Health Policy 123 (2019) 675–680

Contents lists available at ScienceDirect

Health Policy

journal homepage: www.elsevier.com/locate/healthpol

Is having private health insurance associated with less support for public healthcare? Evidence from the Norwegian NHS

Pål E. Martinussen[a,*], Jon Magnussen[b]

[a] Department of Sociology and Political Science, Norwegian University of Science and Technology (NTNU), Trondheim, Norway
[b] Department of Public Health and Nursing, Norwegian University of Science and Technology (NTNU), Trondheim, Norway

ARTICLE INFO

Article history:
Received 20 November 2017
Received in revised form 26 February 2019
Accepted 6 May 2019

Keywords:
Private health insurance
Support for public healthcare
NHS
Private sector
Social inequalities in health

ABSTRACT

The purpose of this study was to investigate whether increased uptake of private health insurance (PHI) in a traditionally NHS type system is likely to affect support for the public healthcare system. Using the Norwegian healthcare system as our case, and building on a survey among 7500 citizens, with 2688 respondents, we employed multivariate analysis to uncover whether the preferences for public health services are associated with having PHI, controlling for key predictors such as socio-economic background, self-rated health and perceived health service quality, as well as age and gender. The basis for our analysis was the following two propositions related to the role of public healthcare, which the respondents were asked to score on a 5-point Likert scale (1 = "totally disagree", 5 = "totally agree"): 1) "the responsibility of providing health services should mainly be public", and 2) "the activity of private commercial actors should be limited". The regression analyses showed that the willingness to increase the role of commercial private actors is positively associated with having a PHI. However, we found no relationship between holding a PHI and support for public provision of health services when other factors were controlled for.

© 2019 Elsevier B.V. All rights reserved.

1. Introduction

Several studies have documented high levels of public support for an extensive role of the state in European healthcare systems [1–3]. In these countries a vast majority of the population share the opinion that it is the state's responsibility to guarantee access to healthcare services for all citizens. This support has been found to be particularly high in NHS-type countries [3], where healthcare is publicly financed and the responsibility of the state. However, during the last decades market-inspired reforms have been implemented even in NHS countries. One element of these reforms have been a growth in the provision of private health insurance (PHI), an accompanying rise in the number of private providers, and increased use of private actors in the provision of publicly funded services. This study focuses on the role of PHI. Specifically, we investigate whether increased uptake of PHI in a traditionally public NHS type system is likely to affect support for the notion that the responsibility of providing health care services should be public, and the attitudes towards private commercial actors.

PHI may cover expenses or services not included in the public benefit package ("gap coverage"), or else provide the same benefits from private providers ("parallel coverage"). One possible advantage of parallel coverage PHI is that it may shift demand from the publicly financed health care sector to a parallel private sector. If PHI increases available capacity it may reduce waiting times and release financial pressure in the publicly funded health care, given that PHI-holders will cover some of their medical expenses themselves. Faster access and increased choice of providers for patients may furthermore result in more flexibility and responsiveness to population needs and preferences. Potential advantages of gap coverage may include access to services excluded from the public coverage and a more dynamic and competitive market with a higher degree of innovation [4]. However, these effects have yet to be consistently demonstrated [5], and there is concern for the potential negative consequences that an increasing privately funded health care sector might have. Rather than increasing capacity, PHI may instead have the opposite effect by crowding out resources from the publicly funded part of the sector [6]. It is also argued that higher income groups, with PHI and paying taxes, may be less motivated to contribute to the public system [5].

The consequences of increased uptake of PHI for the support of a publicly financed health care system is likely to depend both on the type of PHI (gap vs parallel coverage) and on whether

* Corresponding author.
E-mail address: paal.martinussen@svt.ntnu.no (P.E. Martinussen).

https://doi.org/10.1016/j.healthpol.2019.05.003
0168-8510/© 2019 Elsevier B.V. All rights reserved.

PHI is purchased individually or collectively provided by the employer. The market for PHI has grown significantly in the Nordic countries, and currently about 51% of the population is covered by PHI in Denmark, 20% in Finland, 9% in Norway and 7% in Sweden. Except from Finland, the market is dominated by insurance through an employer: in Norway collective/group policies constitute around 90%, in Sweden 72% of insurance policies were paid by the employer, and in Denmark 75% was part of an employment contract [29]. However, in the case of Finland the first survey of health insurance estimated that only 16% of the insured adults had employer-purchased insurance and as many as 75% had self-purchased insurance [30]. While the share of the population with PHI in the UK has decreased somewhat from 2008 to 2015, the share of those carrying a private insurance through a company plan has increased and is estimated at 76% in 2015[1] .

Propper [7] describes two likely scenarios for the relationship between use of private health services and support for publicly funded health care. One possibility is that those who use private health services continue to use public health care. In this case, a gap coverage PHI would mainly be aimed at covering supplementary health care costs not covered within the NHS scheme. Individuals will use both public and private services and may retain an overall strong commitment to the state financing of health care even though they are private service users. However, we would expect the level of commitment to differ between individuals consciously deciding on purchasing PHI and those who are offered PHI as a part of an employment package.

Alternatively, increasing use of privately funded health care services may be accompanied by a decrease in the support, and willingness to pay taxes, for the public sector. In this case, parallel coverage PHI will substitute for the use of publicly funded health care services. This may also lead to the development of a group of users who demand a substantial part of their health care from the private sector and who consequently have less commitment to public funding of health care. Thus, high usage of privately funded healthcare could lead to lack of 'voice' and taxpayer discontent that could again lead to the evolution of a NHS into a two-tiered system, with a 'poor service for the poor'.

A small body of literature has investigated the relationship between private sector use and support for public healthcare. Summing up the empirical evidence from the UK, Propper and Green [8] concluded that those who use the private sector seemed in general to be less supportive of public financing of health care. Besley et al. [9] found indications that individuals who expressed dissatisfaction with the NHS were more likely to purchase private insurance. A further study showed that those with PHI were more dissatisfied with the NHS as compared to those without PHI [10]. Users of private health care services, and more particularly users of PHI, were also less supportive of increases in expenditure on the NHS or the equity goals of the NHS [11,12]. The findings of Burchardt and Propper [12] and Propper and Green [8] also suggest that those who used the private sector were less supportive of public financing of health care. A Catalonian study similarly suggest that the purchase of PHI made lack of support for the NHS more likely: Costa-Font and Jofre-Bonet [13] found that the demand for PHI affected negatively the propensity to show support towards the NHS, even when controlling for demographic factors, income and premium paid.

Most of the above studies are based on data from the 1990s. In the decades to follow, changes of modern health systems have been so frequent that some authors speak of an 'epidemic of health care reforms' [14]. European countries have implemented a number of health reforms, typically allowing for a larger role of the private sector [15–19]. Using Norway as our case, this study adds to the research field by utilizing data gathered after this era of 'big reform', thus capturing the substantial growth in private sector activity, including uptake of PHI, which has taken place the last 5–10 years. Furthermore, unlike previous studies, we were also able to control for important confounding factors in the same analysis, such as health status, socio-economic background, and perceived quality of the public health services.

The Norwegian healthcare sector is financed from general revenues, predominantly public, and, according to OECD figures as of 2015, only behind Switzerland and Luxembourg in per capita real spending in the EU/EEA area. Since all inhabitants are covered by the public insurance system, PHI has traditionally played a marginal role in Norway. The estimated share of the population with such arrangements in 2003 amounted to only 0.6 per cent [20], but by 2016 the share had increased to around 9,5% [21]. The most common PHI schemes provide parallell cover, offering shorter waiting times for publicly covered elective services and specialist consultations in private facilities. As in other NHS countries, this arrangement allows the clients to jump waiting lists by obtaining treatment from private providers paid by the insurance. The insurance typically covers expenses for specialist, psychologist/psychiatrist, physiotherapist/chiropractor etc., hospital stays and travel expenses, as well as rehabilitation; thus, there is also an element of gap coverage. However, as the upper limit on co-payments in the Norwegian system is approximately 200 Euros per year it is reasonable to assume the parallel feature to be dominant.

2. Materials and methods

The data material for this study is from a survey undertaken by SINTEF Research Institute on behalf of The National Union for Heart and Lung Disease (LHL). The survey was sent to 7 500 randomly selected Norwegian citizens. The gross sample was a randomly selected sample from the population (5 000 persons aged 18–75 years and 2 500 persons aged 40–75 years). Persons above 40 years of age are thereby overrepresented. The purpose of this overrepresentation was to secure a large enough sample of health service users, and to obtain a sample of a certain size within the various disease groups. The sample was drawn from the National Registry, and a total of 2688 persons responded, which gives a gross response rate of 36%. Through comparisons with available population statistics we were able to assess the representativeness of our sample. For more information on the data representativeness, see Ådnanes and Dyrstad [22].

Of the 2688 respondents, 2651 answered the question about private health insurance. Of those, 364 reported to have employer-paid health insurance, 313 privately purchased health insurance and 1770 no such insurance (in addition, 173 reported that they did not know, and 31 that they had a combination of employer-paid and privately-paid insurance). We note that the share of our sample with PHI is substantially higher than in the general population, and also that the share of those with privately purchased insurance is higher. This is not surprising, given the overrepresentation of persons over 40 years

2.1. Dependent variables: support for public healthcare

The basis for our analysis is an item in the survey where the respondents were asked to score the following two propositions related to the role of public versus private healthcare on a 5-point Likert scale (1 = "totally disagree", 5 = "totally agree"):

A. "The responsibility of providing health services should mainly be public"
B. "The activity of private commercial actors should be limited"

[1] https://www.theguardian.com/business/2017/jan/16/private-medical-insurance-sales-surge-health-nhs

Table 1
Support for public healthcare. Percentage and frequencies.

	1 = "totally disagree"	2	3	4	5 = "totally agree"	N
"The responsibility of providing health services should mainly be public"	3.0 (79)	3.9 (102)	14.6 (385)	24.6 (650)	53.9 (1424)	100.0 (2640)
"The activity of private commercial actors should be limited"	16.8 (439)	19.9 (519)	34.6 (903)	15.1 (394)	13.6 (354)	100.0 (2609)

Table 1 shows the sample's distribution along the five response categories. There is a large majority in favour of public healthcare: almost 54% 'totally agrees' with this. Adding also those who selected the value of 4 on the response scale, the share that is in support of public responsibility exceeds ¾ of the respondents. However, quite a large share is still against limiting the activity of private commercial involvement in healthcare: almost 37% of the respondents scored 1 or 2 on this statement, where 1 corresponds to "totally disagree".

As can be observed in Table 1, one of our dependent variables are strongly skewed. While the other is more normally distributed, we have chosen to recode both into dummy-variables for the purpose of the multivariate analysis. For both propositions we elected to assign the value of 1 to respondents who scored 4 or 5. Hence, both dependent variables thus have the same direction in terms of preferences for public-private mix for healthcare, with the value of 1 signifying higher preference for public healthcare.

2.2. Main explanatory variable: PHI

Our main interest here is in the association between having employer-provided private health insurance, PHI, and support of public health care. As noted above this group dominates PHI in all NHS countries except for Finland. By limiting the analysis to this group we also sidestep the question of whether people have PHI because their support of the public system is low, or whether their support for the public system decreases because they have PHI. In the latter case we would not know whether it is the view on private healtcare that affects the decision to purchase PHI or the other way around. Thus there would be endogeneity issues in the analysis. In the majority of cases PHI is a "mandatory" fringe benefit for the employee in the sense that it cannot be traded for higher wages. Furthermore, we believe that PHI will not be the factor determining choice of employer. Thus, prior to having PHI we assume that there would be no systematic differences in attitudes towards the public health care system among the group that eventually obtains PHI and those who do not. PHI was captured in the model through a dummy-variable for which the value of 1 was assigned to those who had acquired such insurance paid for by their employer (excluding those with privately paid PHI).

2.3. Controls

To account for possible confounding factors we included a number of control variables. A first set of variables reflect the respondents' health and their view of the health system. *Self-rated health* was captured through an item in the survey asking the respondents to "rate their own health in general" according to the categories 'very poor', 'poor', 'neither good nor poor', 'good' and 'very good'. We re-coded this into a dummy-variable where the value of 1 was given to those who reported the first three categories; i.e. those with poor health. *General satisfaction with the health system* is measured by a survey item with the following wording and a 5-point Likert scale as response format (1 = 'very poor', 5 = 'very good'): "All in all, how would you rate the quality of the health services in Norway"?

Table 2
Descriptive statistics for the variables in the analysis.

		N
Support for public provision of health services	0: 566 (21.4%) 1: 2074 (78.6%)	2640
Support for limitations of private commercial healthcare	0: 958 (36.7%) 1: 1651 (63.3%)	2609
PHI paid by employer	0: 1770 (85.0% 1: 313 (15.0%)	2083
Poor health	0: 1947 (77.2%) 1: 576 (22.8%)	2523
Overall view on service quality	1: 24 (0.9%) 2: 84 (3.2%) 3: 340 (12.9%) 4: 1716 (65.2%) 5: 469 (17.8%)	2633
University college / university degree	0: 2155 (83.3%) 1: 433 (16.7%)	2588
Income	1: 26 (1.0%) 2: 211 (8.5%) 3: 778 (31.3%) 4: 909 (36.5%) 5: 430 (17.3%) 6: 96 (3.9%) 7: 38 (1.5%)	2488
Age	Mean: 52.5 Min.: 16 Max.: 75 St. dev.: 13.97	2668
Female	0: 1160 (46.0%) 1: 1362 (54.0%)	2522

A second set of control variables reflects important *socio-demographic characteristics*. Education is measured through a dummy-variable which takes the value of 1 for respondents with university college or university as their highest education; i.e. a bachelor or master degree or higher. Income is captured through the total gross household income, measured in 7 intervals. Finally, age is included in the model through a continuous variable, while the dummy-variable for gender takes the value of 1 for female respondents.

The descriptive statistics for the variables in the analysis are presented in Table 2. Given that several of the independent variables in our model may be highly correlated, there is a potential concern for imprecise estimates due to large variance. However, collinearity diagnostics uncovered no such problems (not reported here).

3. Results

Table 3 reports the results from the multivariate analysis. Given that the dependent variables are dichotomous, the model was estimated via logistic regression. The estimates in the table thus express the odds ratios for being supportive of public provision of healthcare and of preferring stronger limitations on private commercial healthcare, respectively. In order to uncover the role of the two sets of control variables, we first entered self-rated health and view on service quality in a separate bloc, before including the socio-demographic controls in the final model. Also, since our data contains information about the geographic location of the respondents, we estimated a fixed effects-model with a set of dummy variables representing each of the 19 counties (with Oslo as refer-

Table 3
Results from logistic regression. Odds ratios, with 95% confidence intervals in parentheses.

	Support for public provision of health services			Support for limitations of private commercial healthcare		
PHI paid by employer	.65** (.49-.87)	.69* (.51-.93)	.84 (.60-1.18)	.47** (.34-.64)	.47** (.34-.66)	.52** (.39-.70)
Poor health		1.41 (.86-2.31)	1.42 (.83-2.42)		1.14 (.89-1.46)	1.00 (.77-1.29)
Overall view on service quality		1.56** (1.33-1.83)	1.52** (1.28-1.81)		1.59** (1.36-1.87)	1.55** (1.33-1.80)
University college / university degree			1.52* (1.07-2.16)			.96 (.74-1.26)
Income			.98 (.87-1.11)			.84** (.75-.93)
Age			1.01 (1.00-1.02)			1.00 (.99-1.01)
Female			1.24 (.89-1.58)			1.52** (1.24-1.87)
Constant	4.77**	.83	.44	.53**	.08**	.54
N	2062	1923	1696	2041	1904	1682

* p < .05.
** p < .01.

ence category) in order to control for possible confounding factors due to geographic variation (estimates for county-dummies are not reported in the table).

The bivariate relationship reported in the first column indicates that respondents with PHI are more likely to reject the proposition that the responsibility of providing health services should mainly be public. This relationship also holds when controlling for both health status and satisfaction with the health system, but fails to reach statistical significance when the second set of controls are included in the model. This means that some of the variation due to PHI was picked up by socio-demographic background. Yet, the reported odds ratio of 0.84 should still be interpreted as the most likely value, and a larger sample size might have yielded a statistically significant result. Observe also that the inclusion of the last bloc of control variables (the sociodemographic characteristics) reduces N because of missing values with more than 200 cases. A closer inspection of the data uncovers that this is mainly due to the gender variable, and a re-estimation of the full model with gender excluded returns an odds-ratio which is significant on a 10%-level.

Based on the results in Table 3 we calculated the probabilities of supporting public healthcare provision and limitations in commercial healthcare for those with and without PHI, respectively.[2] An average respondent holding a PHI has a 66% probability of supporting public provision of healthcare versus a 70% probability for a respondent without PHI. The difference in probabilities is naturally larger for the support of limiting commercial actors: 21% for PHI-holders versus 33% for those without PHI. In addition, we also calculated "most likely" and "least likely" cases for both dependent variables by imputing the values that gives the highest and lowest probabilities, respectively.[3] Hence, an older female respondent with no PHI, positive rating of health service quality, poor health, higher education and low income has a 78% probability of supporting public provision of health services, while a younger male respondent with PHI, negative view of health service quality, good health, lower education and high income only has a 51% probability of the same. The corresponding difference for support of limiting commercial healthcare is 34 percentage points: 47% probability for older, highly educated, female non-PHI-holders that are satisfied with the health services, of poor health and with low income, versus only 13% for respondents with the opposite characteristics.

For the other dependent variable, the reported odds ratios remain significant after all control variable enters the full model, which indicates that PHI holders are less supportive of limiting private involvement than respondents without such insurance are. Naturally, the association is weakened when self-rated health, health system satisfaction, SES and demographics enter the model, with the odds ratio changing from 0.47 ($p < .01$) in the bivariate model to .52 ($p < .01$) in the final model.

As expected, the analysis indicates that the perceived quality of the health services weighs in heavily when considering private versus public healthcare: those who are most satisfied with the health system are also the strongest supporters of public provision of healthcare, with an odds ratio of 1.52 ($p < .01$, CI = 1.28–1.81). Similarly, the view on private commercial involvement is also associated with how the health service quality is assessed: the better the health services are evaluated, the higher the support for restrictions on private commercial activity (OR = 1.55, $p < .01$, CI = 1.33–1.80).

The analysis also confirmed the relevance of socio-economic status: respondents with high school or university as their highest education are more supportive of public provision of healthcare than those with less education (OR = 1.52, $p < .05$, CI = 1.07–2.16). For the question of private commercial healthcare, however, income and not education is the significant predictor, and, notably, the direction is reversed: the better off respondents are, the less willing the respondents are to restrict such activity (OR = 0.84, $p < .01$, CI = .75–.93).

Finally, gender is also of importance for the view on private commercial actors: female respondents are significantly more likely to agree with limits on private activity than their male counterparts, with an estimated odds-ratio of 1.52 ($p < .01$, CI = 1.24–1.87).

4. Discussion

Our results corroborate earlier findings that support for public provision of healthcare is strong in Europe [1–3]: as many as ¾ of the respondents agreed with the proposition that the provision of health services should mainly be a public responsibility. Still, as many as 37% oppose limiting the activity of private commercial actors. In other words, there seems to be a penchant for "yes please, we will have both": there should be a role for private health services, but only within the limits of the public healthcare system.

Our results mean we cannot rule out that a market for collective parallel coverage PHI through employers may undermine

[2] This was done by calculating the predicted logits for PHI- and non-PHI-respondents and holding other variables constant by entering average values for health service satisfaction, income and age, and 0 for the dummy-variables (i.e., a person with good health, higher education and male gender). The following formula was then used to calculate the respective probabilities, where L equals the predicted logit: $\frac{1}{1+e^{-L}}$

[3] For income, age and health system satisfaction values that equals 1 standard deviation from the average value was used.

the support for the publicly financed health care. This is in line with the studies of both Hall and Preston [11] and Costa-Font and Jofre-Bonet [13], who found that the purchase of PHI reduced the propensity of individuals to support the NHS in the UK and Catalonia, respectively. However, their analyses were based on individually purchased rather than employer-provided PHI. As noted, the direction of causation may in this case go from the level of NHS support to the decision to purchase PHI. We did supplementary tests on the share of our sample who had purchased PHI individually, and the results supported the notion that those with PHI are less positive towards public health care provision (results not reported here). The relevance of drawing parallels between Norway, UK and Spain may also be limited by country specific experiences with and attitudes towards the public health care system.

The analysis furthermore indicates that having employer-provided PHI implies a higher preference for private commercial actors in healthcare. Obviously, in NHS countries the question of private healthcare is mainly a case of private versus public production within a system of public control and financing. Hence, it is only on the dimension related to production that the private hospitals are fully private. The state still exercises control through its sanction authority over the number of beds and the technical and professional standards in the private hospitals. One interpretation of our results would therefore be that employer-provided PHI does not alter the support for public health care, but strengthens the support for a "parallel private market". A question that warrants further study is whether employer-purchased PHI also signals a higher general willingness to pay for health care than is reflected in the level of public expenditures.

Furthermore, the role of socio-economic status for the demand for private health care is well established. Several studies have revealed that the purchase of PHI is determined by individual or family income, indicating the financial capacity to pay for private health care as important [13,24]. Similarly, other studies have identified the importance of income also for the use of private health care services [10,25,26]. Following from this, a fair assumption would be that socioeconomic status is important for the view on the public-private mix of healthcare, with the richest being more positive towards private solutions, and thereby less supportive of public delivery. Yet, while several studies have included socioeconomic status among the explanatory factors of public satisfaction with or trust in the healthcare system in general, there is still a lack of research that explain the preferences for private versus public healthcare by way of socioeconomic status. To our knowledge, the only previous study that has investigated this relationship is the Catalonian study by Costa-Font and Jofre-Bonet [13], who found mild support for the association of higher levels of income and lack of support for the NHS. Our results add to this, as the analysis showed that high income within the group that had employer purchased PHI was associated with less support for the introduction of limits on commercial private health services.

On the other hand, Costa-Font and Jofre-Bonet also showed that education had a positive effect on the likelihood of showing lack of support for the NHS, which was taken as corroborating the hypothesis of the 'revolt of the rich', since education is argued to be typically associated with higher levels of wealth. In our study, however, education works in the opposite direction: the highly educated are those most supportive of public provision of health services. This is in line with other Norwegian studies that found the well-educated to be more positive towards the public sector [27]. Again, possible explanations may be, first, a selection effect of those purchasing PHI individually in Catalonia and, secondly, that the Catalonian study included no control for satisfaction with the NHS.

The latter point may be particularly relevant, since dissatisfaction with the NHS should properly be distinguished from the dissatisfaction with the idea that health care should be publicly provided. Earlier studies indicate that it is not the concept of public provision, but rather dissatisfaction with the quality of the services, which leads to demand for private services. Besley et al. [9] found evidence from the UK that the quality of the NHS is associated with the use of the private sector: longer waiting lists have been found to be linked with higher levels of demand for private medical insurance. Besley et al. and Calnan et al. [10] also found evidence of a link between dissatisfaction with the quality of the NHS and private insurance purchase in the UK. Similarly, in a study by Burchardt and Propper [12] it appeared that it is the use of the public, as much as use of the private services, which shifts attitudes away from support of a universal NHS. This suggests that it is dissatisfaction with the quality of service, rather than the concept of public provision, which drives people into the private sector [8]. Our results corroborate such an understanding, since the overall view on the health system quality is positively related to support for both public provision of health services and for limitations of private commercial healthcare.

More surprising, however, is the lack of any relevance of self-rated health. A reasonable assumption is that health should be inversely related to the preference for private involvement in healthcare, since those of poor health typically have the largest need for health services [28], and would therefore face higher economic costs if going private. The survey data available for our study allowed us to test the importance of several important aspects of self-rated health (such as short-term health conditions and chronic conditions, as well as smoking behaviour, body mass index and average physical exercise), but the results obtained were mainly the same, with no significant effects of any of the indicators of health condition (results not shown here).

Finally, some weaknesses with our analysis need to be addressed. In our analysis we chose to exclude those respondents that reported that they had obtained PHI through private payment or a combination of private and employer payment. The share that reports private purchase of PHI is notably higher in our sample than in the general population. One possible explanation is, as noted above, that the survey was not distributed to a representative sample of the population. Adding the missing values on other variables, we ended up with around 1700 respondents available for the full model. However, a missing values analysis showed that the excluded respondents did not differ much from those included on the variables used in the analysis (results not reported here). Furthermore, we also re-estimated the models including the respondents with privately paid or combined privately-employer-paid PHI in the reference category, thus increasing the cases available for analysis to more than 2100, but this altered the results only marginally (results not reported here). We have chosen not to do a separate analysis of those with privately purchased PHI because the endogeneity issues limit the interpretation of such an analysis.

5. Conclusions

On the face of the results from this analysis we would only be moderately concerned that the growth in employer provided PHI would affect the support for the public health care system. One concern, however, is that this argument hinges on this mainly being parallel coverage PHI in the sense that it provides a broader range of providers and not necessarily a broader range of services. The fear of a two-tier system is less pronounced when it comes to waiting times for minor surgery or co-payments for physiotherapists than it is when it comes to health plans covering a full set of health care services. The introduction of such plans, however, would require a population (or employer) base that is not likely to be present in a

sparsely populated country such as Norway, as well as a substantial shift in the attitude towards private provision of services that seems unlikely in the present as well as foreseeable future political climate.

References

[1] Gelissen J. Worlds of welfare, worlds of consent? Public opinion on the welfare state. Leiden: Brill; 2002.
[2] Kohl J, Wendt C. Satisfaction with health care systems. A comparison of EU countries. In: Glatzer W, Below SV, Stoffgren M, editors. Challenges for Quality of Life in Contemporary World. Dordrecht: Kluwer Academic Publishers; 2004.
[3] Wendt C, Kohl J, Miscke M, Pfeifer M. How do Europeans percieve their healthcare system? Patterns of satisfaction and preference for state involvement in the field of healthcare. Eur Sociol Rev 2010;26:177–92.
[4] Alexandersen N, Anell A, Kaarboe O, Lehto JS, Tynkkynen L-K, Vrangæk K. The development of voluntary private health insurance in the Nordic countries. Nord J Health Econ 2016;4:68–83.
[5] Sagan A, Thomson S. Voluntary Private Health Insurance in Europe: Demand, Supply and Implications for Health System Performance. Copenhagen: WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies; 2015.
[6] Mossialos E, Thomson S. Voluntary Health Insurance in the European Union. Copenhagen: World Health Organization; 2004.
[7] Propper C. The demand for private health care in the UK. J Health Econ 2000;19:855–76.
[8] Propper C, Green K. A larger role for the private sector in financing UK health care: the arguments and the evidence. J Soc Policy 2001;30:685–704.
[9] Besley T, Hall J, Preston I. Private Health Insurance and the State of the NHS. Report. London: The Institute for Fiscal Studies.; 1996.
[10] Calnan M, Cant S, Gabe J. Going Private: Why People Pay for their Healthcare. Oxford: Oxford University Press; 1993.
[11] Hall J, Preston I. Public and Private Choice in Uk Health Insurance. Working Paper No. W98/19. London: The Institute for Fiscal Studies.; 1998.
[12] Burchardt T, Propper C. Does the UK have a private welfare class? J Soc Policy 1999;28:643–65.
[13] Costa-Font J, Jofre-Bonet M. Is there a 'recession of the wealthy'? Private health insurance uptake and National Health System support. Bull Econ Res 2008;60:265–87.
[14] Stambolovic V. Epidemic of health care reforms. Eur J Public Health 2003;13:77–9.
[15] Rothgang H, Cacace M, Grimmeisen S, Wendt C. The changing role of the state in health care systems. Eur Rev 2005;13:187–212.
[16] Maynard A, editor. The Public-Private Mix for Health. Oxford: Radcliffe Publishing; 2005.
[17] Magnussen J, Vrangbæk K, Saltman R, Martinussen PE. Introduction: the nordic model of healthcare. In: Magnussen J, Vrangbæk K, Saltman R, editors. Nordic Health Systems. Recent Reforms and Current Policy Challenges. Berkshire: Open University Press; 2009.
[18] Toth F. Healthcare policies over the last 20 years: reforms and counter-reforms. Health Policy (New York) 2010;95:82–9.
[19] Blank RH, Burau V. Comparative Health Policy. Basingstoke: Palgrave-Macmillan; 2014.
[20] NOMESCO. Health Statistics in the Nordic Countries. Copenhagen: National Board of Health; 2006.
[21] Finansnæringens hovedorganisasjon. 330 000 forsikret mot helsekø. Oslo, Finansnæringens hovedorganisasjon (FNO); 2012.
[22] Ådnanes M, Dyrstad K. Oppfatning av egen helse, helsetilbudet og prioritering i Helse-Norge. Oversikt og analyser basert på statistikk og opinionsundersøkelse i 2014. Research report. Trondheim: SINTEF; 2014.
[24] Costa-Font J, Font-Vilalta M. Preference for National Health Service use and the demand for private health insurance in Spain. The Geneva Papers on Risk and Insurance 2004;29:705–18.
[25] Papadakis E, Taylor-Gooby P. The Private Provision of Public Welfare: State, Market and Community. Brighton: Wheatsheaf; 1987.
[26] Taylor-Gooby P. The politics of welfare privatisation: the British experience. Int J Health Serv 1989;19:209–20.
[27] Sannes J. Støtte til behovsprøvde ordninger. In: Jenssen AT, Martinussen W, editors. Velferdsstaten i våre hjerter. Oslo: Ad Notam Gyldendal; 1994.
[28] Iversen T, Kopperud GS. Befolkningens bruk av helsetjenester. J Norwegian Med. Assoc 2002;122:2199–203.
[29] Alexandersen N, Anell A, Kaarboe O, Lehto JS, Tynkynen L-K, Vrangbæk K. The development of voluntary private health insurance in the Nordic countries. Nord J Health Econ 2016;4:68–83.
[30] Valtonen H, Kempers J, Karttunen A. Supplementary Health Insurance in Finland. Consumer Preferences and Behaviour, Helsinki, KELA Working Paper no. 65/2014; 2014. p. 5–55.