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Predictors of Influenza Immunization Among Home Care Clients in Ontario

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ABSTRACT

Background: This study examined factors associated with the receipt of influenza vaccination among Ontario home care clients.

Methods: Home care clients were assessed, as part of a routine home visit, during a pilot study of the Resident Assessment Instrument – Home Care (RAI-HC) in 12 Ontario Community Care Access Centres (CCACs). The RAI-HC is a multidimensional assessment that identifies clients' needs and level of functional ability. Multiple logistic regression was used to identify factors associated with influenza immunization in the two years prior to assessment.

Results: The overall rate of immunization reached about 80% by 2002. Factors such as age, respiratory problems, diabetes and congestive heart failure were associated with greater uptake, but overall rates of influenza immunization were lower than expected. Low education, smoking and poor medication adherence were negatively associated with influenza immunization. In addition, there was considerable variation in uptake among CCACs after adjusting for other significant individual-level independent variables.

Interpretation: Comprehensive assessments like the RAI-HC can be used to help identify and respond to health promotion and disease prevention issues in this population, and to compare rates across Canada.

MeSH terms: Influenza; home care services; risk factors

La traduction du résumé se trouve à la fin de l'article.

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Influenza contributes to approximately 70,000 hospitalizations and 500-1,500 deaths each year in Canada,¹ with roughly 80-90% occurring in the elderly.² Multiple chronic health conditions and impaired pulmonary defense mechanisms make the elderly especially susceptible to acquiring influenza.³

Immunization is an efficacious and cost-effective preventive intervention for community-based and institutionalized seniors.⁴⁻¹² Despite unequivocal recommendations for its use,¹³⁻¹⁵ estimates of the rate of influenza immunization among community-based elderly Canadians range between 45%-60%.¹⁶⁻¹⁸

Factors reported to be positively associated with receiving the vaccine include previous immunizations, a positive perception of its effectiveness, recommendations to be immunized from a physician or nurse, the presence of one or more chronic medical conditions,¹⁹ higher education,²⁰ physician visits,²⁰ age,²¹ and being female.²¹ Other research indicates that fear of side effects,^{22,23} perceived invulnerability to influenza,^{16,23} and being a smoker²⁴ are associated with lower rates of immunization.

This study examines factors associated with the receipt of influenza vaccination among Ontario home care clients. This group is of particular interest because they represent an especially vulnerable population that should have high rates of uptake based on existing guidelines.

METHODS

This study used data from a pilot implementation of the Resident Assessment Instrument – Home Care (RAI-HC)²⁵ in 12 Ontario Community Care Access Centres (CCACs are single-point entry agencies) between 2000-2002.

Sample

The sample included 7,346 adults assessed in their homes by trained CCAC case managers, either as part of their intake assessment or as part of a regularly scheduled reassessment. Table I summarizes the basic sample characteristics.

Data collection

Assessors were trained to use all information sources available to them (e.g., direct observation of the client, clinical records) and to use their best clinical judgement when

TABLE I

Sample Characteristics, Ontario Community Care Access Centre (CCAC) Clients (n=7,346)

Mean Age (SD)	75.9 (13.8)
Gender (%)	
Male	29.2
Female	70.8
Top 5 Diagnoses (%)	
Hypertension	14.8
Arthritis	12.1
Diabetes	8.6
Congestive Obstructive Pulmonary Disease	6.1
Cancer	5.9

recording their observations. All RAI-HC assessments were reviewed by nurses on the research team to ensure data accuracy.

Measures

The RAI-HC is a comprehensive assessment intended to measure the strengths, preferences and needs of home care clients with respect to their medical, functional and psychosocial characteristics. This instrument has been shown to be reliable and valid in several international studies,²⁶⁻²⁸ including an 11-country study of home care funded by the European Union.²⁹ An extensive, independent review for the Victoria Australia Department of Human Services³⁰ concluded that the RAI-HC is the best available assessment instrument for home care, which is consistent with findings of comparable reviews done in New Zealand³¹ and Canada.³² The RAI-HC has been adopted in seven Canadian provinces/territories and it is now a central component of the Canadian Institute for Health Information's (CIHI) Home Care Reporting System (www.cihi.ca/hcrs).

The item on influenza immunization asked whether it has been received in the last two years. It is therefore uncertain if the vaccine had been received while the individual was under the care of the CCAC if his/her stay had been less than two years. Also, while there will be seasonal variations in access to the vaccine, the estimate based on a two-year timeframe employed here should not be seriously affected by such variations. There will be some risk of recall bias on the part of the client/caregiver if the information is not already available from medical records. However, the influenza immunization item has been found to have excellent inter-rater reliability,²⁶ with a kappa value of .85 in a multinational reliability trial.

TABLE II

Percentage (and number) of CCAC Clients Who Received Influenza Immunization in the Last Two Years, by Demographics and Diagnoses (n=7,346)

Variable	%(n) Received Influenza Vaccine	P value
Age		0.0001
20-49	49.2 (208)	
50-59	57.0 (264)	
60-69	69.1 (545)	
70-79	76.7 (1740)	
80-89	76.2 (2092)	
90+	76.6 (487)	
Gender		0.65
Male	73.3 (1567)	
Female	72.7 (3782)	
Low Education		0.36
Yes	72.2 (3571)	
No	73.3 (1785)	
Live Alone		0.64
Yes	73.2 (2204)	
No	72.7 (3152)	
COPD/Emphysema/Asthma		0.0001
Yes	82.3 (366)	
No	72.3 (4990)	
Coronary Artery Disease		0.0008
Yes	77.5 (726)	
No	72.2 (4630)	
Congestive Heart Failure		0.0001
Yes	83.2 (440)	
No	72.1 (4916)	
Cancer		0.0001
Yes	63.1 (275)	
No	73.5 (5081)	
Diabetes		0.002
Yes	78.1 (496)	
No	72.4 (4860)	
End-Stage Disease		0.0001
Yes	57.0 (81)	
No	73.2 (5275)	

The socio-demographic variables considered were age, gender, living alone and education. In addition, study year was included as an independent variable to control for any historical changes in immunization rates.

The RAI-HC includes a checklist of common medical diagnoses requiring active treatment. In addition, an item of prognosis of 6 months or less to live was indicative of end-stage disease. This item has been shown to be a strong predictor of mortality in complex continuing care hospital patients³³ and comparable results have been found for home care clients (available from corresponding author on request).

Functional status was measured by the ADL Self Performance Hierarchy,³⁴ which uses four types of ADL impairment (i.e., personal hygiene, toilet use, locomotion, eating) and classifies them into 7 categories ranging from 0 (no ADL impairment) to 6 (severe impairment in late loss ADLs). The Cognitive Performance Scale (CPS)³⁵ provides a measure of cognition that has been validated against the Mini-Mental State Examination (MMSE)³⁶ in long-term care settings. Landi and colleagues²⁸ recently

also validated the CPS against the MMSE in home care clients.

The health care services considered included contact with a nurse (i.e., any nurse credentialed according to provincial regulations, including registered nurses (RNs) or licenced practical nurses (LPNs) for daily or less than daily monitoring (e.g., to manage complex medications), seeing a visiting nurse in the home at least once in the last week, contact with a physician in the last week and the completion of medication review by a physician in the previous 180 days. An item on medication adherence was used to group individuals into those with good compliance (adherent 80% of the time or more) or poor compliance (less than 80% of the time).

Analysis

Bivariate analyses were based on the chi-squared test statistic for cross-tabulations and logistic regression was used for multivariate analyses.

Ethics

Ethics clearance was provided by the Office of Research Ethics, University of Waterloo.

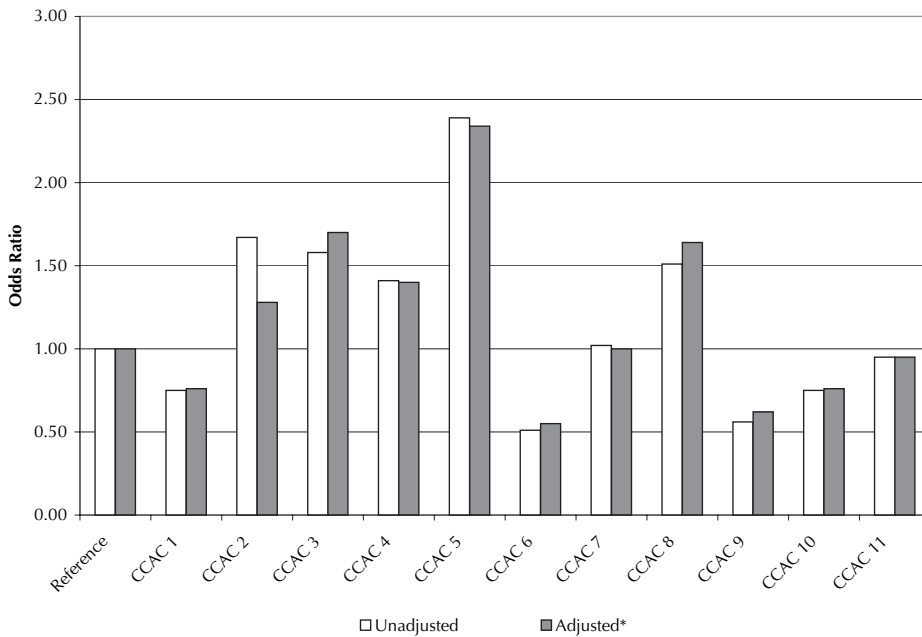


Figure 1. Odds ratio for receiving flu vaccine by CCAC (all assessments; n=7,346)
 * Adjusted odds ratios compare Community Care Access Centres (CCACs) relative to a reference agency controlling for COPD, CHF, diabetes, end-stage, age, ADL, adherence, smoking, low education and study year

obstructive pulmonary disease (COPD)/emphysema/asthma, congestive heart failure (CHF), diabetes, and coronary artery disease. Persons with cancer or end-stage disease were less likely to have received it.

Participants with higher levels of cognitive and ADL impairment were less likely to have been immunized. However, the difference was more pronounced for ADL (see Table III). In both cases, immunization was least likely among clients in the highest impairment categories (i.e., scores of 4 or more).

Table III also shows that contact with nurses was associated with a reduced likelihood of immunization, but clients with physician or clinic visits were somewhat more likely to have been immunized. A pattern of poor adherence to prescribed medications and being a daily smoker were both associated with a reduction in the receipt of influenza vaccine (about 12% and 14% lower, respectively).

The disease diagnoses that remained in the final logistic model were chronic obstructive pulmonary disease/emphysema/asthma (OR=1.78; p=0.001), congestive heart failure (OR=1.71; p=0.0001), and diabetes (OR=1.31; p=0.01). Clients with these conditions were more likely to have received immunization after controlling for other factors in the model. Clients with end-stage were significantly less likely to have been immunized (OR=0.62; p=0.008). Age (p=0.0001) also had a strong effect, since each 10-year increment had an odds ratio of 1.27 (equivalent to an odds ratio of 4.20 when comparing the extreme age groups). Conversely, ADL impairment (p=0.0001) continued to be associated with a reduction in the likelihood of immunization with an odds ratio of 0.93 for each single point increment (equivalent to an odds ratio of 0.65 for extreme values on the scale). Clients with low education (OR=0.81; p=0.003), smokers (OR=0.61; p=0.0001) and those with poor adherence (OR=0.62; p=0.01) were all less likely to have received the flu shot. Physician or clinic visits and contact with nurses were not significant in the multivariate model. Clients assessed in 2000 were significantly less likely to have influenza immunization compared with their counterparts in 2002 (OR=0.66; p=0.0001), but there was no significant

TABLE III
Percentage (and number) of CCAC Clients Who Received Influenza Immunization in the Last Two Years, by Functional Ability and Service Use (n=7,340)

Variable	% (n) Received Influenza Vaccine	P value
Cognitive Performance Scale		0.003
0	72.2 (3087)	
1	75.2 (1040)	
2	75.5 (437)	
3	73.7 (583)	
4	72.5 (50)	
5	66.2 (137)	
6	52.6 (20)	
ADL Self Performance Hierarchy		0.0001
0	74.0 (3954)	
1	73.1 (418)	
2	72.2 (470)	
3	73.4 (284)	
4	61.5 (112)	
5	57.3 (90)	
6	54.0 (27)	
Contact with Nurse*		0.0001
Yes	69.8 (1601)	
No	74.3 (3755)	
Physician or Clinic Visits in Last 7 Days		0.003
Yes	75.3 (1573)	
No	72.0 (3783)	
Adherence to Medications		0.002
Good	73.1 (5273)	
Poor	61.0 (83)	
Daily Smoker		0.0001
Yes	60.3 (495)	
No	74.5 (4861)	

*Includes visiting nurses and daily/less than daily nurse monitoring

RESULTS

There was a significant increase in immunization rates over time, rising from less than 70% in 2000 to over 80% in 2002. There was a strong positive relationship with age,

with the highest rate (76.6%) among those aged 90 years or older. There was no relationship with gender, education or living alone at the bivariate level (Table II).

Immunization was more likely to have been received by persons with chronic

difference between 2001 and 2002 (OR=0.93; p=0.12).

Figure 1 shows the unadjusted and adjusted odds ratios for receipt of influenza vaccine by CCAC. The adjusted model controls for all factors associated with receipt of the vaccine. There were considerable differences in rates between CCACs among the clients in the study, and these differences persisted after controlling for population differences.

DISCUSSION

As suggested by professional guidelines, older individuals and those with respiratory problems, congestive heart failure and diabetes were more likely to receive the flu shot than individuals not having those conditions. However, many Ontario home care clients were *not* immunized. The rate of immunization among these home care clients (about 80% by 2002) was higher than that reported in the Canadian Study of Health and Aging (55%)¹⁸, but still below levels called for by public health officials. Since guidelines call for the administration of influenza vaccine to all frail individuals and persons with compromised immune systems, one could reasonably argue that *all* long-term home care clients meet these criteria.

There is also considerable variability in immunization rates among CCACs. These differences are not attributable to differences in the populations served, because the order and magnitude of differences were generally preserved after multivariate adjustment. Whether this can be interpreted as a *practice pattern* difference among CCACs (e.g., due to differences in care provider attitudes toward immunization) cannot be determined since these data included new admissions and short-stay clients. However, in other analyses, these differences also persist when only repeat assessments were considered (available on request). Agencies with higher levels of uptake warrant closer scrutiny to determine if they represent models for effective practices regarding influenza immunization (e.g., by improving access to immunization with transportation, flexible hours). That being said, one limitation of this study is the inability to differentiate between instances where the client has refused to accept immunization from instances where the home care program does not offer the services.

The CCAC differences are also important because they suggest that marketing strategies to increase uptake of influenza immunization should not be restricted to the individual level alone. They should also target home care professionals whose role should include health promotion and disease prevention.

A history of poor adherence to medication regimens, daily smoking and low education are associated with reduced odds of influenza immunization. Another Canadian study also reported an association between higher education and an increased rate of vaccination, but found a weak association with being a non-smoker.¹⁸ The present findings point to the need for home care agencies to consider the development of specialized targeting and educational programs that deal directly with the underlying reasons for lower levels of uptake in these groups.

The finding on end-stage disease suggests that, for some individuals, a short prognosis of time left to live may mean that use of influenza vaccine is seen as an unnecessary precaution. The negative association of ADL impairment with receipt of influenza vaccine may be the result of barriers to access to health clinics providing the immunization, or a perception of decreased risk if largely housebound.

Additional efforts may be required to further increase the uptake of influenza immunization in this population. However, the issue of informed refusal must also be addressed before program implications are reconsidered.

The present findings may not be generalizable to all home care clients in other Canadian provinces. According to a CIHI report on the general elderly population, the highest rates of influenza immunization in the well elderly are in Nova Scotia and the lowest are in Quebec.³⁷ Six provinces, including Ontario, had rates of 50-60%. It will soon be feasible to make interprovincial comparisons of influenza immunization rates in home care as implementation of the RAI-HC proceeds across Canada. Such data will provide an opportunity for "natural policy experiments" in which the impact of different models of targeting and service delivery for influenza immunization can be evaluated with readily available data.

REFERENCES

1. Ontario Ministry of Health and Long-Term Care. Ontario influenza bulletins. Available online at: <http://www.gov.on.ca/health/english/program/pubhealth/flubulmn.html> (Accessed October 31, 2005).
2. Lui KJ, Kendal AP. Impact of influenza epidemics on mortality in the United States from October 1972 to May 1985. *Am J Public Health* 1987;77:712-16.
3. Sims RV. Immunization in the elderly. In: Lavizzo-Mourey R, Day SC, Diserens D, Grisso JA (Eds.), *Practicing Prevention for the Elderly*. Philadelphia, PA: Hanley and Belfus, Inc., 1989;37-46.
4. Fedson DS, Wajda A, Nicol JP, Hammond GW, Kaiser DL, Roos LL. Clinical effectiveness of influenza vaccination in Manitoba. *JAMA* 1993;270:1956-61.
5. Govaert TME, Thijs CT, Masurel N, Sprenger MJW, Dinant GJ, Knottnerus JA. The efficacy of influenza vaccination in elderly individuals. A randomized double-blind placebo-controlled trial. *JAMA* 1994;272:1661-65.
6. Mullooly JP, Bennett MD, Hornbrook MC, Barker WH, Williams WW, Patriarca PA, et al. Influenza vaccination programs for elderly persons: Cost-effectiveness in a health maintenance organization. *Ann Intern Med* 1994;121:947-52.
7. Nichol KL, Margolis KL, Wuorenma J, von Sternberg T. The efficacy and cost effectiveness of vaccination against influenza among elderly persons living in the community. *N Engl J Med* 1994;331:778-84.
8. Nichol KL, Wuorenma J, von Sternberg T. Benefits of influenza vaccination for low-, intermediate-, and high-risk senior citizens. *Arch Intern Med* 1998;158:1769-76.
9. Nichol KL, Goodman M. Cost effectiveness of influenza vaccination for healthy persons between ages 65 and 74 years. *Vaccine* 2002;20:S21-S24.
10. Ohmit SE, Arden NH, Monto AS. Effectiveness of inactivated influenza vaccine among nursing home residents during an influenza type A (H3N2) epidemic. *J Am Geriatr Soc* 1999;47:165-71.
11. Saah AJ, Neufeld R, Rodstein M, LaMontagne JR, Blackwelder WC, Gross P, et al. Influenza vaccine and pneumonia mortality in a nursing home population. *Arch Intern Med* 1986;146:2353-57.
12. Vu T, Farish S, Jenkins M, Kelly H. A meta-analysis of effectiveness of influenza vaccine in persons aged 65 years and over living in the community. *Vaccine* 2002;20:1831-36.
13. National Advisory Committee on Immunization. Canadian immunization guide. Ottawa, ON: Health Canada, Health Protection Branch, 1998.
14. UK Department of Health. Flu and flu immunisation. Available online at: <http://www.doh.gov.uk/flu.htm> (Accessed October 31, 2005).
15. Centers for Disease Control and Prevention. Vaccine information. Available online at: <http://www.cdc.gov/ncidod/diseases/flu/fluvac.htm> (Accessed October 31, 2005).
16. Duclos P, Hatcher J. Epidemiology of influenza vaccination in Canada. *Can J Public Health* 1993;84:311-15.
17. Russell ML, Maxwell CJ. The prevalence and correlates of influenza vaccination among a home care population. *Can J Public Health* 2000;91(6):441-44.
18. Andrew MK, McNeil S, Merry H, Rockwood K. Rates of influenza vaccination in older adults and factors associated with vaccine use: A secondary analysis of the Canadian Study of Health and Aging. *BMC Public Health* 2004;4:36.

19. Chapman GB, Coups EJ. Predictors of influenza vaccine acceptance among healthy adults. *Prev Med* 1999;29:249-62.
20. Kamal KM, Amonkar MM. Determinants of adult influenza and pneumonia immunization rates. *J Am Pharm Assoc (Wash DC)* 2003;43:403-11.
21. Tacken M, Braspenning J, Spreuwenberg P, van den Hoogen H, van Essen G, de Bakker D, et al. Patient characteristics determine differences in the influenza vaccination rate more so than practice features. *Prev Med* 2002;35:401-6.
22. Nichol KL, Lofgren RP, Gapinski J. Influenza vaccination. Knowledge, attitudes and behavior among high-risk outpatients. *Arch Intern Med* 1992;152:106-10.
23. van Essen GA, Kuyvenhoven MM, de Melker RA. Why do healthy elderly people fail to comply with influenza vaccination? *Age Ageing* 1997;26:275-79.
24. Nicholson KG, Kent J, Hammersley V. Influenza A among community-dwelling elderly persons in Leicestershire during winter 1993-4; cigarette smoking as a risk factor and the efficacy of influenza vaccination. *Epidemiol Infect* 1999;123:103-8.
25. Morris JN, Bernabei R, Ikegami N, Gilgen R, Frijters D, Hirdes JP, et al. RAI - Home Care (RAI-HC) assessment manual for version 2.0. Washington, DC: interRAI Corporation, 1999.
26. Morris JN, Fries BE, Steel K, Ikegami N, Bernabei R, Carpenter I, et al. Comprehensive clinical assessment in community setting: Applicability of the MDS-HC. *J Am Geriatr Soc* 1997;45:1017-24.
27. Kwan CW, Chi I, Lam TP, Lam KF, Chou KL. Validation of Minimum Data Set for Home Care assessment instrument (MDS-HC) for Hong Kong Chinese elders. *Clin Gerontol* 2000;21.
28. Landi F, Tua E, Onder G, Carrara B, Sgarbi A, Rinaldi C, et al. Minimum Data Set for Home Care: A valid instrument to assess frail older people living in the community. *Med Care* 2000;38:1184-90.
29. Carpenter I, Gambassi G, Topinkova E, Schroll M, Finne-Soveri H, Henrard JC, et al. Community care in Europe. The Aged in Home Care project (AdHOC). *Aging Clin Exp Res* 2004;16:259-69.
30. Foreman P, Thomas S, Gardner I. The Review and Identification of an Existing, Validated, Comprehensive Assessment Tool. Report for the Department of Human Services. Lincoln Centre for Ageing and Community Care Research, Australian Institute for Primary Care at La Trobe University, 2004.
31. Martin G, Martin I. Assessment of Community Dwelling Older People in New Zealand: A review of the tools. Report to the New Zealand Guidelines Group. Wellington: New Zealand Guidelines Group, 2003.
32. Black C, Mitchell L, Finlayson M, Peterson S. Enhancing Capacity to Study and Evaluate Home Care: An Evaluation of the Potential to Use Routinely Collected Data in Manitoba. Report to Health Transition Fund, Health Canada. Manitoba Centre for Health Policy and Evaluation, 2000.
33. Hirdes JP, Frijters DH, Teare GF. The MDS-CHESS scale: A new measure to predict mortality in the institutionalized elderly. *J Am Geriatr Soc* 2003;51:96-100.
34. Morris JN, Fries BE, Morris SA. Scaling ADLs Within the MDS. *J Gerontol A Biol Sci Med Sci* 1999;54A:M546-M553.
35. Morris JN, Fries BE, Mehr DR, Hawes C, Mor V, Lipsitz L. MDS Cognitive Performance Scale. *J Gerontol A Biol Sci Med Sci* 1994;49:M174-M182.
36. Folstein MF, Folstein SE, McHugh PR. "Minimal state". A practical method for grading the cognitive state of patients for the clinician. *J Psychiatr Res* 1975;12:189-98.
37. Canadian Institute for Health Information. Influenza immunization, by sex, household population aged 65 and over, Canada and provinces, 1996/97. *Health Indicators* 2001;3:1.

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RÉSUMÉ

Contexte : Cette étude porte sur les facteurs associés à l'administration du vaccin antigrippal à la clientèle des soins à domicile en Ontario.

Méthode : Dans le cadre d'une visite programmée, nous avons évalué des personnes recevant des soins à domicile. Ces évaluations s'inscrivaient dans une étude pilote de la méthode d'évaluation RAI-HC (Resident Assessment Instrument - Home Care) dans 12 centres d'accès aux soins communautaires (CASC) de l'Ontario. La méthode RAI-HC est un outil d'évaluation multidimensionnel qui permet de définir les besoins des clients et leur niveau de capacité fonctionnelle. Par analyse de régression logistique multiple, nous avons cerné les facteurs associés à l'immunisation contre la grippe au cours des deux années antérieures à l'évaluation.

Résultats : Le taux global d'immunisation atteignait environ 80 % en 2002. L'âge, les troubles respiratoires, le diabète et l'insuffisance cardiaque congestive étaient associés à une demande accrue pour le vaccin antigrippal, mais dans l'ensemble, les taux d'immunisation contre la grippe étaient plus faibles que prévu. La sous-scolarisation, le tabagisme et le non-respect des directives concernant les médicaments étaient négativement associés à l'immunisation contre la grippe. De plus, nous avons noté d'importants écarts dans la demande pour le vaccin d'un CASC à l'autre, après rajustement des données pour tenir compte d'autres variables indépendantes significatives à l'échelle individuelle.

Interprétation : Des outils d'évaluation globaux comme la méthode RAI-HC peuvent être utiles pour cerner et résoudre les problèmes liés à la promotion de la santé et à la prévention des maladies dans la population recevant des soins à domicile, et pour comparer les taux à l'échelle du Canada.

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