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CMU-C Beneficiaries Self-report more Illness than the Rest of the Population

Results of the ESPS 2006-2008 surveys

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The results of the 2006 and 2008 Health, Healthcare and Insurance surveys reveal that CMU-C beneficiaries, who tend to be younger and count a higher percentage of women, self-report a poorer health status than the rest of the population. At equivalent age and gender, the incidence rate of self-reported illnesses is higher among CMU-C beneficiaries than among rest of the population, which for certain disorders such as depression and diabetes can be twice as high. Exposure to health risk factors such as tobacco consumption and obesity is also higher among CMU-C beneficiaries than the rest of the population: 1.6 times higher for tobacco consumption and 1.7 for obesity, in accordance with the higher self-reported incidence rate of upper digestive tract disorders and cardiovascular diseases.

Among the motives for their last consultation with a general practitioner or specialist, backache, depression, respiratory, digestive and hepatic disorders are more frequently evoked by CMU-C beneficiaries, in accordance with the self-reported diseases. On the contrary, whereas they more frequently declare suffering from illnesses of the ear and teeth, they are less frequently evoked as motives for consulting a GP.

This study proposes an approach to the health status of CMU-C[1] beneficiaries based on the results of the the 2006 and 2008 Health, Healthcare and Insurance surveys (ESPS) (Sources and data insert). It is essentially based on respondents' self-reported diseases on the one hand, and the motives for their last consultation with a doctor on the other. It confirms the results of previous studies revealing the poorer health status of CMU-C beneficiaries compared with the rest of the population (Le Fur, Perronnin, 2003; Boisguérin, 2004). Among these, the exhaustive study conducted by the National Health Insurance among beneficiaries covered by the compulsory general scheme and registered under the long-term illness scheme (LTI), showed that at equivalent age and gender, the prevalence of LTI was 1.8 times higher among CMU-C beneficiaries than the rest of the population (Païta et al., 2007). The number of CMU-C beneficiaries registered under LTI for tuberculosis is five times higher than among non-beneficiaries, and three times higher for all pathologies related to haemoglobin and haemolytic anomalies, cirrhosis and other liver disorders, HIV and other auto-immune deficiencies, and over two times higher for mental health disorders, diabetes and severe arterial hypertension. Finally, in addition to over-morbidity, a recent publication by the CNAMTS (Tuppin et al., 2011) reveals that CMU-C beneficiaries have a higher

[1] The CMU-C is a means-tested scheme providing full health insurance coverage for low-income individuals (Couverture maladie universelle complémentaire).

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mortality rate than the rest of the general population: 3.32 per 1,000 versus 1.36 per 1,000, the gap being wider between men and women.

An approach of CMU-C beneficiaries' health status according to diseases and risk factors

This study shows that at equivalent age and gender, almost all the major disease groups are over-represented among CMU-C beneficiaries[2] (graph 1). Among these groups, mental health disorders, diverse symptoms (pain, coughs, vertigo without other indications), digestive tract disorders, illnesses of the ear and the central nervous system reveal the greatest differences in prevalence between the two populations.

A detailed approach permits a finer analysis of the diseases most frequently self-reported within the major disease groups.

CMU-C beneficiaries self-report more illnesses than the rest of the population

Of the 31 diseases or disease entities most frequently self-reported (by at least 1% of the population), 22 are significantly more frequently self-reported by CMU-C beneficiaries than non-beneficiaries at equivalent age and gender (graph 2).

Out of 100 CMU-C beneficiaries aged under 65, 17 self-report back problems (lumbago, sciatica…) and almost 12 report osteoarthritis versus 14 and 9 respectively among non-beneficiaries. As previously evoked, CMU-C beneficiaries more often self-report identified mental health disorders, notably anxiety (reported by 16% versus 9% for the rest of the population) and depression (10% versus 5%).

Furthermore, gastro-intestinal disorders are also more frequent, notably upper digestive tract disorders such as stomach or duodenal ulcers, and œsophageal reflux (11% versus 7%). A percentage of these disorders can probably be related to the higher rate of anxiety disorders and certain risk factors such as obesity.

Among the cardiovascular diseases, the prevalence of arterial hypertension is also higher among CMU-C beneficiaries (11 % versus 8%). The prevalence of arrhythmia disorders, coronary heart or artery diseases, and diabetes is twice as high among CMU-C beneficiaries, as is asthma and chronic bronchitis. These results can be partly explained by a higher exposure to health risk factors such as tobacco consumption and overweight (graph 3).

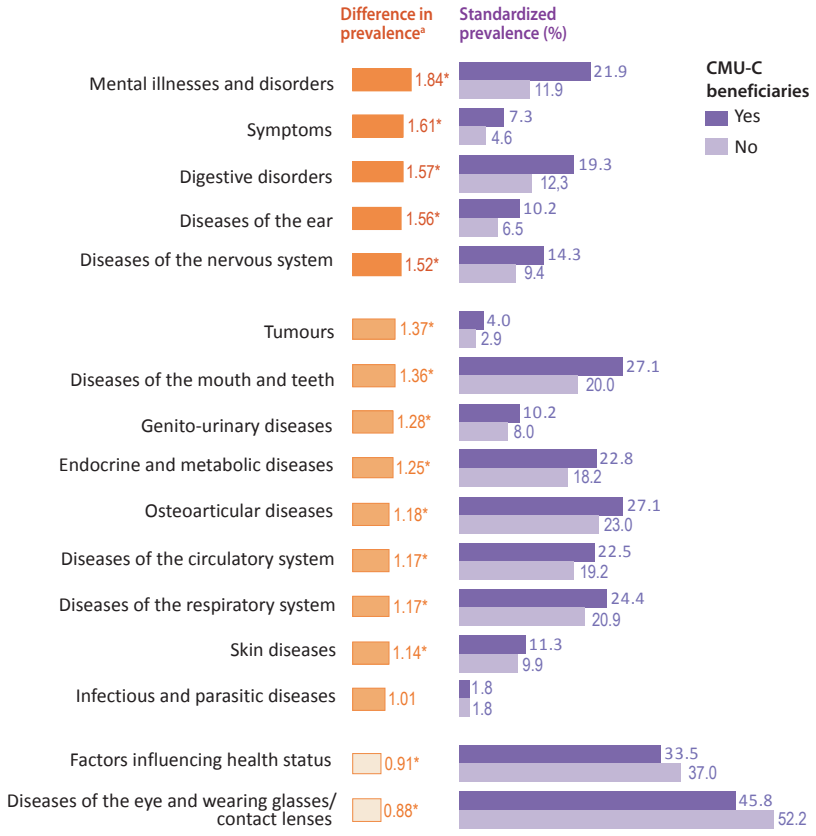
12% of CMU-C beneficiaries are affected by infections such as 'pharyngitis, sinusitis and rhino-pharyngitis' against 10% of the other respondents. We also observe a higher prevalence of deafness among CMU-C beneficiaries (6% versus 4%) and otitis (5% versus 3%).

Finally, 9.5% of beneficiaries self-report suffering from migraine versus less than 7% for the others, and women more frequently report menstrual problems.

On the contrary, CMU-C beneficiaries are fewer to self-report eye wear and dental prosthesis than the rest of the population

Wearing glasses or contact lenses, that permits measuring the rate of ophthalmological problems in the ESPS survey, and

G1 Differences in prevalence by major disease groups among CMU-C beneficiaries and non-beneficiaries



[1] *Standardized morbidity ratio (SMR).*

*: Significant gap

Reading guide: concerning diseases of the eye and wearing glasses or contact lenses, the ratio between CMU-C beneficiaries and the others is 0.88 (46/52). In effect, at equivalent age and gender, 46% of CMU-C beneficiaries report at least one disease of the eye or wearing glasses and contact lenses versus 52% for non-beneficiaries, the difference being significant.

Field: individuals aged under 65

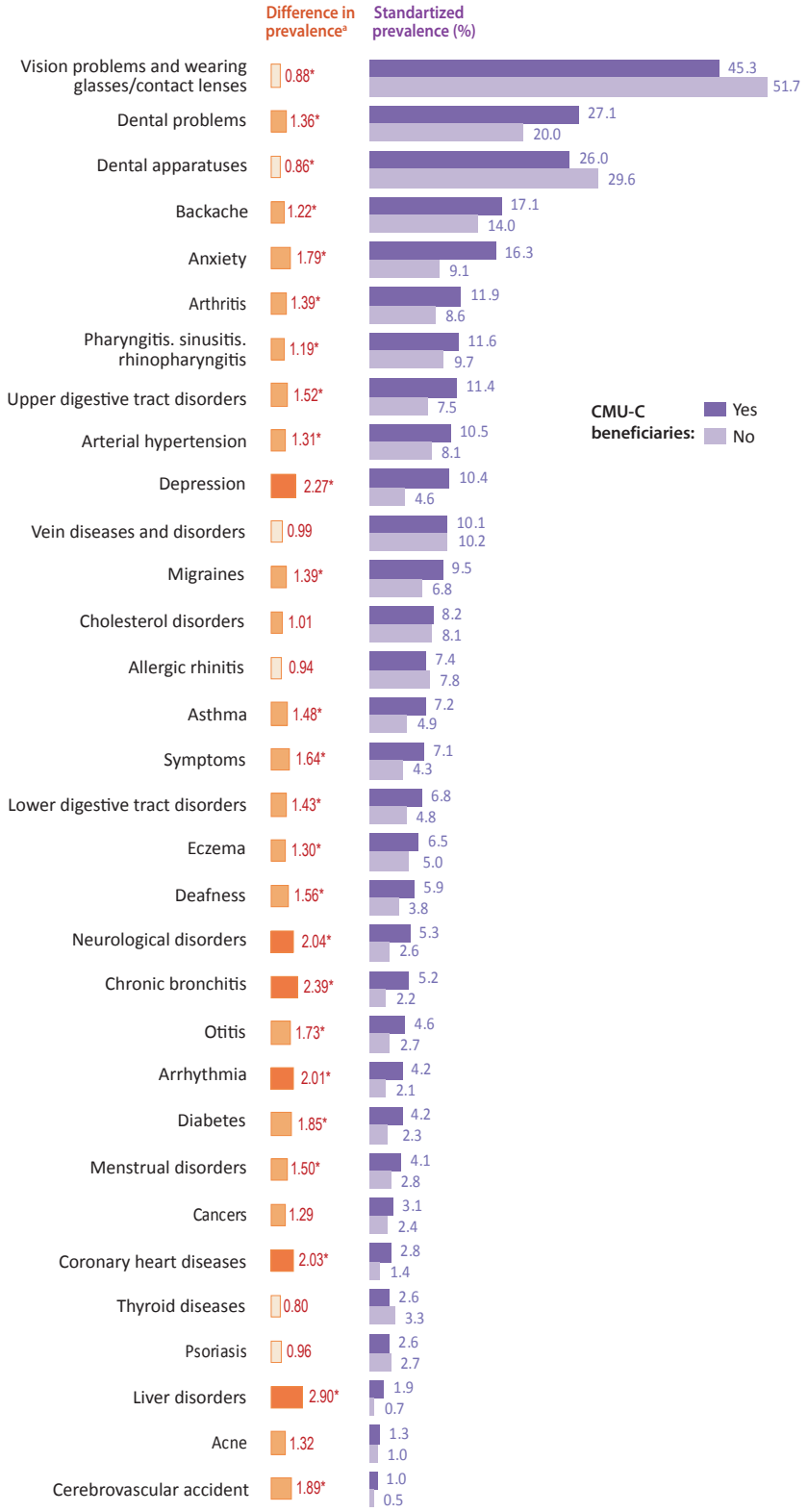
Source : ESPS 2006-2008, Irdes.

To download data : www.irdes.fr/Donnees/Qes173_PathologiesBeneficiairesCMUC.xls

[2] The major disease groups are similar to those used in the International Classification of Diseases (ICD 10).

G2

Prevalence differentials for the most frequently reported pathologies among CMU-C beneficiaries and non-beneficiaries



[1] *Standardized morbidity ratio (SMR).*

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Reading guide: concerning diseases of the eye and wearing glasses or contact lenses, the ratio between CMU-C beneficiaries and the others is 0.88 (46/52). In effect, at equivalent age and gender, 46% of CMU-C beneficiaries report at least one disease of the eye or wearing glasses and contact lenses versus 52% for non-beneficiaries, the difference being significant.

Field: Individuals aged less than 65

Source : ESPS 2006-2008, Irdes.

To download data : www.irdes.fr/Donnees/Qes173_PathologiesBeneficiairesCMUC.xls

dental prostheses are less frequent among CMU-C beneficiaries than the rest of the population. Only 43% of beneficiaries self-report wearing glasses against 51% for the rest of the population, whereas the prevalence of vision problems[3] is comparable (44% versus 46%). Similarly, significantly fewer CMU-C beneficiaries are fitted with dental prostheses (26% versus 30%) even though they more frequently report untreated or poorly treated dental caries that would normally require fitting dental prostheses. In this case it probably indicates a lower use rate for dental care.

Eyewear and dental prostheses are expensive and poorly reimbursed by the National Health Insurance, although out-of-pocket payments are covered by the CMU-C. The lower rate of eyewear use and dental prostheses observed among CMU-C beneficiaries could be explained by healthcare renunciation due to socioeconomic deprivation and individuals' personal histories (Després et al., 2011) or as the result of care unsuited to their needs (Gilles, 2011), which could explain their difficulties in accessing this type of care despite its being theoretically free.

Tobacco consumption and obesity: two risk factors more prevalent among CMU-C beneficiaries…

Obesity, a risk factor in diabetes and cardiovascular diseases, has a much higher incidence rate (+ 1.7) among CMU-C beneficiaries than the rest of the population: 15% versus 9% (graph 3). This result had already been revealed among socioeconomically deprived populations in general (Allonier et al., 2007). The frequency of overweightness in both populations, however, is comparable at the rate of 24%.

Calculated for individuals aged 16 and over in the ESPS survey, exposure to tobacco consumption among CMU-C beneficiaries is also higher: at equivalent age and gender, the percentage of smokers among beneficiaries is 1.6 times higher than in the rest of the population. In fact, almost half the beneficiaries are

[3] The ESPS survey also collects data on vision impairments (difficulties with near-sighted or far-sighted vision).

smokers; 49% versus 29%. This situation notably results from a lower percentage of CMU-C beneficiaries having stopped smoking: 13% had stopped smoking against 24% among non-beneficiaries.

… but not alcohol consumption

Contrary to preconceived ideas but in accordance with other surveys, CMU-C beneficiaries are twice as numerous to declare never consuming alcohol: 44% versus 22% (Com-Ruelle et al., 2008). However, CMU-C beneficiaries more often self-report being at risk from chronic alcoholism (10% versus 8%) but less from immediate risk (18% versus 27%).

In total, CMU-C beneficiaries having participated in the survey more frequently self-report suffering from most of the diseases and health problems studied, and present a greater number of risk factors. Do the motives for consulting a GP or specialist provide the same results?

Morbidity among CMU-C beneficiaries examined through the motives for the last consultation

Examining the motives for the last medical consultation is a way of approaching the health problems affecting CMU-C beneficiaries by comparing them with the motives self-reported by non-beneficiaries.

The motives for consultation[4] analysed here are self-reported by respondents in answer to a question concerning their last consultation with a GP and/or specialist during the last twelve months preceding the survey in 2006 and 2008. Other than the fact that the information collected is self-reported, observation of the last consultation generates selection bias (insert below). Thus, specific one-off consultations regarding a new or acute health problem are over-represented in the

Sources and Data

Sources

In France, the Health, Healthcare and Insurance survey (ESPS) collects detailed self-reported information on morbidity every two years. The specificity of this survey lies in its unique survey base constituted of a representative sample of National Health Insurance beneficiaries. It thus provides a regular overview simultaneously covering health, access to care and complementary health insurance since 1988.

Sample

Since 2006, the survey has at its disposal a sub-sample of CMU-C beneficiaries. In order to work on the complete sample, (half the sample is interviewed every two years), 2006 and 2008 data have been grouped together for this study.

Of the 44,423 survey respondents in 2006-2008, 33,204 completed a health questionnaire. Of these, 28,569 were aged less than 65 and included 2,714 CMU-C beneficiaries. Only individuals with a personal home address are interviewed which excludes the more vulnerable CMU-C beneficiaries, more particularly the homeless.

Socio-demographic characteristics of CMU-C beneficiaries

Through the very principles that led to its creation, the CMU-C concerns individuals whose socioeconomic situation is below that of the majority of the population: the percentage of CMU-C beneficiaries in the sample living in an unskilled worker household is 30% against 9% in the rest of the population. The percentage of households composed of commercial sector employees is 16% versus 4%. As for the self-reported unemployment rate, it reaches over 60% among CMU-C beneficiaries against 8.5% in the rest of the economically active population.

CMU-C beneficiaries are younger with over 70% aged less than 40 (48.5% among other respondents). Inversely, very few individuals aged 65 and over benefit from the CMU-C. This is because the minimum basic State Pension paid out to the most underprivileged from the age of 65 (or 60 years old in the case of incapacity) is above the income threshold giving access to the CMU-C. There are also more women than men among CMU-C beneficiaries (56% versus 52%).

This imbalance in age structures, and to a lesser degree gender, led on the one hand to limiting the study to individuals aged less than 65, and on the other to presenting the results concerning morbidity and use of care after having effectuated a direct standardisation on data relating to CMU-C beneficiaries by taking the age and gender structure of non-beneficiaries as the reference.

Data

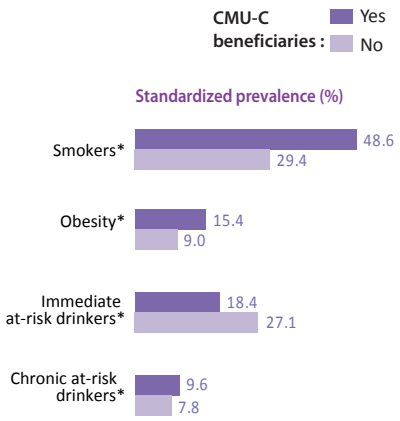
In the Health, Healthcare and Insurance survey (ESPS), health status data is collected from the self-administered health questionnaire on self-reported morbidity, risk factors and motives for the last medical consultation.

Respondents report all the diseases they suffer from. A physician then codes the diseases according to the International Classification of Diseases (ICD 10th revision). These diseases are then classified into groups of related conditions close to the ICD 10 chapters. Respondents also declare dental prosthesis and eyewear which in the ESPS survey completes the ICD chapters entitled 'Diseases of the Eye and Vision Problems' and 'Other Factors Influencing Health Status'.

The survey also collects data on risk factors such as tobacco and alcohol consumption (cf. Test Audit C (Com-Ruelle et al., 2008)), and respondents' self-reported weight and height. This information permits calculating body mass index (BMI) and classifying individuals that are overweight or suffering from obesity (WHO norms, see p. 69 Allonier et al. (2010).

Finally, respondents also report the medical condition that motivated their last consultation with a GP or specialist. These medical conditions are then coded in ICD 10.

G3 Prevalence of risk factors for CMU-C beneficiaries and non-beneficiaries



* : Significant standard deviation.

Reading guide: At equivalent age and gender, 49% of CMU-C beneficiaries self-report smoking against 29% for the rest of the population.

Field: Individuals aged less than 65

Source : ESPS 2006-2008, Irdes.

To download data :
www.irdes.fr/Donnees/Qes173_PathologiesBeneficiairesCMUC.xls

last reported consultations to the detriment of follow-up consultations for chronic illnesses.

Self-reported motives for consultation are very similar among beneficiaries and non-beneficiaries

Among the ten most frequent motives for consultation, beneficiaries and non-beneficiaries self-report the same motives even if the proportions are slightly different (table). ENT disorders are the most frequent motives for consultation in both population categories in persons aged below 65 and after standardising rates on the structure by age and gender[5] .

However, certain motives for consultation are significantly more frequent among CMU-C beneficiaries...

These more frequent motives for consultation concern four major domains: firstly, the mental health domain with 3.4% last consultations for depression among CMU-C beneficiaries against only 1.6% among non-beneficiaries. Secondly, in the respiratory domain, asthma and chronic bronchitis represent 2.1% and 1.2% of last consultations among CMU-C beneficiaries against 1.5% and 0.7% respectively among non-beneficiaries (graph 4). In the digestive sphere, upper digestive tract disorders, grouping together stomach or duodenal ulcers, gastro-oesophageal reflux and gastralgia, and hepatic disorders are also significantly more frequent motives for consultation among beneficiaries than other insured respondents. Although the latter disorder has a relatively low rate of prevalence, it nevertheless motivated 1% of last consultations among CMU-C beneficiaries against 0.2 % among non-beneficiaries. Finally, in the cardiovascular domain, arrhythmia disorders concerned 1% of motives for consultation among beneficiaries against 0.5% among non-beneficiaries. Back problems and osteoarthritis are among the more frequent motives for consultation although the gap between the two populations is not significant. These results are globally coherent with the differences previously highlighted. In other words, CMU-C beneficiaries report motives for consultation in accordance with self-reported health problems.

... whereas other motives for consultation appear less frequently

This is the case for ENT-related problems (grouping together sinusitis, rhino-pharyngitis and pharyngitis) that motivated 11% of last consultations among beneficiaries against 13.2% among non-beneficiaries, otitis (1.6% versus 2.1%) and allergenic rhinitis (graph). This result does not however permit the conclusion that the rate of use in relation to needs is insufficient, given the limitations of this study.

Vision problems constitute 3.1% of motives for consultation among CMU-C beneficiaries, lower than among non-beneficiaries (4.1%), the gap being significant. These results are directly related to the percentage of self-reported last

[4] Consultations for prescription renewals only, non-responses and 'illegible illnesses' were not taken into account in the analysis of last motives for consultation. .

[5] Standardisation is carried out by applying the age and gender structure for non- beneficiaries aged below 65 having consulted at least one doctor over the last twelve months to CMU-C beneficiaries.

T

The ten most frequent motives for consultation among CMU-C beneficiaries and non-beneficiaries

	CMU-C beneficiaries	Non-beneficiaries
Motives for consultation		
ENT	11.1%	13.2%
Back	4.8%	4.0%
Depression	3.4%	1.6%
Vision problems	3.1%	4.1%
Arterial hypertension	2.9%	2.9%
Pregnancy, contraception	2.8%	2.8%
Asthma	2.1%	1.5%
Osteoarthritis	2.0%	1.5%
Cancer	1.9%	2.3%
Otitis	1.6%	2.1%

Field: Motives for the last consultation with a GP and/or specialist among individuals aged less than 65 in 2006 and 2008.

Sources : ESPS 2006 and 2008, Irdes. Calculations Drees.

To download data :
www.irdes.fr/Donnees/Qes173_PathologiesBeneficiairesCMUC.xls

Insert. **Limitations of the representativeness of motives for consultation**

The motives for consultation analysed here concern the last visit to a general practitioner or specialist during the course of the last twelve months preceding the ESPS survey in 2006 and 2008. The results are not representative of the totality of respondents' consultations with a GP or specialist during the course of the last twelve months.

In the observed sample, the one-off consultation self-reported by an individual that has consulted a GP once during the year has the same weight as the last consultation of a person having consulted a GP ten times during the year for a chronic illness. In the same way, one consultation with a specialist during the course of the last twelve months has the same weight the last consultation of a person having consulted several specialists. No adjustments permitted correcting this bias.

One-off consultations that in the majority concern a new or acute health problem are over-represented in the last consultations reported to the detriment of follow-up consultations for chronic illnesses.

The number of motives for consultation studied can be broken-down as follows:

- 1,936 motives for consultations among CMU-C beneficiaries, of which 1,294 motives for consulting a general practitioner,
- 9,148 motives for consultation among non-beneficiaries of which 12,144 motives for consulting a general practitioner.

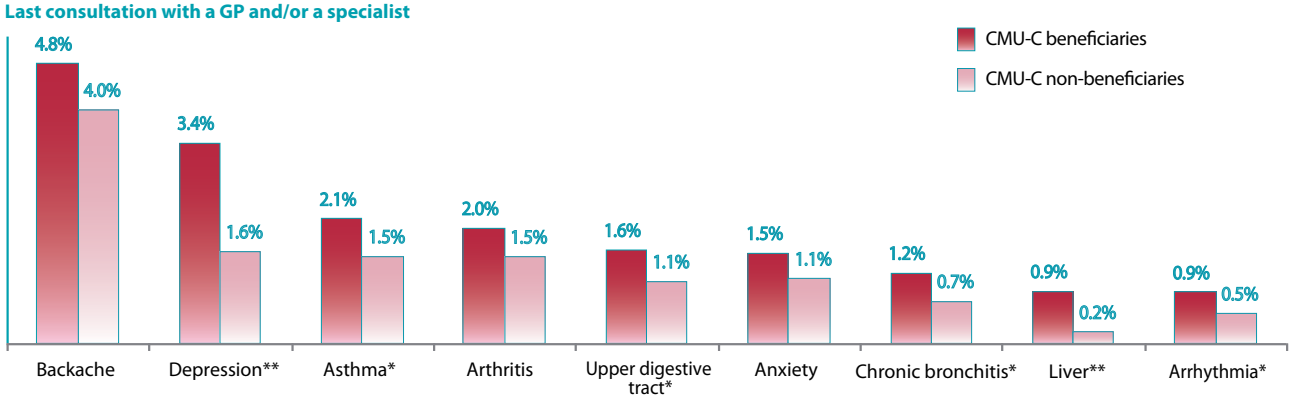
In total, 89% of CMU-C beneficiaries consulted at least one physician (GP or specialist) over the last twelve months and 91% of non-beneficiaries. However, 84 % of CMU-C beneficiaries consulted a GP over the last twelve month against 81% of non-beneficiaries, the gap being significant after direct standardization on age and gender. Consultations with a specialist however, all specialities combined, are less frequent: 38% versus 46% for the rest of the population. These results are coherent with studies concluding that socioeconomically deprived individuals consult general practitioners more often than specialists (Raynaud, 2005).

CMU-C beneficiaries consult GPs more often than specialists compared with non-beneficiaries. This difference has repercussions on the composition of last consultations. Consultations with a specialist thus constitute 31% of last consultations for CMU-C beneficiaries and 36% for non-beneficiaries. Among the last consultations for which the motive is given, the percentages are 33% for beneficiaries and 37% for non-beneficiaries.

G4

Most frequent motives for consultation among CMU-C beneficiaries and non-beneficiaries

Last consultation with a GP and/or a specialist



Asterix means that the motives for which the prevalence differential between beneficiaries and non-beneficiaries is significant.
** : significant at 95 %. * : significant at 90 %.

Reading guide: Depression is mentioned in 3.4% of cases as a motive for consultation by CMU-C beneficiaries against 1.6% among non-beneficiaries.

Field: Motives for the last consultation with a GP and/or specialist among individuals aged less than65 in 2006 and 2008.

Sources : ESPS 2006-2008, Irdes. calculations Drees.

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consultations with an ophthalmologist with a rate of 4% for beneficiaries and 6% for non-beneficiaries, in accordance with the lower use rate of ophthalmologists among CMU-C beneficiaries (Allonier et al., 2010). In effect, 9% of CMU-C beneficiaries consulted an ophthalmologist during the course of the last twelve months against 15% for the others after controlling for age and gender.

***

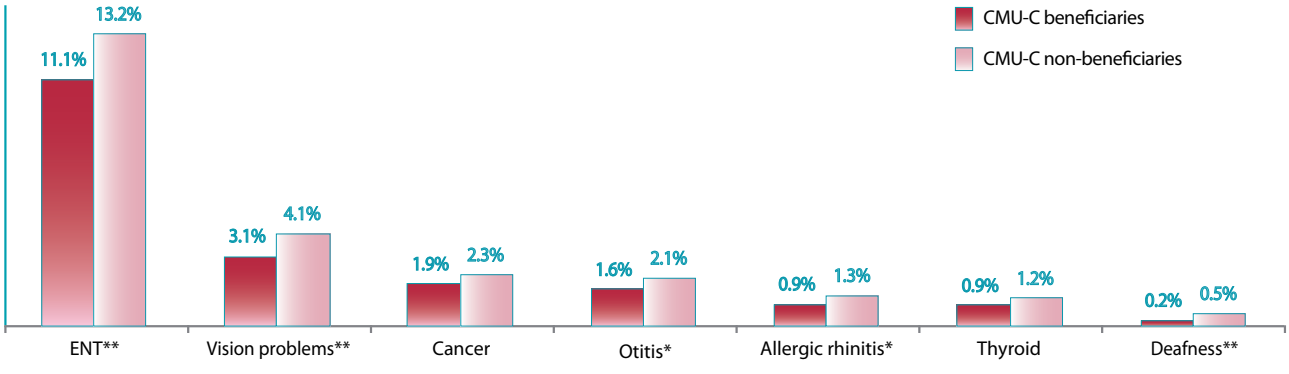
Since its institution in 1999, the CMU-C has clearly improved beneficiaries' use of healthcare by facilitating their financial access to care (Boisguérin et al., 2010). This scheme is all the more important in that the population covered presents a clear over-morbidity both in 2006 and 2008.

However, even if beneficiaries consult a GP more often, they are fewer to consult a specialist even if their health condition necessitates it. The excess fees often charged by specialists, such as the tariffs charged for optical and dental care outside the CMU-C basket of care, partially explains this behaviour (Després, 2009). This is also related to a combination of individual factors related to past and pre-

G5

Least frequent motives for consultation among CMU-C beneficiaries and non-beneficiaries

Last consultation with a GP and/or a specialist



Asterix means motives for consultations for which the prevalence differential between CMU-C beneficiaries and non-beneficiaries is significant.
** : significant at 95 %. * : significant at 90%.

Reading: ENT problems constitute 11% of motives for last consultations for CMU-C beneficiaries and 13% for non-beneficiaries.

Field: Motives for last consultations with a GP and/or specialist among individuals aged less than 65 in 2006 and 2008.

Sources : ESPS 2006-2008, Irdes. calculations Drees.

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sent socioeconomic deprivation, as recent studies on healthcare renunciation have shown (Després et al., 2011). Adapting care supply to patient needs, such as educating CMU-C beneficiaries in the use of the healthcare system, is an on-going challenge for public health policy to extend the effort made by the CMU-C in improving financial access to care.

Beyond the healthcare system's sphere of action, the results of this study show that CMU-C beneficiaries are more exposed to risk factors such as tobacco consumption and obesity and mental health problems, in all likelihood related to a lower socioeconomic and labour market status. This result raises the question of elaborating specific complementary interventions that could act on risk and socioeconomic deprivation factors among this population category. These interventions could be part of a broader policy framework aimed at reducing health inequalities and involve actions ranging beyond the health system to include social protection as a whole. ♦

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