

S4 E13: JOMT: CVD with Dr Jim Moore; Methotrexate Monitoring, Opioid Withdrawal Strategies

Neal Tucker: 0:00 - It's Friday, the 9th of June, and this is the Hot Topics podcast. Welcome to the Hot Topics podcast from NB Medical. My name is Neal Tucker and we've got a jam packed podcast for you today. Later on, we have the next installment of our interview series. Just One More Thing This time we're joined by Dr Jim Moore, who's had a long career as a GP but is also the current chair of the Primary Care Cardiovascular Society. What he doesn't know about cardiovascular disease we do not need to know, which is why I may need to rebrand this as just a few more things but stick with us, because I learned a hell of a lot by chatting to Jim for half an hour, and I hope you will too. We'll also, of course, have some new research one paper from the BMJ on methotrexate monitoring and one from JAMA on helping people with chronic opioid use get off of their medications. And, of course, then there's the news in general practice.

First I should do the news for NB Medical. So loads going on in June, really busy month for us. Do check out the www.nbmedical.com website for all the upcoming webinars. So Saturday, the 10th, we're doing a live webinar for the Hot Topics course. If you're listening to this after then. Don't worry, we'll be doing another one of those on Friday, the 30th of June. We've also next week, so on the 15th of June, that's a Thursday morning we've got our New to General Practice course. It's a new course that we've just developed. It's targeting people who are newly qualified in general practice or they're just due to finish their CCT.

Do check out the website for that. Also, the next day, we've got our Women's Health course always really popular Abnormal blood tests coming the week after that. Also, managing obesity. And remember, if you signed up to NB Plus, our subscription service just over £300 a year you can join us for all of our live and on demand webinars at no extra cost throughout the year. What's the big news for general practice this week? Well, of course it is Wee Govee, wee Govee, wee Govee, wee Govee. Probably the last one, but take your pick. Maybe better just to use the generic name Semagletide or Semaglutide. Or we never had this problem with aspirin. Anyway, all over the news, GPs will be prescribing Semagletide. It's a game changer. Elon Musk uses it. We've solved the obesity crisis Hooray. I'm sure many of us will be hitting our heads against the wall.

That's not to say that it's not an effective medication. It is an effective medication for losing weight. We're going to be talking a lot more about it on the next hot topics course, but you really do get the impression from the media that people will be able to walk into their general practice and will be given the medication. It did NICE approval in March, but, crucially, it's meant to be given as part of a tier 3 weight management program. Nice did not suggest that GPs should be handing it out left, right and centre. It almost feels like the government have done it deliberately to bring on yet another conflict with our patients. In fact, what the government decided to do is not follow NICE's recommendation. Okay, fair enough. It's also not that all GPs should be prescribing Semaglutide for weight loss to their patients, fair enough. This is about a pilot to see whether it is feasible for GPs to prescribe this in the community. To quote the BBC, the new scheme will test how GPs could safely prescribe such drugs. But do we really need a pilot here? because I think we already have our answers.

For patient safety, along with the prescription, you just need to give them a sharp spin and a sick bag, and for clinician safety, you need to be wearing some kind of heavy duty protective clothing. I'm thinking, something like they wear in ice hockey, for when, at two years, you have to tell the

patient that you're going to stop this drug, because at that point all hell is going to break loose. I'm not looking forward to 2025. Entrepreneurial clinicians could get ahead of the game, setting up their own private clinics, doling out wee-go-vee pens like their smarties for the inevitable demand that's been driven by this policy. All of this, of course, is predicated on the notion that you'll actually be able to get some, due to the demand, supply has been an issue. Sucks to be diabetic right now. If you're needing Semaglutide, all your medications are being used by Instagrammers and TikTokers. Well, you might think that your toes falling off is important, but I need to fit into these skinny jeans for my next selfie. Let's move on to the research before I really get myself in trouble. So, first up, we have a paper in the BMJ. Now cards on the table. This is a paper that I don't really understand, but the outcome is quite interesting. The title is risk stratified monitoring for methotrexate toxicity in immune mediated inflammatory diseases prognostic model development and validation using primary care data from the UK.

Methotrexate, of course, is a great medication if you've got inflammatory disorder, if you've got rheumatoid arthritis, psoriatic arthritis, then this is a life-changing medication. Back in the old days you just had to go on steroids till you looked like a blimp and had a heart attack. Now we have alternatives and methotrexate is the most likely option. We've got loads of patients in all of our practices who are taking this drug. While generally well tolerated, we know that it is also linked with some problems cytopenia, liver dysfunction, acute kidney injury and because of that people need some careful monitoring. Most of the problems happen within the first few months of treatment. Then, as part of shared care protocols, that treatment gets transferred into general practice and then we continue to monitor people and typically you'll have a patient having a blood test every two to three months. It's one of the things that the CQC always look at when they inspect practices, because if you don't have a system in place, if you're not keeping them up with these blood tests, you are not keeping your patients safe. But is that actually right? As the authors of this paper say, no evidence-based supports the use of three-monthly blood tests in the early detection of liver, blood or kidney toxicity during long-term methotrexate treatment. Problems after the first year are uncommon.

Abnormalities are often due to something else, like another infection or another treatment, but will still require further testing to try and work out what on earth is going on. You might have to stop the methotrexate. That might in a disease flare-up a lot of anxiety for patients. Could all of that be avoided safely by doing less tests, not more? So the researchers used UK healthcare records on adults diagnosed with an immune-mediated inflammatory disease who'd been prescribed methotrexate to develop and validate a prognostic model to allow risk stratification of patients, so to try and work out which patients were likely to have a problem, which could then determine the frequency of monitoring that was required. If you're higher risk, let's focus our efforts There. You can have some more blood tests. If you're lower risk, great, you don't need so many tests. We can lower the burden on practices and patients alike.

They included 11 candidate predictors, 17 parameters, plugged it all into some statistical tools that only statisticians will understand, and at the end out came this prognostic model that they then validated to show it had a suitable level of accuracy. This is not one for you and I just yet, but this probably is the future of how we're going to monitor people on methotrexate and make decisions about the frequency of monitoring. The linked editorial suggests that low risk patients may only need a blood test every 6 or even 12 months. That sounds like great news for everyone involved. Now our second piece of research was published in JAMA last week, reducing opioid use for chronic pain. With a group-based intervention, a randomized clinical trial. All of us will have been in the position where we have patients on opioids for chronic pain. The patient still seems to be in

pain, the opiate doesn't seem to be doing any good, but they don't seem to want or can't stop it. We don't know why they were started on it in the first place. We suggest stopping it. Everyone starts getting angry with each other.

We all know the pattern. We've all been there before. Here, then, the researchers are trying to answer two questions. So, firstly, compared with usual care, can patients with chronic pain reduce opioid use through a multi-component intervention? And secondly, can that intervention improve pain interference with daily activities? I'm going to skip to the end and work backwards with this one. I think, so. They recruited 608 participants. The median daily morphine equivalent dose was 46 milligrams. A third of participants were on less than 30 milligrams of morphine a day, while one in 10 were in the highest opioid category. So they were having over 150 milligrams of morphine equivalent each day. Can you imagine having more than 150 milligrams of morphine in a day? I'd be amazed that you're still standing. At 12 months follow up. 29% of the intervention group, compared with 7% in the usual care group, had discontinued opioids.

They found no statistically significant differences in pain interference with daily activities, which I get the impression from the way the authors have written it they were quite disappointed in, but actually in my mind it would seem. Well, these people have stopped their opioids and their pain is no worse. So that seems like a win to me. So good news, I think, for participants and the authors of this study. But how does this relate to anything that we're doing in day-to-day practice? Even though this was a UK-based trial and the patients were recruited from primary care settings, it is hard to see how these findings are generalisable to you and I, with an individual patient who has got chronic opioid use sat in front of us. Nevertheless, I think there are lots of lessons we can take away from this paper. Firstly, getting people off of long-term opioids is hard. The success rate with usual care was just 7%. People will try and fail and just like with any other addiction, any other addictive substance, don't get disheartened. Reassure the patient and you can always try again. Secondly, you and I in normal general practice cannot deliver the interventions that were delivered in this study.

So in the treatment group, one of the interventions is it's a bit difficult to understand because of the way the authors have written this, but they've written it as three-day-long group meetings held once weekly. Does that mean that these patients have gone to multiple three-day-long group meetings? Can you even imagine I'd be like what fresh hell is this? I would just go cold turkey on day one and hope for the best. The patients also had input from a specialist nurse who would do a one-hour consultation with motivational interviewing, follow-up calls and a face-to-face consultation as well. So this is an intervention that needs to be delivered on scale. Perhaps it could be done in a PCN. Maybe it needs to be a community hub that's commissioned by an ICB. But I wonder if the authors have maybe missed something here. Both the intervention and the comparator arms received enhanced usual care. This is described as consisting of My Opioid Manager, which is an online tool from Canada.

It's got useful information for healthcare professionals and for patients on prescribing and withdrawing opioids, also a self-help book and a relaxation CD too. But maybe they should have had a third arm, an arm where that patient sits down with their GP, they have a one-to-one conversation about the issues, put a plan together about how they're going to address it and then organise some follow-up. I haven't ever audited this part of my practice, but I would hazard a guess that most of us would see a better than 7% opioid cessation rate. I could be wrong. If you know any research in this area, please do get in touch. But I just wonder if this is another example of where GPs may be one of the most cost-effective interventions in the health service.

Time now for our interview. Just one more thing. You will be very familiar with this concept now. So we ask GP experts three questions. Firstly, what do we need to know about in your field that's going on in general practice? Number two, what do we need to know about this going on in secondary care? And three, what will the future look like for managing these conditions, or what will be pushing the boundaries of medicine here? Today I am really lucky to be joined by Dr Jim Moore. So he is a GP and he's also the president of the Primary Care Cardiovascular Society. Jim, thanks for joining us today. How are you?

Jim Moore: 13:39 - I'm fine Neil, it's a great pleasure, and indeed a privilege, to be talking to you today.

Neal Tucker: 13:45 - I've done a very brief introduction, but there's a lot of strings in your bow, so why don't you tell me just a little bit about yourself to get us started?

Jim Moore: 13:53 - I am a GP who stepped away from doing general practice after 35 years around about a year ago, but I still have a GP with special interest commitments. I'm a GP specialist in a heart failure service. I'm currently the president of the Primary Care Cardiovascular Society. I also have several other roles, which include being one of the national co-leads primary care co-leads for what is the cardiac transformation program. It's probably what. Just saying a few words, Neil, about the PCCS, the Primary Care Cardiovascular Society. So it's an organisation which has really changed dramatically over the last two or three years from having a very small membership of specialist GPs to now having over three and a half thousand.

We are looking to promote best practice through cardiovascular health education, training, service development and a very important component of that is supporting our membership to deliver optimal care. The PCCS, we feel, has an important role in facilitating and leading primary care cardiovascular research and we also provide now a very important voice within across that sort of national cardiovascular stage, whether it be inputting into the nice guidelines or whether it be in discussions with other cardiovascular organisations or indeed NHS.

Neal Tucker: 15:35 - Let's go on to our first question then. Jim, give me one thing, then, that we need to know about that's happening in primary care related to cardiovascular disease right now.

Jim Moore: 15:48 - So let's just highlight something that's happened in the publication of QOF in this last month or so. Although we spend a significant amount of time looking at people with other aspects of CVD risk factors, I think cholesterol is one of those areas where we perhaps should have but have not paid as much attention as we might have. I think that's partly been driven by the fact that QOF has such an important part to play in influencing what we do in terms of practice. Without that QOF focus, then, cholesterol has been languishing. I gave the example earlier on of many people with established cardiovascular disease, people who have had heart attacks and strokes, who are not currently on lipid-lowering therapy, and we know, for those who are on lipid-lowering therapy, that many do not reach what is nationally or even internationally agreed targets. So the introduction of two QOF indicators is, I think, very, very significant. Between them, these QOF indicators are worth 30 points, so that's somewhere around £36 million. So the first QOF indicator is for those who are high risk those with established vascular disease, coronary artery disease, PAD, who have had strokes or indeed have chronic kidney disease.

It's the percentage of those who are currently prescribed a statin or, where a statin is declined or clinically unsuitable lipid-lowering therapy. So that's the first indicator. The second indicator I think is really, really important. It gives us a target to aim for when we are using lipid-lowering therapy

and people with established vascular disease, and that target is a non-HDL target, a non-HDL target of less than 2.5 millimoles per litre, or an LDL target, an equivalent target of less than 1.8. One of the challenges I think we have had in terms of lipid management is that to this point in time, nice guidance points us towards achieving a 40% reduction in non-HDL cholesterol. And I think in many ways that has been seen as too great a challenge by most in primary care. And it's encouraged to certify and forget approach to managing cholesterol. So start someone on a statin, achieve some form of lipid lowering and just maintain that lipid lowering with actually looking at what you're actually achieving. So to actually have a target I think will be a major step forward.

If you've been around the scene for as long as I have, you will remember a decade or more ago we did have targets that we carried around, achievements, potential achievements in terms of lipid lowering, and I think to return to that, to be carrying a figure around in our head would be very useful. We do know that nice are currently looking at this as part of an extended scope of the CBD prevention guidelines and later on this year we hope we may have a target from NICE. It may be the same as the target that's within QOF. It may be, different. There may not be a target, we don't know. It really depends on the outcomes of their discussions. So the target we have of a non-HDL of 2.5 may be a temporary or starting point and it may change within the next year or so.

Neal Tucker: 19:46 - Why is it advantageous to this group to actually have a target rather than just say they're all going to go on 80 of atorvastatin? We've already maxed out our statin option there. Why bother with a target at that point?

Jim Moore: 20:00 - Well, firstly, Neal, that many of those people who are currently taking lipid-lowering therapy and are at high risk do not reach what we would describe as even modest targets in terms of cholesterol reduction. We know that that response to taking medication such as statins can be quite variable, but in a significant number of people, if not more than 50%, it's not going to be sufficient to reach a target which is internationally recognised as important in terms of cholesterol. We also know that, by large, in treating cholesterol, we tend to think about using single drug therapy. But if you look at examples, say in managing hypertension or managing heart failure, we now know that combination therapies are very important and equally, within the area of managing lipids, combination therapies are very, very important. So, statin therapy as your baseline treatment, where appropriate, the addition of ezetimibe it's a drug which in the past we've often been discouraged from using, and this was based around the lack of evidence about hard longer term outcomes. We now have that evidence and we know that, when used in combination with statins, ezetimibe has a significant additional lipid-lowering effect. We've also now got new drugs available to us which, in addition to using those, the drugs I've just described, can give additional lowering of your cholesterol, and these are drugs, in fact, that we are going to have to use to actually achieve the targets that are set in many of our patients.

Neal Tucker: 21:56 - On that note, where are we with Inclisiran then we were talking about it on the Hot Topics course about three years ago and then we had a pandemic and everyone seemed to forget it existed. Are we going to see in general practice anytime soon?

Jim Moore: 22:11 - It's quite interesting when you look at data around its use. It's very variable. If you look at areas such as down in the southwest, it's quite commonly used. I think the problem with Inclisiran is that it's delivered in an unfamiliar way. It's an injectable. And we associate injectable cholesterol treatments with specialist initiation and follow-up, and particularly PCSK9 inhibitors, which are used in people with inherited lipid abnormalities such as familial hypercholesterolemia.

But we now have nice recommended treatments that can be initiated within primary care and nice make a particular point in that TA of not suggesting that this is a drug. That should be specialist initiation or specialist follow-up.

There is an interesting position, or interesting position statements, from some of our national organizations around Inclisiran, based around the fact that it's a new drug, based around those hard outcomes. Yet we know that consistently, Inclisiran will reduce your LDL cholesterol by 50%. The studies, the publications that we have now show that that is maintained over four or five years and we have evidence that if you lower your LDL cholesterol by a given percentage you will reduce the cardiovascular risks for that population in an equivalent way. You can go back to 30, 40 years ago where people were having some form of gastrointestinal surgery ilio bypasses to actually reduce their cholesterol and you could see on the basis of what you achieved, even by a non-medicinal approach, that you could predict what the benefits in terms of cardiovascular outcomes were for that population. So there's absolutely no reason to think that we will not see the same benefits from using Inclisiran and obviously in several years the research will come up and give us the anticipated hard outcomes related to that.

But the question I would have around Inclisiran's use and the questions that have frequently been raised. Do we really want to wait four or five years till we have another randomized control trial that give us those hard endpoints around mortality, etc. Or should we look at what has happened historically, based on what we can achieve in terms of LDL lowering and anticipated outcomes?

Neal Tucker: 25:07 - I reckon the other big bugbear for people is that they might have been hoping for some funding for the introduction of this new treatment, given that it's injectable. Do you think there's any scope for extra funding for practices with this?

Jim Moore: 25:21 - So yeah, i think that's down to local negotiation. I mean there's just no way across the country that lipids specialists could take on the initiation and prescribing of Inclisiran. They struggle in many parts of the country to actually cope with the work demands of looking after people with, say, inherited cholesterol abnormalities. We looked at these figures down in our particular area about what it might mean for practices. In relative terms, the number of injections of Inclisiran that would be appropriate for our population are actually down in single figures on a weekly basis. The injections themselves are no more complicated than, say, giving a vitamin B12. The other, i think important thing, it is a new treatment. It's a black triangle drug, but we now have a number of years of follow-up of using this medication. That shows that it's really really well tolerated. Other than potentially some reactions around injection sites, it's a very, very well tolerated therapy. The other thing we know about when you compare oral with injectable drugs, we know that there are frequently problems over adherence to oral therapies. There are a number of people who are consistently taking medications such as statins, varies taking them not only on a regular basis, but they may be taking them intimately. They may not be taking them at all. When we're giving injectable therapies and we've given an injection-saving Inclisiran twice a year, we know that it's actually a cut. Know that they will have somewhere around 50% LDL lowering, so you know what you're getting.

Neal Tucker: 27:13 - Okay, let's move on from cholesterol and let's go to our second question then, Jim. So what do we need to know about that's important in cardiovascular medicine, in secondary care, right now?

Jim Moore: 27:25 - Let me expand that to say within specialist services, because when we think secondary care, we think about hospital services, and I'm going to talk about heart failure. And

specialist services for heart failure not only exist in secondary care in hospitals, but they frequently exist within the community. If you come to Gloucestershire, we have Gloucestershire Heart Failure Service, which is a large community independent service which looks at diagnosing and managing heart failure and that landscape has that the management of heart failure has changed significantly in recent years. So if we look at a particular type of heart failure, so it's heart failure with reduced ejection fraction, HFrEF.

That's where your ejection fraction is reduced to 40% or less. It should be 50% or above. So with HFrEF we have really good evidence around evidence-based therapies. We talk about pillars of therapy, the four pillars of evidence-based therapy, and traditionally we have introduced these individual therapies one at a time. So we introduce one therapy, we optimise it, we introduce a second therapy and so on until we've got those four pillars in place. And that will frequently take anything up to four to six months to do. But there's increasing evidence that tells us that there are significant benefits to patients if we can get those therapies on board much more quickly. And there's also a move away from a very classical approach to introducing these therapies.

So you start with a RAS blocker, an ACE or an ARB, moving on to a beta blocker, then MRA and then now an SGLT2 inhibitor, the newest class of drugs to be introduced and there's a move away from introducing these drugs one at a time in a set classical order to looking at the patient characteristics and introducing which of the drugs that you think are appropriate, initially introduce them in a small dose and then move on to a second drug and third and fourth drug and the sequencing really depends on the individual. So rather than abc and d, it could be dacb, could be very, very different and that really needs the skill and experience of heart failure specialists to decide as to how these drugs should be introduced and optimised. You will see significant benefit both in terms of symptoms and in terms of those harder outcomes hospitalisations and mortality, from about four weeks on with these medication. So that's why it's really important to get them in place quickly.

The other thing I think that's quite interesting if you look at almost every area of healthcare, not least in cardiovascular disease, we don't feel we necessarily have enough of the specialists that we need to deliver care. I think heart failure patients are amongst the most difficult and challenging patients clinically to actually manage and I believe that they should be buying larger. At least their initial optimization on treatments should be supervised and overseen by a specialist team. But the question is what can primary care actually do to support that optimization? and there's some really interesting what's being done around the use of clinical pharmacists I mean clinical pharmacists have been an absolutely fabulous addition to workforce within primary care in recent years and we can see all sorts of benefits for the use of clinical pharmacists across many, many areas.

But cardiovascular disease is one of those areas where I think they have the skill set to support the optimization of treatment. So, with the oversight of a heart failure specialist team, whether it be in secondary care or in the community, using that resource, hopefully funded within primary care, to help with optimization of treatment in this vulnerable group of patients is very important.

Neal Tucker: 32:03 - One of the rationales for getting people on these medications is that they have this longer term prognostic benefit. As we see with so many conditions, it seems the earlier you get people on treatment, the better their outcomes in the long term. That's because we actually do see people's hearts remodeling. I mean, it actually is changing the whole process when you get them on the right medications early on, isn't it? So that's like a big driver here.

Jim Moore: 32:29 - Absolutely One of the important responsibilities we have is making that early diagnosis. Sadly, the evidence that we have tells us that people with heart failure are often present with symptoms many months, sometimes years, before their diagnosis of heart failure is actually made in there. And when we look at where a diagnosis of heart failure is made, say over the last 10 or 20 years, we can see a shift from the majority of patients being diagnosed in primary care with heart failure to now the majority of patients being diagnosed during an acute admission, and we know that the outcomes for those two different populations are different.

So if your diagnosis of heart failure is made during an acute admission, your mean survival is halved as a consequence. When you compare a diagnosis that's being made earlier within primary care And that really is about being able to get evidence based therapies on board, appropriate treatment at an early stage, and that then gives the greatest chance of a heart. For instance, where you have heart failure with reduced ejection fraction, not only do you have a left ventricle that's failing to squeeze effectively, but you often have a ventricle that has become dilated, And we know that with evidence based therapies and early treatment, the prospect of improving and remodelling that heart is much, much greater and the outcomes are much greater. Part of the problem. I think one of the consequences of the pandemic is that it's even a focus in someone who presents with breathlessness is even more likely to be around a respiratory cause for their breathlessness as opposed to a cardiovascular cause.

So, again, potentially adding to that delay, and one of the more typical referrals that I receive into a community service is where someone has been seen in primary care on a number of different occasions where the assumptions being made that their breathlessness relates to a respiratory cause, they've not infrequently had several courses of antibiotics and then the penny drops they've got oedema as well as their breathlessness. Perhaps their questions around orthopnea and PND and they've got orthopnea and PND, and NTPROBMPs done in ECG has done their referred they've got heart failure. So I think we need to raise the awareness around heart failure within primary care. I think the pathway to diagnosis is simple. I think NTPROBMP measuring NTPROBMP is absolutely central to what we do, so it's thinking about it and acting on it more quickly.

Neal Tucker: 35:43 - Okay, that's done it for two. Question number three then Jim what is going to be pushing the boundaries of managing cardiovascular disease in the future?

Jim Moore: 35:53 - I'm going to talk Neil about hypertension. If you look at our long term by our 10 year ambitions around reducing strokes, heart attacks, cases of dementia by 150,000. If you look at the individual cardiovascular risk factors, then hypertension contributes more than any of the other risk factors, whether it be cholesterol etc.

So by addressing hypertension we will achieve somewhere around 60 to 70% of that long term plan. So what I'm really saying is hypertension is probably that top target, and that's been recognised really in this year's NHS objectives. So they, as have been set out in the NHS priorities and operational planning guidance, where healthcare organisations, ICBS, have been tasked of achieving hypertension management in 77% of the known hypertension population.

That's a huge, huge ask. When you look at the 10 year ambition for hypertension management, it's getting 80%. So currently we're somewhere around 60%. That figure was lower during the pandemic. So we are beginning to address the needs of that particular population. Still we've got an awful lot of work to do in the next 12 months to actually achieve that.

Neal Tucker: 37:34 - That feels like quite a difficult target in quite a short space of time. What's going to help us achieve that?

Jim Moore: 37:42 - One of the things we introduced during lockdown was home blood pressure monitoring as a means of monitoring. I mean it was an appropriate way to do that because obviously the contact that we had with people was limited. We know that somewhere around 50% of people who have had a diagnosis made of hypertension will actually have a blood pressure machine at home. We are frequently not aware of that. And we also know that if you've got a blood pressure machine at home that it will remain accurate.

There are studies in work that have been done that show that up to five years after acquiring your blood pressure machine it will remain accurate. There's this thought about every year you have to send your blood pressure machine away to get revalidated, make sure that it's accurate. Well, in fact, that's not necessary. If you've had it for less than five years, you can assume that it will be accurate. So during the pandemic, NHSC distributed, I think, somewhere around 200,000 home blood pressure monitors across England.

We know that nice guidance suggests that in terms of monitoring hypertension, we should be giving people the option of using home blood pressure monitoring, and certainly our experience and the feedback we've had from various programmes and projects that have been done around this is that patients do embrace this. They quite like being more directly involved in self-caring and using their blood pressure.

Neal Tucker: 39:23 - So patient ownership and patient-led testing. That may help somewhat. Do you think there's anything else that can make a difference?

Jim Moore: 39:30 - The other important aspect to all of this is the role of community pharmacists. Community pharmacists are now reimbursed to support the work that's being done, particularly around blood pressure detection. That reimbursement relates to the use of ambulatory blood pressure monitoring to actually confirm a diagnosis. So you may ask why do we use ambulatory blood pressure monitoring?

Ambulatory blood pressure monitoring is the gold standard. It's where we have the evidence around diagnosis. We know it's not widely available. Hopefully, with community pharmacists offering that, it will be more widely available.

Neal Tucker: 40:11 - Jim, you are a wealth of information. It's been fascinating talking to you. Thank you so much for joining us on the podcast today. Hopefully we can do something again soon.

Jim Moore: 40:22 - Delighted. Thank you for inviting me, and I very much enjoyed chatting to you. Thank you.

Neal Tucker: 40:27 - That's it for the podcast. Thanks everyone for listening. Remember you can always get in touch. You can email hottopics@nbmedical.com. You can go on Twitter @GPHotTopics. And don't forget to check out the nbmedical.com website for all the courses coming up over the next few weeks. Enjoy the sunshine, everyone. I hope it's going to be a lovely weekend. Look after yourselves. Bye-bye.