



Health Committee

Oral evidence: [Children's oral health](#), HC 1912

Tuesday 24 February 2015

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Written evidence from witnesses:

- [NHS England](#)
- [Public Health England](#)
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Members present: Dr Sarah Wollaston (Chair), Grahame M. Morris, Andrew Percy

Questions 1-112

Witnesses: **Dr Barry Cockcroft CBE**, Chief Dental Officer for England, **Peter Howitt**, Deputy Director, Legislation and Policy Unit, Department of Health, **Dr Sandra White**, Director of Dental Public Health, Public Health England, **Professor Nigel Hunt**, Dean of the Faculty of Dental Surgery, Royal College of Surgeons, and **Stephen Fayle**, Consultant and Honorary Senior Clinical Lecturer in Paediatric Dentistry, Leeds Dental Institute, gave evidence.

Q1 Chair: Good afternoon. Thanks very much for coming. I am afraid we are a little thin on the ground, but we are expecting a couple more colleagues to arrive later; they are on their way. Welcome to this hearing into children's dental health. Could we start by the panel introducing itself to those who are following the proceedings from outside?

Dr White: My name is Sandra White. I am a consultant in dental public health by background. I am the director of dental public health for England in Public Health England.

Peter Howitt: I am Peter Howitt. I am a senior civil servant at the Department of Health and the lead for dental policy at the Department.

Dr Cockcroft: I am Barry Cockcroft, chief dental officer for England at NHS England with responsibility for DH and Health Education England. I am a general dental practitioner by background.

Professor Hunt: I am Nigel Hunt. I am a specialist orthodontist and consultant in London. I have worked in both primary and secondary care, and I am currently dean of the faculty of dental surgery of the Royal College of Surgeons of England.

Stephen Fayle: I am Stephen Fayle. I am a consultant in paediatric dentistry at the Leeds teaching hospitals in Yorkshire. I am a member of the faculty board, but I am also chair of the national consultants' group in paediatric dentistry. I am a past president and very active member of the British Society of Paediatric Dentistry.

Q2 Chair: Thank you very much for coming this afternoon. Dr Cockcroft, could you start by talking us through the data on the state of children's dental health across the United Kingdom? How much of that data gives us an accurate picture, and how much is perhaps hidden in the way changes in data collection have occurred? For those who are not familiar with the background, it would be helpful to have some opening comments from you.

Dr Cockcroft: I can open up the debate, but most of the data are owned by Public Health England and it probably sits with Sandra. Overall, the data show that child oral health has improved very significantly over the last 40 to 50 years. A large proportion of children are now totally free of disease. The latest data from Public Health England show that 88% of three-year-old children and 70% of five-year-old children are free of disease. Very importantly, the latest children's dental health survey of 2003—we are just awaiting the next one—shows that a very high proportion of 15-year-old children are free of decay as well. That is important, because that is their permanent dentition, so they will have that condition throughout the rest of their lives.

Although there has been a significant improvement overall, the data show that, if you take away the children who are caries-free, there is too much of a burden of dental disease among those who have the disease, and that is linked very much to deprivation and social factors: education, ethnicity, disability and things like that. The challenge is: be pleased that the number of children who are caries-free is increasing and continues to increase, but recognise that we have to do something about the minority who have the disease. Obviously, as oral health improves, it gets more difficult to challenge the minority because the minority gets smaller. I do not know whether Sandra has anything to say.

Q3 Chair: Sandra, could you elaborate on that and perhaps bring in the issue of positive consent to taking part? How much are we witnessing under-reporting as a result of those changes? Perhaps you could explain what that is to those following from outside.

Dr White: The vision is to try to get a generation free of disease, and this is a preventable disease. As Public Health England, we have to start with the fact that it is a preventable disease. In 2007, we started to change to positive rather than negative consent. What used to happen was that people had to opt out, and now they almost have to opt in to the survey. All of the last few surveys have been done by the same methodology, so we can compare them. You are quite right. We are always concerned that there may be deprived populations where there is chaos at home; they would not return the consent form, or people are worried because there might be too much decay, and they might not return the consent form. But we have some robust data; for example, the three-year-old survey was 54,000 children nationally, so it was a big number. That does give some kind of gravitas.

Q4 Chair: If there is a higher probability that you are less likely to return a form to give positive consent if you are in a higher-risk group, how confident can you be that the apparent drop we have seen in the last two surveys is not just because you are missing out on certain households who might have been at higher risk? What data have you collected or what research have you done to see how much of this is a change in data collection? Are we being lulled into a false sense of security by the very reassuring graph that we have in front of us?

Dr White: The last two five-year-old surveys have been done with the same methodology. You are quite right. You cannot methodologically compare the ones before that, with negative consents, with positive consents, but you can compare the last two five-year-old surveys, and we have shown a decrease in both the prevalence of decay and the number of decayed and missing and filled teeth, so there has been an improvement.

Q5 Chair: Within the last two surveys.

Dr White: Within the last two five-year-old surveys, yes.

Chair: Thank you for clarifying that.

Dr White: And for me, what is important in terms of inequalities is that across all the quintiles of deprivation there has been improvement as well.

Q6 Chair: The University of Liverpool has claimed that the true prevalence of disease has been, as they put it, “grossly underestimated”. Do you share that view, or not?

Dr White: Without the evidence, we cannot say it is grossly underestimated. What we can do is work with the data we have. There has been some work looking at the reasons why people have and have not returned responses. People have tried to increase the response rate, but, now that we are beginning to get trend data with the same methodology, it is robust; and we can say, yes, there definitely has been an improvement, because it is the same methodology.

Q7 Chair: Perhaps you could talk a little more about the inequalities in terms of prevalence within different groups who might be more prone to dental decay.

Dr White: Those from poorer backgrounds and more deprived backgrounds, vulnerable groups—those with special needs—and certain groups in society have higher dental health needs and higher levels of dental decay. To try to prevent the disease—I am sure you have read the Marmot report on proportionate universalism—we would try to target those from backgrounds that have a higher level of dental need, so it gives us something to work with. On the last five-year-old survey, we did some work that looked specifically at improvement across all the quintiles. They have improved across all the quintiles. They have not just increased the inequalities; everybody has got better.

Q8 Chair: If we compare that with the work Public Health England has done on childhood obesity, where they produced very helpful breakdowns of each decile of income

inequality and clearly demonstrated the differences in obesity, could you talk us through what the figures would be for the difference in dental health between the most and the least deprived?

Dr White: I do not have all those figures with me today, but, for example, if you look at the inequalities just in terms of regions, let alone deprivation, we know that the prevalence of dental decay in the north-west is about 34.8% compared with 21.2% in the south-east.

Q9 Chair: We are going to talk specifically about regional differences in a minute. Have you looked particularly at income inequality?

Dr White: I will show you a chart. It is easier to give it to you visually, if you don't mind.

Q10 Chair: It is not easy for other people following the debate from outside to follow things visually. We can include a chart in an eventual report, but perhaps you could talk us through the figures for those following from outside.

Dr White: I am reading it off the graph, so I might need to come back to you with the specific numbers. In 2012, in the most deprived quintile, around 40% had dental decay.

Q11 Chair: At what age?

Dr White: This is in five-year-olds. In the least deprived, it was around 15%.

Q12 Chair: It is a very significant difference.

Dr White: It is a significant difference, yes.

Q13 Grahame M. Morris: Following Dr Cockcroft's comments about the prevalence of tooth decay and the progress we have made in the last 10 years, the Committee has some figures from the House of Commons Library which show that over the last 10 years admissions have risen as an overall proportion of the number of children in England. What conclusions should we draw from that? What are the main drivers of the growth in the number of children who require the extraction of teeth under general anaesthetic?

Dr Cockcroft: You cannot explain that by any one factor on its own. In the same period, as Sandra said, the oral health of children has improved, and access to services has improved significantly. A number of factors may have impacted on that. The accuracy of hospital data is less robust than what we know from primary care, but we certainly need to look at whether dentists understand what the correct modality is and, if they are nervous in the current more litigious environment, is there a driver to refer when they might not know what the right treatment is.

One thing we do know, which we learn from the publication "Delivering Better Oral Health", is that if you provide dentists with robust evidence about what the right thing to do is—"Delivering Better Oral Health" relates to prevention—dentists have been fantastic in taking it up. We now have a research programme going on, which the BSPD referred to in

their evidence, the FiCTION trial, which is about filling children's teeth. Dentists do not have clear guidance about whether or not they should fill deciduous teeth. I think there is a natural reluctance to do that.

I talked about the relationship with deprivation. In general, access for children tends not to be an issue. Children from deprived communities, who genuinely have a greater disease burden, are much less likely to access care, despite the fact that it is now more available, until they develop symptoms. Once they have symptoms, treatment is more likely to be extraction. If you have a very young child, the reason for admission is not the caries; it is for the administration of the general anaesthetic, because we changed the rules that stopped general anaesthetic being administered in practice some time ago. You cannot tie it down to one factor; it is a combination of a whole load of factors that we need to address.

Q14 Grahame M. Morris: In the evidence submitted by the Faculty of Dental Surgery, the faculty observed that the growth in hospital admissions for tooth extraction had not been accompanied by an equivalent increase in the level of treatment for decay in primary care. Does that go back to your point about dental surgeons being worried about litigation? Is there any evidence that more children are being referred to secondary care—hospitals—from primary care because dentists in general practice are unable to treat children's tooth decay?

Stephen Fayle: I agree with what Barry is saying to a certain extent. Probably one of the issues here is better counting. We did a study in Yorkshire which looked at how different providers of children's general anaesthesia services for dentistry reported their figures. The data were captured about seven years ago. We found that a lot of it was not being reported on HES data. Hospitals are now much better at reporting that data; they need to report it to be paid, so I think there is an element of better counting.

It comes as no surprise to me as a paediatric dentist that those figures are now so high. The general anaesthesia bit is just the tip of a very big iceberg. Barry referred to the three-year-old data. Turning that on its head, in Leeds, my area, which is not one of the worst in the country but is in that worse section, 19% of three-year-olds have visible decay. That is one in five three-year-olds, which is a huge proportion of the child population. The Sheffield data show they are getting on for 700 visits to accident and emergency departments in children's hospitals every year. That has been echoed up and down the country. That is two children a day.

To tell you something else that is not in the evidence, as chair of the consultants' group I did a little e-mail survey in the last couple of weeks in the run-up to this. For some reason, there is a real rise in referrals occurring in many of the big centres in the country. We do not quite understand why that is happening. The figures being quoted to me by colleagues are probably 10% or 12% in the last year. We do not quite understand the reasons behind that. It might actually be a feature of success in some ways. I do not have the data for this, but one of the things it might be, and I get that impression from my clinics, is that families are finding it a little easier to access dentistry in the first place. There is varying information, but it might be that they are accessing dentistry and then they are being referred on because their needs are so high.

Q15 Grahame M. Morris: Is there a reluctance to do fillings earlier in the process of addressing tooth decay? Is that what you are suggesting? In primary practice, is there a fall-off in the number of fillings?

Stephen Fayle: Fillings are one thing. Many good things have happened in the last decade or so—the FiCTION trial that Barry was talking about, where we are doing a randomised control trial to look at different types of intervention. Fillings are one type of intervention, but the underpinning core has to be preventive care. One of the concerns we have as paediatric dentists, as do the faculty and BSPD as well, is that under the current 2006 contract there is very little to support and encourage dental teams to deliver effective and ongoing preventive care and advice to families. That is a great concern for us. We are pleased to see the contract pilots now, and as that moves on there is much more emphasis in the proposals for the new dental contract—in the pilots—on ongoing and preventive care, which we think is the core underpinning thing that will change this equation eventually. That has to be the thing that changes.

Professor Hunt: I agree with all that has been said by Barry and Stephen. To come back to the problem of access and families perhaps not approaching dentists until they have symptoms, we are seeing a missed opportunity to have an interim stage, which is the general practitioner but then the specialist paediatric dentist as well, who can treat them, and has the expertise to provide treatment to those patients, before they get to the extraction stage. We have seen a decline in the number of specialist paediatric dentists over the last few years. There are now way fewer than 250 in the whole of England.

Stephen Fayle: Two hundred and twenty-eight.

Q16 Chair: You helpfully sent us a diagram of where the specialist dental practitioners are. Is there a correlation between the availability of specialist dental practitioners and the reduction in the number of extractions?

Professor Hunt: My understanding is that there is no hardcore evidence to suggest that, but anecdotal evidence would appear to be that, for example, in the south-west of England where there is a complete dearth of paediatric dentists—

Q17 Chair: According to this, we can see that for some areas there are. There are parts of Devon—I am hesitant to use diagrams because other people cannot see them, but is the lack of evidence because the data are not being collected and collated?

Professor Hunt: I do not know whether Sandra has that evidence.

Dr White: I do not have the number of paediatric dentists.

Professor Hunt: And the referrals to hospitals?

Dr White: No.

Stephen Fayle: I don't think we have that either.

Q18 Chair: One of the points you are making is about having more paediatric specialists so there is an in-between stage before extraction, but as far as you are aware nobody is looking at that data or collecting it specifically.

Professor Hunt: Except that the highest referrals would seem to be within hospital departments in areas where there is a lack of that expertise.

Q19 Chair: But anecdotally you are saying that is the position.

Professor Hunt: Yes.

Dr White: I hope you would agree that the majority of dental extractions in hospital are carried out not by our paedodontist friends but through community services. It is the very specialised work carried out by paedodontists that is necessary. I would also like to say—I would say this, wouldn't I, because I am from Public Health England?—that we are missing a trick today if we are not talking about preventing it before it gets to that stage.

Q20 Chair: We will be talking about that very specifically.

Dr White: I shall stop there.

Dr Cockcroft: I want to come back to the point Stephen made about incentives in contracts, and prevention. He is quite right in saying that under the 2006 system we are still effectively based on activity, and it was so before 2006. I am sure we will come to contract reform later on and aligning incentives with the right clinical outcomes, but in defence of the profession, and to praise the profession, the biggest single area of growth since 2007 in the provision of services in primary care has been in preventive dentistry—evidence-based preventive dentistry—specifically the provision of fluoride varnish. That is a most effective evidence-based preventive procedure, which has grown spectacularly since the publication of “Delivering Better Oral Health” in 2007.

Chair: We will be talking about that in greater detail later on.

Dr Cockcroft: That has occurred despite the fact there is no direct financial incentive for the dentist to do it, and I think that is a massive credit to the profession.

Q21 Andrew Percy: In our brief, we have some figures from west Yorkshire, from the Leeds Dental Institute, showing that young children aged three to five in the most deprived areas of west Yorkshire have an average of nine primary teeth removed under general anaesthesia. The brief shows that in Sheffield the average age for tooth extraction is a little over five years. How would you describe that? Do we have an oral health crisis for children? I know we do not always like to use the crisis word.

Stephen Fayle: Perhaps “crisis in oral health” is not the right thing to say. I believe the problem has been here for a long time. There are a number of reasons why it has now come to everybody's notice, not least the fact that it is now the most common reason why children between five and nine are coming into hospital in England. We have the three-year-old data, which has made us all realise just how early this problem is starting. If there

is a crisis at the moment, it is occurring in the acute hospital sector and the specialist services.

To go on from what was just discussed, Sandra is absolutely right to point out that one of the big problems we have seen over the last few years is a withering of specialist services out in the primary care sector. I do not think it has been deliberate; there has been a focus on other things. If we look at the numbers of specialists, 228 is the total number for the whole of the United Kingdom. If we look at the whole of the United Kingdom, nearly 100 of those are consultants. That tells us that in the last 15 years, as the number of hospital-based consultants has increased, the number of specialists out there to deal with children, and perhaps help to prevent them from needing to come into hospital for general anaesthetics and other more advanced care, has dwindled. I think that is where the crisis is.

The other part of the crisis is that in many parts of England children are now waiting 18 weeks-plus for first consultation. I have data on this from my colleagues. Imagine you have a child with toothache and infection, often kept awake at night by repeated bouts of toothache. These children are waiting 18 weeks—four months—to be seen by a specialist, and in some cases it takes over a year to get them treated. In many of the big centres, waiting times are well over 18 weeks again for the actual general anaesthetic care that perhaps they need, or whatever. That is where the crisis is. The recent rise in referrals is making that acutely worse.

Dr Cockcroft: As a clinician, it is quite frustrating to see a condition occurring that you know to be completely preventable just by patient action. We should not see this purely as a dental issue. If we see it as purely a dental issue, it will take for ever to see significant improvements, and we will never see Sandra's vision, which I share. This is a completely preventable disease and it ought not to occur. We need to work across the system with NHS England, which has a duty not only to commission services but also to reduce inequalities, with Public Health England, which has a key relationship with local authorities, and with the Department for Education, so that we have oral health promotion in key skills at school and things like that. We must not see it—I hate to say it—as just a health issue; it is a societal issue that we need to address across a broad front. If we only tackle it as though it is purely a dental issue, the pace of improvement will become very frustrating.

Professor Hunt: Barry is absolutely right. There is evidence that in certain parts of the country—for example, Greater Manchester where the campaign Baby Teeth Do Matter has been running—we are doing exactly that; we are taking prevention into the community, but it is early days and it is not across the whole country. We need to make sure that we are moving this more on to a national scale, particularly in areas where there is some social deprivation.

Q22 Andrew Percy: Your answer to this problem is more in terms of prevention and education, rather than recruiting more specialists.

Professor Hunt: I think it is both.

Stephen Fayle: Yes.

Q23 Andrew Percy: What is the driver not to recruit more specialists? Where is the failure in that? Is that NHS England?

Professor Hunt: I think it is an element of the diversion of finite resource. It has not become a priority in certain areas, which perhaps it should have done.

Stephen Fayle: There has been considerable emphasis, quite rightly, on the development of better services for adults with co-morbidities and other special problems that make dental and oral health care more difficult to deliver. There has been a lot of focus, quite rightly, on that within the primary care sector, but in some ways it has taken the focus off children in paediatric dentistry. That is partly why we have seen a decline in the numbers of paediatric dentists as those other services have, quite rightly, been built, because there is a great need there.

Dr Cockcroft: I slightly disagree with Stephen in that there is no evidence of a shortage of paediatric dentists. There is evidence that there has been a reduction. If you look at the map, the distribution is not even; it is very much focused on dental hospitals. Paediatric specialists are highly trained, highly skilled, and should be focused on doing the very complex work they can do and general dental practitioners cannot—developmental defects like amelogenesis imperfecta, hypodontia and hypoplasia, and children with co-morbidities and children who need management for transplantation and things like that. As Sandra said, in areas where anaesthetic lists are being carried out, for GAs, it is normally oral surgeons or special care dentists, and in some cases paediatric dentists, but I think it is an inappropriate use of those skills for paediatric specialists to do those things when other people could be doing them. What I desperately agree with is that we need more paediatric people out in primary care, leading teams and guiding other practitioners who can provide the right care in primary care. I am not disagreeing, because I do not have the evidence; but I cannot agree, because I do not have the evidence either. I think the distribution of paediatric specialists needs to change so that they are playing a greater part in leading teams to tackle this appropriately, in multi-disciplinary teams, with other people. It is a very simplistic thing to say we need more paediatric dentists. We need them engaged better with the whole work force across the piece. In areas where there is a waiting list for anaesthetic sessions—I know it is the same in your constituency because there is a current issue about waiting lists increasing—it is often more to do with the shortage of anaesthetic time and theatre time than with paediatric specialists. That is also a big issue that commissioners need to work out with providers.

Q24 Andrew Percy: We have heard about children having as many as nine teeth extracted. We have heard evidence about the large number of extractions and the age of extraction. What are the short and long-term health consequences for young children having multiple tooth extractions?

Professor Hunt: Again, there are multiple factors. The whole ethos is that we are trying to create a relaxed child in a friendly environment. If their first exposure is to have multiple extractions, we are in danger of creating an anxiety in that child that lasts a lifetime. There is also evidence to show that, if you do not get prevention right in young children, it tends to persist into adulthood. Therefore, you are almost committing that person to a drain on health service treatment for the rest of their life. As an orthodontist, I have to say that when you lose baby teeth the other consequence is that you automatically lose space for

the permanent teeth which would normally come through to replace them. Therefore, you are shifting the emphasis into committing a child to the need for future orthodontic work, which is an expense and an ordeal for the family.

Dr Cockcroft: As somebody who worked in practice for over 25 years, if you have built a relationship with a child from when they are very tiny to a time when they may need some treatment the child has built up a reservoir of confidence in the clinician and is comfortable in the environment. If the first experience is related to discomfort or pain, or results in general anaesthesia, it is a very poor way to start your experience of oral health care, and then it is a real challenge for the paediatric or special care people to change that child from being a nervous child to a confident child, which is what you want to do at the end of the day. Delivering care to a nervous child is challenging as a clinician, and it is much easier and better to deliver it to a happy and confident child. If they do not attend until they get to the stage of symptoms, you are on a loser to start with. That is why the growing access thing has been really important. People can access care more easily now than they used to be able to do; it is just that possibly people do not realise it in some cases.

Stephen Fayle: If you look at the Leeds and Yorkshire data, the average number of decayed teeth being taken out is eight or nine. If we look at the third of the children in Leeds who have decay by five years of age, the average number of decayed teeth is about three and a half. That is telling you that the general anaesthetic bit is the worst end of the spectrum, and a lot of children are managed and treated successfully in other ways. It goes back to what we said before. We need a work force—more people—who can offer those other alternatives as well. What we do not want are children being left. Think about it: at three years of age, one in five children where I work has decay. By five years of age that is becoming the most common reason why a child comes into hospital. We need something in between, with people with the will and the skill to be able to deliver the right interventions, both preventive and fillings and other treatments, to stop those children escalating.

Q25 Chair: We shall be returning to that in more detail in a minute. Thank you.

Dr White: I absolutely agree about the impact being physical, psychological, social and, starting school, readiness for school. All of that has an important impact. I agree that it is important to have a good, trained and specialist work force. I know we are coming on to prevention, so I will not thrash it here, but these children have decay at three. Sometimes they have not even seen a dentist by that time. We have to get the wider work force into this, and I am not just talking dentistry; I am talking midwives, health visitors, nursery staff, parents and support for parents. The whole of society must get into this, because it is the business of all of us. As dentists we cannot do it alone.

Professor Hunt: Do not forget the impact on the rest of the family. When these children are attending hospitals for extensive treatment, particularly extractions, it is a big burden on the parents. If we are already dealing with parents who may well have socio-economic difficulties, that extra burden is exactly the wrong thing they need to cope with.

Q26 Chair: Can we come to the issue about minority communities? We received evidence from Sheffield city council about the specific difficulties they are facing with the Slovak Roma community accessing care very late. As we have touched on income inequalities, do you feel you are sufficiently resourced to be able to reach out to communities that may have greater needs? How do you address that?

Professor Hunt: We need better research, because I do not think we yet fully understand the cultural differences we face with these particular groups. There may well be reasons why they are reluctant to access dental treatment, and I do not think we yet have a finger on the pulse as to why that is the case. Sandra and I have discussed this several times. We need funding for that research, and that is the biggest problem.

Q27 Chair: It is an absence of evidence. Is it that the Roma community are not accessing dentistry, or are there other issues around oral hygiene? Could you perhaps touch on why you think this is happening?

Dr White: There have been some local studies around the country on Roma communities and Travellers, but nothing has been done nationally yet, because, although they are an ethnic minority, the tickbox has not been there for marking them down in terms of their ethnicity. Services have to be culturally sensitive. If I can use an example, when I was a clinical dentist I used to drive a dental mobile—a caravan—to the caravans to offer treatment for Travellers. They loved that because it was an environment they understood. But that is very high resource. The cost resource of sending a dentist with a dental mobile to a Traveller site is quite high, but it is a way of trying to make sure that whatever services we deliver are culturally sensitive to the needs of people, whether it be Roma, BME, or whatever it is.

Dr Cockcroft: One of the benefits of a locally flexible service is that the issues in some parts of the country will be different. You talked about Romanies. We know there are problems with Romany and Traveller people. It is homeless people, as well. People with drug and alcohol problems find difficulty in accessing dental services. It is about how to work with community and societal leaders and people who are used to interacting with those groups to find the best way to engage with them. We had a project in east London where we co-ordinated with people monitoring for tuberculosis in homeless people. We found that the same people had issues with their oral health, so we linked the two together; we combined it. It was a very efficient way of getting to homeless people in that particular area. That is why it is so good to have a degree of local flexibility rather than a national one size fits all. In Lincolnshire, there is a big issue around migrant workers coming in to pick produce at certain periods, so things will change. It is good to have a national strategy, but it is very important to have local flexibility to deal with specific issues.

Chair: Could we return to the availability of dentistry? We probably have more to hear from you in that area.

Q28 Grahame M. Morris: I should really ask Dr White about this. We touched on it a little earlier in the session. I think you mentioned—it is certainly in our evidence—that about 30% of children have not seen a dentist over the last two years. Doesn't that number of children who have not had any contact with a dentist indicate a failure of either the

Department of Health or other public health bodies to protect the oral health of children in England? Is that a reasonable conclusion?

Dr White: I absolutely understand the question.

Q29 Grahame M. Morris: What are we going to do about it?

Dr White: I would go back to the fact that it is everybody's business and that we should not just rely on dentists. There should be healthy food policies. We should be supporting parents. We should make sure environments are good. Policies at a national level should support children. We should make it easy for children to have good teeth.

Having parked that, I will answer your question about getting people to the dentist. To try to improve on that 30%—how we get them to the dentist—is quite difficult. There have been lots of schemes across the country. This is probably Barry's role more than mine, but they have placed services in areas of high deprivation, they have put messages on buses and used all sorts of innovative ways to try to encourage people to go to the dentist. There has been quite a problem in getting them into the dental chair, but I will let Barry answer the question.

Dr Cockcroft: We have the data around access relating to the NHS. Some of those 30% of children will be seeing a dentist in the private sector, and now they have the choice to do that, so the 30% is probably slightly overstated, although the vast majority of people who get care do so through the NHS. The issue now is not one of access; it is actually about uptake and how you encourage uptake in areas where access has improved. That is everybody's job. I remember when access was difficult. It is not perfect now, but it is much better. When it was poor, it was all over the newspapers, and as it has been improving it has got very little coverage. I think there is a lingering perception that it is still the same.

Q30 Grahame M. Morris: Peter, you are not saying very much. Does the Department of Health have any role in this?

Peter Howitt: The Department of Health's focus is on the contract reform programme. I was going to pick up Barry's point about access. Our figures show that 95% of people asked say they can get access to an NHS dentist if they want one. Building on Barry's point, it is not that there are not enough dentists out there with availability; it is getting people to want to pick up the phone and go into the dental practice, as Sandra was saying.

Q31 Grahame M. Morris: On Stephen's point about the prevalence of tooth decay among particular groups in Leeds and Sheffield, is there a definite correlation between deprivation and levels of tooth decay being exhibited? If there is, are we doing anything about it, either from the Department of Health or Public Health England? You mentioned advertising campaigns on buses. I am a great believer in the philosophy of proportionate universalism, where we move the curve for everybody, but if the biggest gains are to be made in the most deprived communities, what are we doing there?

Peter Howitt: The focus, as Barry and Sandra said, has been on local action, because by giving the responsibility to local authorities they can join it up with early years services,

Sure Start and things like that, and they can also tailor stuff to local needs. You had a really good submission from Leicester city council setting out how they are an outlier in the east midlands and why they are particularly targeting oral health in a way that would not be relevant for some other areas. That is why we have taken a locally led approach rather than a one-size-fits-all national approach.

Q32 Grahame M. Morris: In terms of upstream interventions and justifying it in financial terms, is it more cost-effective to do that? Can we conclude that children whose parents do not access care, even if it is available, fall out of the system and then present further downstream for costly extractions in hospital under general anaesthetic? We could make a financial case that this is the best intervention as well, couldn't we?

Dr Cockcroft: It is not only financial; it is on a clinical outcome basis as well. We have to tackle it upstream. Our focus is tackling it upstream, but not ignoring that what we do not tackle upstream we have to tackle downstream.

Stephen Fayle: One of the successes in child oral health is the Childsmile programme in Scotland, by making it everybody's business and engaging with lots of other professionals, not just dental health professionals but other health professionals, like health visitors, and nursery schools to get the messages out there. Part of that programme is making sure that children get to see a dentist before they are two. One of the core messages is: dental check by one. We want children to go along to their dentist, and get their teeth checked and get the right advice before they are one. Childsmile and programmes like that—there are other examples—have managed to push that forward. Now only 14% of children in Scotland are not accessing dental care.

Q33 Grahame M. Morris: Professor Hunt was talking about orthodontic interventions with milk teeth and so on. I had a particular case where a community-based dentist decided not to do anything about a particular problem, with teeth growing over and so on. That presented later and involved quite complicated interventions and the application of orthodontic appliances. Was that lack of expertise or lack of confidence, or thoughts about being sued if it did not work? Why should that be, because it is easier to do when the individual is a child, isn't it?

Professor Hunt: This is a particularly hot topic at the moment with regard to the new contracting proposals for orthodontic services.

Q34 Grahame M. Morris: There is the cost as well, isn't there?

Professor Hunt: One thing that has been causing some concern is the ratio of new patient treatment to those that are taken on for active treatment rather than just for subsequent review. As a consequence, there is currently an active disincentive for orthodontists to see and assess patients at that early stage when perhaps some very simple treatment could alleviate future problems to a considerable extent—I am not saying completely, but to a large extent. Barry and I have had several discussions on this particular issue, but we need to get through to the commissioning pathway people that it is the case.

Q35 Grahame M. Morris: Have you highlighted that to us in your evidence?

Professor Hunt: I think it is highlighted in the submission from the British Orthodontic Society.

Q36 Grahame M. Morris: Right. That is relevant.

Dr Cockcroft: That leads on to the link with education and training. If as a commissioner you can deliver a good outcome in a more efficient way without resorting to intervention, it is obviously better for everybody, but the clinician doing that has to be confident that they are making the right decision and the right assessment, which means we have to look at the education of undergraduates and relatively young practitioners to know they have the confidence to do that. Hopefully, we are working on a commissioning guide for orthodontics which will say to commissioners, “If you can intervene earlier in certain circumstances and avoid the need for braces, it is better for the patient and the system; it is a better outcome for everybody.” It emphasises the important link between commissioning, education and training. This is a classic example where we need to do the right thing.

Q37 Grahame M. Morris: I know that we are coming to commissioning later.

Professor Hunt: You quite rightly raised the point earlier that one third of children had not seen a dentist. One thing we could do quite simply. At the moment we are only recording data every two years. The NICE guidelines are that you should see a dentist every year. It would be very simple to extend that data collection to an annual basis, and we would have a much clearer picture at that stage in terms of access.

Peter Howitt: It is something we could look at. The challenge would then be recording data for children on a different time scale from adults, which may make data collection tricky. Normally, we tend to allow a period of grace after the 12 months, because some people might come at 13 or 14 months, so the other aspect is should you then be collecting at 18 months, and does it become a big enough difference? It is something we can look at.

Q38 Grahame M. Morris: In terms of this Committee’s role in making recommendations to Government for them to act on or not, if that is your considered opinion as experts and practitioners—the fact that you expressed that—we could consider it and whether we would wish to support it.

Professor Hunt: We would push that very strongly.

Grahame M. Morris: That is helpful.

Q39 Chair: Many people who gave evidence to this inquiry endorsed the Childsmile approach in Scotland. What would it take to make that happen here?

Dr Cockcroft: A lot.

Dr White: About £20 million.

Q40 Chair: It is purely lack of funding. What about the national leadership role in this?

Dr White: I do not mean to be flippant about that. Childsmile has cost about £1.8 million for Scotland. We talked about Yorkshire and Humber. Scotland has a population of the size of Yorkshire and Humber. If we tried to scale it up to do Childsmile over England, it would cost us more than £20 million. Local authorities now have a statutory responsibility for improving the oral health of their population. Across the country they use that responsibility to varying degrees, so there is something around trying to co-ordinate that, perhaps using pooled budgets across local authorities and other ways of trying to lead it, but one of the main things is the resource element.

Dr Cockcroft: As the data show, there is amazing variability between the best and the worst in this country. If you applied resource like that to an area where you already had incredibly good levels of oral health compared with anywhere in the world, it would not be a valuable use of resources in these times when we are trying to make the best use of all the resources we have. That is why we have local flexibility, so that people should be doing this in areas where it has the greatest impact. In other areas, there may be other things that might be better done.

Q41 Chair: The trouble is that in areas where it would make the most impact there are also other health challenges that they need to address.

Dr Cockcroft: Yes.

Dr White: What would you stop doing in order to do that?

Q42 Chair: To be clear, Dr White, you feel that it is mostly a funding issue that prevents that.

Dr White: Increased funding would help on that. To go back to proportionate universalism, we have good epidemiological data, and you would target it on the areas of deprivation where there is poor oral health. If you look at the Childsmile scheme, there are some universal things that are done for everyone; for example, at age six months they are encouraging children to go to the dentist—getting them really early. That is a positive thing. There is supervised brushing in all nursery settings—that is universal—and they are targeting with fluoride varnish and giving out toothbrushes and toothpaste.

Q43 Chair: Those are the key elements of it that work.

Dr White: Yes. Those are the key elements. With a little more funding, and trying to co-ordinate it, that would be marvellous. A similar sort of thing is happening in Wales. They are not quite as far along as the Scottish Childsmile, but they are doing a similar sort of thing.

Stephen Fayle: You might ask: is England lagging behind? The thing always to bear in mind is that this was born in Scotland out of very high levels of disease. In 2004, 50% of five-year-old children in Scotland had dental caries—dental decay—and Childsmile was introduced in 2006. We are down to 32% of children having decay in 2014, so there has been a real improvement. It may not all be due to Childsmile, but the great thing about Childsmile is that it is a multi-potent, multi-directional attack on dental decay.

Q44 Chair: Does the panel feel that this is what is giving the best bang for our buck?

Stephen Fayle: Yes. They claim that over the period it has been running they have saved £6 million on the cost of dental treatment in Scotland.

Q45 Chair: It is paying for itself more or less.

Stephen Fayle: Yes.

Chair: Thank you. That is very clear. Andrew will deal with quality of care.

Q46 Andrew Percy: That varies across regions as well. Public Health England has said that the care index is not a measure of quality, but it seems clear when you look at the index that the scores tend to be lower in the most deprived areas. The north-west is the example used in our brief, where I think the care index is about five point something per cent. What is the explanation for that?

Stephen Fayle: From my perspective as a paediatric dentist working in one of those areas, we are seeing, as we have already seen, quite large numbers of children being sent to us at a fairly late stage of disease. They have already had pain and infection, and the extent of disease in their mouths is such that fairly radical interventions are the best thing for that child at that time. I would love it to be different. We try to offer a complete range of different interventions, and nowadays we are very keen, and much more able than we ever were, to provide alternatives, like restoring and saving teeth, but that is not possible in the worst cohort.

Q47 Andrew Percy: You would think that, if demand was highest in the most deprived areas where there was the most tooth decay, the incidence of fillings would be greater, but it is the reverse, and that is simply because they are presenting too late, or not at all.

Stephen Fayle: Partly. Remember as well that the care index is a proportion, so if you have much more disease you might be doing more fillings, but it will be a smaller proportion of the total disease. It is not the only measure of quality of outcome. For example, one of our key indicators for children's dentistry following general anaesthesia is how often we have to repeat the general anaesthetic. We are extremely keen to make sure that, if a child does have to access services and go through what is an unpleasant and not entirely risk-free procedure, the child does not have to re-access. We have seen a sea change in that over the last couple of decades.

Q48 Andrew Percy: Isn't the care index a percentage of decayed teeth treated by filling?

Stephen Fayle: Yes.

Q49 Andrew Percy: So it should not be the case that there are these big variations, should it?

Professor Hunt: I think it comes down to the stage at which they are presenting to the dentist. At that stage, the option of restoration or fillings has passed and we are referring on to extractions.

Dr Cockcroft: This relates to the FiCTION research trial as well, and what is the appropriate thing to do at which particular age. You are dealing with an unusual part of the human body, which will become redundant and be lost at a certain age. Is the cost and outcome of intervention ultimately going to be counterproductive in the long term? Stephen and I agree on lots of things and disagree on a few, but one thing we would say is that untreated decay in permanent teeth needs treating at the earliest possible age. When you have children with deciduous teeth, research is ongoing as to whether the right thing to do at a particular age is to treat, or to observe and just apply the right preventive measures to stop them developing symptoms—developing pain, infection and things like that. It is not simple in the deciduous dentition.

Stephen Fayle: It is not, but we have evidence from retrospective studies in practice showing that 60% of children who have significant decay in their primary molars before school age, before four years of age, will go on to have pain and infection in their primary teeth.

Q50 Chair: Do you mean permanent teeth?

Stephen Fayle: No. They will go on to have pain and infection from their primary teeth.

Q51 Chair: Yes, but in their permanent teeth.

Stephen Fayle: Sorry, did I say “permanent teeth” at the beginning? What I am saying is that if a child has significant decay in their mouth—we saw the figures for three-year-olds—a large proportion of those children will go on to have pain and infection, even if they receive preventive care in practice. I do not quite agree with Barry on this. Sorry, have I confused you?

Q52 Andrew Percy: Yes. I still know them as milk teeth and adult teeth.

Stephen Fayle: Sorry.

Q53 Andrew Percy: Which ones are we talking about? What are primary teeth?

Stephen Fayle: Primary are milk teeth—baby teeth. I apologise.

Q54 Chair: I thought you meant that they would go on to have pain and infection in their permanent teeth.

Stephen Fayle: No; they have pain and infection in their primary teeth. By the time they are four, if they have significant decay in their primary or baby/milk molars, even though, as Barry says, those teeth will be lost between 10 and 12 years of age, 60% of those children will go on to have at least one episode of pain or infection associated with those teeth.

Q55 Chair: What is the incidence of pain and infection in their permanent dentition? In other words, if you have a problem with your primary dentition, I assume you are more likely to have problems later on as well. How strong is that link?

Stephen Fayle: That is absolutely right. You are more likely to have dental decay in your adult set of teeth if you have had dental decay in your baby set. Sandra might be able to give us more data on that.

Dr White: It is more likely. A lot of it is to do with behaviour. If you have eaten a lot of sweets and have not brushed your teeth until the age of five or six, the likelihood is that you won't change. That is why it is really important to get those life skills and behaviours in place at a very early age, and to instil them.

I would like to pick up your question directly. We do not want to see supervised neglect, because that is what you worry about when you hear those sorts of things. There is a professional debate about whether you should or should not fill dental teeth, which is what the FiCTION study is all about. There is cognisance of that, which is why the contract reform is trying to ensure that when the reformed contract comes out there are no perverse incentives, and that if something needs to be treated it is treated and if preventive advice is needed it is given. Sometimes you can just give preventive advice, even though there is a small hole. You can make it self-cleanse. The experts are at the end; I am not going to say what to do, but thorough preventive advice can be an alternative to drilling and filling.

Q56 Andrew Percy: As a follow-up question, I was going to ask about the non-restorative culture, as it is referred to. How much of the regional variation can be explained away by that? Are there differences in standards across areas? Do they vary regionally? Is there any evidence of that?

Dr White: I would have to go back to look at the care index across the country.

Q57 Andrew Percy: The differences between the south-east and my area in Yorkshire and the north-west on the wrong side of the Pennines are quite substantial. There seem to be quite significant variations.

Dr Cockcroft: I do not have the data to answer that question. I want to make one observation on milk dentition and permanent dentition. These are not two separate

dentitions. There is a period between six and 12 when you have mixed dentition. The first permanent teeth—central incisors, lateral incisors and molars—start to come through at about the age of six, so you need to address the lifestyle issues Sandra talked about at a very early age. It is not as if you get all the baby teeth and they all fall out in one go and then all the permanent teeth come through; you have a transitional period. That is really important, because that is the time you can start to change the child's behaviour and diet. The permanent teeth come through from five and a half to six and a half. The permanent teeth have to last you, given our lifespan now, probably another 80 years. Your permanent teeth start to come through very early. They are not two separate things; there is a big transitional period in the middle, and that is very important.

Professor Hunt: I entirely agree. There is another aspect of the relationship between decay in milk teeth and the effect on permanent teeth. For example, if you have children with chronic abscesses on milk teeth, that can damage the formation of the permanent teeth underneath while they are still growing in the gums, and that can then translate itself into the need for further treatment once those teeth come through.

Chair: Thank you. We now come on to the work force.

Q58 Grahame M. Morris: You have touched on this before. The British Society of Paediatric Dentistry submitted evidence to the Committee showing that some parts of the country do not have specialist paediatric dentistry services. The image I have here shows Cumbria, Teesside in particular and parts of North Yorkshire, where either there is no service or children have to travel long distances to undergo treatment. What is your interpretation of that? I think Stephen referred to 228 specialists.

Stephen Fayle: That is for the whole of the UK.

Q59 Grahame M. Morris: For the whole UK. In the short term, how can the NHS maintain access to specialist services in secondary care? Presumably, not all of these are in hospitals.

Stephen Fayle: No, they are not.

Q60 Grahame M. Morris: Some are community based.

Stephen Fayle: We think that in England probably about 60% are in the primary care sector and about 40% in hospitals.

Q61 Grahame M. Morris: It seems that for its population Northern Ireland has a relatively high proportion, or is that not right?

Stephen Fayle: They have very high levels of disease in Northern Ireland as well.

Q62 Grahame M. Morris: How can the NHS maintain access to specialist services in secondary care when, from the information you have provided, demand seems to be increasing but the work force to meet that demand is declining?

Stephen Fayle: It is a huge challenge. As Barry has already said, it takes three years to train a specialist in children's dentistry. Whether we believe we need specialists or whether we need other types of primary care practitioners with those types of special skills—a sectional skills set—is a debate that is going on, but we certainly need people with the right skills in the right place. This is such a prevalent condition that they need to be more equally distributed geographically. It is striking, isn't it, that right in the middle is Leicestershire—LE—and there is one paediatric dentist, yet 34% of children in Leicester have decay at three years of age.

Q63 Grahame M. Morris: Take Teesside, which is TS, Sunderland, where I live, which is SR, and the DH postcode.

Stephen Fayle: Whereabouts are we looking?

Grahame M. Morris: It is right in the middle of the country, just a little further north of where you were looking. Taking DL and CA, which I presume is Cumbria, all of that area has no specialists at all.

Stephen Fayle: Absolutely.

Q64 Grahame M. Morris: What happens to children there? Do they have to travel, or do they just not get treatment?

Stephen Fayle: They have to travel. You will see that in Leeds and Yorkshire there is a little group of paediatric dentists. We have managed to have paediatric dentists fairly well represented in the other parts of Yorkshire, but more and more children have to travel further and further distances to access the right type of care. It is a real problem for some parts of the country. In particular, the south-west has a huge problem.

Q65 Grahame M. Morris: On the same theme, the British Society of Paediatric Dentistry estimates that there is a shortfall of about 300 specialists, so just in England we have fewer than half the number we should have.

Stephen Fayle: Absolutely.

Q66 Grahame M. Morris: You have already mentioned that there is a wide variation in services available in different parts of the country. What are we doing through the Department to address that shortfall? How can we address that variation in services available to children without recruiting a lot more specialist staff?

Dr Cockcroft: I think I touched on this earlier. I also work for Health Education England, which has responsibility for education and training. The important thing is to make sure that people who have the skills use them in the appropriate way. A lot of the disease we are talking about is appropriate for treatment by people other than specialists, but it is very

important that teams are led by specialists in individual areas. I do not know where the evidence supporting the numbers statement in the paediatric dentistry submission comes from, but I accept that distribution is not good at the moment. Stephen is highly trained. He should be focused personally on delivering care, not necessarily to the children with the most complex needs but to those whose management is complex as well, with co-morbidities and things like that, and actually leading a team, because most dentistry is primary care. Sometimes it is delivered in the acute sector. It is very helpful that the Five Year Forward View talks about moving care from the acute sector into primary care to be managed properly, and this is a good example of that. I do not know where the numbers come from, but I think the spread and distribution is not appropriate and may well be historical, because I know that a lot is focused on dental schools and things like that.

You also need centres of excellence. When children have very complex needs, with massive developmental defects, there is evidence that a centre of excellence is a good way to deal with that as well. It is getting a mix of general dental practitioners feeling confident to manage, having the support if they get a problem, and developing discrete centres of excellence for the absolute, most complex cases. It is not necessarily true that we need paediatric dentists delivering the particular work; it should be within the competency and training of a dentist with normal skills.

Stephen Fayle: The numbers come from two sources. One is information from other developed countries about the numbers of paediatric dentists they have per head of population, particularly countries with levels of disease similar to our own. That was refined using referral data, which are now probably eight or 10 years old, to specialist centres, and understanding and using those two pieces of information together to make a calculation of how many you would need to meet the estimated needs of the population. That came out at around 600. We were very short of similar levels of provision in some other countries, and also short of what we calculated 10 years ago that we would need.

Q67 Grahame M. Morris: Stephen, what does the cohort look like? Are the specialists relatively young? Are we losing them? Are they going abroad? Are they retiring together, or have we just not addressed the increase in demand?

Stephen Fayle: There is a nice graph within the BSPD submission, on the page before the map, which shows the age distribution and the numbers in each age group of paediatric dentists on the specialist register—the little blue bar graph. You can see that since the 1970s we have not really been training any more. The specialist lists were set up in the late '90s. If we look at around 2000 or 2001, we have virtually no more paediatric dentists now than we had then; in fact, we have had a decline in the numbers recently. We are very concerned, because on that graph there is quite a bulge at the older age group of people who are probably retiring quite soon, and then there is a dip. Locally, we have recently advertised to recruit a specialist to train as a consultant-level paediatric dentist. We have tried twice and cannot get anyone. It is very difficult. Part of the problem is that there are not enough training opportunities to train specialists in the first place, so there are then not enough coming through to fill the other roles as well.

Q68 Chair: Would that be the responsibility of Health Education England?

Dr Cockcroft: They have to assess the need, looking at the need in the population. It is interesting to look at the same period that training has been relatively flat but oral health has been improving massively. There is a slight disconnect over the last 40 years, as we have seen oral health improve massively. It is up to Health Education England—the control. The number of specialists in training has not been gripped particularly well so far by Health Education England. We are about to establish a national dental work force group, which will look at the needs and align training with the particular needs of commissioners.

Q69 Chair: Would that involve you taking it forward?

Dr Cockcroft: I lead within Health Education England on dental issues.

Q70 Grahame M. Morris: Presumably, the difference is because of the upstream interventions in terms of public health and education programmes to make parents and children aware, and that is not necessarily reflected in an increase in the number of specialists in the community or who are hospital based.

Dr Cockcroft: Yes.

Stephen Fayle: With respect, do not forget that there is an enormous problem at the moment, and a requirement for this specialist level of care, whether or not we have ideas about upstream interventions and so on. Barry is quite right to say there have been improvements; there have been improvements in oral health, but, boy, there is still a lot of extensive disease around, and the increasingly long waiting lists for accessing specialist care will not be made shorter in the short term by preventive interventions. Preventive interventions are very important, but they will take some time to filter through. We have a lot of children waiting for care right now.

Q71 Grahame M. Morris: I want to pose this question just to you, Stephen: has the lack of available specialists which has been identified—we can argue about the numbers—contributed to the increased number of children requiring extractions under general anaesthetic?

Stephen Fayle: I truly believe it has, yes.

Q72 Andrew Percy: Dr Cockcroft, I think when you were talking earlier you stated you did not believe there was a shortage of specialists.

Dr Cockcroft: I said there is no evidence to support it.

Q73 Andrew Percy: Is that conjecture, or is there evidence behind it to support that?

Stephen Fayle: I do not have any hard evidence to support that, but I strongly believe that is the case. The diminishing number of specialists in the primary care sector, particularly within community dental services, has been a key factor—I think personally—in causing

children to be left until the stage where they now have to be referred to hospitals to have treatment.

Andrew Percy: It is important for us to know that whatever we put in our report is evidence based. That evidence is not there; it is also not not there, so we have to be careful about that.

Q74 Chair: We have no specific data linking to regional differences. It seems logical, but we need to be clear for our report. If there is evidence, we need to show it.

Stephen Faile: I do not think we have evidence at the moment that would definitively support that.

Chair: We now come to prevention, which is of great interest to everybody here.

Q75 Andrew Percy: Indeed. I am interested in the evidence we had on universal action, particularly Childsmile in Scotland, and the copied but renamed Designed to Smile programme in Wales—I don't know what we will have to think of in England. In my local area, Hull, there is the Teeth Team project, which we have heard from. The evidence of the Department of Health to the Committee states very clearly that “universal actions” applied with “scale and effect” will achieve a better reduction in inequality than programmes simply targeted at the most deprived areas. Would the panel, therefore, support the creation of a nationally commissioned scheme or project on the Scottish Childsmile model, or not?

Dr White: Yes. If I can speak for Public Health England—I cannot speak for the other organisations—it would be great to have a co-ordinated campaign and scheme like Childsmile. There is something around making some parts of it universal and some parts proportionate to the need and targeting that. That is really important. We need to get a grip on sugar, and we need to ensure that fluoride gets into the teeth one way or another. Combating sugar is sometimes more than just Childsmile. Childsmile is great at getting fluoride on teeth and giving dietary advice. We have talked about upstream, but we need to ensure that there are proper food policies and that we tackle the amount of sugar. Thirty per cent of the sugar a teenager consumes comes from what they drink. We need to try to combat that. Where are the machines in schools? What is happening in hospitals? We have to make sure we do that, as well as the dental stuff—putting fluoride on teeth. It is just as important.

Q76 Andrew Percy: They do that as part of the Childsmile project, don't they? They use varnish.

Dr White: Yes. They have both ways. They have it through toothpaste; they make sure there is the right amount of fluoride in the toothpaste they give out, and there is supervised tooth-brushing in nurseries. They also put fluoride varnish on those that most need it.

Dr Cockcroft: A co-ordinated and consistent national approach is the right thing, but we need to leave some local flexibility in the health system. NHS England has a budget overall, and area teams commission services to meet needs; they have a statutory duty to commission services to meet needs. If somebody all of a sudden said, “You have to do this

within your existing budget,” we would have to prioritise it over something else, somewhere else.

Q77 Andrew Percy: Why would you need local discretion on prevention?

Dr Cockcroft: Because, as you have seen, the variability of disease is so different in different areas and the local—

Q78 Andrew Percy: But that is because of a lack of prevention, isn't it?

Dr Cockcroft: It is related to social deprivation and to local factors. We have already talked about some areas where you have Romany and Traveller communities and lots of homeless people. There is massive variability in the population, and we need to give local commissioners the opportunity to respond to their local variability.

Peter Howitt: There is something about local ownership of the problem if you have a national approach and it is seen as being done to areas. The Hull example is great. I was chatting to those guys a couple of weeks ago. They are really mobilising the community and the council, and getting everybody behind a package of interventions. If NHS England were just telling Hull that was what they had to do, would they have the same positive reaction?

Q79 Andrew Percy: Is there any evidence from Childsmile that having a national approach in the highlands and in Lanarkshire has resulted in the loss of anything at local level? It does not seem to. From all the evidence we have heard from Childsmile, the talk is that it has cost £1.8 million and saved £6 million. I fail to understand.

Professor Hunt: I think we are saying that if we had an ideal world, with infinite resource, it would be good to apply the same principles everywhere, but we are talking about making maximum use of a somewhat limited resource to focus directly on areas where we have clear evidence that they are the ones with the worst oral health issues.

Dr Cockcroft: The structure of the health care system in Scotland is different from the structure in England, so the way we relate to local health care service deliverers and people like Public Health is different in England from Scotland. That is just a fact of life.

Dr White: The responsibility in England is with local authorities. Whatever NHS England does, the responsibility and the payment is through the local authorities. To put the number of specialists into some kind of perspective, consultants in dental public health work across England with Public Health England and local authorities to assess needs. Should we be focusing on children in this area? Should we be focusing on the vulnerable elderly? It might be different in different areas depending on where you are in the country. The consultants are looking at need; they are helping to come up with upstream and downstream care and looking at impact and cost-effectiveness. There are 30 of us nationally. That is not a lot of people to be working with local authorities to encourage prevention. That is why it is everybody's business; it has to be. I would agree with Peter that local authorities have to own it. They do not like to be told what to do and, quite rightly, they have local responsibilities and they need to use them.

Dr Cockcroft: To support Sandra, the driving force behind the Childsmile project in Scotland was consultants in dental public health. They are really important in assessing needs and working out the best way to tackle inequalities at a local level.

Q80 Andrew Percy: But they will face the same issues.

Dr Cockcroft: Absolutely, but they are looking at it upstream.

Q81 Andrew Percy: But they have still determined on a national project. I just wonder whether it is over-complicating it a bit, but what would I know? In terms of cost saving, I quoted a minute ago the Scottish Government's assessment that the £1.8 million on Childsmile has saved £6 million in children's dental treatments, "mainly owing", it says in our evidence, "to fewer tooth extractions, fillings and general anaesthetics". Has anybody done a study of what the likely savings would be in England?

Dr White: If you take the fact that we have 61,000 general anaesthetics in this country, and the average payment by results tariff is around £427 for each general anaesthetic to have one tooth out, and you times those numbers, you are up to £26 million. That's a lot. If you could save even 10% of that, it would help towards prevention and it would very quickly make a difference. A lot of the reports on inequalities over the years have shown this, and that is what Five Year Forward is saying: focus on prevention and make sure you have got it right. I absolutely agree that you need the work force—the specialist work force and the special care work force—but unless you get on top of prevention you are pulling people out of the stream and just filling the holes when you need to get up there.

Dr Cockcroft: If you look at gradually changing activity in general dental services, treatment is banded simply in band 1, band 2 and band 3. Very slowly, over a period of time we have seen a slight reduction in band 3s and band 2s and an increase in band 1s, which means that you can provide more care. As you get healthier people with a lesser burden of disease you can use the same budget to provide care for more people, and that is clearly a win-win for everybody, because it is a better clinical outcome.

Q82 Andrew Percy: What would band 1 care be?

Dr Cockcroft: Band 1 care is examination, preventive treatment and diagnostic radiography. Basically, you need no interventive treatment other than perhaps a simple scale and polish—I hate to say simple, because a periodontologist will tell me there is no such thing as a simple scale and polish—but basically it means you do not have the burden of disease such that you need treatment in bands 2 and 3. Doing prevention makes the service more cost-effective with a better clinical outcome and better value for money for the taxpayer's investment.

Q83 Andrew Percy: If we were to adopt a Childsmile equivalent in England, what is the cost of that?

Dr White: If there are 10 million of us in England you could times it up, couldn't you? I cannot do it off the top of my head. It is 1.8 million times 10—around £20 million.

Stephen Fayle: To return to your point, Andrew, which was a very important one, England has a different health care system from Scotland and that makes it more difficult to tell the responsible bodies what to do. I think there are some clear core messages we need to get out, and we could do a lot more. For example, how much would it cost to have a campaign to make sure that people realise they should get their children to the dentist before one year of age? How expensive is it to have a campaign to make sure that everybody recognises the value of using adult strength fluoride toothpaste for children over three years of age, and fluoride toothpaste before that age? There are some basic things. The Scottish system uses the great term “proportionate universalism”—the idea that there are core strategies for everyone and, on top of that, there are targeted approaches where there are higher needs, or groups that can be identified as being at higher risk. You are right. There are some core national things we could be doing.

Q84 Chair: Are there different financial drivers in Scotland? Here you might spend money in a local authority but it will be a benefit to health. Within the Scottish system do the drivers benefit the whole system? If you invest in one part, does it benefit the same part?

Stephen Fayle: I don't know.

Dr White: It is difficult. If a local authority spends money to prevent decay, to a certain extent—although it is very good for their population—actually the savings would be for the NHS.

Q85 Chair: That was the point I was making. Are the drivers different in Scotland?

Dr White: Yes.

Q86 Chair: Is there a saving in the health service budget in doing the prevention work?

Peter Howitt: I would not have thought so, because it is only in Northern Ireland where there is more pooling of the budgets. It would be interesting to look at that with the better care fund and some of the interventions.

Q87 Chair: You see some potential for the better care fund being used for this, so that you benefit the whole system.

Peter Howitt: Hopefully. It comes down to priorities, and issues around the frail elderly in hospitals, which has been the focus of the better care fund.

Q88 Chair: Better care fund planning is now at an advanced stage, but are you aware of any examples where the better care fund is being used to promote these kinds of schemes?

Peter Howitt: I am not, but I can talk to my colleagues who work in that area. It would be interesting to see, wouldn't it?

Q89 Chair: Thank you. Can we come to the wider issue about sugar? If we take a “what works” approach, what are the best examples of getting children to cut sugar from their diet, and is that most effectively done through campaigning around sugary sweet drinks or other sources? Where are they doing this well and where is it working?

Dr White: I am not sure if you are aware that the Scientific Advisory Committee on Nutrition is going to give information to Ministers in late spring/June looking at a whole range of interventions, whether fiscal measures, marketing, sponsorship, or whatever it is. I do not want to pre-empt what will come out of that, and I am not leading it in PHE. Change4Life came out in January. I do not know whether you saw the blobby man on the television. There was some evidence about reduced numbers of sugared drinks, and they were picking sugar-free drinks—

Chair: Smart swaps. We have been looking at that in another inquiry.

Dr White: Absolutely; yes.

Q90 Chair: Specifically on the dental side of things, are there any particular campaigns led by local authorities, with a focus on dental health, which have shown real success that you think we should be aware of?

Dr White: Yes. There are things like Smile for Life in Cumbria and other areas across the country. There is the Smile award in Milton Keynes. There are lots of other places across the country. There is something in Bradford around reducing sugar. It is about ensuring simple things in nursery and child settings—not having sugared drinks, not having biscuits at break time, and that their food policies are signed up to. That can make a difference in sugar consumption. With a whole-system approach, if the local authority is signed up, schools can have healthy eating as well.

Q91 Chair: Do you think there is a case for saying to schools that no child can bring a sugar-sweetened drink into school, or would that be too draconian? Do you think we need a much more directive approach to this, or not?

Dr White: Public Health England are looking at all of those ideas and the evidence behind them. It is important that we do not just jump in and think, “That sounds attractive. Let’s try that.” It is important that we wait and have the evidence review so we are absolutely sure what does and does not work, and then we have a sound basis on which to push it forward.

Professor Hunt: You have touched on an important area, which is educating teachers. I am aware from my own personal experience of children that they get rewarded with sweets for good work. Potentially, children are snacking all day long, which is the worst thing that could possibly happen. Sandra mentioned nursery assistants and teachers, but it goes right the way back to midwives and paediatric nursing in hospitals. All the way through, we need to improve education on the deleterious effects of sugar, and the amount of sugar that is available and often hidden in some of the packaging of these products.

Dr Cockcroft: With dental disease, it is not just the amount of sugar but the frequency of it as well. That is one of the potential differences between dental disease and obesity.

Constant snacking of a little amount is really bad from a dental point of view. My mother always told me, “Make your sweets last as long as you can.” She should have said, “Eat them all at once; that’s the best thing for you”—although that is not the right thing for your diet either. It is about educating, but it is a complex message to get across.

Peter Howitt: In defence of the teaching profession—I declare an interest; my wife is a primary school teacher—there is a real focus on healthy diet in schools now. My kids are only allowed to take in water to drink. I have never seen any rewards of sweets or anything like that.

Professor Hunt: With my own children, I had that problem on a daily basis.

Q92 Chair: Things might have moved on.

Peter Howitt: I think it has moved on.

Q93 Chair: Your impression is that schools are making changes. The message I am hearing from Dr White is that we have to wait a little longer, and wait for the report to be published, before you are prepared to say what approaches should be recommended.

Dr White: We should base things on evidence. When there is a thorough look at all of the evidence—reviewing it all—that is the time to say, “We really need to focus on that.” The Change4Life with the blobby man, which has just come out, is expensive. Television advertising is expensive, so we have to ensure that we are using the public purse efficiently and effectively. That is why I would pull back for the moment. Obviously, as a dentist, I do not want to see Coke machines.

Q94 Chair: Clearly, there will be a job of work around education but also around what the role of Government is in terms of regulation, price, availability, marketing and all those things.

Dr White: Absolutely.

Q95 Chair: But I am hearing from you that you feel it is too early and we should wait for the full evidence review.

Dr White: For Public Health England, I would wait for the evidence review.

Q96 Chair: Thank you. Is that the view of the rest of the panel?

Dr Cockcroft: There is always a tension between what the Government can do by legislation and infringing people’s public rights. As a clinician and somebody who has spent a lot of time dealing with children in pain and taking teeth out under general anaesthesia, there are certain things that I would almost make illegal, but in my role as chief dental officer I would not propose that, because it would not be acceptable to this House.

Dr White: There is a difference between an individual and the population, which is what we are talking about. I am sure that at an individual level Stephen and Nigel when giving advice would say, “Don’t put sweetened things in your lunch pack. Make sure that you take fruit.” I am sure that will happen at an individual level, but we are talking about the population.

Q97 Chair: At an individual level the message to parents should be, “Don’t give your children sugar-sweetened drinks.”

Dr White: Yes.

Stephen Fayle: One of the great things about the Change4Life sugar swaps approach is that instead of the message being, “Don’t do this; don’t do that”, we are moving to, “This is what you need to do.” If you think about anything else in life, telling people what not to do does not necessarily inform them how to not do it, or what they should be doing instead. We are now moving to a different phase where we are helping families and educating people in what they should be doing instead. I think the Change4Life sugar swaps are fantastic.

Q98 Chair: You think it is a good thing.

Stephen Fayle: Yes.

Q99 Chair: We heard earlier about constant sugar around the teeth—make your sweets last; the point you made, Dr Cockcroft. What about chewing sugar-free gum? You talked about whether or not you should tell people what they should do rather than what they should not do. Is there any role for those kinds of measures, or not?

Dr Cockcroft: In relation to how you control commercial producers to produce sugar-free gum, the vast majority of gum sold in this country now is sugar-free; it is about 78% or 80%. They have grown their market on the basis of chewing sugar-free gum being good for your oral health. If you look at the proportion of mints, it is almost the reverse. It is growing, but there is still a large amount of mints that contain sugar and are used in the same way, especially if people are giving up smoking or something like that. You have to trade it as a positive message rather than a negative one. A positive message usually resonates better: for example, saying to a commercial producer of mints, “If you market sugar-free mints, you will get a bigger sector of the market”, not just, “Do this for the good of the population and you will lose money.” That is not going to convince anybody in business, but if you align a better product with oral health and general health that is a positive. I use public transport, and the number of children you now see drinking water out of a bottle rather than fruit juice and squash is fantastic. That is because we have got the message out, and people are able to market it as the right thing to do. They have grown their market sector and improved oral health at the same time. Rather than giving negatives all the time, you support people by giving positives.

Q100 Chair: As a panel you would endorse positive messaging and Change4Life.

Dr Cockcroft: Yes, it is much more powerful.

Q101 Chair: Can I come to the issue of fluoridation? If we are talking about what would deliver the best value, the debate about fluoridation comes and goes. Dr White, could you give us your thoughts on whether fluoridation is the most cost-effective method of reducing tooth decay, particularly in deprived areas?

Dr White: It is safe, effective and cost-effective; it is the cheapest way to get fluoride on teeth. Over decades and over systematic reviews, we have shown that it has been safe and effective, but it is one of a whole series of ways of getting fluoride on teeth. Last year, Public Health England developed a guide for local authorities on commissioning better oral health, and it gave different ways of doing that. Water fluoridation was one of them. The guide looked at the impact on inequalities, and at effectiveness, cost-effectiveness and feasibility. Fluoridation of water was one thing, but it also looked at fluoride varnish schemes, fluoride toothpaste and supervised tooth-brushing. You cannot fluoridate water in all areas. It has to be, again, a local decision, dependent on local need. If you have very little decay in a very rural county, that might not be the right way to do it, whereas for somewhere like the west midlands, which is urban with a high density of population, it makes sense to have fluoridated water.

Dr Cockcroft: One of the sadnesses about the reorganisation is that I lost responsibility for fluoridation. As a huge enthusiast for fluoridation, I found that sad, but you have to accept it. Today, we have talked about education, compliance with good standards and eating the right diet. The great thing about fluoridation is that it requires no compliance by people, so the people who are likely to get the biggest benefit are those with the biggest needs. It is not my policy area; it is Public Health England's. I do not want to tread on any toes, but under the new scheme responsibility for fluoridation sits with local authorities. NHS England has a duty to reduce inequalities, so I would hope that, if local authorities, working with Public Health England, decided they wanted to consult, NHS England in the locality would feel able to support that.

Professor Hunt: In our report, the Royal College of Surgeons supported exactly what Sandra said.

Q102 Chair: Does anybody on the panel feel that we should not support fluoridation in urban areas with high levels of decay and deprivation?

Peter Howitt: The only caveat is that, as we saw with the issues in Southampton, there is a vocal minority with a visceral distrust of fluoridation. That is a challenge. You have limited resources—as Sandra was saying, there are only 30 consultants in dental public health—so do you focus on battling that opposition or do you focus on other priorities?

Q103 Chair: Even today, I see that there is something from the University of Kent saying it causes hypothyroidism, so it is very controversial.

Dr Cockcroft: Every major city in the United States has fluoridated. If there was evidence of that—you’ve seen “Erin Brockovich”—I think lawyers in America would have sorted it out, never mind the health care community.

Professor Hunt: We have to be careful about articles such as the one you are referring to, which is being spun by the media as cause and effect. It is not actually reporting that.

Q104 Chair: It is an observational study; it is methodologically flawed and you cannot draw the conclusions that it does. Thank you for that. To what extent do you feel that community water fluoridation presents a risk of over-ingestion of fluoride by children?

Dr White: They would have to drink an awful lot of water—about 1,500 litres—and tubes of toothpaste. It has proven to be safe over decades—75% of America and 5 million people in this country.

Q105 Chair: If it was in your gift to do so, you would introduce it more widely. Is that correct?

Dr White: It is not in my gift. I grew up in Coventry which is a fluoridated area. I do some teaching in the west midlands and see people who do not have any problems, so yes, I support water fluoridation. I will not give you what we are going to do with sugar until we have looked at the evidence; likewise, once you have seen the evidence and the systematic reviews you look at the balance of evidence. In terms of the report out yesterday, somebody would say, “There’s more hypothyroidism here,” but you might find that in other areas there was less. You have to look at the balance. Does it prevent fractures or does it cause fractures? You have to look at the balance of evidence in all these things.

Q106 Chair: Your view is that on the balance of evidence it is safe, effective and cost-effective.

Dr White: Absolutely; yes. That is my personal opinion and the opinion of Public Health England, the World Health Organisation, the Centers for Disease Control and Prevention in America, the British Medical Association and the British Dental Association. I am not alone in that thought.

Chair: Thank you. That is very clear.

Q107 Grahame M. Morris: You have already covered some of the ground on commissioning, so this is just to reinforce it; it is an area you touched on earlier. For the record, in relation to health inequalities and children with learning disabilities and mental health issues, is there anything we should know about in terms of identifying priorities and particular interventions that need to be undertaken?

Stephen Fayle: In terms of learning disabilities, neurodisabilities and things like that, we know there has been an increase in the number of children in our population with those problems. They present very special problems from the point of view of delivering what is otherwise routine oral health care. Because of their other disabilities it can make delivery

more difficult. In some cases, it can make them more prone to dental disease, or make the effects of dental disease much more dangerous for some children than they might be for others, so they are a priority area.

One of our concerns—Barry touched on this earlier—is that one of the key roles of the specialist work force is to focus on children with either more complex dental problems or more complex dental and oral health care delivery problems, but the specialist work force is being swamped with more routine problems at the moment. In the feedback I have had from local consultants, one of the concerns they have raised is that, for children with co-morbidities and other problems and disabilities, the waiting times to get access to acute hospital beds are going up as well. There is a problem, which is partly to do with too few people trying to cover too much work, and that is diluting the services that were originally designed to be there for those children.

My second point brings me back to the point about the primary care work force and specialists in primary care.

Q108 Grahame M. Morris: Before you move on, is that a role for the hospital-based consultant and paediatric dental surgeon specialist?

Stephen Fayle: It is part of the role we cover if children with disabilities, learning difficulties and so on cannot be managed in the primary care sector. Today, we have talked a lot about general anaesthesia, but within the hospital sector we also have access to support from other paediatric specialties and other people with expertise, so multi-disciplinary care is sometimes easier in the hospital environment than it is out in primary care.

Q109 Grahame M. Morris: Specifically on commissioning, you implied that the existing dental contract fails to provide dentists with sufficient incentive to provide children with ongoing and complex care. Professor Hunt or Dr Cockcroft gave the example of braces and orthodontic appliances. Under the existing system, with units of dental activity, are the incentives designed so that it makes more commercial sense—you implied it did in that particular case—for a dentist to refer a child to a secondary care specialist at a hospital rather than treating them in primary care?

Stephen Fayle: In my consultant clinic yesterday, I said to one of the parents of a teenage girl with quite extensive dental disease, “Why did your dentist not try to treat your daughter?” The dentist said, “She’s got far too much disease. I need to refer her to a specialist.” The difficulty primary care practitioners and general dental practitioners face is that the current contract is very much a one-size-fits-all-type approach. I am not a primary GDP myself, but I understand that where there is dental disease the amount of resource money available to treat that person does not vary according to the amount of disease they present with, so there is an inbuilt disincentive to take on people with high needs.

Dr Cockcroft: There is a tension. Under the current system you do not get more reward for treating people with more disease, but you do get rewarded equally for people who have very little disease. The dentist will always talk about the high-needs patient, but the vast

majority of people who present are not high-needs patients, and they are very well rewarded. It is a way of thinking that has been there for years, because dentists have been paid on items of service. We recognise that. The dentists have had great difficulty coming to terms with the swings and roundabout concept. What we are trying to do under the contract reform process—I am now treading on Peter's toes—is to align the incentives in the contract with the right clinical outcomes by getting a blend of capitation and some activity into the system to make sure there is an appropriate reward, and quality on top. It is complex, but the outcomes from the pilots have been very good.

Q110 Grahame M. Morris: I want to ask about the new contract. You mentioned that it was based on capitation and clinical outcomes. It has been under development for a little while. Peter, do we know when we can expect it to be introduced and rolled out?

Peter Howitt: We are moving to the next phase—testing with prototypes—which will be an increase in the numbers of practices involved. That is starting in autumn 2015, and will take about 18 months in terms of the learning. If that shows positive results, we would be looking to increase the numbers in 2017-18, and looking towards a move nationally in 2018-19. That is the approach. The criticism around the last change of contract was that it was done in a rush. We are trying to do this very much as evolution, working with dentists. I have visited quite a few of the pilot practices in the last few months. It is great to see the enthusiasm dentists have for a new approach which allows them to focus more on prevention, and not just drilling and filling.

Q111 Grahame M. Morris: You have answered the question really, but presumably the intention in the prototypes and pilots is to focus more on prevention. Stephen alluded to the example that a large amount of tooth decay was referred to the hospital setting. Therefore, the pilots and prototypes will focus on that and hopefully prevent it from happening in future.

Peter Howitt: Yes. By having a capitated payment it is in the dentist's interests to treat upstream. There is a really good clinical pathway alongside the contracting mechanism, which has been praised by dentists, for focusing on prevention.

Stephen Fayle: I gave that example, but I am amazed at how much primary care general dental practitioners do for some patients who have high needs, knowing that the rewards they get are no greater than for people with very low needs, as Barry was saying. There is a feeling that, given the right framework, a lot of family dentists would want to do a lot more. There is no doubt about that. That is certainly the feeling I get.

Dr Cockcroft: We have talked about 2006 and the new contract. The really significant thing about 2006 was the introduction of local commissioning, which gave the NHS the ability to control the availability of dental services. It had been going down since 1992, and 2006 introduced a budget for dentistry which was allocated to the NHS. Almost 2 million more people now see a dentist. That is a result not of the contract itself but of the introduction of the use of commissioning which gave the NHS tools to deal with the problem as it was then. What we are doing now with the development of a new contract is really important and needs real clinical engagement; it needs to take a lot of time. We are trying to build on the commissioning side and align the contract with the outcomes we want. It is not easy and it is very complex, but we are absolutely committed to doing it.

Q112 Chair: Are there any points any member of the panel would like to make to the Committee that you feel are important?

Professor Hunt: I come back to the point about the lifelong benefit of getting oral health right in the child. There is a lot of evidence to show that, if you can correct that, it carries forward into adulthood. This is definitely related to quality of life, self-esteem and so on. There is also the relationship between oral health and general health. We know that there are certain bugs—bacteria and so on—found in healthy mouths which are similarly associated with conditions such as cardiovascular disease and diabetes. More recently, there is even a suggested association with Alzheimer's disease. If you can get to the child young and get good oral hygiene, the lifelong benefits are fairly monumental. There was even a study recently at my own establishment, the Eastman Dental Institute, where we looked at the relationship between oral health and athletic performance. We used the Olympic games as the source of material for that. There is a very definite improvement in performance if oral health is of a high standard, so it has many benefits beyond those we have touched on today.

Stephen Fayle: Dental decay is obviously driving this, but it is important to recognise that we are not just talking about taking decayed teeth out under general anaesthesia. We need a whole range of services. By providing a full range of services we will minimise the tip of the iceberg that ends up needing general anaesthesia. Sedation has been mentioned perhaps once or twice. We need to make sure that we have in place alternatives to general anaesthesia, and that they are accessible to patients and provided at the right level.

We have talked a lot about young children today. Within our population we have quite a lot of teenagers with high levels of disease in their permanent teeth. Many of them find it difficult to access dental care because they are very anxious, so we need to make sure we have the right services for those children. Finally, we must not forget that there are some dental conditions that are not decay but are very prevalent in our population. There is a condition called molar incisor hypomineralisation, which affects one in eight children in the population at one level or another. A proportion of those children will need to have their first adult molars extracted under general anaesthetic. That adds to the general anaesthetic figures as well.

Chair: That is a good point to finish on. Thank you very much for coming this afternoon. We appreciate it.

