







regions representing the national context were selected by random sampling (and within these regions GPs were selected in a random way). If a country only has a list of the facilities in that particular country, a random selection of this list was made (Schäfer et al., 2011). Data collection among patients in each country took place during a period of several months. The patients were recruited on different days of the week and during different times of the day. The fieldworkers consecutively invited patients (aged 18 years or older) who had just had face-to-face consultations with GPs to complete a questionnaire until 10 patients had responded. The survey consisted of two questionnaires, one about the patient's experiences and one about the patient's values. The first nine respondents completed the questionnaire about their experiences with the consultation, while the 10th respondent completed the questionnaire probing the patient's values. Additionally, one GP working in the included practice completed a questionnaire. Finally, each fieldworker completed a short questionnaire about the practice facility. A unique practice identification number enabled the linkage of GPs data to patient data and the fieldworker data to allow for multilevel analyses. In total, 7.183 GPs and 61.931 patients participated in the study. Details about the study protocol and questionnaire development are provided elsewhere (Schäfer et al., 2011; Schäfer et al., 2013).

The strength of the PC systems was obtained from the PHAMEU database (Kringos, 2012). PHAMEU is a European Union-funded project that was conducted by the Netherlands Institute for Health Services Research (NIVEL) and was cofunded by the European Commission. The project was intended to produce a database comparing various characterizing aspects of European PC systems. This database shows trends and variations in PC strength across Europe, and details knowledge and expertise relating to policy strategies conducive to strengthening PC. The development of PHAMEU consisted of four sequential steps: (1) an identification of relevant PC dimensions and features by means of a systematic literature review, (2) a selection of adequate indicators within the established PC dimensions, (3) an evaluation of the indicators by European PC experts, and (4) a pilot test of the feasibility of the PHAMEU monitor in 31 European countries. In the following paragraph, we will explain these four steps in greater depth. However, for more specific and detailed information regarding the development of the PHAMEU monitor, see Kringos (2012).

The systematic literature review by the NIVEL research team identified 85 relevant systematic reviews and original research articles on PC classification published between 2003 and 2008. Ten core dimensions that constitute a PC system were derived and related to one of the three levels in the framework created by Donabedian (1980): structure, process, and outcome. The structure level consists of (1) governance, (2) workforce development, and (3) economic conditions. The process level comprised of (1) access, (2) continuity, (3) comprehensiveness, and (4) coordination. The outcome level consists of (1) efficiency of care, (2) quality of care, and (3) equity in health (Kringos, Boerma, Hutchinson et al., 2010). In the second step of the development of PHAMEU, indicators within the 10 aforementioned dimensions were identified. First, measurable indicators were selected from the publications included in the systematic literature review of step 1. Second, additional indicators were collected from a number of international databases (such as Eurostat, the World Bank, OECD Health data, and the WHO "Health for All" database). When there were no indicators for a dimension available, the NIVEL research team

developed measurable indicators. In this second step, 551 indicators for the 10 PC dimensions were identified overall. However, one of the aims of the third step was to shorten this long list of indicators and obtain a feasible set of essential indicators, using expert evaluation. These experts consisted of members of the NIVEL research team and eight other experts from various European countries (such as researchers in family medicine, GPs, and health services researchers). The experts were asked to score each indicator on its suitability for describing and comparing European PC systems on a 4-point Likert-type scale (ranging from *not useful for PC system comparison* to *essential for PC system comparison*). In this step, 143 essential indicators used to describe 9 of the 10 dimensions (i.e., governance, workforce development, economic conditions, access, continuity, comprehensiveness, coordination, efficiency of care, and quality of care) were identified. Indicators that were selected in the “equity dimension”, however, obtained a low score in the expert evaluation. The experts felt that the proposed indicators measuring equity in health were influenced by various other factors (such as social conditions in which people live and work) than just disparities in PC access and use. Therefore, no indicators of the “equity dimension” were included in the PHAMEU monitor. However, equity was integrated in several other dimensions (e.g., an indicator called “policy on equality in access” in the governance dimension and an indicator called “affordability of PC services” in the access dimension; Kringos, Boerma, Bourgueil et al., 2010). Finally, in the fourth step, all retained indicators in the PHAMEU monitor were scored by national coordinators for the 31 European countries. They used the best data available from several relevant sources, such as international databases (WHO or Organization for Economic Co-operation and Development), publications of the European Observatory on Health Systems and Policies, and national statistical databases. All sources used were registered and published in Kringos et al. (2015). Furthermore, in the appendix of the present study, we added a detailed overview of the several PC strength dimensions and explained from which features they are constructed.

### **Measuring Access**

Access to PC was measured by asking the patients whether they had postponed a GP visit within the past 12 months (yes or no). If the patients responded yes, they were asked whether the primary reason they had postponed a GP visit was financial (yes or no, Tables 1 and 2).

[TABLE 1] [TABLE 2]

### **Calculating PC Strength Dimensions Scores**

A score for each PC strength dimension per country was calculated using the scores of the national coordinators (supra) and by means of a two-level hierarchical latent regression model. The dependent variables in this two-level hierarchical regression model were the country's score for the indicators belonging to that dimension. In the fixed part of the model, the differences in the item averages were controlled by estimating the indicator average together with the item effects (using deviation indicator coding). In the random part, at Level 1, the differences in the items' deviations were considered controlled by modelling the item measurement errors as separate variance terms for each item. At Level 2, the effect of each country on the

indicator was modelled and used to calculate the country scores. Reliability coefficients of the constructed dimension scales were acceptable and could be considered reliable (Kringos et al., 2013). Following the methodology developed by Macinko, Starfield, and Shi (2003), the data on all indicators were transformed into scores ranging from 1 (*weak*) to 3 (*strong*). The limits between weak–medium and medium–strong were determined by means of the 33% and 67% percentiles, respectively.

#### Statistical Analyses

First, one-way analysis of variance test statistics (with Bonferroni post hoc tests) were used to test the associations between the prevalence of financially driven postponement of GP care and the independent variables.

Additionally, due to the hierarchical structure of the data (patients [Level 1] nested in GP practices [Level 2] and these practices nested in countries [Level 3]) logistic multilevel regressions were performed. These logistic multilevel regression models were used to evaluate the importance of each level independently (i.e., patient, practice, and country) in explaining the differences in postponement of GP care (i.e., our dependent variable). In view of answering our research questions, the health care system characteristics mentioned above were added as explanatory variables at the country level.

#### [TABLE 3]

In the first model, only variables capturing general information about two global measures of the strength of the PC system (one for structure and one for the delivery process) are included. This model, for which the results are presented in Table 3, can be abstracted by means of the following equation:

$$\text{logit}(\pi_{ijk}) = \ln\left(\frac{\pi_{ijk}}{1 - \pi_{ijk}}\right) = \beta_{0jk} + \beta_1 x_{1k} + \beta_2 x_{2k} + \beta_{\text{income}} \text{income}_{ijk} + \beta_{\text{GDP}} \text{GDP}_{ijk} \quad (1)$$

$$\beta_{0jk} = \beta_0 + v_{0k} + u_{0jk}$$

$$\text{logit}(\pi_{ijk}) = \ln\left(\frac{\pi_{ijk}}{1 - \pi_{ijk}}\right)$$

This equation, represents the dependent variable: postponement for financial reasons in the past 12 months by patient *i* in GP practice *j* of country *k*.  $\beta_{0jk}$  is the constant intercept term for all patients in a particular GP practice of a particular country. Furthermore,  $x_{1k}$  is the continuous structure variable, which is calculated as the sum of a country's scores with respect to government, economic conditions, and workforce development;  $x_{2k}$  is the continuous process variable which was calculated as the sum of a country's scores for access, continuity, coordination, and comprehensiveness. All analyses were controlled for household income of the patients and GDP per capita. Household income was categorized as “below average,” “around average (reference category),” or “above average” based

on the respondents' answers to the question: "Compared with the average in your country, would you say your household income is ... ?" GDP per capita was added to the multilevel regression model to control for a country's average income and economic status of the included countries. It is the sum of the gross value of purchaser's prices, added by all citizens producers in the economy plus any product taxes and minus any subsidies that are not included in the value of the products (The World Bank, 2016). Data on GDP per capita from 2013 were used, as the outcome variables were also collected in 2013.  $\beta_1$  and  $\beta_2$  represent the coefficients corresponding to the continuous structure and process variable, respectively. Last,  $v_{0k}$  is the error term at the country level and  $u_{0jk}$  is the error term at the GP practice level.

[TABLE 4]

In the second model (of which the results are presented in Table 4), we more closely examined the independent effects of specific indicators of both the structure and process strengths of PCs by including the seven individual dimension scores. This model can be visualized using the following equation:

$$\begin{aligned} \text{logit}(\pi_{ijk}) &= \ln\left(\frac{\pi_{ijk}}{1-\pi_{ijk}}\right) = \beta_{0jk} + \beta_1 x_{1k} + \beta_2 x_{2k} + \beta_3 x_{3k} + \\ &\beta_4 x_{4k} + \beta_5 x_{5k} + \beta_6 x_{6k} + \beta_7 x_{7k} + \beta_{\text{income}} \text{income}_{ijk} + \beta_{\text{GDP}} \text{GDP}_{ijk} \\ \beta_{0jk} &= \beta_0 + v_{0k} + u_{0jk} \end{aligned} \quad (2)$$

$$\text{logit}(\pi_{ijk}) = \ln\left(\frac{\pi_{ijk}}{1-\pi_{ijk}}\right)$$

In the equation above,  $\text{logit}(\pi_{ijk})$  represents the dependent variable and  $\beta_{0jk}$  the constant intercept term of this second model. Moreover,  $x_{1k}$  exhibits the governance dimension,  $x_{2k}$  exhibits the workforce development dimension,  $x_{3k}$  the economic conditions,  $x_{4k}$  the access dimension,  $x_{5k}$  the continuity dimension,  $x_{6k}$  the comprehensiveness dimension, and  $x_{7k}$  the coordination dimension. As in the previous regression, this analysis is also controlled for the income of the patient and GDP per capita (in US\$). The corresponding  $\beta$ s represent the related coefficients;  $v_{0k}$  is the error term at the country level and  $u_{0jk}$  is the error term at the GP practice level.

In order to benchmark the results found for financially driven postponement, we provide the reader with the same analysis, but with an alternative outcome measure, that is, postponement in general. Postponement was measured by asking patients whether they had postponed a GP visit within the past 12 months (yes or no).

Analyses were conducted in MLwiN (University of Bristol, the United Kingdom, version 2.31); first-order penalized quasi-likelihood was used as the nonlinear estimation procedure. Finally, for the null model, which is a model with only the intercept term  $\beta_{0jk}$  and no explanatory variables, we calculated the variance partition coefficient (VPC) for each level. This VPC shows us the proportion of explained

variance at the three levels (country, GP practice, and patient level), and indicates whether multilevel analyses are required (if VPC at the second and third level is > 0%; Hox, Moerbeek, & van de Schoot, 2010).

## RESULTS

### **(Financially Driven) Postponement of GP Care**

On average, 15.0% of the respondents postponed a GP visit at least once within the past year. The countries in the upper quartile concerning general postponement rates were the following: Hungary (24.9%), FYR Macedonia (24.6%), Lithuania (23.0%), Estonia (21.5%), Poland (20.6%), Romania (20.3%), Ireland (18.4%), and Spain (18.4%). The countries with the lowest postponement rates that were thus situated in the weak quartile were the following: Portugal (11.4%), Sweden (11.4%), England (11.2%), Iceland (10.5%), Switzerland (9.5%), Malta (8.9%), Cyprus (8.6%), and Turkey (6.1%). When we focused on postponement for financial reasons, we found that an average 8.5% of the patients had postponed care for this reason. Romania (23.8%), New Zealand (23.2%), Bulgaria (22.8%), Cyprus (22.4%), Ireland (21.9%), Slovakia (14.9%), Australia (14.8%), and Greece (14.7%) had the highest financial postponement rates and were thus situated in the upper quartile. Luxembourg (2.5%), Spain (2.5%), the Netherlands (1.4%), Slovenia (1.3%), Denmark (1.2%), England (1.1%), and Austria (0.7%) reported the lowest financially driven postponement rates.

### **The Role of Health Care System Characteristics in Financially Driven Postponement of GP Care**

Bivariate analyses demonstrated significant associations ( $p < .001$ ) between the financially driven postponement of GP care and all of the independent variables with the exception of the continuity indicator of the process strength.

In order to answer Research Question 1 of this article, we built a multivariate multilevel regression model stepwise. In the first model (Table 3), we add first the global structure scale and subsequently the process scale.

However, we will first consider the model with no explanatory variables (null model). Using this null model, we can calculate the VPC for each level, giving us the proportion of explained variance at the different levels (i.e., country, GP practice, and patient levels). The null model revealed that the variances at the country and practice levels were 0.78 (0.22), and 0.93 (0.13), respectively. When we calculate the VPC of each level,<sup>1</sup> we found that 15.52% of the differences in the postponement of GP care were situated at the country level and 18.60% at practice level.

First, the analyses reveal that compared with patients with a middle income, low-income groups are more likely to postpone a GP visit due to financial reasons. While patients with a high income are less likely, compared with patients with a middle income, to postpone a GP visit because of financial reasons. Second, according to this first multilevel model, strength of the PC process is significantly related to financially driven postponement. No significant association between strength of the PC structure and postponement for financial reasons was found.

Subsequently, the specific indicators of both the structure and process measure of PC strength were entered step-by-step into a second multivariate multilevel model (Table 4). As in the previous model, the significant association between income and financially driven postponement stays significant in the same direction. In other

words, low-income groups are more likely and high-income groups are less likely to postpone a GP visit due to financial reasons, compared with middle-income groups. As in the first model, the structural strength (i.e., governance, economic conditions, and workforce development) of PC was less relevant for explaining financially driven postponement than the strength of the process level of PC. *Access* and *comprehensiveness* were relevant process characteristics in this model. In other words, health care systems with strong foci on PC in terms of *access* to and *comprehensiveness* of care resulted in less postponement of GP care for financial reasons. Last, GDP per capita is significantly inversely associated with financially driven postponement. In other words, the higher the GDP per capita in a country, the less likely patients postpone care for financial reasons.

#### Benchmarking of the Results Using an Alternative Outcome Measure, That Is, Postponement in General

Multilevel modelling shows that patients with a low income are more likely to postpone GP care, compared with middle-income patients. Furthermore, according to the results presented in Table 3, no strength levels are significantly associated with postponement of care. However, when dividing these strengths levels into strength dimensions (Table 4), a significant association between continuity of PC and postponement can be observed. The negative significant effect between low-income groups and postponement of care stays significant in this model.

#### DISCUSSION

Policy makers all over the world are urged to strengthen their PC health care systems in response to several societal evolutions. The process of strengthening PC health care systems will improve the functioning of health care systems (Starfield, 1994). The core of PC is the provision of universal accessible care and responding to the need for medical care and not providing care according to age, gender, education, income, or ethnicity (Goddard & Smith, 2001). Despite this goal, there are still high rates of postponement of medical care among different social groups (Burström, 2002; Whitehead & Hanratty, 2004). Previous studies indicate the importance of individual sociodemographic characteristics in the postponement care seeking; people with low-income postpone visits to GPs more often than people in higher socioeconomic groups (Vilhjalmsson, 2005; Whitehead & Hanratty, 2004). Some of the reasons for these postponements could include lack of time, wait-and-see, language barriers, availability (i.e., restricted opening hours), health beliefs, cultural habits, and financial problems. European research indicates that 31% of the unmet need for medical care is due to financial reasons (Baert & de Norre, 2009). This study examined the extent to which the strength of the PC system is related to the postponement of GP care for financial reasons.

Concerning the prevalence of financially driven postponement of GP care, we found that the highest rates occurred in Cyprus, Romania, and New Zealand, and the lowest rates occurred in Austria, Denmark, and England. System characteristics (at both the national health care system and local GP levels) explained more than one third of the differences (i.e., 34.1%) in the financially driven postponement of GP care. In other words, the organization of all different dimensions of the (primary) health care system and the GP practice can decrease patients' financial access and therefore lead them to postpone GP care. These system characteristics could also compensate for the most important influence of the individuals' characteristics on care-seeking

behavior. Future research could assess in further depth the influences of system characteristics on the different operating levels and also the potential of system characteristics to compensate for the socioeconomic disadvantages of some patients. Especially noteworthy, and the most important finding of this study is, when we elaborated the roles of specific health care system characteristics, it became clear that the PC process level was associated with the financially driven postponement of GP care. Particularly in PC systems with accessible and/or comprehensive care, there was less postponement of GP care due to financial reasons. Governments of countries should focus on developing policies that reduce barriers to access to care. In line with the composition of the access indicator in the analyses, policies should, therefore, be focused on (1) national availability of PC services, (2) geographical availability, (3) accommodation of accessibility, (4) affordability, and (5) acceptability (Kringos, 2012). Last, the way PC systems address the wide variety of basic needs that exist in the community (i.e., comprehensiveness) is negatively associated with postponement for financial reasons. Consequently, policy makers could consider enhancing the comprehensiveness of their PC system by focus their policy on (1) adequate medical equipment available, (2) PC as first contact for common health problems, (3) PC for treatment and follow-up of diagnoses, (4) preventive care, (5) mother and child and reproductive care, and (6) health promotion (Kringos, 2012). This inverse association between financially driven postponement and comprehensiveness can be explained because having a broad range of services in the PC system encourages patients to present their (health) problem at the primary level of care and not at secondary care, which is less cost-effective care, and, therefore, more expensive both for society and for the individual patient. Last, the results of this article show that low-income groups are most vulnerable for both postponing GP care in general and financially driven postponement of care.

### **Strengths and Weaknesses**

The QUALICOPC study is the first, largest (61,931 patients, 7,183 GP practices, and 34 countries) and most comprehensive database regarding PC. Its unique structure combining data from three levels (patient level, GP practice level, and country level) is a major strength of current study. The combination of the QUALICOPC data with the PHAMEU data allowed us to evaluate the associations between the structure and the performance of health care systems on different levels (Schäfer et al., 2011) to elaborate on the benefits of PC.

Although we feel that the results of the present study are important, there are some limitations that should be considered. First, a limitation of the study that is specifically relevant to care avoidance is the fact that the included patients are visitors of GP practices only. In other words, the participants had overcome some obstacles to visit their GP. Heavy avoidance of care may therefore be underrepresented. Consequently, our postponement distribution is probably biased downward. Furthermore, the data on the strengths of the PC systems were derived from the PC Monitor (PHAMEU), which is a database that was built on available data, dating from 2010. This issue could be a limitation because it may have reduced the comparability with data regarding financial postponement (that is collected between 2011 and 2013). Additionally, interviews with national experts helped find missing information, validate country results, and deliver consensus-based information (Kringos, Boerma, Bourgueil et al., 2010), which may have affected a portion of the results because the experts may have based their judgments on the

objective current statuses or shortcomings of their countries' PC on the one hand or on the prospects for innovations or concerns about declines in the near future on the other hand. Furthermore, because the data on the PC systems' strength are situated at the country level, the PHAMEU data allow only between-country analyses and not within-country analyses. Subsequently, these data do not allow exploration of (or control for) the differences in access between regions in a country. Also, because there is a wide variation in the size of the included countries, the amount of heterogeneity within a country on PC may differ greatly, leading potentially to an underestimation of the variation in financial postponement explained by differences in the strength of a country's PC system. Therefore, we are in favor of future research studying the relationship between regional PC strength and financial postponement at the regional level. Finally, it is possible that other (unobserved) factors affect both dependent and independent variables. We should, therefore, be careful in interpreting causal inference.

## APPENDIX

Dimensions of the primary health care activity monitor for Europe (PHAMEU) and the corresponding features (*Source*.Kringos, 2012).

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## Authors' Note

Ethical approval was acquired in accordance with the legal requirements of each country. Both the GP and patient surveys were conducted anonymously.

## Declaration of Conflicting Interests

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## NOTES

1.

The residual variance at the patient level was estimated to be 3.29 ( $= \pi^2/3$ ) using the

latent variable method (Snijders & Bosker, 1999) because in logistic multilevel analysis, the individual-level residual variance is expressed on a different scale (probability) than the higher level residual variances (logistic; Merlo et al., 2006).

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**TABLES AND FIGURES**

**Table 1.** National Distributions of Patients Who Postponed a GP Visit in the Past Year.

Country	Patients who postponed a visit to the GP in the past year				Patients who postponed a GP visit in the past year due to financial reasons			
	N	Missing, N (%)	Yes, N (%)	No, N (%)	N	Missing, N (%)	Yes, N (%)	No, N (%)
Austria	1,592	68 (4.3)	208 (13.1)	1,316 (82.7)	276	74 (26.8)	2 (0.7)	200 (72.5)
Belgium	3,670	62 (1.7)	564 (15.4)	3,044 (82.9)	626	90 (14.4)	45 (7.2)	491 (78.4)
Bulgaria	1,971	12 (0.6)	317 (16.1)	1,642 (83.3)	329	12 (3.6)	75 (22.8)	242 (73.6)
Cyprus	603	6 (1.0)	52 (8.6)	545 (90.4)	58	6 (10.3)	13 (22.4)	39 (67.2)
Czech Republic	1,980	9 (0.5)	272 (13.7)	1,699 (85.8)	281	14 (5.0)	18 (6.4)	249 (88.6)
Denmark	1,877	64 (3.4)	258 (13.7)	1,555 (82.8)	322	71 (22.0)	4 (1.2)	247 (76.7)
England	1,296	38 (2.9)	145 (11.2)	1,113 (85.9)	184	40 (21.7)	2 (1.1)	142 (77.2)
Estonia	1,121	25 (2.2)	241 (21.5)	855 (76.3)	266	20 (7.5)	9 (3.4)	237 (89.1)
Finland	1,196	19 (1.6)	183 (15.3)	994 (83.1)	204	21 (10.3)	7 (3.4)	176 (86.3)
FYR Macedonia	1,283	16 (1.2)	314 (24.6)	953 (74.3)	325	17 (5.2)	41 (12.6)	267 (82.2)
Germany	2,117	8 (0.4)	271 (12.8)	1,838 (86.8)	279	13 (4.7)	12 (4.3)	254 (91.0)
Greece	1,954	58 (3.0)	350 (17.9)	1,546 (79.1)	456	69 (15.1)	67 (14.7)	320 (70.2)
Hungary	1,934	25 (1.3)	482 (24.9)	1,427 (73.8)	507	25 (4.9)	65 (12.8)	417 (82.2)
Iceland	761	50 (6.6)	80 (10.5)	631 (82.9)	130	51 (39.2)	5 (3.8)	74 (56.9)
Ireland	1,676	89 (5.3)	309 (18.4)	1,278 (76.3)	398	87 (21.9)	87 (21.9)	224 (56.3)
Italy	1,947	49 (2.5)	341 (17.5)	1,557 (80.0)	395	64 (16.2)	14 (3.5)	317 (80.3)
Latvia	1,936	78 (4.0)	311 (16.1)	1,547 (79.9)	389	47 (12.1)	48 (12.3)	294 (75.6)

(continued)

**Table 1. (continued)**

Country	Patients who postponed a visit to the GP in the past year				Patients who postponed a GP visit in the past year due to financial reasons			
	N	Missing, N (%)	Yes, N (%)	No, N (%)	N	Missing, N (%)	Yes, N (%)	No, N (%)
Lithuania	2,008	15 (0.7)	462 (23.0)	1,531 (76.2)	477	16 (3.4)	16 (3.4)	445 (93.3)
Luxembourg	707	23 (3.3)	96 (13.5)	588 (83.2)	119	28 (23.5)	3 (2.5)	88 (73.9)
Malta	626	14 (2.2)	56 (8.9)	556 (88.8)	70	15 (21.4)	2 (2.9)	53 (75.7)
The Netherlands	1,969	29 (1.5)	258 (13.1)	1,682 (85.4)	288	46 (16.0)	4 (1.4)	238 (82.6)
Norway	1,529	39 (2.6)	179 (11.7)	1,311 (85.7)	218	37 (17.0)	9 (4.1)	172 (78.9)
Poland	1,971	3 (0.2)	407 (20.6)	1,561 (79.2)	410	3 (0.7)	38 (9.3)	369 (90.0)
Portugal	1,877	46 (2.5)	214 (11.4)	1,617 (86.1)	261	44 (16.9)	17 (6.5)	200 (76.6)
Romania	1,975	3 (0.2)	401 (20.3)	1,571 (79.5)	404	2 (0.5)	96 (23.8)	306 (75.7)
Slovakia	1,916	11 (0.6)	297 (15.5)	1,608 (83.9)	308	11 (3.6)	46 (14.9)	251 (81.5)
Slovenia	1,963	36 (1.8)	283 (14.4)	1,644 (83.7)	319	34 (10.7)	4 (1.3)	281 (88.1)
Spain	3,727	44 (1.2)	687 (18.4)	2,996 (80.4)	731	85 (11.6)	18 (2.5)	628 (85.9)
Sweden	769	22 (2.9)	88 (11.4)	659 (85.7)	260	176 (67.7)	7 (2.7)	77 (29.6)
Switzerland	1,791	10 (0.6)	170 (9.5)	1,611 (89.9)	180	19 (10.6)	7 (3.9)	154 (85.6)
Turkey	2,605	0 (0.0)	160 (6.1)	2,445 (93.9)	160	5 (3.1)	18 (11.3)	137 (85.6)
Australia	1,190	13 (1.1)	162 (13.6)	1,015 (85.3)	162	9 (5.6)	24 (14.8)	129 (79.6)
New Zealand	1,150	24 (2.1)	161 (14.0)	965 (83.9)	185	3 (1.6)	43 (23.2)	139 (75.1)

Note. GP = general practitioner.

**Table 2.** Bivariate Associations Between Financially Driven Postponement of GP Care and Health Care Characteristics (Structure and Process Strength), Reporting One-Way ANOVA Tests.

	Postponement of GP visit due to financial reasons						F	p
	Total		No		Yes			
	N	M (SD)	N	M (SD)	N	M (SD)		
Strength PC structure	8,451	6.67 (0.26)	7,618	6.68 (0.27)	833	6.57 (0.23)	<b>114.18</b>	<b>&lt;.001</b>
Governance	8,451	2.43 (0.11)	7,618	2.44 (0.11)	833	2.40 (0.11)	<b>66.81</b>	<b>&lt;.001</b>
Economic conditions	8,451	2.15 (0.10)	7,618	2.15 (0.10)	833	2.11 (0.12)	<b>124.76</b>	<b>&lt;.001</b>
Workforce development	8,451	2.08 (0.13)	7,618	2.09 (0.13)	833	2.06 (0.12)	<b>33.94</b>	<b>&lt;.001</b>
Strength of PC process	8,759	8.70 (0.35)	7,885	8.71 (0.35)	874	8.53 (0.28)	<b>220.34</b>	<b>&lt;.001</b>
Access	8,759	2.25 (0.14)	7,885	2.25 (0.14)	874	2.19 (0.14)	<b>195.48</b>	<b>&lt;.001</b>
Continuity	8,759	2.36 (0.05)	7,885	2.36 (0.05)	874	2.36 (0.05)	0.44	.506
Coordination	8,759	1.77 (0.21)	7,885	1.73 (0.21)	874	1.66 (0.19)	<b>93.96</b>	<b>&lt;.001</b>
Comprehensiveness	8,759	2.37 (0.16)	7,885	2.37 (0.16)	874	2.33 (0.17)	<b>49.80</b>	<b>&lt;.001</b>

Note. GP = general practitioner; PC = primary care; ANOVA = analysis of variance.  
All significant ( $p < 0.05$ ) are indicated in bold.

**Table 3.** Multilevel Logistic Regression of Financially Driven Postponement of GP Care (and Postponement of Care in General) on Primary Health Care Characteristics (Log Odds and Their Standard Error).

	Financially driven postponement			Postponement (in general)
	Null model	Strength PC structure	Strength PC process	
Strength PC structure		<b>-2.63 (0.96)**</b>	-1.41 (1.05)	-1.11 (0.47)
Strength PC process			<b>-3.21 (1.47)*</b>	0.60 (0.68)
Low income		<b>0.65 (0.08)***</b>	<b>0.66 (0.08)***</b>	<b>0.19 (0.03)***</b>
High income		<b>-0.44 (0.17)*</b>	<b>-0.43 (0.17)*</b>	0.02 (0.04)
GDP per capita (in US\$)		<b>-0.14 (0.06)**</b>	<b>-0.10 (0.05)*</b>	-0.04 (0.02)
Intercept	<b>-2.60 (0.16)***</b>	3.53 (2.16)	<b>7.71 (2.79)**</b>	<b>-2.79 (1.26)*</b>
Variance country	<b>0.78 (0.22)***</b>	<b>0.52 (0.16)***</b>	<b>0.44 (0.13)***</b>	<b>0.11 (0.03)***</b>
Variance GP	<b>0.93 (0.13)***</b>	<b>0.97 (0.14)***</b>	<b>0.97 (0.14)***</b>	<b>0.50 (0.02)***</b>
N	8,723	8,723	8,723	55,685

Note. PC = primary care; GP = general practitioner.  
 All significant ( $p < 0.05$ ) are indicated in bold.  
 \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p \leq .001$ .