

UNMET NEEDS BECAUSE OF COST IN THE PARIS METROPOLITAN AREA: EVOLUTION BETWEEN 2005 AND 2010.

Emilie Renahy¹, Isabelle Parizot², Amélie Quesnel-Vallée^{3,4}, Pierre Chauvin⁵

¹ Centre for Research on Inner City Health (CRICH), St. Michael's Hospital, Toronto, Canada; ² Centre Maurice Halbwachs (CNRS-EHESS-ENS), Equipe de recherche sur les inégalités sociales (ERIS), Paris, France; ³ McGill University, Department of Sociology, International Research Infrastructure on Social inequalities in health (IRIS), Montreal, Canada; ⁴ McGill University, Department of Epidemiology, Biostatistics and Occupational Health, Montreal, Canada; ⁵ UMRS 707 (INSERM-UPMC), Equipe de recherche sur les déterminants sociaux de la santé et du recours aux soins (DS3), Paris, France.

Introduction.

Social inequalities in health do not decrease spontaneously with medical progress or increased quantity and quality of health care provision, including in welfare states where the health system in theory allows fair access to care ¹. A growing number of epidemiologists emphasize the advantage of working on new approaches such as psychosocial determinants of health but also more upstream determinants in order to make progress in understanding the mechanisms underlying social inequalities in health and thereby on the development of policies and strategies to reduce them. In this context, we deemed it important to focus on access to care and unmet health care needs appears to be a relevant indicator to study social health inequalities assessing determinants both at the individual and societal level. The underlying assumption is that any (increase in) financial contribution and reduction in publicly covered services are financial barriers to get access to care that may increase unmet needs.

In the United-States in 2010, two-thirds of the population reported unmet health care needs because of cost ². Having continuous health coverage (either public or private) is associated with a lower level of unmet needs ³. However, while the recent establishment of a near-universal coverage in Massachusetts increased the overall coverage rate, rate of unmet needs decreased only slightly (from 9.2% to 7.2% between 1996 and 2008). Moreover, results were contrasted because a significant decrease occurred only among the groups at lowest risk: male, White, healthy, and high income ⁴. In countries such as Canada or France where universal coverage is much wider than in the U.S. (though only partial), about 15% of the general population has experienced unmet health needs because of cost ^{2,5}.

Several surveys have attempted to better understand factors associated with unmet health care needs, especially because of financial reasons. Beyond the socioeconomic gradient, the probability of unmet needs because of cost (whatever the type of care) is higher in people who have no health insurance ⁶. Several studies have also shown that people without private health insurance were more likely to report unmet health needs in general ⁶⁻¹¹ and because of cost more specifically ^{6,12-16}. These mechanisms contribute to social inequalities in health by reducing access to care for the most disadvantaged. To overcome this issue, universal coverage system is often seen as a good way to reduce social inequalities in access to care. This is especially true among immigrants in Canada compared to U.S. ^{11,17}. However, even in countries with universal coverage (often partial) is in place, the social inequalities in health persist and some individuals have to forgo care or treatment.

We have to acknowledge that there is a wide range of public coverage in place in industrialized countries. Before the debate around the health care reform in the U.S. for instance, only the elderly and the very poor have access to public coverage. In Canada, while access to physicians and hospital is fully free of charge for the whole population, other services are free (or at low cost) only for certain groups (such as drug or dental care for children or social assistance recipients for example). In Sweden, the health insurance plan that covers a wide range of health care services is also accompanied by various user fees: co-payment for medical consultation in public and in private, medicines, dental care, etc... In France, the public system of Social Security covers almost all services and type of care. However, patients most of times have to pay the full costs to the point of service (direct payment) and are reimbursed only partially by the Social Security (70% on average). The

additional 30% (co-payment) will be reimbursed later by a complementary/supplementary health insurance or will be borne by patients.

In France, the establishment in 2000 of universal health coverage (*couverture maladie universelle* or CMU, a mandatory alternative to get public coverage for people not covered through employment or as a relative of an employed person) and the complementary universal medical coverage (*couverture maladie universelle complémentaire* or CMU-C, offering free complementary coverage to the poorest) has significantly reduced the financial barriers in access to health care among the poorest^{18, 19}. However, this also led to a threshold effect for people with incomes slightly above the eligibility criteria²⁰. In 2010, CMU-C covered more than 4 million people²¹. To prevent this threshold effect, a means-tested allowance has been created in 2005 to help people buy private health insurance (*Aide à la complémentaire santé* or ACS)²²⁻²⁴. Even if the number of beneficiaries has been growing over time, the use of ACS remains low, and a recent experiment shows that only one out of five eligible people apply to get this benefit²⁵.

Several circumstances recently restored the interest in unmet health care needs because of cost in France. First, since decades, and more especially over the past five years, many measures have been implemented to reduce the Social Security deficit, resulting in the increase of direct financial participation of patients. Thus, since 2008, the introduction of different franchises on prescription drugs, and paramedical and medical transport, the de-reimbursement of 'insufficiently efficient' drugs, the flat fee of € 1 to medical procedures, increased hospital package and excess fees have contributed to substantially increase the direct cost of health care on households²⁶. Second, the 2008 economic crisis and its impacts on the socioeconomic status of French may have led to worsen (objective and/or subjective) financial hardship experienced by people. The current international economic situation and stupendous debt of the United States and several European countries suggests that this instability and its resulting tensions are likely to continue. Third, the frequency of unmet needs because of cost has been chosen as an indicator for monitoring the performance of the health system and health insurance in France.

Objectives

In this context, the general objective of this research is therefore to better understand unmet health care needs because of cost in Paris metropolitan area, its determinants, at the individual, neighbourhood and societal level and its evolution over time. We will address following two main objectives:

1. Estimate and compare the frequency of unmet needs because of cost in 2005 and 2010 a) for any type of care and b) by specific types of care (such as dental care, visual aids, specialist care, or drugs);
2. Assess the association with demographic factors (age, gender, immigrant origin), socio-economic (household income, perceived financial situation, education level, employment status, type of health insurance coverage), psychosocial (social integration, health representations and experiences) and territorial (socioeconomic type of area of residence, medical density) and compare their strength between 2005 and 2010.

Methods

We used two waves of the SIRS (French acronym for health, inequalities and social ruptures) cohort study. This socio-epidemiological cohort study is representative of the adult French-speaking population in the Paris metropolitan area (Paris and its suburbs - departments 75, 92, 93 and 94 - , a region with a population of 6.5 million) and comprises 3,000 households recruited in the fall of 2005 by 3-level random sampling. The first level consisted of a geographical partition (IRIS, units that contain about 2000 inhabitants) and was stratified based on a socio-professional space typology²⁷ and the government-defined sensitive urban zones (ZUS) status: 50 IRIS were randomly selected among 2,595, with an over-sampling of ZUS and blue collar neighborhoods. At the second level, 60 housing were randomly selected in each IRIS. Finally, one adult was randomly selected per household and included in the cohort. Data on numerous social and health-related characteristics were collected both in 2005 (wave 1) and 2010 (wave 3), while the second wave (2007) consisted in a short to follow up. This socio-epidemiological cohort is led by the DS3 team at Inserm (which houses the personal data) as part of a research program involving also the research team on social inequalities (ERIS) at Centre Maurice

Halbwachs (CNRS-EHESS-ENS). We estimated multilevel models, to take into account the sampling design: individuals (level 1) nested within neighborhoods (level 2).

Results

The proportion of respondents who stated they experienced unmet health care needs because of cost during the past 12 months was respectively 16.9% in 2005 and 15.7% in 2010¹. This small decrease was not statistically significant. After adjustment for all variables, demographic factors appear to have only a marginal impact on the probability of forgo health care for financial reasons. In 2010, French citizens born from foreign parents (i.e. immigrants' children) are more likely to forgo care than French citizens born from French parents (OR = 1.35, 95% CI = [1.04-1.77]). On the contrary, the risk of stating unmet needs because of cost did not differ between French citizens (born from French parents) and people with foreign citizenship. It might be the result of the healthy migrant effect and/or different health expectations of immigrants, which in this case would be lower than the French (for example due to lack of integration).

Unmet needs because of costs was not only significantly associated with the financial inability to access to care (household income), but also highly significantly associated with a negative perception of this financial situation (OR = 3.36, 95% CI = [2.57-4.89]) and health coverage (higher risk of unmet needs with decreasing level of coverage). In 2010, recipients of CMU-C were at higher risk to state unmet needs because of costs, but this difference was not significant after adjusting for other characteristics. In France, protection of the poorest through CMU-C seems to fulfill its role by cancelling potential financial barriers in access to care. In contrast, the risk was significantly higher among those without complementary/supplementary coverage (OR = 2.17, 95% CI = [1.49-3.15]) or no health insurance coverage at all (OR = 5.29, 95% CI = [1.31-21.41]).

In addition, at comparable socio-economic status (especially in terms of level of income or health insurance), unmet needs because of cost was stated more frequently among people who had at least one health condition or were socially isolated. In addition, the psychosocial dimension appears to be extremely important since the risk of unmet needs because of cost is higher among those with more negative health representations and who experienced major traumatic life events during childhood or adulthood (serious events, biographical ruptures).

Finally, the type of neighborhood had only a very marginal impact. It seems that individual factors have a much greater explanatory power (reflecting a strong composition effect) than these contextual factors.

In contrast in 2005, the effect of gender was significant whereas the migration origin one was not. Financial position, both objective and subjective, was significantly associated with seeking care but to a lesser extent than in 2010. The major difference stood in health coverage: while CMU-C recipients were less likely to forego care than those covered by a private health insurance in 2005 (OR = 0.63, 95% CI = [0.41-0.96]), the difference was no longer significant in 2010. In fact the proportion of unmet needs because of cost dramatically increased among CMU-C recipients (19.7% to 30.9%). The association with health status seemed slightly larger in 2005 than in 2010. Associations with psychosocial factors were comparable.

Preliminary discussion.

Unmet needs because of cost have remained relatively stable between 2005 and 2009. Our analyses showed that unmet health care needs because of cost do not only refer to the financial inability to access to care, but also to the frustration of people between what they want to benefit in terms of medical care (expectations that may also be socially diverse) and what they actually access. We have already identified several critical economic, social and health determinants. Our work stressed that the issue of unmet needs because of cost cannot be understood without paying special attention to how people perceive their own health needs and their financial or social situation. We also showed how the impact of health coverage status has changed over

¹ Please note that the measurement was slightly different in 2005 (unmet needs because of cost directly measured) and 2010 (contingency question assessing unmet needs in general followed by different justifications, among them financial reasons)

time and how the health system – and any change in public policy – might have a strong impact on health inequalities. Moreover, the preliminary services-specific analysis (such as dental care or visual aids – not shown in this extended abstract) showed that the evolution of unmet health needs because of costs seems highly related to recent increases in cuts in the French health coverage system.

References

1. Chauvin P, Lebas J. Inégalités et disparités sociales de santé en France. In: al FBe, editor. *Traité de santé publique* (2ème édition). Paris: Flammarion Médecine Sciences; 2007. p. 331-41.
2. Schoen C, Osborn R, Squires D, Doty MM, Pierson R, Applebaum S. How health insurance design affects access to care and costs, by income, in eleven countries. *Health Affairs*. 2010
3. Centers for Disease Control and Prevention (CDC). Vital signs: health insurance coverage and health care utilization --- United States, 2006--2009 and January-March 2010. *MMWR Morb Mortal Wkly Rep*. 2010;59:1448-54.
4. Clark CR, Soukup J, Govindarajulu U, Riden HE, Tovar DA, Johnson PA. Lack Of Access Due To Costs Remains A Problem For Some In Massachusetts Despite The State's Health Reforms. *Health Affairs*. 2011;30:247-55.
5. Levesque J-F, Pineault R, Robert L, Hamel M, Roberge D, Kapetanakis C, et al. Les besoins non comblés de services médicaux : Une reflet de l'accessibilité des services de première ligne? *Gouvernement du Québec* ; 2007.
6. Cunningham PJ, Hadley J. Differences between symptom-specific and general survey questions of unmet need in measuring insurance and racial/ethnic disparities in access to care. *Medical Care*. 2007;45:842-50.
7. Okoro CA, Young SL, Strine TW, Balluz LS, Mokdad AH. Uninsured adults aged 65 years and older: Is their health at risk? *Journal of Health Care for the Poor and Underserved*. 2005;16:453-63.
8. Shi LY, Stevens GD. Vulnerability and unmet health care needs. The influence of multiple risk factors. *Journal of General Internal Medicine*. 2005;20:148-54.
9. Shin J, Moon S. Quality of care and role of health insurance among non-elderly women with disabilities. *Womens Health Issues*. 2008;18:238-48.
10. Devoe JE, Tillotson CJ, Wallace LS. Usual Source of Care as a Health Insurance Substitute for US Adults With Diabetes? *Diabetes Care*. 2009;32:983-9.
11. Siddiqi A, Zuberi D, Nguyen Q. The role of health insurance in explaining immigrant versus non-immigrant disparities in access to health care: Comparing the United States to Canada. *Soc Sci Med*. 2009;69:1452-9.
12. Powell-Griner E, Bolen J, Bland S. Health care coverage and use of preventive services among the near elderly in the United States. *Am J Public Health*. 1999;89:882-6.
13. Ayanian JZ, Weissman JS, Schneider EC, Ginsburg JA, Zaslavsky AM. Unmet health needs of uninsured adults in the United States. *JAMA*. 2000;284:2061-9. Epub 2000/10/24.
14. Bazin F, Parizot I, Chauvin P. Original approach to the individual characteristics associated with forgone healthcare - A study in underprivileged areas, Paris region, France, 2001-2003. *European Journal of Public Health*. 2005;15:361-7.
15. Callahan ST, Cooper WO. Access to health care for young adults with disabling chronic conditions. *Archives of Pediatrics & Adolescent Medicine*. 2006;160:178-82.
16. Ahluwalia IB, Bolen J, Garvin B. Health insurance coverage and use of selected preventive services by working-age women, BRFSS, 2006. *Journal of Womens Health*. 2007;16:935-40.
17. Lasser KE, Himmelstein DU, Woolhandler S. Access to care, health status, and health disparities in the United States and Canada: results of a cross-national population-based survey. *Am J Public Health*. 2006;96:1300-7.
18. Boisguérin B, Bonnardel C, Claude G, Ruault M. L'aide médicale départementale : bilan 1996-1999. *Etudes et Résultats* n°126. Paris: Ministère de l'Emploi et de la solidarité DRESS, 2001.
19. Conseil national des politiques de lutte contre la pauvreté et l'exclusion sociale. De 1893 à 1999 : De l'Assistance médicale gratuite (AMG) à l'Aide médicale d'Etat (AME) en passant par l'Aide médicale départementale (AMD). Paris2009 [updated October 10, 2009January 19, 2011]; Available from: <http://www.cnle.gouv.fr/De-1893-a-1999-De-l-assistance.html>
20. Direction de l'information légale et administrative. Formulaire Cerfa n°12504*02 - Autre n°S3711d : Couverture maladie universelle complémentaire et aide pour une complémentaire santé. 2010. p. 1-6.
21. La documentation CMU. Bénéficiaires de la CMU complémentaire en France entière. Synthèse France entière - Tous régimes - 2007-2010. 2011; Available from: <http://www.cmu.fr/site/cmu.php4?id=3&cat=75>.
22. Grignon M, Perronnin M, Lavis JN. Does free supplementary health insurance help the poor to access health care? Evidence from France. Hamilton: CHEPA (Centre for Health Economics and Policy Analysis), 2006 Contract No.: Paper 06-02.
23. Steffen M. The French Health Care System: Liberal Universalism. *Journal of Health Politics, Policy and Law*, 2010;35:353-87.
24. Safon M-O. Historique du ticket modérateur en France. Paris: Institut de recherche et documentation en économie de la santé, 2011.
25. Guthmuller S, Jusot F, Wittwer J. Le recours à l'Aide complémentaire santé : les enseignements d'une expérimentation sociale à Lille. *Questions d'économie de la santé, Irdes*. 2011;162.
26. Perronnin M, Pierre A, Rochereau T. La complémentaire santé en France en 2008 : une large diffusion mais des inégalités d'accès. *Questions d'économie de la santé, Irdes*. 2011;161.
27. Prêteceille E. La division sociale de l'espace francilien. Typologie socioprofessionnelle 1999 et transformations de l'espace résidentiel 1990-99. Paris: Observatoire sociologique du changement, 2003.