



Tackling Diabetes: preventing obesity and ensuring the best possible treatment for patients

A seminar by the All-Party Parliamentary Health Group

Date: Tuesday 3rd February 2016, 9.00 - 10.30 am

Venue: Attlee Suite, Portcullis House, Westminster

Chair: Baroness Julia Cumberlege, Co-Chair, All-Party Parliamentary Health Group

Speakers:

- **Professor Jonathan Valabhji MD FRCP**, National Clinical Director for Obesity and Diabetes, NHS England
- **Bridget Turner**, Director of Policy and Care Improvement, Diabetes UK
- **Amanda Cheesley**, Professional Lead, Long-Term Conditions and End-of-Life Care, Royal College of Nursing

Introduction by the Chair: Baroness Cumberlege

Baroness Cumberlege opened the meeting, introducing the topic and the speakers.

Professor Jonathan Valabhji MD FRCP, National Clinical Director for Obesity and Diabetes for NHS England

Broadly speaking, there are two major types of diabetes and it's important to differentiate between the two. Type 1 Diabetes is what we call an auto-immune disease, so it's one where one's own immune system destroys the cells in the pancreas that produce insulin, which means that people who develop that condition are dependent on insulin for survival throughout their entire life.

The age of onset of Type 1 diabetes is often in childhood and young adulthood and it's not preventable. It constitutes the smaller proportion of those with diabetes, so only around 9% of those with diabetes have Type 1; it's a very distinct form.

The most common form is Type 2 diabetes; in excess of 90% of all those people with diabetes have Type 2 diabetes, and while there is a small genetic contribution to one's risk of developing Type 2 diabetes, by far and away the most important, modifiable risk factor, is lifestyle. So, as we as a population have put on weight and got bigger around our middles, we've seen an explosion in the prevalence of Type 2 diabetes: many would describe it as the public health crisis of our time.

Two-thirds of adults are now either overweight or obese and, corresponding with that, we have seen a doubling in the prevalence of Type 2 diabetes over the last fifteen years or so. Unless we do something differently we'll have another doubling of that over the next 10-15 years.

The important point is that we can identify individuals who are at risk of developing diabetes in the next few years. If you measure someone's glucose level you can see if it's elevated, but not yet in the diabetes range. We've identified swathes of our population that fall into that category which opens the door to prevention. We've got very good evidence, internationally, to show that if you identify high risk individuals, and put them through intensive behaviour change programmes that focus on weight loss, more physical activity and better quality food, you can prevent, or at least delay the onset, of Type 2 diabetes quite considerably.

So, while there are two distinct different forms and causes of diabetes as I've outlined, the consequences are quite similar. The raised blood glucose levels you see in both people with Type 1 and Type 2 diabetes cause problems in the small blood vessel disease damage, including damage to the eyes (diabetes is a common cause of blindness) and damage to the kidneys; it is the most common cause of kidney failure in the UK and it causes damage to the nerves in the feet so one's feet can become numb and develop foot ulcers which can lead to amputations. So diabetes damages the small blood vessels, but it also accelerates the process of furring of the arteries. This is one of the things that is most likely to get us all, but it's much more rapid in those with diabetes, so you have a doubling, at least, of the risk of heart attack, stroke and heart failure.

So of the £8.8 billion that we spend as a health service on diabetes, around 80% of that is spent on dealing with those complications and we know we can prevent the onset of complications by delivering good treatment and care.

So as a clinician, working in the field for over two decades, I've seen two major changes. The first is a very positive one, and it's vastly improved outcomes for each individual with diabetes over the past two decades. So, as we've become more aware about what we can do to prevent complications, we've seen the risk of an individual with diabetes developing many of these complications, and the compromise to longevity, has improved considerably over that time.

My second observation over those two decades, however, is the expanding prevalence of diabetes, and unfortunately that probably swamps the benefits of the former. So while the outlook for each individual has improved considerably, the total burden of disease and the total burden of complications that we, as an NHS, have to deal with, is going up, due to the explosion in prevalence.

With concerns around the sustainability of the NHS, that led on to the appearance in our policy document, the NHS **Five Year Forward View** - published 15 months ago now - of an explicit ambition for us in England, to be the first country to implement, at scale, an evidence-based Type 2 diabetes prevention programme, and that is where we've focused a lot of our efforts over the past 12 months, and what we will continue to focus on in the ensuing years.

So this is about identifying those individuals that I have described, who have already been found to have a glucose level that is a bit elevated, but which does not constitute diabetes, and to put them through the sort of intensive lifestyle, behaviour-change programmes that I've outlined. We've spent this financial year working with a number of pilot sites, seven demonstrator sites, to tease out how we can best translate the evidence into real world implementation in England and we're mid-procurement of a large programme that, once scaled up - which we intend to do over the next three years or so - will deliver around 100,000 interventions each year, i.e. 100,000 at risk individuals per year will go through these interventions which we plan will modify their risk and will delay or prevent them going on to get diabetes.

So that's one of our major policies, but what about the three to four million people who already have a diagnosis of diabetes?

I've talked about the improved outcomes over the last two decades or so, but there is still a lot to do. We still see a large number of amputations per annum, while a large proportion of those who have heart failure also have diabetes, so there's a lot of work to do to improve outcomes further.

One of the major issues is the variation that we can see. There are three dimensions to that variation across the country: firstly, geographical, which is widely publicised in the media - someone in one locality may have very good care for their diabetes and another person less so in another locality. Interestingly, that doesn't map out quite as one might assume to socio-economic factors, (one hopes there are potentially easier nuts to crack than the socio-economic gradient across the country), but there is clear geographical variation.

The second dimension is according to age. What we see is that our elderly cohort with diabetes, do much better in terms of receiving care and achieving treatment targets, and I think that bears witness to the effective focus we've had on multi-morbidity. What we're seeing are young people, newly diagnosed with diabetes, not doing so well.

If you look at the data, one can almost see a threshold effect around retirement age, and so I think there's an important message here about access to care when you have a long-term condition in the NHS, and when your priority is going out to work, earning a living and supporting a family.

The third dimension of huge variation is according to type of diabetes. People with Type 1 diabetes are not doing as well, in terms of delivering care processes, achieving treatment targets and avoiding complications, as people with Type 2. So if you come along to my multi-disciplinary foot clinic on Thursday this week, you will make a number of observations. Firstly, that there is a vast over representation of Type 1 diabetes patients - it's not your 9%/91% split, it's more like 30%/70%.

The age distribution of the complications of diabetes has two humps and you'll see that in my clinic and many clinics across the land. The first peak in age is during the mid- to late sixties, which represents people who have Type 2 diabetes who have developed complications, but at around 15-20 years younger than that, one sees another peak, which is the peak in people with Type1 diabetes and that's because, in terms of the determinants of complications - in addition to glucose, blood pressure and cholesterol, which we can address - there is a factor around the duration of diabetes. So for Type1 diabetes, where the onset is often in childhood or young adulthood, one sees the complications developing at a much younger age.

Secondly, empowerment of our people with diabetes is hugely important. There are only a finite number of healthcare professionals and there's a burgeoning population with diabetes now. There are 8,760 hours in a year, of which a person with diabetes may only spend four of those 8,760 hours with a healthcare professional; the rest of those hours for a diabetes patient are spent self-managing so we have to empower structured education for our people with diabetes.

So what will be the vehicles moving forwards in order to tackle the variation and the empowerment need?

I think we have a really important and powerful lever about to come online, the **CCG Improvement and Assessment Frameworks**; many may have heard the Secretary of State talking about that. So the concept will be to have six focus areas, six priority areas of disease, one of which is diabetes, with others being maternity, mental health, dementia, learning disabilities and cancer.

Each of those will carry its own Ofsted style ratings, so within diabetes each CCG, each local healthcare economy will be rated according to the quality of diabetes care delivered and I think that will be a phenomenally powerful lever to address both the variation, and the vacuum in some areas, of proper structured education for people with diabetes. So those are our two major priorities going forward.

The Five-Year Forward View, as many in the room will know, identified a £30 billion shortfall in the NHS budget, £8 billion of which was the ask of our elected representatives and tax payers - and we have been promised that, but the other £22 billion is to be achieved through us finding savings, hence the emphasis on prevention and sustainability; more important than that, we have to determine what bits of healthcare we can invest in today to realise a return on that investment, in what is a very narrow timeframe of five years.

So I was asked, as National Clinical Director for Diabetes and Obesity, where I would focus in terms of diabetes. So variation is one area and structured education is another, but I think there are two other really important areas we can truly realise returns on investment within that timeframe. One is in-patient care. One in six of all beds across the land are occupied by someone with diabetes, but they're not there necessarily because they have diabetes; it may be because they have pneumonia or have had a gall bladder operation, but they've got diabetes and their diabetes confers a higher risk of complications in hospital and a longer length of stay which, of course, is bad in terms of quality of care and is also costly. So we need to address that, and our diabetes specialist nurse resource is particularly important there. I'm sure Amanda will talk in more detail about that.

The second area where we can realise quite marked returns on investment in a short time frame is around diabetic foot disease where, while there is a decade or more lead in to tackling the underlying complications - the nerve damage - by getting the infrastructure in place, the multidisciplinary foot teams that we know reduce amputations by about 50% and streamlined care pathway such that if someone develops a problem they can be seen in a specialist team within one working day, we can realise returns and reductions in amputations by about 40% within a three year window.

That's where I believe we can make the greatest gains in the next few years and that's where we plan to focus.

Chair: Baroness Cumberlege

Going on to Brigit Turner, Brigit is the Director of Policy and Care Improvement at Diabetes UK, which we know is a very dynamic organization, and which has done a lot for diabetes. Bridget was diagnosed with Type 1 diabetes in 1977, so clearly you have a very strong interest in all of this.

Bridget Turner, Director of Policy and Care Improvement, Diabetes UK

Thank you very much and good morning. Thank you for inviting me today. I'm going to make the points Jonathan has made, but in a slightly different way. I'm going to make them in the context of someone living with diabetes. Baroness Cumberlege highlighted that I was diagnosed with Type 1 diabetes in 1977. It was very different managing diabetes in the 1970s: it was about boiling up syringes, about long needles, and no blood tests; they didn't exist at that time. Over the past 20 years things have changed dramatically. There is blood-glucose testing, really instant feedback, insulin pumps and education - for some. I'll come back to that later.

Diabetes is easier to manage today in terms of the drugs, devices and technological systems available. What hasn't changed is how hard it is to manage on a day-to-day basis, to plan what you're going to do and eat, balance it out over time, plan what your blood-glucose level might be after doing a 10 minute presentation, having altered your insulin level two hours previously to be able to balance it out over time.

It's the same for Type 2 diabetes; although not all people with Type2 diabetes are on insulin, they still have to plan what they're doing, think about their food, and think about their activity. That's the most challenging thing when you're living with Type 1 or Type 2 diabetes, it's the self-management.

Jonathan mentioned the 8,757 hours that people with diabetes spend managing their own care, with only three hours, roughly, spent with a healthcare professional. The role of the NHS is two-fold; to support those people living with Type 1 and Type 2 diabetes, different conditions, but both requiring similar support and to support people to be able to live with it well, to help them to have a good quality of life, to get over some of the frustrations and challenges that living, day-to-day, with a complex health condition can bring on an individual - and also to be able to live in a positive way to reduce the risk of complications.

In terms of prevention of Type 2 diabetes, Jonathan mentioned the fact that the prevalence of Type 2 diabetes is increasing exponentially; the challenge there is encouraging people to engage in their healthcare, to want to prioritise it, to want to take action, and having the health services

and support in place, the interventions in place, to be able to encourage, to motivate, to actually drive the change that we all find so difficult. Nobody likes change and it's even harder to change in a health context. Diabetes is easy to ignore until it's too late because you don't feel it until the complications present.

In January 2016, the Commons **Public Accounts Committee came out with their review on the state of diabetes care** which highlighted a number of key priorities that needed to change going forward. Diabetes UK is really pleased and welcoming of the fact that NHS England seems to be prioritising diabetes more. The prevention programme has been put in place and it will be up and running by April; they will be launching intervention services - long-term interventions to encourage people and engage people, to help them to see how to lose weight, and then put it into practice, giving them the skills and confidence to do so.

Diabetes UK thinks that this will have a very positive impact on reducing the burden of Type 2 diabetes. It is important to remember that not all Type 2 diabetes can be prevented and that some Type 2 diabetes is caused by age and it's not to do with weight, but one of the biggest challenges is clearly the growing waistline of the whole of the population. So, it's a really positive news about the **NHS Diabetes Prevention Programme**.

There are other things that need to happen to make it easier for us, for people to actually reduce their risk of developing heart disease, cancer and diabetes, including Type 2 diabetes. This is about getting society and industry to play their part.

We need reformulation and reduced portion sizes in packaging when you buy things off the shelves; portion sizes today are big and actually some people try to eat it all because they feel guilty leaving something on their plate. There needs to be a change there. Secondly, there also needs to be a restriction on marketing in place, especially for children and young people. Every time you turn on the television or open a magazine, there are adverts for high-sugar, high-fat food, so there needs to be restriction on marketing, particularly for children and young people, otherwise, the situation is just going to get worse.

Thirdly, as part of a package of measures for society, there is the option of a tax on sugar-sweetened beverages. More and more people drink sugar-sweetened drinks because they're there and they're big bottles, but there is a challenge in terms of people that already have Type 1 diabetes and those with Type 2 diabetes on insulin. Some people with diabetes who have hypos when their blood sugar level goes too low, many actually use high-sugar drinks to treat their hypo, so there is an issue here to make sure that people who are living with diabetes, who need it for a medical condition, are not treated unfairly and do not lose out.

Jonathan touched on variation. There is a big challenge across the system, in relation to quality and outcomes, for children's and young people's services, and for adult services, for those living with Type 1 and Type 2 diabetes. If you look at the variation across general practices and across hospitals, some people do not get as good outcomes and it's dependent on where they live.

A key challenge for the NHS, hopefully within the context of the Five-Year Forward View and the CCG Assessment Framework, is to change things, to actually put in place the quality improvement support and the leadership needed at a local level, both across paediatric services, across CCGs, and adult and primary care and specialist care services.

Once you've got diabetes, you've got it for the rest of your life. So it's about having a system working together to link up general practice, specialist services and paediatric teams so that people with diabetes do not drop out of the system, which is what happens so frequently at the moment.

Working across a whole local economy - rather than just a general practice working on their own, or a hospital working on their own - working together in diabetes networks, has been shown in areas to be able to drive that integration and that improvement and this is a priority going forward, to ensure that the expertise of specialists, particularly diabetes specialist nurses, is shared with primary care and with hospital care so that people with diabetes get access to the specialist care they need.

Jonathan has already mentioned education and self-management because so much time is spent by people with diabetes managing the condition ourselves. People with diabetes need the support and knowledge to know what to do, to put it into practice during the 8757 hours they have to manage this condition themselves. At the moment, few people access education courses. The last **National Diabetes Audit from 2013/2014** found that only 1% of people with Type 1, and 1.5% of people with Type 2 diabetes attend education courses. The **most recent National Diabetes Audit for 2014/2015** published two or three days ago (January 2016), showed that the offer of structured education for those people newly diagnosed with people with Type 2 diabetes has increased dramatically to 60%, which sounds a brilliant increase in a year, and also amazing because a Freedom of Information request from Diabetes UK showed that in many areas they didn't have any educational course to refer patients to. So there is a question around how the levers and incentives of payment in primary care are utilised in the local service and whether those education services are actually in place or not.

Even when they are in place, many people don't attend so there is a lack of awareness regarding the value and benefit of education courses and about the importance self-management; it is not prioritised as much as taking a tablet. There is a need for people with diabetes to see the benefits and then get access to local courses.

Finally, Jonathan mentioned foot care and in-patient care. Poor care can lead to serious foot problems including amputation, as Jonathan mentioned, and too often drug errors occur in hospital - resulting in dangerously high levels of blood-glucose - and sometimes people question whether going into hospital can be safe because there are so many medication errors and there is a need to drive the improvement to ensure that in local hospitals diabetes care and diabetes treatment - because it's a complex condition with the management of insulin, tablets and food - is prioritised.

At the moment, one in six people in hospital has diabetes, but 65% of in-patients were not seen by a member of the diabetes specialist nurse team; the National Diabetes Audit showed this. And almost one third of hospitals did not have a diabetes specialist in-patient team at all. Investing in diabetes specialist in-patient teams will really help to improve the quality of care in hospitals, which in turn will reduce costs and lead to savings.

The second aspect of specialist care is multidisciplinary foot care clinics. If a person with diabetes is diagnosed with an active foot ulcer, it can kill quickly if they are not identified quickly. Multidisciplinary foot care teams have the vascular surgeon, the in-patient specialist

team, the diabetologist, the diabetes specialist nurse, all there to be able to diagnose and treat. At the moment only 70% of areas have adequate access to the vascular teams.

Jonathan mentioned the CCG Assessment Framework for diabetes which Diabetes UK is delighted about. We have to see how it's going to work in practice and this really needs to be a credible system that will work. It also needs investment and support to ensure that once an area is rated, it is provided with the support needed to drive the improvement; there's no point rating areas if they then just stay bad. The point of rating them is to ensure improvement happens.

For people living with diabetes and those at high-risk of diabetes, there is a real opportunity in 2016 to be able to improve local care, to drive service improvement, to reduce variations, to ensure that people with diabetes are identified early, to ensure that those at high-risk have access to support, to enable them to make the behaviour changes that they know they need to make, but it's hard to do: to have access to early and effective treatment, drugs and devices. Research is key in this, but it's about putting what we find out in research into practice.

People with diabetes need to actually be able to work together with their healthcare professional team, to identify their own goals and priorities and negotiate together how they best can achieve them. Effective models of integrated care do exist; there are places where outcomes are more positive. If they can exist in one area they can exist in another. We know good care saves money and it also saves lives. Following the Public Accounts Committee report we do hope that 2016 is the year that will actually deliver for people with diabetes, so that diabetes is recognised as the serious condition that it is.

I'll leave you with one quote from a person with diabetes, which just sets in context what the NHS needs to focus on.

"Give us the best care, whoever we are, and however severe our complications. Recognise that without our full co-operation you will be wasting your time. Do everything you can to ensure we stay motivated to look after ourselves. Rescue us when we mess it up because we really will. You can only do this through full integrated diabetes services of the highest quality, treating us as people and not as a medical condition."

Thank you very much.

Amanda Cheesley, Professional Lead, Long-Term Conditions and End-of-Life Care, Royal College of Nursing

I'm going to concentrate on how important nurses are in this and how nurses are a theme in everybody's life, even before they're born. So a midwife has an extraordinarily important part to play for women with diabetes who are contemplating getting pregnant, or for women who acquire diabetes while they are pregnant. Health visitors take over from midwives to support families until their children are five, trying to ensure that their children are able to access healthy food, and giving people advice about how those children can be kept healthy.

I've not going to focus totally on the different types of diabetes because I think the theme is about supporting people with the condition if they have it.

The prevention of obesity, as Jonathan and Bridget have touched on, is a really important thing. There aren't that many people in this room who are overweight, but if you go to a school or you walk down the road, you will see frightening numbers of very small children who are so overweight they can hardly walk. That is scary - really frightening.

And although we all have responsibility to ourselves and to our children, we need help sometimes to enable us to understand what we need to do to make things different and that's where a nurse can play an incredibly important part. A health visitor, a school nurse, a practice nurse, these are non-specialists in many cases, they are generic people who have some skills that can enable people to understand what they might do differently and how they might do things differently - not pointing fingers, not saying "your child is terribly overweight, you need to do something about it", but actually helping people to understand the consequences of that overweight child or that overweight mum or dad. You do get genetic tendencies that impact on this, there are familial traits, but most people are overweight because they eat too much or eat too much of the wrong food and that is not so difficult to alter. This is about providing support and helping people to change what they do in their family.

If you do it within a family or with friends it's an awful lot easier than trying to do something by yourself. Jonathan talked about behavior change and this is a fundamental area where we need to train our health and social care professionals to understand what that means in terms of the kinds of questions you ask people and how you frame the conversation. When people have a consultation, whether with a GP, a practice or a specialist nurse, whoever they are in a multidisciplinary team, quite often health professionals ask closed questions, rather than open questions like "What would happen if...?"

I came across someone recently, who was a long distance lorry driver; he was very overweight, and I was in the consultation with the nurse specialist who was having this conversation with him. He said "it's really difficult to eat well, the transport cafés have high fat food, terrible hours and I'm sitting a lot" and all these sorts of excuses.

The nurse said "What would be the consequences for you and your family if you couldn't do this job? What would happen if you weren't able to work?", and it changed round the way he saw it, it wasn't a conversation about saying "you must lose two stone or else" which is sometimes the sort of conversation that people experience, and it wasn't about doing costly things like going to the gym. "So what is it that you can do to give you a bit of exercise?" "What can you do to enable you to eat a bit more healthily whilst continuing to work?"

So by asking a very different question, this man was enabled to think about this in a different way, not just about him, but actually about the wider consequences of him not being able to work, which for many people with diabetes is a consequence of their diabetes not being managed effectively - or perhaps they are able to work but not in the role that they would really like to be doing.

So general nurses need to know enough to be able to help people who want their help and GPs and nurses are often the first point of contact, both for patients and their families.

A district nurse may well be the only person that someone who is elderly, or someone that is housebound sees, not a specialist nurse necessarily, but we absolutely must have specialist nurses to be able to co-ordinate the care for someone who has a complex condition, to support

their colleagues, other healthcare professionals, their district nursing colleagues and their acute nursing colleagues. When someone has diabetes that is perhaps not as well managed as it can be, they are one of the key lynchpins in terms of straddling a number of services. I'm looking at Grace here [Grace Vanterpool], who is a consultant nurse specialist, who works across community and primary care, so the people that she sees in her clinic in the hospital, she can follow up in the community. She can link with her consultant colleagues, her foot care colleagues, her podiatrist colleagues and she can support both the patient and their family and also other healthcare professionals in understanding what their role is in managing a person's diabetes or a person they are caring for with diabetes, but who doesn't necessarily have to do the day-to-day minutiae which is, as Bridget said, people with diabetes have to do all the time. It's about enabling a person to understand what the disease is and how they need to look after themselves and what they can do to make a difference to their lives, to be able to live their lives really well.

I think one of the things which is the most worrying for me, having been a nurse for a very many years, is that the age profile of many of these nurses, whether they are practice nurses, district nurses or specialist nurses; they are likely to be retiring in the next four or five years. We have not grown the nurse population to really understand the need to acquire some of these specialist skills. There aren't the courses available and people aren't being supported to attend the courses. I'm not talking about paying for it lock, stock and barrel, but I am talking about people being encouraged to take on a specialist role and acquire the skills in order to be able to do that, but not just the specialist role, but to be able to actually work with people who understand what diabetes is, and to understand the difference between Type 1 and Type 2 diabetes.

One of the things I found when I came to the RCN, and Grace worked with me on this, is the frightening number of nurses who don't know the difference between Type 1 and Type 2 diabetes. They don't know how to treat them and what a good blood glucose level is for different types of people. If you fracture your femur, you go to an orthopaedic ward, and if you go into one of the hospitals without a specialist diabetes team and the team looking after you don't know a lot about diabetes, it could have really devastating consequences for you, so we must train nurses and doctors and other healthcare professions to have a basic understanding of diabetes. We must encourage [the NHS] to have those specialist services for when they are needed, not just for patients, but for staff.

Going back to Bridget's point about people accessing supported education, if that education is delivered, not very close to your home between 9am and 5pm, on a Monday to Friday, I wouldn't be going and I'm sure many of the people here wouldn't be able to go because you'd have to take time off work.

We, as healthcare professionals, have to start taking services to where they are suitable. We have a hub in the pub in our village in Somerset which delivers a huge amount of things locally to people because we don't have a bus service. People go there and the hub in the pub is in a skittle ally and we have a library, we have some advice and we have a nurse who goes in there. So it's not impossible to deliver these services to people outside of the normal settings. I dislike the idea of the 'hard to reach', it's 'the seldom heard' and we need to start knocking down the walls of our institutions and actually start delivering services where people want them, and I would urge you to lobby your MPs to ensure that nursing services and nurses are not the first

services to be cut to save money in the NHS. We are a too valuable resource to lose. Without nurses, people like Bridget who have diabetes, and many in this room, would actually have much worse outcomes for their diabetes.

The Q & A session

The questions (Q) and comments (C) in bold below were raised by attendees. The answers (A) are from the speakers

Q. Baroness Cumberlege: *Thank you to our three speakers. I'm going to kick off the discussion because two of you, Jonathan and Bridget, have both mentioned geographical barriers, and I wonder if there is some indication as to why some geographical areas are better than others and, if so, where are the ones that need to be challenged and where are the ones that are doing really well?*

A. Professor Jonathan Valabhji: One's used to hearing about postcode lotteries and geographical variations and usually that falls to socio-economic factors so services in poorer areas are often poorer services and that's *not* what we're seeing in diabetes. We are seeing huge variation, but it tends to be attributable more to organisational factors, whether that's GP practice or specialised services organisational factors, things that we feel are probably more amenable for us to get in there and doing something about. So, it's highly variable: it may be due to the way in which you process data and which IT system you're choosing to use in your clinic, or it may be due to other organisational factors, rather than ingrained factors such as the stock of housing in your locality. So, I don't know if that goes some way to answering your questions.

Q. Baroness Cumberlege: *I was wondering about diet, because we know that diet varies hugely as we know people in the North West are more likely to eat fatty foods, for example.*

A. Professor Jonathan Valabhji: Two different things, I think. In terms of socio-economic factors determining overweight and obesity, it's a very important factor; we know that poorer communities are more likely to be heavier and have a higher risk of developing Type 2 diabetes, so there is an over representation of Type 2 diabetes in such communities, but the quality of care of the services that are there are not related to those factors.

A. Bridget Turner: To pick up on the organisational factors, one of the key organisational factors is the quality of the relationships between those working in general practice, community services and specialist services and the relationships they have within the system, which is a significant indicator of better quality care, as well as having pathways that are clear and where there are clear roles and responsibilities and education training programmes delivered, particularly in primary care. So, these are things to look out for in assessing a good quality service.

Q. Baroness Masham: *Yesterday, Professor Jonathan Valabhji was speaking at an interesting meeting of the vascular group. We heard about the horrifying amount of amputations and one of the speakers said that surgeons actually get paid a lot to take the leg off and nothing to keep it on. I think that's something that we should think about. Prevention is so much better than taking a leg off, because many people have terrible problems with after care, living in one room with a commode and a kettle, for example, and therefore, housing is a great problem too. My husband had diabetes, a bleed, a stroke,*

Parkinson's disease and cancer, and the diabetes was the most complicated of all those conditions and I would agree with every one of the speakers. I would like to ask Jonathan, how can NHS England get better quality care across the country?

A. Professor Jonathan Valabhji: The CCG Assessment Framework will be a [quality] assessment framework, but packaged around that we do have a specific diabetes programme now within NHS England, and that will be a service improvement, supportive infrastructure. The principle will be based on something called the **Right Care programme**, whereby one can define what a good care pathway looks like and for foot disease I think it's a fantastic example because we know what works and we know that if we have all the infrastructure in place, we can do a huge amount to reduce that risk of amputation. Putting all one's ducks in a row, if you have an effective assessment of feet, searching for foot disease at general practice level -, and we now have incentives in terms of the Quality and Outcomes Framework (QOF) and pay for performance - so that all people with diabetes should have a foot assessment, and we're hitting around 85% of people with diabetes getting that at the moment.

This can link to a foot protection team, whereby if a foot examination rings alarm bells and there are clear factors that put that foot at high risk, and that individual at risk, they can be referred to a 'foot protection team, which is about caring for that individual in a holistic way, educating them, giving them the information about how to minimise their risk of developing a foot ulcer, for instance, and also providing mechanical things; you can put specifically made insoles into shoes that markedly reduce the risk of foot ulceration and subsequent foot amputation.

Linking in with a multidisciplinary foot clinic, such as the one I run up the road at St Mary's Hospital, has the benefit of having all of the right players in the right place at the right time, so there isn't this Chinese whispers issue of people with diabetes getting different messages from different health care professionals. There will be myself, my podiatrist and diabetes specialist nurse and my orthotist, who fits custom-made shoes, a vascular surgeon, perhaps an orthopedic surgeon, depending on the day of the week, all pulling in the same direction, formulating the care plan with the person in front of us. That's how you can really lower your amputation rates. We and others have published amputation rates now that are as low as anywhere in the world, but again, you have to have your ducks in a row as it were and there are lots of parts of the country where that doesn't take place.

So you define your pathway, you articulate what the pathway looks like, you go into an area that has a high amputation rate for instance, and you look at the difference between the care pathway there and what one might consider a gold standard pathway and then over the ensuing time try to narrow the gap so that the pathway in the area with high amputation rates looks more like the gold standard.

That does take some investment and we are prepared for that and we are prioritising such areas for investment because the return on investments is very good, but the impact on people's suffering, morbidity and actually duration of life is quite impressive so, that will be our plan. It will be defining good practice and looking at areas where the outcomes aren't good enough and actually trying to shift the care pathways to look more like the care pathways in the areas that are getting very good outcomes.

Q. Camilla Horwood, Novo Nordisk: The National Diabetes Audit (NDA) data that came out the other day for 2014/2015 showed a worrying decline in response rates to that, so I'm just curious as to what the NHS England is going to do to address that?

A. Professor Jonathan Valabhji: That's an interesting observation you make and of course the media picked up the negatives and not the positives, so I disagree with your interpretation of the report. What we saw and what was picked up in the paper was that the chance of an individual with diabetes having all eight care processes delivered had gone down a little bit.

That was because we lost a QOF point around checking for protein in urine - and I don't know mathematically how many people are up with the mathematics and statistics - but if you've got a composite end point containing eight things, it's 'x' to the power of eight to get completion of them all, so it only takes one for the whole thing to fall down a bit and that's what we saw. So I think that illustrates a very important point, which is how sensitive some of the delivery of care is to the pay-for-performance incentives that we have in the NHS. The other care processes were largely stable and some improved.

For me, what is more important, and that was also articulated well in the [recent] National Diabetes Audit, is the achievement of treatment targets, and those are three-fold: glucose, cholesterol and blood-pressure - and those targets in themselves, those parameters, are much more closely linked to the hard clinical end points that really matter to people with diabetes. So they're very closely linked to blindness, amputations, to kidney failure, to heart attacks, to premature mortality. Our efforts will probably focus more on achievement of the treatment targets than the delivery of care processes, although we clearly need to focus on both of those and they're intimately linked. If you read the report carefully, you would see that what we have done this time round, and what was beautifully described in that Audit, is that blood pressure for both those with Type 1 and Type 2 has clearly improved and blood glucose levels at a national level, at an aggregate level, has improved for people with Type 1 diabetes, so those are major steps forward.

So I read that report positively and you clearly read it a little less so.

C. Camilla Horwood, Novo Nordisk: There were some very positive developments, but what is concerning is a decline in practices participating and we need to capture that information.

A. Bridget Turner: Thank you, I think that is a real challenge. The Public Accounts Committee also identified it as a real problem as well because I think the response rate of GPs participating this year, nationally, was around 57%. There are a variety of reasons, I know, why that [decline] has happened, it is partly because of the change in the opt-in, opt-out system, whereby GPs now have to opt-in and they have to choose to give their audit data into the audit programme). It was quite a complex process to do that, with that handover. In reality, if we are going to use data - and we need data to be able to assess quality and performance and variation between areas - it needs all general practices participating. It was very interesting, where there is a high participation rate of general practices of between 80% and 90%, which is very high, they had CCGs working with general practices, they had the leadership and clinical leadership and some technical support as well. GPs can't do everything on their own and there is a real need for CCGs to work with general practices to help them put their audit into the system, but also to work with them to make the changes that are needed on the basis of the audit results.

A. Professor Jonathan Valabhji: We're very much hoping that that is a temporary blip, that in some respects was predictable because of the changes, that Bridget has mentioned, in information governance. We used to have an opt-out system; it is now an opt-in system. Depending on which IT system you use, it can be invariably easier, or more difficult, to participate and we will iron that out, but it wasn't ironed out for these two rounds of data collection. So I'm hoping that it will be addressed. The Public Accounts Committee have required us to address it and I think many of them would like us to mandate it. It's not quite so simple that we can tell people that they must, but we can certainly put incentives in there and make life easier for our very busy clinicians who understandably are more concerned to deal with the problems of the person sitting in front of them, rather than doing the more administrative tasks around data collection for audit, but I think we'll get there.

Q. Lord Wigley: Thank you. From the popular press we read and learn that sugary drinks are moving to the top of the agenda. How high up the agenda is it [for the panel]?

A. Amanda Cheesley: From a nursing perspective, I think most nurses are very concerned about the amount of sugary drinks that, particularly, children are consuming. If there are any dentists in the room, they will be supporting the abolition of sugary drinks in their totality. I think the anxiety is, from the RCNs point of view, we've had a lot of discussion about this in our various working groups, looking at the practicalities of having a sugar tax and who does it disadvantage and what is then put in place of the sugar to make something taste nice? I recently bought some yoghurts and the amount of sugar in the low-fat yoghurt was significantly higher than in ordinary yoghurt. I think there is something, for me, and for us as an organisation, about labelling things and advising people effectively to understand how much sugar is in something as a starting point, and whether or not taxation is the entire answer, I'm not at all sure.

A. Professor Jonathan Valabhji: I strongly believe that we need a portfolio of multiple interventions and each single one will only have a very small effect. A sugar tax, which I think is what you're referring to, will have some effect – we've seen that now from the data that has come out of Mexico within the last month or two, but it will be a small effect when one looks at the population distribution of overweight and obesity, and what we need is multiple different population-level attacks. I think advertising is one, [tackling] the targeting children in particular with adverts that, we as parents, struggle to say no to when our kids want something they've seen on the television. Promotions are another area; believe it or not, 40% of everything that we consume now is bought on promotion, usually in supermarkets. If you look at the types of foods that go on promotion there is a weighting towards the less healthy stuff. So if we tackle the promotions issue that would help. Amanda has alluded to this, and we've become more aware through some successful campaigns – I think Jamie Oliver has been very successful in highlighting things; many people didn't know how many teaspoons of sugar there were in their fizzy drink. I won't name a producer but all of them can be loaded with sugar, it's quite shocking when you realise it. That awareness, I think, is really important.

Where we had a great deal of success in reducing salt in our food, was through producing a level playing field for producers by saying we want everyone that produces food to reduce salt content by 5% this year, and next year by another 5% and then by another 10%, and that was a 10 year programme, that in totality, reduced the population's salt consumption really quite significantly, right across the board, which has reduced the stroke rate and the hypertension drug-need as well.

We could do the same for sugar; we could do the same for fat. All of these potential interventions have been laid out beautifully by, what I think was a fantastic document of the evidence base, by Public Health England, **Sugar Reduction: the Evidence for Action** published I think on the back of the Health Select Committee hearing in October 2015. I think that puts out all that we could 'go for' in terms of the portfolio for interventions.

Now, we're of course waiting on a Government announcement on a Childhood Obesity Strategy moving forward, which I think is hugely welcome to many of us in the field. I don't know what it will contain yet. The portfolio of potential interventions has been laid out beautifully by Public Health England and we will see where it is pitched. I think it's really clever, and it's brilliant to title it a Childhood Obesity Strategy. Of course, if you talk about an obesity strategy for the country and you're seen to be telling adults what they should or shouldn't eat and how much exercise they should do, there are accusations of the 'nanny state', but apparently focus groups tell us that we don't mind being told what to do for the health of our children, so I think the focus of that is very clever as well.

I think that will be hugely important in terms of how we move forward, societally, to address obesity and the diseases associated with it. You've heard me focus of our diabetes prevention programme, which I should say was done, collaboratively, with NHS England working together with Public Health England and Diabetes UK, but it won't succeed as a standalone programme without the other aspects of intervention at population level which we hope to see with the Government announcement coming on board.

C. Baroness Cumberlege: When I was in the Government years and years ago, we introduced the concept of 5-a-day and I was really interested that my grandson knew all about 5 a day and he was incredibly impressed that this was an initiative that I brought in when I was a Minister so that was really nice – I got some brownie points. I do remember then the tremendous controversy it caused and it really amazed me. We had a diagram of a plate with a knife and fork and the different areas divided up for '5 for day' and I remember the Potato Marketing Board coming in with their plate which was only potatoes and chips and I thought how determined they were that we weren't going to succeed. That seems to have gotten into the psyche a bit, but we have all these other issues about sugar and salt today.

Q. Helen McKenna, King's Fund: *We've heard that reducing childhood obesity should be done through a range of interventions, rather than just a sugar tax and obviously with the financial settlement that NHS England has got, in terms of public health and local authorities actually, it's not as ideal as they would have wanted, as some of those interventions cost money. I just want to get your view on whether actually a tax is something that we could easily do at this stage?*

A. Professor Jonathan Valabhji: Is a sugar tax the easiest thing to do? I'd suspect not. Of course it has the added advantage that, if we were permitted to re-invest the money accrued through such a tax and direct it specifically to anti-obesity related measures, that would have a perfect symmetry, but I don't know that we can assume that. I think that if we put all of our eggs in one basket we'll fail. If all we were to see on the back of our public health interventions and our population level interventions, and the announcements about childhood obesity would be a sugar tax, then I don't think it would take us far enough. I'm not saying that I don't think it

would contribute, but I think it would have, an important, but small, contributory effect. But if we are really serious about this, then it has to be a multi-pronged attack.

Q. Grace Vanterpool: I am a diabetes nurse in Ealing and Chair of the Diabetes Forum at the RCN with Amanda. I have a couple of questions. The first is about the commissioning/provider split and whether the Five-Year Forward View and the Ofsted-style assessments will actually allow the 'marriage' to take place?

A. Professor Jonathan Valabhji: I think the Five-Year Forward view has taken us into new territory, healthwise. Many of us welcomed it hugely. It seemed to be embraced by all the political parties in the lead up to the General Election and much of the content found its way into Party manifestos, including the Conservative pre-election one, which means that much of it is to be implemented. We just published a few days before Christmas, the business plan moving forward on the back of the mandate. The mandate comes from the Department of Health, from the Government to direct NHS England as an Arm's Length body, as to what we will be held to account around, and on the back of that we produced the business plan.

For the first time the business plan had two different dimensions. The first was the traditional one: what is each organisation going to do to achieve financial balance in the next 12 months, and that's what we've always associated business plans with. But actually the second dimension was new and, I think, hugely promising and healthy and I think addresses your point. It is a requirement for the entire health economy to work together around a health plan for the benefit of its local population.

It doesn't differentiate GPs, from specialists, from community teams, from CCGs per se. CCGs are clearly the orchestrators of the local health economy but they are to work with their local authority colleagues, their acute providers, their primary care providers, to produce a plan for what works for their population. They are called Sustainability and Transformation Plans, and we should get that for all 209 local health economies and so I think that will address what you're referring to.

You and I have both been involved in integrated care plans and pilots in years gone by and we've made some in-roads where we've tried very hard to break down the institutional barriers between hospitals, mental health institutions, primary care and social care. We've done some good along the way, but one of the barriers was the flow of money and essentially, for us clinicians, our Chief Executives can often earn more if we are "back on the ranch" earning tariffs, than if we are out in the community doing integrated care. I think the concept of a business plan for a whole health economy, not just embedded within the walls of our own personal institutions, is the way forward. The way we're really reaching out to get that accelerated is in the vanguard sites, which are exactly that and the concept of me, as a specialist, and my GP colleges, being employed by the same employing organisation, all pulling in the same direction when it comes to money, I think, is potentially hugely powerful and helpful.

Q. (name inaudible) I think there is a lot of variation in care for people with diabetes in nursing homes, residential homes and in mental health institutions; what is the way of addressing that?

A. Amanda Cheesley: This goes back to my previous point about the importance of everybody working in health and social care understanding what diabetes is and if you don't give people

the training and education to understand it, then if you're in a care home being cared for, sometimes by, certainly by, non-specialists, and often by a very fluctuating workforce, many of whom have not trained in the UK (I'm not making that as a criticism, it's just a reality), for whom English is not their first language, if they haven't got access to support from a specialist team then their residents with diabetes may well be disadvantaged. The same applies for mental health, particularly, in mental health institutions, but also for people living in the community who have significant mental illness or learning disabilities, living in a community setting, where they don't have access to those specialist teams.

I think that's what I alluded to earlier, in terms of the need to take services to people, we have to make sure that teams, and Jonathan with your integration, it's about those services being really clear that there will be a percentage of the population in their community who need different and possibly, more intense, support from specialist services, than some of the general population. So yes, we have to train people carefully, but we also have to make ourselves accessible to them.

A. Professor Jonathan Valabhji: Just on the care home issue, we've been working quite hard with the CQC around firstly, hospital inspections and secondly, a themed look at community diabetes provision, but also Professor Alan Sinclair has done a lot of work that the CQC are very interested in around what constitutes quality diabetes care in care homes.

Q. Paul Saper: *Once of the problems is that, while you've got a chance in care homes, you don't in private homecare where there are a lot of people who are untrained providing care and the CQC don't access them, and that's a growing area so it's important. Are you getting the co-operation of the Royal College of General Practitioners or NHS England, that when people present themselves with diabetes at their GP practice and treatment is commencing, and GPs do blood tests and checks etc, the information always actually gets back to the patient, so the patient can actually get involved in their own treatment and actually enter into some kind of partnership? There is a concern that, compared to the United States, there's no connection.*

A. Professor Jonathan Valabhji: Of course, I think tied in to what you say is the workload and pressure on general practice, and in hospitals as well, and that's why we want the emphasis on structured education to empower people to understand their condition, to actually go into the consultation with their GP or practice nurse or their specialist, to say what is my HbA1C, what is my blood pressure, what should it be? I think we haven't scaled that up sufficiently over the last decade, I think the value of that was identified around a decade ago now. We know that glucose control in people with diabetes, and quality of life and other parameters around empowerment, respond very well to what we call structured education. Access has been a problem and we are moving on that with as many of the levers as we possibly can. I'm sure Bridget, you'll be able to follow up on that.

A. Bridget Turner: It's a real challenge in a lot of areas. IT systems and communication system just aren't set up in certain areas; there is more work to be done. There are examples of general practices that are being really proactive, where they are developing systems so that people with diabetes can look at their own records; so that is a priority moving forward, although it's not accessible everywhere at the moment.

Diabetes UK has been working with many GPs on something called Information Prescriptions, where in a consultation, a discussion is had around HbA1c, blood glucose, blood pressure and cholesterol and the person with diabetes is given a printed information sheet that says these are your results and a discussion is had about what their priorities are. So it's handing back that information to inform and empower. It's currently made available across about 12,000 people with diabetes, so it's a bit of a drop in the ocean at the moment and there need to be opportunities to roll that out more widely.

Q. Lord Morris: I'm here this morning because I want to know more. I suspect that there are thousands, perhaps millions of our fellow citizens, who would like to know more and need to know more. How do we scale up public information and indeed, public education, in respect of diabetes?

A. Bridget Turner: I absolutely agree. People aren't aware of how serious it is. There isn't enough public information and education out there. A public information/awareness programme, maybe supported by Public Health England or NHS England, would go a long way towards actually raising awareness, to let people know where to go to find out more information and to get the right information. There hasn't been one of these, a public information programme or an awareness programme, for many years. Maybe this is an opportunity to do that.

A. Amanda Cheesley: I would just add that we could start really early, this is not just about health or social care, it's about education, it's about schools and universities, about workplaces. We could do this in a way that actually means children go home and say "Did you know...?" and I think that's really powerful.

C. Baroness Cumberlege: I'm very conscious too that one way of getting the message across to young people - and you saying that young people are a challenge - is through social media and actually, that costs nothing, well perhaps a little bit because you'd need someone to monitor it and put out the information, but I would have thought that this would be a very good role for Diabetes UK.

A. Bridget Turner: Social media awareness campaigns are part and parcel of the work that Diabetes UK does. I think the benefit in working with public institutions such as PHE and NHS England is the power of the collaborative to actually reach out to more people. You're right, social media reaches out to young people much more effectively than posters at a bus stop. But it needs to be reinforced by all the other messages as well.

Chair: Baroness Cumberlege

I would like to thank our speakers who have been extremely concise, very clear and also put out a lot of information for us and, thank you, to all of you for coming today. A summary of the event will be produced by the APHG.

End

Note: This transcript of the meeting is as accurate a representation of the discussion as possible, within the limits of the audibility of the recording.