



Science and Technology Select Committee

Uncorrected oral evidence: Ageing: Science, Technology and Healthy Living

Tuesday 28 January 2020

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Members present: Lord Patel (The Chair); Lord Borwick; Lord Browne of Ladyton; Baroness Hilton of Eggardon; Lord Hollick; Lord Kakkar; Lord Mair; Baroness Manningham-Buller; Baroness Penn; Baroness Rock; Baroness Walmsley; Lord Winston.

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Questions 72 - 78

Witnesses

Professor Maggie Rae, President, Faculty of Public Health; Ruthe Isden, Head of Health Influencing, Age UK; David Sinclair, Director, International Longevity Centre.

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Examination of witnesses

Professor Maggie Rae, Ruthe Isden and David Sinclair.

Q72 The Chair: Good morning, ladies and gentlemen. Thank you for coming today to help us with our inquiry. I know you were all sitting at the back listening to the first session. We are live on the internet but not on the BBC television channel, unless they have changed their mind. None the less, you are being broadcast. As you probably heard, the focus of our inquiry is on the Government's strategy for extending healthy ageing. We want to explore this strategy and other issues with you. Before we start, please introduce yourselves for the record.

Professor Maggie Rae: Good morning, everyone. I am the UK president of the Faculty of Public Health.

Ruthe Isden: Good morning, I am head of health and social care at the charity Age UK.

David Sinclair: Good morning, I am director of the International Longevity Centre, the specialist think tank on the impact of ageing on society. We are one of 16 across the world; we are just finishing a major project, working with the Canadian, Singaporean, Japanese and other Ministers on prevention across the world; and we had a discussion at the G20.

I want to pick up a couple of points initially. It is very clear to me that most of the focus so far has been on the social determinants of health. The point of our project is very much to explore the fact that health systems cannot pass the buck to social determinants and that it is extraordinarily important, whether through medication, screening or vaccination, to make sure that health systems are playing their part in healthy ageing. I have not heard that so far. We need to make sure that we democratise access to prevention, so that we do not run the risk of increasing inequalities in healthy life expectancy by the wealthier using preventive medicines more than the poorer. It is extraordinarily important that it is never too late to prevent ill health.

I am slightly less convinced than your previous panel by the evidence base beyond regulation and active travel, where I think there is an evidence base. I am less convinced that doing X results in Y in this space, beyond that. I think that the Government's five-year target is laudable and exciting but unbelievably unachievable without major policy change.

Baroness Manningham-Buller: Not a civil servant's response.

David Sinclair: Yes, I'm not a civil servant.

Q73 The Chair: We will explore this with you in more detail, but I am grateful for your comment because it is exactly what we want to hear. Before we start the questions, I have no particular interest to declare in relation to this inquiry, although I am the chair of several professional organisations, and an honorary fellow of the Faculty of Public Health.

I shall follow on from what you just said. Do the Government have any healthy ageing priorities that are likely to work? What public health strategies currently target healthy ageing?

David Sinclair: I can rant first, if you like. To me, there are a few things that government can do. You can educate and inform people, you can nudge or you can compel, and then there is a bit of active travel that might be in between those. We know that active travel works, and actually I think we know that regulation works. There was a conversation earlier: we know that higher rates of taxation result in lower rates of consumption of cigarettes and alcohol.

The Chair: Between nudge and regulation, which works better?

David Sinclair: My take is that you cannot do nudge without regulation. You cannot go to a high street and tell someone they need to be eating healthily if there is no way the local authority can ensure that there is provision for healthy eating on that high street. In order to nudge people you will absolutely need a regulatory environment that allows for the nudge, so I do not think you can see them as separate.

I am not convinced that a few posters makes any difference. This is where I am slightly less convinced on the education and information side, because we have been doing that for many years and participation continues to fall. We do not seem to be having the impact that we need to be having, so we need a major step change.

Ruthe Isden: I agree with David that the targets are ambitious, and they are the right ambition. I think we are a long way from achieving them, particularly within the timeframes we have set within the context of the strategy. I have a slightly different take. We have to look at this in two contexts. There is a long-term healthy ageing strategy, which you heard about in the previous evidence, where we look across the life course—and, absolutely, it is never too early to begin thinking about long-term health prospects, about the accumulation across people's life course and what it will mean for them in older age.

However, I also think it is extremely important, and it is something that we in danger of doing at the moment, that we do not overlook the capacity and capability of improving health in later life. For people who are already in their 60s, 70s and 80s—and even their 50s—we are overlooking the opportunities. There is a lack of investment in some of those areas in comparison with the life-course approach we have heard about. If we want to make progress towards those targets within the timeframe we have set out, we really need to think about how we improve the health of those with the poorest health who are already coming into later life, because that is where we will make the fastest progress.

On the question of whether we are doing the right things, there is a lot of emphasis perhaps on the social determinants of health without thinking about the determinants of the determinants, as I would think of it. What

are people's capabilities and capacities to engage with healthy lifestyle behaviours? We know a lot about that. We know it is about the bandwidth, about people's psychological capacity to make healthy decisions. We know it is about their financial capability, their domestic resources and the environment and communities in which they live. That spans the life course, particularly with reference to those who are already older.

At Age UK we can see a number of deficits in that space, such as the number of older people who are living in poverty. We know that there are 2 million older people living in poverty, half of whom are in severe poverty, and they are about four times more likely to be living with disabilities and difficulties with activities of daily living compared to those in the highest quintile.

We know that there is a lack of social care—supportive services and preventive services. It is not just about those who meet the formal social care threshold that enables people to engage. We know that there is a lack of accessible transport. We know that there are issues about how age-friendly people's communities are. Can people manoeuvre around those spaces? Can they access transport? Do they feel safe to go out into the streets?

All these are things that shape and contribute to people's ability to engage with what we know are the big five in terms of healthy lifestyles and making health improvements at any age. I do not think we are giving the same priority and consideration to some of those underlying factors as we are to some of the headlines.

Professor Maggie Rae: What is your approach to targets? Are you the William Tell of target shooting: as long as the arrow hits somewhere in the target, even if it hits the board, you are quite happy? I think we have to ask ourselves what our approach to targets is. I am very happy with the ambition, it is a very welcome ambition, because we do not have the choice to do nothing. It is a great sadness to me that, for the first time since we have collected records on health matters, we are seeing this crisis, with life expectancy stalling and the gap widening.

I had the great privilege of leading the Department of Health, when it was a UK department, on health inequalities, in the era when we improved not only life expectancy but infant mortality, and we narrowed the gap. So I want to reassure you that it can be done. If we combine all the efforts of society and work with our communities, we can shift these numbers and make a huge difference. I am very comforted by that, but we need to get real on what our approach is and what plans we are going to put in place. Who are we going to hold responsible? What resources are we going to put into this?

I am also very comforted that even with the health problems we have in society in our country, the vast majority of babies are still being born healthy—not overweight, not with diabetes. Then it is about what we do to them along the life-course journey, which is where these things start

to happen. We have heard that starting young is very important. We also need to intervene at the points of greatest motivation, I agree wholeheartedly.

One of my biggest tasks when I led on health inequalities was convincing my own colleagues that it was not all about the wider determinants. We public health people love the wider determinants—housing, getting a job—which is absolutely brilliant, but if your arteries are beginning to furl up and you have the beginnings of long-term conditions such as diabetes, who better than our wonderful NHS to start reversing those things?

In my experience as a clinician, people are best motivated when they have a health crisis. I would love it not to be the case; I would love everyone to buy in to healthy lifestyles much earlier. But I also agree with Ruth's excellent point. We are talking about healthier life expectancy.

At the moment, the NHS is completely overwhelmed and dominated every day by a crisis in frailty. I joined the NHS to try to improve the way we spend our resources effectively on things that are likely to give the best advantage in quality-adjusted life years. We have very little attention on children and the middle years, and all this attention on the elderly.

The elderly are important in this agenda, because clearly we should never give up on trying to improve people's lives. One of the biggest causes of this crisis in the NHS can be seen if you look at the reasons for admissions of the elderly. These are usually put down as "not specified" but, if you drill down, a lot of them have urinary tract infections—it is nice to get gory so early in the day—because they are not moving, or being washed, or drinking fluids. There is a reason why we consider those things very important.

All through the life course there are places to act and things to do, but one of the biggest successes—if we can get all government departments working together and get the legislation in—is minimum pricing for alcohol. I have not managed to get anyone in England interested in it, although the results in Scotland were beyond expectations. I have got Wales and Northern Ireland interested. Those were a few of the things I wanted to start by saying.

The Chair: You covered quite a lot.

Q74 **Baroness Rock:** We have covered quite a lot. I would like to come back to the evidence side of things. Mr Sinclair, you talked about the importance of evidence underpinning the public health advice on healthy ageing. Ms Isden, you talked about there being evidence on the big five, but less on other areas. In what areas is further evidence needed? You touched on transport and things like that. What data should we obtain, and how can we analyse and use it effectively in those areas?

Ruthe Isden: For me, one of the areas where we most lack evidence is less about "what" than "how". We have not made sufficient investment in

understanding. I agree with David to the extent that regulation is always going to be an important part of this picture, but there are areas of people's lives that we cannot regulate; we can only encourage through regulation and the provision of opportunity.

We need to understand how we look at attitudinal change. We lack evidence about how to do that effectively, particularly for people who are already in later life or who have health conditions. A very interesting example of this from our perspective is that we have been working with 15 other organisations, including Sport England, to launch the We Are Undefeatable campaign. I do not know if anybody has had the opportunity to see that. It came from a view that Sport England wanted to do more to improve the physical activity levels of those who were already living with long-term conditions. It recognised that this was one of the hardest groups to reach.

A lot of the conventional messaging and stereotypes that society has about what it means to be physically active, including the targets that have been set in a public health context about what good looks like and how much activity you need to do in order to be "active", were being detrimental to those individuals. They did not recognise it; it felt too aspirational and unachievable. They needed something that spoke much more clearly to who they were and to their motivations to undertake more physical activity, and encouraged them to do it in a way that was ambitious but realistic to their context.

That was the origin of the campaign. We have done a great deal of work to understand those attitudinal barriers and how to create a social movement and attitudinal shift. For me, the most fantastic piece of evidence that came out of that was the response of the wider public to the campaign. In our testing, people said that it was the first time they had seen "people like me" be active, or articulate the benefits of being active.

I learned very strongly from that campaign that, across a wide range of public health areas, we do not know enough about what motivates people and supports them to understand and engage with these messages. It also caused me to reflect on some of the work done 10 to 20 years ago on smoking cessation, which went through a similar shift. People may recall that the public advertising moved from, "If you stop smoking, you will gain X years in however many years' time", to, "Let's give you a very physical, graphic depiction of what is happening to you right now, every time you light a cigarette". It was a profound shift and a much more impactful way of presenting the health issues to individuals.

We need to learn from the things that have worked and think more clearly about where we get the evidence of how to support and encourage people to do the things that we already know they need to be doing.

David Sinclair: I completely agree. We generally do not know how we deliver some of this behaviour change, although we are learning slowly.

It strikes me that government wants easy solutions to complicated problems. I give the example of free swimming, which essentially resulted in the same people who used to go swimming going a little bit more and not having to pay for it. It did not address the fact that swimming pools were dirty, that people had no public transport to get there, that women did not like to travel alone. It did not address the real barriers to swimming, but it allowed the Minister to stand up and say, "Lovely, we've spent £100 million on some free swimming. Isn't that great".

We have to look beyond the simple solutions in this space. There are some really interesting community initiatives. It would be interesting to note the impact of Park Run on the participation of under 12s and over 80s in physical activity. I suspect that it has been extraordinarily popular, but it is very hard to measure because you do not know what people did before. It would be difficult, but extraordinarily useful.

We did a piece of work last year on attitudes to adult vaccination across the world, looking at Japan, the UK and Canada. Bringing up the earlier question, we found that selling positive messages on health works much better than negative ones. If you start saying, "You're going to die and it's all going to be horrible", people, particularly in some countries, think, "Of course I am going to die". If you use a message that being healthy is great and good for you, and you can do X, Y and Z, it really works.

One example of a really good and interesting public health campaign in this area—I do not know if it made any difference—was by AARP, the American equivalent of Age UK. About 15 years ago, it did a poster campaign on physical activity. It had lots of photos of things like a father dancing with his daughter at her wedding. The message below was, "Because she deserves a second dance". It played nicely on remaining fit and healthy, not so that you are not lying in a bed watching TV but so you can have the second dance with your daughter, and things like that. Perhaps the positive message works, but that is a good example of where we need to know whether those posters really did make a difference.

Q75 Lord Browne of Ladyton: We are well and truly into the area of evidence that I was hoping this question might open up and which Mr Sinclair's first answer went into. I make no apology for staying on this, because it is of interest to this Committee. It is a wide-ranging debate and we have heard just a snapshot of the evidence.

We know that smoking, drinking alcohol and obesity, and—probably consequently—a lack of physical activity, are pretty detrimental to your health. There is hardly anybody out there who does not know this, yet we still do it. It does not seem to prevent people doing it. We have an opportunity, at this moment in time, to make recommendations to the Government on improving that and to debate them in Parliament.

We are not looking for easy solutions, but we have already heard evidence that would indicate that there is no one fix for this. There are some things that encourage people to do something for one reason, and

others that encourage for another. I am not particularly attracted by the idea of showing people what is happening to their body when they drink alcohol, to stop them doing it, or showing what is happening to their body because of obesity, but it appears to have worked to some degree with cigarettes.

What, from your experience, can you tell us about what works and what does not work? Are there particularly good examples out there? We have heard a lot about smoking in public places; we know how successful that was. We have had discussions about sugar and minimum pricing on alcohol. Are there other initiatives and policies, over and above the ones you have told us about, that you think could be scaled to significant effect?

Professor Maggie Rae: There are two that I would like to start with. The research evidence is very rich, so I am now moving into development. If you think of research and development, we are talking about how we get this research into action and develop it. There are two that are very easy to do and produce great results.

I will go to men first because, notoriously, many men find it difficult to make choices about their health and get intervention when then need it. We are talking about trying to reduce health inequality, particularly in deprived areas, and want to get people to go early to screening programmes for cancer—particularly bowel cancer—and to their health check. This country offers a free health check, and we picked a particular age. Those of us in the room today do not need it; we are perfectly able to articulate our needs and get things done. It was designed for people in the most deprived areas.

I never thought I would hear myself saying this, but going to football is a fantastic way of communicating with people. People feel incredibly passionate about their team; most towns in the country have one. Moving the fantastic initiatives up to a more industrial scale across the country really gets to people. What does it do? It peer-influences. The right people to influence behavioural changes, to get people to think “Am I going to be alive for my daughter’s wedding? Am I going to see my grandchildren?” are the family and the community.

There is an emotional attachment, but there is also the huge economic benefit of keeping people in work and making sure that they are active in society. We have seen similar things in areas where rugby is the sport. You could take it to a range of sports. That is a nice, easy and very effective thing to do.

I will just mention the second one, and then I will move on because I want to come back to early intervention. I am sure you all know what the top intervention on childhood obesity was. It was the virtually costless daily mile. Every child would do the daily mile. It makes sense, does it not? It does not really cost anything. Does it happen? No. Is it happening in every school? No. Should it happen in every school? Yes. Maybe by the time you get to secondary school you will need to find another

intervention because it might not quite work, but I suspect it would work magically in every school. We get tired of things very quickly and we toss them away and come up with new things and ambitions. If we just stuck to some of the things that we have the evidence on, and make sure they are done, we would see a difference.

The Chair: A quick point about what might work.

Ruthe Isden: I see this like a funnel. There are some things that we need to do at the top—big, practical, national things about normalising the behaviours that we want to see and attitudes to them. That is where regulatory interventions and large-scale attitudinal campaigns come into play. Broadly speaking, we could go further on those things. We do not do too badly, but we could do a bit more. Underneath that is tackling the practical barriers that David mentioned. There is no point in investing in free swimming if people feel unsafe, the pool is dirty, it is an unpleasant environment, they feel unwelcome because they feel it is not for people like them. There are some practical things that are about investing in the right infrastructure in our communities and the right shape of those communities—the local authority piece.

Then it comes down to thinking about personal barriers. Most effective here are things like health coaching and the provision of information and advice. Some of the new things that the NHS is exploring with social prescribing are not new to my sector, but it is welcome that the NHS is thinking about rolling them out more broadly. It is about supporting people who have significant personal barriers, including the wider range of things that are going on in their lives. There is no point in talking to someone about stopping smoking when they are up to their eyeballs in debt and they have housing issues; it just not their top priority.

How does good quality information and advice set people on the right road? How do we support people and hold their hands to get on the right journey? We need to be working very actively at every one of those levels if we want to make the change, but we do not. We work at different levels in slightly piecemeal ways, targeting different aspects of the changes we want to see. Professor Rae's point was that we do not often follow through, work consistently and deliver consistent investment at each level. We pick things up and put them down.

David Sinclair: Exactly. One of the many areas where the UK should be proud is that it is one of the few countries that gets close to the 75% target for flu vaccine uptake among older people. It is slightly embarrassing that no one achieves it. How do we do that? First is the astonishingly smart use of real time-data—weekly information that comes backwards and forwards between the Department of Health and local GPs. Someone in the Department of Health can essentially pick up the phone to a GP and ask, "Why haven't you vaccinated anyone this week?"

Second is the increasing the use of pharmacies. We heard earlier about the potential of libraries, and there are other spaces that can be used to deliver some of these preventive services. Reminders, call and recall, and

texting people are astonishingly successful. There is increasingly good practice in how we vaccinate health and social care workers. We are still lower than the WHO target, but we are actually world leaders. This is a good example of where we can make a big difference by using data.

Q76 Baroness Walmsley: Everybody seems to be agreed that health across the whole life course is important for healthy older life. Do you agree with that? Is public health policy sufficiently joined up? We have heard that there are opportunities to intervene at particular points. Can you say a bit more about what those points are and what the interventions might be?

Can you say something about the role of employers? Is there a role for employers in helping their employees to prepare for retirement? For example, my public library is a very good opportunity for volunteering. A lot of people think that volunteering in older age is a very good thing because it gives people a reason to keep active. Employers could, for example, give people the opportunity to develop that volunteering before they retire. Perhaps you could tell us a bit about that.

Who should be doing the intervening, not just when and how? GPs probably have a major role. They certainly do in flu vaccination, but we still do not have 100%. Do we have enough call back?

David Sinclair: I absolutely think that we need to focus across the life course. I may be at risk of misquoting him, but I think I remember Lord Winston once saying that we start ageing in the womb. Certainly, ageing starts very young and we have to make sure that we are intervening as young as we possibly can. Apologies if I have misquoted him, but we need to make sure that we start intervening young.

Simply in terms of the Government's target, there is a mathematical reason for starting young. If you look at life expectancy, the Government want to get those extra five or eight years, and if you prevent a newborn dying you potentially add 90 years to life expectancy. If you prevent someone who is 90 dying, you may add one extra year only, so there is a mathematical reason: you will have a bigger impact on reducing overall average mortality by focusing on prevention at the young end.

My view is that we should not be pitching young against old. It is extraordinarily important that we prevent in childhood, in youth and in old age, but also in middle age. If you look at physical activity participation by age in the UK—it is not the same everywhere—it starts falling when we leave school. Arguably, the interventions we need to make are for people in their 30s, 40s and 50s, so that it does not drop off. You have to do physical activity in school, although it is not enough, but when people leave, they stop doing it. We have to make sure that we work across the whole life course; it is not just about the old and the young.

Ruthe Isden: I agree with that. My one concern is not about whether the life-course approach is the right approach, it is that in discussing that approach and how it is implemented in the real world, sadly, old people tend to be deprioritised. It is very important that we do not allow our

desire to take a life-course approach to ageing to obscure the fact that we do not do public health for older people, which is incredibly important.

I want to touch on one example of that. Going back to what Professor Rae was saying about pressures on the NHS and some of the people who are coming into hospital, we know that there are around 1.6 million older people who are malnourished or at risk of malnutrition. In terms of immediate public health impact, malnutrition is a greater risk than obesity, yet all our funding, attention and public health investment is going into obesity.

That articulates something that is quite important. Yes, it is very important for us to look at obesity across the life course, but our desire to do that has effectively meant that there is no real effective, systematic intervention to look at older people who are malnourished in the community. They represent around one in three. One in three old people are already arriving in hospital malnourished, which is often a contributing factor to the infection, the fall or the frailty that brings them there. It is not either/or, it is and/both.

On the question of intervention points, we have discussed a range today, and of course there are all sorts of points in life when people think about their health, whether that is in pregnancy, in maternity or through to retirement. However, there is one that is overlooked. We have really good emerging evidence from the Guy's and St Thomas' Foundation Trust, which has done some fantastic work just across the road in Lambeth on this. When people acquire their first long-term condition, different people then take different trajectories. Some move forward and manage one long-term condition, while others quite quickly spiral into having two, three, four or five long-term conditions, multi-morbidity and all the wider problems we know that that brings, including polypharmacy and complexity around disability.

That appears to be a key intervention point, because it is possible to amend that trajectory if you catch people at the point at which they acquire the first long-term condition and encourage them to make some of these important lifestyle improvements. That appears to be one of the biggest differences between those who carry on with one condition that they manage and those who quite quickly spiral into very poor health indeed. It is an area where we do not know enough, but the research is very interesting and takes us down some important avenues.

That brings me to the final question that Baroness Walmsley posed: who should be doing this intervening? I do not think there is any single answer to that. If we look at it as a funnel, with a need to work at every level, we look to people from government, professionals, local authorities, all the way through the system and beyond into our communities, to take on different aspects of this role, with the complexity of lining everybody up to move in the right direction.

There is something extremely important, when we get down to that lowest layer, about the most personal interaction. It is not necessarily

about the GPs, but thinking about the role the wider multidisciplinary team has to play, the opportunities that PCNs open up, through social prescribing and anticipatory care approaches, and the wider provision, through that, of access to community-based services, information and advice, health coaching, which is critical. It is not a “the GP must do it” answer, but primary care and its links to the community and the wider health roles is critical.

Q77 Baroness Penn: I want to pick up on two aspects of the Government’s target. One is five years extra healthy life expectancy and the other is about reducing inequality. Specifically, do we know what the main challenges are when it comes to reducing those inequalities? More usefully, do we know what has been effective in helping to reduce them? You talked about going to where those populations are and delivering your messages there, but are there any other examples of what can be effective in reducing those inequalities? Is public health and public health strategies the right place to do that, or should we be thinking of elsewhere in the system?

Professor Maggie Rae: I want to answer by saying that we need to talk more about population health. We are now really in the population health business. We are talking about creating a movement, about everyone being organised for the greater good of society and, most importantly, engagement with society itself. Very little of this changes. If you take the beginning of the life course, we have a lot of support from the public—you do, we do—about caring for children and protecting them, but once we get beyond the childhood years, we have to engage with people directly.

I reached a point of enlightenment, which I would like to share, when I realised that all public health interventions, programmes and strategies have the potential to widen health inequalities. Unless they are targeted, naturally the really healthy people, the articulate and educated, will pick them up and you may never get to the other people. With the movement on integrated care systems and people being held to account for population health and understanding the needs of the population, we want to shift the middle quintiles to get the numbers early and to narrow the gap early. It does not mean that I am not completely passionate about those in the bottom quintile. I am doing work at the moment on drugs and targeting drug deaths, because that is quite shocking and need special attention, but a general population model needs to shift the middle.

You talked, Lord Browne, and it fits nicely with your question, Baroness, about how the usual suspects—coronary heart disease, smoking—are a bit boring for some people. I think employers need to be brought on board on the economic argument. That is quite straightforward and is the best way to do it. Sir Muir Gray and I have been working very closely together, during my presidency, on dementia. Some people are not that interested in improving cardiovascular disease, but they are very interested in anything they can do to prevent dementia. So we have to be quite fleet of foot on the current issues and how we communicate these

things to people. While I am sure we will see great advances on dementia in our lifetime, we actually have the list of interventions that can improve your brain's functionality.

The Chair: What science-based evidence do we have that says you do X or Y and you reduce dementia?

Professor Maggie Rae: It is very interesting, because it is the things you would expect relating to lifestyle and abuse. We are not going to find a magic cure through those factors, but anyone who is able to keep their brain as active as possible is less likely to experience the effects of dementia sooner.

The Chair: Is that an observation, or is there data on it?

Professor Maggie Rae: No, we have some data on that which we can share with you. My colleagues in Age Concern are pushing it too.

The Chair: We would be pleased to have that data.

Professor Maggie Rae: Yes.

Ruthe Isden: And on cognitive decline more broadly, I believe the Committee will be hearing evidence in due course from Edinburgh University on the Lothian birth cohorts. That is from where a lot of this evidence is derived.

The Chair: From 1938.

Professor Maggie Rae: Targeting is very important.

David Sinclair: If government is going to achieve its big five-year target, it is also going to have to address the inequalities. There is a nearly 19-year gap between the life expectancy of the most and the least deprived deciles. The gap between the most deprived decile and the average is 13 years. So in order to achieve the big number, we have got to tackle the inequalities too.

It feels a bit like we are living through Groundhog Day. I am old enough to remember the 2005 Government's commitment that no one would be seriously deprived based on where they live. Do we think that, 15 years on, we are any better off than we were? I am not sure. Amazing work is certainly being done on decent homes and things like that, but have we tackled the health inequalities over the last 15 years? I am not sure. We have had Michael Marmot; we know that—

Professor Maggie Rae: I need to come in here with the evidence. Margaret Whitehead, a well-renowned public health professor and researcher actually researched the years when we narrowed the gap. There is evidence, scientifically significant evidence, that we narrowed the gap and improved life expectancy. Importantly, we also reduced infant mortality. If you do not have that paper, we will make sure that you get it.

David Sinclair: Professor Carol Jagger did a piece of work looking at the period between 1991 and 2011, which was published in the *British Medical Journal*, which confirms that. My general, glass-half-full feeling is that there have been times when we have done this. It is not impossible. We can achieve it, and Carol Jagger has shown that there have been periods when we did it, so I should not always be too negative. One of the challenges here is that, although ONS keeps records on life expectancy, we do not have long-term evidence on healthy and disability-free life expectancy. So it is harder to track whether we are doing better or worse than in previous times.

The Chair: Baroness Penn, did you have any supplementary questions?

Baroness Penn: No, but is there anything more you wish to say?

Ruthe Isden: I agree that we are on the cusp of a really exciting development in health and the way we use population health data. The population health management programme that NHS England is rolling out is starting to look at it in interesting ways. We need to do things at different levels. We need to do things from a national and a community perspective to target areas of health inequality. We know that the drivers of health inequality are particularly problematic. We are increasingly learning that we need to be much more granular and often to go into quite small, grass-roots communities to address specific barriers to engagement with health improvement. I will give two quick examples.

I was sitting in with a group that is developing the population health management programme in the north of England. They realised, through the use of local data, that some of those with the poorest health, who had the greatest utilisation of A&E, were people with multiple, long-term conditions living in houses in multiple occupation. They effectively went door to door, and the data was able to get to them at that level of granularity, which was incredibly important.

The other area comes back to David's flu example, an area in which we do a lot of work, in collaboration with the MRC and others. We have realised that part of the next phase of our programme—starting in London this year and hopefully moving to other communities in due course—is to do much more work at the grass roots. We have gone as far as we are going to go with the approaches that we have traditionally been able to take. It is now about going almost door to door with quite small, grass-roots community groups, spreading the messages, tackling the barriers and understanding individual motivation.

Technology, in terms of both population health management and our capacities through all sorts of social media and other activities to microtarget messaging, is of a different order now than it was even five or 10 years ago, and we need to think about how we use that very effectively.

Q78 **Baroness Manningham-Buller:** We now come full circle to where we started, with Mr Sinclair's view that the grand challenge was not

achievable. You have all given us some suggestions of how it might be achievable and said that it is good to have ambitious targets. In our final moments together, I want to ask you both whether you think it is achievable—we know what Mr Sinclair thinks—and, if you do not think it is, to give a distillation of some of your recommendations of how you think we can get a good way towards it.

As we said in the previous session, the Committee is thinking about what its recommendations will be. This is your chance to tell us what the challenge is and how we are going to get there. Where would you prioritise the things that need to happen?

The Chair: Very succinctly and clearly.

David Sinclair: I think it is achievable with a major public policy change. I have three quick points. First, all Governments across the OECD say they care about prevention; until recently we have seen cuts in spending on prevention across the OECD. The simple thing the Government can do is make sure they are spending money on this.

Secondly, there is a need for a serious debate about the role of regulation. It is welcome that you have been talking about this. The nudge and compel stuff does work.

Finally, to answer Baroness Walmsley, the role of employers is potentially extraordinarily useful. Companies such as Aviva and Mercer are currently piloting mid-life MOTs, which are about trying to provide people with a combination of health, well-being and finance advice within the workplace. If that works, it is the sort of thing we should be pushing more, and it would be great to have more government support for it.

Ruthe Isden: I come back to what I was saying about having to work on these things at every level. We have to normalise it, broadly speaking. We then need to tackle barriers within local environments and communities. Then we need to work with people as individuals. In order to achieve the change we want to see, we need to ensure that public policy is lining up across a number of areas, to drive all those things consistently in the right direction.

We will not achieve this target if we overlook older people. I come back to the messages about healthy ageing. We cannot allow that to be a reason why older people are forgotten. We need to do a lot more to explore the emerging opportunities to use data and identifying communities with bespoke needs more effectively and systematically.

Professor Maggie Rae: I think two years would be more practical for delivery. I am an epidemiologist and I could not resist jotting down what we have achieved and doing a little calculation myself. For some people five years is possible, but we have got to halt where we are going now—stop the decline in life expectancy—and then do the other stuff, across the board, not just in healthy people's lives. That would not stop me trying to do it, trying to get the investment and trying to get people behind the message.

Baroness Manningham-Buller: To get the two years, what would be the top three things that the Government, public health authorities and the private sector should do.

Professor Maggie Rae: The top three things, for me, would be, first, ensuring that we were committed to the networking that delivered this population health programme in every part of the country. I am a system designer and we have to get the system working, because we do not deliver from the centre. If we could get that system working, we could put in incentives.

Secondly, I smiled when David mentioned the £100,000 for free swimming; we have had many £100,000s taken out. If we put the money behind the key interventions—they are there—and worked through them, it could be doable. It is not the interventions that we are looking for, it is their implementation and the money to go with it.

Thirdly, I would pick significant points on the life course and hit them. One of the good things about having the life course is that you engage with everyone. Part of me would be tempted to just go like billyo for 50 year-olds and get the delivery there. However, for some of our deprived populations, 50 is too late.

The Chair: Thank you very much. It has been a very useful session. We have gained a lot. Each of you has promised to send us some information. Please do so.