown in Table 3, and the results are similar overall to those of the previous models. The coefficients associated with unemployment are systematically significant and positive, indicating positive associations between unemployment and forgoing different types of healthcare, whatever the type considered (Table 3; Appendix Tables A.1–A.4). Individuals are more likely to forgo healthcare for which the prevalence of use is highest.⁽²¹⁾ Excepting dental care, for which individuals with CMU-C or AME coverage forgo care less than those with complementary insurance, these schemes protect against forgoing healthcare to the same extent as complementary insurance. However, for all types of healthcare, forgoing is most frequent among individuals with no complementary coverage.

Table 3. Effects of unemployment and health coverage on forgoing specific types of healthcare, logistic regression coefficients

| | Visits to a physician | | Dental care | | Glasses, lenses, frames, contact lenses | | Other healthcare | |
|--|-----------------------|----------|-----------------------|----------|---|----------|-----------------------|-----------|
| | Bivariate regressions | Model 4 | Bivariate regressions | Model 4 | Bivariate regressions | Model 4 | Bivariate regressions | Model 4 |
| Employment status | | | | | | | | |
| Unemployed | 1.266*** | 0.362*** | 0.768*** | 0.275*** | 1.041*** | 0.289** | 1.050*** | 0.286** |
| Employed | <i>Ref.</i> | | | | | | | |
| Complementary insurance | | | | | | | | |
| Mutual or private insurance, provident institution | <i>Ref.</i> | | | | | | | |
| CMU-C or AME | 1.125*** | -0.217 | 0.400** | -0.423** | 1.026*** | -0.045 | 0.886*** | -0.387 |
| No complementary insurance | 1.741*** | 0.869*** | 1.071*** | 0.541*** | 1.288*** | 0.729*** | 1.341*** | -0.565*** |
| <p>* $p < 10\%$. ** $p < 5\%$. *** $p < 1\%$. Control variables: Model 4 (demographic variables + SOC + income + health insurance). Sample: Individuals aged 18–64 who report being in employment or unemployed ($N = 9,660$). Source: Health Barometer 2016.</p> | | | | | | | | |

The above-average exposure of unemployed people to the risk of forgoing healthcare is not explained solely by the combination of factors associated with forgoing care, be they demographic or economic. There is an additional effect of unemployment on forgoing healthcare. The 2016 Health Barometer data cannot provide a direct explanation of the possible causal links between unemployment and forgoing care, other than the variables controlled for in the above models, but several potentially relevant factors deserve to be mentioned.

(20) Income per CU was excluded from Model 3 due to its strong collinearity effect. It was included in Models 2B and 4 to show that unemployment remains explanatory.

(21) We assume individuals understand that ‘visits to a physician’ refers to consultations with all types of physician, whether a general practitioner or a specialist.

Unemployment may be experienced in different ways but is generally perceived in a pejorative and negative light,⁽²²⁾ and unemployed people are socially marginalized (Chabanet, 2016). The results provided above (Table 1) show that unemployed people more frequently experience psychological distress than people in employment, and consequently may pay less attention to their health needs. Feelings of dejection and failure, of dependence and worthlessness, and of uncertainty about the future may lead to social isolation (Schnapper, 1998; Demazière, 2006; Paugam, 2006). This may increase vulnerability to mental health problems, such as depression or generalized anxiety disorder (Blasco and Brodaty, 2016). Faced with the situations of fear, anxiety, and stress associated with unemployment, individuals feel obliged to put on a brave face rather than addressing the cause of their symptoms, or to adopt avoidance strategies (Methivier, 2012). These circumstances may be a factor in unemployed people's more frequent forgoing of healthcare, even when their living conditions and health coverage are similar to those of people in employment. Likewise, to make up for this perceived lack of social utility, unemployed people may focus on looking for work, with their health taking second place behind their main objective (finding a job) even if they have more free time to devote to healthcare (Chabanet, 2016). Another hypothesis concerns mobility. Workers often seek healthcare in facilities located close to the workplace, but unemployed people tend to be less mobile, so their access may be more limited (Lucas-Gabrielli et al., 2016). Regarding the specific question of forgoing healthcare for financial reasons, the effect of unemployment can be attributed to uncertainty about the future and hence the perceived need to save money.

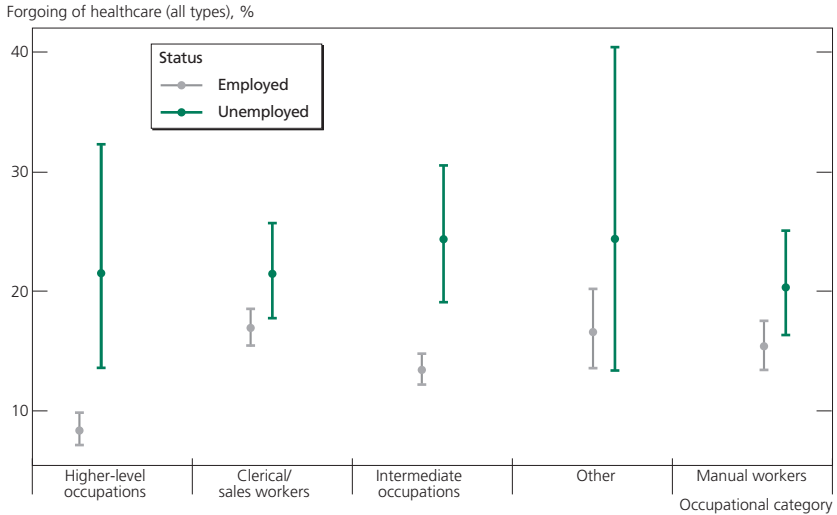
3. Employment status and inequalities in forgoing healthcare

To further investigate the characteristics associated with forgoing healthcare among unemployed people and the corresponding dynamics of inequality, the following analyses model the characteristics associated with forgoing care by introducing interactions between the employment status variable (unemployed vs. employed) and each variable of interest (see Appendix Table A.5). This analysis compares the probability of forgoing healthcare for each category of sociodemographic characteristics, distinguishing between unemployed and employed people. The analyses were run for all variables in Model 3.⁽²³⁾ The graphs featured here illustrate the predicted probabilities of interactions between employment status and SOC (Figure 1), type of health insurance (Figure 2), household composition (Figure 3), and self-rated health (Figure 4).

(22) This is implicit in the very definition of *chômage* (unemployment), which basically signifies 'not working' (Milland, 2002).

(23) Model 3 was preferred over Model 4 because adding the variable of income by CU is somewhat tautological for explaining the forgoing of healthcare for financial reasons. This last variable serves as an additional control to show that employment status remains explanatory, but an analysis based on Model 3 is more informative in this respect, as the effects linked to SOC are not masked by household income.

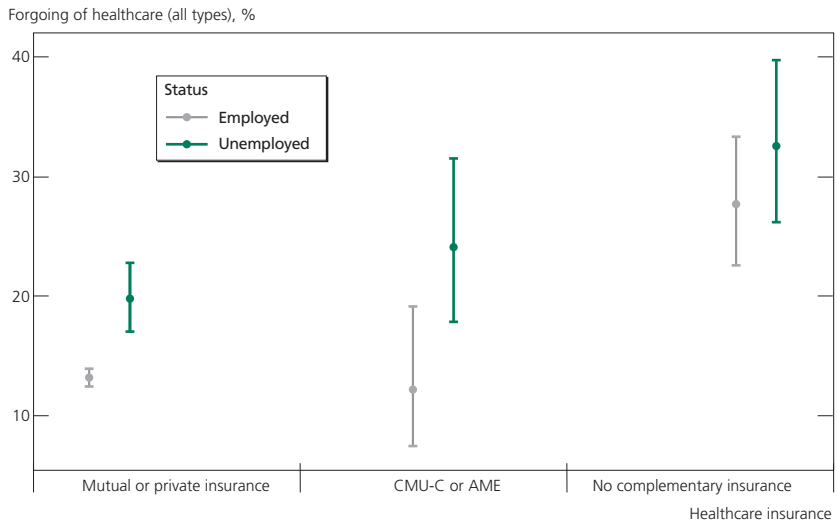
Figure 1. Predicted probabilities of interactions of employment status and SOC on forgoing healthcare



Interpretation: The predicted probabilities of forgoing healthcare are 8% for people employed in higher-level occupations and 21% for unemployed people previously in higher-level occupations.

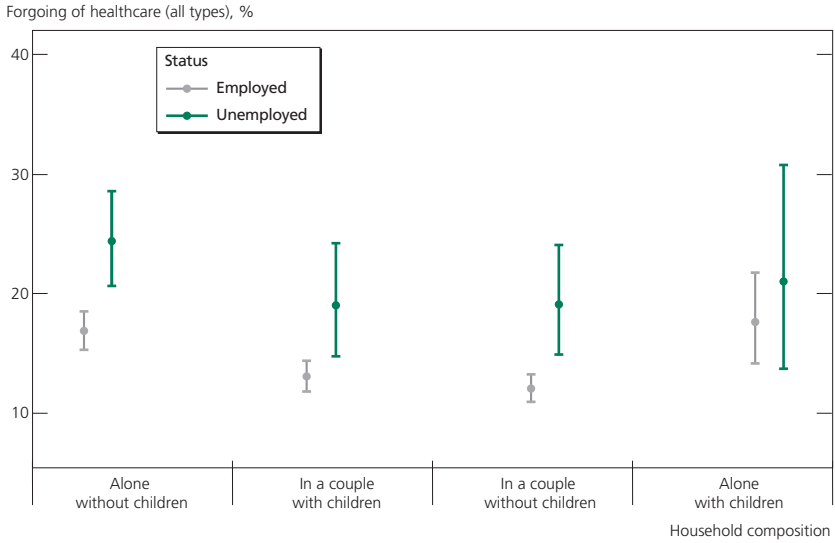
Source: Health Barometer 2016.

Figure 2. Predicted probabilities of interactions of employment status and type of health insurance on forgoing healthcare



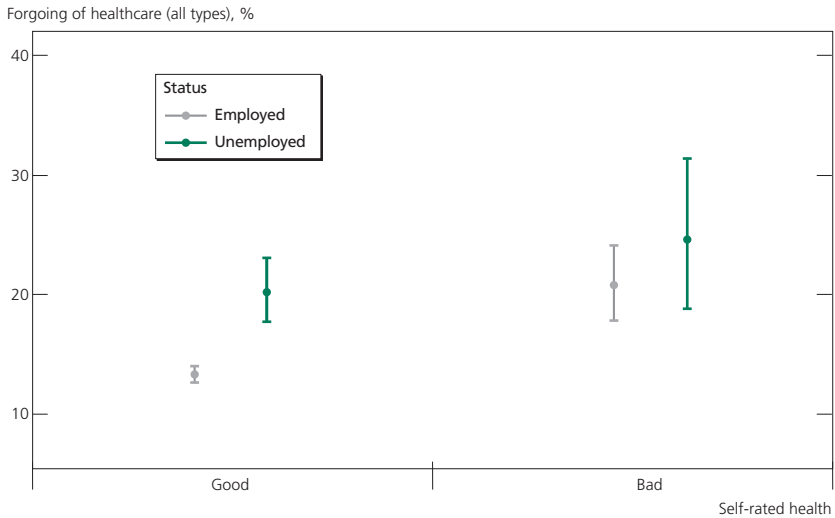
Source: Health Barometer 2016.

Figure 3. Predicted probabilities of interactions of employment status and household composition on forgoing healthcare



Source: Health Barometer 2016.

Figure 4. Predicted probabilities of interactions of employment status and self-rated health on forgoing healthcare



Source: Health Barometer 2016.

For all the characteristics presented, the probability of forgoing healthcare is higher for the group of unemployed people than for employed people. The interaction analysis should enable us to determine whether a difference in forgoing healthcare exists between unemployed and employed people according to their other characteristics. As the interaction between SOC and employment status is statistically significant, one could conclude from Figure 1 that the existence of excess risks is greater for the categories generally at least risk of forgoing healthcare. The relative difference is greater for people in intermediate and higher-level occupations than for manual and clerical workers. For example, while the probability of forgoing care is below 20% for employed people in all SOCs and is above this threshold for each SOC among the unemployed, it is people in higher-level occupations who are the least likely to go without healthcare when working and, to a lesser extent, those in intermediate occupations, whose probability of forgoing healthcare increases the most when they are unemployed, all else equal. When unemployed, their risk of forgoing healthcare becomes identical to that of the other SOCs. In other words, socio-economic differences in forgoing healthcare disappear for unemployed people.

Unlike the interaction between SOC and employment status, the other interactions are not statistically significant,⁽²⁴⁾ so we cannot be certain that the same applies for the other characteristics. We note, however, that for the health insurance schemes that protect most against forgoing healthcare (mutual insurance, CMU-C or AME), we find statistically significant differences between unemployed and employed people, although these differences are not significant for the other coverage types (Figure 2). Likewise, people living alone with children (Figure 3)—those with the highest probability of forgoing care—are also those for whom the difference between employed and unemployed people is the least significant. Last, we observe a significant difference for people reporting good health in contrast to those in poor general health, who also have the highest probability of forgoing healthcare (Figure 4).

Social, economic, and demographic disparities in forgoing healthcare appear thus much less pronounced among unemployed people than among those in employment. In this sense, it seems unemployment has an ‘equalizing’ effect, with the excess risk of forgoing associated with unemployment being higher for the subgroups initially least exposed. That said, additional analyses based on longitudinal data are needed to confirm this finding.

Conclusion

In 2016, almost 1 in 3 unemployed people reported having forgone healthcare for financial reasons. According to the results of the 2016 Health Barometer, this proportion is double that observed among employed people. An abundant scientific

(24) Results not shown but available from the authors.

literature has explored the forgoing of healthcare, and unemployed people have been identified as a population in especially poor health. In France, however, the link between unemployment and forgoing of care has never been studied until now. Unemployed people combine the characteristics generally associated with forgoing healthcare for financial reasons. They more often live alone with or without children, have lower incomes, and more often report poor physical or mental health. Last, they less often have complementary health insurance, so they are more exposed to out-of-pocket healthcare expenses. This combination of negative characteristics seems consistent with the much higher level of forgone healthcare among unemployed people compared with employed people. However, our results show that while the characteristics of the unemployed population partly explain their having forgone healthcare, the effect of being unemployed should not be overlooked. According to the analysed data, after controlling for all social, economic, and demographic characteristics, unemployment itself has an effect on forgoing healthcare. Moreover, it seems unemployment reduces the within-group disparities in forgoing healthcare observed in the group of employed people. Individuals with characteristics presumed to reduce their exposure to forgoing healthcare, such as being in a higher-level occupation or having a partner and children, are those whose exposure to risk of forgoing increases most sharply when unemployed. For these individuals, the new social and financial circumstances arising from unemployment lead to a more drastic change of priorities, with spending on healthcare being considered an over-expensive luxury.

Complementary insurance is a major factor in forgoing healthcare, especially for unemployed people whose level of social protection is affected by job loss. So what specific measures could be implemented to reduce the forgoing of healthcare among unemployed people? From a policy standpoint, the French system of healthcare coverage appears to be a highly effective tool, but access to complementary insurance is a source of inequality. Although collective health insurance contracts are offered by most employers, they are not available to all (Jusot, 2014). Salaried workers who alternate between short-term contracts and periods of unemployment face the problem of non-continuity of complementary coverage. Unemployed people are penalized because complementary coverage is linked to salaried employment.

One way to combat the forgoing of healthcare is to provide alternative means of financial support and healthcare coverage. Our results show that the CMU-C and the AME—whose beneficiaries do not forgo healthcare any more than people with private complementary insurance—provide an effective solution for some. However, some unemployed people are not covered. For the CMU-C, this may be because they are not eligible for this kind of support or because they do not ask for it. Non-eligibility⁽²⁵⁾ may explain, at least in part,

(25) To be eligible for the CMU or the CMU-C, individuals must be French nationals or documented immigrants who have been living continuously in France for at least 3 months and who do not receive other social transfers in kind from any obligatory health insurance scheme (social security regime or special regime).

the proportionally greater impact of unemployment on individuals with the most advantaged characteristics. In addition, the complicated application process for obtaining support and the most vulnerable individuals' lack of knowledge about their rights may be factors that increase levels of non-coverage. Claiming social benefits such as the CMU-C involves an often long and discouraging administrative process that may have a dissuasive effect. The associated stigma may also be an obstacle (Warin, 2016).

The forgoing of healthcare among unemployed people with no complementary insurance and no access to the CMU-C or AME represents a blind spot in the current healthcare coverage system. A study of the new *complémentaire santé solidaire* that replaces the CMU-C and the ACS is needed to determine whether this gap has been filled. However, our results show that income is not the only factor explaining greater forgoing of healthcare among the unemployed. For this reason, automatic affiliation to a complementary insurance scheme would provide a means to improve healthcare access.

But even unemployed people with complementary coverage forgo healthcare more frequently than employed people.⁽²⁶⁾ The problem is broader than that of social protection alone: financial insecurity and the many social and health problems associated with unemployment are key factors. This raises the question not only of social protection but also of the health risks and uncertainty associated with unemployment. Here too, policy responses can be developed, such as psychological and social support (Blasco and Brodaty, 2016) or screening and prevention measures for diseases with high prevalence among the unemployed.

It is important to look for ways to improve healthcare access for people in vulnerable situations such as unemployment. In recent years, several new measures have been put in place to broaden access to social protection and thereby to improve healthcare take-up. One such example is the PUMa universal health protection introduced in 2016. French residents who, due to their occupational or migration status, are not automatically covered by the social security system can apply for coverage under this scheme.

These policy recommendations could be refined through additional analyses; for example, by using data that take account of more recent changes in the health coverage system or that are based on objective rather than self-reported unemployment status. Another way to develop more in-depth causal analysis would be to introduce a time dimension. Using duration of unemployment or panel data (to study transitions from one employment status to another), the above analyses could be fleshed out by pinpointing effects not identified through correlation alone. Finally, the hypotheses presented here

(26) There may be differences in the mean quality of complementary insurance coverage for unemployed and employed people, especially as workers are covered by group contracts which tend to be more generous than the individual contracts available to unemployed people. These differences are not measured in the 2016 Health Barometer, but this is an interesting angle that may shed further light on the functioning of social protection.

to explain the effect of unemployment could be explored through qualitative studies to gain deeper insights into the mechanisms underlying the forgoing of healthcare among unemployed people.

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APPENDICES

Table A.1. Forgone dental care, logistic regression coefficients

| | Percentage having forgone care | Estimated coefficients | | | | Ref. | |
|---|--------------------------------|------------------------|----------------|-----------------------|--------------------------------|-----------|---------------------------------|
| | | Bivariate regressions | Model 1 Demog. | Model 2A Demog. + SOC | Model 2B Demog. + SOC + Income | | Model 3 Demog. + SOC + Coverage |
| Unemployed | 20.8 | 0.768*** | 0.565*** | 0.547*** | 0.308*** | 0.466*** | 0.275*** |
| Employed | 12.5 | | | | | | |
| | | | | | | | |
| Sociodemographic characteristics | | | | | | | |
| Sex | | | | | | | |
| Female | 15.7 | 0.271*** | 0.223*** | 0.174** | 0.113 | 0.195*** | 0.133* |
| Male | 12.0 | | | | Ref. | | |
| Age | | | | | | | |
| 18–34 years | 13.9 | -0.051 | -0.116 | -0.131 | -0.151* | -0.153* | -0.168* |
| 35–44 years | 14.8 | | | | Ref. | | |
| 45–54 years | 14.2 | -0.046 | -0.083 | -0.106 | -0.114 | -0.096 | -0.109 |
| 55–64 years | 11.4 | -0.186* | -0.277** | -0.293*** | -0.232** | -0.281** | -0.229** |
| Household composition | | | | | | | |
| Couple with children | 13.1 | | | | Ref. | | |
| Couple without children | 11.7 | -0.104 | -0.051 | -0.067 | 0.077 | -0.077 | 0.064 |
| Alone with children | 20.20 | 0.626*** | 0.395*** | 0.353** | 0.182 | 0.341** | 0.200 |
| Alone without children | 16.8 | 0.448*** | 0.364*** | 0.341*** | 0.337*** | 0.309*** | 0.314*** |
| Country/region of birth | | | | | | | |
| France | 13.7 | | | | Ref. | | |
| Europe (excluding France) | 12.9 | -0.020 | -0.058 | -0.083 | -0.099 | -0.098 | -0.114 |
| Africa | 16.4 | 0.419*** | 0.211* | 0.188 | -0.004 | 0.123 | -0.055 |
| Other regions | 14.0 | -0.118 | -0.372 | -0.348 | -0.439 | -0.493* | -0.555* |
| Locality size | | | | | | | |
| Rural municipality | 11.4 | -0.371*** | -0.301*** | -0.444*** | -0.594*** | -0.425*** | -0.581*** |
| Fewer than 20,000 inhabitants | 15.1 | -0.121 | -0.076 | -0.199* | -0.322*** | -0.179 | -0.307** |
| 20,000 to 99,999 inhabitants | 14.4 | -0.176 | -0.239** | -0.352*** | -0.480*** | -0.340*** | -0.467*** |
| 100,000 or more inhabitants | 13.3 | -0.233** | -0.262*** | -0.330*** | -0.439*** | -0.324*** | -0.432*** |
| Pansian agglomeration | 16.6 | | | | Ref. | | |

Table A.1 (cont'd). Forgone dental care, logistic regression coefficients

| | Percentage having forgone care | Estimated coefficients | | | | | |
|--|--------------------------------|------------------------|----------------|-----------------------|--------------------------------|---------------------------------|--|
| | | Bivariate regressions | Model 1 Demog. | Model 2A Demog. + SOC | Model 2B Demog. + SOC + Income | Model 3 Demog. + SOC + Coverage | Model 4 Demog. + SOC + Income + Coverage |
| Health | | | | | | | |
| Psychological distress (yes) | 23.6 | 0.790*** | 0.578*** | 0.558*** | 0.541*** | 0.548*** | 0.535*** |
| General ill health (yes) | 22.2 | 0.730*** | 0.448*** | 0.404*** | 0.335*** | 0.411*** | 0.350*** |
| Socio-economic characteristics | | | | | | | |
| SOC | | | | | | | |
| Manual worker | 14.0 | 0.677*** | | 0.572*** | 0.055 | 0.526*** | 0.032 |
| Clerical/sales worker | 18.0 | 0.874*** | | 0.690*** | 0.200 | 0.696*** | 0.220* |
| Intermediate occupation | 12.3 | 0.469*** | | 0.430*** | 0.181 | 0.424*** | 0.179 |
| Higher-level occupation | 7.2 | Ref. | | | | Ref. | |
| Other | 13.1 | 0.658*** | | 0.704*** | 0.249 | 0.692*** | 0.263 |
| Income per CU in quintiles | | | | | | | |
| 1st | 22.8 | Ref. | | | Ref. | | Ref. |
| 2nd | 18.5 | -0.299*** | | | -0.095 | | -0.087 |
| 3rd | 13.6 | -0.658*** | | | -0.395*** | | -0.383*** |
| 4th | 10.8 | -0.939*** | | | -0.688*** | | -0.665*** |
| 5th | 5.0 | -1.784*** | | | -1.483*** | | -0.145*** |
| Complementary insurance | | | | | | | |
| Mutual or private insurance, provident institution | 11.41 | Ref. | | | | | Ref. |
| CMU-C or AIME | 16.12 | 0.400** | | | | | -0.423*** |
| No complementary insurance | 27.33 | 1.071*** | | | | | 0.707*** |
| * $p < 10\%$. ** $p < 5\%$. *** $p < 1\%$. | | | | | | | |
| Source: Health Barometer 2016. | | | | | | | |
| Sample: Individuals aged 18-64 who report being in employment or unemployed ($N = 9,660$). | | | | | | | |

Table A.2. Forgone visits to a physician, logistic regression coefficients

| | Percentage having forgone care | Bivariate regressions | Model 1 Demog. | Estimated coefficients | | | |
|---|--------------------------------|-----------------------|----------------|------------------------|--------------------------------|---------------------------------|--|
| | | | | Model 2A Demog. + SOC | Model 2B Demog. + SOC + Income | Model 3 Demog. + SOC + Coverage | Model 4 Demog. + SOC + Income + Coverage |
| Unemployed | 14.4 | 1.266*** | 0.880*** | 0.836*** | 0.444*** | 0.642*** | 0.362*** |
| Employed | 4.9 | | | | Ref. | | |
| Sociodemographic characteristics | | | | | | | |
| Sex | | | | | | | |
| Female | 7.5 | 0.3769*** | 0.354*** | 0.323*** | 0.245** | 0.384*** | 0.305*** |
| Male | 5.3 | | | | Ref. | | |
| Age | | | | | | | |
| 18–34 years | 9.0 | 0.4318*** | 0.369*** | 0.342*** | 0.331*** | 0.297** | 0.298** |
| 35–44 years | 7.0 | | | | Ref. | | |
| 45–54 years | 4.7 | -0.4318*** | -0.509*** | -0.544*** | -0.601*** | -0.543*** | -0.600*** |
| 55–64 years | 2.8 | -0.7874*** | -0.942*** | -0.970*** | -0.888*** | -0.980*** | -0.910*** |
| Household composition | | | | | | | |
| Couple with children | 5.9 | | | | Ref. | | |
| Couple without children | 4.4 | -0.3496*** | -0.696 | -0.087 | 0.101 | -0.084 | 0.091 |
| Alone with children | 11.1 | 0.9755*** | 0.551*** | 0.499*** | 0.220 | 0.410** | 0.213 |
| Alone without children | 9.0 | 0.5731*** | 0.467*** | 0.450*** | 0.367*** | 0.375*** | 0.311** |
| Country/region of birth | | | | | | | |
| France | 6.1 | | | | Ref. | | |
| Europe (excluding France) | 6.4 | -0.0855 | 0.000 | -0.020 | -0.094 | -0.050 | -0.123 |
| Africa | 10.2 | 0.6480*** | 0.278 | 0.251 | -0.092 | 0.087 | -0.217 |
| Other regions | 6.7 | 0.3200 | -0.130 | -0.082 | -0.246 | -0.377 | -0.478 |
| Locality size | | | | | | | |
| Rural municipality | 4.1 | -0.8602*** | -0.677*** | -0.834*** | -1.022*** | -0.794*** | -0.999*** |
| Fewer than 20,000 inhabitants | 7.7 | -0.2237 | -0.101 | -0.238*** | -0.419*** | -0.176 | -0.370** |
| 20,000 to 99,999 inhabitants | 6.4 | -0.3253** | -0.366*** | -0.467*** | -0.651*** | -0.455*** | -0.637*** |
| 100,000 or more inhabitants | 6.2 | -0.3854*** | -0.402*** | -0.492*** | -0.637*** | -0.498*** | -0.641*** |
| Parisian agglomeration | 8.5 | | | | Ref. | | |

Table A.2 (cont'd). Forgone visits to a physician, logistic regression coefficients

| | Percentage having forgone care | Bivariate regressions | Model 1 Demog. | Model 2A Demog. + SOC | Model 2B Demog. + SOC + Income | Model 3 Demog. + SOC + Coverage | Model 4 Demog. + SOC + Income + Coverage |
|--|--------------------------------|-----------------------|----------------|-----------------------|--------------------------------|---------------------------------|--|
| | | | | | | | |
| Health | | | | | | | |
| Psychological distress (yes) | 12.6 | 1.0165*** | 0.776*** | 0.764*** | 0.746*** | 0.753*** | 0.748*** |
| General ill health (yes) | 13.8 | 1.0345*** | 0.786*** | 0.737*** | 0.624*** | 0.737*** | 0.644*** |
| Socio-economic characteristics | | | | | | | |
| SOC | | | | | | | |
| Manual worker | 7.2 | 0.9484*** | | 0.751*** | 0.013 | 0.641*** | -0.029 |
| Clerical/sales worker | 8.4 | 1.1151*** | | 0.786*** | 0.111 | 0.786*** | 0.151 |
| Intermediate occupation | 5.0 | 0.6175*** | | 0.524*** | 0.161 | 0.507*** | 0.154 |
| Higher-level occupation | 2.8 | Ref. | | Ref. | | | |
| Other | 5.1 | 0.5456** | | 0.667** | -0.077 | 0.607** | -0.057 |
| Income per CU in quintiles | | | | | | | |
| 1st | 15.9 | Ref. | | Ref. | | | Ref. |
| 2nd | 6.9 | -0.8741*** | | -0.593*** | | | -0.518*** |
| 3rd | 5.4 | -1.2201*** | | -0.865*** | | | -0.794*** |
| 4th | 3.4 | -1.7125*** | | -1.376*** | | | -1.271*** |
| 5th | 1.3 | -2.7274*** | | -2.281*** | | | -2.161*** |
| Complementary insurance | | | | | | | |
| Mutual or private insurance, provident institution | 4.07 | Ref. | | | | | Ref. |
| CMU-C or AME | 11.57 | 1.125*** | | | | 0.158 | -0.217 |
| No complementary insurance | 19.49 | 1.741*** | | | | 1.138*** | 0.869*** |

* $p < 10\%$. ** $p < 5\%$. *** $p < 1\%$.

Source: Health Barometer 2016.

Sample: Individuals aged 18-64 who report being in employment or unemployed ($N = 9,660$).

Table A.3. Forgone vision care (glasses, lenses, frames, contact lenses)

| | Percentage having forgone care | Bivariate regressions | Model 1 Demog. | Model 2A Demog. + SOC | Estimated coefficients | | | |
|---|-----------------------------------|--------------------------|-------------------|--------------------------|--------------------------------------|---------------------------------------|--|--|
| | | | | | Model 2B Demog. + SOC + Income | Model 3 Demog. + SOC + Coverage | Model 4 Demog. + SOC + Income + Coverage | |
| Unemployed | 9.86 | 1.041*** | 0.772*** | 0.748*** | 0.367*** | 0.568*** | 0.289** | |
| Employed | 5.28 | | | | Ref. | | | |
| Sociodemographic characteristics | | | | | | | | |
| Sex | | | | | | | | |
| Female | 7.80 | 0.674*** | 0.610*** | 0.540*** | 0.455*** | 0.579*** | 0.495*** | |
| Male | 4.29 | | | | Ref. | | | |
| Age | | | | | | | | |
| 18–34 years | 5.18 | 0.037 | -0.066 | -0.081 | -0.079 | -0.114 | -0.102 | |
| 35–44 years | 5.51 | | | | Ref. | | | |
| 45–54 years | 7.66 | 0.318*** | 0.196 | 0.166 | 0.168 | 0.185 | 0.184 | |
| 55–64 years | 5.57 | 0.114 | -0.135 | -0.152 | -0.019 | -0.129 | -0.010 | |
| Household composition | | | | | | | | |
| Couple with children | 4.54 | | | | Ref. | | | |
| Couple without children | 5.40 | 0.219* | 0.173 | 0.161 | 0.334** | 0.156 | 0.317** | |
| Alone with children | 10.09 | 0.975*** | 0.585*** | 0.548*** | 0.300 | 0.464** | 0.281 | |
| Alone without children | 8.04 | 0.813*** | 0.624*** | 0.601*** | 0.519*** | 0.545*** | 0.482*** | |
| Country/region of birth | | | | | | | | |
| France | 5.90 | | | | Ref. | | | |
| Europe (excluding France) | 5.08 | -0.361 | -0.483 | -0.500 | -0.587* | -0.510 | -0.597* | |
| Africa | 8.33 | 0.585*** | 0.432** | 0.423** | 0.205 | 0.311* | 0.122 | |
| Other regions | 3.48 | -0.194 | -0.429 | -0.381 | -0.540 | -0.671 | -0.781 | |
| Locality size | | | | | | | | |
| Rural municipality | 5.12 | -0.184 | -0.074 | -0.189 | -0.358** | -0.156 | -0.337** | |
| Fewer than 20,000 inhabitants | 5.96 | 0.012 | 0.089 | -0.014 | -0.149 | 0.017 | -0.126 | |
| 20,000 to 99,999 inhabitants | 6.48 | 0.023 | -0.052 | -0.133 | -0.273 | -0.127 | -0.264 | |
| 100,000 or more inhabitants | 6.34 | 0.046 | 0.012 | -0.039 | -0.154 | -0.031 | -0.150 | |
| Parisian agglomeration | 6.30 | | | | Ref. | | | |

Table A.3 (cont'd). Forgone vision care (glasses, lenses, frames, contact lenses)

| | Percentage having forgone care | Estimated coefficients | | | | Model 4 Demog. + SOC + Income + Coverage |
|---|--------------------------------|------------------------|-------------------|--------------------------|--------------------------------------|--|
| | | Bivariate regressions | Model 1 Demog. | Model 2A Demog. + SOC | Model 2B Demog. + SOC + Income | |
| Health | | | | | | |
| Psychological distress (yes) | 13.23 | 0.096*** | 0.813*** | 0.800*** | 0.773*** | 0.778*** |
| General ill health (yes) | 13.39 | 1.077*** | 0.588*** | 0.539*** | 0.429*** | 0.538*** |
| Socio-economic characteristics | | | | | | |
| SOC | | | | | | |
| Manual worker | 5.72 | 0.906*** | | 0.687*** | -0.001 | 0.585*** |
| Clerical/sales worker | 8.87 | 1.326*** | | 0.856*** | 0.211 | 0.860*** |
| Intermediate occupation | 5.18 | 0.823*** | | 0.655*** | 0.336* | 0.652*** |
| Higher-level occupation | 2.02 | Ref. | | | Ref. | |
| Other | 5.06 | 0.957*** | | 0.911*** | 0.229 | 0.874*** |
| Income per CU in quintiles | | | | | | |
| 1st | 12.56 | Ref. | | | Ref. | Ref. |
| 2nd | 7.52 | -0.659*** | | | -0.449*** | -0.380*** |
| 3rd | 6.03 | -1.125*** | | | -0.813*** | -0.730*** |
| 4th | 3.51 | -1.453*** | | | -1.153*** | -1.057*** |
| 5th | 1.44 | -2.411*** | | | -2.053*** | -1.945*** |
| Complementary insurance | | | | | | |
| Mutual or private insurance, provident institution | 4.65 | Ref. | | | | Ref. |
| CMU-C or AME | 11.98 | 1.026*** | | | | 0.279 |
| No complementary insurance | 15.04 | 1.288*** | | | | 0.967*** |
| * p < 10%. ** p < 5%. *** p < 1%. Source: Health Barometer 2016. Sample: Individuals aged 18-64 who report being in employment or unemployed (N = 9,660). | | | | | | |

Table A.4. Other forgone healthcare, logistic regression coefficients

| | Percentage having forgone care | Bivariate regressions | Model 1 Demog. | Model 2A Demog. + SOC | Estimated coefficients | | | |
|---|--------------------------------|-----------------------|----------------|-----------------------|--------------------------------|---------------------------------|--|--|
| | | | | | Model 2B Demog. + SOC + Income | Model 3 Demog. + SOC + Coverage | Model 4 Demog. + SOC + Income + Coverage | |
| Unemployed | 10.83 | 1.050*** | 0.609*** | 0.626*** | 0.302** | 0.530*** | 0.286** | |
| Employed | 4.45 | | | Ref. | | | | |
| Sociodemographic characteristics | | | | | | | | |
| Sex | | | | | | | | |
| Female | 6.77 | 0.545*** | 0.507*** | 0.495*** | 0.443*** | 0.539*** | 0.485*** | |
| Male | 4.20 | | | Ref. | | | | |
| Age | | | | | | | | |
| 18–34 years | 6.86 | 0.305** | 0.301** | 0.299** | 0.289** | 0.268** | 0.268** | |
| 35–44 years | 5.20 | | | Ref. | | | | |
| 45–54 years | 5.23 | -0.124 | -0.263* | -0.289** | -0.331** | -0.289* | -0.334** | |
| 55–64 years | 3.38 | -0.295* | -0.518*** | -0.536*** | -0.490*** | -0.525*** | -0.489*** | |
| Household composition | | | | | | | | |
| Country/region of birth | | | | | | | | |
| France | 5.00 | | | Ref. | | | | |
| Couple with children | 4.97 | | | | | | | |
| Couple without children | 3.94 | -0.241* | -0.114 | -0.114 | 0.048 | -0.113 | 0.037 | |
| Alone with children | 8.31 | 0.580*** | 0.112 | 0.141 | -0.037 | 0.105 | -0.018 | |
| Alone without children | 7.79 | 0.600*** | 0.453*** | 0.442*** | 0.399*** | 0.401*** | 0.368*** | |
| Locality size | | | | | | | | |
| Rural municipality | 3.50 | -0.678** | -0.502*** | -0.600*** | -0.716*** | -0.579*** | -0.711*** | |
| Fewer than 20,000 inhabitants | 5.61 | -0.100 | 0.047 | -0.039 | -0.168 | -0.001 | -0.138 | |
| 20,000 to 99,999 inhabitants | 5.88 | -0.300* | -0.330* | -0.410** | -0.574*** | -0.392** | -0.555*** | |
| 100,000 or more inhabitants | 5.86 | -0.191 | -0.187 | -0.231 | -0.331** | -0.233 | -0.336 | |
| Parisian agglomeration | 6.98 | | | Ref. | | | | |

Table A.4 (cont'd). Other forgone healthcare, logistic regression coefficients

| | Percentage having forgone care | Bivariate regressions | Model 1 Demog. | Estimated coefficients | | | |
|--|--------------------------------|-----------------------|----------------|------------------------|--------------------------------|---------------------------------|--|
| | | | | Model 2A Demog. + SOC | Model 2B Demog. + SOC + Income | Model 3 Demog. + SOC + Coverage | Model 4 Demog. + SOC + Income + Coverage |
| Health | | | | | | | |
| Psychological distress (yes) | 13.76 | 1.310*** | 0.934*** | 0.916*** | 0.899*** | 0.904*** | 0.895*** |
| General ill health (yes) | 17.03 | 1.491*** | 1.178*** | 1.154*** | 1.058*** | 1.155*** | 1.071*** |
| SOC | | | | | | | |
| Socio-economic characteristics | | | | | | | |
| Manual worker | 5.74 | 0.651*** | | 0.399** | -0.126 | 0.319 | -0.168 |
| Clerical/sales worker | 7.47 | 0.911*** | | 0.459** | -0.024 | 0.456** | -0.007 |
| Intermediate occupation | 4.35 | 0.491*** | | 0.327* | 0.098 | 0.320* | 0.095 |
| Higher-level occupation | 2.47 | Ref. | | | | Ref. | |
| Other | 5.49 | 0.625*** | | 0.663*** | 0.181 | 0.640** | 0.204 |
| Income per CU in quintiles | | | | | | | |
| 1st | 11.92 | Ref. | | | Ref. | | Ref. |
| 2nd | 5.88 | -0.833*** | | | -0.516*** | | -0.495*** |
| 3rd | 4.46 | -1.167*** | | | -0.780*** | | -0.773*** |
| 4th | 4.23 | -1.271*** | | | -0.886*** | | -0.853*** |
| 5th | 1.55 | -2.260*** | | | -1.749*** | | -1.705*** |
| Complementary insurance | | | | | | | |
| Mutual or private insurance, provident institution | 4.15 | Ref. | | | | | Ref. |
| CMU-C or AME | 9.50 | 0.886*** | | | | -0.064 | -0.387 |
| No complementary insurance | 14.19 | 1.341*** | | | | 0.791*** | 0.565*** |

* p < 10%. ** p < 5%. *** p < 1%.

Source: Health Barometer 2016.

Sample: Individuals aged 18-64 who report being in employment or unemployed (N = 9,660).

Table A.5. Model 3 with interactions, logistic regression coefficients

| | Unemployment x Household composition | Unemployment x General health | Unemployment x SOC | Unemployment x Insurance |
|---|--------------------------------------|-------------------------------|--------------------|--------------------------|
| | Estimated coefficients | | | |
| Sociodemographic characteristics | | | | |
| Sex | | | | |
| Female | 0.313*** | 0.311*** | 0.314*** | 0.314*** |
| Male | | <i>Ref.</i> | | |
| Age | | | | |
| 18–34 years | 0.084 | 0.080 | 0.086 | 0.077 |
| 35–44 years | | | | |
| 45–54 years | -0.171** | -0.172** | -0.172** | -0.173** |
| 55–64 years | -0.356*** | -0.357*** | -0.355*** | -0.360*** |
| Household composition | | | | |
| | Employed | Unemployed | <i>Ref.</i> | |
| Couple with children | -0.766*** | -0.318* | | -0.079 |
| Couple without children | -0.856*** | -0.315* | -0.082 | 0.307** |
| Alone with children | -0.409** | -0.195 | 0.311** | 0.304*** |
| Alone without children | -0.465*** | <i>Ref.</i> | 0.298*** | 0.304*** |
| Country/region of birth | | | | |
| France | | | <i>Ref.</i> | |
| Europe (excluding France) | -0.254 | -0.259 | -0.265 | -0.258 |
| Africa | 0.148 | 0.145 | 0.141 | 0.154 |
| Other regions | -0.348 | -0.357 | -0.359 | -0.366 |
| Locality size | | | | |
| Rural municipality | -0.486*** | -0.487*** | -0.490*** | -0.483*** |
| Fewer than 20,000 inhabitants | -0.219** | -0.223** | -0.222** | -0.218** |
| 20,000 to 99,999 inhabitants | -0.375*** | -0.378*** | -0.378*** | -0.372*** |
| 100,000 or more inhabitants | -0.341*** | -0.344*** | -0.340*** | -0.340*** |
| Parisian agglomeration | | | <i>Ref.</i> | |
| Health | | | | |

Table A.5 (cont'd). Model 3 with interactions, logistic regression coefficients

| | Unemployment x Household composition | Unemployment x General health | | Unemployment x SOC | Unemployment x Insurance |
|--|--------------------------------------|--------------------------------|------------|--------------------|--------------------------|
| | Estimated coefficients | | | | |
| Health | | | | | |
| Psychological distress (yes) | 0.633*** | 0.632*** | | 0.639*** | 0.632*** |
| General ill health (yes) | 0.473*** | Employed | Unemployed | 0.474*** | 0.474*** |
| (no) | | 0.032 | 0.249 | | |
| | | -0.511*** | Ref. | | |
| SOC | | Socio-economic characteristics | | | |
| Manual worker | 0.598*** | | | Employed | Unemployed |
| Clerical/sales worker | 0.717*** | 0.599*** | | -0.409 | -0.071 |
| Intermediate occupation | 0.506*** | 0.714*** | | -0.296 | -0.002 |
| Higher-level occupation | Ref. | 0.506*** | | -0.567* | 0.162 |
| Other | 0.724*** | 0.729*** | | -1.097*** | Ref. |
| | | | | -0.319 | 0.165 |
| | | Complementary insurance | | | |
| Mutual or private insurance, provident institution | | | | | |
| CMU-C or AME | 0.161 | Ref. | | 0.154 | Ref. |
| No complementary insurance | 0.813*** | 0.152 | | 0.804*** | 0.249 |
| | | 0.812*** | | | 0.671*** |

* p < 10%. ** p < 5%. *** p < 1%.

Source: Health Barometer 2016.

Sample: Individuals aged 18-64 who report being in employment or unemployed (N = 9,660).

REFERENCES

- ARBER S., 1987, Social class, non-employment, and chronic illness: Continuing the inequalities in health debate, *British Medical Journal (Clinical Research Ed.)*, 294(6579), 1069–1073. doi:10.1136/bmj.294.6579.1069
- BATARD P.-É., FERRARI N., SAILLARD E., 2012, Le chômage des jeunes: quel diagnostic? *Économie & prévision*, 200–201(2–3), 207–215. doi:10.3917/ecop.200.0207
- BAZIN F., PARIZOT I., CHAUVIN P., 2006, Déterminants psychosociaux du renoncement aux soins pour raisons financières dans cinq zones urbaines sensibles de la Région parisienne en 2001, *Sciences sociales et santé*, 24(3), 11–31.
- BECKFIELD J., BAMBRA C., EIKEMO T. A., HUIJTS T., MCNAMARA C., WENDT C., 2015, An institutional theory of welfare state effects on the distribution of population health, *Social Theory & Health*, 13(3–4), 227–244. doi:10.1057/sth.2015.19
- BERCHET C., 2013, Le recours aux soins en France: une analyse des mécanismes qui génèrent les inégalités de recours aux soins liées à l'immigration, *Revue d'épidémiologie et de santé publique*, 61(2), S69–S79. doi:10.1016/j.respe.2013.03.001
- BLASCO S., BRODATY T., 2016, Chômage et santé mentale en France, *Économie et Statistique*, 486–487, 17–44.
- BOURGUEIL Y., ELBAUM M., GRIGNON M., LE PEN C., SAOUT C., 2012, Quand les patients renoncent aux soins: un diagnostic sur notre état de santé? *Esprit*, 5, 90–101.
- BOUVART C., DONNE V., 2020, *Taux de chômage et zones d'emploi: vers une nouvelle approche de la performance territoriale?* (Working Paper No. 2020-12), Paris, France stratégie.
- BRAS P.-L., 2015, La liberté des tarifs médicaux: la victoire des médecins spécialistes, *Les Tribunes de la santé*, 48(3), 73–92. doi:10.3917/seve.048.0073
- BRAS P.-L., TABUTEAU D., 2012, Les assurances maladie et l'égal accès aux soins, in Bras P.-L., Tabuteau D., *Les assurances maladie*, Paris, Presses universitaires de France, 73–94.
- BRENNER M. H., 1977, Health costs and benefits of economic policy, *International Journal of Health Services*, 7(4), 581–623. doi:10.2190/CC3D-Q2YG-P7AV-Y8FJ
- CADOT E., GUEGUEN J., SPIRA A., 2008, Le renoncement aux soins parmi la population parisienne, le poids des déterminants sociaux et économiques, *Revue d'épidémiologie et de santé publique*, 56(5S), 262.
- CAISSE NATIONALE DE L'ASSURANCE MALADIE, 2017, *Observatoire des pratiques tarifaires: dépassements d'honoraires des médecins, une tendance à la baisse qui se confirme.* <https://assurance-maladie.ameli.fr/presse/2017-11-29-dp-observatoire-pratiques-tarifaires>
- CHABANET D., 2016, Le chômage des jeunes en France: une 'épreuve' diversement vécue, *Les Annales des mines, Gérer et comprendre*, 125(3), 24–31. doi:10.3917/gecol.125.0024
- CHADELAT J.-F., 2016, Histoire des complémentaires maladie, *Regards*, 1(49), 35–44.
- CHAREYRON S., L'HORTY Y., PETIT P., 2019, *Les refus de soins discriminatoires: tests multicritères et représentatifs dans trois spécialités médicales*, Université Paris-Est Créteil, Université Paris-Est Marne-la-Vallée, Erudite, TEPP.

- CHAUPAIN-GUILLOT S., GUILLOT O., JANKELIOWITCH-LAVAL É., 2014, Le renoncement aux soins médicaux et dentaires: une analyse à partir des données de l'enquête SRCV, *Économie et Statistique*, 469–470, 169–197.
- DARCOVICH N., HASAN A., JONES S., KIRSCH I., MURRAY T. S. ET AL., 2000, *La littératie à l'ère de l'information. Rapport final de l'Enquête internationale sur la littératie des adultes*, Paris, OCDE, Statistiques Canada.
- DEMAZIÈRE D., 2006, *Sociologie des chômeurs*, Paris, La Découverte.
- DESPLANQUES G., 1994, *Chômage, situation familiale et mortalité: peut-on établir un lien causal?* Colloque de l'observatoire de l'intégration, Montpellier.
- DESPRÈS C., 2013, Significations du renoncement aux soins: une analyse anthropologique, *Sciences sociales et santé*, 31(2), 71–96. doi:10.3917/sss.312.0071
- DESPRÈS C., DOURGNON P., FANTIN R., JUSOT F., 2011a, Dépense de santé et accès financier aux services de santé: une étude du renoncement aux soins, *Comptes nationaux de la santé*, 66, 87–97.
- DESPRÈS C., DOURGNON P., FANTIN R., JUSOT F., 2011b, Le renoncement aux soins pour raisons financières: une approche économétrique, *Questions d'économie de la santé*, 170, November.
- DOURGNON P., JUSOT F., FANTIN R., 2012, *Payer peut nuire à votre santé: une étude de l'impact du renoncement financier aux soins sur l'état de santé* (Working Paper No. 47), Paris, IRDES.
- DREES, 2018, *Les dépenses de santé en 2017 - Résultats des comptes de la santé - Édition 2018*, Paris, DREES.
- DRISCOLL A., BERNSTEIN A., 2012, Health and access to care among employed and unemployed adults: United States, 2009–2010, *NCHS Data Brief*, 83, 1–8. PMID: 22617552
- INSEE, 2012, Situation sur le marché du travail - Immigrés, *Insee références, Immigrés et descendants d'immigrés en France*.
- INSEE, 2014, En matière d'emploi, les métropoles ont davantage résisté à la crise, *Insee Première*, 1503, June.
- INSEE, 2016a, Emploi, chômage, revenus du travail. Édition 2016, *Insee références*.
- INSEE, 2016b, Tableaux de l'économie française. Édition 2016, *Insee références*.
- INSEE, 2016c, Définition - Nombre d'unités de consommation du ménage fiscal, *Insee définitions*.
- INSEE, 2017, Emploi, chômage, revenus du travail. Édition 2017, *Insee références*.
- INSEE, 2019, Au deuxième trimestre 2019 le taux de chômage baisse de 0,2 point, *Informations rapides*, 208.
- JUSOT F., 2014, La complémentaire santé: une source d'inégalités face à la santé? *Les Tribunes de la santé*, 43(2), 69–78. doi:10.3917/seve.043.0069
- JUSOT F., CARRÉ B., WITWER J., 2019, Réduire les barrières financières à l'accès aux soins, *Revue française d'économie*, 34(1), 133–181.
- JUSOT F., SILVA J., DOURGNON P., SERMET C., 2009, Inégalités de santé liées à l'immigration en France. Effet des conditions de vie ou sélection à la migration? *Revue économique*, 60(2), 385–411. doi:10.3917/reco.602.0385
- KOOLMAN X., 2007, Unmet need for health care in Europe, in European Commission (ed.), *Comparative EU statistics on income and living conditions: Issues and challenges, Proceedings of the EU-SILC conference (Helsinki, 6–8 November 2006)*, Luxembourg, Office for Official Publications of the European Communities, 181–191.
- LAPINTE A., PERRONNIN M., 2018, 96 % des salariés ont accès à une assurance complémentaire santé d'entreprise en 2017, *Études & Résultats*, 1074, July.

- LASSER K., HIMMELSTEIN D., WOOLHANDLER S., 2006, Access to care, health status, and health disparities in the United States and Canada: Results of a cross-national population-based survey, *American Journal of Public Health*, 96(7), 1300–1307.
- LEGAL R., VICARD A., 2015, Renoncement aux soins pour raisons financières: le taux de renoncement aux soins pour raisons financières est très sensible à la formulation des questions, *Dossiers solidarité et santé*, 66, 28.
- LEPLÈGE A., ECOSSE E., VERDIER A., PERNER T. V., 1998, The French SF-36 Health Survey: Translation, cultural adaptation and preliminary psychometric evaluation, *Journal of Clinical Epidemiology*, 51(11), 1013–1023. doi:10.1016/s0895-4356(98)00093-6
- LUCAS-GABRIELLI V., PIERRE A., COM-RUELLE L., COLDEFY M., 2016, *Pratiques spatiales d'accès aux soins* (Report No. 564), Paris, IRDES.
- LYNGE E., 1997, Unemployment and cancer: A literature review, *IARC Scientific Publications*, 138, 343–351. PMID: 9353675
- MARUTHAPPU M., WATSON R., WATKINS J., WILLIAMS C., ZELTNER T. ET AL., 2016, Unemployment, public-sector healthcare expenditure and colorectal cancer mortality in the European Union: 1990–2009, *International Journal of Public Health*, 61(1), 119–130. doi:10.1007/s00038-015-0727-2
- MENETON P., PLESSZ M., COURTIN É., RIBET C., GOLDBERG M., ZINS M., 2017, Le chômage: un problème de santé publique majeur, *La Revue de l'Ides*, 91–92(1), 141–154.
- MESRINE A., 2000, La surmortalité des chômeurs: un effet catalyseur du chômage? *Économie et Statistique*, 334(1), 33–48.
- METHIVIER J., 2012, État émotionnel négatif et organisation des représentations sociales du travail et du chômage de jeunes adultes en recherche d'emploi, *Les cahiers internationaux de psychologie sociale*, 95–96(3–4), 417–437. doi:10.3917/cips.095.0417
- MILUNPALO S., VUORI I., OJA P., PASANEN M., URPONEN H., 1997, Self-rated health status as a health measure: The predictive value of self-reported health status on the use of physician services and on mortality in the working-age population, *Journal of Clinical Epidemiology*, 50(5), 517–528. doi: 10.1016/s0895-4356(97)00045-0
- MILLAND L., 2002, Pour une approche de la dynamique du rapport entre représentations sociales du travail et du chômage, *Revue internationale de psychologie sociale*, 15(2), 27–57.
- MILNER A., PAGE A., LAMONTAGNE A. D., 2013, Long-term unemployment and suicide: A systematic review and meta-analysis, *PLoS ONE*, 8(1), e51333. doi:10.1371/journal.pone.0051333
- PAUGAM S., 2006, L'épreuve du chômage: une rupture cumulative des liens sociaux? *Revue européenne des sciences sociales. European Journal of Social Sciences*, XLIV-135, 11–27. doi:10.4000/ress.248
- PINEL L., 2020, Conditions de vie des jeunes femmes en zone rurale: des inégalités par rapport aux hommes ruraux et aux urbaines, *Études & Résultats*, 1154, July.
- RENAHY É., PARIZOT I., VALLÉE J., CHAUVIN P., 2011, Le renoncement aux soins pour raisons financières dans l'agglomération parisienne: déterminants sociaux et évolution entre 2005 et 2010, HAL, inserm-00645136.
- REUIL H., CASAGRANDE A., CHAUVEAUD C., 2016, *Diagnostic quantitatif du renoncement aux soins des assurés de 18 Caisses Primaires d'Assurance Maladie* (No. 62), Odenore/Pacte/CNRS.
- SANTÉ PUBLIQUE FRANCE, *Les Baromètres santé, un observatoire des comportements des Français pour orienter les politiques de santé publique*, Santé publique France.

- SCHNAPPER D., 1998, Travail et chômage, in De Coster M. (ed.), *Traité de sociologie du travail*, Louvain-la-Neuve, De Boeck Supérieur, 127–138.
- SERMET C., KHLAT M., 2004, La santé des chômeurs en France: revue de la littérature, *Revue d'épidémiologie et de santé publique*, 52(5), 465–474.
- SHMUELI A., 2003, Socio-economic and demographic variation in health and in its measures: The issue of reporting heterogeneity, *Social Science & Medicine*, 57(1), 125–134. doi:10.1016/s0277-9536(02)00333-7
- STIRBU I., KUNST A., MIELCK A., MACKENBACH J., 2011, Inequalities in utilisation of general practitioner and specialist services in 9 European countries, *BMC Health Services Research*, 11(1), 288. doi:10.1186/1472-6963-11-288
- WARIN P., 2016, *Le non-recours aux politiques sociales*, Grenoble, Presses universitaires de Grenoble.
- WILLMANN C., 2007, La protection sociale des sans-emploi, *Informations sociales*, 142(6), 60–69. doi:10.3917/inso.142.0060

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UNEMPLOYED ADULTS FORGOING HEALTHCARE IN FRANCE

In 2016, almost 1 in 3 unemployed people in France reported having forgone healthcare for financial reasons in the 12 previous months, a proportion twice as high as that observed in the working population. Drawing on data from the 2016 Health Barometer, this article analyses the factors behind this forgoing of care. A comparison between unemployed and employed people shows that while forgoing healthcare among unemployed people is partly linked to their economic and social characteristics, being unemployed itself also has an effect. Moreover, the sociodemographic inequalities in forgoing healthcare observed among employed people are smaller among the unemployed population. Last, for unemployed people, having complementary health insurance remains key to making full use of healthcare services.

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LE RENONCEMENT AUX SOINS DES CHÔMEURS EN FRANCE

En 2016, près d'un chômeur sur trois déclare avoir dû renoncer à un soin de santé pour raisons financières lors des douze derniers mois, soit près de deux fois plus qu'au sein de la population active occupée. Cet article propose d'analyser les spécificités de ce renoncement aux soins des chômeurs en se basant sur les données du Baromètre Santé 2016. La comparaison des chômeurs et des actifs occupés montre que si le moindre recours aux soins des chômeurs est en partie lié à leurs caractéristiques économiques et sociales, il existe également un effet de la situation de chômage en elle-même. Par ailleurs, les inégalités sociodémographiques de renoncement aux soins que l'on observe chez les actifs occupés sont atténuées chez les chômeurs. Enfin, le fait de disposer d'une couverture santé reste, pour les chômeurs, un critère fondamental pour éviter de renoncer aux soins.

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LA RENUNCIA A LOS CUIDADOS MÉDICOS DE LOS DESEMPLEADOS EN FRANCIA

En 2016, casi uno de cada tres desempleados declara haber renunciado a la atención médica por razones financieras en los últimos 12 meses, casi el doble que en la población activa ocupada. Este artículo analiza las especificidades de esta renuncia basándose en los datos del Barómetro de Salud 2016. La comparación de los desempleados y los activos ocupados muestra que, si bien la menor utilización de los servicios de atención médica en los desempleados se debe en parte a sus características económicas y sociales, también existe un efecto de la propia situación de desempleo. Por otra parte, las desigualdades sociodemográficas en la renuncia a la atención médica que se observa entre los trabajadores ocupados se atenúan entre los desempleados. Por último, el hecho de disponer de una cobertura médica sigue siendo, en los desempleados, un criterio fundamental para no renunciar a los cuidados médicos.

Keywords: Health Barometer, unemployment, health, access to healthcare, forgoing healthcare, social protection, France

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