# HEALTH AND COMMUNITY CARE COMMITTEE

Tuesday 26 October 1999 (*Morning*)

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## HEALTH AND COMMUNITY CARE COMMITTEE 9<sup>th</sup> Meeting (Morning)

#### **CONVENER:**

\*Mrs Margaret Smith (Edinburgh West) (LD)

#### COMMITTEE MEMBERS:

\*Malcolm Chisholm (Edinburgh North and Leith) (Lab)

\*Dorothy-Grace Elder (Glasgow) (SNP)

\*Mr Duncan Hamilton (Highlands and Islands) (SNP)

\*Hugh Henry (Paisley South) (Lab)

\*Margaret Jamieson (Kilmarnock and Loudoun) (Lab)

\*Ms Irene Oldfather (Cunninghame South) (Lab)

\*Mary Scanlon (Highlands and Islands) (Con)

\*Dr Richard Simpson (Ochil) (Lab)

\*Kay Ullrich (West of Scotland) (SNP) \*Ben Wallace (North-East Scotland) (Con)

\*attended

#### WITNESSES:

Professor Sir John Arbuthnott (Principal, University of Strathclyde) Dr Alastair Leyland (Social and Public Health Sciences Unit, University of Glasgow) Professor Graham Watt (Department of General Practice, University of Glasgow)

COMMITTEE CLERK:

Jennifer Smart

ASSISTANT CLERK:

Irene Fleming

# **Scottish Parliament**

# Health and Community Care Committee

Tuesday 26 October 1999

(Morning)

[THE CONVENER opened the meeting at 09:16]

The Convener (Mrs Margaret Smith): Good morning, everybody. My first suggestion is that we take the next 10 minutes in private, to discuss our strategy for approaching the witnesses this morning. I draw to the attention of committee members—particularly Dorothy-Grace Elder and Ben Wallace, who have just joined us—the fact that our expert, John Forbes, has given us two sheets of paper, copies of which members will find on their desks. One sheet contains some suggested questions; the other contains some of the main points that were brought out from the many submissions that we have received.

If members are in agreement, I suggest that we now go into a private session to discuss our tactics, in respect of who will ask what questions. John's questions are a starting point, but members will have other questions that they have either thought of in advance, which we can discuss now, or that will occur to them while we are questioning our witnesses. Is that suggestion acceptable to members?

Members indicated agreement.

### 09:18

Meeting continued in private.

### 09:37

Meeting resumed in public.

**The Convener:** We have had a useful discussion of our tactics for this morning's meeting. It is nice to have Sir John with us again, and I welcome him and Mike Palmer to the committee.

# **Arbuthnott Report**

The Convener: Last month, Sir John, we had a chance to discuss the report with you, but this is our formal evidence-taking session. I believe that you have been told that you have 10 minutes to provide us with a general overview, after which we will ask questions. Is that correct?

Professor Sir John Arbuthnott (Principal, University of Strathclyde): I have been asked to make a short opening statement. I do not think that it will take 10 minutes.

**The Convener:** That is absolutely fine. After you have given us a short statement, we will ask you a series of questions about the key points. Is that okay?

### Professor Sir John Arbuthnott: Yes.

I am very pleased to attend this formal meeting of the committee, having taken part in the scoping discussions. As the committee knows, at the very end of 1997 I was asked by ministers to take responsibility for a review of resource allocation and to consider a new approach to resource allocation in the Scottish health service. As members know, the title of the report is "Fair Shares For All". That reflects what the review has tried to achieve: a fair distribution of resources. We would all agree that that is fundamental to the national health service in Scotland. Everyone should have reasonable access to NHS resources and services, whether they live in densely populated urban areas or in remote or rural areas. Achieving a distribution of resources that will ensure that everyone has equal access to health care is the basic theme that runs through the work of the review group. We have taken account not only of remoteness, rurality or urban location, but of the state of people's well-being-deprivation and their life circumstances.

At the outset, we decided that we had to take an evidence-based approach. That is what ministers asked us for. The current resource allocation mechanism formula, which is known as Scottish health authority review equalisation or SHARE, was introduced more than 20 years ago. The working group that produced it decided that it did not have an analytical evidence base on which to make its judgments, so most of its judgments are just that—judgments. Some of them are still very reasonable, but, in hindsight, some of them ought to be updated.

We now have much better statistics available to us in the national health service, particularly in Scotland. I am proud to say that our statistics are among the best in the world. That does not mean that they are complete: we always want better data. There are points in the report where we look to improvements in future, and the committee may want to discuss those. However, the data are much better than they were 20 years ago.

This information gives us the evidence to work out a more equitable way of distributing resources among health boards. However, this has not been a purely statistical, black-box exercise. The steering group that was assembled contained representatives of all parts of the NHS in Scotland. It included all sorts of individuals: managers, trust representatives, board chairmen, nursing specialists and doctors. We also had the benefit of advice from outside the Scottish health service. Our job was to weigh the evidence and to follow some quite strict guidelines when making decisions. One of my most important tasks as chairman was to focus the group on fairness, openness, clarity and common sense, as well as statistics.

Two major issues emerge from the report. For the next couple of minutes I would like briefly to introduce those, as I am sure that they will occupy us this morning. First, there is overwhelming evidence that high levels of deprivation give rise to high levels of need for health care. Secondly, the costs of delivering health care services are much higher in remote and rural areas.

I do not need to tell members about the poor state of health care in Scotland compared with other European countries. Our record on coronary heart disease is not good. That is linked with deprivation, and levels of deprivation are much higher in some health boards. It is quite clear that if we are to achieve a fair distribution of resources, we must take account of the influence of deprivation on health care needs. I will give the committee a brief example. The existing share formula takes no account of the influence of deprivation on the need for mental health care, but our work—and numerous other studies that have been done—clearly indicates that deprivation is a major factor. Our formula recognises that.

Many people live in remote and rural areas of Scotland and, as citizens, they have a right to expect the best possible access to health care services. The additional costs that relate to the provision of health care services in such areas must be taken into account. We have carried out a detailed analysis of the effects of remoteness and rurality on those costs and have recommended that a significant adjustment be made, especially for the Highland boards, to reflect them.

Our results on deprivation and on remoteness and rurality provide a firm basis for moving forward on how resources should be allocated among health boards to meet their relative needs.

Since the report was published in early July, it has—as you know, convener—gone out to general consultation. The health department in Scotland is meeting all the health boards to discuss their reaction to the report. That consultation process is taking place in parallel with the consultation that this committee is carrying out.

A great deal of interesting material is coming through from that. We are not saying that this is the final prescription, but you may have information from health boards and your own thoughts on it. It should be subjected to the same rigour as we have applied to the rest of the report. You will find that the Scottish Executive health department is responsive to those reactions.

#### 09:45

**The Convener:** Thank you, Sir John. The committee would like to put on record its thanks not only for coming to the committee meeting this morning and meeting us on previous occasions, but for the sheer volume of work that has gone into the production of "Fair Shares For All".

One of the targets that you set yourself was to make the report transparent. It is fair to say that many of us on the committee have struggled with some of the statistical aspects of the analysis in the report. Obviously, the report has had to be evidence-based, but I would like to pick up on some of those aspects.

First, the population projections that you have used are mid-year estimates. It is arguable whether that is the best approach. If one uses midyear estimates, there is a tendency for the population size of health boards in the east and north of the country to show a decrease and that of health boards in the west to show an increase.

Secondly, I want to ask about the use of postcode districts. Members know that there can be great variations in deprivation and so on within postcodes in our constituencies. Several people who have made submissions to us have mentioned rural areas as having great differences between postcodes.

Finally, you use single indicators of life circumstance rather than composite measures. Can you give me some thoughts on that?

**Professor Sir John Arbuthnott:** Those are matters that were given much thought by the steering group. I start with the question of population estimates. The formula starts with population numbers, moves on to age, sex and the life circumstances that I mentioned, particularly in relation to deprivation, and finally takes into account the additional costs of the ruralities. The steering group considered the choice of population in relation to mid-year estimates to be a reliable method. The experts in the matter, the General Register Office for Scotland, recommended that approach.

Although the estimates are perhaps two years behind, they are robust, and measure the relative distribution of population fairly and accurately. We could have looked at the list sizes available from general practices, but—for reasons that are given in the report—those are not reliable. It is possible to make population projections. However, if we made allocations on the basis of projections that turned out to be wrong, we would have to answer for it. It was a question of balance. I am not sure whether I have convinced you, convener, but that is the reason why we used mid-year estimates.

Your next question was about postcodes. I hope that the reason for using that approach is clear in the report. It would be desirable, but it is not possible, to base our formula, background and statistics on what we know about the incidence of individual diseases in particular areas and even in individual members of the community. Unfortunately, we do not have epidemiological public health information to do that on a wide enough basis to make it reliable, although we hope to use that approach in future. In addition, individual statistics are a confidential matter.

Postcodes give a great deal of information. I understand your point that postcodes contain a mixture of citizens of various means, but we are considering them throughout the country and comparing the characteristics of health boards to a national average. The postcodes give us a relatively fine discriminator for that. The averaging effect takes account of any worries that you might have about variations in deprivation.

Your third point was about single indicators of life circumstance. The list of indicators in the study that were investigated for their relevance is the largest that has been used in this approach. It has the advantage of being broadly based and inclusive, and, as can be seen in the technical report, has enabled the economists and the statisticians to evaluate all the individual factors.

The disadvantage, hinted at at the beginning of the report, is that trying to follow the statistics is a difficult task. I assure you that the indicators were properly analysed, and only where individual life circumstance measures were at a significant level did the steering group consider them further.

The decision tree in the report shows how we took the information that was provided to us by the statisticians and the able group of experts that supported the steering group. The decision tree, illustrating which individual life circumstances were included, is laid out in the report. I hope that it is reasonably clear.

**The Convener:** Mary, did you have a supplementary question?

Mary Scanlon (Highlands and Islands) (Con): No.

Kay Ullrich (West of Scotland) (SNP): Throughout the report, the relative needs formulae place equal weight on the main sets of factors: sex, morbidity, life circumstances and remoteness. What rationale or evidence underpins the weighting scheme?

**Professor Sir John Arbuthnott:** You are correct; that is a fundamental point. If one compares this to making concrete, where one

takes proportions of sand, cement and water, we are dealing with a common unit: sand, for example. We are talking about a single unit. It is important that we have not attached particular weightings to these factors. The factors are measures based on the statistical data that we have on population, age, sex, life circumstances and remoteness costs and are worked through in a continuous model.

I consider—and I think that the steering group considers—that each one of those factors will influence the allocation of resources to individual health boards in a fair and balanced way. Some health boards will contain much higher levels of deprivation. We have dealt with those factors clearly in our tables. For example, in individual health boards, a rather large swing away from the national average is indicated as being required as a result of the deprived nature of that area. That is important.

Equally, we have a single pot of money—a single resource is allocated. We have to moderate that allocation by the additional costs of rurality and remoteness. That has been worked through in a uniform way, on a single unit basis. To do anything else would have been to begin to make judgments, which the steering group and I considered would have been unwise. One would then have had to say, on an evidence base, why we were making that judgment. We considered that the evidence and the statistical approach were worked through fairly in the model we used.

A number of people have asked why we did not give more weighting to deprivation, remoteness, or old people as opposed to young people. One becomes involved in a cyclical argument that is almost impossible to break. From a statistical modelling point of view, the steering group approach is valid.

**Mary Scanlon:** I would like to ask a supplementary. I cannot get everything into one question.

Unlike SHARE, the review introduces a host of morbidity and life circumstance indicators, yet the proposed aggregate relocation of £76 million is less than 2 per cent of the £3.9 billion covered in the review. Would it be reasonable to conclude that the current allocation of NHS resources, achieved without relying on the new formula, is fair and equitable?

**Professor Sir John Arbuthnott:** We think that the SHARE working group did an excellent job. One step before SHARE—I am so old that I am probably one of the few people who can remember that—allocations were made on the basis of what had been spent in the previous year. Those responsible for administering our health resources realised that that was not very sensible, as areas could change fundamentally. When SHARE was introduced it did not have the evidence base it was looking for, but used a very reliable piece of evidence: the standardised mortality rate. That gave them a good indicator.

For the proportion of the spend that you indicated, there is a relatively small additional shift. I should say that those do not indicate cuts, but where shifts indicate a differential and lower rate of future growth, they are regarded as fairly significant. That has added important refinements, although they are smaller swings than the ones that occurred when SHARE was first introduced. Moreover, for reasons of accountability and openness, and in order to explain to people what is happening, the socio-economic indicators, whether in health, education, industrial economics, or inward investment decisions, will have to be taken into account. The report provides a good, accountable approach.

One could extend that slightly further to the two quite controversial recommendations at the end. First, we have indicated that we should do further work on inequality of access to health provision, which may introduce a further swing. That factor will be important. The committee may wish later on to ask me how we are getting on with that. We have done a little more work on that since we published the report.

#### 10:00

In the work on general medical services the swings are quite a lot bigger than those in the proportion of the formula raised in the question are. It is the first time that general medical services have been included in this kind of review. We do not suggest that such swings are introduced immediately and we are referring it to the relevant Scottish committee for consideration because the swings indicate that our general medical provision is not well suited to the needs of the population of Scotland.

The evidence base is justified and it can be updated on an annual basis for things like unemployment, lone parent, old age and other benefits. It can also be updated when the next census information has been analysed. We therefore have an instrument that explains and justifies and is fair, which is as important as the amounts of swing.

We must also deal with the new areas we are introducing, inequalities of health care and general medical services, which have not yet really fed through into the recommended allocations but will do so in the future.

Mary Scanlon: Has any account been taken of efficiency savings? If we are only looking at a reallocation of two per cent and, as we all know,

one health board can make a pound go further than another, has account been taken of best practice in that?

As a Highlands and Islands member, I know that the Highlands will benefit. I am also aware that many patients from the Highlands and Islands travel to centres like Edinburgh for specialist treatment. I hope that the reduction in funding for Lothian will not be a disbenefit to patients in the Highlands whom the reallocation is supposed to help. How can you be sure that it actually targets deprivation and all the factors you have mentioned?

Professor Sir John Arbuthnott: My first principle was that, as a citizen of Scotland, wherever I am I expect equal access to health services. Our committee's remit was to come up with a mechanism for resource allocation. We had to face one fundamental question: regardless of the size of the pot of money for health, how would we ensure that the allocation is fair? We therefore compiled the formula that I explained in the answer to the previous question: numbers, age, sex, life circumstances and remoteness. Analysed on the basis of postcode, which, as I said, was the best approach available, that gives us a broadbrush allocation to health boards. That was the limit of our remit. We were not asked to say how health boards should spend that money. Health boards, trusts and their individual components have to account for their spending; they are expected to report to the Scottish Executive health department on a whole range of indicators of efficiency. I cannot say that health boards will mirror what the steering group has recommended is allocated to them in the way that they spend the money.

On the second question, we also have to take into account that this is not just about isolated health boards. People in rural and island communities do not have the reassurance of being close to a big teaching hospital; for some treatments they must be transported to such hospitals and their relatives may have to accompany them. There are other allocations and policy making to consider, which I presume this committee is following very carefully, such as the acute services review and the other health measures set in train through the "Designed to Care" approach to health in Scotland, which will have to address that question.

Is it preferable to provide specialist hospitals close to communities or to have better provision in Lothian or Glasgow or Dundee and make good transport arrangements? That is an area where expenditure on health is integrated. The Government is likely to be looking for a clear indication of where health boards will have to work together on that issue, and the health boards in remote areas will have a big say on that—they have a right to expect the provision of specialist services. I hope that the recommendations of this review and any decisions made on its implementation by ministers do not undermine the provision of core facilities for people in remote communities.

Malcolm Chisholm (Edinburgh North and Leith) (Lab): I hope that later you will say something about the new work on the demand factors, especially health inequalities, and the basis of the report's methodology of trying to strip out the supply and demand elements of utilisation of services from the need. However, I want to focus on the adjustment for supply variables that influence service utilisation. What measures of accessibility were used and were alternative measures of accessibility considered for different care programmes? Was the impact on utilisation of other supply-side constraints such as waiting allowed for in the models? What times adjustments were made for the influence on utilisation of teaching hospitals or hospitals providing regional or tertiary services?

**Profe ssor Sir John Arbuthnott:** The teaching hospitals are separately provided for, as you know. Your opening remark pinpoints the main issue. The technical report, I hope, makes clear that a serious attempt has been made to take account of supply, need and life circumstances, which are intimately related. Supply of health services is not random but because there is a need for them, but the availability of particular services and facilities may affect their utilisation. Therefore, in trying to identify the provision of resources for need one has to correct for that, and that has been done in the measures outlined in the technical report.

We discussed that issue a great deal and were satisfied that as far as we could take account of the supply contamination factor we had done so. Whether we have done so to everybody's satisfaction is another matter, but that is the general approach we took.

I think we looked at supply in relation to individual care programmes. The technical team took the supply adjustment factor extraordinarily seriously. It is difficult to remember every detail.

**The Convener:** We will allow you that. If there is anything you cannot immediately call to mind, let us have it in writing.

**Professor Sir John Arbuthnott:** I will try to let you have anything more there is on that in writing. I gave the committee separate information on waiting times and supply.

**Malcolm Chisholm:** What measures of accessibility were used? I know it is in the technical report, but I asked the question partly

because it is important that the public has some indication of how the model was arrived at. It comes back to your point about transparency and accountability. Even at the risk of simplification, could you explain how the supply factor was accounted for?

**Professor Sir John Arbuthnott:** I am pausing to gather my thoughts. One way of explaining it is that if you live very close to a service, whether a community service or a hospital, then you are in a preferential position in being able to make use of it. The further away you are, the less advantaged you are. If we are to make an allocation that is fair wherever you sit or stand or work in Scotland, we must take account of that. Basically we are talking about a distance factor, with some twirls in it.

The Convener: I will not ask about the twirls.

Ben Wallace (North-East Scotland) (Con): As you said earlier, you decided against using population projections. In order to allow for changes in population, when would you recommend a review?

Professor Sir John Arbuthnott: I should have made that clear in answer to the question on population. If such things are set in cement they become inaccurate. One reason that we did not use general practice data is because the response to change in general practice populations is slow and resources can be allocated on a false basis, which we must avoid. The population, age and sex figures as well as the key morbidity and life circumstance indicators should be updated on an annual basis. It was on that assumption that the General Register Office advised us that mid-year estimates had the least risk of being wrong. Flexibility in the model should enable that to be worked through annually so that we do not make wrongly based allocations.

**Ben Wallace:** Have you said that to the minister?

Professor Sir John Arbuthnott: Yes.

#### 10:15

Ms Irene Oldfather (Cunninghame South) (Lab): We appreciate your explanations, but I am sure you will agree that by its very nature the report is complicated and technical. What opportunities were there for expert examination of any technical problems with the formulae? Were they subjected to peer review?

**Professor Sir John Arbuthnott:** There are two answers to that question. I will take the second part first, which relates to reviewing and updating the population figures and any other key components of the formula so that we do not get locked into out-of-date and inappropriate allocations that have to be changed, which results in a lack of stability in the system. Stability is very important.

We will not wait for 20 years before we review the formula again. As I said to the convener at the beginning, the approach that we have taken will also be adopted in different areas of health and outside the health field. Databases, and their management, are now part of public life and we must ensure that the ways in which they are evaluated, weighted and used in the future are subject to review. I cannot say what ministers have in mind with regard to how frequently reviews are undertaken, but the steering group would be shuffling in its shoes if we went four or five years without a major assessment of the impact of change and of the need to carry out internal and peer reviews.

I was asked about the extent to which we used the best advice available to us and the extent to which we used peer review in the review process. Obviously, we had a finite time in which to carry out the review. It may have been more desirable to have worked over two or three years, but that is a long time. It must be remembered that, when I undertook this job, there was no Scottish Parliament—we did not know what was going to happen. A minister in the Westminster Parliament asked me whether I would do this review for Scotland and I did it. The Scottish Parliament was due to meet in July, so I felt that it was essential that we had a substantial piece of work to present to it, and we have done that.

We took a lot of advice. Members of the expert group came from all over the UK, not just from Scotland, and included all the experts that you would expect to find on such a group. We had mountains of advice, sometimes conflicting. If I may, I will refer to a report in which I was involved that was concerned with higher education. I had the task of chairing a group of 50 education economists, whose task was to determine the impact of higher education. There were probably 25 different opinions on the matter, so the advice—from peers or otherwise—was not always consistent. However, we did take advice.

This may be the first time that this has been disclosed, but the way in which we wrote the report on resource allocation in the health service was not simply by sitting down as a committee and having note-takers from the Scottish health department come up with the final version. That happened with the drafts, but every chapter in this report was edited by at least two members of the steering group, who were assigned parts of the draft according to their interests. They prepared the drafts for the whole group. We began to look at the editorial process—the peer-review process, if you like—very carefully, and did so at least six to nine months before the final report was produced. On the technical report, we used an external member of our committee, Gordon McVie, who is the director general of the Cancer Research Campaign. As you may know, he is well known for his independence of view. He took the report and thoroughly examined it. He came back with comments, asked us to do more work where he thought it should be done and, within the time frame, we did it.

If we had had an infinite amount of time, we would have done infinitely more work, but the report is a good basis on which to move forward. If we accept it as such, and accept the feedback that you will hear today and tomorrow, and the reports that the minister is getting back to the Scottish health department, we can use those meaningful comments to improve what we already have. That would give us a good starting point.

I wish to stress the importance that I attach to annual updating and review. There may have to be a continuous monitoring group, which could address anything that arose from this committee's work or from the Parliament's work in the context of an on-going formula. I would feel much more satisfied if I left this matter in that state—I do not want to provide some kind of ex cathedra statement from Sir John Arbuthnott and his colleagues.

The Convener: You are absolutely right. This matter cannot be left for 22 years, by which time I will be retired.

Mr Duncan Hamilton (Highlands and Islands) (SNP): I welcome what you said about the fact that the review is a work in progress, but one of the issues that arises when one reads the report and the submissions from the various parties is the divide between the concept and the practicality of the report. The report seems to be an academically pure exercise, but I am not sure that it stands up in terms of some of the practicalities.

I give two examples. The first is the idea of joined-up government, which people talk about constantly, but which is an important part of what we are trying to do. How satisfied are you that this report embodies that principle, particularly in terms of the relationships between health boards and local authorities?

You mentioned the acute services review. That was not bound by health board boundaries, but this report seems to be. Are you happy that health board boundaries are the best measurement to use and that there is proper integration across Government and not just in the area that the report addresses?

**Professor Sir John Arbuthnott:** I hope that my letter to the minister at the front of the report is not in any way wishy-washy or academic. The terms of reference under which the steering group was

working were to some extent academic because we were analysing and breaking new ground. However, we were trying to be practical as well. I hope that that has come through in the report. If it has not, that is not good.

Our terms of reference were to come up with a resource allocation formula by which resources could be allocated to the people of Scotland. The agencies responsible for providing health care are health boards and health trusts. In my answer to a question on the integration of services, I indicated that integration was inevitable and that there would have to be more of it. The acute services review provides an excellent indication of where integration must occur. Whether dealing with health, education or economic development, one must have an initial resource allocation point and then a properly established means by which interaction, training and the integration of policy can take place. That is required for joined-up government, in which I firmly believe-I hope that we see it as a result of some of our suggestions.

There are two next steps. We must ask how health boards use money: is it robust and are we monitoring it properly? That is not what I have been asked to do, but we must do it and I would like it to be done. Some health boards may take the report as a form of guidance on how they use their money. Health boards carry our other functions, such as preventive medicine, education on health needs, food safety and so on, and we need to see progress in integrated activities. Our report provides a practical basis on which that sort of joined-up approach can be conducted.

**Mr Hamilton:** My second question, which is related to that point, concerns the practicality of the data. Do you think that the collection and use of data from a wide range of sources have been successful? You are using a census that is already out of date, so are we consigning ourselves, through the formula for resource allocation, to always being slightly out of date?

Using a formula is a fairly rigid way of doing things. I welcome what you said about flexibility, but I am not sure whether the evidence allows us to be flexible. Everyone welcomes the fact that the formula is evidence-based, but the formula is only as good as the evidence that is used to produce it.

**Professor Sir John Arbuthnott:** Remember that what we are doing is trying to channel resources to areas of need. There is no short, logical mental arithmetic that can be performed to avoid addressing the main issue: are we allocating resources to where the need is? Are we being fair to the people who live in deprived circumstances, and to those who live in remote areas? That is the issue at the heart of this report, and it is what we have striven to address. The evidence base, as I have indicated, could always be improved. For example, the data on the community aspects of health are limited, but we are ahead of the game, because we have taken the work of four trusts that have paid particular attention to how they use community health information. We analysed that work rigorously and concluded that the trusts that are involved are not unrepresentative of Scotland. One of the first priorities in this report is to do more work on community health statistics and on inequalities, but we have to start somewhere, and we think that the report is a good start.

The continuous morbidity records have increasingly been fed in by 70 practices over the past five years or so. The information may only represent 11 per cent of the population, but it comes from 70 representative practices, and to ignore it would be to ignore good data. The data are better than what is available in England, Wales or Northern Ireland, so we have given Scotland a good start. Databases must be improved—I am not pretending that they are perfect—but they represent a good start.

When you ask whether the formula will hold up and be practical, you must remember that we live in the real world. I conducted this review in the only way that I could. Put yourself in the position that I was in. What do you do? You have a committee, which obviously represents the interests of Scotland. The only way of doing the analysis fairly was to do it all anonymously. I did not know where the data originated. That anonymised approach enabled us to have rational discussions, after which we said, "We have done all the work that we need to do. Let's now identify how the resources will pan out."

When the resources pan out, of course every health board manager will try to squeeze out the best deal for their board and there will be accusations that the steering group has not done this or that. In that event, this committee, and the minister, must say, "We hear what you are saying. If there is significant evidence that we must make modifications, we will take it into account, and we may well make modifications." I can think of one health board in which we might do something already. That is the right approach to take, but there will be a lot of self-interest when it comes to the allocation of money. I am sorry that I took so long in answering your question.

**The Convener:** It is evident from the submissions that we have had that there is self-interest. Nevertheless, the submissions contain some good points. For example, the area covered by Argyll and Clyde Health Board contains a large number of islands but the board is not treated like an island health board.

**Professor Sir John Arbuthnott:** I understand that.

The Convener: I will ask Dorothy and Hugh to pull together some ideas on addressing health inequalities. After that, we will have run out of time.

**Dorothy-Grace Elder (Glasgow) (SNP):** Most of the data were based on the 1991 census and we are only a couple of years away from the next census. That is a problem, because Scotland has changed considerably since 1991. Health boards that cover areas with the greatest deprivation, in particular Greater Glasgow Health Board and Lanarkshire Health Board, are especially critical of the report. We have just received their submissions, so I do not know whether you will have had the opportunity to read them.

Professor Sir John Arbuthnott: I have not seen them.

#### 10:30

**Dorothy-Grace Elder:** Greater Glasgow Health Board's submission states that

"in one or two places the results seem questionable. The community services formula is one example."

Greater Glasgow Health Board and Lanarkshire Health Board—two major areas—suggest that they will lose money through that formula. Greater Glasgow's submission states that the community services formula suggests that Glasgow's spending per head on community services

"would be 3.3% less than the national average. If we did actually spend in this way it would mean a reduction of about 22% in services such as physiotherapy, district nursing and health visiting at a time when we are looking to invest more in order to meet health inequalities".

The submission also states:

- "the formula is based on data from four trusts which are not typical of Scotland because the populations they serve are healthier than the national average;
- data could only be collected for district nursing and health visiting, which represent less than one-third of community services – no evidence is presented to show that they are typical of the other services".

Lanarkshire Health Board's submission mentions age/sex weights in particular:

"A significant driver in the formula is the age/sex weights and in Lanarkshire's case the impact of this factor alone reduces the funding per head of population from £779 to £733. We would like to explore further the impact that it is assumed that demography has on health needs."

Lanarkshire Health Board agrees about legitimate extra costs in rural areas, but goes on to say that

"if the Arbuthnott recommendations are implemented in Lanarkshire's case we would receive £733 per head of population. This is significantly less than Orkney, Shetland and the Western Is les which receive £1185 per head". It is obvious that health is a bit better on those islands—although there is a massive geographic problem there—but it is absolutely unacceptable for the west of Scotland if budgets are reduced in Glasgow and Lanarkshire.

Professor Sir John Arbuthnott: There is a whole raft of questions there. I will start with the census information. The available census information dates from 1991, but it is extraordinarily rich in material and it would have been unacceptable for the steering group not to have taken account of it. The census provides useful relative information. Poor areas of housing in 1991 are still poor areas of housing today; welloff areas of housing in 1991 are well-off today. There may have been differences in between, but the relativities still exist. That is why I maintaingiven the time in which I was asked to perform the review-that not to use the census information would have been unacceptable. We supplemented the census information with annual updatable information on unemployment and sickness benefit and on many other indications of morbidity and life circumstances.

On the responses from Lanarkshire and Glasgow, we have a mixture. Nobody's allocation will be cut as a result of the review; allocations will be subject to differential rates of growth, which will be corrected for real-time inflation. It is, frankly, not correct for individual health boards to tell us that their allocations will be cut in particular areas because of the formula.

I went to some length earlier to explain that what is being allocated is a resource allocation of a sum of money. Priorities within the health board areas are for the health board managers to decide. Someone asked me why we still allocate to health boards; it is because health boards and trusts are responsible for meeting needs. We are not cutting the boards' allocations and we are not telling them how to spend their money. I have explained that we cut new ice with our use of the community data, and we have yet to see all the evidence that comes forward on that. I am not prepared to accept that the data are as unrepresentative as Greater Glasgow Health Board and Lanarkshire Health Board said in their submissions.

A lack of appreciation exists about the difference between health service provision in remote or rural areas and in urban areas. I will not go into all the factors that are involved in the organisation, focus and delivery of those services. Everybody is stretched for money; in no way would I suggest that Glasgow or Lanarkshire—where my best friends live—would say that they had an oversupply of money with which to provide health services. We know that there are great demands in those areas and we are trying to recognise that. However, let us take the example of someone with an ulcer who lives on a croft in a remote or rural area—how does that person get their ulcer dressed? They do not live within three miles of a health service clinic. Somebody—a health visitor or community health worker—who lives 50 or 100 miles away can come and dress the ulcer. I respectfully suggest that Glasgow and Lanarkshire should be asked to think about that.

There is no commonality of approach with the delivery of community services. Different health boards require different approaches. In rural and remote areas, the community workers do different work. For example, they do some of the general purposes work and accident and emergency work that is done by GPs and A and E departments in the cities. A big fairness factor is involved and I have majored on that factor in the report.

I am sorry to go on at some length, but this is the first time that I have heard the health board comments and I think that we have to take them with a sense of balance. There will be much criticism and I am not steering away from that, but—

**Dorothy-Grace Elder:** We are not ignorant of the geographic balance—

**The Convener:** I am sorry Dorothy, but I want to ask Hugh to contribute, as we are running a bit over time.

Hugh Henry (Paisley South) (Lab): I accept what you said, Sir John, about different methods and approaches for different areas, but earlier you expressed an aspiration that everyone in Scotland should have equality of access to health provision.

#### Professor Sir John Arbuthnott: Yes.

**Hugh Henry:** You also posed a couple of questions: "Do we want to channel resources to where need exists?" and "Are we being fair to deprived areas?" Those questions weigh heavily and underpin much of what Dorothy said. Will you explain what further work is planned on examining the inequalities in health provision and on identifying ways of eradicating them?

**Professor Sir John Arbuthnott:** We asked that question in chapter 15 of the report. For the benefit of members of the public, I should explain that we had considered and compiled a resource allocation mechanism that depended on population age and sex, life circumstances, and rurality and remoteness costs. We then asked the fundamental question, "By doing that, are we meeting this need?"

When we considered the uptake of certain services, we found a disturbing indication that although, in a number of areas, the use of health services by deprived groups was greater than it was by the most affluent groups, it was not as great as it should be. That conclusion was reached by considering various kinds of operations and drug treatments that were indicated in the report.

We realised that this was an important factor and we have been working on it flat out for three months. On the basis of that work—part statistical review, part literature review—we concluded that there is a problem. Although the steering group is not now formally constituted, we broke all the rules and met last week in Stirling to consider the evidence. There will have to be a further correction for inequalities of health or an allocation to meet such inequalities in deprived areas. Exactly how that will be done is still being worked on. Last week, we considered three options, the third of which was discarded, as it was not sound.

The first option told us that, at the very least, there was a good case for establishing a further adjustment that would redistribute about £4 million to boards with relatively high levels of deprivation. People in Glasgow, Lanarkshire and the other areas might say that that is not enough, although the good people of Lothian might say that too much has been given already.

The second option, which was extremely interesting, indicated that the redistribution of resources to areas with high levels of deprivation should be about £21 million. Following our meeting last week, the steering group felt that it must find more evidence to support that second option. However, in answer to your question, the evidence indicates that we must act, and we have an initial idea of the money that will be involved when we act. The money will have to be made available. As this is a major addendum to the report, it will have to be subject to consultation in the health service and beyond and in this committee. I suspect that this will be the first piece of on-going work stemming from the Arbuthnott review.

**Malcolm Chisholm:** What about the third option?

**Professor Sir John Arbuthnott:** The third option would move even larger amounts of money. That is a fact.

**Malcolm Chisholm:** I wondered whether there was an alternative. Do the options all involve redistributing money?

**Professor Sir John Arbuthnott:** Yes, but according to different approaches. There are different ways of analysing the situation. We considered one way that is certainly acceptable but that may not move enough money. We considered another way that would begin to look for good practice among health boards. Some health boards allocate more money to deprived areas than others do; the question is how that good practice can be implemented throughout the

country.

**Mr Hamilton:** How much would the third option have reallocated?

**Professor Sir John Arbuthnott:** I cannot remember offhand. I think it was just more than  $\pounds 40$  million.

**Dorothy-Grace Elder:** Both the amounts seem to be very small, Sir John. You mentioned the sum of  $\pounds 4$  million. Are you talking about the whole of Scotland, or just the greater Glasgow area?

**Professor Sir John Arbuthnott:** I have explained that we are in the middle of working this out and that those figures are what have emerged. There is no doubt that an adjustment must be made; this is a matter of evaluating what that adjustment must be. We must be fair, as we are dealing not only with deprivation, but with people in Scotland as a whole.

The evidence substantiates the conclusions that were reached in the report. We hope to be able to circulate an update that will enable people to consult on the extent to which those conclusions are fair, statistically reasonable and meet the needs of people in deprived areas. That is one of the features that we highlighted in the report.

**The Convener:** That will be an important addendum to the report. At various points in the report, notably chapter 15, you are at pains to say that it is a work in progress. Some of the points that have been raised today, such as what Duncan said about the availability of data, indicate that the report is a work in progress and must be reviewed.

**Professor Sir John Arbuthnott:** In the conclusions, we recommend that those gaps be filled. Indeed, we have been up front about that.

**The Convener:** The way in which health care and health services in Scotland are moving, with an increasing shift to primary and community care, makes it more likely that that will happen.

One concern that I have—although I do not know how the situation could have been avoided—is that the report is very much of its time. We are moving into a new style of health care, which is more concerned with community and primary care but, because of the lack of available data, you have, in some cases, almost been hidebound into having to make do with what data are available. There is a need for a review.

I would like to make a point about the on-going work on health inequalities. Taking off my convener's hat and putting on a Lothians hat for a moment, I point out that the health board in Lothian feels that it has done badly out of this. There will be concern in areas that are not perceived as deprived if extra weight suddenly seems to be given to the deprivation factor. There is a need for proper consultation.

People are making submissions to us and to the health department and the minister. If things suddenly change because added weight is attached to deprivation, we may have to go through the cycle again, as the committee has made known to the minister and the department. We have asked for a slight extension for our initial comments—we have said that we will come back to the matter during the second consultation period to take into account the extra work that is being done on inequalities. The process is ongoing.

#### 10:45

**Professor Sir John Arbuthnott:** Can I take it that you would encourage me to complete the work arising from chapter 15 and to submit that for consultation?

The Convener: Yes, if you feel that that is doable.

**Professor Sir John Arbuthnott:** You say that the report is of its time. My response is that Scotland has a formula that was devised 22 years ago. One could say that we should wait until this or that is better and something else is known, but I think that we have to get on. A feature of the steering group's work is that it provides a basis on which to go forward. One may say that we should act with caution in some areas, but we must proceed. Otherwise, we will be rooted in the past and the good work that is being done on developing community services will not be recognised—I think that it is recognised in the allocations that we are making, although there are different views on that.

**Dorothy-Grace Elder:** The margarine may be spread thinner and more fairly, but the amount of money that is proposed for the whole of Scotland is not large—it is only about £73 million. I assure you that £4 million or even £21 million for the greater Glasgow area is peanuts given the massive scale of deprivation.

**Professor Sir John Arbuthnott:** I do not dispute that passionately held view—I hold passionate views myself about some of these things. The task is to come up with a balanced means of allocating resources that is as evidence-based and fair as possible. The total resource that is allocated is a matter for Government, ministers and this Parliament.

**The Convener:** Absolutely. Ben, do you have a supplementary point?

Ben Wallace: No, I have a more specific point.

The Convener: I will be kind and let you have one extra point. Is the committee happy to eat up five or 10 minutes of the time allocated to later speakers in asking these questions? Members seem to be.

**Ben Wallace:** My point is about weighting and fairness, which is in the title of the report. It is also about your passion for remoteness. Can you explain how the adjustments for general medical services were calculated for Dumfries and Galloway and for the Borders? The population density in the Borders is 24 people per hectare, whereas in Dumfries and Galloway it is 23 people per hectare, and the percentage of the population living in locations with fewer than 1,000 people is 30 per cent in the Borders and 34.9 per cent in Dumfries and Galloway. Although the remoteness seems the same, the Borders is given a weighting of 1.1 per cent above the national average for expenditure, whereas Dumfries and Galloway is given 20.4 per cent above it.

**Professor Sir John Arbuthnott:** That is a very specific question and I welcome the opportunity to answer it. Nothing different is being done in the Borders or Dumfries and Galloway in relation to the key elements of the formula. If something is wrong or has been miscalculated, we will look at it, but the basis of the approach is the one that we have talked about this morning. However, you have raised a specific point that we will address.

Ben Wallace: Thank you.

**The Convener:** I am smiling, Sir John, because all the members have their hands up wanting to ask a question. I will take Malcolm Chisholm first.

**Malcolm Chisholm:** I will save my question for the minister tomorrow. I want to take us down a different route. The reason that I asked about the third option is that your remit, Sir John, only allowed you to consider redistributing money to health boards. I believe that the extra money for inequality should be looked at differently, in terms of specific initiatives in deprived areas, but you were not allowed to look at that.

Professor Sir John Arbuthnott: I was not allowed to look at that at all, although I hope that colleagues will give us a little bit of credit for having opened up that aspect. What has just been said is important. There may well be more than one route towards dealing with inequalities. The problem is not new-folk have known about it all the time and, living in Glasgow, I am aware of itbut there may be a new way of dealing with it. That could partly be done through resource allocation, as I was asked to do with this formula, but there could equally be integrated, joined-up Government initiatives that would allocate money for particular purposes. It was not for me to make such a suggestion but, having heard it, I think that it is an interesting approach and I am sure that there will be much discussion about it. There is not just one way of treating this problem.

The Convener: A couple of submissions made the point—Mary Scanlon also raised it with me that the British Medical Association and the Highland Health Board said that they were examining the link between the way in which the formula is put together and the way in which local authority social work departments consider how they allocate resources. That relates to the idea of joined-up government. Is it right to consider one set of allocations in one way and another set in another way when the allocations may involve the same patient?

**Professor Sir John Arbuthnott:** You should look at the sales figures, convener. We produced 3,500 copies of the report and there have been two reprints. We have issued more than 3,000 copies of the main report, although I would not say that as many copies of the technical report have been issued.

The Convener: Possibly as a cure for insomnia.

**Professor Sir John Arbuthnott:** This is a serious point, convener. In many cases, it was the local authorities that asked for copies, so there is obviously a keen interest in applying the report's principles to local authority resource allocation and in integrating that with health. I am not at all opposed to the idea.

**Mr Hamilton:** I want some clarification. Earlier, you talked about the challenges for island communities. As I understand it, the disbursal of moneys from central Government to local authorities currently takes account of a special adjustment for the islands. Is that correct?

Professor Sir John Arbuthnott: Yes.

**Mr Hamilton:** Is it also true that there is a special adjustment for islands in the current formula?

**Professor Sir John Arbuthnott:** That is how it is done at the moment.

**Mr Hamilton:** Exactly. Why then is that not included in the new formula?

Professor Sir John Arbuthnott: It is.

**Mr Hamilton:** As I understand it, it is included not as an additional special category, but as part of a remoteness index. There is one population needs base even under this formula that does not take account of the special needs of the islands.

**Professor Sir John Arbuthnott:** I am not sure that I understand your point. We have considered the outcome of the estimates on resource allocation through the new approach, which takes account of remoteness, rurality and—you can see it throughout—the extent to which the islands are involved, which comes out startlingly. If one were to compare that outcome with current sharing taking account of a little extra money going to the Highlands and Islands as a result of the sparsity factor—the difference can be found in weighting, which has been summarised in the tables at the end of the report.

One Highland board made a suggestion that can speak for itself. We have not taken into account one group of factors—communication between the islands and the mainland and the ferrying about of people to key resources—although we may well end up taking account of it. We have not heard the end of these discussions with the island boards.

**The Convener:** Sir John, I am sorry to bring you to a conclusion, as I am sure that we could go on all day—you will be glad that we will not do so. Your remarks were very useful and provide an ideal beginning for our consideration of "Fair Shares For All". I thank you for coming to the meeting. If any points arise over the next couple of days, would you be happy for us to take them up with you?

**Professor Sir John Arbuthnott:** I will certainly respond to the point about Dumfries and Galloway.

I have found the meeting extremely helpful, particularly in relation to inequality of health provision, which I will follow through.

The Convener: The points that you made about some of the issues arising from submissions and the consultation process are critical, as is the fact that you are already considering improving some of what you have done. That is the way forward for your report—we do not want to end up 22 years on without having reviewed it.

**Professor Sir John Arbuthnott:** We could talk about this for 22 years.

The Convener: It is only 22 days on, and you are reviewing it already. Thank you, Sir John, for giving us your time.

We will have a comfort break for a few minutes.

### 10:56

Meeting suspended.

#### 11:08

#### On resuming—

The Convener: I welcome Dr Alastair Leyland from the University of Glasgow to the Health and Community Care Committee. Dr Leyland, could you begin by giving us some of your impressions of the review? We will then open up the floor to questions. Could members intimate to me whether they wish to ask a question? From here on in, we will take questions in a free-flowing manner, if that is acceptable.

Dr Alastair Leyland (Social and Public Health Sciences Unit, University of Glasgow): I start by saying that I work at the social and public health sciences unit at the University of Glasgow, which is jointly funded by the chief scientist's office in the Scottish Executive and by the Medical Research Council. However, the opinions that I give are mine and not necessarily those of either of my funders.

I was involved in the review both through my membership of the expert group that advised the steering group and through the analysis of the development of the formulae for acute, maternity, obstetric, hospital in-patient and day-case services.

There were eight criteria by which the review was to be measured. Of those, the most important was equity—we wanted to ensure an equitable allocation of resources to health boards. We have gone some way towards doing that. In particular, we have moved towards having an evidence base. There is now some rationale for the allocation of resources, which is a major step forward.

SHARE formula had The previous the advantage of simplicity-everyone could understand what they were getting and knew that they were likely to get about the same amount the following year because mortality rates do not vary much from one year to the next-but it lacked responsiveness. It was not possible to target particular conditions or sectors. It also assumed that historic mortality was the only indicator of the need for health services.

Although, as I suggested in my submission and as Sir John said earlier, there is further work to be done in this area, the report represents a major step forward in terms of the fair distribution or allocation of resources to health boards throughout Scotland.

The Convener: I will kick off with a fairly general question about the formula. It is obvious from submissions that have been made to us and from our concerns as members representing different parts of Scotland that some areas are perceived deprivation, some as having are island communities and some have differences between postcode sectors. Is it possible to devise a formula that fits all areas, or do you have to give different weightings-as SHARE did-to islands and so on?

**Dr Leyland:** That is possible once there are sufficient data. I do not think that we yet have sufficient knowledge of the additional costs of providing services to island health boards, for example. I heard your question to Sir John as to whether Argyll and Clyde Health Board should be treated as an island board or as a mainland board. I do not think that the new formula is perfect, but I think that it is a step forward. We need further research and more data needs to be collected. Eventually, we will be able to have one formula that fits all. That will include adjustments. I have not seen any of the submissions that the health boards have made, but the consultation is not just for people to defend their positions, but for them to give feedback and to indicate in which areas research needs to be carried out.

#### 11:15

Mary Scanlon: May I ask you to defend your submission? I draw your attention to some points under the headings "Community Health Services Data", "General Medical Services Data" and "Scottish Health Service Costs Data". You say:

"The representativeness of Community Health Services data is uncertain and should be ascertained . . . The Continuous Morbidity Records . . . data raise doubts concerning their representativeness and should be investigated further . . . A check of the quality of the Scottish Health Service costs data is overdue and would do much to instil faith in their use."

As so much rests on the quality of those data, I do not have confidence that you have confidence in the data that you were working with, if that makes sense.

**Dr Leyland:** Yes. My problem is that I am too close to those data—I work with them all the time for a range of purposes. They are the envy not only of the United Kingdom, but of most countries in the world. I have talked to colleagues in Finland, Canada, Italy and the Netherlands who are attempting to take forward programmes of resource allocation, and they wish to have the kind of information that we have.

The Scottish health service costs are, to some extent, the cornerstone of the allocation—they are the basis that we use for saying how much the provision of those services costs. As such, they are probably the area of data that most urgently needs to be reviewed. However, they are all that we have. They come to the right totals—we know that, because they have to add up. In a way, they are an accountancy exercise—they are made to add up to the right totals.

The data give much more detailed information than is available in England and Wales, where data could not follow the path of disaggregated services blocks—splitting the acute sector into circulatory disease, respiratory disease and so on—because the information that we have was not available. The data are not perfect and I would like them to be improved—not just for those uses, but for the other uses to which I would like to put them. However, as they stand, they are the best available evidence, and to base our decisions on the evidence that exists is better than to use no evidence at all.

**Mary Scanlon:** Would it be right to say that you have serious concerns about the quality of some of the data?

Dr Leyland: Yes, I have serious concerns.

The Convener: Will you be specific about the areas into which we should be putting greater investment in data collection? Moreover, continuous morbidity recording is being used in four health boards. Although there is a question about whether they are representative of Scotland as a whole, do you think that we should be pushing to incorporate CMR as it stands in health boards across Scotland, or would that be a false track to go down?

**Dr Leyland:** I think that it is the community health service data that cover four health boards, although they should be extended to include all health boards; CMR covers 11 per cent of the population. In addition, not all areas of activity in community health services are included in those data, which should be expanded. We are talking about a brief initial attempt, with the best available data, to allocate to community health services. In a year or two, at fairly marginal costs, better data could be collected, the formula could be revisited and developed and complaints could be dealt with.

CMR—the general practitioner data—is a different question. As I say, I think that 11 per cent of the population are registered with practices that are included in the CMR data. My key concern about that is that the practices are self-selected. If the scheme were sufficiently expanded, that would give us a whole new insight into general practitioner behaviour. The problem with that is that the cost would be much greater, because we would be talking about frequent consultations.

The Convener: Are we also saying that those schemes should be extended to the members of a general practice team other than the GP and that those people should be seeing patients face to face more often?

#### Dr Leyland: Yes.

**Ms Oldfather:** I would like to make a point about community health data. It has been mentioned that that data is concentrated on four trusts; Dr Leyland explained that he did not think that that was robust enough. The data also concentrated on two professions but omitted key areas, such as community psychiatric care. Given the emphasis on community psychiatric care in the health service, that is a major omission and I wonder to what extent we can have confidence in the data set. Could Dr Leyland say something about that? Can that problem be resolved?

**Dr Leyland:** I am in no doubt that the data could be improved, which would also improve the

formula and make for better allocation. At the moment, those data are the best that we have. If there is to be an allocation for community health services, that would best be done by using the available evidence and not by making a guesstimate of what the allocation should be.

**Ms Oldfather:** Could you say something about community psychiatric care? What sorts of measures should we be examining? What sorts of data should we be trying to collect to make the information more robust? As we heard from Sir John, we are not going to wait 22 years for a review—we want an on-going review. I am trying to think ahead and I am trying to think what we can do to make the situation better.

**Dr Leyland:** The data that have been collected on, for example, community health services have not been collected for the purpose of reviewing resource allocation. If data were to be collected over the next six months—that would be the shortest appropriate time scale—on the activities that are believed to be the main areas of expenditure, by this time next year a muchimproved allocation for that block of the services could be put forward. The time scale for improvement could be that short. We would not have the final answer in a year, but there would be a big improvement on what is currently available.

Hugh Henry: You said that we were the envy of the world in terms of available data, but you also expressed serious concerns about some of that data. Three questions flow from that. First, are your concerns so significant that you feel that they invalidate the report and its conclusions? Secondly, what are your general observations about the methodology that was employed in the compilation of the report? Do you believe that that methodology was robust enough? Thirdly, everybody will accept the need for some method of allocation of resources, but they will reserve their opinions on the effect of that method on them. Do you believe that the thrust of the report is acceptable and productive and that some of the changes that Sir John suggests are necessary?

**Dr Leyland:** I do not believe that my concerns about the data are significant enough to invalidate the formula. I would, obviously, prefer to have perfect data, but they are not perfect. I have highlighted areas in which I believe it would be easiest to improve the data—those are, therefore, the areas in which my concerns about the data are greatest. However, what the report suggests is an improvement on the method of allocation through the existing SHARE formula. This is the best evidence that we have for allocating resources, although some doubts might be attached to the data.

To a large extent, our methodology was tried and tested. It particularly follows the methodology developed in York and used for the allocation of resources in England, Wales and Northern Ireland. It has been exported to many parts of the world. We have used better data and have put a couple of twists in the system that we think have improved the allocation. You will understand that it is difficult for me to talk about these things impartially, as I was involved in the process, but improvements have been made, some of which were possible only because of the availability of data in Scotland.

You made a point about the overall thrust of the data, Mr Henry. The fact that the movement of money about which health boards are concerned is less than 2 per cent of the total allocation shows that we have not moved far. If SHARE had been very wrong—if the movement had been 20 per cent, for example—the need for a review would have been apparent long ago. We have moved slightly—2 per cent—as we have adopted a more evidence-based approach. That is not to say that in 10 years' time there will not be a divergence or that there has not been a divergence in the past. The fact that we have come so close to the SHARE formula reflects the fact that our approach is worth while.

You Hamilton: mentioned island Mr communities. Do you agree with the argument of representatives of those communities that the report is undermined by the fact that it does not take account of fixed costs? Certain costs will be incurred regardless of the number of patients involved, but the document does not seem to reflect that fact. The wild swings in funding that we often see are influenced by the size of the islands' populations, which in some cases have reached a point that might undermine the credibility of the allocation scheme.

You dealt with the position on unemployment figures in your written submission. Governments of all political persuasions are good at fiddling employment figures; that has an impact on how much we can rely on the weighting that the report says has some relationship to unemployment. How important do you think that that is?

I was taken with your point about national average costs. You wrote:

"The assumption that national average costs should apply to all hospitals, and the effect of this assumption on the subsequent analyses (and hence the formulae) should be tested."

That strikes me as a strong point because that assumption defeats the logic of the report, which sets out to establish that there are different costs in different areas. The use of national costs skew the report. 11:30

**Dr Leyland:** I will deal with your first and third points together as they relate to each other. The use of national average costs is meant to ensure that inefficiencies in hospitals are not rewarded. If, for some reason, a stay in a hospital is more expensive than it would be in another hospital, that is taken into account so that more money does not continue to be paid to that hospital unless it can be shown that the costs are justified.

I think that that links with your first point. My concern is that additional fixed costs associated with some hospitals have not been taken into account. The costs that have been taken into account are factors such as—for an island board, say—the transportation from one island to another and the fact that that could mean that a person required an extra day's stay. What has not been taken into account is that, for reasons of diseconomies of scale, every time someone goes to a small hospital, the initial cost per patient is higher. It is worth while investigating how substantial the differences between health boards are.

Another example is the severity of a patient's condition. Two patients with the same illness could stay for an identical period of time and appear to use the same resources but, if one had the illness more severely, he would require higher drug or nursing costs. Those additional costs have not been included. If that is a systematic difference between two health boards, regional inequalities in cost may not have been taken into account.

There are mixed concerns about unemployment figures. First, the number of unemployment benefit claimants and figures on income support have only recently been available. Those statistics were not used in the English and Welsh allocations, although they were used in the Northern Ireland allocations. They are extremely powerful predictors of the use of hospital services-as we might expect—and they have the advantage that, unlike census data, they are not eight years out of date. The data refer to last year and can be updated annually.

However, any change in the way in which those figures are calculated will have a knock-on effect on the formula. I do not know how great that effect would be—that would depend on the likely changes. That is what I mean when I say that we should at least examine the sensitivity of the overall formula to the unemployment figures. We must see how changes in unemployment figures might reflect back to the allocations and whether every change in the counting of unemployment figures would necessitate the complete reestimation of the formula. Does that answer your question? **Mr Hamilton:** It does. I was interested in the point on population size, if we can return to the islands for a moment. There is a critical mass argument that says that the swings in funding are so great because of the population size. Is that something that you would come down on as a flaw?

**Dr Leyland:** Population size is important in terms of the per capita allocation to a health board, as are issues of settlement size. For example, one of the needs indicators is the proportion of the population who live in communities of more than 1,000, 5,000 or 10,000 inhabitants. Those are fairly arbitrary cut-off lines and we explore whether there are alternatives that make more sense.

**Kay Ullrich:** Duncan raised a point about unemployment and income support data. You said that there was a heavy reliance on that data and that the data must be updated. The point is that changes in benefits can be made by Government for political or cost-cutting reasons. How can the data be updated in terms of making a judgment on whether people who have lost out are still in need? Is that not asking the impossible? Is that not asking for a subjective rather than a statistical judgment? I foresee that as a problem. Could you also expand on your concern that out-patient data are restricted to the first attendance. How could that be improved?

**Dr Leyland:** I take your point about changes to benefits and the individuals affected. The analyses that we have been looking at were done at small area level rather than at the individual level, so we are not looking at the relationship between an individual in receipt of benefit and the use of services but between the level of benefit going to an area and the use of services. If a change to benefits has more of an effect on some areas than on others, that would have even more of a knockon effect. However, a change in the level of income support might not affect rural more than urban communities, for example—we would still have something to represent the use of services by people in receipt of benefits.

The nature of the relationship between benefit receipt and use of services may change. That is why I suggested a need to revisit and re-estimate the formula, but I hope that we would not exclude people just because the proportion who are in receipt of a benefit had changed. If 10 per cent of the population are in receipt of a benefit and a Government measure reduces that to 5 per cent across the board, as long as the formula is adjusted so that we double the importance placed on that benefit, we are back to where we started. If the proportion varies in different communities—in some it stays at 10 per cent and in others it is at five per cent—that is significant. I do not know how to address that—it is one of the areas that calls for further research, by economists rather than by statisticians.

The out-patient data collected are, as you said, on first attendance at a clinic. My biggest concern is that, just as over the past few years we have seen a move in hospitals from in-patient to daycase services, we are also now seeing a move from day-case to out-patient services. We do not have sufficient detail on out-patient services. At the moment, we are assuming uniformity throughout the country.

If that assumption is correct, it is sufficient just to take account of the first attendance for a patient, because that assumes an overall package of care. However, it is more likely that only some hospitals are moving patients to out-patient services and away from day-case surgery. The out-patient data should be brought into line with in-patient and daycase records, which means including the diagnosis and management of the patient and a record of attendance for each visit, rather than one per patient. I know that that entails extra administration and expense and is not likely to be a popular use of health resources, but I believe that it would enhance our ability to understand how out-patient services are used and to look at equitable allocation for out-patient services.

Margaret Jamieson (Kilmarnock and Loudoun) (Lab): You indicated that GP prescribing data appear to be robust. You also referred to the national average cost data. Obviously, those data refer to the cost of drugs, not to the cost of the management of patients.

Recently, the Accounts Commission advised us that there was wide variation in Scotland in the management of patients with regard to the drugs that were prescribed to them and that a significant saving for the health service had been identified. I take it from your comments that you were not privy to the information that was held by the commission. Is it possible that that matter could be revisited, thereby freeing up more money to be reallocated?

**Dr Leyland:** Yes. The idea is that, instead of using national average cost data, we would use the more efficient expenditure on prescriptions data. It would be straightforward to do that.

**Margaret Jamieson:** Would those data be available? I understand that the Accounts Commission had difficulty in obtaining some of its information, so I assume that the information would be difficult for you to find—at the moment, there is no appropriate method of recording it other than by picking up random samples of prescriptions.

Dr Leyland: I think that that is right. I am not entirely sure about the prescribing data because

they are not my area of expertise. I am not sure to what extent the difficulties that you identified would allow the opportunity to revisit the prescribing allocation.

The use of average cost data is still averaging out expenditure across health boards, so if some GPs in some health boards are prescribing more expensive drugs, their allocation is not being increased accordingly—any increased allocation is coming from the health boards concerned. The use of average cost data means that allocations to health boards that are prescribing more expensive drugs are reduced.

If the more efficient prescription cost data were used rather than the average cost data, that would reduce the weighting given to the prescribing block in the allocation formula, allowing the prescription money to be reallocated to any of the blocks, including back to the prescription block. I think that that addresses your point that there is a cost saving to be made within prescribing.

Margaret Jamieson: A significant cost saving.

**Dr Leyland:** I think that work could be done on that.

The Convener: Has the report been subject to peer review, and what part should peer review play in the on-going monitoring and reviewing of the allocation process? Is it your contention that, instead of ad hoc reviews, there should be a standing group to review this matter?

**Dr Leyland:** Yes, it has been subject to peer review. I am not sure of the details of the process but I know that it did go out for peer review and that any future changes to allocations should be reviewed. It is my view that there should be a standing committee, along the lines of the committee in England and Wales.

The experience of going through the review has alerted people to the vast amount of work that is involved. It takes a long time just to become familiar with the terminology and with what is available—for example, the data and information on what has happened in other countries—let alone looking at the developments that can be made because of the availability of data in Scotland.

That means that it is not sufficient simply to hang on the coat tails of another resource allocation committee. We are talking about following a different path to that of any other country, in terms of resource allocation. Therefore, we need a Scottish resource allocation committee, which, as you suggest, convener, would need to be subject to peer review by experts not connected to the Scottish process, to ensure that, given our circumstances, we are following a sensible path—the best path—for equitable allocation of resources.

#### 11:45

**Ben Wallace:** Are you concerned about the lack of projection in the report? Sir John talked about how much it relied on here-and-now population figures. Given the lack of projection in more affluent areas, the projected health problems will probably be less in future. The report does not give much weighting to projected populations or, indeed, to the projected health conditions of people.

**Dr Leyland:** The majority of health care expenditure is on service provision—on the hereand-now problems—and keeps people running. The projected problems might be more of a concern for health promotion, if there were a separate budget for health promotion based on factors such as known tobacco use in teenagers, with projections of health service requirements in 30 years' time.

However, the use of resources over the coming year can be predicted fairly accurately, based on current utilisation. Not only are the same people using the services from one year to the next, but the same problems are occurring in the same areas. The fact that we do not have a long-term projection is not necessarily detrimental. We pull people out of the river, rather than going upstream to see who is pushing them in. If substantial increased funding was put into health services, one could consider long-term health spending. At the moment, we are looking at keeping the country running.

**Ben Wallace:** The report does not take into account the fact that many health boards transfer resources into the social services budget— although different amounts are involved—because of the shortfall in funding that social services receive through local authorities. As local authorities do not use the same weighting or calculations, that does not take into account the fact that, for example, Grampian might bail out—or assist—social work less than Ayrshire might, because of the aging population. Should such assistance be given, or should that be part of the way in which we look at joined-up government, which was mentioned earlier?

**Dr Leyland:** That is a question of joined-up government and falls outside the remit of the review, which examines health expenditure. However, I take your point about the assumption that the money is used to buy the same services in all health boards. Quebec has come up with the idea of a one-number allocation—one that covers health, social services and the complete range of centrally funded expenditure. Perhaps that is a question for a committee with a wider remit than this committee, but it might be an area for future exploration.

**Dorothy-Grace Elder:** I think that you have summed up aptly what a number of us feel, when you said that you are pulling people out of the river rather than going upstream to see who is pushing them in and why. On the £76 million that is to be reallocated—we should stress that it is not extra expenditure—I will ask you an unfair question. I am sure that it was not in your remit, but you must have thought about this issue. How much more do you think would need to be spent on Scottish health to make a real difference?

The Convener: Dorothy, that is way beyond the remit of our invited guest.

**Dorothy-Grace Elder:** I will move on to another question.

I have always found accident statistics to be particularly barren in terms of our being able to examine them to try to prevent accidents. What did you find on that? Did you examine any of the accident and emergency statistics?

**Dr Leyland**: The closest that we came was through the disaggregation of the acute services statistics. That included injury and poisonings as a separate disease block, which includes services provided for accident and emergency. That was to cover the expenditure faced by health boards and what predicted that expenditure on those increasingly important issues.

**Dorothy-Grace Elder:** Will it be worth diverting expertise to help accident prevention? More detailed breakdowns could be produced, such as child accidents, what category, what area, and pooled nationally in Scotland.

**The Convener:** If I may add to Dorothy's point, child health is meant to be a priority for the health service. A couple of boards have mentioned that that was not considered as a separate issue. Should children's health have been considered in that way? That brings in accidents, as they are a big component of why children are in hospital.

**Dr Leyland:** I do not know how the consideration of child health separately from adult health would have benefited the review. It would have been a possibility. We considered, for example, making a distinction between medical and surgical admissions or between emergency admissions and elected admissions, but eventually decided on the separate disease blocks. There is a separate block for the elderly non-acute care for geriatric long staying. It could be argued that child health should be a separate block along the same lines, so that it could be targeted. Remember that this is about acute expenditure, not about prevention. This is about targeting the resources needed to treat children in Scottish hospitals. It is

possible to use the data to separate the services used by children.

Accident prevention is, at the moment, left to health boards. I am not sure if your question is whether the review should lead to a different allocation of resources to health boards so that they can target accident prevention.

The Convener: I was aware, from some of the submissions that we have received, that there are areas of work that health boards undertake which this review had not touched on. The review did not seem to have taken into account that work in its indicators or weighting. One area that was mentioned was child health. Another was health promotion, into which more health boards are putting more of their resources.

I will lead those points into another question. Would it be fair to say—this is a concern raised by Lothian Health and Forth Valley Health Board that the review is a snapshot in time, based on the available data, which tends to be more in the acute field? At the same time, health boards such as Lothian are moving to more innovative ways of giving out care, whether that be primary or community care.

Do you feel that the incentives to encourage the movement towards community care and primary care that the Executive and the Government want are there, or does the review give incentives to a more established, older form of care, which is the one for which we have the data at the moment?

Dr Leyland: It is important to remember that it is beyond the remit of the review to dictate to health boards how their money is spent. The proposed formulae give the ability to target resources and to move them, for example, from the acute sector to the primary care sector or to community health services, as is seen to be appropriate. Current allocations are based on empirical evidence. They are based on the expenditure weights, which are determined by previous use of services.

If the desire is to encourage movement from acute services to primary care, for example, that can be done by a decision to allocate, say, an additional 1 per cent per year and switch from the acute sector allocation to the primary care allocation. That is just moving money from one block to another. That is now possible. It is not a matter of dictating to health boards that that is where they must spend their money, but it does give the facility for that.

**The Convener:** Are there any other questions for Dr Leyland?

I think that you have exhausted us. On behalf of the committee, I thank you for coming, giving us your time and answering all our questions so fully, Dr Leyland, and for your contribution to the review itself, which has been a substantial piece of work for all those involved.

We should have a break of a minute or two while we wait for our next victim.

11:58

Meeting suspended.

12:08

On resuming—

The Convener: We will hit the road again. I welcome Professor Watt, who has joined us again from the University of Glasgow. It is good to see you again, Professor Watt, after having met you at the informal briefing that we received on the Arbuthnott report. Can you give us a general introduction, as we already have your paper on the review? I will then open up the discussion to questions from the committee.

Professor Graham Watt (Department of General Practice, University of Glasgow): Thank you for asking me before the committee again. I may repeat myself, as I do not think that all members were at the informal briefing.

I am commenting on the Arbuthnott report rather than criticising it. I think that Arbuthnott has done as good a job as is possible with the available data. The report is timely and important. I am not concerned so much about the detail—I want to turn the microscope upside down and look at the broad picture.

From my point of view, the worst thing that could happen as a result of the Arbuthnott report would be for us to think that something very substantial had been achieved. I do not think that that stands up to examination. Of the 12 mainland health boards, only three will find that their share of the NHS budget in Scotland will change by more than 0.1 of 1 per cent as a result of Arbuthnott. The three are Glasgow and Ayrshire and Arran, which gain, and Lothian, which loses. That is a very small shift.

There are a number of reasons for that. One is that the process is essentially conservative: it starts from the status quo, which is the source of the data. The status quo includes SHARE, which—whatever its strengths—over a period of 20 years has been associated with adverse trends in life expectancy in the population as a whole. As one of the previous witnesses said, there are questions as to whether the status quo is about right.

There is another reason, to do with data, for the fact that the effects are small, particularly on the community and general practice side. In the paper that I submitted, I flagged up two issues. The first

was coverage. We eventually obtained some data on the coverage of practices by the CMR scheme. In 11 per cent of practices in Scotland, more than 30 per cent of patients qualify for deprivation payments. Of those, 88 per cent are in Glasgow, where 44 per cent of all practices are eligible. However, only 3 per cent of the CMR practices meet the criterion. The Information and Statistics Division itself says that all its data for deprivation category 7 come from one practice.

Quite apart from that, the coverage underestimates the extent of need: counting consultations does not tell us what is going on in those consultations. One word that I would ask the committee to remember is co-morbidity-the extent to which social as well as health problems are concentrated not just in individuals, but in families. They concentrate in families, those families concentrate in practices and those practices concentrate in particular areas. There are multiplying effects at each level that make it more difficult to deliver health care.

The final reason that this report is fairly modest in its implications is that it is preoccupied with issues of access. I think that the importance of those issues is overemphasised. The health service was invented to address problems of access and, generally, I think that access is not the problem. There may be pockets where there are problems of access, but that is not why the health service finds it difficult to deliver effective care equitably.

I want to amplify that point. If the health service says that it will be there for people when they are born, when they die, if they have an accident and when they fall ill, that is providing access. However, those events happen to people at different times in their lives. What the literature on deprivation tells us is that problems happen earlier to people in deprived circumstances—when they are in their 60s rather than in their 70s.

A service that is preoccupied with access will provide the services whenever clinical events occur. The service should also do something about when those differences occur by preventing or delaying initial clinical events or their complications. That has different implications for what the health service is trying to do or should be doing. I welcome Arbuthnott because, whether we like it or not, it leads us into a debate on what the health service can do to address inequalities in health care. We do not know the answer to that question, which is why Arbuthnott calls for research, but the answer is, almost certainly, more than is done now. I have made other points in my paper, but I will not talk about them just now. 12:15

The Convener: You mention pockets of problems of access. Given the problems that remote rural and island Scotland face, do you think that it is right that Arbuthnott has not given any extra weighting to indicators of deprivation, morbidity, age, sex or remoteness? They are included almost equally. Is it fair to say that you downplay the needs of rural patients who have access problems, but think that greater weighting should be given to deprivation?

Professor Watt: There are obvious added costs in providing equitable access and care in rural areas because of the distances and the lack of economies of scale. The question is not whether, but to what extent one tries to address that. There are also added costs in delivering effective care in deprived areas that are less easy to identify and quantify. One could ask what health gains the £60 million that will be redistributed because of problems of rurality will buy? The boards that are affected by large rural hinterlands are quite different. Grampian, for example, stands to gain a number of millions of pounds on the hospital side, but its population has the longest life expectancy of any in the country: 74 years for men and 80 years for women. To redistribute resources simply on the grounds that the added costs of delivering health care can be identified is to answer a different kind of question. I do not say that that should not be done, but part of the ongoing agenda is to ask what problems we are trying to solve.

The Convener: I see a forest of hands.

**Mary Scanlon:** Professor Watt, my questions arise from your paper. You say that 1 per cent of the budget is to be reallocated and cite £59 million rather than £76 million. Could you clarify whether your calculations are right? Can this very small shift, which is less than what we thought it was this morning, make any difference?

You are also concerned, on the basis of comorbidity, that the Arbuthnott report seriously underestimates health deprivation. That is a profound point. Has Arbuthnott got to the heart of the matter that we thought that it was addressing?

On budget increases, you emphasise primary care. Is enough of the budget going from secondary to primary care? You express disappointment at the rate and volume of transfer, which you seem to think is at the heart of addressing deprivation.

Your final point, which seems to arise from many of your concerns, is that

"a strategic review is required concerning . . . how the health service can best use its resources to reduce inequalities".

That question came up when Professor Arbuthnott was here. How can we be guaranteed that giving health boards more money addresses the problems that this committee is concerned about?

**Professor Watt:** The sums can be done in different ways. I used the statistic that you mention when I was comparing mainland health boards and examining the shift from east to west for a particular purpose. The money could be cut up differently, and there are flows in different directions—£60 million for rurality; £50 million for age and sex; and £125 million for mobility and life circumstances—but the net result is between 1 and 2 per cent. The difference between the 1 per cent that I quoted and the 2 per cent is that we are slightly on either side of 1.5 per cent, but that is quibbling over a small detail. The shift is small and it does not seem likely that it will have a big effect.

The issue of co-morbidity is interesting and rings a bell with anyone who works on the front line. There is no research literature that dots the i's and crosses the t's, but when I talk to colleagues or have meetings in the Glasgow area about the issue, there is no doubt that people feel that they are drowning in a sea of need and demand that is concentrated within families.

On secondary to primary care, I felt that it was important to make the point that the redistribution within general medical services is counter to the Government policy of valuing and supporting decision making in primary care. To take resources from Grampian, Borders and Lothian or to introduce zero growth seems to be a contrary development when the issue is not to level up within the budget, but to transfer budget from secondary to primary care. In my paper, I contrasted the constellation of academic support that there is for different care programmes. One point that I did not make as explicitly as I would have liked is that the primary care component should underpin them all, because there is not a patient in acute services-although Henrik Larsson may be the exception-who is not there as a result of a decision taken on primary care.

The tradition of decision making in primary care is essentially pragmatic and conscientious. By and large, it serves everybody well, because money is not a feature of the consultation, altruism rules and people have professional standards, although there are problems at the extremes that increasingly interest the General Medical Council. In general, the system gives us a health service where the balance of work between primary and secondary care is more efficient than in countries where patients have readier access to specialties.

However, pragmatism and conscientiousness in decision making on individual patients are no substitute for taking a strategic approach to decisions on the best way of deploying resources, particularly in deprived areas. That is why I made the point that there are issues endemic to primary care in deprived areas that require not just an injection of resources, but the culture to be supported, which involves many elements.

To give an example, 150,000 people living in deprivation categories 6 and 7 in Glasgow are registered with general practices with one or two general practitioners, of which 32 practices are run single-handedly and have average list sizes of 1,900. Such practices have many strengths, because of the individuals involved in them, but it seems unlikely that they represent the best way in which to deliver a full range of services in areas characterised by high need and demand. There are issues of how general practice is configured and how it has evolved in the circumstances in which it works, which should be addressed strategically.

**Hugh Henry:** It would be inappropriate for us to try to duplicate the work of Arbuthnott. In other words, we do not need to hold another exhaustive, comprehensive inquiry. That work has already been done. The question for us is whether the Arbuthnott report is fundamentally correct in its approach and whether it makes a useful contribution to moving things forward. It is also for us to ascertain whether there are any mistakes at the margins that need to be identified and rectified. If we accept the premise that it has a contribution to make, can improvements be made at the margins?

I was therefore intrigued by your opening remark and your concluding remarks. You opened by saying that Arbuthnott was as good a job as could be done with the available data and you concluded by saying that you welcomed Arbuthnott because it leads us into a debate on what the health service should do. In between, however, you seemed to cast some fundamental doubts on some of the work that had been done. If the Arbuthnott report did not exist, what would you put in its place that would be different?

**Professor Watt:** I was not criticising Arbuthnott; he has done the best that he could do. The team included some of Scotland's best statisticians, who have a lead in multi-level modelling and have applied it in the report. There are some quibbles about some of the data sources on community health services and some people question whether that aspect of the report is correct, but in general I would not quibble with the methods. There is more scope for commenting on the remit of Arbuthnott, which was to look at issues of access.

Had he been asked to do something else, Arbuthnott could not have done it because the data do not exist. That is why my first conclusion was that Arbuthnott had to be a first step. It takes us forward from SHARE and is better than SHARE. By applying those methods, we get models that better explain the current situation. The report can be only the first step because of the limitation of the data available to Arbuthnott, particularly on the community health and GMS side.

One of the follow-ons must be to improve the quality of data, but that would simply be to address the issue of access. If the issue is taken forward to equitable access to effective care, we will be asking for all kinds of new data, which I believe will take longer to produce than Arbuthnott suggests in terms of a five-year timetable. The gaps that he identifies are not casual gaps that can be rectified simply by the stroke of a pen. To get the routine data and the research data out of deprived areas will take longer, because there are no people on the ground who are ready to pick up that challenge.

**Dr Richard Simpson (Ochil) (Lab):** I apologise for not being here sooner. I was at a meeting of the Finance Committee.

It is right to say that this committee should not do the work of Arbuthnott again. Rather, we should comment on how effective it is, which will depend on the outcomes. In five or seven years' time, if Arbuthnott still rules, will the gaps in life expectancy have narrowed? That is not exclusively a health service matter; it obviously affects other services.

It is fundamentally important that we make recommendations in our report about the data collection systems that should now be put in place or the emendations that should be made to current systems to ensure that the next round of the SHARE process—whether conducted by Arbuthnott or not—is based on data that are even sounder than the data that we have now. It will never be perfect, and the point about the deprivation category score is fundamental.

We should make a strong recommendation about the flaw in CMR. It is a good data collection system. In addition, we should request an operative report to indicate how that would be brought in. The opportunity for recording morbidity and co-morbidity is limited for the single-handed practices and the small group practices with high deprivation category scores in Glasgow that you mentioned. They will require substantial additional resources. Although the CMR system allows the recording of multiple morbidity, it does not link up to the social and family sides in the way that is needed. We could make some specific recommendations in that area. Do you think that that is another blind alley, or is it a route that is worth going down?

12:30

**Profe ssor Watt:** The deficit in coverage of CMR is not for want of trying to recruit practices in those areas. That is not the problem; it is a question of making it easier for practices to take part. I do not wish to prescribe what should happen, but something different from the current arrangement is probably needed. There might need to be a network within a network, whereby practices in the west of Scotland have a local centre, as well as one in Aberdeen. That might be a way of achieving local ownership.

In addition, it is important that this is not simply a data collecting exercise, but something broader relating to the development of primary care. It has the facility for measuring more than one diagnosis, but to me, the heart of co-morbidity is the high prevalence of socially patterned psychological distress. At its extreme, that presents itself as a higher prevalence of depression, anxiety and conditions that one would diagnose and treat. Below that, there is a higher prevalence of people under pressure-which makes the whole system dysfunctional in terms of what can be achieved within short consultations-and a cumulative effect the morale and motivation of health on professionals. That is why there should be a systems approach to the problem, rather than trying to solve it at the level of individual practices.

The other day, I was talking to a colleague who works in a health centre in Easterhouse. She told me that no GP at the centre has been there longer than 10 years. Most of them are 40 years old or younger. There are troops on the ground who have the potential to be very effective, given the support and resources.

**Mr Hamilton:** To return to the transfer of resources, and following on from Mary Scanlon's point, you describe as perverse the fact that the impact of Arbuthnott seems to run entirely counter to Government policy in terms of the transfer to primary care. We need to have a coherent policy, so that is obviously not a deliberate mismatch. What is the best way in which we can tie the two perspectives together? Would you want any standing committee that is set up constantly to review Arbuthnott to look at that?

That ties into a bigger issue. At the end of your paper, you say:

"In the current financial climate, there is scepticism about whether Health Boards will be able to use the transferred funds to produce the desired increases and decreases in the budgets of specific care programmes."

It comes back to the level of intervention that underpins the strategic approach that we are discussing. What should the role of Government be with regard to health boards, and what should the role of any committee looking at Arbuthnott be in terms of informing Government policy at an early stage?

**Professor Watt:** To pick up your point about whether the money would be transferred, I was at a meeting of general practitioners from different health boards a couple of weeks ago. One of them, who was potentially in a gaining board, said that the board would never see the money, as it would be used to pay nurses' salaries.

It is interesting to contrast the Arbuthnott recommendations that there should be monitoring of resources that are shifted. I am not aware that there is such a mechanism for monitoring shifts in resources from secondary to primary care as the work is transferred.

**Margaret Jamieson:** On resource transfer, you commented on the difficulty between secondary and primary care and on there being no mechanism to ensure that health boards make appropriate allocations. There are also difficulties regarding the social care of individuals who have been discharged early. Another factor is that individuals might well be bed blocking, but their care will fall to social work. I am concerned that Arbuthnott does not ensure that there is joined-up thinking on health policy.

There is a high number of residential establishments for the elderly in the west of Scotland. I come from Ayrshire, which some years ago was nicknamed Costa Geriatrica by the press. Arbuthnott does not address that problem. You have indicated that insufficient funds are split between east and west. Did you look at the full picture, including social care?

**Profe ssor Watt:** I do not think that Arbuthnott was charged to do that. To look at things in terms of whole systems is spot on. For instance, there is a twofold variation in emergency medical admission rates. The rates of admission are twice as high from deprived areas as from affluent areas within Glasgow. Who knows what that means—is that a good thing or a bad thing? How does that relate to other activities in primary care in terms of prevention and in terms of out-patient referrals? How does it relate in terms of what happens to people who are discharged from hospital?

We tend not to have a systems approach to knowing how one thing impinges on another. Another example is the new out-of-hours scheme for primary care—who knows what effect that is having on accident and emergency services or on other services? They have been evaluated rather narrowly.

**Kay Ullrich:** Most of the matters that I was going to raise have been mentioned already, but I go along with what Margaret Jamieson was saying about areas such as Ayrshire, where there is a preponderance of elderly people because of the nursing homes and residential homes in the area. Your point on co-morbidity is well made and I am sure that the committee will bear it in mind when we produce our report. Your second main point is:

"Research is needed on the *added costs* of delivering effective care in deprived areas."

Could you expand a little on what you mean by added costs?

I was also concerned by your statement on Greater Glasgow Health Board and Lanarkshire Health Board, in which you ask why they have not made greater use of their non-cash-limited element of general medical services. Could you expand a wee bit on that?

**Professor Watt:** I will answer the second question first. This question came from Grampian GPs. They were asking why people in Glasgow do not take more of their non-cash-limited budget. I do not know the answer for sure, but I think that it is to do with the endemic situation of practices in deprived areas. They are a particular size and they are not well configured to take advantage of the additional funds that are available through the non- cash-limited system. That is one reason, and that is why I think that simply saying "Here is the money" is not the answer. One must take two steps back before one starts taking steps forward.

On added costs, I will put it like this. What is the evidence that the health service can do something about differences in life expectancy? There is not a great deal of evidence, but there are clues. All the clues lead me to the conclusion-which is not outlandish-that we have the evidence from trials about effective treatments for lowering cholesterol and blood pressure. That is very important because those conditions affect a large proportion of the population. There are many effective treatments, but they make a difference to public health only when they are delivered to large groups of people. That requires high-quality, organised care. To use an analogy from Scottish football, we do not need a team of all stars; we need team players who will do simple things well, for large numbers of people.

### Kay Ullrich: Like scoring goals?

**Professor Watt:** It is good if you can score goals as well, but what is a goal? When we try to prevent something, a success is something that does not happen—strokes that do not occur or heart attacks that do not happen.

As someone once said, there are no grateful patients in preventive medicine. We need a different type of incentive system to assess whether a practice is good because things have not happened. That requires two kinds of intelligence: organised information that says what is happening and another approach that tries to understand whether that is good or bad. Scoring goals is an interesting issue.

To return to added cost, what works is wellorganised care—doing simple things well for large numbers of people. That is why it is better to be in a research trial—even in the placebo group because the care will be well organised. There are some good studies, although somewhat anecdotal, which show that well-organised care delivers better results all round.

For example, there was an interesting study in the United States, on hypertension detection and follow-up. The investigators could not do a randomised control trial of treating high blood pressure because consumer demand would not tolerate a placebo. That is one of the things that we should bear in mind when we encourage a consumer-driven health service. Instead, they randomised patients, either to special hypertension care, or to whatever care they would usually receive under the US health service. Although the investigators never said so, they were in effect carrying out a randomised control trial of a comprehensive health service free at the point of need-targeted on hypertension, but dealing with other complaints-using the marketdriven American system as a control. At the end of the trial, they had to explain why mortality improved, not just in cardiovascular events, but in non-cardiovascular events, including cancer, which could not be attributed to hypertensive treatment.

The point that the example demonstrates is that well-organised care delivered to groups with high needs is effective. It is more difficult to deliver that in areas where practices are small and where people feel that they are drowning in demand. That is where the added costs come from. It is more expensive to deliver that high-quality care.

**The Convener:** I wanted to ask about chapter 15, on health inequalities. That chapter makes the point that more research is needed to establish a better understanding of the reasons for differences in the use of services by affluent and deprived groups. There were some startling figures. One of the examples was hip replacement—the difference between the number of hip replacements in affluent areas and those in deprived areas is considerable. People are not getting—for want of a better word—access to services. How can we pursue that line of inquiry to even up treatment?

I used hip replacements as an example, but chapter 15 contains other examples such as data on varicose veins and coronary artery bypass graphs. Those graphs suggest that, although people in deprived areas are having more of those operations, they should be having three times more. How do we tackle that?

#### 12:45

Professor Watt: A colleague in my department examined access to coronary revascularisation procedures, which I think is a model in some ways. The data in the Arbuthnott report on social variation in access to bypass crafting are a typical example of data based on hospital sources. Such data do not tell us whether differences reflect decisions made by cardiologists at out-patients as to who will or will not have the procedure; whether the decision is made by general practitioners at the point of referral; or whether the decision is made by patients in their response to symptoms. In our study, we found that patients did not differ much. They knew what a pain in their chest meant and then went into the system. The explanation of that social variation is in the system somewhere. My hunch is that such variation happens at the point of referral, not at out-patients, although I could be wrong.

In June, we had a symposium on the well-known inverse care law, which means that the availability of good medical care tends to vary inversely with the population's need for that care. The origins of the inverse care law predate the NHS, as the law comes automatically with a market-driven health service. The NHS was designed to solve that, in regard to access. Our social differences are more subtle than the cruder differences in the US and are different in different conditions and perhaps for different areas. I do not think that there is an across-the-board law of nature called the inverse care law that we can apply to all conditions. We need to examine the different aspects of the matter.

**Dorothy-Grace Elder:** I want to ask about a comment in the British Medical Association's submission. You might not have seen the submissions from other groups; indeed, we have seen only some of them. Do you agree with the BMA's statement that

"a major draw back of the Review is that it does not address the chronic overall underfunding of the National Health Service in Scotland. We realise that this was not its remit, but consider it as a missing material factor"?

**The Convener:** I must stop you there. I think that you are just rewording a question that you asked the previous witness.

**Dorothy-Grace Elder:** No, no, no. I am asking a legitimate question and Professor Watt wants—indeed looks desperate—to answer it.

The Convener: He might also want to answer the question, "What's your favourite football team?" Your question is not within the remit of the committee's investigation, and Professor Watt is not in front of us to answer it. Your question touches on a much wider subject, when perhaps other committee members want to ask about the review.

**Dorothy-Grace Elder:** I was going to go on to the review. Does Professor Watt object to answering my question?

**The Convener:** It is not a question of whether Professor Watt objects; it is not within the remit of the committee.

**Dorothy-Grace Elder:** Convener, this committee has a loaded brief.

The Convener: The purpose of our investigation is not to ask everyone who comes before us whether we spend enough on health care, which is basically what you are asking.

**Dorothy-Grace Elder:** No, not entirely. It has always struck me as passing strange that such a comprehensive and expensive review has not included that issue at all and has been confined merely to moving things around. However, if you object to that question, I will move on to another.

**The Convener:** I do object. Could you limit your questions to the remit of the review?

**Dorothy-Grace Elder:** That is the problem.

The Convener: If you want to question someone about whether the review's remit was too narrow, I suggest that you ask the minister tomorrow.

**Dorothy-Grace Elder:** Okay. We will move on to Glasgow, if you please.

Greater Glasgow Health Board's statement highlights the community services formula from the Arbuthnott report. The statement says:

"It suggests that Glasgow's spending per head on these services would be 3.3% less than the national average. If we did actually spend in this way it would mean a reduction of about 22% in services such as physiotherapy, district nursing and health visiting at a time when we are looking to invest more in order to meet health inequalities, communities development and social inclusion objectives".

Do you agree with that, Professor Watt? Indeed, although I am sure that you have had to take so much into account, did you notice that passage in particular?

Professor Watt: I was aware that Greater Glasgow Health Board was concerned about the community services formula, which was based on data from surveys carried out in Dundee, Edinburgh, Renfrewshire and Highland. The choice of those locations is justified in terms of the base population being broadly comparable with the Scottish population as a whole. Other issues are whether those surveys, which, I believe, comprise activity data for district nurses and health visitors for 1996 and 1997, provide a true reflection of the needs of people in those areas and whether the areas are typical of deprivation categories 6 and 7. There are deprived areas in

Dundee, Edinburgh and Highland, but they are less concentrated than in the west of Scotland. There are questions about that part of the formula.

**Ms Oldfather:** As I said earlier this morning, the data are based on two professions—health visitors and district nurses—which, in general, tend to make up around 32 per cent of the community budget. That means that 68 per cent of the budget, which takes in community psychiatric care, physiotherapy, occupational therapy and so on, has been ignored. As the information has been based on four trusts, concentrating on two professions that account for far less than half the budget allocation in the community sector, can we say that the information is robust and should we base decisions on it? Can you say anything about that?

Professor Watt: I cannot say more than you have said.

**The Convener:** Can we take it that that remark turns Irene's question into a statement? [*Laughter.*]

Mary Scanlon: I realise that you have not seen the BMA submission. As a member for the Highlands and Islands, I am delighted at the increase in funding for the area. However, I am concerned about your concern over the lack of transfer to primary care. I am further concerned that, in an area that stands to benefit, such as the Highlands, there will be a decrease of 20 to 30 GPs, as the BMA points out. Who will benefit in the Highlands? It is serious for access and for the GPs' role in health promotion and so on if the BMA thinks that there will be that decrease in a remote, rural area. I realise that I am throwing someone else's submission at you, but you can understand that, as a member for that area, I am seriously concerned.

**Profe ssor Watt:** That is part of a broader issue connected with the final column in table 16.4—the non-cash-limited part of GMS, which Arbuthnott felt that he could not consolidate with the rest of the budget as it was a different system. There are questions about whether that system is capable of viring that amount of money and about the way in which money in that system can be accessed and used strategically.

You reflect views that have also been expressed in Glasgow. I have heard colleagues say that they do not see how the additional money for GMS helps as, once put through the formula whereby GPs are paid and rewarded, it is seen as not being helpful. This would not be the time to go into noncash-limited GMS—a higher degree is needed to be able to understand that.

The general point is well made: is the system capable of realising redistributed funds in ways that would be best used to produce health? We have a system: wherever it has come from, it may not be the one to go with.

**The Convener:** The key thing, as you said earlier, Professor Watt, and which Richard Simpson also mentioned, is to start with the end product, health gain, and then work back, rather than do what Sir John has been asked to do, which is different. In fact, everyone wants to see equity and fairness and improved health. That is what we as a committee must keep sight of.

**Professor Watt:** I would like to make a general point. It goes back to the question whether the health service can make a difference. It may crystallise into whether the health service is passive or active in relation to inequality issues. While the health service got rid of gross access inequalities, because it is a certain sort of system, we inevitably get different patterns of usage of the system and different results.

This is what we have seen over the past 20 years: if we take a passive approach, we sit back and watch inequalities widen. What are the implications of a health service that does not passively accept those social processes? What use is the health service as an instrument of social justice? How would the health service be different if it applied itself to that task?

**Mary Scanlon:** The factor of rurality has been built into the equation—as well as deprivation and other factors, and we all welcome their inclusion yet, in the most rural area of Scotland, there is a potential reduction of 20 to 30 GPs. As an economist, I would say that that does not make sense: that rurality is built into the equation, yet there will be fewer resources to address primary care problems than exist already.

**The Convener:** The final decision on that is taken by a different board, is it not?

**Professor Watt:** To be fair to Professor Arbuthnott, I am sure that he does not understand the intricacies of general medical services—the non-cash-limited component. Nor would the statisticians. They would apply the formula in a rather naive way, which does not understand the system. Once we start trying to apply his recommendations, we run into the system.

**Mary Scanlon:** Do you feel that the BMA's estimate is likely to be accurate?

**Profe ssor Watt:** I have no idea. I do know that simply to say that there should be more non-cash-limited GMS in an area does not automatically translate into a load of dosh that can be spent on health services.

**The Convener:** Richard might be just about to say it, but perhaps you could raise that issue with the minister tomorrow, Mary.

**Dr Simpson:** I was just going to say that, and that the evidence of the dep cat—deprivation category—scoring system and the funding resulting from that has not done more than prevent massive deterioration in GMS. Would you agree?

There have now been deprivation payments. That was the previous Government's attempt to recognise that there were different needs—it was the one thing that the previous Government did introduce which said that. There is no evidence that those moneys are used in a way that does more than prevent deterioration in the services. They have not succeeded in producing a quantum leap in the quality of services in those areas.

**Professor Watt:** The main effect of the payments has been to retain general practitioners in deprived areas, more in England than in Scotland, because we have fewer problems of recruitment.

**Dr Simpson:** I am also not being critical of Arbuthnott, because Arbuthnott was set a specific task, but I was wondering whether what you are talking about is—or was—the right task. If we are saying that the outcomes are modest, we must be clear in saying that the report will not make a radical change to Scotland's health.

#### 13:00

**Professor Watt:** SHARE had to be updated for all the reasons that were indicated. It has been updated, and it is the best that can be done with the data. The first thing that I said was that the worst outcome would be for people to sit back and say, "Well, we've dealt with that now."

**The Convener:** One of the things that the review is stressing—and it is something that the committee will endorse, I think—is the need for constant monitoring and reviewing of the formula, as opposed to what happened with SHARE. Would the best way of doing that be to have a standing group to consider that periodically, rather than having ad hoc groups? What is the best way forward on monitoring and reviewing the Arbuthnott formula?

**Professor Watt:** I do not have a view on that. Rather than the implementation of Arbuthnott, the things that interest me most will come after Arbuthnott.

**Dorothy-Grace Elder:** Given that social differences and life expectancy discrepancies are widening, despite the intentions of the SHARE formula, it seems at least questionable whether a small shift in national health service resources such as the one considered by Arbuthnott will halt, let alone reverse, current trends.

Earlier, you were talking of general practitioners in Glasgow, and you said that you felt that they were drowning in a sea of need and demand. In future, would you wish the remit of another review committee to be a bit wider? Arbuthnott's remit was very narrow.

**Professor Watt:** Arbuthnott was asked a question, and he provided the answer as far as he could. However, his report leads to another question.

**Dorothy-Grace Elder:** It is a very political question, and politicians put it when they want to save money.

**The Convener:** The point made to you earlier, Dorothy, is that it is a political question and therefore one for you to ask of a politician. The politician will be before you tomorrow to answer the question. Graham has done his best to answer all our questions on his particular remit and the remit of the Arbuthnott review, and I would like to thank him very much for that.

**Professor Watt:** One of the things that Arbuthnott shows is the limited nature of the advances that can be made in policy, with the help of statisticians and civil servants. Some of those big decisions are political, and can be dealt with only by politicians, not by professionals. The political issues that Arbuthnott raises are very important—especially at the outset of the Parliament—because if some of those issues are not addressed now, they will not be addressed. The Convener: Some things are coming through in the submissions and comments that have been made to us. There is a certain amount of stretching of plausibility in some cases, when one looks at what they mean in practical terms. You have made a point about the difference between secondary and primary care. If all around you the movement in health care is towards primary and community care, having a formula that is almost institutionalising institutional care does not sit easily with everything else that is going on, such as "Designed to Care", dealing with health inequalities and so on.

There are many reasons for regarding Arbuthnott as a first step—Sir John himself said that we must proceed with caution. The committee has to find a way of doing that. We have to find ways of doing things better, to deliver a health gain.

Thank you, Professor Watt, for speaking to us and answering our questions.

I thank the committee for its attention. We will reconvene at 2 o'clock, when our first witness will be Margaret Pullin from the Royal College of Nursing.

13:03 Meeting suspended. Members who would like a printed copy of the Official Report to be forwarded to them should give notice at the Document Supply Centre.

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