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Equal access for equal need? Constructing and implementing a capitation-based formula for the distribution of health care resources in Norway

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ABSTRACT

Objectives. To discuss challenges when developing and implementing a capitation-based formula for funding health care services in a regionalized health care system.

Study design. Case study based on the design and implementation of a capitation formula in Norway.

Methods. Descriptive study.

Results and Conclusions. In the Norwegian context, policymakers are often given one recommended model rather than a menu of options to choose from. This makes it more difficult to introduce politically motivated changes, but may also reduce the possibility of manipulation by interest groups. A more thorough analysis of the merits of different approaches is needed.

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Keywords: capitation, health care financing, policy implementation
Motivation – why geographical equity is important

The Nordic health care model, with its traditional focus on local governance, opens up geographical variations in service levels that are determined both by local differences in preferences and by differences in income levels. At the same time, the egalitarian principle is clearly expressed in all Nordic countries and thus one has sought to avoid geographical inequities with income equalization grants from the central level. Such compensation comes in the form of tax equalization grants as well as corresponding transfers and is considered essential for a fair distribution of and access to health services across all regions.¹

The design of intergovernmental transfers will depend on the specific goals of the health care system. Central goals in the Nordic health care systems are generally formulated with respect to equity, efficiency and quality. Equity, however, has two dimensions: horizontal equity is related to equal access for equal needs, while vertical equity is related to equal levels of health. A distribution of resources aiming at horizontal equity will thus be different from a distribution of resources aiming at vertical equity. Both are, however, often presented as goals in official documents (for Norway, see e.g., [1]).

The transfer of funds from the central to the local level can be in the form of capitation-based funding, activity-based funding (ABF) or as compensation for structural differences in costs. All Nordic countries use a mix of these principles. There are differences in the weight put on ABF vs. capitation as well as extent of cost compensation, but in all countries capitation-based models form a central part of the financing of the health care sector. Designing a capitation-based model poses several challenges. What type of equity is pursued? How can one establish a relationship between population characteristics and need for health care services? To what extent should structural cost differences be compensated for? Using Norway as a case, our aim in this paper is to provide a discussion of both the process leading to the formula, the analytical choices made in this process, the weighting of knowledge against “informed guessing” and, finally, the road to political implementation. In an “ideal” world the role of scientists and policymakers would be clearly separated. The role of scientists would be to provide policymakers with a set of alternatives based on different equity goals, different approaches to need and different cost compensation mechanisms. The role of politicians would be to weight the merits of different models against political considerations. In reality, these two roles may not be so easy to separate. In the Norwegian context this is illustrated by the extensive use of public committees that, rather than providing a set of alternatives, are expected to provide one recommended answer to the proposed question. Although there is still room for policymakers to provide alternative solutions/j judgements, a unanimous committee creates a certain political pressure that, in practice, makes this less feasible. We believe that the description of the process leading up to the implementation of a new capitation formula in Norway will provide a useful illustration of how this process works in real world situations.

¹Also, the recent recentralization of the Norwegian (2002) and Danish (2007) health care systems can be seen as an attempt to secure a more even distribution of services.
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The Norwegian context

Norway is a small, sparsely populated country with a population of around 4.8 million. Large areas in the northern part of the country have a low population density, and this makes the question of a fair geographical distribution of resources important, both with respect to accounting for differences in need and differences in the cost of providing services.

Needs-based formulas for financing of health care services have been used since 1980, when funds were allocated to 19 locally elected county councils, who had the responsibility for the provision of specialised health care services. The formula have been regularly revised, with revisions reflecting both changes in the types of services included, the availability of data and changes in analytical approaches. In 2002, however, the state took control of the hospital sector, moving the responsibility from the 19 counties to 5 state-owned regional health authorities (RHA). As a consequence of this reform, a committee was appointed to develop a model for how the state should finance the regional health authorities. The committee suggested 2 major changes from the financing of the county councils. First, a majority of the members recommended that the state should not use activity-based financing, but rather give each RHA a fixed share of the total health care budget. As the county councils had previously been financed by a combination of ABF and global budgets, this represented a fundamental shift in the way the purchasing bodies of specialized health care services were financed. Second, the committee suggested a new needs-based formula for allocating resources between the 5 regional health authorities. Neither of these 2 suggestions were, however, implemented. The government chose to retain a system of partly activity-based financing also between the level of the state and the regional health authorities. Furthermore, the new needs-based formula was deemed to result in a reallocation of resources that was politically unacceptable. In particular, the formula would, if implemented, result in a major redistribution of resources from the Northern Norway Regional Health Authority to the Western and Central Norway Regional Health Authorities. To avoid such redistribution, the new system for resource allocation was based on 50% of the suggested formula and on 50% of historical income levels, with additional redistribution of services from the Western and Central RHAs to the Northern RHA. Third, there was to be a transition period of 5 years.

The effort of limiting the distributional consequences of the new formula and the subsequent use of transfers from those gaining to those losing did not go down well in those areas that stood to gain according to the suggested model from the committee. The government’s initial response to the discontent was to reduce the period of transition from 5 to 3 years as well as providing some extra funds for the Western and Central RHAs. In the middle of this process, however, alternative capitation-based formulas began to surface. While the committee’s analysis was based on rather crude county level data, the alternative analyses utilized more disaggregated municipal level data and were able to show that a number of socio-economic variables initially rejected by the committee did indeed signifi-

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2 While 430 municipalities had the responsibility for primary care services.
3 I.e. shifting the responsibility for nursing homes from counties to municipalities (1988).
cantly affect the use of (and thereby the need for) services. Furthermore, incorporating these variables into needs-based formula changed the geographical distribution of funds back in favour of the Northern Norway RHA. Thus these analyses seemed to verify that some of the politically motivated adjustments made by the government could indeed be justified by scientific analysis. The alternative analysis generated some debate (4), and the government finally chose to start all over again with the appointment of a new committee to propose a revised formula for the distribution of resources between the regional health authorities.

The development of a formula – mixing science and judgement

The purpose of a public committee

Before discussing the approach chosen in developing a new formula, a brief discussion of the purpose and work-form of the Norwegian public committees is necessary. A public committee is appointed by the government by royal decree. It is given a specific mandate and a time frame for its work. The selection of members to the committee is done by the ministry, and members will usually be a mix of experts, representatives of special interest groups and “neutral” outsiders. Within the health care sector in Norway, recent public committees have looked at principles for priority setting, payment systems, coordination of primary and secondary care and (once again) allocation of funds between geographical areas (5). Once the Official Norwegian Report is delivered to the government, it is sent on a broad public hearing. Thus within a (usually) 3-month period all interest groups are allowed to comment on the suggestions in the report. Finally, based on the report and the hearing, the government goes to Parliament with a suggested solution to the problem raised in the committee's mandate. As was the case with the suggested model for financing in 2002, the government’s suggested capitation model will not necessarily be the same as the one recommended by (the majority of) the committee.

Some choices

Smith et al. (6) describe some of the choices that have to be made when setting capitations as “frankly judgmental.” The need to base some of the decisions on judgement arise both from the fact that data may not always be available to provide an empirical analysis and that choices of analytical strategy as well as interpretation of results implies using judgement. Such choices will include:

1) whether to pursue a goal of vertical vs. horizontal equity
2) deciding which factors are legitimate determinants of need
3) deciding how to weight different types of services against each other
4) choosing a model specification
5) deciding whether or not to compensate for regional differences in costs
6) deciding which factors are legitimate determinants of costs

This discussion refrains from going into analytical details, as there is a voluminous literature on the pros and cons of different approaches in this field. By describing the different steps when setting capitation in

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4Of which, the book by Peter C. Smith (7) covers more than the essentials.
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Norway, the aim, however, is to highlight some of the potential caveats in this type of analyses as well as illustrate the often pragmatic choices that need to be made along the way.

Horizontal vs. vertical equity
Horizontal equity can be interpreted as a distribution of resources that makes the benefit of each individual in terms of health equal at the margin. On the one hand, such a resource allocation would be efficient in the sense that it would maximize health at any given level of resources. Vertical equity, on the other hand, implies than one primarily seeks to even out individual (or group) differences in health. One consequence is that an individual with a lower capacity to benefit from health services nevertheless would have a higher priority if he/she had an initially lower level of health. Thus resource allocations aiming at vertical equity generally do not maximize health and, in that sense, are not efficient. There is a trade-off between equity and efficiency. This trade-off is not clearly recognized in Norway’s public documents in which both equal access and equal health are proclaimed as central goals. This trade-off was briefly discussed in the committee’s report (3), but the pragmatic solution was to view present-day patterns of health care use as adequately reflecting the desired allocation of resources between different population groups.

Legitimate vs. illegitimate determinants of need
The second step involves deciding on the criteria to be used to set the capitation. As noted by Smith et al. (6), such criteria should ideally be universally recorded, consistent, verifiable, free from perverse incentives, not vulnerable to manipulation and reflect plausible determinants of individual needs. In practical applications we face 2 major obstacles: first, data are rarely available on an individual level, thus some sort of grouped data must be used in the analysis; second, the notion of “plausible” determinants is not clear. While we may have substantial knowledge about how health correlates with factors at both the individual and group level, causal relationships are rarely established. Furthermore, when we use group level data, we often assume that the criteria chosen reflect some underlying individual behaviour that is associated with individual health. An example of this is the relationship between socio-economic status and health. While this relationship is firmly established and accepted (8,9), it is more difficult to establish what factors drive the relationship. There is little reason per se to assume that socio-economic status would correlate with genetic factors in such a way that it is positively correlated with health. Thus the assumption must be that higher socio-economic status is associated with a healthier lifestyle and perhaps also with a healthier work environment, and that this in turn results in a higher level of good health.

The practical implication of this is that a variable is included if it is able to statistically explain existing patterns of health care use. In some cases, as for socio-economic status, this is uncontroversial. When the story behind the statistical relationship is more difficult to establish, however, the use of judgement becomes more controversial. In this case we would argue that it is important to be open about the uncertainty of the choices that are made. Results could be presented using different model specifications, different variables, and so on. In the case where the role of the committee is to present the policymakers with a menu of
models, this is both desirable and feasible. In
the Norwegian setting, however, the expecta-
tion is for the committee to choose among
the alternatives and recommend one model.
Further problems arise when one suspects that
there is an unmet need in the population that is
studied. In this case, analysis of health care use
is not of any help, and the distribution of need
between different population groups must be
assessed by other methods.

In its report (5) the committee explicitly
stated the criteria used for choosing vari-
ables that would be included in the setting of
the capitation formula. Thus variables should
(a) be documented in previous analysis or
(b) be included in capitation models in other
countries or (c) judged as plausible based on
medical literature. The use of analytical strategy
was also discussed, acknowledging that several
analytical paths were possible. The chosen
strategy was to use a “simple” model; the prac-
tical consequence of this was that the use of
interaction variables was limited to letting the
effect of socio-economic and health variables
depend only on age; as well as including age in
the form of group dummies, rather than a linear
variable (3). It is also important to control for
differences in supply. In the case of Norway,
this is done by analysing data within defined
geographical areas, while also taking into
account factors such as distance to hospital,
private sector capacity, and so on.

An aggregate measure of health care services
It is difficult to talk about the demand for a
homogenous health care service. Individuals
will differ in both the type and amount of
services they need, and this raises the ques-
tion of how (or even if) these services should
be aggregated. If analysis is based on health
care expenditure, one could hope that relative
cost differences reflect the relative differences
in efficient resource use. In the case of Norway
there is, however, no available information
about health care spending on individual
or group levels that would be a meaningful
gauge for analysis. Thus the Norwegian model
identifies 4 types of services; (1) somatic care
(including rehabilitation), (2) psychiatric care,
(3) substance abuse and (4) ambulance and
other patient transport services. Within these
services, weighting is based on different prin-
ciples. Somatic services are measured using
the diagnosis related groups. This system is
not available for psychiatric care or substance
abuse. Hence separate capitation formulas
are calculated, for example, for in-patient and
outpatient adult psychiatric services, and these
are again weighted by their relative share of
total costs. The weighting between the different
service types are done using their share of total
costs in one specific year (2006).

Analytical strategy
Several analytical strategies can be envisioned.
A normative approach would be based on
specific norms of use of services, that is, be a
departure from epidemiological data on the
incidence and prevalence of illnesses. This
approach is, however, demanding and, in
the case of the committee, chosen only for
ambulance services. This implies that, rather
than analysing the costs of ambulances, one
determines the optimal location for ambu-
lance services given norms for response times
and use of labour. Using estimates of cost per
unit of travelled distance, the relative need for
resources can be calculated for the regional
health enterprises. For the other services,
the analytical strategy is to use a statistical
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approach; either based on individual data or on aggregated data. Individual data are used for psychiatric services for adults and for services related to substance abuse. In this case a matrix approach is chosen, thus the total use of services is distributed in cells according to individual characteristics believed to influence the need for services. The pro of this approach is the use of individual data; the con is that it is limited to characteristics that can be readily coupled with an individual patient’s data. A second alternative is to use aggregate data and analyse consumption per capita in small groups against a set of group characteristics. Typical aggregation levels may be small geographical areas (municipalities). This approach was chosen for somatic services, but used groups consisting of individuals of the same age and sex and living in the same municipality. For example, men born in 1957 and living in Bergen was one group. All together this approach led to more than 72,000 different groups, which enhanced the explanatory power of the model substantially. The regression approach was chosen for psychiatric services for children and youths, although the municipality was the unit of observation.

Compensating for differences in the costs of producing services

Costs may differ between service providers for a variety of reasons (10). First, there may be economies of scale and/or scope; second, there may be differences in the characteristics of providers; third, there may be differences in case mix; and fourth, there may be differences in management practices and levels of quality. The principal question is which of these should be compensated, the practical how to obtain accurate estimates of the magnitude of this compensation? Norway has a relatively large number of small hospitals, and one question is whether these should be compensated for diseconomies of scale. This has, however, proven difficult to establish empirically (11). Also, there is an open question as to whether or not compensating for diseconomies of scale would provide a stronger incentive for a restructuring of the sector. Similar arguments could be made about regional differences in wages. On the one hand, these may be the result of differences in labour market conditions, and on the other hand, compensating providers for high wages will obviously provide difficult incentives when it comes to setting wages. The alternative of using wages outside the health care sector was not considered feasible in the Norwegian context. Differences in the case mix that are not captured by using DRGs was not considered explicitly, but may be captured by including teaching status, an index for scope of services provided and the size in the regression analysis. Finally, differences in management practices will be reflected in differences in efficiency. Again, these are difficult to establish empirically.

Table I shows the chosen vector of criteria in the capitation model. Four types of services are included: somatic care accounts for 73% of the resource allocation, psychiatric services 18%, and so on. This is based on the actual share of expenses for each different service type. Another possibility would have been to say that some services ought to be given a higher priority and that resource allocation should

\[3\]In the end, this normative solution was replaced by one criterion indicating travel time to hospital, which led to a resource allocation close to both historical costs and the normative model. The reason for this was that the norms for response time are not mandatory, and it was deemed unwise to base resource allocation on non-mandatory response norms.
be based on the factors driving the need for these. Within each service type the percentages indicate which group of variables are the most important determinants of need. For somatic services, for example, age accounts for 58% while health and social variables account for 42% of the total need.

The vector of variables, the weighting of services and the index used to compensate for structural cost differences were all unanimously recommended by the committee in its report to the government (5). Implementation of the formula within existing budgets would lead to a redistribution of around 800 million NOK (approximately 100 million euros), from the South-Eastern Regional Health Authority to the three other regional health authorities. This would mean that the South-Eastern Regional Health Authority would lose approximately 2.2% of its income.

Some comments, however, need to be made about some of the criteria. First, the criterion capturing climate and latitude did lead to discussions inside the committee that resulted in 3 members expressing doubt about its relevance, although not opposing it. It is obviously difficult to establish a causal relationship between this criterion and the need for health care services. On the other hand, the criterion fulfilled the statistical tests and the general judgement was that it probably captured some underlying features of the population that were related to need. However, since this was a new criterion, and one that had large effect on redistribution, the committee recommended that its empirical impact be reduced by 80 percentage points, thus the criterion was included with one-fifth of its empirical impact.

Second, some of the included variables are not the result of statistical analyses but are meant to capture unmet need and/or unobserved demand. The inclusion of non-Western immigrants is not based on empirical analysis but on “sound judgement.” Also, including the “metropolitan area” in the substance abuse model was not based on the data but on “sound judgement.” It is clear, then, that the suggested formula is a combination of the results of empirical analysis – using different strategies – and sound judgement.

While the purpose of the committee obviously was to provide an allocation formula to be used for all parts of the country, there were some specific challenges related to the Northern Norway RHA. First, the costs related to ambulances and patient transport were substantially

| Table 1. Criteria used in the capitation model. |
|-----------------------------------------------|
| **Somatic services** (weight 73%) | **Psychiatric services** (weight 18%) | **Substance abuse services** (weight 3%) | **Ambulances and patient transport** (weight 6%) |
| Age (58%) | Age (55%) | Age (55%) | Travel distance to hospital |
| Health and social variables (42%) | Health and social variables (45%) | Health and social variables (45%) | - Mortality |
| - Mortality | - Martial status | - Martial status | - Disability pension |
| - Employment status | - Disability pension | - Social care recipient | - Level of education |
| - Receiving rehabilitation compensation | - Living with one parent | - Level of education | - Disability pension |
| - Level of education | - Child protective services | - Non-Western immigrants | - Metropolitan area (Oslo) |
| - Municipal socio-economic index | - Level of education | | - Metropolitan area (Oslo) |
| - Index for climate and latitude | - Non-Western immigrants | |
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higher in the northern region, but were inadequately reflected in the existing allocation formula. Second, the costs of providing hospital services were believed to be higher, and again were not reflected in the existing formula.

To determine the costs of ambulance services and patient transport, a combination of a normative and statistical approach was chosen. First, the expected costs for ambulances were calculated based on specific time limits for the response time as well as expected capital and labour costs for the ambulances. Since neither response time nor labour requirements are official, statistical analysis were used to establish criteria that would give an allocation of resources “as close as possible” to the normative model. These criteria were adapted to areas where a normative model could not be established, such as air ambulances and patient transport. The resulting criterion – travel time from the centre of the municipality to the closest hospital with acute care – was used in the allocation formula.

Adjusting for the costs of producing hospital services is challenging. Ideally, one would want to adjust for structural costs outside the control of the hospitals; that is, differences in efficiency should obviously not be compensated. It is, however, both conceptually and empirically difficult to separate structural-related from efficiency-related cost drivers. A low number of hospitals make statistical analyses even more difficult. From the point of view of the northern regions, there are several factors that might explain higher costs. First, sparsely populated areas might lead to higher “on call costs.” Second, it might be more difficult to recruit key personnel to more remote areas, thus higher turnover would result in higher costs as would greater use of temporary personnel. Third, wages might have to be set at a higher level in order to attract personnel. Fourth, a more decentralized structure might lead to higher capital/labour ratios and costs.

Few of these hypotheses could be tested empirically on the limited data set that was available for analysis. The strategy chosen by the committee was to base cost compensation on a mix of costs adjusted for travel time and historical costs. No compensation was (explicitly) given for higher wages; the argument being that this would enable hospitals to pass labour costs on to the central government.

Given that the committee did include representatives from all health enterprises as well as broad representation from the different academic institutions, one could expect that the suggested model would generate broad consensus. This was not, however, the case. The next section looks at the reactions from different geographical regions, professional organizations and political organizations.

From report to implementation:
Establishing political consensus
Geographical reactions
As is tradition, the committee’s report was sent to a number of organizations for their consideration. Thirty-eight different organizations responded with their views:

• 14 counties
• 4 regional health authorities and 2 local health trusts
• 7 professional organizations
• 6 patients organizations
• 1 ministry
• 1 central directorate
• 3 universities/university councils
All 9 counties located in the regional health authorities that would stand to gain from the implementation of a new capitation formula responded to the hearing; and all were in favour of a new formula. Some of the counties suggested a more radical redistribution in the form of compensating the gainers for their presumed losses from a “wrong capitation formula” in previous years, others pointed out that the empirical results suggested that climate and longitude should count even more. Notably only half (5 out of 10) of the counties located in the South-Eastern RHA, that would lose from the implementation of a new formula, responded to the hearing. Their reactions seemed less coordinated, but there was a general concern that the new formula could only be implemented if it was accompanied by a growth in the amount of available resources. Those who stood to gain would get more resources; the RHA who stood to lose would remain at its present income level. Two of the 5 counties objected to the climate/latitude criteria, but the other 3 did not have fundamental objections to the work done by the committee. A common feature of all the county responses is that they are short, and they do not in any detail discuss the work done by the committee.

The regional health authorities were, understandably, more thorough in their response. The 3 that stood to gain were predictably positive, while Health South East had several objections. First, it was critical of the use of the climate/latitude variable; second, it argued that it had a deficit in its R&D budget that ought to be compensated; third, it was sceptical about the level of compensation for ambulance services; and fourth, it was sceptical about the cost index. Basically, it argued that compensating the Central and Northern Norway RHAs for higher structural costs was a compensation for inefficiency. Having been represented in the committee with 2 members, there obviously was a fine line between being critical and undermining its own work. South-Eastern RHA had general praise for the work that was done. Also notable is the fact that 2 regional health enterprises that were most severely punished by the “non-commitment” to the previous model (Health West and Health Middle-Norway) coordinated their response. The fourth, Health North, was positive but also had several local issues that needed to be pursued under the headline of general content.

Professional reactions
It would initially be expected that the response from the professional organizations would be “neutral” in terms of the effects on redistribution and would focus on the limitations of the analysis and the use of sound judgement. Two of the organizations, which were also members of the Norwegian Confederation of Trade Unions, did not respond at all to the work of the committee but used the hearing to argue against what they saw as the increased “marketization” of health care. Others were generally positive, but mainly interested in expressing views about the general situation for their members. The most interesting reaction came from the Norwegian Medical Association. The NMA explicitly rejected the use

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6R&D is financed separately. Thus RHAs with deficits in their R&D sector need to cover this from the capitation-based income.
of the climate and latitude as a criterion, and suggested that a substantial amount of further work was needed before a new model could be implemented. Two interpretations of this response are possible: one is that there was a genuine concern about the quality of work done, and the other is that by suggesting that “further work was needed,” the NMA did not have to endorse a model that could possibly affect the majority of its members in a negative way. The reaction within the NMA was strong and suggested that the latter was the main motivation (12). Its president chose to publish a revised statement, stressing that the NMA “of course” supported the propositions from the committee, but nevertheless recommended that the effects on redistribution be handled through a growth in recourses.

Political reactions
When a public committee delivers a unanimous report, politicians have 2 possible reactions. They can acknowledge the work that has been done and implement the suggestions, or they can contend that there are other societal issues that are not addressed in the work of the committee and that the suggested model therefore needs to be modified. When the major issue is that of geographical distribution of resources, however, it may be difficult to find broad societal issues that are not related to specific local interests. The opposition to a suggested model is generally linked to whether one stands to gain or lose from the new model. In Parliament, this type of behaviour is generally kept under control by the party whip. To avoid embarrassment, back-benchers eager to position themselves are told to vote according to party preferences, whether these coincide with their local constituents or not.

Without interviewing the actual politicians, it is more difficult to describe the political process in detail, since obviously a major part of this process takes place behind closed doors. Still, based on public sources as well as the authors own involvement as the head of the committee, the following interpretation is proposed:

When the committee delivered its report, it was to a minister of health from the Labour Party, who together with the Centre Party and the Socialist Left Party formed a government with a majority in Parliament. A model for geographical distribution of resources to specialized health care is, however, not an issue one would expect would be subjected to ideological differences. Any political differences should have been expected to be geographically motivated, that is, the model would have been opposed by representatives from the region who lost and supported by representatives from the regions who gained. This was initially what happened. An unofficial network of MPs from all political parties was formed (13) with the intention of lobbying Parliament to pass the suggested capitation formula. As it soon became apparent that the Labour Party was divided on a national level, the parties who were in opposition reacted by becoming (on the national level) united in their support of the committees report. There were differences in views on the time frame for implementation, and there were also local voices against the proposition. In Parliament and among the public, however, the national leadership of the opposition parties were all in favour of the model.
In this situation, the Labour Party, by far the largest party in the government coalition, struggled with a growing division within its parliamentary group. Quotes from 2 Labour MPs – one (Øye) who was elected from a region that would lose and one (Asphjell) from a region that would gain – illustrate this:

“[The committee] has developed an artful formula that favours those health authorities that have not managed to stay within their budget limits. If [the committee] represents the solution, I do not know where the health sector in Norway is heading. It would be a parody.” (Øye [13]; author’s translation)

“I am amazed that, after 14 of the most competent health economists in the country have concluded, politicians with no knowledge in this field can say that this is not correct. If this was the case, they have an intellectual capacity so large that I would recommend that they find something else to do.” (Asphjell [13]; author’s translation)

Adding fuel to the fire, representatives from the 15 counties that were part of the South-Eastern RHA also pointed out that they had more parliamentary representatives and thus would be able to block any change, even if the government intended to follow up on the recommendation from the committee. This led the councilmen from the 9 counties that belonged to regions gaining from the committee’s proposition to publish a letter to the government in the form of an op-ed article in all the large regional newspapers, which was entitled “Which Inhabitants Are Most Valued in Norwegian Health Care?” (14). These councilmen represented all the major political parties in Norway. One week later the minister of health declared that the government intended to follow the recommendations from the committee and, after presumably using the party whip, the new model was (with a few minor changes) approved by Parliament in December 2008.

Concluding comments
Several lessons emerge from the Norwegian experience. First the model of a public committee is challenging, but it can be powerful if it can reach consensus. As experience with previous committees (2) has shown, lack of consensus seemingly makes it easier for decision-makers to ignore the recommendations. One of the main strengths of the new resource allocation formula was that it was based on a consensus that went across the implicated regional health authorities, the general academic institutions, as well as the so-called neutral outsiders. This meant that in order to overturn the unanimous recommendations the government would have to (a) declare that it never had any intention of following these in the first place, (b) demonstrate that there were serious flaws in the approach chosen by the committee in its work, or (c) point out that there were policy issues overlooked by the committee that justified an adjustment of the formula. The first point was really not an option; this would effectively undermine the use of such committees in the Norwegian public sector, the third was clearly not an option because of the geographical differences in the attitude towards the formula. This left the second point about the approach, and the opposition against the recommendations was largely put forward as scientific-based objections.
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The main objection was against the use of the variable capturing climate and latitude, with the lack of causality between this variable and the need for health care service cited as the main reason. This may well be the case, as there is indeed very little empirical evidence that supports that the need for health services varies with normal variations in temperature and humidity. Nevertheless, one may view this variable as a proxy for underlying lifestyle variables where the degree for causality is higher. As can be seen from the discussion above, this is the underlying argument for including socio-economic variables such as income or education. Consistent arguments should therefore have led to the rejection of several other variables as well. That this was not the case increases the suspicion that the opposition from the Norwegian Medical Association was as much a geographically as a scientifically motivated dissent.

As demonstrated by the quote from Member of Parliament Asphjell above (13), there is a tendency to view the recommendations from public committees as the “correct answer” to the posed question. On the one hand, the strength of a unanimous committee is what increases the possibility of a quick implementation. On the other hand, this model implies that value judgements, which perhaps ought to be the responsibility of the political system, become a part of the committee’s work. The solution (5) was to be quite explicit about the type of judgements that were made. Still, one should perhaps acknowledge more clearly that this is not an exact science, and that different choices regarding both data and analytical approaches will lead to different results. Explicitly encouraging committees to provide a larger set of alternatives, and even replacing them with working groups consisting of academics only, might be more preferable. In this case the demarcation between the use of analysis and sound judgement as well between science and politics would have been clearer. The experience from the Norwegian process indicates that (some) politicians are myopic; they tend to look to their constituencies and no further. Neither those embracing the proposition as the result of the work of the “best health economists” nor those rejecting it as ridiculous, demonstrated (in public) any substantial understanding of the subject under discussion. If this is a correct interpretation of the Norwegian process, one might argue that internalizing the value judgements into a committee may be a more efficient way of producing a result that is acceptable for all parties concerned.

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