

# Expanded patient choice in Norway and the UK: Will it succeed?

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## 1. Introduction

In this paper we compare the development and impact of patient choice reforms in Norway and the UK during the 1990s and 2000s. Our main focus is on the 2000s reforms. During 2001-2005, a number of radical legislative moves expanded patient choice in Norway. A similar reform path was followed in the UK, what provides a relatively controlled context and conjuncture. Both countries have similar National Health Systems (NHS), and are engaged in mutual policy learning. Those shared structural and policy attributes facilitate comparative analysis, and make further policy transfers likely.

We defend that the 2000s expanded choice reforms in the UK and Norway can be seen as part of a second generation of European pro-choice policies, which do not assume that choice will automatically happen and result in improved efficiency. Rather, they focus on designing adequate micro-regulations and coherent reform packages as a way of guaranteeing that the required incentives for policy implementation are in place. Hence, we depart from the hypothesis that the actual pace and impact of choice reforms depends on their complex interactions with wider reform goals and detailed implementation mechanisms<sup>1 2</sup>.

Coherent with this, the paper has five main objectives, each addressed in a separate subsection. First, we analyze the evolution of choice reforms in both countries, and its 'goodness of fit' within broader reform packages. Second, we study the main trends in patient mobility before and after the reforms were approved. Third, we analyze the micro-level incentives and other policy instruments aimed at making choice happen. Fourth, we examine the available evidence on the impact of pro-choice reforms, based on individual microdata for Norway. Fifth, we discuss some policy proposals which could help advancing patient choice and improving its system impact.

## 2. Patient choice and health system reform

### 2.1. Defining patient choice

Patient choice and patient mobility are difficult to disentangle from each other both conceptually and empirically. We depart from Tessier's et al. conceptualization and measurement for the US<sup>3</sup>. They divide patient mobility in three different types: (1) forced, i.e. resulting from insufficient supply at the local level; (2) physician-induced, i.e. resulting from GPs' referrals preferences and hospital affiliations; (3) mobility due to patient choice.

**Figure 1. Patient choice and patient mobility**

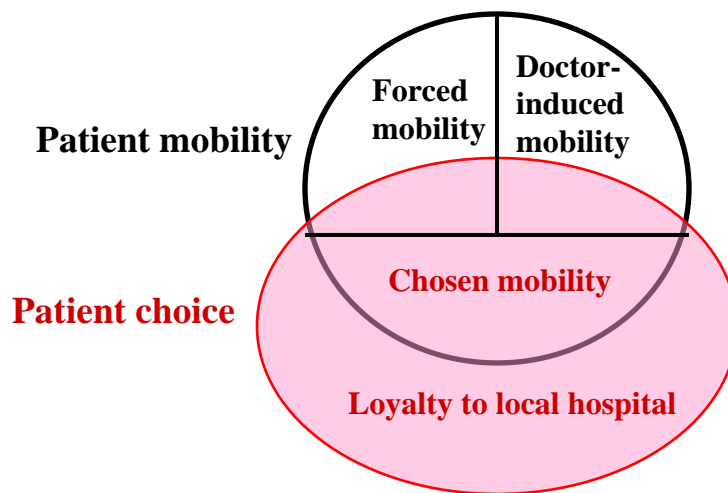


Figure 1 extends Tessier et al. framework and outlines our proposed definitions. As Tessier et al emphasize, part of (1) is the result of patient choice, as in elective surgery there is often some margin to choose the relative intensity of treatment (with less intensive treatment options often being available at the local level). The same can be defended in the case of (2), as a majority of patients in OECD countries defend that they share most decisions with their GPs, or decide on their own under GP advise<sup>4</sup>. Hence, it seems reasonable to assume that there is some empirically variable overlap between (1), (2) and (3). In addition, some patients choose to remain loyal to their local hospitals, i.e. remain immobile.

### 2.2. Expanding choice: first and second generation reforms

The first generation of patient choice reforms dates back from the 1940s and 1950s in some Social Health Insurance (SHI) countries. In National Health System, pro-choice reforms start in the early 1990s. The limited data existing on this period points to 1-10% of patients choosing to opt out from their local providers, including those who opt out to the private sector on self-funded basis<sup>159</sup>. As for the second generation, the Dutch and German reforms promoting free choice of insurer are pioneering moves within SHI

countries. Launched in the mid 1990s, they are still being re-designed and adjusted<sup>6</sup>. Within tax-funded health systems, the second generation started in the late 1990s, and focused on choice of hospitals. Spain and Italy enact reforms together with some incentives to boost activity in the late 1990s<sup>1 7</sup>. Norway and England launch comprehensive pro-choice reform packages from 2000. Scotland is an innovative latecomer<sup>8</sup>. Sweden and Denmark, which pioneered the first generation reforms, did only engage half-heartedly in the second generation<sup>1 2</sup>.

In the UK, first generation reforms started in 1989, and focused more on physician-induced mobility than patient choice per se. GP fundholders could make extra-contractual referrals, which accounted for only 2% of referrals and focused on emergency or tertiary services<sup>9</sup>. In Norway, a commission was appointed by the government in 1991, and a proposal for introducing a free choice of hospital entered the political agenda for the first time during 1993/94, including only patients who had exceeded the new waiting-time guarantee. A pilot on free hospital choice for all patients was established in one of the health regions from June 1994. After a two-year trial period, the pilot was evaluated, showing that only a few patients move, mainly due to lack of information and transportation costs<sup>33</sup>. After this initial trial period, new pilot studies focusing on information and the role of GPs started<sup>34</sup>.

As for the second generation, in Norway a new act expanding choice was passed in 1999, and became effective in January 2001. It allowed choice among NHS hospitals. From 1 September 2004, choice was extended to private hospitals and particular hospital units within multi-hospital trusts as well as to psychiatric care. New waiting times guarantees, activity-based financing (ABF), pro-competition regulation and expanded capacity were put into place during 1997-2000. In England, second-generation reforms were officially announced in April 2002, as an explicit policy transfer from Scandinavia. From April 2004, choice will be offered by GPs to patients which have been waiting for elective surgery for more than 6 months. From December 2005, choice will be expanded to all patients. During 1999-2001, an ambitious plan of capacity and expenditure expansion was designed and launched. Also, during 2003-5, ABF is progressively introduced, in parallel with expanded choice<sup>8</sup>.

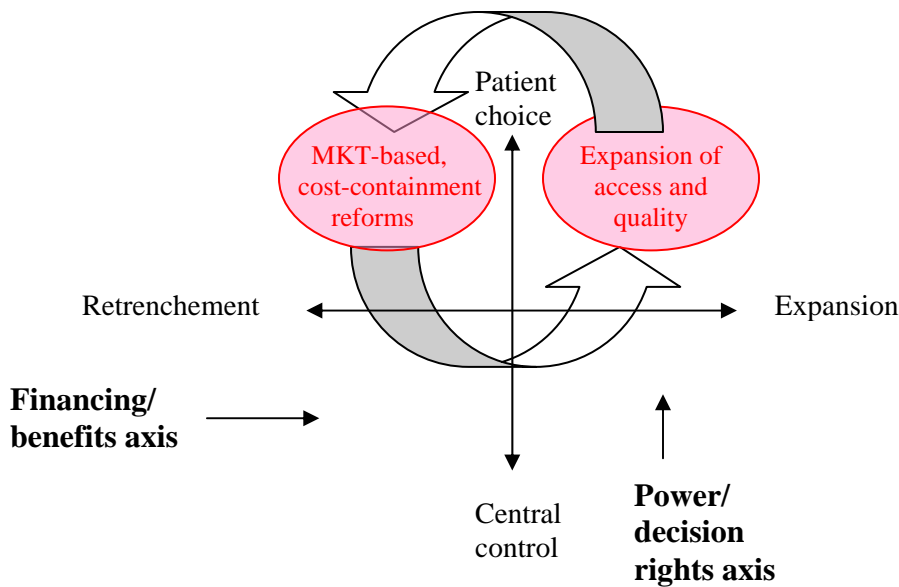
### **2.3. Patient choice, market-based reforms and benefits expansion**

As Vrangbæk and Østergren remark<sup>2</sup>, the two waves of patient choice reforms in NHS systems had very different, and somewhat contradictory, policy objectives. We extend on their framework by proposing that the first generation of pro-choice reforms was envisaged as an element of the early market-based reforms, mainly a means to achieve cost-containment via price competition, or expand productivity (without increasing costs) via waiting-times based competition. Hence, choice was launched in parallel with frozen or retrenched public financing and/or benefits. Those restrict the availability or accesibility of services, which in turn depresses effective patient mobility and choice<sup>3</sup>. In contrast, within the second generation, extended patient choice schemes have been increasingly linked in NHS countries to wider reform packages aimed at decreasing waiting times<sup>1</sup>. Choice started to be considered as a patient right, and combined with

policies to expand service capacity, productivity and accessibility, and therefore, public expenditure and benefits.

The evolution of health policy in both Norway and the UK suggests a cycle of policy from market-based pro-choice reforms, through reinforced central control and cost-containment, towards expansion-oriented patient choice reforms in Norway and the UK expanded supply and choice. This suggests that there maybe a long-term policy cycle which combines choice with extended or rationed benefits depending on the economic and electoral conjuncture (Figure 2).

**Figure 2. Patient choice and other health system reforms**



In Norway, two other reforms have been introduced more or less in parallel with enlarged patient choice<sup>1</sup>. Ownership of hospitals was transferred upwards from 19 counties to central state in 2002. Hospitals were organised into health enterprises (trusts), with 5 regional agencies (RHE) overseeing them. Second, a patient list system was introduced in primary care in 2000, in order to reinforce GPs' role. In the UK, others reforms launched in parallel are regional devolution, and delegation of commissioning and other powers to PCGs.

### 3. Spatial mobility and patient choice: the figures

In this section we present the macro-level developments in patient mobility between 1999 and 2003 in Norway, that is, in the period immediately before and after the choice reforms came into effect in 2001. The analysis mainly focus on changing patterns in mobility among elective inpatients, including day care and day surgery. A patient is

defined as being mobile when s/he is treated outside a predefined geographical area, such as for instance the local hospital catchment area.

**Figure 3. Evolution of patient mobility in Norway, 1999-2003**

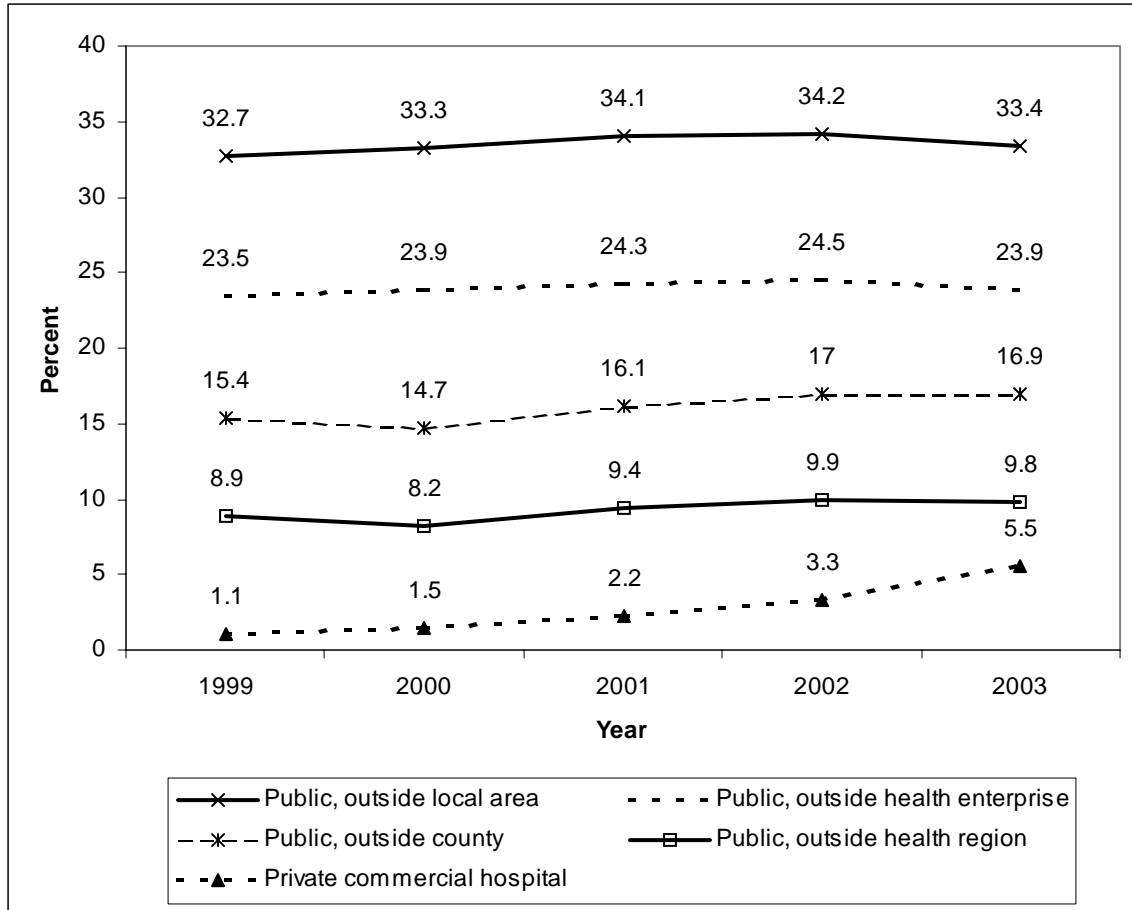


Figure 3 shows that during the period one in three patient contacts is with a public hospital different from their local one. About one out of four elective inpatient contacts is with a hospital outside the local health enterprise. In addition, some 3-4 % of acute, non-elective hospital inpatients were also mobile during the period. These figures can be understood to represent what we initially termed either forced or induced mobility, which remains fairly stable, with a slight decline after 2001. As for patient mobility outside the patient's home county and health care region, we observe a slight increase after 2001. In NHS systems, here is where we would expect to find an increase in mobility due to the patients own choice, as administrative barriers and transportation costs start to be non-negligible. The only significant change in mobility has been towards private for-profit hospitals. While in 1999 when about 1 percent of all patients were treated by private providers, they now treat 5.5 percent of elective inpatients in Norway. Preliminary figures (not presented here) from the first nine months of 2004, suggest a further increase in the share of patients treated outside public hospitals.

The relative small growth in patient mobility in relative terms can be partly a result of the significant raise in activity experienced during 1999-2003. For elective inpatients, the total number of patient contacts has gone up by about 181.000, from 458.000 to 639.000. The number of patients treated outside their own region has risen from 40.500 to 62.400 patient contacts. The number treated outside their home county has increased by 37.000 (from 70.300 in 1999 to almost 107.700 five years later). The most marked growth, however, took place in the private sector in which the number of patient contacts almost doubled from 18.404 in 2002 to 35.095 the year after. In addition, we are unable to measure mobility within the Oslo region and county due to data problems (see Annex), what can further depress our mobility estimates.

#### **4. Micro-regulations, incentives and other supporting mechanisms**

Neither regions nor hospitals can, as a general rule, refuse to treat, or give less priority to, patients from other regions in Norway. The micro-regulations do however allow hospitals to reject new patients under exceptional circumstances, whenever the needs of its assigned populations are not been adequately addressed, e.g. due to long waiting lists. Will this lead to implementation gaps, patient selection and cherry picking? The answer depends on two other critical questions, namely: (1) which are the incentives for hospitals to admit free choice patients? And (2) Do hospitals have sufficient capacity to attend new choice patients timely? Question (1) has to do with the micro-regulation of choice and the way hospitals are financed. Question (2) is directly related with the issue of access and the problem of waiting times. Both questions refer to supply-side factors. Whether or not choice will happen depends also on factors on the demand-side, such as (3) available information and patients' willingness to choose, and (4) GPs' advice on choice of hospital. We examine each of these issues in turn. Some demand-side factors, such as waiting time guarantees, and subsidized transportation costs, are discussed within sections 4.1. and 4.2. below, which focus on related supply-side mechanisms.

##### **4.1. Which are the incentives to make free choice happen?**

Activity-based financing (ABF) constitutes a powerful incentive to make choice happen, as it implies that the more patients are treated, the more hospitals' income will increase. In Norway, ABF was introduced in the allocation of hospital funds to county councils from 1 July 1997, as a necessary pre-condition to fulfil the waiting list guarantee adopted by parliament in 1990. A fraction of the block grants to the county councils was replaced by a matching grant depending on the number and composition of hospital treatments. At first, 30 % of the DRG-based cost of a treatment was refunded from the state. From 1 January 1998, the percentage was increased to 40% and from 1 January 1999, to 50%<sup>10</sup>. In 2005 it is set to 60%. Counties were free to decide on how to allocate resources to hospitals. It turned out that 15 of Norway's 19 county governments readily introduced ABF to fund hospitals in 1997, and the remaining 4 did so during 1998-2000<sup>11</sup>.

There are few if any financial constrains for patients in Norway to exercise their rights, as they only has to pay an small fraction of the actual transportation costs (limited to a maximum of € 50). The remaining costs have to be paid by the region to which the

patient is assigned geographically. The idea is to give incentives to regions to improve the performance of their local hospitals so that their patients do not opt out. But these increased expenses can also make the RHEs somewhat reluctant towards the reform. Given the long distances involved in the case of Norway, in some instances choice will entail considerable costs, especially for regions in the North. As they are also among the poorest, extended choice may exacerbate equity problems. Data on the period 2001-3 shows that the costs per mobile patient for the RHEs vary from €10 (South), to €200 (North).

In England, some important restrictions derived from the micro-regulation of choice are that private or overseas hospitals can only be chosen if their fees are below the national average public tariff; and that travel costs will not be covered for all patients. This is in spite of the concern expressed by patients and GPs in the pilot studies preceding the enactment of the scheme. ABF financing started to operate in April 2003, and was also explicitly adapted from the Scandinavian experiences, and by 2005 it should already account for 60% of total funding. Full implementation is scheduled for 2008<sup>9</sup>.

Patient choice can not be seen in isolation from other changes that have taken place in Norway in the same period, often designed as integral elements of market-based reforms, which also condition its impact on the health system. The most prominent of these changes are hospital mergers. During 2002-3, about 70-80 hospitals plus some smaller institutions were re-organized into 25 health enterprises<sup>11</sup>. Hospital concentration may be a way of obtaining other goals such as cost containment. It does, however, de facto mean a reduction of possible alternatives to choose. This trend was also acknowledged by the Parliament when enacting the recent amendments to the Patient Right Act. In England, 99 mergers of hospital trusts and other providers took place between 1997 and 2002<sup>12</sup>. At present, there is no micro-regulations in England to prevent that trust mergers curtail patient choice of hospital.

#### **4.2. Do hospitals have sufficient capacity to attend new choice patients timely?**

During the last decade, physician numbers have increased in all OECD countries but Canada and Sweden; day and long-term care facilities have expanded; hospital beds have decreased; and hospital productivity has tended to increase. In addition, in both Norway and the UK, significant expansions of available capacity through contracting out private and foreign hospitals, and expanding public staff and facilities, have been launched during the last years, which are of critical importance to make choice feasible. These supply-side developments have been driven in turn by significant demand-side factors, such as the expansion of patients' rights via waiting-time guarantees (WTG) and expanded choice<sup>1</sup>.

Norway, Sweden, England and the Netherlands pioneer the introduction of WTG<sup>1</sup>. In Norway, they are introduced in 1990 (focusing on treatment within six months), and considerably extended in 2001 the guarantee was considerably extended. Patients were now given the right of having their health situation assessed within 30 days. In the UK, as in Sweden, six month WTG were introduced in 1992. In both countries, the impact of the

new regulations was mixed, with WT resuming their growth after a short period of decline, and doctors reporting that they interfered with clinical prioritization criteria. To avoid the later, new microregulations establishing as WT targets that the WTG are fulfilled for most, but not necessarily all, patients (eg 80%)<sup>1</sup>.

### 4.3. Patients' willingness to choose and the critical issue of information

Previous research on the US (see Box 1) suggests that: a few categories of patients are interested in opting out their local providers; they have specific information needs; new information transmission tools and methods, which are targeted to specific patient groups, should be designed in order to make the most out of patient choice<sup>13 14 15 16 17 18 19 20 21 22 23 24 25</sup>.

#### Box 1. Research on the US suggests that...

- 1. Patients forced to choose a new provider (due to change of residence, or retirement of previous physician), patients who are unsatisfied, and chronic patients, are interested in, and do make effective use of, information oriented towards choosing a new provider<sup>13 14</sup>
- 2. Information should be adapted to different audiences<sup>15</sup>; specially, chronic patients, less educated patients and ethnic minorities are likely to have special needs<sup>16</sup>. For instance, chronic patients need process rather than outcome indicators, given that the final outcomes of chronic care are only evident after long periods of time<sup>17</sup>
- 3. Methods other than league tables or practice profiles can be effectively used to target information. Targeted individual counselling to patients interested in choosing a new GP obtained good results<sup>18</sup>; and group-produced customized information by which a number of patients engage in lengthy, in-depth group discussions with a doctor and a nurse has worked well in related fields like lifestyle counselling<sup>19</sup>
- 4. When decisions about choice of provider are framed as directed to avoiding risks (rather than to obtaining better quality of care), patients' comprehension, valuation and use of performance information increases<sup>20</sup>
- 5. In areas with intense competition among providers, report cards are used and have an effective impact<sup>21</sup>
- 6. Patients are selective in using performance indicators, and focus on those more interesting to them<sup>22</sup>
- 7. Consumers want information which is provider-specific<sup>19</sup>
- 8. Comparisons among providers from a same local area are preferred over national comparisons<sup>23</sup>
- 9. Utilization and choice patterns seem more related to service availability at the community and group practice level (e.g. ratio of physicians per pop.) than to different practice styles among physicians<sup>24</sup>
- 10. All stakeholders should be involved in the development of information instruments<sup>14 25</sup>

In addition, recent evidence on patients' attitudes and information tools in the UK (Box 2) emphasizes that<sup>26 27 28</sup>: there is widespread support for choice as well as for customized performance information among patients; league tables are useful for some indicators but contextualized, background information is given priority. In Norway, the available data also suggests that choice is widely appreciated as an end in itself, with 73% of citizens being in favour of its introduction in 1998 (as compared with 93% for the GP list system; and 60%-50% for expanded competition and private insurance). As for information, there

has been only limited experimentation with web-based league tables and a free telephone line starting in 1998-2000. However, previous evidence suggests that this approach has limited impact unless GP direct guidance to patients is used as a complement<sup>29</sup>. There is a lot to be learned in this field from the UK, which starting experimenting with league tables and other information tools in the mid 1990s; and passed explicit regulation mandating GPs to offer choice of hospital to patients, and support them in making it feasible (see next section). Also, the policy transferability to the EU of the very interesting US policy lessons should be investigated further.

**Box 2. The initial evidence on the UK suggests that<sup>26 27 28</sup>:**

- 11. Patients agree that performance should be measured
- 12. Few patients have been exposed to performance data and other information tools yet
- 13. Many patients initially react negatively to league tables, but after getting familiar with the material, most support that performance indicators should be collected and published
- 14. Patients want detailed, customized information about local services rather than standardized, generally comparative information
- 15. Dr Foster type of guides, which add detailed descriptive reports of providers to comparative indicators, frame comparisons at the local level, and have well-designed presentation formats are preferred over the Department of Health league tables-only approach; also, the independence of Dr Foster organization from government control increases the credibility of the information
- 16. Patients are more interested in comparative information about waiting times, physicians' special interests, clinical experience and success rates; and less interested in issues such as mortality rates.

#### **4.4. The involvement of GPs**

A specific feature of health care is that often a joint patient-physician demand is involved, due to the marked asymmetries of information, and the centrality of GPs and other first contact physicians in the process of defining needs and preferences for specialist care. This seems clearly the case as for hospital choice. A recent European survey confirms that GP advice is considered by patients the main and more trusted source of information<sup>4</sup>. Therefore, in order to make the most out of patient choice of hospital, a critical requirement is that primary care has enough power and capacity to assume new roles in shared decision-making and patient advice.

In the capacity and power resources of GPs are not expanded prior to the expansion of their role in patient choice of hospital, excessive workload could lead to lowered professional morale and eventually an implementation gap. In 2003, almost 90% of GPs in the UK feared that increased workload will result from government plans of implementing patient choice of hospital starting in 2005<sup>33</sup>. However, 65% had positive attitudes towards offering choice to patients. In 2003-4, only about 30% of GPs in Norway held a positive attitude towards the reform. The relatively negative initial attitudes of Norwegian GPs, could reflect similar concerns about increased pressure on them. In fact, excessive workload (together with the no. of years worked as a GP, and lack of access to internet) constitutes one of the main predictors of GPs having a negative

attitude towards choice of hospital. Even if the available evidence points to insignificant increases in mean consultation time for choice patients<sup>33</sup>, fears of increased workload can prevent GPs from involvement in reform implementation. The best hospital consultants have reasons to be similarly worried, as they would probably attract a great deal of the new patient flows. No incentives are in place to compensate professionals for the higher workload expected, what cast doubts on the feasibility of adequate reform implementation.

In spite of GPs' reluctant attitudes in Norway, 48% of the doctors reported that the introduction of the reform had made them change their referral patterns to some extent, and only 9.2% had not changed their referral pattern at all. Empirical analysis shows that the factors affecting the likelihood of GPs offering and authorizing referrals to a hospital different from the local one are the following. On the supply-side, long waiting times, high infection rates and perceived low competence at the local hospital have positive effects; while a long travel distance to an alternative hospital has negative effects. On the demand side, patients' preferences for a quick treatment have positive effects, while preferences for treatment home, old age, and low functional ability are negative predictors. Patients' gender and education has no effects. In the UK, an official 2003 pilot prior to the introduction of choice suggests that around 25% of GPs offered choice to all or most patients, and that they were more likely to have a positive effect towards the reforms than other GPs.

## **5. The impact of patient choice**

### **5.1. Who chooses? Determinants of choice at the individual level**

Most empirical research on hospital choice takes Andersen's conceptual model from the 1960s as their theoretical point of departure<sup>30</sup>. Since the late 1960s this theoretical framework has been developed further. Here, we base our empirical analysis on the contribution of Kurz and Wolinsky<sup>31</sup>. The two authors argue, much in line with Andersen's initial model, that four sets of factors is likely to influence patients' decision of which hospital to be treated at. They distinguish between predisposing (e.g. demographics and social characteristics), enabling (financial resources), the patient's need for medical care (e.g. perceived needs/self rated health), and previous utilization of health care services. Another vein of research has focused more upon the impact of geographical distance (i.e. travel distance) upon hospital choice. Since one of the aims of the free choice reform was to reduce the geographical differences in access to hospitals, we have also included some measures of the patients travel time in our empirical model. In this analysis we limit ourselves to investigating the impact of the individual level (patient) characteristics on choice.

Multivariate analysis of individual microdata on patients treated outside their local hospitals in Norway (from the SINTEF survey), suggests that individual characteristics of the patient are weak but still significant predictors of hospital choice, with the exception area of residence (see Table C in the Annex for more details). Some 40% of patients reported to have chosen to move (see Tables A and B in the Annex for a description of

the variables and the bivariat relations among them). After having controlled for all the other variables in the model the only significant difference with respect to education is the one between those having completed a university degree and those with primary education. Students have a higher probability to choose hospital compared with those currently working. A significant negative association remains between frequent use of services and choice; and between self-rated health and choice. Having to spend the night as a part of the trip to the hospital, and the time trend variable also remain significant.

Norwegian data suggests that healthier and better educated patients are more likely to make effective use of their choice rights than other patients, what raises equity concerns. In the UK, a public consultation was conducted during August-December 2003 in order to anticipate the potential dangers, and elaborate on the feasible policy mechanisms which could be put in practice to address them. The resulting report, *Building on the best – choice, responsiveness and equity*, published by the Department of Health, can offer important lessons for Norway.

## **5.2. Efficiency, access, quality and satisfaction**

As for the first generation reforms in the UK, the evidence on the effects of GP fundholders' choice of hospital on behalf of their patients points to considerable reductions in referral costs, hospital prices, and waiting times for mobile patients. However, this could be at the expense of some loss of quality, as apparently hospitals with more competition potential tended to display higher mortality rates in England<sup>8</sup>. In Norway, as in other Scandinavian countries, first generation policies and pilots had apparently little effect on mobility, productivity or access, probably due to lack of information and incentives as well as scarce GP involvement<sup>34 35 2 36</sup>.

As for second generation reforms, in Norway hospital production increased considerably after the introduction of ABF, and later extended choice. For inpatients measured in DRG-equivalents there was an average yearly increase in hospital activity of 3.2 per cent in the period from 1997 to 2000, compared with 2.0 per cent per year in the period from 1992 to 1996. From 2001 to 2003 the average yearly increase measured by DRG-equivalents exceeds 6 per cent. A consequence of the increased activity is a reduction in waiting time. Reaching a top in year 2000 when waiting time for elective treatment was app. 240 days (average waiting time for patients waiting for treatment), waiting times have decreased to a level of 88 days by the end of 2004 (see Figure A in the Annex for more details). In contrast, in England and Sweden, where ABF was not in place, the initial results obtained were unsatisfactory<sup>1</sup> (see section 4.2). As expenditure expanded rapidly during the early 2000s, WT decreased faster.

In Norway, there is also evidence that patients who are offered choice are more satisfied even if they opt to remain at their local hospital. However, six month after expanded choice was enacted, citizens' perceived self-efficacy in choosing hospital was still markedly low<sup>37</sup>. In spite of that, 23% of patients expressed their interest in freely choosing hospital in 2002<sup>38</sup>. In the UK, a pilot conducted in 2003 shows that patients who were offered choice by their GPs have a high perceived self-efficacy as for their capacity

to choose hospital, and higher satisfaction levels. This is in spite of the fact that most patients chose to remain at their local hospital<sup>9 33</sup>.

## **6. Which are the issues at stake?**

### **6.1. The policy issues**

Patient choice of hospital can be defended as a right (i.e. an end in itself), or as a means to achieve other system goals. As a democratic right, it requires expanded public coverage, and improved access. It is also considered as one of several possible market mechanisms geared towards greater competition, and therefore higher efficiency (Saltman and von Otter 1995). Patients are expected to choose the best performing hospitals; then, if money follows patients, efficient providers will be rewarded and inefficient ones will lose business. The double nature of choice as a right and as an efficiency driver also explains the broad consensus across stakeholders on its desirability.

But it also builds up a certain contradiction of policy goals. The expansion of patient rights is likely to increase expenditure (and also allocative efficiency); in contrast, market competition often seeks cost-containment as a critical long-term goal. A more cost-efficient use of hospital capacity in turn often requires longer WT, which reduce access and curtail choice. In addition, there are reasons to believe that, unless properly accompanied by complementary regulation, patient choice can also have unintended negative effects upon system performance. First, patients can find difficult to make sound choices on their own, given asymmetric information. Second, and as feared by professionals, choice can involve higher workload for already overloaded GPs. Recent research in the UK suggests that even if the workload on GPs does not apparently increase significantly, the information and management support schemes can be difficult to design and costly to run. Third, there is a trade-off between choice and continuity of care which can be especially detrimental for chronic patients. Fourth, sicker and less educated patients can find significant barriers to make their choice rights effective. Fifth, poorer regions can see their resources drained, as a higher proportion of patients are likely to opt out to the local hospital to other regions.

A more profound objection to patient choice is that the mechanisms triggered by competition are unlikely to foster structural changes in a market like public hospital care, characterized by very high set-up costs; substantial economies of scale, scope and learning; strong loyalty of communities to their local hospital; and relatively standard processes and products. As it has been emphasized in the educational sector, “the best schools cannot be stretched like elastic”<sup>39</sup> to make room for more children. In addition, the option of forcing inefficient hospitals out of business is not fully credible, especially in tax-funded systems in which they are often publicly owned. Given those constraints, and as originally remarked by Hirschman<sup>40</sup>, given patients the right of exit, so that they can opt out from their local hospitals, can interfere with other parallel change-promoting mechanisms such as voice and loyalty, therefore reducing the prospects that the less efficient hospitals could see their performance improved.

## 6.2. Policy lessons and proposals

As for the mechanisms required to make the best out of choice, (a) expanded capacity, (b) economic incentives linked to activity, (c) information transmission tools, and (d) GP advice, emerge from the analysis as key complementary policy instruments. Norway pioneers in 1997 the nation-wide introduction of (b) ABF; together with complementary measures (a) to expand capacity such as expanding patient choice to private and foreign hospitals in 2000-2002. In the UK, the emphasis is first placed on (c) information tools and (d) GP advice. As a result, there are already available innovative instruments in the field of information, such as the experimental guides and hospital cards to inform patient choice of hospital recently designed by Dr Foster and the University of Nottingham, and commissioned by the Department of Health<sup>41</sup> based on an evaluation study of the needs and barriers to information use by patients in primary care settings<sup>33</sup>. Also, the role and powers of GPs has been extraordinarily strengthened during the last decades, and specific regulations are in place which mandate that GPs offer choice of hospital to all patients.

The fact that among the four main pre-conditions for expanded patient choice, Norway focused on the first two (a-b), while the UK on the other two (c-d) has quasi-experimental advantages for hypothesis testing and policy transfer. The data examined in sections 3 and 5 suggests that pre-conditions a-b are more effective in making expanded choice happen, while minimizing the risk of decreased equity or access; and that pre-conditions c-d are more critical to guarantee that choice has a positive impact on other critical health system goals such as productive efficiency, quality, patient satisfaction and empowerment. Last, but not least, other comparative research suggests that there is a need to introduce incentives and other strategies to reinforce patients' autonomy, voice and loyalty within health care, in order to counterbalance some of the adverse unintended effects of patient choice<sup>2</sup>.

In the UK, the Scandinavian example, was taken into account in designing an ambitious plan of capacity and activity expansion for the period 2002-2004. Given the pioneering role of Norway, and the marked structural and policy similarities with England, data on the course and impact of reforms can be of great utility for the challenges ahead. In Norway, some of the key policy issues which remain undressed relate to the role of GPs: primary care is still governed by municipalities, what makes integration with other levels of care problematic; waiting lists in primary care are long, what suggests problems of under-capacity; and there is no formal obligation of GPs to offer, and provide advice on, choice. In addition, experimentation with information tools has only started, and mainly focused on web-based information oriented to GPs. In both realms, the UK experience offers important policy learning value for Norway (see section 4).

## 7. Conclusions

The analysis carried out in this paper has tried to cast new light on the issue of choice by formulating new analytical and policy proposals based on a comparative analysis of recent data on Norway and the UK. The comparative method helps us to isolate

intervening mechanisms and analyse impact. A summary of our results and policy proposals is displayed in Box 3.

Research on of patient choice is still scarce and plagued with important conceptual, measurement, and data problems. Confusion between mobility and choice, little knowledge on intervening mechanisms, and lack of official data on the magnitude and impact of choice, has been the main obstacles to analyze the phenomenon in the past. During the last few years, however, knowledge and data have expanded rapidly.

Some proposals for further research are as follows. On the one hand, and in spite of the progress made, often detailed data analysis is still lacking; and some basic analytical issues still require empirical and conceptual clarification. On the other hand, the amount of data and knowledge already accumulated on the issue calls for more specific, sophisticated research strategies. Specific, in that the focus is on comparing selected groups of patients, specific DRGs, different incentives to boost activity and capacity, and diverse information transmission methods. Sophisticated, in that a control group and enough follow-up time, are allowed for.

A research evaluation program has been launched within the Department of Health Management and Health Economics at the University of Oslo. Several databases with detailed microdata are available which can be combined to study the magnitude and effects of choice (see Annex). A series of comparative studies on patient choice in Europe are underway as part of the HORN research programme.

**Box 3. Summary highlights**

- From September 2004, Norwegian legislation on patients' choice became one of the most generous in the world; in the UK a parallel reform path has been followed, which will be completed in April 2005
- In order to make choice happen and have the expected results, expanded capacity and incentives to increase activity are required in overloaded NHS systems such as Norway and the UK
- Activity-based financing was introduced in 1997 in Norway, and capacity expansion started also earlier, offering important lessons for the UK
- Fears of increased pressure on professionals and patients' difficulties to operate choice can hinder implementation
- Hence, other complementary tools would be required to make the most out of hospital choice, such as a strengthened powers and capacity at the primary care level and new information transfer tools; the UK can offer key policy lessons in these fields
- The right of opting out should not run counter to other improvement mechanisms, such as patients' voice and loyalty

## ANNEX

### 1. Data sources for Norway

#### *Data used in section 3.3:*

The data used in the macro level analysis was taken from the Norwegian Patient Register (NPR). NPR was founded in 1997 by the Ministry of Health and Social Services, who owns the register. NPR is run by the research institute SINTEF Health. NPR collects and verifies patient data from all public somatic hospitals and psychiatric institutions in Norway, as well as from some private hospitals. The register includes data on all hospitalizations at somatic hospitals (24-hour hospitalizations and outpatients), births registered at county delivery rooms in addition to some outpatient treatment at somatic outpatient departments. Furthermore, the register contains patient data from psychiatric institutions for adults as well as for children.

#### *Data used in section 4.4*

A cross-sectional survey with a self-administered questionnaire was conducted among all GPs in Norway during the winter 2003/2004. The survey was carried out as a project of collaboration between the Research Institute of the Norwegian Medical Association and the Department of Health Management and Health Economics at the University of Oslo. The questionnaire was sent to 3388 GPs. After one follow-up round 1633 questionnaires were returned, giving us a response rate of 48.4 %.

#### *Data used in section 5.1*

A cross-sectional survey with a self-administered questionnaire was conducted among Norwegian patients during summer and fall 2004. The survey was carried out in cooperation with the SINTEF Research Institute in Oslo, and was (in part) financed by the Norwegian Ministry of Health. The questionnaire was sent out to a sample of patients who had been treated at a hospital during the last quarter of 2003 or the first quarter in 2004. The sample consisted of 4000 patients where 3000 had not been treated at their local hospital and 1000 were treated locally. After one reminder we obtained an answer back from 1678 patients, giving us a final response rate of 47 %. In the analyses below we have included respondents aged 15 years and above, giving us a sample of 1.488 patients.

## **2. Methodological and data problems**

Even though we have been able to describe the development in patient mobility during the past five years, some present and future methodological and data problems has to be addressed. First of all it should be noted that during the past few years several reforms has taken place more or less simultaneously within the Norwegian health care system. Among these are the recent hospital ownership reform (i.e. the central governments takeover of the hospitals from the counties from 1. January 2002). This reform raises some particular challenges with respect to analyzing data on patient mobility over time (i.e. the number of possible “destinations” for the patients has been altered). The main reason for this is the creation of larger hospital enterprises, often consisting of several hospitals each. The process of hospital mergers implies that the number of “units” in our data set is also changing. In the analyses presented above, we have “overcome” this problem by using the pre 2002 hospital structure. The data for the transitional periods of 2002 and 2003 have still been collected for the same hospitals as prior to the reform. In the future, however, this problem might become more sever. Secondly, there has been a redrawing of the health care enterprises geographical catchment areas. This development has mostly taken place within and in the close vicinity of Oslo. The redefining of catchment areas will represent a greater problem for future analyses, as most of them have come into effect in 2004, a year which we have not included in the analyses.

The first, and perhaps most important data limitation, is the fact that we cannot distinguish empirically between the three types of patient mobility presented in the introduction of the paper. Thus, we are not able to determine on the basis of these register data whether the observed increase in inter-county or inter-regional mobility is the result of a more patients using their right to choose or whether it is forced mobility that has changed. Secondly, we would expect the patient mobility to be greatest in and around Oslo. In Oslo there are four large hospitals (in addition to the National Hospital), each with their own geographical catchment-areas, situated in close proximity to each other. Unfortunately, we do not have access to a variable describing the patient’s exact area of residence within the capital, which would have allowed us to fully explore the mobility taking place within the municipality of Oslo.

### 3. The individual determinants of choice in Norway

Table A contains the description of the data material. 41.7 per cent of the participants in our sample reports to have chosen hospital where they were treated. It is, however, important to remember that the majority of the respondents were drawn from a sample of patients treated outside their local hospital.

**Table A. Means, Standard Deviations (S.D), and coding of the variables**

Characteristics	Coding	Mean	S.D
Age	Actual number of years	48.9	18.2
Sex	0 = Male 1 = Female	0.55	0.50
Area of residence	0 = Rural 1 = Urban	0.38	0.49
Education	1 = primary education 2 = secondary education 3 = lower university degree 4 = higher university degree	2.68	.96
Labor Force participation	1 = Working 2 = Pensioner 3 = Student 4 = Social support beneficiary	1.38	0.78
Income	Income in 7 categories	3.56	1.45
Previous health care utilization	An additive index made up by the number of GP consultations during the past 12 months and the number of hospital admissions during the same period.	2.66	1.03
Self Rated Health	0 = Bad/Not so good 1 = Good/Very good	0.62	0.48
Travel time to hospital	1 = Less than hour 2 = 1-2 hours 3 = 3-4 hours 4 = 5-8 hours 5 = More than 8 hours	2.24	1.27
Stay over night – long travel	0 = No 1 = Yes	0.18	0.38
Year of treatment	1 = 2003, 2 = 2004		
Hospital choice	0 = No 1 = Yes	.417	.49

Table B reports the bivariate relationship between the variables in the model. The strength of the bivariat associations are measured by the crude (i.e. unadjusted) O.R. We also report the 95% confidence interval (C.I) for the estimates.

**Table B. The bivariate relationships between the independent and dependent variables**

Characteristics	N	Crude O.R	C.I
<i>Demographics:</i>			
Age	1488	1.01	(0.99-1.01)
Sex	1488	1.31	(1.06-1.63)
Area of residence	1488	1.12	(0.91-1.40)
<i>Social characteristics:</i>			
Education – primary	1367	1.00	
- Secondary		1.44	(1.03-2.01)
- Lower University		1.71	(1.21-2,41)
- Higher University		2.08	(1.46-2.94)
Labor Force participation - work	1430	1.00	
- Pensioners		1,28	(0.95- 1.71)
- Students		1,24	(0.86-1,76)
- Social support beneficiary		0.86	(0.66-1.13)
Income	1405	1.06	(0.98-1.14)
<i>Heath related variables:</i>			
Previous health care utilization	1339	0.85	(0.76-0.94)
Self Rated Health	1428	1.26	(1.01-1.57)
<i>Travel time:</i>			
Travel time to hospital	1422	1.07	(0.98-1.17)
Stay over night – long travel	1402	0.52	(0.39-0.68)
<i>Time effect:</i>			
Year of treatment	1488	1.28	(1.03-1.59)

The results from the bivariate analyses show that gender is the only significant variables among those describing the demography of the patient. Female patients are more likely to choose hospital than male patients. Among the measures of social position education is the only significant variable in the model. At the same time education show an interesting pattern, as higher levels of education increase the probability of the patient choosing a hospital. Even though the effect is not significant, social support beneficiaries are less

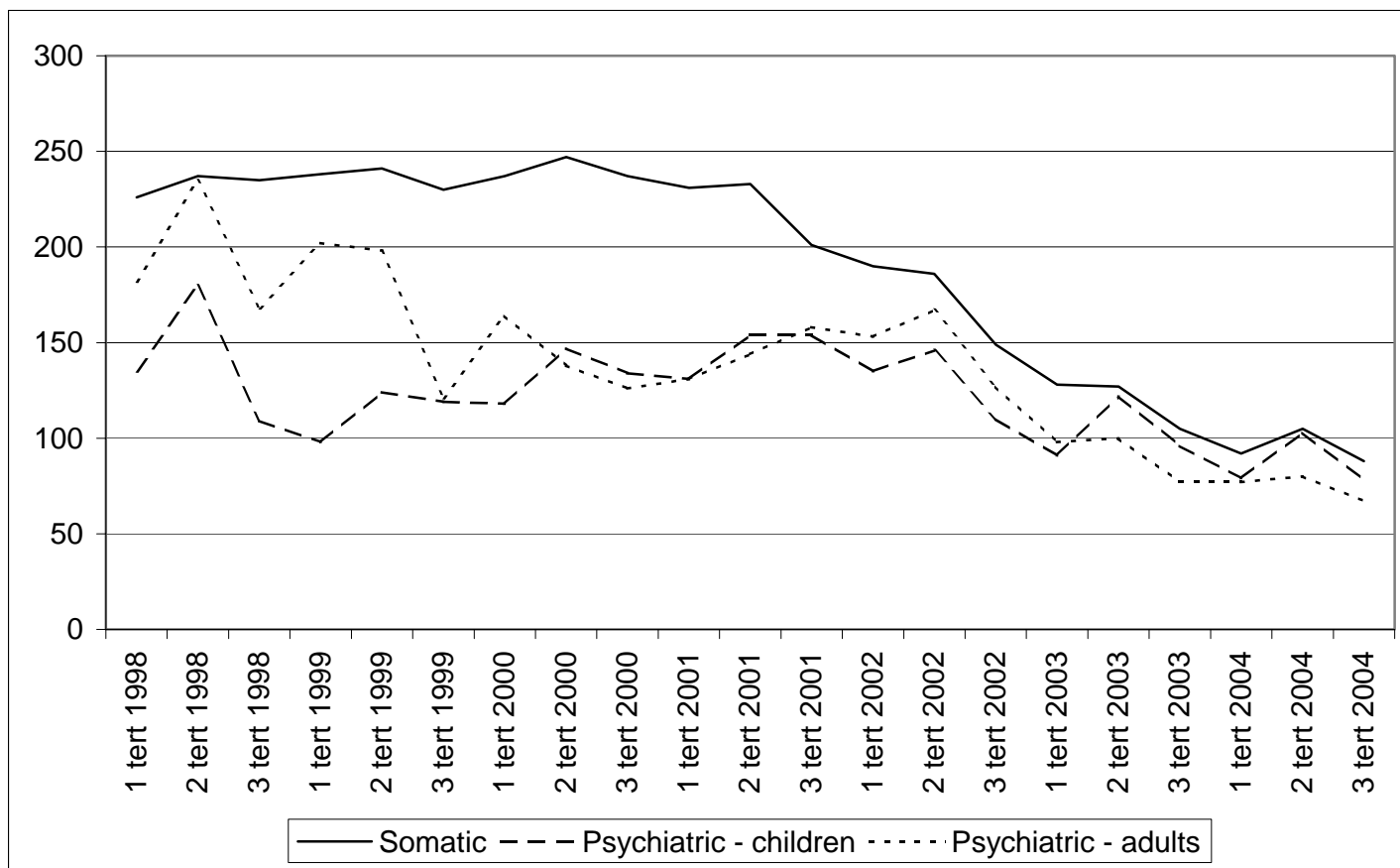
likely than those currently working to choose. With respect to the health related variables we find that an increase in previous health care utilization is significantly and negatively associated with choice. On the other hand, having a better self reported health has a positive association with the probability to choose hospital. Travel time does not show a significant association with the probability to choose. Only if the patient has to spend the night away from home (i.e. due to a long travel) the probability of choosing decline. Finally, there seem to exist a “time effect” in the sense that patients treated in 2004 have been more likely to have chosen the hospital than those treated the year before. This may be caused by the fact that as time passes by more patients become aware of their possibility to choose a hospital.

The results of the multivariate analysis are shown in Table C, and discussed in section 5.1. of the paper.

**Table C. The results of the multivariate analysis of hospital choice**

Characteristics	Adjusted O.R	C.I
<i>Demographics:</i>		
Age	1.01*	(1.00-1.02)
Sex	1,37*	(1.07-1.76)
Area of residence	1.15	(0.90-1.49)
<i>Social characteristics:</i>		
Education – primary	1.00	
- Secondary	1.17	(0.80-1.73)
- Lower University	1.32	(0.88-1.98)
- Higher University	1.55*	(1.01-2.38)
Labor Force participation - work	1.00	
- Pensioners	1.38	(0.84-2.26)
- Students	1.66*	(1.02-2.70)
- Social support beneficiary	0.95	(0.66-1.36)
Income	1.08	(0.96-1.20)
<i>Heath related variables:</i>		
Previous health care utilization	0.85*	(0.75-0.96)
Self Rated Health	1.13	(0.84-1.52)
<i>Travel time:</i>		
Travel time to hospital	0.99	(0.89-1.12)
Stay over night	0.48*	(0.34-0.68)
<i>Time effect:</i>		
Year of treatment	1.41*	(1.10-1.80)
-2 log likelihood: 1619.019		
Nagelkerke R Square: .071		

**Figure A. EVOLUTION OF WAITING TIMES IN NORWAY, 1998-2004**



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