98. Richard Gee

(1) Tell me about your background.

I was born in a small south-Staffordshire village. My father worked as an accountant, for a Black Country meat factory, and worked his way up, slowly, towards his final post as sales manager. My mother was a housewife; she was always around. Educated at a Church of England primary school, and then, having taken the Eleven Plus, went on to King Edward's Grammar School at Stourbridge, which was highly academic. And struggled for a while, being a country lad, and used to freedom. The discipline of academia was quite difficult for me, but it was a good school, and fortunately they were able to bring the best out. From the age of fourteen, I decided I wanted to be a doctor. No one knew why - I didn't quite know why myself, at that time, because I was interested in other things. But that was always the driver, and that was the target I was aiming for, and fortunately I got there. Went to Birmingham University when I was eighteen.

Tell me about your training.

I was based at Birmingham University from 1965 until I qualified in 1970. The medical course was divided into two main sections. The first three years were basic sciences. We had no contact with patients; we spent most of the time in the medical school and the university, learning things like biochemistry and pathology, and that kind of thing. And then, at the end of the three years, we had a series of examinations to test our knowledge of our basic sciences. And, having passed through that, we then went on to the clinical part of the course for the last two years.

(2) And that was quite unique, because we were the first year to try a new system of what was called continuous assessment. And the final two year period was divided into ten week periods - sessions - in the various major specialties; for instance, surgery, medicine, psychiatry, obstetrics and gynaecology, and paediatrics. And we spent ten weeks actually working as an assistant to the house officer, attached to one particular consultant's firm. And we had to be there virtually all the time; we had to be noticed. We had to be noticed on ward rounds, not only physically, but also academically, making... or asking useful questions and making sensible comments. So, it was quite a discipline. And at the end of each ten week period, we had various assessments: a multiple choice examination; a clinical examination, where we were given a patient to examine, et cetera - the old-fashioned one; then a viva, where we were sat at a table being interrogated by consultants. It was quite challenging. And as we neared the end of the two year period, we hadn't been assured that we weren't going to take final examinations. So, these final examinations were scheduled, I do believe, for the March of 1970. And most of us were finishing our final ten week period in the February, and some of us hadn't done major subjects, like medicine or surgery, for almost eighteen months, so we were sweating a little. And

that was quite a stressful period. But at the end... towards the end of the final ten week period, we were reassured by the Dean of the medical school that they'd got enough information; that we didn't need to take finals. And there was a huge sigh of relief breathed by everyone. But in discussion, following the completion of the course, we felt that this was a very good way to learn medicine. It was hands-on, and we were exposed to part of the patients' pathway, from the time they were admitted to hospital to the time they were discharged. And sometimes you were in the outpatient follow-up clinics as well, so it was a very good way to learn medicine, and get a taste for actually what you wanted to do with the rest of your career. And it didn't work in my case, because I liked most of it, and it was very difficult for me to decide what I wanted to do. I did decide that I needed some practical experience. So, having done my first house job at the Birmingham General Hospital on a cardiology firm, which was quite high-powered, I decided to move out to peripheral hospitals to get some hands-on practical experience in surgery and medicine, without having half a dozen registrars looking over my shoulder; learn to make my own decisions, and to learn how to make my own decisions. And that's why I came to Dudley, and did my first surgical house job in the Guest Hospital in Dudley, which had an associated accident and emergency department. And then, following that, I did six months at the Wordsley Hospital, in general medicine, and that was really general medicine; we saw just about everything there. And I got a lot of practical experience. But, even at the end of that time, I hadn't made my mind up what I wanted to do with my career.

(3) By the time you'd got to do general medicine at Wordsley Hospital, how much did you know about diabetes?

Apart from that I'd learned in medical school, from the formal training, which was probably, all in all, about two weeks' training: very little. I'd come across the occasional patient, while I was a senior medical student in the teaching hospitals, but we were really not very hands-on, at that stage, and so we were just observing other doctors looking after these patients. But in my own experience, it was very little. Wordsley Hospital was then quite a challenge, because quite an intake of patients, at Wordsley, were diabetic patients, and I felt that I knew very little about it. I chose cardiology at the general hospital, because I'd got on very well with the consultant while I was a medical student. During my sojourn at the General Hospital, we were encouraged to attend ward rounds on other firms, and attend outpatients. But there was one proviso, and that was that don't try to attempt the diabetes clinic on a Wednesday afternoon, because it was horrendous - starting at one thirty in the afternoon, and finishing between seven and eight in the evening. Some of the registrars were seeing over fifty patients each, and there were usually about three hundred patients in the outpatient clinic. So, it was a definite no-no for students to go there, so we tended to avoid that. And I was aware that, by the time I'd got to the Guest Hospital and I was working in the A&E department, that my knowledge of diabetes wasn't really up

to scratch. And I remember having to deal with patients in both hypoglycaemia and in hyperglycaemic coma in A&E, and feeling very vulnerable, and having to rely on the superior knowledge of my registrars. And sometimes the sister in A&E was a fountain of knowledge for the management of those cases, for the brief period that they were within the A&E department.

And now describe your time at Wordsley Hospital.

For six months, in 1971, I was a house officer in general medicine, working for four consultants, two of whom described themselves as general physicians, one was a nephrologist, and the fourth was a cardiologist. But they all had to share the workload that came into what was quite a busy hospital. I became rapidly aware that the nephrologist knew quite a bit about diabetes. I was aware that my knowledge of diabetes, at that stage, was not sufficient to need, and so I encouraged this consultant to teach me. And I learned a lot during my six months at Wordsley Hospital, enough to make me feel that diabetes wasn't best managed in hospital, because patients were... most patients with diabetes, presenting either as a crisis or opportunistically, were referred to hospital for management. The hospital environment was completely alien to their own home environment, both as far as diet and exercise is concerned. So, having thought that we'd got their diabetes under control, and discharged them back home, only to find that they were admitted a short time later with hypoglycaemia, because they were using far more energy at home, and eating differently than they had done in hospital. So, I became aware that diabetes probably wasn't best managed in hospital, apart from when the patients were ill enough to be at risk.

(4) What are your memories of the management of patients with diabetes?

In Wordsley Hospital, particularly, patients were either referred to outpatients, if they were felt not to be too severe, or admitted to the ward directly, if they were either in hypoglycaemic crisis or hyperglycaemic crisis. I became aware that there were two different types of diabetes. Some patients required insulin, and some patients could be managed with tablets alone. All patients were put on quite a strict diet, when they were in hospital, and they were counting their units. I think they usually allowed between eight and twelve units a day, depending on whether they were male or female, or how big they were. I can't remember exercise ever being mentioned at all. And I was quite sure that the sedentary lifestyle that the patients had in hospital was bound to cause problems for them when they went home and went back to work, because a lot of the patients that came into Wordsley Hospital were from the Black Country, and had physical jobs. The two types of diabetes were described, in those days, as being "juvenile diabetes", which was more likely to mean that the patient had to go onto insulin, and it tended to start in younger people. And then there was "maturity-onset diabetes", which was regarded as a degenerative disease, in those days, and affected older people, and very often could be controlled by tablets. I remember quite a few patients having complications, particularly peripheral vascular disease, leading to ischaemic gangrene and amputations, ocular problems

- what I now know is diabetic retinopathy, and diabetic nephropathy - kidney problems. And that was the area of interest of the consultant that taught me most about diabetes, at that stage, in that he was basically a nephrologist who was interested in the effect of diabetes on the kidney. And his research had led him to a great knowledge of Type... what we call Type 2 diabetes now, what was called maturity-onset diabetes. And it was always felt that juvenile diabetes, because of the requirement for insulin, was the most severe. And maturity-onset diabetes was a degenerative condition, which you just kept an eye on, and made sure they took their tablets regularly, and that wasn't really much of a problem. But it became very obvious, shortly, that patients with Type 2 diabetes were much more likely to get complications than patients with Type 1, or what was called juvenile, in those days.

And when you say "it became very obvious shortly", do you mean while you were at Wordsley?

Yes, while I was at Wordsley, it became obvious. One could see that the patients who'd got the most severe complications were patients with maturity-onset diabetes. The patients with juvenile diabetes were usually treated with either beef insulin or pork insulin. And I remember some of the names of these: Isophane, IZS, and I was thinking "well, I'll never get to know... I won't become familiar with these insulins". And then the patients with the maturity-onset diabetes were treated with drugs like Tolbutamide, and I do believe Chlorpropamide was being used, at that time, as well, which is something I took from my hospital practice into general practice.

(5) How much did you know about diet, while you were at Wordsley?

I'd heard the terms "units" used. Patients were either allocated eight or twelve units per day. I had a vague understanding that one unit was equivalent to about ten grams of carbohydrate, but I hadn't really much idea about diet at all. It was a very busy house job, and obviously one's time was spread across a broad spectrum of different medical patients. However, I was able, on some occasions, to refer back to my medical school notes to find out exactly what a unit was, and what the implications thereof were, but I had no formal training about dietetics at all.

Can you remember what the outpatients clinics were like?

They were very large, and the patients were completely undifferentiated. You'd have a whole mixture of patients, from cardiology cases to endocrinology cases, to gastroenterology cases, all mixed together in the one outpatient department. And you were probably expected to see between twenty five and thirty patients in a three hour session. It didn't seem to me that the patients came at any allocated time. The outpatient clinic seemed to start at two o'clock in the afternoon, and all the patients turned up then. And by the time you got to the last patient at six o'clock, they were pretty exhausted, and quite fed up!

And what are your memories of life on the wards?

Wordsley Hospital was a converted workhouse. And the general medical wards were a series of Nissen huts, which had been originally built to receive wounded soldiers from the Second World War. And they were rather like the Nightingale wards at the General Hospital in Birmingham, in that you'd got patients on both sides of a very long, thin ward. Because these Nissen huts were on the periphery of the hospital, the food was delivered by trolley. And I do remember that diabetic patients had special diabetic diets, and so their food came in plates with covers saying "diabetic" on the top of them. The ward rounds: we'd do a ward round twice a day, with a registrar, but the consultant ward rounds were quite frequent. And because they had a general spread of medical patients, the consultants, who were fairly focussed in their approach - like the cardiologist wasn't particularly interested in patients with diabetes - and would tend to discharge them quite quickly back to their own doctors. There was very little inter-consultant referral, I remember. It's different, these days, but there was very little, because they all had their territory, and they were quite jealous of that territory, and reluctant to ask the opinions of their consultant colleagues.

And what did you learn from your time at Wordsley?

Managing diabetes, I'd learnt two things, mainly, that I took out into general practice. One is that we must bend all efforts to make an early diagnosis. And secondly, that to achieve glycaemic control efficiently, we must do that while the patient was in their own home environment and attending work, because, otherwise, our dietary restrictions, if we were using diet to control it, were going to be irrelevant to their needs.

(6) What did you do after you left Wordsley?

It was my intention to become a cardiologist, but I'd absolutely no experience of general practice at all. However, there was quite close liaison between the local general practitioners and Wordsley Hospital. I'd met them at a number of clinical meetings, and I'd got to know the practice that I'm in now. And unfortunately, one of the GPs left from the practice as I was nearing the end of my senior house officer post at Wordsley, and I was offered the job as a locum. And I thought this was an ideal opportunity to taste general practice, because I'd no training and no idea about it. And I came to Lower Gornal for six months. Shortly before I joined, the senior partner died suddenly, so that they were very short of GPs, so my locum period was extended from six months to twelve months. By which time, I'd decided that general practice was the place for me.

And can you describe Lower Gornal, and the kinds of lives that your patients led.

Lower Gornal is on the edge of the Black Country conurbation, and this is a conurbation which extends from Wolverhampton in the north, to Solihull in the south, a distance of about twenty miles, completely built up. Lower Gornal is built on the side of ridges, which really define the western boundary of the Black Country. The kind of people that lived in Lower Gornal were of three distinct types, because, prior to my joining the practice, it had been a coal-mining area,

too. So, we had a community of patients who were descended from Scottish and Yorkshire coal miners, who were imported during the Victorian era to exploit the coal that was found below the Himley Estate, which is just about a mile away from the practice. We had another community of heavy manual workers, who were supporting the steel industry in the Black Country. And a third community, which fed them, through their trading relationships with the farmers in Shropshire and South Staffordshire. So, three distinct communities, and there was competition between these communities for the local facilities. But, of course, we had a range of disease entities, which were common to Gornal. The diseases associated with mining, such as chronic bronchitis and pneumoconiosis. The diseases that were associated with the steel industry, again, chronic bronchitis, mainly respiratory diseases, and coronary heart disease. And because the village of Gornal was quite an enclave, there seemed to be quite a bit of interbreeding, so the incidence of Type 2 diabetes was higher than I expected. And, in fact, it turned out to be higher than the national average, at the time, and is still around about there.

(7) So, can you describe the life of a GP in Gornal in 1972?

The practice that I joined was quite large. We had two surgeries, one in Lower Gornal, and one in Sedgley, which is about a mile and a half away. And we had twenty one thousand patients. There were seven full-time equivalent GPs. I would describe the work as overwhelming. My morning surgeries would consist of seeing between thirty and thirty five patients. I'd then be expected to do between six and eight house visits, and then an evening surgery. And while this was going on, we had a maternity unit, which we were also on call for. So, at any time, night or day, we could be called to a delivery at the local maternity unit. Because there were seven of us, we were on call one in seven, but when you were on call, you knew about it, because you could get an average of fifteen calls a day, day and night. I remember weekends used to be particularly stressful, because you could go through the whole weekend without having any sleep, which meant that on Monday morning, you were like a zombie, which wasn't conducive to good medicine. So, we joined another practice, adjacent practice, with four GP partners, and shared the rota, and started to split the weekends into two, so that they became more manageable. There was very little preventative medicine being done; everything seemed to be reactive. I was very fortunate, in that the practice appointed two other new doctors, when one of the older partners retired, which enabled me to join the practice too. I joined the practice, because I had such a lot of common ground with the two new appointees. We all felt the same: that we should start to do more about preventing people becoming ill, than just reacting to the crises. And so, we set up a programme of preventative medicine, can I say, between 1974 and 1978. In 1978, we made the decision that the practice was too large to manage as one entity, and, having two surgeries, we decided to split the practice into two. It also coincided with the fact that we were going in different directions. In Lower Gornal, we were tending towards more preventative work, whereas in Sedgley, with the more senior partners, they were holding on to the traditional way of reactive medicine. And the split was

amicable, fortunately, and worked very well for both practices. That enabled us - the four of us down here in Lower Gornal - to get things under control, and that, we bent our efforts towards, during the latter part of the 1970s and the early part of the 1980s. We were one of the first practices in the Dudley area to develop a computerised repeat prescription system, which freed up about an hour a day per partner. And we became a training practice. I think, probably, in 1984, we became a training practice. I wasn't involved as a trainer, but my senior partners were. And that was a superb discipline. Not only did it bring in young blood, but also it meant that we really needed to concentrate on our continued professional development, and keep ourselves up to speed and up to date. We developed a very good relationship with the other training practices in Dudley, and, from that relationship, grew the relationship we had with a recently appointed - or more recently appointed - endocrinologist and diabetologist, Dr Zalin, at Wordsley Hospital.

(8) Can you talk about how these changes, in the 1970s, affected patients with diabetes?

Yes. I mean, traditionally, if a diagnosis of potential diabetes was reached in general practice, the patient was either referred to outpatients at the hospital, if the problem didn't seem to be life-threatening, or they were admitted as an emergency in a crisis. During the period 1974 to '78, when we became a little more proactive, we started looking at patients with maturity-onset diabetes - Type 2 diabetes - and learning how to control those patients at home. So, we up-skilled ourselves, not only in the diagnosis of diabetes, but also in the management of Type 2 diabetes. Type 1 diabetes, we still felt was beyond our expertise, and tended to refer all Type 1 diabetics to hospital.

When you talk about "in the home", did this involve home visiting, or simply the patient reporting how they were getting on?

It was really the patient reporting how they were getting on. Most of the patients, fortunately, were mobile, although we did a lot more home visiting then than we do now. Some of the patients with complications, particularly the amputees, we used to visit at home, but it was quite difficult to arrange patient testing, in those days. We didn't have blood sticks. I mean, we used to test their... or try to assess their glycaemic control by using urine dipsticks, which was purely a surrogate marker of blood sugar levels, but that's all we had, at the time.

In the 1970s, did you know how many people in your practice had diabetes?

No, we didn't. In fact, in the seventies, it was quite difficult to keep track on patients, because we had... we were a group practice, so the patients could elect to see whichever doctor they wanted to see. So, it was quite difficult to manage continuity of care, because you may well have seen a patient on two or three occasions, then they'd be followed up by one of your partners. So, it became obvious to us that we needed to have a common approach.

(9) And we struggled with this, for a while, trying to write protocols regarding

the diagnosis and management of Type 2 diabetes. But then we developed a unique solution to it. We noticed that patients had preferences, and that doctors had preferences, and that we all behaved quite differently towards our patients, and the relationships that we had with our patients were all different. So, we decided to develop, within the practice, individual lists. We did this with the patients' knowledge, and the patients' agreement. And I remember, one weekend, spending the whole weekend in the building with the staff, sorting out the records into four equal piles, so that we got an equal number of patients. So, the agreement we had between ourselves is that so long as we all had the same number of patients, we would regard that as being equal shares, and it was up to us how we managed those. And it worked very well, particularly as far as continuity of care is concerned, and then coming to terms with the size of the problem that we had, particularly in diabetes.

Can you give me any idea of the scale of the problem with diabetes, in the 1970s?

I came out of hospital with the impression that we could do a lot better with diabetes than we were doing at present. I felt that it was far more common than people felt, and I think that's probably 'cause I saw quite a high number of patients with complications. And I'd learned that these complications were, perhaps, preventable, with early diagnosis and good management. So, I began looking for it, and so I was proactive, and fortunately I shared the same philosophy with my partners. And we began to devise opportunistic screening, particularly for hypertension, because we'd noticed that hypertension was much more common than we'd been taught at medical school. And there was a big overlap in the population of hypertensive patients and patients with Type 2 diabetes. So, we started to screen them annually, and do annual blood tests or random blood sugars, opportunistically screening everyone who came into the surgery for hypertension. And so, we were proactive, in that respect, and began to become aware that there were far more Type 2 diabetics out there than we'd been taught, and that their needs weren't being met.

(10) How did things change in your practice, in the 1980s?

Following the change of practice, and the division of the practice into two, in 1978, this gave us breathing space to start to look at preventative programmes, and to begin to scope the problems that were facing general practice; that's the problems of coronary heart disease, hypertension, diabetes, epilepsy, hypothyroidism. We decided to become a training practice, so that we could motivate ourselves to continue our professional development, and learn more about the challenges that were facing primary care. And also to draw on the support of surrounding academic practices, which were probably a little bit further down the road than we were. And, in addition to that, draw on the resources lent to us by the visiting trainee GPs - they were called trainees in those days, they're called registrars, now - because they were bringing new and fresh knowledge straight from medical school. And we found that that was a useful educational resource, too. So, we began to scope the problem. We joined the local training practices' meetings,

and then we developed a liaison with Dr Zalin at Wordsley Hospital. And he was expressing the need for the enhancement of services, within general practice, to deal with the diabetes problems, and was quite prepared to train us and educate us to develop our own diabetic mini-clinics. There was a great deal of enthusiasm for this, amongst the training practices, and if my memory serves me correctly, Dr Zalin began this course of education and training in 1985. We attended, as a practice, meetings every two weeks, at Wordsley Hospital, and he took us through the whole range of diabetes: the pathology, the early presentations, early diagnosis, management plans, screening for complications. And so, at the end of a couple of years, we felt confident to start our mini-clinic. During the two years of training, Dr Zalin encouraged us to build a practice-based diabetes register, and enter every diabetic patient on that, whether they be Type 2 or Type 1. This we did. We were still a paper-based practice, at that time, so we used to colour-code the patients' records, so that they would be easily identifiable. And also remember that we had individual lists, at that time, which made it much easier for us to develop this data. By the time we developed our mini-clinic, we'd got a full register of all our diabetics, and we were able to design the clinics around this number, and allow patients to have a review every six months, to start off with. At that time, my practice list size was just over ten thousand, and we had two hundred and forty diabetics. I think the incidence of diabetes was reported nationally as being 2%. At that time, we still felt that we were under-diagnosing diabetes, and we felt that the incidence was more like 3, 3.5%.

(11) Can you describe what your mini-clinics were like, when they started in 1987?

Yes, all partners here were involved in delivering the service. We used to run two clinics a month; two doctors in one, two doctors in the other. We had a phlebotomist, who came every two weeks, so that we arranged for the patients who were... the patients to have their blood test two weeks before they were due to come to the clinic, so that when they came to the clinic, we'd got their blood test results. We had a practice nurse, who was willing to learn about diabetes, and so she gradually up-skilled herself, during the following two years, until she was able to carry out most of the clinical measurements, prior to the patients seeing the doctor. We had a dietitian in attendance at the clinic, and we had access to chiropody, at the far end of the health centre. While we ran our diabetic clinics, we were still in contact with Dr Zalin, and continued our professional development on a monthly basis, attending meetings at Wordsley Hospital.

Can you describe the nurse's role in the clinic?

The nurse would see the patients first. She'd make sure that all the blood test results were back from the test two weeks previously. She'd do a random blood glucose, with the BM sticks; she'd test their urine for sugar and protein; check their blood pressure; inspect their feet; ask them about their diet, and about their exercise; and record all the data on our clinic sheet. And then, when her consultation was over, the patient would come and see the doctor. And we'd go

through all the parameters, and discuss the rudimentary targets that we used to set for the patients, in those days, and discuss their progress towards the targets, and diet and exercise, again, and then check the circulation in the feet.

(12) You mention exercise, but said that you didn't really learn anything about exercise during your training. So, when did the awareness of the importance of exercise dawn upon you?

It was really emphasised during the training that we received from Dr Zalin. And, although we felt that it had a bearing on the control of diabetes, its importance was brought home during the training. And we were encouraged to do a formal assessment of the patients' exercise at the time of initial assessment, and then to begin to talk about exercise, and the relationship between exercise, diet and blood sugar, with the patients. We always felt that it was much more important with the Type 1 diabetics, who'd got to try and maintain glycaemic control between varying levels of exercise, and a fixed diet, and fixed doses of insulin. So, we tended to concentrate our exercise efforts on the Type 1 diabetics. But again, later in the development of our mini-clinics, we began to realise that it was much more important for Type 2 diabetics, particularly in the early phase of their illness, and particularly as most of them weren't getting significant amounts of exercise at presentation.

But when you described the jobs of your patients, they sounded as though they involved a great deal of exercise, so why did the exercise cease?

I think because the vast majority of men had worked physically very hard. When they reached retirement, they felt that they were due for a rest, and, consequently, their exercise levels fell dramatically. And they became quite sedentary, and their social lives tended to revolve around the local pub or club, getting very little exercise at all.

(13) And do you have any more memories of changes in the 1980s?

Yes. Parallel to the development and rolling out of the mini-clinics, a Diabetes Resource Centre was developed at Wordsley Hospital by Dr Zalin and Dr Labib. We were encouraged to feed into the Diabetes Resource Centre our... the register of diabetics. And, in fact, in the early nineties, Dr Zalin wrote out to all GPs in Dudley, and encouraged them also to notify the Diabetes Resource Centre of all diabetics. And the whole idea of that was to develop a retinopathy screening service based on the Diabetes Resource Centre. It was recognised that not all practices felt able to host diabetes mini-clinics, or manage their own diabetic patients, and so a health economy-wide programme was developed to try to improve the diabetes care of those patients who didn't have access to mini-clinics. The Diabetes Resource Centre also developed specialist diabetes nurses, who worked as a liaison between primary care and secondary care, in as much as if we had a patient whose diabetes was insufficiently well controlled on oral hypoglycaemic agents, and we were considering an insulin changeover, then the diabetes liaison nurse could be contacted, and she would supervise the introduction of insulin into the patient, under those circumstances. Insulin

initiation, in Type 1 diabetics, was still being done in the hospital, at that stage, but we were gradually up-skilling ourselves to be able to identify those patients who were amenable to insulin initiation in the community. And again, this was done with the help of the diabetes liaison nurses, who were becoming a very useful resource. The Diabetes Resource Centre continued to develop, during the nineties. And, in fact, annual screening was offered to all diabetics in Dudley, through that clinic, with the help of two or three GP clinical assistants, who worked alongside Dr Zalin, and provided that retinopathy screening service. However, most of the GPs who were running their own diabetic mini-clinics, were trained by the local ophthalmologists to provide the ophthalmology, and a fundoscopy retinal screening service, which we did in our own mini-clinic. And the Diabetes Resource Centre continued to collect data on the patients of Dudley, right to the mid-nineties, as far as I know. One of my colleagues, Dr Steve Parnell, was very heavily involved in that. And, in fact, he conducted an audit - a comparative study, really - of the quality of care of patients attending GP diabetic mini-clinics, and hospital outpatients, which... really, the outcome of which, really seriously motivated us, because it was quite obvious that our patients were receiving a higher standard of care than the patients attending hospital outpatients. And that led us to believe that further investment in the mini-clinics was worthwhile.

Was that just going on the patients' subjective assessments, or were there measurements?

There were measurements, yes. It went on HbA1c, cholesterol, blood pressure, body weight, BMI, things like that, yeah.

(14) How were you affected by changes in the National Health Service?

We were all disappointed by the imposition of the contract in 1990, but it was imposed in such a way that our representatives could continue the debate about the priorities of the contract. And it really didn't affect the way that we were working. We were able to continue developing the services that we felt needed to be developed, and continue running the mini-clinics, which were then running extremely well. The next big change was the introduction of general practitioners to commissioning, both in fund-holding, and in locality based commissioning. It had been recognised, by the then government, that general practitioners were in a unique position, knowing what services were available for their patients, and which services the patients would desire or require. Fund-holding and locality based commissioning gave an opportunity for GPs to be involved in commissioning, and this means that they were involved in the purchasing, as well as the design, of services for patients. The experience that was learned in fund-holding and locality based commissioning was almost lost in the change of government, in 1997. But then it was recognised that there was a lot that was positive about fund-holding and locality based commissioning, and the involvement of general practitioners in the commissioning process. So, then we started to develop towards Primary Care Groups, in which groups of GPs would be involved more heavily in commissioning across-the-board services. I was involved in the development of the Primary Care Group, or one of the Primary Care Groups in Dudley, and became chair of what was called Beacon and Castle Primary Care Group. And one of our priorities was to try to improve the services for diabetic patients, and to improve the standard of care across the whole of the PCG, so that we could get rid of these islands of poor care, and make the same quality standards of care available to everyone within the Primary Care Group. And, to this end, we developed a large PMS collaborative in 2001, in which the care for diabetics was standardised within the contract - that's the PMS contracts, the quality based contracts. So, their diabetes care was standardised within the contract, and that it was monitored carefully by the PCG, at the time. And in 2002, Beacon and Castle PCG became Beacon and Castle PCT, and thankfully retained its clinical leadership. And diabetes services were again enhanced by the development of community nurse specialists in diabetes, who were able to support the diabetic mini-clinics, able to provide the services that, a decade before, had been provided by the Diabetes Service... Diabetes Resource Centre, developed at Wordsley Hospital. And, from 2004 onwards, the diabetes community nursing team has gone from strength to strength. And it's been one of our defences against the iniquities of Payments by Results, which is the new way in which secondary providers were paid, that came into existence in 2004, 2005, if I remember correctly.

(15) PMS - Personal Medical Services - is a locally based contract between a GP practice, or group of practices, and the PCT - the Primary Care Trust. It's a quality-based contract, and it's monitored very carefully by the Primary Care Trust, and payment is based on performance against certain agreed targets. This was going very well in 2002 to 2004, and more and more of our patients were being managed in primary care. And there was an incentive for hospital consultants to discharge patients to their primary care mini-clinics, particularly as confidence had grown between the diabetes specialists in hospital and the general practitioners. In 2004, with the advent of the new payment system for secondary care - that's Payment by Results - this incentive was lost, because the hospitals were then paid for what they did. So, they were far more reluctant to discharge patients back to their general practitioners, and tended to encourage people, who weren't interested in delivering diabetes services in the community, to refer patients to secondary care. So, it actually reversed the flow of patients from primary care into secondary care. Dudley Beacon and Castle PCT -Primary Care Trust, at its inception in 2002, was committed to improving community-based services for patients. And one of the areas that it was concentrating on was diabetes. There was a desire to develop a strong and well-equipped community-based diabetes nurse specialist team, and this was achieved. There was also a diabetes Local Enhanced Service developed, which raised the standard of diabetes care in response to need, and rewarded the practices that provided diabetes care at a higher standard. This service was so well taken up, particularly by the Personal Medical Services collaborative, that when Payment by Results came in, in 2004,

many of the patients were reluctant to go to hospital or to be referred to hospital. Most of them preferred to stay with their general practitioner's services, and be looked after by their general practitioner, supported by the community nursing team. So, it was a hedge against the reversal of patient flow, which had been encouraged by Payment by Results.

(16) And how else have you been affected by changes in the National Health Service?

The most significant change, I think, was the introduction of the new general practitioner's contract in 2004, and the Quality and Outcomes Framework, which set very clear targets for the management of diabetes within primary care. And also encouraged every GP to be collecting information on their diabetic patients, whether they were involved in the management of that diabetes or not, over the whole of their practice area. So, that was a very significant change. And also the introduction of Local Enhanced Services, which were designed to further improve the community-based services, and the services available to diabetic patients.

Well, we're sitting here in your Lower Gornal surgery in 2008, which is one of the explanations for the many sound effects in the background, can you look back to this same practice in 1972, and compare and contrast the treatment of patients with diabetes?

You think this is noisy; in 1972, it was a lot noisier than this, because the practice - the surgery - was open almost all day. Patients were seen either by appointment, or just walk-in patients. It was quite chaotic. Diabetes patients were seen, and probably almost immediately referred to hospital, either as an emergency, if they were ill with their diabetes, or to a management clinic if the diagnosis had just been made or suspected. That's quite different now. Even when we have five surgeries running, five doctors working, two nurses working, the waiting room is very much more controlled. Access is far better. Patients can... we still see walk-in patients, but access is much better these days. Diabetes patients are very rarely seen in a normal, generic surgery. Most diabetics are seen in the diabetic mini-clinic, and very few have problems between clinics. If they do, they know who to contact. Most of the patients are empowered to deal with their own difficulties. But the biggest change of all is the fact that we very rarely see a patient presenting with hyperglycaemia - a high blood sugar level - because we're proactive. We screen the population. We've identified those patients who are at risk from diabetes, and we screen them on an annual basis. So, we pick up diabetes at a very early stage, before it actually presents as hyperglycaemia, these days. That's the biggest difference, I think. And only slightly secondary to that is the fact that patients, these days, are empowered. They know a lot more about their conditions. They know the effects of diet, exercise and the drugs on their blood sugar levels. They know that it's important to control their blood pressures, their cholesterols, and their body weight as well. And part of our management plan is to educate patients in terms that they understand, so that they can manage their own diabetes.