Ulster Medical Society

THE DESMOND WHYTE LECTURE
3 December 2009
'Postgraduate Education of Doctors
for the 21st Century'
Professor Sir John Tooke
Peninsula College of Medicine & Dentistry

Host:

Good evening, ladies and gentlemen. It's a great pleasure to welcome you all to the north-west this evening, and the Ulster Medical Society, for Professor Tooke's lecture. A few housekeeping issues, there is dinner after the meeting, and you'll be all very welcome to stay. I think a number of you have already registered, and it's with great pleasure that we welcome Professor Atkinson, the President of the Ulster Medical Society.

Professor Brew Atkinson:

Thank you very much. I think this is a very important evening each year for the Ulster Medical Society. There's a tradition going back many years of having an out-of-town meeting here in the northwest, and we're very grateful to the people in the Post-Graduate Centre who worked so hard. Alison Heath has been the person who's been doing a lot of the work for this evening, and I'm not sure if she's here or not, but we're very much indebted to her for all the work that she's done.

So it's very nice to be here and have the Ulster Medical Society here tonight, and as you know, tonight is a special memorial lecture for Desmond Whyte, and many people here wouldn't have met Desmond Whyte. I happened to meet him as a very young SHO working for Frank Pantridge, and he was a great mate of Professor Pantridge's, because they had a similar background during the war in Burma (and I think they'd already known each other from Queen's) and he'd worked behind enemy lines there. He got a DSO, he came back, he came up to Altnagelvin, set up the Post-Graduate Medical Centre, and set up a very fine department with radiology, which was always renowned. Frank Pantridge, always a bit scurrilous, as those who know him would acknowledge, said if you really wanted to get a chest x-ray, you had to come up to Altnagelvin. You couldn't get a decent chest x-ray but Desmond Whyte did up here. So it's very nice that, in honour of a very fine man, that this lecture has been named after Desmond Whyte, and we remember him very fondly tonight.

It's now my great pleasure to introduce to the Ulster Medical Society, and everyone here tonight, Sir John Tooke. John Tooke is between jobs at the moment, although I can see his first slide from here, and he's moved on already, but on 30th November, he finished his work, which was as a dean of the Peninsula College in Medicine & Dentistry, and he really set

up that new medical school. He worked extremely hard, and brought it to the fore very rapidly. He, over those years that he's been there, he held, and before that, an honorary consultant appointment with the Royal Devon & Exeter NHS Foundation Trust in diabetes and in vascular medicine, and he remains clinically active.

Between jobs, as I say, but in January 2010, he takes up a very important post as Vice Provost in Health and head of the Medical School at University College, London. He's the immediate past chair of the Medical School's Council, chair of the UK Healthcare Education Advisory Committee, a member of the National Institute for Health Research Advisory Board, and the Health & Education National Strategic Exchange.

As you know, in 2006, he led a high-level group for the Chief Medical Officer, on overcoming barriers to clinical effectiveness, and in 2008, he chaired the independent enquiry into the modernising medical careers, dealing with the publication of Aspiring in Excellence, which is so important when we see around us very often, a trend towards mediocrity in many areas of life.

He was recently also invited by the government to join a high-level panel representing medicine on fair access to the professions, who set out their first report unleashing aspirations in July 2009. It's very good of Sir John to take time to come and talk to us here. It's very apt, somebody was just reminding us that just in the last week, all of the advertisements have gone in for the various SPR jobs in the BMJ. Sir John has told me that he's not speaking in any government capacity tonight, because he's moved on from that, and we've now a new chair of the new board, Chris Edwards, another endocrinologist, I might say, but he will be giving his thoughts on post-graduate education. The third lecture of that will be by the man who succeeded Sir John as chair of the Medical Schools Council, Tony Weetman from Sheffield, who's coming to talk to us, I can't remember whether it's in February or March, so you'll want to twin that with your next visit to Belfast, or your next, next visit to Belfast, because I just want to remind you that the annual dinner of the Ulster Medical Society is on Friday 5th February, and we've got some very good speakers coming to that, and we'd be delighted to have a good turnout that night.

So again, Sir John, you're very welcome here tonight, and we're looking forward to your lecture. Thank you very much indeed.

Sir John:

Thank you very much, Mr President. Can you all hear me at the back without a microphone?—because otherwise I'll be getting myself in a muddle. It's a real pleasure to be invited here today, and thank you so much for the kind invitation.

My interest in post-graduate education, other than that that I think all consultants have who work with trainees, was of course heightened by this event. In 2007, MTAS was the precipitant, but as somebody pointed out to me at the time, MTAS, the selection process, acted as a lightning rod for deeper concerns within the profession at that time, and key amongst those, I think, were a sense in medicine, and indeed professionalization, of lack of clinical engagement in key decision-making. And when we undertook the enquiry, those feelings became even more manifest, and resulted in one of our key findings, and one of the most worrying from my perspective was that there was a lack of clarity about the doctor's role, and that was heightened by observations from the Secretary of State for Health, who had proclaimed that trainees were becoming increasingly supernumerary; in other words, there was a negation of the real service contribution that people in training positions make. And of course, there was still a lack of resolution of what the specialist, the CCT holder, was actually going to contribute in the future, and all of this, I think against a background of a deficient acknowledgement of what the doctor brings to the contemporary healthcare team. Now, we can discuss why that may have occurred, and why there was a sense of de-professionalization. I think a lot of it stemmed actually from the failings of the very few, which were highly publicised around the turn of the century, which I think put the profession on the back foot, and made it very difficult for the profession to assert its true role, and its role in the healthcare team.

Perhaps we can talk about that later, but what is clear is that, if you don't have clarity about the role the doctor takes on, it's impossible to pursue outcome-focused medical education. If you don't know what you're preparing people for, how can you devise a sensible educational programme? And furthermore, if you don't know what individual members of the healthcare team are going to contribute, how can you plan your workforce in any meaningful way? And of course, you can't understand what the individual needs to excel at, if you don't know what their role is, so I make no apology for starting a discussion on post-graduate medical education, or indeed undergraduate medical education, by saying without role clarity, it's very difficult to move forward.

I want therefore to consider with you for a while if I may, not what the past role, the historic role of the doctor has been, but what the future role of the doctor should be, because after all we're preparing people for a changing context, but we nonetheless have to ask, what are the abiding attributes that you would expect a doctor to have? Now, I've split those into generic qualities, qualities and attributes that you would expect to see in any healthcare professional, and those which you can regard as not necessarily specific for medicine, but they must house their obligatory attributes that society would wish to see in their doctor.

When I say prepare for the future, I think it's sobering to realise that, as a species, we tend to

underestimate the pace of change, and I put up some predictions here from certain luminaries, just to illustrate that point: Bill Gates, "640K ought to be enough for anybody", a clear underestimate, but this is what we do. We don't realise the pace of change, and therefore we're likely to not prepare adequately for a changing environment. And in considering change there's a number of dimensions one can look; there is, of course, demography, economy, technology capacity, and, allied to that, public expectation. Now as Brew has said, I've recently left a role in the West Country, the detail doesn't matter here. The black slice at the top is the growth in people over the age of 65 which is essentially doubling, between 1980 [1880?] and 1926. So a huge demographic, rapid shift of which of course we're all aware, where our health services and certainly our social care services have yet to catch up with.

Now it's not just that we'll be dealing, and the doctorate tomorrow will be dealing with a more aged population, it's the economic impact of this because whereas now there's roughly one elderly retired person for every four people in work, by 2025 it's going to be one per three. So there's a huge shift occurring here which is going to impact on the public purse and therefore have a profound effect really upon the way that health services will have to be organised in the interests of cost efficiency. The other driver here is the fact that healthcare costs with increasing technology capacity are changing very rapidly as well.

This graph, this divergence that you can see there, is the total spending on health, the blue line, and the dotted orange line is gross domestic product for the OECD countries. So for all OECD countries, there is this divergence between how much the country's earning and what health costs are doing. Currently in the UK we spend about 9% of GPD on health. In the States it's something like 15% to 16%. If you extrapolate that, by the end of this century, the US is spending 100% GPD on health which is clearly nonsense, but it simply makes a point that this is an unsustainable divergence that you have between the amount of money coming in and the amount that healthcare can cost. Of course part of that is technology capacity, you can do more, and science will not stop because of the financial constraints.

Just to illustrate how advances are likely to impact even further, I choose the question of what derives from the human genome project, and of course it's not about gene substitution it's about being able to undertake better risk profiling, perhaps be able to target drugs better through the use of pharmacodynamics but more importantly if you understand what gene is responsible for something and you work out the function of that gene, it gives you new insight into new molecular targets from which new treatments are derived. But it's not just therapy that will, I think, be the end result, it is actually preventive care as well. Now I know there some endocrinologists in the audience but there are also a

number of general practitioners and many of us are faced with this assertion, are we not, when we see someone with morbid obesity, it's not my fault, it's my genes, it's my glands but of course in the absence of anything else we have said well we know that's not the case, but do we? Because colleagues of mine in the Peninsula Medical School identified the common variance in the FTO gene, common, present in one sixth of the population, that predisposes to overweight and obesity. Detected because it's one of the genes that we've seen the variants of that're known to predispose to diabetes but a diabetes simply driven with propensity to weight gain. Now I simply mention this to say, once you're able to understand the function of that gene, and it looks as it if works on satiety, I would put it to you that there will be treatments, preventative treatments made available to manipulate the function that is relatively disturbed in that proportion of the population.

That said because of the importance of the role adopted to deliberations about education, one of the outcomes of the MMC enquiry was holding a consensus conference a little over a year ago which involved all of these bodies, as well as I might add members of the public, so this was an open event and a very broad event. Just to review some of the findings from that. The generic attributes that I refer to, those features you'd expect to find, not only in doctors but in any healthcare professional, including of course good communications skills, ability to work as part of a team, non-judgmental behaviour, empathy and of course, integrity. The must-haves, the obligatory attributes: first and foremost was clinical reasoning that underpins the process of diagnosis; then the concept that the doctor has to synthesise and integrate information that comes in from a variety of different sources and act as an interpreter of that information, not just for the patient but in relation to other healthcare professionals and colleagues; the capacity to handle this and uncertainty, so be able to work off protocol and use experience and judgment to know how to do that; the capacity to assume a leadership role doesn't imply that the doctor is always the leader of the team but must have the capacity to assume that role where appropriate; and the confidence to take ultimate responsibility for clinical decisions. Then again some assurance that these things were right from a YouGov poll. You're possibly all familiar with a YouGov poll, it's a system whereby you can sample, stratified sections of society that you know to be typical, in demographic, societal [?] terms, sort of generality of the UK population, and we use this device to test out some of the assertions. As you can see, it doesn't show up very clearly, but the majority of people strongly agree that this confidence in the doctor as a diagnostician is an absolutely critical part of the role.

Now one of the other things that came through really strongly was the concept of historically and now, doctors have a role and a responsibility for enhancing clinical services, pushing the boundaries of health through their positions of leadership and responsibility. Now for some doctors that enhancement is simply doing their job better on a day by day basis through reflective practice and learning how they might do things better. That's of course absolutely fine. Others will be promoting enhancement through team performance but then others still will be involved in education and research in management and leadership and this is I think very much acknowledged as part of the role.

More contentious was the idea that when resources are tight and as we look forward that's likely to ever more be the case, in the medium term at least, then doctors have a role in terms of determining how resources are used. What came out of the debate was of course it's easy for a doctor to hide behind their patient advocacy and say right I've got to treat the person who comes to me to the exclusion of everything else, that all of us involved in clinical services know that the time and resource you give to the person in front of you has an impact on the 100 people waiting outside the consulting room door; and I don't think that this is something that a doctor in the future can shy away from and hide behind the patient advocacy perspective. There's a balance to be struck here but interestingly when you ask society they anticipate that doctors will play along in this revision of resources, not on their own, obviously in consultation with society and policymakers, and it really is, I think, an important thing to consider how much the doctor should be contributing to such debates. If we don't contribute to it, then resource allocation is going to be a subject of political imperative as opposed to clinical need.

Dealing with complexity and co-morbidity is, again, something that is assumed that's critically important for the doctor. And with the demographic shift, with the growth in chronic disease, and what many people don't appreciate is that chronic diseases now are the major causes of death, not only in the developed world but the developing world. So I was always under the impression it was infection and malnutrition that were the main causes of death in the developing world, that's been overtaken by the huge strain of chronic disease affecting those populations as well.

The idea that a doctor as part of their role needs to be research aware also came through. This doesn't mean that everybody has to be a researcher but the fact that there is now considerably drive for evidence based practice which is likely to get greater given the resource constraints. The fact that more patients are in trials and I would suggest to you that in many of your professional life times we'll see lesser dependence on the controlled clinical trial then there has been in the past, simply because to do large scale clinical trials when therapeutic margins are getting smaller, therefore trials have to be bigger, it simply becomes too expensive. You're then getting into the

ethical dilemma, is it best not to consider trialling a particular therapy or introducing it, or do we produce new devices to introduce treatments in controlled ways to selected groups of patients, and my suggestion to you is that's what will happen over the next ten years or so. Of course that means that practitioners will have to market that evaluative framework to [treat?] themselves for use in that way.

Then again, reflecting the economic climate we find ourselves in, there is no doubt that the collapse of the private sector within the UK that the knowledge economy and the life science industries will become increasingly important for our economy and I have no qualms about speaking about the economy as a doctor thinks. We all know the very close relationships between the health and the wealth of our population. So I think the need to sustain a strong biomedical research base in the UK means that research awareness amongst doctors is going to become more of a premium than perhaps then it has over the last 10 to 15 years.

Clinical leadership I've already alluded to, but the work I did on barriers to clinical effectiveness, made it I think, very clear to me that the barriers are context specific. They relate to the particular environment, particular team, the particular condition and particular locality. If that's the case, and the evidence suggests that that is the case, then top down control, central directives are never going to overcome those local contextual situations. Local ownership, and local clinical engagement, and local leadership, therefore become critically important if you are to improve health services. Again the public have a view on this and although sometimes the medical profession is somewhat ambivalent about promoting its role as a leader, society has a pretty clear view that the doctor is not invariably, but usually, the leader of the medical healthcare team.

I, in my last role, was involved in promoting a School of Dentistry and it always amuses me when I reflect on the doctor's role as the leader, does anybody ever question the dentist's role as the leader of the dental healthcare team. It would never be entertained that we sometimes think to be indifferent about suggesting that on many occasions it's appropriate for the doctor to lead the medical team.

So against that backdrop, let's consider what the implications for postgraduate medical education training are in the 21st century. I want to pose you a series of questions. Does the experience they have prepare them for the health problems, changes resulting from demography etc, of the 21st century? Are we equipping trainees to deal with risk and uncertainty in a rapidly changing world? Perhaps most importantly are we equipping trainee doctors to enhance their individual contributions along the lines that I suggested to you?

Well of course the MTAS, the MMC problems would suggest that things weren't quite right and you will have seen the report and I'm not going to go into

it in great detail. Simply to say these along with the absence of clarity about the role of the doctor were the main findings. Policy mal-alignment, what that simply meant was that the principles and objectives of MMC were not aligned with the stated policy objectives of the Department of Health orders or care in the community, greater emphasis on chronic disease, greater emphasis on the patient [?] and so forth. These things weren't being reflected in the training programmes that were being developed. No doubt that the government's process for the introduction of MMC, and particularly MTAS, were seriously awry. The risk management of the process, the lack of trialling and so forth were dire, quite frankly.

By patchy quality management we meant the postgraduate deanery function was delivered variably across the UK, in some places it was very good and I say this, which every devolved administration I was in, devolved administrations I think managed things much better I suspect, the scale, and the tighter knit relationships between deanery service and medical schools.

Poor work force planning is probably an understatement. Of course around this time it triggered a whole set of discussions as to whether work force planning was ever possible and then suddenly Cyril Chantler said to me during the health work force for London discussions, along the lines that the great thing about no work force planning is when the disaster comes, there's been no preceding anxiety. I'm not sure that's a responsible approach to take but I think you know optimal work force planning has got to do better than none, and we're dealing here with UK-wide resource, it simply can't be left with certain speciality areas being totally unprovided for.

The complex regulatory framework we identified at this time that was PMETB and there was GMC. The GMC of course as you know regulates under-graduate medical education and playing a role in CPD and the ultimately revalidation with PMETB doing the bit in the middle. Now that may have been alright if the personalities and the philosophies of the heads of the two bits were working in union but can you imagine what it would have been like had different education and philosophies arisen with those two organisations. Then of course finally the inflexibility and non-aspirational nature of the training mechanism.

So does their clinical experience prepare them for the problems of the 21st century. Well I would argue not very well. We're talking about postgraduate education but if you look at undergraduate medical education, well the majority the of [?] experience is still in the hospital sector. In my medical school in the West Country we push the boundaries hard and we got it up to about 30–35% within a community setting. In a typical London medical school that I'm going to is 15%. So the exposure that students get to the career area where most of them will be entering, will be changes in patterns of care, doesn't mirror that future. Similarly the foundation programme although

its introductory statements makes aware of the fact that chronic disease is now an important health burden for the country and for other countries, the rest of the curriculum really pays scant attention to it, and the focus is on the management of the acutely unwell person. Genetics, which is bound to become a far more important part of all of our experience, doesn't figure in that programme at all. Modern genetics will not be delivered by clinical geneticists, it will require every medical practitioner and other health professionals having a more profound understanding of genetics and gene environment interaction.

GP training restricted to three years, one of the, I think, one of the few countries in Europe where the length of training is as short as it is, and yet this idea that a society with high public expectation of what the health service can offer would be satisfied with that, when care moves even further into a community setting.

All of this compounded by the impact of the European Working Time Directive which of course threatens the acquisition of experience on which judgment relies. I put it to you again that in the context of the demographic shifts with significantly more co-morbidity and more complexity, and that experience, the building up of one's clinical capital to draw upon in such circumstances is going to become increasingly important.

Are we equipping trainee doctors to enhance their contribution? This concern about the second foundation year as being something of a mark in time was a deep concern to us during the enquiry. Now I'm very aware that the quality of the foundation programme varies from place to place, and I think where people have worked well and hard at it, and particularly where FY2 becomes more themed, in a sense there is an entry into specialist training, it can be a strong experience. But I think the foundation programme is going to be under review, currently is being considered by John Collins, that will be an important part of the revision I think that is necessary.

I just want to focus for a few moments on to what extent medical education inculcates this sense that doctors should be involved in pushing the boundaries of healthcare. I suggest to you that there are at least three issues that get in the way in that in the way that we structure things at the moment. One of them is this risk aversion. I think in part this is a non-intended consequence of a focus over the last decade or more on patient safety. Now it's very difficult to argue against patient safety and there's no doubt that it's been an important driver for improvements in quality of services. But nonetheless it can begin to promote the idea that ultimate safety is possible and deny the fact that there is inherent risk in medical activity. Being ill is a risky business and yet there's almost a sense that society can be insulted from all this, and we're led to believe that things can be 100% safe, already that screening tests can be 100% specific. Clearly it's nonsense but it's the culture that has been developed.

I'm intrigued to see how, having established that culture within the health service, a risk-averse culture, how we're going to respond to the new drive for innovation, because innovation is risky. You know you're doing something that is relatively untried, at least in that context. It will be very interesting to see whether we have a health service that is imaginative enough and responsible enough to take on that challenge.

Risk aversion I would suggest is also a barrier to earlier involvement in clinical practice. You see this in the States with medical students where now you know they're not allowed to do [anything?] in the fear that they might do somebody harm.

How many people in the room did a student locum when they were training, when they were a medical student? So possibly half. How many of you saw that as a very valuable experience? Every time I ask this question that's the sort of response one gets. Very fulfilling, it's one of the first times that you realise what the role is actually about and you grew in confidence and you were properly supervised, and probably took some risks but it went pretty well. Of course if we are going to go, I'll go on to say in a moment, [compact?] EWTD, one of the things we need to do is transform the acquisition of skill and experience and think about introducing such experiences again. The latest Tomorrow's Doctors which I'm sure some of you, I'm sure many of you are aware of, which is the GMC blueprint for medical undergraduate education also makes great play of the reintroduction of student assistantships. So maybe the lesson is being learned.

Another barrier is what I call research binary divide and I've already alluded to this and the need for research awareness in the medical work force. Essentially what we now have is those that see research as part of their career probably 4–5% of the medical work force and everybody else who doesn't. Now that's a big, big change from certainly when I was first a consultant where most people would have had a doctorate and many people would perceive some clinical research as part of their role. It's problematic now because of research bureaucracy, so if you're only doing this on a very part-time basis, to get over the hurdles to actually generate sufficient momentum to do anything is extremely trying and I think we have a real problem in that regard.

We also if we've had a burgeoning medical student numbers, this relative decline in academic staff numbers, the latest survey shows that unless we refuel that pipeline, in ten years' time through retirements, myself included, there'll be a 15% reduction in the number of clinical academics. Now people say well there's always academic development programmes and everything else, but we have no idea what the conversion rate is for those programmes, what conversion rate is from someone doing a doc-

torate going into clinical academia. So I think there's still a great, great vulnerability here in terms of clinical academic careers.

Then of course the final area is the subject of competence, and again a bit like safety, competence is difficult to argue against. Of course you want doctors to be competent but I suggest you want them to be more than competent, you want them to have clinical expertise which is founded on the combination of competence doing technical things and to do tasks but also to have the experience and more importantly the judgment to know when to use those competencies. So it's an amalgam of different sets of skills that's really required.

Now as you know, just look at the red line, you're all familiar with it, this is run-through training pre the review and to a larger extent is still the case, where trainees select into 1 of 57 specialities and sub-specialities and off they go, with relative lack of flexibility, little attention paid to enhancing the [?] goals that the doctor might subsequently take on. Again you may not be able to see in detail, but what we're suggesting is the results of the enquiry was a broader core speciality training perhaps four core areas to give clinicians a broader base for their training such that if they were required to reinvent themselves later in their career they would have a foundation on which to fall back on. It wouldn't be like Snakes and Ladders where you have to go back to the beginning again getting this narrow pipestem to actually progress as a very, very narrow specialist. Related to that was the idea that during that training you could also have options to undertake skilling in perhaps for example, research, education, management, public health, we've not talked about public health, but I see that as a very important part of the role moving forward.

So those are the proposals that we've made and they are now subject to medical education ruled deliberations. Also it's suggested that to lift the quality of postgraduate medical education training the idea of testability, in other words the money for education has to reward excellent training, and that will be played out possibly, through the provider / commissioner split. Then professionalising training, we still have the situation of course where busy clinicians are supposed to take on the training role, the job plans don't necessarily afford sufficient time and the training in the educational function is relatively deficient. Moves are afoot to try and address that. The Academy of Medical Educators are currently involved a project to identify what the training resources currently are, what the needs are, develop a curriculum of educational supervisors, pilot that and then see what the implications are for implementing that. But it seems absolutely clear to me that one of the responses to EWTD has to be greater professionalization training as well as fast forwarding and therefore we need to invest in skilling clinicians to play their part in that.

The other measure of course is this idea that you

have modular credentialing so you build on your core experience in perhaps an incremental way, taking a relatively narrow focus because that's the only way you can accrue sufficient experience in specialist areas.

Now again I'm not going to go through the detail of this but you will know that in our final report we suggested that none of this could happen in a coherent way unless there were a body which was largely medical led that was going to ensure coherencecoherence in terms of the principles underpinning postgraduate medical educational training, policy coherence so that general health policy and educational policy aligned. That there was real intelligence about the work force numbers required that reflected technological advance and other changes, and that the postgraduate deanery function was better aligned with service and academic effort. Medical education has been formed [?], it's about six, nine months into its life and I think it's beginning to tackle some of the issues which have really not been tackled since we published the report. But as the eternal optimist I think there's a good chance that they will make pretty rapid progress now.

So I've covered a lot of ground but what I hope I've convinced you is that we have to visit the doctor's role and the education around [?] in a rapidly changing context. It's no good saying well this is what it used to be like, let's try and recreate the past. So clarity about the doctor's role is absolutely critical, and it's critical that education takes account of health policy imperatives more generally and work very closely to ensure that that's the case. The education structures and process needs to match that but also need to be built such that they can cope with the huge challenges of the European Working Time Directive. Yes aspire to excellence, but define what excellence is, it's not just a vague aspiration, we've got to identify what we think people should be excelling at and then critically we must ensure that those doing the training have the resources and skills to actually benefit from training.

Thank you very much for your time.

Professor Atkinson:

Thank you very much for your lecture, Sir John, and I'm sure Sir John will be happy to answer questions. Maybe I'll start off while you're getting your questions. You obviously, I hope I'm not reading too much in, not a great fan of the F2 year and the three year course of speciality training which is maybe something that you're all not fairly familiar with. Do you want to tell us a wee bit more about that and why that was there's four different modules in that?

Sir John:

So I think the first thing you have to recognise here is that we have a Medical Act which requires registration after the first year of the foundation programme. There are arguments for and against creating a two year programme. I'm not sure it was actually adequately discussed as with many reforms of postgraduate training when the two year programme was introduced but that's what happened. I think what drove us to consider a one year foundation was recreation of a carefully constructed pre-registration year which fused very tightly with the fifth year of undergraduate medicine, was in fact the impact of EWTD and there just wasn't the luxury to allow people to drift for that period given that every year was precious in terms of accruing experience. The difficulty you run into of course is that people, and what F2 I think was trying to address, was that many young doctors won't know what they want to do. About 50% of people at the end of their pre-registration year know what they want to do and hence this idea that if we gave them a few options then that may help them. Now it could do if they were given an array of options which met vaguely their aspirations, I mean in two centres that happened, in others it didn't, and they were having experiences which were of no interest in them whatsoever. I think if you're going to deal with the career option issue, you have to be far more deliberate about it and address it head on and that means in medical school prospectuses we should be revealing what proportion of doctors do what so that medical students don't come out of medical school thinking that 50% of them are going to become surgeons, because they're not. You have to be very realistic about the number that go into general practice, and we need to reinforce that through medical undergraduate education and we need to offer very good career advice during that whole period. Now I suspect if you do that and you use special study units within medical school to actually expose students to concentrated in-depth experience within a speciality, you improve on that 50%. Now still not everybody will know what they want to do and that's where having core programme and some form of accreditation for prior learning, such that if you, okay you did the wrong core, it's not the end of your career you can accredit some of that into another core programme and you can go through your specialist training, I think is a better way to go.

Audience Member:

Firstly doctor thank you for an excellent talk. I'm a consultant here in Derry and I'm the foundation programme director in Derry. I'd like to specifically ask you about the money. Towards the end there you alluded to [?] but the reality is that postgraduate education is polishing the willing, certainly in heath service, [?] GP it's particularly people that excel and want to do it. You talk about professionalising it, the reality is until the money flows with it, it isn't ever going to get the focus from the individuals or the organisation. I'm interested that Medical Education England, Medical Education UK in Northern Ireland but Medical Education England is on the march and I read your report, and that's the thing that struck out

at the end, talking about money following the training. When do you think that's going to change, do you think it's going to change and if so when?

Sir John:

I don't think you'll cope with any of this without proper incentivisation and job plans that reflect an educational commitment, that's the absolute bottom line on this. On the incentivization stuff, actually there are a number of bits in place now, at the highest level of the NHS constitution, now states, what was always the case actually with the NHS, that the NHS simply isn't about service, it's about educational research. That was in the founding principles of the NHS and they've been reasserted in the constitution. The Quality Care Commission will also start to look at education as part of its measures of hospitals performance. But probably the most critical thing is for the Chief Executive to look at is the operating framework within the NHS. It again makes reference to education. So we could have policy environment and incentives at that level, it's the money and I think that my worry about the money is that it's unrealistic to see the envelope of money increasing in the next decade. It's going to be distributed differently. The best view of that is that places that are really good are going to get more of the resource, the problem then is with service impact of trainees not being everywhere. My real worry is that unless we really promote what the critical role of the doctor is, you'll see a lot more role substitution as the cost efficient way of dealing with what we're faced with.

Audience Member:

You said role substitution, what are your thoughts about the doctor taking clinical ownership, that's with respect [?]?

Sir John:

Absolutely right and what most people fail to acknowledge with role substitution is that the good studies, and there aren't that many good studies, but the good studies suggest that role substitution is not more cost effective and the reason it isn't, is because as soon as something goes off protocol which of course what happens with elderly people and complex co-morbidity, you need to bring somebody else in to sort it out. If I just amplify that a bit more, most of the studies of role substitution, simple in experimental design are done in narrow areas of medicine where protocol application is relatively easy. They're not looking at it on the selective stuff that really is the nature of most of medicine.

Audience Member:

On your point [?] talking about nurses, to me [?] I mean because that role is substitution [?] generalisation. The other point I wanted to ask about was you were mentioning about the students internships and if they broke those down and got the internship then

to be one year, [?] having multiple specialist training for two years [?] into six or seven sub-specialist design programmes in an area which may be more efficient to use the knowledge it takes to produce an efficient doctor?

Sir John:

That's certainly very much the philosophy behind our thinking. I find it interesting that the role substation plays out across medicine because in acute medicine there is now greater emphasis on putting the most highly skilled person at the front end to undertake that triage. In other parts of heath service, certainly in certain primary care settings then the nurse will be [?] high and you all have views on what is the more effective and efficient way of doing things. I think it does need to be very carefully considered.

Professor Atkinson:

When you see so many younger doctors here, they're all younger than me and it'd be lovely to have your thoughts on the training, people just beneath their training, people in the middle of their training, thoughts on flexibility, questions about the talk tonight, anybody want to put their hand up and ask anything. Yes please.

Audience Member:

One question [?] haematologist now [?] (laughter) one of the difficulties that we have, you have a health care standards and everybody should have he same standard of care, everybody should be diagnosed and treated within those parameters, [?] but then actually [?] then you have NHS which is completely made up of [?] and trusts, they're actually in competition with each other [?] and also those resources for the trainees [?]. So the ethos of NHS and ethos for service delivery standard and equal as training, [?] completely you know counterintuitive, so I think...

Professor Atkinson:

Your question?

Audience Member:

My question is, where is work force planning for all this training and delivery of service because the two are independent and there's no way to enforce work force planning [?]?

Sir John:

I agree entirely with your comments about the difficulty of having equity in service delivery in a market forces system. It seems difficult to me to align equity, [?] and choice. I don't see how you can make that triangle work and that aside I think there are real difficulties work force planning in that environment because of course we are already seeing some Trusts, particularly in England, hesitating to involve themselves in training, in a sense take on their national

responsibility for the collective provision of a number of trained specialist because it's not in their individual interest to do so and the same is true, that's why I think there does need to be some central oversight such that sufficient numbers of people are produced. If you don't go down that route then the only other solution is to adopt the American model which is that you under-provide and you have immigration rules that allow you to top up with everybody else's overproduction. Whether that's ethical, given what those countries have put into undergraduate medical training for example, I think is questionable. So I recognise the nature of this, it's a dark art. I think you have to try to do as well as you can. I think you've got to have some central oversight and control to ensure that no speciality suffers. I think that core training should happen everywhere but there should be more competition in terms of where specialist training occurs to drive up quality. I agree it's a very challenging equation to solve.

Professor Atkinson:

We're having a very good discussion and I hope the soup's not getting cold but a few questions, couple more questions.

Audience Member:

How many opportunities do you get to throw [?] and should a talk like this perhaps be put on TV or DVD so a much wider range of students can get this important insight?

Sir John:

I do think it's important, we're talking about the next generation's careers here and it's all very well somebody like me pontificating, it does need to be conveyed to them as well because they're the ones that are going to make or break it. I think one of the really invigorating things for me is the way that young medical students possess the desire to, well they're vocational, there's a risk that that vocation gets bashed out of them. I don't know what your view is but I'm increasingly of the view that many of them see their vocational aspirations being met in a global context as opposed to a local context. Now on one level I think that's inevitable, they see themselves as far more [?] than perhaps my generation, but I do worry that they perhaps perceive less opportunity to make a real difference in their careers and that would be very sad if that were the case. So yes I think we start earlier to engage with them, these are issues that need to be debated very fully because the roles are going to be different to the one that you and I have enjoyed.

Professor Sydney Lowry:

I had a comment and question but you've answered my question which was role of substitutes. The comment is very brief. I was talking to my GP yesterday and he said medical students when they're asked why do you want to do medicine, they must

never say because I want to help people. I was telling my wife this and she said what they should say it's for the money.

Audience Member:

I'm an GP and I'm involved in postgraduate education in the West of Ireland but this time of year I go round schools and prepare A level students for university enrols intake interviews next week. I had 12 people yesterday and 12 today and one of my question always is do you know about the career structure after you qualify and where do you see yourself in 10 years? Then I say to them, what percentage of people do you think do general practice, and they all want to be GPs if they can't get into paediatrics, brain surgery or save the world, that's the three main things. I say to them 80% of people end up in general practice, and I thought your comment fascinating that should be in prospectives, and they had no idea, for me to try and tell an 18-year old where they're going to end up, they don't really believe you.

Sir John:

No they don't. Well we know where kids get their medical insights from so if there's not a doctor in the house, they get it from the media. So they have this completely artificial view of what the rate of cardiac resuscitation is like, for example.

Audience member:

We should bring back Dr Finlay's case book.

Professor Atkinson:

Well I think that we should really thank Sir John for giving up his time. This is a precious month for him and our programme was set before he knew about the move and yet he still came in the midst of this very busy month. It has been very enlightening and it's been very interesting. I suppose one of my sadnesses and I'll probably get into trouble over dinner for this is, that it's not Medical Education UK because I'm not sure that the devolved administrations are big enough to carry their own programmes forward and hopefully you can contribute to ME [?] as well.

Sir John:

There is that device, I mean I insisted because we weren't allowed to object to DH England a solution that was only ME UK, in fact now they have within their constitution the absolute need to relate to the devolved administration stuff at this point.

Professor Atkinson:

Just to thank Sir John very much...