HEALTH AND SPORT COMMITTEE

Wednesday 12 March 2008

Session 3

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HEALTH AND SPORT COMMITTEE 8th Meeting 2008, Session 3

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DEPUTY CONVENER

*Ross Finnie (West of Scotland) (LD)

COMMITTEE MEMBERS

*Helen Eadie (Dunfermline East) (Lab)

*Rhoda Grant (Highlands and Islands) (Lab)

*Michael Matheson (Falkirk West) (SNP)

*lan McKee (Lothians) (SNP)

*Mary Scanlon (Highlands and Islands) (Con)

*Dr Richard Simpson (Mid Scotland and Fife) (Lab)

COMMITTEE SUBSTITUTES

Joe Fitz Patrick (Dundee West) (SNP) Jamie McGrigor (Highlands and Islands) (Con) Irene Oldfather (Cunninghame South) (Lab) Jamie Stone (Caithness, Sutherland and Easter Ross) (LD)

*attended

THE FOLLOWING GAVE EVIDENCE:

Professor Raj Bhopal (University of Edinburgh) Professor Sally Macintyre (Medical Research Council) Professor Graham Watt (University of Glasgow)

CLERK TO THE COMMITTEE

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SENIOR ASSISTANT CLERK

Douglas Thornton

ASSISTANT CLERK

Emma Berry

Loc ATION Committee Room 2

Scottish Parliament

Health and Sport Committee

Wednesday 12 March 2008

[THE CONVENER opened the meeting at 10:01]

Subordinate Legislation

National Health Service (Clinical Negligence and Other Risks Indemnity Scheme) (Scotland) Amendment Regulations 2008 (SSI 2008/60)

The Convener (Christine Grahame): Good morning and welcome to the eighth meeting in 2008 of the Health and Sport Committee. I remind all members and anybody in the public gallery to switch their mobile phones off.

Item 1 on the agenda is subordinate legislation. negative instrument before The us for consideration amends the National Health Service (Clinical Negligence and Other Risks Indemnity Scheme) (Scotland) Regulations 2000 (SSI 2000/54), which established a scheme to enable cost-effective risk pooling and claims management for a broad spectrum of clinical and non-clinical risks incurred by scheme members, including health boards, special health boards, the Common Services Agency and the Mental Welfare Commission for Scotland. The 2008 regulations will change the way in which the scheme is funded, moving from funding in advance to retrospective funding.

No comments have been received from members and no motions to annul have been lodged. Are we agreed that the committee does not wish to make any recommendations in relation to the regulations?

Members indicated agreement.

Health Inequalities Inquiry

10:03

The Convener: Item 2 on the agenda is our health inequalities inquiry. At our meeting on 27 February, we agreed to focus the inquiry on the implementation of the forthcoming report of the ministerial task force on health inequalities, particularly any recommendations that are relevant to the incidence and experience of cardiovascular disease among different groups. To inform our consideration of the report ahead of its publication, we agreed to take evidence from a panel of academics, so I am pleased to welcome Professor Raj Bhopal, who is professor of public health in clinical sciences and community health at the University Edinburgh; Professor of Sally Macintyre, who is director of the Medical Research Council's social and public health sciences unit; and Professor Graham Watt, who is professor of general practice at the University of Glasgow.

I direct committee members to paper HS/S3/08/8/3, which includes written material from all our witnesses, for which I thank them.

Do any of the professors wish to make some opening remarks or do they just want to take questions?

Professor Sally Macintyre (Medical Research Council): I produced a report for the ministerial task force that has been included in your papers. It focuses mainly on socioeconomic inequalities in health and on policy options for addressing them. I understand that the committee is also interested in inequalities based on gender, rurality and ethnicity. The research unit that I run also researches those areas, but they are not included in the paper so, if you wished in future to have any more information on that research—for example, we have done work comparing ischaemic heart disease in remote and rural areas with that in urban areas—we could supply it.

I will pick out a few key issues from the paper that you have. One of the important health policy issues that is often overlooked is that the question whether something works is different from the question whether it works to reduce health inequalities. A policy that works in the aggregate to improve health—for example, to reduce smoking prevalence—might actually mask the fact that it increases inequalities. If a policy works better for the better educated and the richer—as policies usually do—it might increase inequalities.

It tends to be much harder to improve the health of the poor and the disadvantaged, partly because of existing co-morbidity and partly because of other stresses in the lives of those people—there is a whole number of reasons. Improving the health of the most disadvantaged often requires more resources and more intensive work, and that is sometimes overlooked. An education or information campaign that is targeted across the board is least likely to reduce inequalities in health.

My final point relates to my first. There are two major goals—improving population health and reducing inequalities in health—but they may sometimes conflict. That is simply because, if you want to improve population health in the aggregate, you are better off targeting the rich and well educated because you get better health improvement at less cost. That, however, might increase inequalities. If you target the poor, it will cost more and you will need to do it more intensively. That is the conflict. If you wish to reduce smoking prevalence in Scotland, for example, that might not achieve the other goal of reducing health inequalities.

The Convener: Thank you—that was very clear and helpful.

Profe ssor Raj Bhopal (University of Edinburgh): Thank you for this invitation-it is a great honour. I will make some brief points in support of the paper that I have provided for members. First, ethnicity is a very complex variable; it is a bit like social class in that regard. It is not simple, as it is to do with culture, ancestry, language, religion and a number of other factors, which makes it complex. Secondly, however one uses the concept of ethnicity, one finds incredibly large variations in health status by ethnic group. Some of the variations are twentyfold or thirtyfold, than and probably bigger any other epidemiological variable of that kind, whether that is age, sex, social class or whatever.

The third thing that I want to emphasise is the difference between inequity and inequality. Inequalities are only natural and they will be seen in every field of life; if it was not for inequality we would not have the science of epidemiology, which is really the study of inequality. Inequity is a slightly different but very relevant concept—it is an inequality that is unfair or unjust. Those are the inequalities that we want to tackle, and perhaps I can elaborate on that in due course.

The fourth point that I want to make is that there is a very urgent need to reduce ethnic inequalities, and particularly ethnic inequities, in this country, particularly in areas such as Glasgow. To reduce inequalities—and ethnic health inequalities—we need information, which is where Scotland has lagged behind badly. I would be grateful if the committee would lend its influence to the Scotland-wide effort to improve health information by ethnic group. Finally, we need action, which I emphasise will help the entire population of Scotland. It is not a case of saying, "Well, we have some information or some action that will help the Chinese people or the people of Pakistani origin in Scotland." The lessons that we learn and the services, ideas and innovations that we develop help the entire population. Just as, when we learn something about the white Scottish population, we try to apply that to the whole population, wherever people live, if we learn something by working with the Indian population of Scotland, for example, we try to apply that learning to the entire population.

Professor Graham Watt (University of Glasgow): I want to follow what Professor Macintyre talked about, focusing on the role of the national health service in addressing but also in widening inequalities. The health service behaves perversely compared to the way in which everyone believes that it should behave, in what it delivers and achieves. Most of what I want to say would come under the heading of the inverse care law—that the availability of good medical care varies inversely to the need for it in the population that is being served.

The inverse care law is quite well known, but it is widely misunderstood and is confused with many other things. Originally, it was used to talk about the effect of market forces on health care. Because health care is so lucrative, the private sector is always seeking to portray itself as the solution to health service problems, and it has had substantial success in England on that score. It is encouraging that the policy in Scotland appears to be to steer clear of inviting the private sector in. My argument against the private sector is not ideological; it is that I do not believe that it can deliver—or has a track record of delivering—what is required to improve health through health services.

Sally Macintyre alluded to another aspect of the inverse care law—the fact that the middle classes will make use of any free public service more than the rest of the population. That is a reality and a challenge for politicians. If they take their hand off the wheel of the health service up here in Edinburgh, it does not sail in a straight line; it sails to one side according to how it is used. Therefore, I believe that there is a political responsibility to keep a hand on the wheel and to steer it on a straight line.

The inverse care law is illustrated in the figure that I have circulated in my written submission. It is not rocket science. Put simply, the resourcing formula in primary care—which is where most health improvement is generated in the health service—is based on addressing the 1948 problem of access to health care. We ration access to health care in the same way that we

rationed bread, butter and eggs during the last war: everybody has the same amount of access. That is why you will see, in the diagram that I have circulated, which covers the social spectrum in Scotland from the most affluent on the left to the most deprived on the right, using whatever independent measure of health you wish, that there is a two-and-a-half to threefold increase in the prevalence of health problems among the most deprived. However, as indicated by the straight black line across the bottom of the diagram, there is a flat distribution of general practitioners. We cannot square that circle, and the consequence is that the service is time poor where health care is needed most. Unless we address the issue of the service being time poor where it is most needed, we will continue to have adverse health statistics as a result of the way in which health care is delivered.

I am happy to answer questions on any of those points.

The Convener: Thank you. Do members have any questions?

Ross Finnie (West of Scotland) (LD): I have two questions, the first of which is largely directed at Professor Macintyre although the other witnesses may answer. Your paper helpfully directs us to a fact of which we are increasingly aware, which is that we should focus on outcomes and not on inputs. That is a welcome message. That is the only way in which we can perceive the stark reality that we are not reducing inequalities, although we might be improving the general level of health. The paper also describes qualities and attributes that might be more successful in addressing health inequalities as well as those that might not. I want to press you a little further on that. Are there more specific areas or characteristics within the population where we could apply the criteria that you have set out so clearly? The difficulty for the committee is that the problem is way out there. We look to experts such as those whom we have invited to appear before us this morning to help us focus not just on measures that might be more successful but on the population cohort and particular conditions where we could reduce health inequalities.

10:15

Professor Macintyre: That is a difficult issue, as there is little evidence—often due to a lack of information—on the relative cost-effectiveness of different policies to reduce inequalities in health. It is hard for us to know where to focus our efforts; often we must work from rather general principles. Because it takes a long time to obtain evidence on outcomes, there is also a lag time effect.

You asked how we can identify which measures work better and which measures work less well. I do not have strong evidence for what I am about to say, but there are one or two obvious groups and issues for us to target. Tobacco is an important issue in health inequalities and health more generally. Scotland has already introduced measures to tackle the issue, but they could be more targeted. Another issue is early years. It is important to start with children, because many inequalities that are expressed in later life are generated during childhood. To tackle barriers and price issues, we need to improve transport, retail provision and access to all sorts of facilities-not just health services, but health-promoting resources such as decent education, transport and housing.

I am afraid that I have not given a focused reply—I would need more time to consider the question—but the principles that I have outlined could lead the committee in the directions that I have identified. Some of the issues are controlled by the Scottish Parliament, but others are reserved. The Parliament cannot do much about fiscal policies, but it can do something about the distribution of resources and work intensively on issues such as tobacco and early years.

Bhopal: One Profe ssor important epidemiological principle is that we should focus on large inequalities. We use a concept called relative risk, which involves comparing the rate of disease in one population to that in another. A relative risk of 1 means that there is no difference between the two populations. If the figure is 1.1, there is an excess of 10 per cent on one side. There are many conditions for which the excess is 100, 200 or 300 per cent. We should focus not on those conditions for which the excess is 10 per cent, but on those for which the differences are large. Graham Watt made the point that, for some conditions and circumstances, the rate of disease in one population is twofold, threefold, fourfold, fivefold and even tenfold that in another. Let us focus on those differences.

A second principle is that we should focus on those conditions where we have evidence that an intervention works. Over the past 50 years, we have learned that what seems to be common sense often does not work. We need scientific evidence, preferably based on some form of controlled trials, to show whether an intervention works. If it works, we should apply it vigorously, instead of devising new, commonsense interventions that probably do not work.

The member asked which populations we should target. For 200 or 300 years, we have known that we should target people who are poor, people who are less well-educated, minorities and people who live at the fringes of society. A standard, time-honoured public health approach is to target the people who are most deprived. The next step is to identify those people and to find ways of working with them, as there is not always an easy and obvious way of working with such populations.

Finally, I echo Sally Macintyre's comments. The history of public health interventions over the past 1,000 years shows that interventions that are led by Governments tend to be effective, especially in reducing inequalities. Although interventions that are targeted at individuals and individual behaviours may be effective, they tend to be so among the well-off and the well-educated, and tend, therefore, to increase inequalities. That is another principle to add to the list.

Professor Watt: The important point is what works. We have spent too much resource on rather speculative and hopeful interventions, sometimes to the neglect of interventions that are of proven effectiveness but which we are not good at delivering, or which we deliver to differential extents in different groups.

That takes me back to my point about access. One type of access involves being able to knock on the front door of the health service and get in; another involves getting into the health service, getting everything that it can offer for your benefit and getting out by the back door. People vary in how much business they must conduct in the building, but the resource formulae that operate for some parts of the health service are largely to do with ensuring that everyone has front-door access. The consequences of aiming at back-door access are substantial and present challenges for us all in the context of what we want to achieve.

Ross Finnie: I used to believe that people of immense intellectual capacity were better if they had a good dose of common sense. I am not sure that Professor Bhopal has challenged that, but his comments have caused me some worry.

Professor Watt, you circulated a diagram showing the even distribution of GPs. There are two GPs on the committee, but they are probably not the right people to state on the record the current position, wonderful though it is to have them. Do the contractual arrangements with GPs present barriers or disincentives to altering the flatline distribution that you showed us?

Professor Watt: Several people round the table could help to answer the question.

Between 1948 and about 2003 the matter was rigorously policed by the Scottish Medical Practices Committee, which determined how many GPs there would be throughout the country on a per capita basis. That committee no longer operates and there is much more flexibility about where manpower can go. The interesting point about the figure that I circulated is that the health service no longer collects those data, which are based on whole-time-equivalent GPs. It astonishes me that such a dramatic statistic is no longer collectable. Perhaps Richard Simpson or Ian McKee will amplify what I said about manpower. There is more scope for flexibility than there used to be, but the difficulty is that there is not a huge amount of manpower to redistribute, if that were thought to be the solution.

Ross Finnie: Can you vary the per capita approach?

Professor Watt: There used to be a mechanism that prevented our doing so, but it has been removed.

Dr Richard Simpson (Mid Scotland and Fife) (Lab): Not only are data on GPs not collected, but data on staff, which GPs collect, are not collected.

The only time that the contract included an incentive that related to deprivation was in the early 1990s. The approach was not particularly successful but at least provided for increased payment when a GP had more deprived patients on their list. Professor Watt might comment on that.

The Convener: lan McKee wants to comment.

Ian McKee (Lothians) (SNP): Historically, a large proportion of a GP's income came from a constant source, whereas income is now much more reliant on the number of patients seen, services provided and targets met. Such matters are more difficult to manage in an area of deprivation, so GPs tend to go to non-deprived areas, where they will receive an increased income.

The Convener: Do the witnesses concur with that?

Professor Watt: The deprivation payments, which no longer operate, added only 1 or 2 per cent to the GP budget and were intended to counteract the disadvantage that GPs in poorer areas had in generating income through the contract. In essence, the approach was an attempt to retain GPs in poor areas. It is important to point out that, unlike England, we do not have under-doctored areas—we have coverage. That is a real achievement and a resource for the future.

Dr Simpson: I have a couple of questions, the first of which is for all the witnesses, but perhaps particularly for Professor Bhopal. We have had a discussion with the NHS Scotland resource allocation committee—NRAC—which has been revising the Arbuthnott formula. On the question of ethnicity, NRAC concluded in its report that

"areas with higher proportions of ethnic minority groups also tended to have higher values of many of the main indicators of need, particularly those related to deprivation"

and that

"In effect, this means that including deprivation indicators in the formula captures the additional needs of ethnic minorities".

I questioned that. Given the significant focus of ethnic minority communities in Glasgow, I asked why NRAC was not prepared to recommend a change in the formula to recognise that concentration and the additional ethnic minority need. Will you comment on the fact that NRAC has not included ethnic factors in determining the distribution of funds?

Professor Bhopal: Thank you for that challenging question. The reason why those factors are not included is that people have not thought through the matter properly and research has not been done to show how much extra need there is. The health and health care needs of ethnic minority groups is a complex issue. There are many ethnic minority groups and they all have different needs and patterns of disease. Some groups speak English well and some do not. Some have arrived in the country in the past few years, whereas others have been here for 25 years. The issues are complex. Some diseases are less common among ethnic minority groups. For example, cancer is less common and, because on average people in those groups are younger, dementias are less common. However, other diseases, such as diabetes, heart disease and stroke-the diseases in which the committee is particularly interested-are much more common in most of the groups, although not all of them. Indian, Pakistani and Bangladeshi people have high rates of those diseases, but the Chinese have very low rates of heart disease. Therefore, it is complex to work out what the needs are.

I have done back-of-an-envelope calculations and worked out that a health board needs approximately £100 for each person from a minority to meet their needs, particularly on translation and other forms of communication, signage in hospitals, the provision of appropriate food in hospital, the provision of spiritual care services that are adapted for their needs and a number of other issues. That is a back-of-anenvelope calculation that is not quite good enough to apply as policy, but the committee might want to consider recommending that more detailed work of that kind be done. The issue definitely needs to be recognised, because we know from smaller-scale research that a GP needs to spend approximately twice as much time on a consultation with a person whose English is not strong as they spend on a standard consultation. That applies particularly if an interpreter is required. More work is needed on that and NRAC needs to go back to the table.

Professor Macintyre: Raj Bhopal is more of an expert than I am on the issue, but another point is that the standard indices of socioeconomic deprivation that we use, which are predictive of health in the white majority population, do not necessarily operate in the same way for many ethnic minority populations. For example, in some ethnic minority populations, there is a lot of selfemployment. The different patterns mean that our hierarchical social class system does not capture well the real living conditions and standards. If one applies the standard Carstairs index or socioeconomic status scores, they will not really capture what is happening in ethnic minority groups. Therefore, it is incorrect simply to say that all ethnic minorities are deprived and live in deprived areas and that therefore the formula can take account of all that as the same thing.

10:30

Professor Watt: I take the point about the imprecision of some of the measures, but they are nevertheless precise enough to show big patterns in society as a whole. The big policies are, appropriately, pitched at that level. What can be said about ethnicity can be said for patients with multiple morbidity—they need more time and are perhaps less likely to get it, depending on which part of the country they are in. In that sense, NRAC was subject to the same constraints that Arbuthnott was subject to—as Donald Rumsfeld said, "They knew what they knew, but they didn't know."

The exercise was an excellent one: it had the best intentions, methods and statisticians working on it. However, at the end of the day, it was limited by the extent of the available data. We cannot take account of unmet need. By definition, routine data systems cannot tell us about unmet need—the things that would be covered if people had more time. [*Interruption.*] I am afraid that my mind has jumped tracks.

The Convener: We will return to you. Richard Simpson has a supplementary question.

Dr Simpson: My mind has also just jumped tracks. I was enjoying the response.

The Convener: We are an elderly committee.

Professor Watt: If I may, I will finish my point, convener.

Arbuthnott assessed need on the basis of activity. That works well in the hospital setting—if someone is ill, they tend up to end up there. However, if someone is receiving primary care treatment, some areas may have insufficient capacity to generate the activity in response to need. Any proxy measure of need therefore goes by default. Unmet need is the dog that did not bark in the night, so to speak. What is disappointing is that, although Arbuthnott recognised the problem, when Karen Facey came to chair the next committee that undertook the same work, she found the same problem. Yet again, the committee could not take account of unmet need. One group came to the conclusion that there was no evidence of unmet need, but it was a sub-group that sat at desks in York. If anyone ever tried to tell a GP in Govan that there was no unmet need, they would be given a completely different perspective on the issue.

Dr Simpson: My supplementary question is on the different types of problem with which we are faced. I will raise three. As Professor Watt said so eloquently, if someone gets to the front door, we have equality of front-door provision. My first point is how do we set about encouraging people to come to the front door to be screened for illness or given health and lifestyle advice? Rich people have lifestyle advisers and will—or will not—follow that advice, but that is not the issue.

Secondly, once we have got people through the door, people from more deprived areas have comorbidity conditions that are, up to that point, unrecognised in the system. Those conditions present a multiplication of complexity for the people beyond the front door to address. From all the information we have heard, the evidence is clear: even if someone from a deprived area gets through the front door and their co-morbidity conditions are recognised, they are not as likely to get a revascularisation operation, for example, as a middle-class person.

The third problem is someone getting through the second door into secondary services. Will you comment on that?

Profe ssor Watt: I will return to the front door in a minute. On access to revascularisation, we undertook a study that compared people with chest pain in Drumchapel and Bearsden. We took account of differential access whereby the referral could be made by the surgeon, the cardiologist or as a result of the initial GP consultation. In so far as we could study the procedure, we found that hospitals were making equitable decisions on treatment. That said, the situation may have changed now that revascularisation has become a hot, as opposed to a cold, procedure.

We were looking at where the fork in the road occurred; whether it was early or late in the patient journey. We found that people with chest pain knew what that meant and went to see their doctor, but that different outcomes resulted from the consultation. I will use a stereotype in trying to explain that. A professional man knows exactly what the score is and what he wants from the consultation, as does his GP. In that situation, the procedure happened. A patient from Drumchapel, on the other hand, would have a number of things apart from chest pains. The chest pain would not necessarily be the most salient issue; he could be a smoker, and he would have been told about that by the doctor before.

The conjecture that we were left with following the research was that self-censoring might be going on. Although the consultations started with the same information, they ended with different results because of different expectations on the part of the patient and, perhaps, the doctor. The resource part of the problem might have been identified, but the solution is not just about pouring in more resources. As a consequence of long-term conditioning to a reduced resource, there is a cultural problem of lower expectations on both sides. We would not seek to influence that immediately. It is a big problem that needs a longterm approach.

There is an important point to make regarding the front door and contact. Keep well was launched on the false assumption, I think, that there is a big problem with hard-to-reach patients and that we need to go out and knock on doors. That is a false start. In fact, we do have contacts. One of the beauties of the health service and the way in which it was first structured so long ago is that we have contact, coverage, continuity and flexibility—all the things that we would want to deliver health improvement. The trouble is that when the contacts occur, they are for other things and there is not the time to complement the reactive care with anticipatory care.

Keep well started with a rather BUPA-like model of well man and well woman clinics. It started well, but keep well's challenge is to move from that initial ascertainment to routine care, where the reactive is mixed with the anticipatory. We have the contacts, but we do not have the opportunity or the readiness to make use of those contacts for health improvement.

I spoke about keeping the private sector at bay. We in Scotland have the enormous advantage of complete coverage of the population through the general practitioner system. We have contact, continuity and flexibility, as I said. Often, people do not want to talk about their smoking today, but they might be ready to do so in three months' time. A special health promotion scheme might not have the required flexibility. I would also point out that high levels of trust in the family doctor system have repeatedly been reported among the public.

All the ingredients that I have mentioned are hugely important. The active ingredients in health improvement are contact, continuity, co-ordination, flexibility and trust. We have all that, but it is not sufficiently resourced for us to capitalise on our advantages. My argument against United Health and all the other companies is that I do not think that they will provide the advantages that we could get out of our general practice system if we resourced it more effectively in deprived areas.

Dr Simpson: The first piece of research that I ever did, under Professor Barber, the professor of general practice at the University of Glasgow, was to measure blood pressure in different populations and find out whether routine access, with anticipatory work and screening work, could apply in rural, suburban, industrial and deprived communities. We showed that, over three years, there was a 90 per cent level of contact by the population. We screened people's blood pressure and we were able to pick up problems and move on. That was 30 years ago, but it makes Professor Watt's point absolutely.

Professor Watt: To reiterate, we have the contact; what we have not got is the time and readiness to use that contact.

Professor Bhopal: Getting people through the front door is not difficult. We already know from many studies that the socioeconomically deprived have more contact with the health service. The same applies to ethnic minority groups: with the exception of the Chinese population, ethnic minority groups have more contact with the NHS than the population as a whole. Contact is no longer the issue; it is the quality of the contact that is important. The contact needs to be equitable—that is the challenge. Graham Watt made that point earlier.

I will take us to an even bigger issue, which is the culture of the country. We live in a country that has taken pride in being a world leader in medical education, medical research, other aspects of health research and medical sciences, and it has a worldwide reputation for that. We also take massive pride in our NHS. It is renowned and admired throughout the world, and we are incredibly lucky to have the NHS that we have. People use it, as Graham Watt said.

However, our health status is still one of the most mediocre in Europe. Why? That is the big question. It is not a question that the NHS on its own can either answer or tackle. We have to look at the culture of the country. I was brought up in the Gorbals in Glasgow. I lived there until I was 11, when I went to Shawlands in Glasgow. I have lived in many other places over the past 50-odd years of my life, and I have observed how people live and think.

We have a culture in Scotland that is pro-good times and to some extent anti-health and anti being told what to do, whether that is on smoking or alcohol. Getting drunk is highly admired in Scotland—it is something that people describe with great pride on a Monday morning. Very well off people eat the 50p mince pies and beans with great relish and never think for a moment about what they are eating. The whole culture of the country needs to be examined, by this committee in particular.

The message from the ban on smoking in public places has resounded throughout the world, and it is something that we can be incredibly proud of. The ban is more than just not permitting smoking in public places; it is symbolic of the fact that Scotland is taking seriously the health status of its people. I hope that there will be many other similar policies, for example on alcohol, the consumption of food, the food that we grow here, what is available in our supermarkets, the price of that food and our ability to exercise and do physical activity. All of those issues need to be examined, and they relate to national policy and politics as well as to good research, the NHS and practitioners. The question of front doors and back doors is about, first, the quality of the service and, secondly, the nation's attitude to its own health.

Mary Scanlon (Highlands and Islands) (Con): My first question is for Sally Macintyre and it is on the information on page 3 of her briefing paper, which shows that the level of smoking among women is far greater in the most deprived areas. That is linked to a much higher incidence of lung cancer, which seems to make sense. The number of men who drink more than 21 units a week in the least deprived and most deprived areas is almost identical, but 5 per cent of men in the least deprived areas have chronic liver disease compared with 80 per cent in the most deprived areas. I cannot understand the difference in the incidence of chronic liver disease, given that 25 per cent of men in both categories drink more than 21 units a week. Will you explain that to me, Professor Macintyre?

Profe ssor Macintyre: I am not expert in chronic liver disease, but I included that information to indicate that not everything is always patterned in the same way. There can be victim blaming, with people pointing out that there is always a gradient.

Figures on drinking more than 21 units a week do not capture whether someone drinks 40 or 22 units a week. If we looked at mean units per week, we might get a different pattern. There is also the issue of binge drinking. A middle-class person, for example, drinking more than 21 units a week by having three or four glasses of wine a night with dinner is different from somebody who goes binge drinking on Friday or Saturday, which is probably more damaging. Some of those factors might explain the discrepancy.

10:45

The paper also shows that some of the indicators are arbitrary. I have never been

convinced by where the limits came from or why it is 14 units for women and 21 units for men. I am not sure about the strength of the evidence for the limits, but the figures certainly do not capture what people drink beyond the limits.

Mary Scanlon: I thought that the difference between 5 and 80 per cent was incredible, but it is obvious that we have to look behind the figures.

Profe ssor Macintyre: It is also about how long someone has been drinking—when they started drinking, whether they have drunk all their life and so on.

Mary Scanlon: I understand. My second question is also about Sally Macintyre's paper. It is estimated that if 20 per cent of the most deprived postcodes were targeted, you would capture only 34 per cent of people on low incomes. As a list member for the Highlands and Islands, I can tell you that we do not have poverty by postcode. I think that the NRAC report that was mentioned earlier did not pick up on poverty in individual houses. Will you give us some advice about how to target inequality and poverty in individual households in remote and rural areas?

Professor Macintyre: It is complicated. The basic point that I was trying to get across is that because it is easier to target approaches at areas and we use deprivation indicators for areas, it is politically attractive to say, "We will put all our extra resources into this 20 per cent at the bottom," which misses the point that you would miss out all those people who are deprived as individuals.

It is easy to target areas in many ways—you can do it through health services, housing or education, but that misses out the worse-off people who live in better-off areas. I guess that comes back to needing to do more intensive work to identify individuals or households that are deprived. That work might be done in an area with pockets of deprivation, such as very poor housing or unemployment rates among individuals.

You could look at remote and rural areas in the Highlands and Islands and ask where the real pockets of deprivation are, rather than at the great big postcode sectors and whether they are deprived according to the Carstairs score. Such work would be to do with unemployment or perhaps failing schools. Identifying such deprivation is the problem and I do not have an answer to it, but policies need to address how we identify households and individuals in need, as well as areas in need.

Mary Scanlon: I will be interested to see how that can be done.

The Convener: Does anyone else on the panel want to comment?

Profe ssor Watt: We are talking about a general problem that does not apply only to individual households in certain areas. Earlier, I referred to my figures that show that the most deprived 10 per cent of Scots are served by seven health boards and 15 community health partnerships, which are difficult to target because they are surrounded by all sorts of other practices. That is a general problem if we are trying to be precise in our policies. It is necessary to bear in mind those examples because there is a danger that they might be left out. Having said that, policy is about the broad brush and the big shove. There is plenty of precision in the broad measures to achieve huge differences in different policies.

Professor Bhopal: Graham Watt has defended the current resource allocation formulas a couple of times. Of course he is right, but you can have only fairly crude approaches at the broad policy level. Knowing your local population is important.

Let us look at an example. Anyone who knows Pollokshields knows that it is a world of two halves: some of the most expensive houses in Scotland are in Pollokshields and so are some of the poorest populations. You have to know your patch. Our policies have to give local people some flexibility to use their knowledge of their own patch to apply the policies in a sensible way. That is why we need public health departments in community health partnerships and health boards and why we need partnerships between them and primary and secondary care.

The same applies to ethnic minority groups. They do not tend to live in the big housing estates on the peripheries of our big cities; they tend to live in the inner city, and the usual statistics may or may not pick out those inner-city areas as socioeconomically deprived.

Graham Watt is right on a broad-brush approach, but local flexibility is essential.

Mary Scanlon: You said that we should focus on conditions for which there is evidence that interventions work. Will you give us one or two examples of something that we know works and is not being done?

Professor Bhopal: I will answer your question, but I will start with something that does not work. Health promotion and preventive medicine have, probably for the past 500 years, been built on the idea that if we inform populations about what they should do, they will do it. That is not true. Of course we must inform them. People have a right to that knowledge and feel empowered by it, so I am not saying that we should not give people knowledge—we must—but that that principle simply does not work on its own. However, we still hear it. In particular, hospital consultants who do not really know the literature often say that all we need to do is tell people something and the problem will be solved. No, it will not. In fact, it will get worse, because a few very well-off people in the middle and upper-middle classes will take on that little bit of advice and everyone else will ignore it.

We need more intensive interventions. We know that Government-level interventions definitely work and are very powerful. Laws on air pollution, housing, occupational health and smoking definitely work. The other thing that definitely works is fiscal measures. Things that become more expensive through taxation are used less and things that become cheaper are used more.

On a more individual level, we know that, for people to change, they require intensive, longterm, continuing effort with people whom they trust. In the past five to 10 years, four or five studies have been published throughout the world-in China, Finland, the USA and Chennai in India-on the prevention of diabetes in people at high risk of developing the condition. They have uniformly shown in a highly cost-effective way that 15 contacts by dieticians and physical trainers over a three-year period definitely works. It helps people to lose weight and makes them fitter. Their risk of developing diabetes is at least halved and sometimes reduced more than that through intensive intervention of that kind. That is an expensive intervention but it is cost effective. It costs about £1,000 to save a life by that method, which is a good intervention. However, it is not easy to put such an intervention in place, especially on a population level.

We know not only that intensive, long-term interventions work but that the benefits can be seen many years after the intervention has stopped. By contrast, a six-month intervention definitely does not work; it has no lasting consequences. When we stop such an intervention after six months, people revert quickly to their previous weight.

I could go on and on but I will not, because I will be stopped. Does that answer the question?

Mary Scanlon: That is helpful.

The Convener: Professor Bhopal, the illness that you mentioned was diabetes; are there any other conditions? I take it that it is only one of your examples. I think that is what Mary Scanlon was looking for.

Professor Bhopal: Oh yes. We know that advice on smoking cessation definitely works and is highly cost effective. We know that policies on alcohol consumption in which Governments control the price of alcohol definitely alter the amount of alcohol that is consumed and by whom.

We have demonstrated that the khush dil programme—a fairly unique primary prevention programme for diabetes and coronary heart disease in south Asians living in Glasgow—works and have published the evidence. It is a one-toone intervention in which health visitors and dieticians work with families and individuals and alter their cardiovascular risk factors. It has many benefits.

We know that we could prevent 90 per cent of heart disease if people would only take the advice. How do we get them to take the advice? We need long-term, intensive, one-to-one interventions.

We know that we can make a big impact on the rates of stroke through reducing blood pressure in particular. How can we reduce blood pressure? People definitely must eat less salt. Graham Watt is a big expert on this. Salt is a major cause of high blood pressure. Many studies have shown that if people eat less salt, their blood pressure will come down and stroke rates will come down substantially. Numerous effective interventions are therefore possible. Perhaps we can bring a list of them to the committee some other time.

The Convener: For the *Official Report*, what was the project that you referred to?

Professor Bhopal: The khush dil project. Khush dil is a Punjabi phrase that means "happy heart".

The Convener: We all have happy hearts here. Perhaps not.

Professor Watt: I want to make a general point about the profusion of programmes-diabetes, cancer, heart disease, mental health and so on. Policy, which is often based on the interests of providers and researchers, is very vertical, but at ground level patients and families are trying to cope with their lives. The challenge is integrating all the conflicting and challenging messages at the individual, family, practice and community levels. In Scotland, we are good at having vertical themes relating to topics or diseases, but we lack complementary horizontal investment in integration at the consultation, practice and community levels.

As Raj Bhopal said, we need investment in longterm relationships that involve trust, but it is also important that people see somebody whom they know. Apart from anything else, that will mean that the second time they meet that person, they will not have to repeat their story. The second, third and fourth consultations will therefore take place at a higher level. That is why my mentor, Julian Tudor Hart, talked about initially being face to face and eventually being side by side. That is an extremely important point, particularly for patients with diabetes, who can go to different places for their feet, eyes and blood pressure to be checked. Most of us who have had contact with the health service know how challenging it is to deal with one part of it, but a person with multiple problems will have a diary full of engagements at different places. We must recognise the importance to the health service of continuity, co-ordination and relationships, and invest in those things. The English health service is taking a rather different track now. We have an opportunity in Scotland to show how things should be done.

I return to a point that was made about the health service. Huge advantages have been bequeathed to us through the health service's structure, but we are not currently rising to meet the challenge of what a national health service could and should do; rather, we are basking in the glories of the people who set it up. There is still work to do so that the health service will evolve and continue to meet its challenges.

We have talked about things that work. The difference between the health service now and the health service of 50 or 60 years ago is that when things did not work, one simply needed front-door access. There is a delivery issue when things do work. We must hold the health service to account on whether it is delivering the things that work where they are most needed. The trouble is that the picture is frequently hidden from view. That is partly because health inequalities are seen to exist only when a statistician makes it his job to collect data to show that there are differences.

Inequalities do not hit people in the eye in the way that the closure of a clinic does, and there will not be the same noise-based effects as a result of such access issues. They do not come to public attention. In addition, the locations of health inequalities are dispersed. As I have said, the 100 most deprived practice populations in Scotland are distributed across 15 CHP areas, so there is no collegiality or networking among practices that are in the same boat. Unless somebody makes it their business to draw attention to that fact, it will not exist and it will not be part of the political consciousness.

We need to set ourselves more challenging targets. One of them, to my mind, should be that the health service will be seen at its best where it is most needed—that is, serving the most deprived 10 or 20 per cent of the population. Where is that population and to what extent do we monitor the health service on the basis of what goes on in those places? We will not get the answer from the annual reports of health boards or CHPs because they have different ways of looking at the health service. 11:00

Professor Macintvre: I return to Marv Scanlon's question about what works. As I mentioned earlier, there is an issue about what works to reduce inequalities in health. One problem is the lack of evidence. We have much more evidence on individual, downstream, face-toface interventions such as the one that Raj Bhopal talked about-15 face-to-face sessions to reduce the likelihood of diabetes. There is some convincing evidence on the effects of big structural changes in history, such as the clean air acts and better housing. There is clear evidence that those things improved health and reduced health inequalities. There is some sort-of plausible evidence that middle-range policies such as the fluoridation of water and tighter controls on salt in food might reduce inequalities in health, but we do not have good evidence that they do. That is partly because of the way in which initiatives are rolled out, which makes it difficult to study them. A lot of studies have considered overall impact rather than inequalities and, as I say in my paper, a lot of them do not focus on outcomes at all.

Although there is a huge industry that researches inequalities in health, there is a disappointingly small amount of clear evidence to show that doing certain things reduces inequalities, so it is difficult to answer the question.

The Convener: That is helpful.

Rhoda Grant (Highlands and Islands) (Lab): My mind is away on another track, so I will recap on a couple of things before I ask my main question.

There was some talk of low expectations, but we also heard about the importance of local knowledge about health inequalities. In a rural context, it is one thing to say that we need local knowledge to be able to identify the areas that we should target with regard to health inequalities, but if that is matched with low expectations on both sides—from health practitioners and from people who use health services—how can we change the dynamics of the situation to make that work?

Professor Watt: There is an important point to do with the independence of general practice. Scotland is served by 1,050 general practices and they are rather independent, as they have always been. There are huge advantages in that independence because it allows them to use their local knowledge. We cannot create a formula that takes into account a particular locality, a group of staff and a group of problems. Those things have to be considered at the local level. We are fortunate in that we have the potential for high levels of leadership at that level, particularly if the leadership is broadened to include a larger number of people.

However, the downside of that independence is isolation and problems with sharing experience with other places or even making comparisons with them. The random variations that exist between practices in the health service are bigger than the variations between affluent areas and deprived areas. There are good practices in the most deprived areas and there are not-very-good practices in the most affluent areas. That is a consequence of the disaggregation of the delivery system for the health service. One of the challenges is to provide greater support and more linkages between places so that experience is shared, evidence is gathered and change is made. Sixty years on, we should have made more progress on that.

Rhoda Grant: There are big issues to do with inequality in relation to rurality, which Mary Scanlon mentioned. There are pockets of deprivation, but sometimes we must deal not with pockets of deprivation but with individuals, who can be difficult to identify. There are also wider issues to do with inequality of access to health services, given the geography in rural areas, and to do with the services that are available where the population is sparse. It is not cost-effective to have an all-singing, all-dancing hospital in every glen. How do we identify and overcome the drawbacks in that regard?

Profe ssor Watt: I do not want to be flippant, but we can congratulate the person who was responsible for making the chapter entitled "Equity" in "Better Health, Better Care: Action Plan" exclusively about remote and rural health care. It is obvious that the argument has been heard. I was surprised that remote and rural health was the only issue to be flagged up in a chapter on equity. My impression is that the issue has been well identified.

Profe ssor Macintyre: Inequalities in health and health outcomes are not just a function of activities in the health service; there are other inequities in remote and rural areas, which are to do with access to a range of resources, whether we are talking about area-wide or individual issues. We need to consider not just secondary and primary care but education, employment, sources of income and patterns of migration in and out of remote and rural areas.

The Convener: And housing.

Professor Macintyre: Yes, poor housing is an issue.

The committee is concentrating on cardiovascular disease, but there are high rates of suicide and other health indicators in remote and rural areas. We must always consider people's living and working conditions as well as the health care that is available to them.

Rhoda Grant: A stark and obvious inequality is that if a person has a heart attack in a remote and rural area, their access to life-saving services is limited compared with that of a person in an urban area. A person might survive or die, depending on where they live. I sometimes think that there is an attitude that someone who chooses to live in a rural area must accept what happens. That takes me back to the discussion about expectations on the part of patients and practitioners. Such expectations must be challenged.

Professor Watt: The situation is evolving. After I qualified, I worked in Shetland, doing surgery. I was told that 20 years earlier people used to see two air ambulances a year, but when I was there we would see two a week. Expectations and possibilities change all the time. The stoicism of the indigenous population is altered by the expectations of incomers, who bring city attitudes with them. There is a complicated mix. The fortunate aspect is that the constituencies are usually marginal, so people's voices can be heard, unlike in inner cities, where issues are often not well heard.

Professor Bhopal: Rural health is not one of my areas of interest, but I was interested in two challenging points that Rhoda Grant made. She asked how we raise people's expectations, which might be lower in some places than they are in others-among patients and practitioners. The solution will be long term. The nation as a whole must raise its expectations. Our First Minister has been doing a grand job on that and I hope that other members of the Scottish Parliament will raise people's expectations. There is no reason why Scotland should lag behind the rest of the world on health; we should be leading the rest of the world. It is up to all of us to raise our expectations, including the people that Rhoda Grant talked about.

The second point that Rhoda Grant made is a difficult one. My neighbour died from an aortic aneurism. He would not have died if it had not been for the fact that he was on holiday in the remote Highlands at the time. If he had been in Edinburgh, he would definitely have lived. People who live in remote places pay a price—he certainly did so.

I suppose that we have to apply the distinction that I noted earlier between inequality and inequity, and that will require deeper analysis. If a person chooses to live in a rural area, obviously they will not have access to a surgeon who can repair an aortic aneurism. That is obvious because such a skilled surgeon cannot be available to every village in Scotland; it would not work, and they would not be effective surgeons. They must be in regional centres.

Is the fact that a person lives in such a place an inequity? Is it unjust or it is just an inequality? It is obviously an inequality, but is there an injustice there? From first principles, I am not quite sure that there is, although I would have to think about that more deeply. If there is an injustice, what can we do to redress it, at least partly? The answer that comes to me is to bring better technology into rural areas, such as video links to surgeons, so that if a person has a particular type of pain, they can be linked immediately to Edinburgh or Glasgow and the surgeon who will repair them and who can give the best possible advice, or the technology involved in moving people safely from remote places back to the big hospitals in the cities. Technology might be the long-term answer.

Otherwise, it is a case of saying that people choose where they live, and there are advantages and disadvantages to living in rural areas. To my general knowledge, health status measured by allcause mortality or life expectancy, for example, shows that people in rural areas do quite well, and people who live in the inner cities do the worst.

Ian McKee: Professor Watt has shown with brutal clarity the working of the inverse care law in Scotland today and of a flat-lining of the distribution of GPs but a rise in need according to deprivation. I suspect that the distribution of nurses, health visitors and midwives flat-lines a bit like that as well. Perhaps, Professor Bhopal, it is a sign of the failure of public health services over 60 years that we are still in that situation and have not been able to effect change.

What practical measures should the committee recommend we take to alter a situation that has been around for 60 years? What real ideas can we suggest? Also, what real suggestions can we make to encourage the adequate uptake of the secondary care procedures that we have also decided for one reason or another that people in deprived areas or who suffer from deprivation are missing out on?

Professor Watt talked about central versus local initiatives. When I was in practice, an awful lot of central initiatives came and went suddenly and we were not quite certain about where they came from or where they went. At the time, it struck us that it would be a lot better to give us the money, because we knew what our local needs were. Do you favour an approach that goes back to locality commissioning, for example? What should the committee suggest the Government do to redress such situations?

11:15

Professor Watt: I agree that in the past 20 years we have too often bought evidence of activity, which then disappears when the funding

ends. Projects such as the primary care development programme and the unmet need project come and go. They serve the purpose of showing that something is being done but, nevertheless, things seem to stay the same.

I said earlier that the biggest challenge is a cultural one, and it would be idle to suppose that it could be addressed overnight. It is a real challenge for politicians. For example, the keep well programme was set up to make a difference to cardiovascular mortality rates in three years, but that was an unrealistic expectation. Under the unmet need project, which I think flowed from the Arbuthnott report, spending any of the money on mainstream services was proscribed. The only things that were allowed to be tested were new, different, alternative approaches.

That is a mistake, because the answer lies in the main stream of the service. However, that creates a challenge in itself. There is a clear, if understandable, reluctance to pour in money, especially given the independent nature of the primary care sector. That is partly because there is no certainty that additional resources will be used to best effect in every place and partly a reflection of the disaggregated nature of primary care as a system. Part of the cultural solution to the cultural problem is to have better support systems in primary care to share experience and to produce evidence, but that will take a long time.

I am an academic and, every Christmas, I count the number of MDs gained by GPs in Scotland. I go back about 30 years, and there have been only about 45 of them. There are 4,000 GPs in Scotland, and only about 1 per cent of them have a higher degree. That is because their jobs do not require it. The system does not require people to think and work in that way. Therefore, the system is rather devoid of evidence on many of the questions that we have been discussing. It operates on the basis of pragmatism and altruism. That has served everybody well, but it is not enough.

We need better linkages between practices serving similar kinds of populations, in the way that there has been a flourishing of networking in remote and rural general practice. That has not always worked, but the idea of people being geographically remote but nevertheless well integrated with colleagues is a very important one. I once joked with Malcolm Chisholm that we ought to turn the east end of Glasgow into an area of the Highlands and Islands, to get all the benefits from that designation. There are important aspects to that point.

We did an experiment in Possil Park, which involved giving the practice there extra time for consultations with complex patients. There were a number of interesting things about that study. First, 50 per cent of the patients in the practice were considered to be complex, because of whatever problems they had. However, it proved impossible to define what complexity was because it was so complex. The only operational definition that worked was that the GP thought that they were complex—he knew it when he saw it.

The only way to use the additional time at Possil Park was to create free slots in surgery, so that every GP always had at his disposal three vacant slots in every surgery. It was not possible to ask people to come back the next Tuesday if there was not time on the day of their appointment, because they would not come. Famously—so I hear—that practice sends out letters to its patients in white envelopes, with hand-written addresses, on the patient's birthday, on the ground that that is the only kind of envelope that is likely to be opened.

The Convener: I have a feeling that you are going to make it into *Holyrood* magazine, given the routine you are pursuing.

Professor Watt: I am trying to illustrate and bolster Dr McKee's point that some decisions must be made locally. In the paper that you have seen, we note that the people with more problems, particularly psychological problems, had less time and were less enabled by consultations. In the Possil Park practice, the extra time brought a better outcome to consultations. The other important change was that practitioners reported feeling less stressed. The surprising finding was that patients who were not deemed complex were also reporting better outcomes after they had seen the doctor. Everybody was winning from it. It is not rocket science: if more time is allowed, there is more opportunity to do more things, and more people benefit.

Therefore, I do not think that we need to agonise terribly much about the nature of deprivation and the nature of its solution. However, in addressing the solution, we need to be more joined up at the horizontal level rather than the vertical level to ensure that everybody is marching in the same step.

I will give one more example. Of the 1,000 GP practices in Scotland, 20 per cent do not take part in teaching, research or training—they do not do anything apart from just doing the business. We do not know what goes on in those practices. They may be satisfactory or they may not be. They all pass the quality and outcomes framework criteria because the bar is set so low that everybody passes. How do we make those kinds of practice into front-line practices that address the problems that we have described? One approach would be to target them as problem practices and say that we need somebody to go in and tell them what to do. Well, we tried that elsewhere and it did not

work. A better approach is to establish different norms and expectations more generally that will suck those practices in. If we concentrate on the leading edge, the rest will follow. That is how I would develop policy.

I am sorry that that was rather rambling, but I am determined not to suggest to the committee that this is a small enough problem that we can deal with it in the short term.

Ian McKee: I want to follow up that point because I am not certain about it. I accept that we cannot solve the deprivation problem overnight, but it does not seem rocket science to say—although it might be one of those conclusions that one jumps to, but which is not right—that if an area has a heck of a lot more demand but the same number of GPs as an area in which there is less demand, the service in the former will be poorer. Should we devise a mechanism to get more GPs, nurses and health visitors into areas in which there is a greater need for them? It is really a simple question. Is it so complicated?

Professor Watt: If there was a queue of unemployed doctors and nurses, what you suggest would be a possible option, but there is no queue. We will have to be cleverer to address that issue. We have done work looking at data from the practice team information system, which collects data on every encounter in 40 or 50 general practices in Scotland. The data go back to before the new contract, to 2002. We found that in 37 practices there was, I think, a quarter of a million practice-patient encounters in the year. Twenty per cent of patients did not consult-perhaps there was nothing wrong with them that year. Ten per cent of patients accounted for 50 per cent of the encounters, presumably because they had multiple problems and needed lots of contacts. The other 70 per cent of patients were seen only two times a year.

Therefore, a normal practice has three groups, one of which is people who do not come and who are probably quite healthy. I was in Hong Kong recently and was struck by the fact that life expectancy there for men and women is 10 years longer than it is in Glasgow—and Hong Kong has a lousy health service. So it is possible for people to live a long time without the benefit of health care. If that is the case, perhaps they do not need much health care and should be left to get on with it.

The second group is the people who keep the health service busy, but who may account for only 10 to 15 per cent of a practice's patients. We are treading water with that group and not making the best of it. How we concentrate on those heavy users of the health service may require different solutions from those for dealing with the casual users. I guess that most of the people round this table are in the casual users group. The problem is that most of the people who make policy and work in the health service experience it as users from the group of generally healthy people who just need the health service when they need it. Their experience is not the same as that of people who have multiple problems who need the health service a lot.

The answer to the manpower problem cannot be simply to pour in manpower; it must be about being cleverer with the manpower that we have. However, I am talking about just one analysis that is not sufficiently strong to inform policy. The fact is that we do not have enough information. I would like primary care to have as much evidence to inform policy and practice as secondary care has.

The Convener: I will move on. The issues are extremely interesting.

Michael Matheson (Falkirk West) (SNP): In her opening comments, Professor Macintyre said that early years interventions have to be a priority in tackling inequalities. She also raises the issue in box 1 on page 6 of her paper, where she states:

"prioritise early years interventions, and families with children".

Can I get a clearer idea of what you think early years intervention should involve? What is being done now that is not working and what could be done to improve the situation? That links in with the point that Professor Bhopal made about trying to create a culture change at an earlier stage and with the need for vertical and horizontal thinking to ensure that health, education and the other services work collectively in the same direction. Can Professor Macintyre expand on her views on prioritising early years interventions? Others can come in if they feel it is appropriate.

Professor Macintyre: I was thinking of two sorts of early years interventions and some steps that you might not call interventions. We do not want our children to be brought up in abject poverty, in poor housing and in really bad circumstances, because those tend to scar them for life. Epidemiological studies show that when children have had a very poor start to life, it tracks through adulthood. Solutions to those issues are probably related to macro or middle-level interventions, such as those related to housing and income.

Many of the specific early years interventions that I am thinking about have been done in the United States and there have been long-term follow ups. The studies tend to show that focusing children. on pre-school educational on interventions and on support for families has longterm benefits in multiple ways, including reductions in crime, reductions in teenage pregnancy, better grades in school and employability. I think that the High/Scope Perry study now has a 40 years follow up.

There have not been many good follow-up studies like the High/Scope Perry study in Britain. The one that I know about, which is fairly hot off the press, is the sure start local programmes in England, which also try to bring together and coordinate services for families with young children. Those programmes are measuring a number of outcomes among the very young at age nine and age three-some are about parenting styles and some are about children's behaviour. The initial interim report showed that there probably was not a big effect and that there might have been some adverse affects on poorer children, which is quite worrying, but a report has been published that shows that there were improvements at age three in children across all categories of socioeconomic status and among children with single parents. There is a sure start programme in Scotland, but I am not aware that there has been an evaluation of outcomes in that way, although I know an evaluation has been done that looked at inputs.

Some of the interventions are focused on the poorest families and single parents. They offer targeted support and educational interventions. They may not be generalisable to Britain because a lot of them have been done in the United States, where there is not a national health service and where there are not health visitors, so they may be at a poorer starting point. However, the evidence suggests that some of the interventions might work here.

Graham Watt might know more about the starting well intervention in Glasgow.

Professor Watt: I do not know the detail. It is not the same as the American intervention; it is a local variation of it.

Professor Macintyre: It is about a mixture of two things. One is early years intervention that is more to do with ensuring that children are ready to go to school, are not in poverty, are not disadvantaged and are not in poor housing, while the other focuses more on education and support, and is to do with family relations, school readiness and ability to learn, which feed into coping better at school, numeracy and literacy, which in turn feed into employability and issues such as that. I am not an expert on this area.

11:30

Professor Bhopal: The importance of the wellbeing of the mother and the foetus and, subsequently, of the young infant and the child was underemphasised until about 15 years ago. Over the past 15 to 20 years, a clearer understanding has developed of the importance of that time for what happens in later life, whether we

are talking about coronary heart disease, stroke, diabetes or other conditions. It is known as the foetal origins of adult disease hypothesis, which is also called the Barker hypothesis or the developmental origins of adult disease hypothesis.

It has become clear that what happens in the uterus of the mother is vital in determining both the metabolism of the child throughout life and the risk of the child suffering from heart disease, stroke and diabetes, in particular. Maternal nutrition and maternal wellbeing-which includes the psychological health of the mother during pregnancy and the exposure of the foetus to alcohol and smoking, for example-are an area of huge research activity across the world. The importance of those factors is becoming clearer day by day. We cannot put enough emphasis on that period of life. If we want to control heart disease, stroke and diabetes in Scotland, that is where we must start if we want to take a long-term view, which is what we should do.

We have also learned that although, typically, a heart attack will occur at the age of 55, 60, 65 or 70, atherosclerosis—the process that precedes heart attacks and strokes, whereby fatty deposits are laid down in the arteries—starts in childhood. Studies of 15-year-old adolescents who might have been killed in road traffic accidents and whose bodies have been autopsied show clearly that they already had atheroma. Having atheroma is a modern state, but it is not a normal state. Healthy people do not have atheroma at the age of 15 or 20. A 70-year-old might not be able to avoid it, but that is not the case with a 15-year-old. We are seeing more and more young people with atheroma.

We know that the inducement of an atheromatous state is heavily dependent on diet that is the crucial factor. We must examine carefully what kind of things our children eat. We have all heard about the obesity epidemic. If we want to take a longer-term view of what Scotland's health will be like in, say, 2050, we should definitely focus our attention on the pregnant mother, the infant and the family during the early years. Above all else, we should concentrate on nutrition throughout that period.

Professor Watt: A point to add is that the literature on the importance of relationships between young children under the age of three for all kinds of development is burgeoning. The absence of such relationships has adverse consequences as regards behaviour long before heart attacks and strokes become an issue—the problems mount up sooner than that.

I also have a point about the big picture. In 1979, 10 per cent of children lived in poverty. By the end of the 1980s, the figure was 30 per cent, so we were catapulted to the top of the European league on child poverty, where, I believe, we remain. The generation that was born in the mid-1980s—which Sally Macintyre's unit has studied has now left school. It is a new experience to find ourselves in a situation in which such a large part of Scottish society was brought up in those circumstances. We are only just coming to terms with the consequences of that change, which was a consequence of policies rather than laws. That illustrates the delay between making and implementing a policy decision and its long-term consequences. We tend to forget that some of our problems with young people as regards schooling or whatever are a consequence of political decisions that were taken 20 years ago.

My view is that the policies on this are fine. The diagnosis and treatment are right, but the dose is not big enough. We have effective treatments for these problems, but the dose is not being prescribed at an effective level. Three pints of beer are three times as effective as one pint of beer. The same principle is true for other areas of policy—it just needs to be applied. In the spending review, the money that is being spent on primary care in deprived areas amounts to 2 per cent of the budget. Even though the diagnosis and treatment are right, the dose is not very big. If the dose is not very big, you cannot expect it to work very well.

The Convener: I was just thinking that when I was a child, in the post-war years, I was probably eating better and exercising more than the current generation. That was a useful question from Michael Matheson. I invite Helen Eadie to ask the final question, because we have had a fair crack at the issue and we have a lot to think about.

Helen Eadie (Dunfermline East) (Lab): I was interested in the discussions that we had this morning about legislative and regulatory controls. Do you know of good examples of regulation or legislation in Europe that we have not yet picked up on? I am looking at the list in box 2 on page 10 of Professor Macintyre's submission, where she has set out a range of measures that would be helpful in reducing inequalities in health.

Professor Macintyre: The situation varies. It is interesting that a lot of European countries are struggling with the same issues. Even countries such as Sweden, which we tend to think of as egalitarian, are very worried about inequalities in health in their society. In countries such as Holland and Sweden, groups like this committee are considering inequalities in health and are coming up with the same lack of evidence. We need action on a broad front. No one has come up with an answer.

We are ahead of the game in some things, such as the NHS, free prescriptions, the provision of free fruit and milk and other things that we have had in the past and might have again to reduce barriers to care and health-promoting goods and services.

Some countries have initiatives on traffic and exercise. Cities such as Copenhagen and cities in Holland have done a lot to reduce the number of traffic accidents and increase physical activity. However, there is a different culture in those places too. The fact that there are hundreds and thousands of bicycles in Amsterdam is not just a result of the authorities introducing cycle lanes—it is part of the cultural repertoire.

The simple answer is that we cannot look to Europe and say that a particular country has cracked the problem by certain means. Some regulatory ideas have come from other countries. For example, there have been studies on seatbelt legislation and cycle helmet legislation from Australia and other countries. Evidence on clean air ads has come from other countries. There is evidence on fluoridation from natural experiments other countries. Some countries have in introduced compulsory fluoridation and then gone backwards. In the United States, some states have fluoridation and others do not. I do not think that we can look to a particular country that has introduced these things and been effective in reducing inequalities in health. It is all bits and pieces; different countries have introduced different things.

Professor Bhopal: Sometimes we veer away from discussing reducing inequalities in health and towards discussing health improvement. Perhaps we have to consider both perspectives. I want to draw the committee's attention to two things. First, virtually every European capital has far better public transport than do Glasgow, Edinburgh and other cities in Scotland and the rest of the UK. There is far more use of bicycles, trams and buses. The idea of taking your car everywhere seems a bit alien to many people in Europe. In the past few years I have had the privilege of visiting many European cities and talking to many public health colleagues. Getting people out of their cars has to become a top priority for Scotland if we want to improve people's health.

The second point to which I will draw attention relates to the fact that, for most of the 20th century, France was notorious for its high alcohol consumption rates and its high rates of cirrhosis of the liver. The French drank alcohol differently from us. It was a normal part of their lives, so they had it with most meals and their children were introduced to it at a young age. It would not be unusual for five or 10-year-olds to drink with their meal a glass of wine, which was usually watered down. That was part of their culture.

France had high rates of cirrhosis and decided to do something about it. It has had a national

campaign against alcohol and its rates of cirrhosis of the liver have plummeted. The culture there has become to have one glass of alcohol with a meal, and that is it. If someone goes to a banquet or meal at which alcohol is being served, they will receive one glass of very high-quality alcohol, such as champagne or a fine wine. At banquets and meals in Scotland, we tend to be given unlimited alcohol and people would be a bit disappointed if they did not have at least the equivalent of a bottle of wine each. That is how we tend to work here. I go to Faculty of Public Health conferences and dinners and the amount of alcohol that is served is astonishing. We should examine that policy.

The Convener: I am glad that the budget is being announced today, as the press will miss your comments.

Professor Bhopal: While France has brought down its rates of cirrhosis of the liver, Scotland's have doubled in 10 years, which has doubled or even tripled the number of people who are admitted to Scottish hospitals with alcohol-related diseases. The policy that Tony Blair-I was about to call him Professor Blair-wanted for the UK was that of drinking in the continental style, but we have not achieved that. What we have achieved is more drinking in the British style. We need to reexamine that policy and to bring the rate of cirrhosis of the liver to below France's level. We are where France was 10 or 15 years ago, and France is where we were 10 or 15 years ago. We can learn a couple of things from our European colleagues.

Professor Watt: The question is interesting. When I was interested in how our child poverty data compared with Europe, I worked through Eurostat, which is like our General Register Office, to obtain data. We can quickly draw comparisons of what all the major European countries spend on education, health and benefits. The figures vary substantially among those countries, never mind the Scandinavian countries. The clincher is the proportion of income that goes on tax. People get what they pay for. The quality of the experience of being pregnant and having young children in other countries is different because those countries decide to spend resources on that.

Eurostat is interesting for people who like looking at data, but the stories are about what it is like to have young children in Holland or France rather than in Scotland. If those countries do things differently, why cannot we? We can learn a huge amount from such comparisons.

Helen Eadie: That is helpful. May I ask one more question?

The Convener: I would like clarification of Professor Watt's point about the percentage of

income that goes on tax. Are you talking about direct and indirect taxation combined? People in the UK do not appear to have high direct taxation, but we pay many indirect taxes. Is the taxation culture different? Are we comparing like with like?

Professor Watt: Comparing like with like is important and I am not an expert in the subject, but the differences were not small—they were 25 per cent and 45 per cent, for example. I reflect the question back to you, because I do not know the answer.

The Convener: Neither do I; I will have to ask somebody else. I know that a difference exists, but I do not know the exact figures.

11:45

Helen Eadie: I was interested, and not surprised, to read in Professor Macintyre's paper that in poorer and more deprived areas --probably every member here covers such an area to some extent-the psychosocial issues with which patients present can lead to higher stress levels and burnout among GPs. I was particularly interested by box 2 on page 10, where Professor Macintyre says that the provision of benefits advice by professional agencies could be done well in a health care setting. It has often struck me that councillors, members of Parliament and members of the Scottish Parliament run surgeries in schools and other places, whereas Citizens Advice Scotland has different offices. Perhaps we can make structural changes to make advice on socioeconomic issues available in the same building as GPs' surgeries throughout Scotland.

Professor Watt: There are a few examples of welfare officers being based in such places. The initial evaluation to make would be how much money could be generated through effective benefit claims. Few interventions are more effective than putting money in people's pockets. However, I do not know where the responsibility for the initiative would lie in relation to general practice.

There would need to be a big enough establishment to accommodate a wide range of services. We have not talked about accommodation. In remote and rural areas, practices can only be small, for obvious reasons, and most people in urban areas are served by small general practices that have one, two or three GPs-a choice has been made in that regard. There are issues to do with whether the broad range of services that you describe can be delivered across the board if the main unit of provision is a small practice. Some 10 per cent of people in Glasgow are served by single-handed GP practices, which, as far as we know from research, have good relationships and continuity

but miss out on the advantages of better organisation and links to other units.

The challenge is to build on the strengths of small practices without necessarily buying Professor Darzi's polyclinic model, which seems to have found favour south of the border but would not work here.

The Convener: Sorry, I did not understand. Professor who?

Professor Watt: Professor Darzi, the Parliamentary Under-Secretary of State at the Department of Health, who is trying to replace general practices in London with polyclinics. Because primary care in London has imploded as a result of under-doctored areas and there are gaps in provision, entirely new types of provision are being invented. We need to avoid the neglect of our poor areas to the extent that that becomes an option. We have better options.

The Convener: I am conscious that the witnesses have been sitting here for a long time without a break or a cup of tea, so I will bring this part of the meeting to a close. I thank you all. We have had a thorough and extensive discussion and we are all pensive—at least, I am pensive. It will be interesting to read the *Official Report*. Your evidence will give us a steer on what we can do to make a difference, instead of just reinventing the wheel by writing a wordy report that sits on a shelf, as some—although not all—committee reports have done.

I remind members that the chief medical officer will give evidence to the committee on 16 April. Today's evidence, on which we will be able to reflect in about a week's time, will be useful to us during that meeting. We are also awaiting the outcome of the Government's investigation into inequalities. All that work will inform us as we try to find a focus for our consideration.

The discussion has been extremely interesting. The witnesses held our attention throughout there has not been one yawn.

Dr Simpson: May I invite the witnesses to make supplementary comments, if they want to do so after they have reflected on the discussion? They have stimulated us, but we might have stimulated them.

The Convener: Heaven forfend that we stimulated anyone. If on reading the *Official Report* the witnesses want to add a supplementary point, they should let us know.

11:50

Meeting continued in private until 12:12.

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