Patients seeking care during acute illness

Why do they not see their regular physicians?

Maria Mathews, PhD Jan Barnsley, PhD

ABSTRACT

OBJECTIVE To identify factors that predict whether patients prefer seeing their regular physicians and whether they do see their regular physicians during acute illness.

DESIGN Cross-sectional, population-based telephone survey.

SETTING Urban areas in southern Ontario.

PARTICIPANTS Random sample of 304 people who had regular physicians, insurance coverage, and had last seen a physician for acute illness. Of the 304, 256 (84.2%) preferred seeing their regular physicians during acute illness, and 48 (15.8%) did not. Of those who preferred seeing their regular physicians, 131 (51.2%) did see their regular physicians, 125 (48.8%) did not.

MAIN OUTCOME MEASURES Preference for seeing regular physician and seeing regular physician during acute illness.

RESULTS Multiple logistic regression found that believing continuity of care was important and traveling further increased, while recent hospitalization and difficulty seeing physicians during or after office hours decreased, the likelihood of actually seeing their regular physicians.

CONCLUSION Almost half the patients who preferred seeing their regular physicians for acute illness did not actually see their regular physicians. Improving access to regular physicians might encourage patients to always try to see them.

RÉSUMÉ

OBJECTIF Identifier les facteurs qui font que les patients préfèrent consulter leur médecin habituel et ceux qui font qu’ils le consultent effectivement.

TYPE D’ÉTUDE Enquête démographique transversale par téléphone.

CONTEXTE Régions urbaines du sud de l’Ontario.

PARTICIPANTS Un échantillon aléatoire de 304 personnes qui avaient un médecin habituel et possédaient une assurance et dont la dernière visite médicale était pour une maladie aigüe. De ce nombre, 256 (84,2%) disaient préférer consulter leur médecin habituel et 48 (15,8%) n’exprimaient pas cette préférence. Parmi ceux qui avaient préféré voir leur médecin habituel, 131 (51,2%) l’avaient effectivement vu et 125 (48,8%) ne l’avaient pas vu.

PRINCIPAUX PARAMÈTRES À L’ÉTUDE Le fait de préférer voir son médecin habituel lors d’une maladie aigüe et le fait de le voir effectivement.

RÉSULTATS L’analyse par régression logistique multiple révèle que le fait de croire à l’importance de la continuité des soins et de devoir parcourir une plus grande distance augmente la probabilité de voir son médecin habituel, alors que celui d’avoir été hospitalisé récemment ou d’avoir de la difficulté à voir son médecin durant ou après les heures de bureau diminue cette probabilité.

CONCLUSION Près de la moitié des patients qui préféraient voir leur médecin habituel pour une maladie aigüe ne l’avaient pas vu. Un meilleur accès au médecin habituel pourrait encourager le patient à toujours essayer de le voir.

This article has been peer reviewed.
Cet article a fait l’objet d’une évaluation externe.
Continuity of care is integral to family medicine and centres on the idea that one physician cannot be substituted for another like replaceable parts of a machine. Maintaining a continuing relationship with a regular physician is associated with an increased likelihood of receiving preventive care, keeping follow-up appointments, compliance with prescribed medications, shorter hospitalizations, lower health care costs, and more effective health promotion and disease prevention.

Studies examining why people go to emergency departments or walk-in clinics suggest that many patients prefer not to see their regular physicians if they believe that they require specialized care or that their regular physicians are not available. By distinguishing between patients who preferred to see their regular physicians and patients who did not, this study highlights differences in care-seeking behaviour and could inform policies to improve continuity of care.

We looked at why people with regular physicians did not see those physicians for acute illnesses. Given that acute illness is common, these patients are a large group for whom policy initiatives could be developed. We examined their characteristics (predisposing, enabling, and need factors) from Andersen and Newman’s Behavioural Model of Health Services Utilization to identify factors that predict whether patients prefer to see their regular physicians, and if they do, factors that predict whether they do actually see their regular physicians.

Predisposing factors exist before onset of illness and create a greater propensity for some patients to use more services than others. Enabling factors are patients’ access to health services. Need is health status or illness severity that reflects the type and immediacy of services required. Previous studies have found that predisposing factors have little influence on either preferring or realizing care from a regular physician. Enabling factors, however, greatly influence care-seeking behaviour; patients will not seek care from their regular physicians if another medical provider is closer (in either distance or time) if an appointment can be sooner, or if patients believe their physicians are unavailable outside regular hours.

With regard to need factors and acute illness, researchers in the United States concluded that patients who went to urgent care centres perceived their problems to be more urgent than patients who went to family practices.

**METHODS**

We used data from a cross-sectional population-based consumer telephone survey collected as part of the Ontario Walk-in Clinics Study. This study was a 3-year multicentre, multicomponent project funded by Physicians’ Services Incorporated Foundation to investigate the role of walk-in clinics and their effect on the health care system. The survey received ethics approval from the University of Toronto.

Using random-digit dialing, we selected households in the greater Toronto, Hamilton-Wentworth, and Ottawa-Carleton regions and the city of London. In each household, we interviewed the person with the next birthday. Number of interviews completed in each area was proportional to the area population. When a child younger than 16 was selected, we asked the primary caregiver to complete the interview.

Interviews were conducted in English only between October 1998 and January 1999. In addition to screening and selecting respondents, the survey gathered information on why respondents last visited a physician; their regular source of care; and their attitudes, psychosocial traits, health status, health service use, and sociodemographic characteristics. Response rate was 72%. Of the 785 respondents in the study, this article reports only on the 304 with acute illnesses, regular physicians, and insurance coverage (ie, Ontario Health Insurance card).

Patients who had seen a physician for preventive care or had seen a specialist or other nonphysician health professional were excluded because factors influencing use of these services might be different from those for primary care for acute illness. In response to open-ended questions, patients described their symptoms on their last visit to a physician. Symptoms were categorized as acute illness, trauma, or chronic illness by three investigators, including a physician. A flare-up of a chronic condition (eg, asthma attack, allergic reaction) was considered an acute illness.

Respondents were asked where or from whom they had sought care: emergency department, regular physician (or member of regular physicians’ group), or another physician (eg, a walk-in clinic). Respondents who had seen a member of the regular

---

Dr Mathews teaches in the Division of Community Health at Memorial University of Newfoundland in St John’s. Dr Barnsley teaches in the Department of Health Policy, Management and Evaluation at the University of Toronto in Ontario.
Physician’s call group were considered to have seen their regular physicians. Respondents who had not seen their regular physicians were asked, “If it were possible, would you rather have gone to your [your child’s] regular doctor?” Those who answered “no” were designated as not preferring their regular physicians; those who answered “yes” or had seen their regular physicians were designated as preferring to see their regular physicians.

In two-step analysis, two dependent variables were considered: preferred regular physician and saw regular physician. Only those respondents who had preferred their regular physicians were included in the analysis of the second variable.

Independent variables included predisposing (demographic and psychosocial traits, attitudes), enabling (when care was sought, travel time, difficulty seeing physician during office hours), and need (perceived seriousness and disability, general health status, hospitalization in last six months, and chronic illness or disability) factors.

The study analyzed unweighted data using SPSS (version 9.0). Unit of analysis was patients’ most recent visits to physicians. Collinearity between variables was examined a priori for each subsample used in the analyses. Univariate regression was used to select significant ($P < .05$) independent variables for multiple logistic regression. Potential interactions were identified using cross-tabulations and were tested in the regression models. Large standard error values indicative of multicollinearity were not found in any of the regression models.

To confirm results of the logistic regression models, we examined responses to the open-ended question, “Why did you decide not to go to your [your child’s] regular doctor?”

### RESULTS

Of the 304 patients in the study, 256 (84.2%) preferred their regular physicians, and 48 (15.8%) did not; 59.9% were women; 27% were younger than 15 years; 48.0% were between 16 and 45 years; 15.3% were between 46 and 64 years; and 9.7% were 65 years or older. Cold and flu symptoms (45.1%) were most commonly reported (Table 1).

In the multiple regression model (Table 2), people who believed continuity of care was important were 2.6 times more likely to prefer their regular physicians than those who did not. Because the term “continuity of care” might not be familiar to the general public, we asked respondents to rate the importance of seeing the same doctor each time you seek medical care” on a 5-point Likert scale. Responses were collapsed into two categories: continuity of care is important, which included the responses “not at all important,” “not very important,” “neither,” and “somewhat,” and continuity of care is very important, only the response “very important.” Those hospitalized during the previous 6 months were 4.8 times less likely to prefer their regular physicians.

The study analyzed unweighted data using SPSS (version 9.0). Unit of analysis was patients’ most recent visits to physicians. Collinearity between variables was examined a priori for each subsample used in the analyses. Univariate regression was used to select significant ($P < .05$) independent variables for multiple logistic regression. Potential interactions were identified using cross-tabulations and were tested in the regression models. Large standard error values indicative of multicollinearity were not found in any of the regression models.

To confirm results of the logistic regression models, we examined responses to the open-ended question, “Why did you decide not to go to your [your child’s] regular doctor?”

### Table 1. Symptoms reported by respondents who preferred their regular physicians and saw their regular physicians

<table>
<thead>
<tr>
<th>REASON</th>
<th>PREFERRED REGULAR PHYSICIAN N (%)</th>
<th>SAW REGULAR PHYSICIAN N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cold, flu, cough</td>
<td>137 (45.1)</td>
<td>117 (45.7)</td>
</tr>
<tr>
<td>Pneumonia, bronchitis</td>
<td>24 (7.9)</td>
<td>20 (7.8)</td>
</tr>
<tr>
<td>Skin condition</td>
<td>17 (5.6)</td>
<td>16 (6.3)</td>
</tr>
<tr>
<td>Urinary tract infection</td>
<td>15 (4.9)</td>
<td>7 (2.7)</td>
</tr>
<tr>
<td>Ear or sinus pain or infection</td>
<td>37 (12.2)</td>
<td>32 (12.5)</td>
</tr>
<tr>
<td>Eye infection</td>
<td>6 (2.0)</td>
<td>5 (2.0)</td>
</tr>
<tr>
<td>Chest pain, irregular heartbeat</td>
<td>5 (1.3)</td>
<td>3 (1.2)</td>
</tr>
<tr>
<td>Other</td>
<td>68 (22.4)</td>
<td>58 (22.7)</td>
</tr>
</tbody>
</table>

Percentages add to more than 100 because some respondents reported more than one symptom.

### Table 2. Multiple logistic regression model adjusting for attitude to continuity of care and hospitalization in previous 6 months: Several factors predict whether patients prefer their regular physicians

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>ODDS RATIO (95% CONFIDENCE INTERVAL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude to continuity of care</td>
<td></td>
</tr>
<tr>
<td>• Not very important</td>
<td>1.00</td>
</tr>
<tr>
<td>• Very important</td>
<td>2.59 (1.31-5.12)</td>
</tr>
<tr>
<td>Hospitalized during previous 6 months</td>
<td></td>
</tr>
<tr>
<td>• No</td>
<td>1.00</td>
</tr>
<tr>
<td>• Yes</td>
<td>0.21 (0.08-0.57)</td>
</tr>
</tbody>
</table>

First category acts as reference for second category within each variable. Nagelkerke’s $R^2 = 0.09$, Hosmer-Lemeshow test $\chi^2 = 0.23$, df = 5, $P = .629$; classification table = 87.3%.
were 65 years or older, and 45.7% reported cold and flu symptoms.

In the multiple regression model (Table 3), those who had difficulty seeing their doctors during regular office hours were 2.5 times less likely to have seen their regular physicians than those who did not have such difficulty. Patients who sought care after regular office hours (weekdays 5 PM to 7 AM, weekends and holidays) were 7.7 times less likely to have seen their regular physicians than those who sought care during regular office hours. Those who traveled longer (in minutes) were more likely to have seen their regular physicians.

Table 3. Multiple logistic regression model adjusting for attitude to continuity of care and hospitalization in previous 6 months: Several factors predict whether patients see their regular physicians if they prefer to do so.

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>ODDS RATIO (95% CONFIDENCE INTERVAL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficulty seeing doctor during office hours</td>
<td></td>
</tr>
<tr>
<td>• No</td>
<td>1.00</td>
</tr>
<tr>
<td>• Yes</td>
<td>0.40 (0.21-0.74)</td>
</tr>
<tr>
<td>• Sometimes</td>
<td>1.14 (0.25-5.17)</td>
</tr>
<tr>
<td>When care was sought</td>
<td></td>
</tr>
<tr>
<td>• Regular hours</td>
<td>1.00</td>
</tr>
<tr>
<td>• After hours</td>
<td>0.13 (0.06-0.27)</td>
</tr>
<tr>
<td>Additional minutes of travel time</td>
<td>1.05 (1.02-1.08)</td>
</tr>
</tbody>
</table>

First category acts as reference within each variable. Nagelkerke’s $R^2 = 0.30$; Hosmer-Lemeshow test $\chi^2 = 3.77$, df = 7, $P = .806$; classification table = 70.75%.

When asked why they did not go to their regular physicians, most respondents who did not prefer or did not see their regular physicians cited enabling factors: physician unavailable, long delay for an appointment, and far distance (Table 4).

### DISCUSSION

Our study found that believing continuity of care was important was a strong indicator of preferring to see a regular physician. This suggests that patient education initiatives to increase awareness of after-hours arrangements and the importance of continuity of care could encourage patients to see their regular physicians. The negative association between hospitalization in the preceding 6 months and preferring their regular physicians suggests that those with existing health concerns prefer more specialized or readily accessible care (eg, an emergency department). Their regular physicians might have advised them to seek immediate care from other providers.

We did not inquire about regular physicians’ involvement in hospital care and whether this had any effect on subsequent care-seeking behaviour. Further study is needed to address these issues. Although enabling variables were often cited, they were not significant factors in the regression analyses. This suggests that access is not as influential as attitudes or need when it comes to preferences for care.

Access seems to be important in whether those who prefer their regular physicians realize care from them. In our study, 48.8% of respondents with this preference did not see their regular physicians. Seeking care after regular hours or being unable to see a physician during office hours reduced the likelihood of seeing a regular physician. These findings are consistent with other Canadian studies and suggest that primary care should be available outside traditional office hours. We also found that respondents who traveled less were less likely to see their regular physicians. Walk-in clinics are frequently located in areas convenient for patients.

In Ontario, primary care reform proposals have recognized the need for improved access to care and have recommended creating mechanisms to provide 24-hour coverage 7 days a week, telephone access to a nurse, and health care–provider networks. These mechanisms, however, might not sufficiently address these barriers if they simply defer patient

---

Table 4. Reasons for not seeing regular physicians

<table>
<thead>
<tr>
<th>REASON</th>
<th>DID NOT PREFER REGULAR PHYSICIAN N (%)</th>
<th>PREFERRED REGULAR PHYSICIAN N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physician unavailable</td>
<td>9 (20.5)</td>
<td>58 (46.4)</td>
</tr>
<tr>
<td>Long wait for appointment</td>
<td>4 (9.1)</td>
<td>19 (15.2)</td>
</tr>
<tr>
<td>Too far away</td>
<td>7 (15.9)</td>
<td>23 (18.4)</td>
</tr>
<tr>
<td>Need specialized services</td>
<td>7 (15.9)</td>
<td>7 (5.6)</td>
</tr>
<tr>
<td>Other site recommended</td>
<td>7 (15.9)</td>
<td>5 (4.0)</td>
</tr>
<tr>
<td>Patient out of town</td>
<td>1 (2.3)</td>
<td>5 (4.0)</td>
</tr>
<tr>
<td>Condition not serious</td>
<td>2 (4.5)</td>
<td>2 (1.6)</td>
</tr>
<tr>
<td>Other</td>
<td>7 (15.9)</td>
<td>6 (4.8)</td>
</tr>
</tbody>
</table>
visits to after office hours rather than expanding the delivery of care after hours.

Limitations
Our interviews were conducted in English only and excluded patients in institutions and patients without telephones. People might have said they preferred their regular physicians if they felt obliged to give socially desirable responses. Since we did not specifically ask about appointment delay in our survey, we could not include it as a variable in regression analyses. Responses to the open-ended questions, however, suggest that long waits for appointments discourage patients from seeing their regular physicians. Future research in this area should include this variable.

Conclusion
By considering care preferences, we found that access barriers are important only after patients have decided whether they want to see their regular physicians. Almost half the respondents who preferred to see their regular physicians were unable to because of access difficulties. To promote continuity of care, primary care reform should include mechanisms to improve after-hours coverage and reduce delays in getting appointments.

Acknowledgment
Dr Mathews was supported by a doctoral fellowship from Health Canada’s National Health Research and Development Program. Data for this study were collected as part of the Ontario Walk-In Clinic Study funded by the Physicians’ Services Incorporated Foundation.

Contributors
Dr Mathews was responsible for analyzing and interpreting the data and drafting the article. Dr Barnsley was involved in design of the study and assisting in interpreting the data and writing the article.

Competing interests
None declared

Correspondence to: Maria Mathews, Division of Community Health, Memorial University of Newfoundland, Health Science Centre, St John’s, NL A1B 3V6. Reprints will not be available from the authors.

References
4. Subcommittee on Primary Care, Provincial Co-ordinating Committee on Community and Academic Health Science Centre Relations. New directions in primary health care. Toronto, Ont: Provincial Co-ordinating Committee on Community and Academic Health Science Centre Relations, 1996.
RESEARCH