

## Switching Health Insurance Plans: Results from a Health Survey

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**Abstract** The study is designed to provide an informal summary of what is known about consumer switching of health insurance plans and to contribute to knowledge about what motivates consumers who choose to switch health plans. Do consumers switch plans largely on the basis of critical reflection and assessment of information about the quality, and price? The literature suggests that switching is complicated, not always possible, and often overwhelming to consumers. Price does not always determine choice. Quality is very hard for consumers to understand. Results from a random sample survey ( $n = 2791$ ) of the Alkmaar region of the Netherlands are reported here. They suggest that rather than embracing the opportunity to be active critical consumers, individuals are more likely to avoid this role by handing this activity off to a group purchasing organization. There is little evidence that consumers switch plans on the basis of critical reflection and assessment of information about quality and price. The new data reported here confirm the importance of a group purchasing organizations. In a free-market-health insurance system confidence in purchasing groups may be more important for health insurance choice than health informatics. This is not what policy makers expected and might result a less efficient health insurance market system.

**Keywords** Switching · Health Insurance · Purchasing Groups · Survey

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## Introduction

It is an essential assumption of market competition for health insurance that consumers choose health insurance wisely and be willing to switch plans and/or insurance companies if dissatisfied. The possibility of switching gives health insurance companies the incentive to respond to consumers wishes for lower priced policies and better quality. Health systems that have experimented with consumer choice and switching include Denmark [7], Switzerland [71], and some U.S. states. In 2006 the Netherlands replaced its mixed health insurance system with a new market based, managed competition insurance system that permits switching [22].

Switching is similar to choosing a health plan, but it is more demanding. Choosing a health plan is a straightforward decision in the sense that it involves a single decision-point-in-time. Switching behaviour implies a higher degree of active consumer participation in the marketplace. It assumes that once an individual has health insurance, she or he will continue, across an extended period of time, to act in an ongoing monitoring-mode as regards health insurance options. The underlying assumption is that patients will take action as a result of this pro-active behaviour.

A decision to switch health insurance plans is considered to be the result of informed individual choices made by rational actors inspired by self-interest [81]. The popular press takes for granted that “health care is a consumer market” and that switching is central to the health sector. Health economists support this idea though much of their assessment is theoretical rather than evidence-based [34, 87]; the notion of informed consumer choice is the foundation of Enthoven’s notions of managed competition, regulated competition and competing integrated delivery systems [22, 23]. Policy makers are told that patients would welcome the opportunity to access information about their health insurance plan and their health care providers so as to facilitate switching [17, p. 18]. Transparency of performance in health care is developed with the construction of websites. Computer-mediated transparency might offer people more choice and better information [54].

Research outside the field of health care indicates that these strong expectations about human behaviour *might be* unrealistic; rather, having extensive choices may blunt one’s capacity to discern differences and act decisively [17].

The aim of this study is to describe switching health plans among consumers in the new Dutch health insurance system. A further aim is to study factors related to switching health plans. From a methodological perspective switching behaviour is dynamic and can be studied through surveys that ask respondents to reflect on past behaviour [37]. The exploration of the actual switching behaviour with a survey among Dutch consumers is preceded by an examination of the assumptions of switching in a competitive system. After describing the design of a survey among Dutch consumers we present data on switching health plans. In the conclusion the relevance of health plan switching and the role of information are considered and lessons for modern health care systems are examined.

## Assumptions About Switching

What is known about switching behaviour? To what extent are patients critical consumers, willing to switch when the price is too high or quality too low?

It is a mistake to assume, as do many writing about switching, that switching health plans is always an option. Health plan environments differ from country to country and by different sectors of a given country. For example, in the U.S. switching occurs most openly or directly by consumers in Federal Employee Health Plans, Medicaid managed care and Medicare Advantage (private plans under Medicaid and Medicare that are paid capitation, an alternative to direct fee-for-service reimbursement to providers), and some private sector employer plans. But switching is not necessary in some national, universal health insurance systems (UK and Canada). The UK has been experimenting with several types of patient choices but not with health insurance or plan choice, which is by definition impossible in the National Health Service (NHS); patients can of course choose between providers within the NHS [30]. In any case, “choice” between the private sector and the NHS was part of the original plan and individuals may switch back and forth between the two if they pay extra for it. In Canada, private health insurance is intended for ancillary or supplemental services, rather than core health care.

Geography, employer preferences, and annual enrolment periods limit the assumed opportunities for individuals to choose and switch health plans. In some regions with health plan choice, switching may occur only at the option of the employer, not the individual employee. For example, in the U.S. 60% of the population has employer-based health insurance, but only about half of these U.S. workers have a choice of more than one health insurance plan [19]. A sizable majority (85%) of companies providing health coverage offer only one type of plan, though larger firms are more likely to offer a choice—66% of large firms (200 or more employees) restrict choice to only one plan type [43]. In addition, frequent switching of health plans within an employer’s health insurance offerings is discouraged, permitted only during a restricted time period for annual enrolment [60]. Finally in several countries (such as the Netherlands) switching is limited to once a year. Individuals are often overwhelmed by so many choices in many economic sectors, including the health insurance sector [18, 76].

Individuals are assumed to embrace choice and the opportunity to switch health insurance plans but “choices” in many economic sectors, including the health insurance sector are overwhelming to many consumers [18, 76]. First, in these cases some individuals develop shortcuts to simplify choices. While this may facilitate switching, it does not always lead to the optimal or most rational choice [8]. In Switzerland health plan choices were studied and “as the number of choices offered to individuals grow, their responsiveness to price declines...” [31, p. 2]. This is confirmed by research in the financial retirement sectors where more choices appear to paralyze employees and lead to less cost-effective decisions [56].

Second, many consumers have mixed feelings about switching health plans. In the U.S. 30% of consumers report that they “might switch” insurers, but only 6% have done so in the recent past [17, p. 18]. From 2000 to 2005 37% of a sample of those insured by a major Dutch health insurance company considered switching and the

majority of these (65%) reported that they actually did switch companies [84]. Twenty percent of consumers in the Netherlands actually switched health insurance plans in a single year when given the opportunity to do so in 2006 during a major health system reform [70]. But switching in subsequent years was much diminished to about 4% [39].

Third, a large gap exists between what patients say they need in terms of health plan decision making aids and what they can meaningfully employ in making these decisions [21]. Many consumers simply do not have the knowledge needed to make such decisions [52] though a few do respond to quality information when making choices [47]. Research suggests that consumers do not understand the meaning of basic terms to make evidence-based choices such as “quality guidelines” [12]. Cognitive burden increases as choices increase: there are methods of presenting material (less information, more summarized information) to lessen this burden for persons with lower numeracy skills [64]. When it comes to choosing and switching, many, though not the majority, say that they want their doctor to tell them what to do. This is true of hospital choice in the Netherlands [48]. Others trust the advice of friends, family and colleagues over any printed or online information, when forced with the necessity of switching. “Personal sources of information are more influential than impersonal sources [66, pp. 25–26]” Education designed to help consumers learn to be rational to critically assess, choose and switch plans when necessary, are not always effective [18].

Offering consumers *financial incentives* to make rational decisions is assumed to be effective but evidence indicates that this is not always the case [18]. On the one hand, in a laboratory experiment offering a financial reward to consider quality factors, consumers demonstrated improvement in decision making ability that resulted in switching when it was the optimal action [77]. There is, however, little evidence that these findings are applicable to real world decision making [18].

Switching health insurance plans is sometimes assumed to be voluntary but this is not necessarily the case. It is often involuntary, the result of changes that are independent of individual choice. Studies suggest that switching related to “consumer choice” accounts for only about a quarter of all switching in the U.S. and much switching is not voluntary “choice” at all [14]. Aging, for example, may require patients to change health insurance (in the US Medicare becomes available primarily as a result of age change). And another U.S.-specific example: young people and students are often excluded from parent’s health insurance plans when they reach a certain age or leave school. People switch when they no longer qualify for a specific government program such as Medicaid [59]. When an individual or families income falls below the poverty line in the U.S. involuntary switching may occur as that individual moves in and out of Medicaid eligibility standards which vary from state to state. They are switched when they are discharged from the military or are released from jail. Geographical mobility for whatever reason may also require an individual switch health insurance plans [82]. The loss of a job can result in switching health insurance. Health insurance companies may disappear through mergers, acquisitions, or bankruptcy, thus requiring patients to switch health insurance plans.

Employees switch insurers when they change employers. This is true not only in the U.S. employer-based sector, but indirectly the situation is the same in the

Netherlands today where they may, however, join the purchasing group at their new job if they wish. In the Netherlands about half of the population has chosen group health insurance coverage organized around their employment (this is not organized by the employer). Each year in the U.S. about 30% of employers (those who do not self-insure) cancel their contract for employee health insurance [13]. These employers do the “switching” for their employees. In some instances they cease to offer insurance altogether.

High insurance turnover rates for specific companies or industry sectors result in “under-investment in health,” “less preventive care” and “higher medical expenditure in retirement” which lead to inefficient health investment at the societal level [24]. When employers in the U.S. change health insurance plans, employees are involuntarily switched and this has negative health consequences [32, 36], including poorer outcomes for diabetes management. This is assumed to be the case because the health benefit “payoff” for proper treatment for diabetics is long term. Therefore, it does not receive the attention it deserves if health insurance policies are short-term [26]. If an insurance company raises its rates this may mean that an enrollee must switch plans or drop health insurance altogether with serious health consequences [32]. The same is true when commercial health plans exit a market, something that is common in the U.S. [59].

### Accounting for Switching Behaviour

What motivates switching behaviour or its absence? What factors mediate these choices? Some of the same variables that explain initial health plan choice also play a role in future switching [74]. In both cases an individual’s initial health plan choice and subsequent switching are influenced to some extent by price, quality, choice of provider, benefit design, coverage, ease of use, demographics, and health status [77]. But the extent to which this is the case is not always clear.

Classic economic theory predicts that pricing will influence switching in many cases and this is certainly observed in the health insurance market [1, 16, 83]. It is true for members and retirees of the Federal Employees Health Benefits program in the U.S. [5, 28, 35]. Younger and healthier individuals are more likely to be influenced by price when switching than those who are older or ill [66, 84]. Newly hired employees in the U.S. are more sensitive to price differences than those already enrolled [78]. There is evidence that many employees switch when offered cheaper policies options by their employers, if the difference is actually worth the trouble of switching in terms of time and administrative hassle [9, 78]. In the U.S. price increases have been observed to increase member switching among Medicare managed care options [62]. But in the Medicare Part D Plan for pharmacy benefits most seniors have proved incapable of seeking out, enrolling in, or switching to “the lower-cost Part D Plan available to them” among equivalent choices [38]. When price fails to influence consumer switching behaviour it can be very frustrating for policy makers who strive to design health systems that encourage critical consumer behaviour. Interviews with the Minister of Health in Switzerland indicated that “despite as much as \$1000 Euro differences, some citizens do not switch to cheaper, but identical health insurance plans” (Personal interview of one of the authors with

Ministry of Health officials, Berne, June 4, 2008). That said, research suggests that in most cases when price differences are very large, switching does indeed increase in Switzerland [31]. Price, however, is not the determinant in all instances, and behavioural economics offers promising insights that complement more traditional economic explanations [66].

Quality of health care is complex, difficult to measure and has been found to influence consumers in the laboratory setting more than in the real world [77]. Some studies suggest that quality information is not necessarily a reason for switching [1] though other studies report a small effect of providing quality ratings to employees [6]. For example, published quality information and “report cards” have little influence on consumers [41, 44, 73]. The number of services offered may be important as a surrogate for quality in motivating patients to switch plans [77]. In any case, switching provides little assistance in assuring quality for the sickest patients [75]. Only a minority of consumers in the U.S. (14%) have encountered and employed quality information about insurance plans, doctors or hospitals; that proportion has declined of the last 10 years [40]. At least one very successful health system, Switzerland, does not make quality data available to consumers [65], suggesting that the Swiss government assumes the responsibility of assuring high-value services along with other regulatory duties. When forced to use quality data, or paid to do so, in the laboratory consumers made better choices and switched plans according to rational motivation. Patient choice of primary care physician is most often based on subjective measures such as satisfaction and interpersonal interaction rather than any objective quality assessment [25].

In theory, employers make quality choices for their employees, switching health insurance providers for them. However, in the US quality has not been found to be an important criterion for employers to purchase health insurance plans for their employees; their main criteria when choosing one insurance company over another, is price [72]. But even this price competition does not necessarily make for much increase in market efficiency. Any gains from price competition could be offset by additional administrative expenses, because of the high costs of marketing to different groups with different instruments. This marketing is especially expensive if it involves selling different products to various segments of the population (age, gender, education level, psychological orientation, attitudes, lifestyle choices, etc.). Pricing strategies and customer retention strategies are other instruments for health plans designs [49]. While central to the market model of health insurance, switching health plans is not entirely positive from a public health point of view [3, 86]. This is the case in countries where switching reduces continuity of care and fails to encourage health services that lead to health improvement in the long term. In some countries switching has been reported to have substantial adverse clinical implications with health system cost effects, especially in the first year. These negative effects include a reduction in preventive care, a decline in cost-effective screenings, an increased chance for avoidable hospitalization, and overall higher health care expenditures [11, 10, 26, 27, 32, 36]. Their findings have implications, as well, for policy regarding employer-based health insurance in the U.S. where inefficiency due to switching is not trivial [13].

Researchers report that the higher the satisfaction level, the less likely employees are to switch, especially if they have family insurance coverage [9]. While there is

some evidence that a general dissatisfaction with services is an important incentive to switching [51], dissatisfaction does not necessarily or consistently lead to switching health plans [1]. However, in the 1990s three-fourths of switching in the U.S. state of Utah was found to be due to dissatisfaction with a consumer/patients' HMO [82]. The now classic Rand Study in the U.S. found that for mental health providers, high patient satisfaction was consistent with an absence of switching [79]. Fondacaro et al. [29] found greater patient satisfaction when health insurer decisions met consumer's needs and when decision making was based on equity considerations. If there is a serious problem with the services offered or if customer service staff are ineffective patients will switch [57].

Switching health insurance plans incurs "costs" to the consumer, sometimes called "transaction costs" and these too, may encourage or discourage change [39]. Time is valued and the transaction costs associated with switching health insurance plans are always part of the decision to act. This is the case across many countries and states within the U.S. [82]. The transaction costs of switching health plans are also a function of the complexity of choice in the health insurance sector. For example, in Chicago, Illinois, the Medical Director of Blue Cross Blue Shield insurance company, Allan M. Korn, MD, reports that there are over 17,000 health plans in the health marketplace [45]. In these cases transaction costs may discourage rational switching to a greater degree than where there are fewer choices. Dr. Korn suggests that everyone seems to "want their own plan design". The high costs of switching, in terms of the time it takes to do so, have also been documented in non-health sectors including the residential electricity market. Here switching has sometimes been associated with an actual "loss in value" because of consumer's inability to choose wisely. Some consumers ended up paying more than they would have if they had not switched [87]. Still, the highly educated and people with a higher income might be less risk adverse and probably more experienced in processing relevant information concerning health plans, thereby decreasing the transaction costs [39].

Switching may be mediated by psychological and emotional factors rather than the result of rational calculation. Decisions that are important to individuals and that have a highly charged emotional aspect involve a great deal of personal interpretation because it is not a matter of a right or a wrong outcome [69]. Certainly some individuals welcome the opportunity to assess and switch health insurance plans. But others experience the "endowment effect" that leads them to "overvalue" what they already possess [46]. This has been observed with regard to choice of a physician choice but much less is known about it with regard to health insurance companies. A related tendency for the elderly to switch less than others is called the "fidelisation" or loyalty effect in France [37]. Workers in the U.S. are said to be overconfident and overly optimistic about their own need for health insurance which distorts their choice when choosing a health plan or switching from one to another [18, pp. 8–9]). The low amount of switching can also be explained by the phenomenon that people have a tendency to leave things as they are because they are afraid to regret the choice they make [2].

It has been shown that changing health insurers is more likely among younger people, well-educated people and people in relatively good health. Varying

relationships between switching behaviour and gender, ethnicity and income have been mentioned.

The differences between groups are mostly attributed to varying switching costs. These are likely to be larger for individuals with greater health care needs (i.e. older people and people in poor health, chronically ill people), because these individuals are especially averse to uncertainty about continued coverage of health care.

Switching health insurance can be the result of calculated anticipation of specific need for medical care, called adverse selection. This has been documented in the U.S. [80]; indeed, adverse selection may be somewhat limited to places (such as the U.S.) where health plans are allowed to offer varying benefits or levels of coverage. For example, patients switched to plans with maternity benefits in anticipation of having children [68]. Appropriateness of the benefits package to the individuals needs is also relevant to the decision to switch. For example, diabetic patients are more likely than others to switch to health plans with vision care [4]. In a Minnesota (U.S.) health plan, families with more co-morbidities chose a plan with a higher premium but less co-insurance and out-of-pocket payments, and the difference of high-premium and low-premium plans appeared to divide an insured population into risk categories, possibly affecting insurance options in the future [58]. Again, while adverse selection is well documented in the U.S. [80], it has not been found to influence switching in France, where health status does not, in principle, influence choice of health insurance policies [37]. In some countries, including the Netherlands, insurance companies are governed by guaranteed issue regulations and they receive extra payments from a risk pool if a disproportionate number of their insured population is very sick. Nevertheless, healthy individuals have been found to voluntarily switch more than those who are sick in several countries across several different conditions [6, 16, 62, 67, 79]. The same has been found for those switching from less generous HMOs to non-HMO private managed care in the U.S. [42]. Generous benefit packages are widely associated with switching among the U.S. elderly [4].

Switching can be influenced by structural incentives in a health insurance system. Debates about financial incentives to switch health insurance plans because of co-pays and deductibles are ongoing. There are both structural and price related incentives for switching. The Rand Health Insurance Experiment's conclusions did not settle the debate about the reasons for health plan switching; the Experiment's results are thought by some to have been affected by attrition bias [61, 63]. The structure of a health plan, and experience with it, can encourage switching. For example, in the US about half of enrollees in consumer-directed health plans say they would change back to traditional health plans if they had the opportunity [50]. There is evidence that access to an "open provider network" is an important incentive for patients to switch, especially for older patients [28, 77]. But other studies have found the opposite—this may not be a reason to leave or stay with an insurance plan [66]. In short, structural complexity increases the difficulty of switching and seldom makes it easier.

### Lessons on Switching From a Case Study in The Netherlands

The Netherlands is an important case for studying switching behaviour and informing the knowledge because the Dutch insurance system offers the opportunity



to switch insurers at regular intervals. Consumers assume the role of creating a market for health insurance and only if they are willing to switch for better quality and/or lower prices will it function as anticipated by policy makers. The 2006 Health Insurance Act united the two health insurance systems, one private and one public, into a single compulsory, private insurance system. It broadened options for individuals to choose among insurance plans offered by private companies, establishing an annual open-enrollment period [53].

The government role was reduced to that of an umpire with the goal of ensuring fair competition among private health insurance companies and protecting consumers [70]. But individuals were also given the option of joining a group purchasing plan, and this has proved very popular in the Netherlands for several reasons; some of these were structural and others were legal in character. The Dutch experience reflects on the extent to which individuals are critical consumers, and on the nature and motives behind the decision to switch health plans. First, polls indicated nevertheless, that consumers in the Netherlands on the whole, had mixed feelings about “choice,” the obligation to shop critically, and the opportunity to switch health insurance plans on the basis of price and quality [70]. Second, the population in the Netherlands is highly educated, and to the extent that switching requires critical evaluation and analysis skills, the Dutch are an excellent test of this activity. Third, adverse selection as a motive for switching is less important here because the universal health insurance system includes community rating, guaranteed issue, and fair risk compensation for insurance companies [70].

Most importantly the legislation in the Netherlands mandated a substantial cost reduction for group purchasers of about 10–15% and this proved to change the way many Dutch purchased health insurance. Many switched to group purchasing because this would minimize personal transaction costs in making health plan choices going forward, though this required that the individual remain a member of the group in the future. The group could as well take on the task of screening for quality at a given price for its members.

Group purchasers are assumed to have more power than individuals, be it informal, to require health insurance providers to perform on both quality and cost [70]. They are financed by employers, unions, patient groups and other consumer groups, and associations representing the elderly or other groups [53]. These organizations are inspired by the ambition to be a good employer or to bind their members [85]. The Dutch Health Insurance Act requires the cost reduction made available to group purchasers cannot be tied to member “characteristics” but rather based on the number of individuals in the group to be insured [85].

## Methodology

### Sampling

In the fall of 2006 a self-administered survey questionnaire was administered to 3856 citizen-residents of the Alkmaar region of the Netherlands (ages 19–65). It was a random sample from the county councils in this region north of Amsterdam. The

study was part of a health monitoring project consisting of consecutive health surveys taken every 3 years. Questions about health plan switching were only included in the 2006 questionnaire after the Dutch Health Care Reform. The response rate was 73% ( $n = 2836$ ). Forty-five respondents were excluded because they failed to respond to a high proportion of the questions. This left 2,791 for analysis. The results were representative of the total population although consumers aged 50 years and over were slightly overrepresented as was the case with women.

The questionnaire included a range of questions about respondents' health, health care and consumption of health services as well as socio-demographic variables. Respondents were queried about switching health plans. They were asked: 'did you switch recently to another health plan?' (Yes/No). They were also asked what reasons they had for doing so (purchasing group, utilization of internet information, advice of relatives, etc.). Non-switchers were asked about the reasons they had for remaining with their health plan (purchasing group, satisfied with current health plan etc.).

### Data Analysis

Comparisons between groups were made utilizing Chi-square tests and Cramers  $V$  tests for categorical data. Switching was considered to be a nominal variable. The differences were considered significant if  $p$ -values were  $<0.01$ . For statistical analysis, SPSS 15.0 for Windows (SPSS, Chicago, IL) was used. In line with a previous study [66] discriminant function analysis was performed to discover variables which explain the principal differences between switchers and non-switchers. Discriminant function analysis is employed here as a multivariate technique for nominal data and especially useful for statistically distinguishing between two or more groups, rather than for classification purposes [55]. Rao's  $V$  was used as the stepwise criterion [55]. Purchasing group, utilization of internet, marital status, gender and age were the discriminating variables.

### Results

Table 1 presents a description of the respondents in the Health Survey.

**Table 1** Respondent characteristics ( $N = 2791$ )

Variable	Percentage
Age	
19–34	29.6
35–49	37.1
50–64	33.3
Men (%)	49.8
Married (%)	65.4
Very good or good subjective health (%)	81.7

Results indicated that 29% ( $n = 823$ ) of the respondents changed their health insurance plan in 2006. This was higher than in the country as a whole (21%) during that year, but variations between geographical regions was expected and this does not affect the results of our exploratory study which represents the regional population sampled.

Joining a purchasing group was mentioned by the switchers as an important consideration for switching. Satisfaction with the current health plan was listed by the non-switchers as an important argument for staying with the health plan. Younger people switch more than the elderly, but this result was not significant. Women were found to be more likely to switch than men. Those *living together* with a partner were found to switch more than consumers living alone. Consumers with higher levels of education were somewhat more likely to switch than those with lower levels of education. The healthy were found to switch significantly more than the less healthy but the outcome was not strong. This greater tendency to switch was also found with those frequently visiting the doctor compared to those who rarely saw their doctor: the result was not statistically significant.

In the Netherlands access to quality information about health plans via the internet is widely available to assist consumers in making choices about health insurance, including the decision to switch health plans. There is a modest association between the utilization of internet resources and health plan switching with users more likely to switch than nonusers. Quality and price information available on the internet may have influenced the switching choices of high internet users (Table 2).

Another variable appears to be more important than any others in accounting for switching health plans. Table 3 displays switching to a *group purchasing plan* from an individual plan. A strong association ( $V = 0.43$ ,  $P < 0.01$ ) is observed between the purchase of a group plan and switching. Respondents who mention purchasing groups as a rationale for switching were more likely to report switching their health plans than those who did not mention purchasing groups as a rationale for switching.

Discriminant function analysis reveals the relative order of importance of the several variables in our study. This analysis ( $P < 0.01$ ) of the data allows us to

**Table 2** Associations between several variables and switching health insurance plans ( $N = 2791$ )

Variables	Results
Age	Not significant
Gender	$\chi^2 = 8.38$ , $df = 1$ , $P < 0.01$ Cramers $V = 0.06$
Living status	$\chi^2 = 35.90$ , $df = 4$ , $P < 0.01$ Cramers $V = 0.11$
Education level	$\chi^2 = 37.05$ , $df = 3$ , $P < 0.01$ Cramers $V = 0.14$
Perceived health	$\chi^2 = 12.57$ , $df = 4$ , $P < 0.01$ Cramers $V = 0.07$
Visiting the doctor	Not significant
Utilization of internet	$\chi^2 = 35.9$ , $df = 1$ , $P < 0.01$ Cramers $V = 0.11$

**Table 3** Percent switching health plan by percent membership in a purchasing group ( $N = 2791$ )

Health Plan Switching	Membership of a purchasing group as a rationale for switching (non) decision		
	Yes	No	Total
Yes	58.8	16.4	29.1
No	41.2	83.6	70.9

**Table 4** Discriminant function analysis for health plan choice ( $N = 2791$ )

Variable	Step	Significance	Rao's V
Purchasing group	1	0.00	
Living status (with partner or alone)	2	0.00	37.2
Gender	3	0.00	42.1
Utilization of internet	4	0.00	65.9
Education level	5	0.00	86.5

reject the hypothesis that consumers actively seek information when switching (Table 4).

Factors are listed according to relevance. *Membership in purchasing groups*, not individual shopping based on internet information, was *the most important factor* in a model that explains 21% of the observed variance in switching health plans. Living status is related to joining a purchasing group: those living with a partner, because they are eligible to join the plan of their partner, have more opportunities to join a purchasing group than those living alone. Therefore, not surprisingly, living status is the second factor in explaining the switching behavior. Education level was not decisive in explaining the principal differences between switchers and non-switchers.

## Discussion

Overall, in the Netherlands switching appears to be motivated by pragmatic reasons as much as by purely rational-calculating processes though the two are difficult to separate. The reduced transaction cost for individuals, the lower prices, and the hope for better quality care that is associated with group plans may have inspired many to switch health plans in the Netherlands.

Our study confirmed the results of other studies [39] showing that the well-educated and the healthy are more likely to switch to another health plan. We could not confirm a role of age. Gender and living status have been shown to be a factor, but joining a purchasing group was by far the most important variable.

Switching to a group plan is not without costs in the Netherlands. Lower individual satisfaction, perceived unfairness, and involuntary future switches initiated by the group, may have to be balanced off with the advantages of group purchasing. It is not exactly clear what motives consumers have for joining a group.

It might be the expected lower premium, but joining a group is also optimal if it means that the purchasing decision, including switching, is made for the group by a highly qualified agent who consults quality ratings and takes relative price for value into consideration.

As reported in our literature review above, individual consumers often make poor decisions when switching for a variety of reasons including the high “costs” of assessing alternatives. Group purchasing resolves some of the dilemmas associated with choice of health insurance. It may also remove some of the emotional and psychological difficulties our literature review discussed involved in switching. It does not entirely reduce the negative consequences involved in switching related to structural factors that require involuntary switching such as aging, geographic mobility, etc.

## Conclusion

We conclude that there are considerable reasons to doubt that most consumers, given the opportunity, will switch plans primarily on the basis of critical reflection and assessment of information about the quality, price, and patient satisfaction. This outcome is in line with findings from a recent study from the same country showing that quality of care was not often a reason to switch, but collective offers were [16]. The new data presented here replicates these results and therefore strengthens this conclusion, thus contributing to further theory development [20]. Most of the research literature reviewed, though not all, suggest that consumers are not very good at making rational, carefully calculated switching decisions at this level of complexity. The assumption that individuals are largely influenced by their economic interest when switching, and that they will not behave in ways that make them worse off financially [61] may be the case most of the time but it should not be assumed to be true in all circumstances.

Rather than embracing the opportunity to be critical shoppers they are more likely to avoid this role, in the case of the Netherlands, by handing this activity off to a group purchasing organization. In the new Dutch health insurance system trust in purchasing groups might be more important than health information from the internet. This is illustrated by the trend towards lower switching percentages among the Dutch population since 2006 and increasing relevance of purchasing groups [15]. Switching insurers may be an important signal to insurance companies that the insured are dissatisfied with levels of service, quality of care, price, etc. When switching rates decline dramatically, as has been the case in the Netherlands, it may indicate a high degree of satisfaction with one’s current insurer or it may suggest that consumers are failing to play their role as adjudicators between insurers. If it is the latter then the implications for market based managed competition between health insurers is worrisome [70]. The market system in the health sector may be inefficient and challenged by administrative costs that are prohibitive. In addition, it may signal that more dollars are spent on administration and fewer dollars on meeting the very real healthcare needs of the population.

The potential consequences of the limited switching on the part of consumers, once they have made their initial choice, are important for health systems because this influences insurer behaviour. Powerful motivators must be found to “move” consumers from the inertia associated with their initial choice. Without such motivators health insurers are unlikely to invest a lot of effort to capture those few customers who might switch. Will insurers fall back to a strategy of grasping for market share without even attempting to compete on price, because price differentials in the health sector are not large enough to move customers? If this is the case, then hoped for efficiencies are unlikely to materialize from market competition in the health sector to the degree anticipated.

Every empirical study involves limitations as does this study. Caution with respect to results is usually warranted. Some caution with our results is needed. The sample does not completely represent the Dutch consumer population, since younger people and males are somewhat under-represented in this study. Nevertheless, data collection via a self-administered questionnaire is assumed to have resulted in less bias. The risk of social desirability is reduced by the utilization of this type of self-administered questionnaire compared to face-to-face interviews.

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