Academy of PHYSICAL MEDICINE

Transcript

Measuring Patient Outcomes With Dave Newell & Jonathan Field

Cast List

Steven Bruce	SB
Dave Newell	DN
Jonathan Field	JF

SB: I've got two fantastic speakers with me this evening to talk about measuring patient outcomes. One of them, Dave Newell, is not a medical practitioner. He has a first degree in biological sciences, a PhD in-

DN: Molecular biology.

SB: Molecular biology.

DN: Molecular biology.

SB: I knew I'd forget one of these things, but more importantly, he's a senior researcher at the Anglo-European college of chiropractic, which is no more. AECC stands for nothing I have just learned. It is now the AECC University College. He's also an external examiner at the UCO, University College of Osteopaths. Everybody's changing that title and I'm too old to keep up with these things these days. His expertise is in the science which goes behind measuring patient outcomes and he has a lot of contact with practitioners such as yourself.

My second guest, Jonathan Field, and he's back for the second time, he was with us some months ago when we did a program on advertising standards. He is a chiropractor, so I have two doctors with me this evening. He also has a PhD in collecting patient outcomes. He is the chair of the pain faculty at the Royal College of Chiropractors, where he is also a fellow. He's also a very keen sailor, so welcome Dave. Good to have you with us.

SB: Good to be here.

JF: Thank you.

SB: What did we say we're going to start with? There's a lot of talk about PROMs, isn't there, across our professions, but I just worry sometimes there's one of these internal arguments that we're having. Does it matter to anybody else?

DN: Yes, I think he really does matter to everybody else. I mean I think probably predominantly if you look at the wider healthcare system, PROMs are becoming very important. There's something called value based care, which is really this idea that, and this is an old thing, that for many, many years, the idea that patients might give you information about how they're doing, was not really thought of as being particularly useful. Which when you look back at that, it seems a bit odd now because of course patients know precisely what's going on. I think this has become very much ... Because of the move towards patient centeredness, I think PROMs are very much becoming central in the expectations that certainly the wider healthcare arena, the NHS in this country, for example, have mandated PROMs in ... were initially four areas postoperatively. In the U.S., of course it's becoming very much that.

How patients feel about what's going on, and what their opinions are and their impression of how their treatment is either working or not working, is becoming very central. With our professions I think it's very important that we look at that wider healthcare arena and start to step up.

SB: You said patients know what's going on. Is that always genuinely the case or does that not matter? It's only what they perceive is going on? Because their perception of whether their movements has improved is often-

DN: Yeah, that's an interesting question because things like pain for example, is clearly subjective. In fact if you think about most things, most of what we all report on, particularly in terms of our symptomatology or how we're feeling about things are by definition subjective. Things like pain, who else would you ask about ... I mean the doctor doesn't know. I often say to my students that, if you had a doctor saying ... well if you said you used a VAS visual analog scale of nought to a hundred and said, "On a nought to a hundred scale, where are you," and the patient said, "Well I think it's 90," and the doctor says, "Wait, it can't be 90 because you've been here for five treatments already. It must be lower than that." Well, who's likely to know?

SB: Yeah, but you've talked about pain. Surely that's not the only measure. I mean if you want to be objective, you can stick GPS trackers on limbs and measure the range of motion, but also quality of daily life, activities of daily living. They're alternative measures of people's improvements aren't they?

DN: Yeah, so there are. That's an interesting question also because there are some ... I mean most of the activities of daily living questionnaires, which is what we we're talking about here. We're essentially talking about questionnaires with a range of questions on around different elements that we're interested in, in an MSK care. It could be pain, it could be disability, it could be some psychological stuff. It could be things about how you feel about whether you're in control and so on and so forth. In terms of most of these things, they are those self-reported stuff. In terms of pain, you cannot measure objectively, so you're never going to be able to sort of say, "Well, you've said nine on a nought to 10 scale. Our piece of wizzy equipment says actually 18." That's not going to happen. Not in any near future.

People have looked at things like you're saying you're tracking. People have looked at whether people's perception of how much they're moving about is actually then correlated to objective measures of moving and certainly in terms of activity. Genuinely, I think probably when people are asked, they tend to overestimate the amount of that than moving about.

SB: Overestimate their improvement or ...

DN: No. Well that depends. I think in terms of when you say to people, it's a bit like how much are you drinking. I think we all tend to say, "Well, I'm not really drinking very much." You tend to sort of underestimate that stuff. It depends on the area you're talking about. I think when people think about exercise and how you're exercising, when people would tend to overestimate that because we all like to say the right thing to the doctor when they ask. Then in terms of pains ... Did you say pain? Was it pain? In terms of pain, what people tend to do, people, patients tend to do, is that they will often underestimate how much they've improved in terms of pain. I think clinicians will often say, a patient will come and say, "Well I haven't changed at all." Then that's the good thing about PROMs. You say, "Well actually you've gone from a nine to a five," so that does happen.

SB: Can I bring you in Jonathan, because I didn't say in your introduction that you're actually the first contact practitioner in a number of NHS practices, GP practices, and you work with osteopaths and physios and there's no differentiation between the three professions. How important are the outcome measures to the NHS employers?

JF: The answer is they're very important. You can use PROMs to actually see how any of your clinician or practice is delivering. You can compare the outcomes of one against another, or if you're running an NHS contract, it's usually one

of the key performance indicators that you have to report regularly. They want to know what they're buying. If they're sending a group of patients to any service, no matter if it's a hospital service or osteopath or a physiotherapist in the community, they're going to want to know what the change of this health status of those patients is.

SB: Is there a standard form across the NHS? This is a loaded question because until a few years ago, we, ourselves, my clinic had the NHS contract for all osteopaths in the East Midlands area. There was a chiropractic clinic that had a contract, but we subcontracted to as many osteopaths who wanted to join us. They told us they wanted PROMs and wouldn't tell us how. We went to the Bournemouth Questionnaire, which we'll look at later, I'm sure. I changed it to make something which I thought was more patient friendly and said, "Right, this is how we're going to measure them." At the end of I think a four year contract of us having to employ extra staff to take all these questions, the NHS admitted that they had done nothing with the data. Is there now some standardization throughout the NHS or is your region particularly-

JF: The NHS isn't one thing. The NHS is lots of things. You'll usually find for example, an orthopedic unit might use the revised alders free, pain disability questionnaire. There is a unifying PROM which has been developed, really coming in over the last three years called the MSK-HQ or the MSK Health Questionnaire, which Keele have validated. That's quite unique in that it measures your health status at the moment related to MSK stuff. Is it movement and activity and sleep and the little bit about mood and things in there as well. It's been validated for knees and hips and backs and necks and shoulders.

SB: This is different from the Keele STarT,-

JF: Yes.

SB: -which was actually measuring your sort of whether you were psychologically affected by the-

JF: The STarT Back Tool-

SB: STarT Back.

JF: -was a stratification tool and it put people into different risk group. The risk group you're in dictated the care which most appropriate for you. Patients in the high risk group had physical factors and psychological factors, which if an osteopath was treating them, that osteopath should also be managing those psychological factors. The medium risk group just have ordinary physical therapy and the low risk group actually seems to do rather well with just a bit of reassurance and a sheet of exercises in the trials which were done. The STarT Back Tool wasn't initially designed as an outcome measure. It was a stratification tool. There is a version of it which can be used as an outcome

measure. Interestingly also developed by exactly the same team, which they did at the MSK HQ. The MSK HQ is definitely the one to watch going forward. That's coming in very, very widely in in the NHS and increasingly. In fact Dave and I are doing a validation study in chiropractic and Steve Vogel's done one in osteopathy, so it's been validated.

The nice thing about this, it cuts across a range of conditions, because PROMs can work in different ways. We can ask a very generic question is, "how are you feeling today?" Something like that short form 36 or the EQ-5D just measures how you are overall. We can ask a very specific PROM, like the neck disability index, which asks, "How is your neck today," which is useful if you're looking at neck or the Oxford knee just looks at the knee. The MSK-HQ looks at everything. As a practitioner who's dealing with MSK conditions could use that across the board. It's been validated for hospital settings, physiotherapy settings, it's been validated in rheumatology clinics and orthopedic clinics, and we're validating it for private practice now.

The idea is we can look at the changing of score and we might find a group of patients seeing an osteopath might have a 20% drop in that score, but if maybe patient's seeing an orthopedic surgeon would have a different drop that'd be more or less, but you can actually compare the cost value because presumably seeing an orthopedic consultant costs an awful lot more with a lot more health risks. If people choosing to buy a service might say, "We want to try the osteopathy first," if the result stackup. At that level, PROMs are important. In our NHS organization we report PROMs every month to our commissioners. They will look at those PROMs. They're actually looking to see are we maintaining at least the same level of patient improvement in PROMs as you were before. Also we look at something called PREMs, which is equally important, potentially even more important to our viewers now, because in private practice, which is about the patient's experience of their service.

If I want to recommend my wife or my daughter to go and see someone I want, because they're going to get good care or there's a health gain to improve, because that's why I'm referring them, but also are they going to have a good experience, is their journey through care, good. That's very much the same things that the NHS is interested in, as well as the cost as well.

SB: Yeah. Another thing I didn't mention, you represent the body in chiropractic, don't you? Which is you're part of what in chiropractic, because you're establishing PROMs in your profession, which is sort of a sister organization to NCOR, the National Council of Osteopathic Research, which is you're doing PROMs for the osteopathic professions. Is that right?

JF: The Royal College of Chiropractors promotes the use of PROMs as good clinical practice. We believe that people should all use PROMs. There's a

range of PROM tools, that there's some paper PROM tools. I'm particularly involved with what's care response, which is what E-PROM system, it's an electronic PROM system.

SB: I see.

JF: Later I'm going to talk about some of the barriers and issues around correcting PROMs, but electronic systems can get around some of the admin issues and the collation of data issues that we have with with paper PROMs.

SB: I guess part of the purpose of the question, and I'm probably rather too sensitive about this, is that people might think, oh you're a chiropractor, what do you know, but actually you work closely with osteopaths. You were talking to Steve Vogel today... This is a collective issue and not just one for yours or mine.

JF: No, no, no. I think what we're talking about, the individual professional identities are slightly a vague thing, where you have practitioners and have different skillsets. I'd rather work with someone who's got appropriate skillset for that patient. I don't really mind which profession they come from because we graduate with a certain set of skills. Then over the next years we develop according to our experience and subsequent training. That's probably more important than where we came out from initially I feel.

SB: What Jonathan has just said makes me think, oh my god, here we go. More confusion because we're now talking about an MSK score. We're talking about the Bournemouth Questionnaire. We've got the Keele questionnaire, one of which is being accepted by the NHS, was being developed by the NHS. The Bournemouth Questionnaire actually arose from the Anglo-European College.

DN: It did, yeah. Yeah, Jenny Bolton was key in developing that.

SB: And became, I thought, quite widely accepted in the NHS. I think that NCORs PROMs, E-PROM system,-

DN: Which is Clin Vivo wasn’t it?

SB: Clin Vivo, yes which we'll talking about. I think that is also based on an abbreviated form of question.

DN: It is, yeah.

SB: Should we be concerned that there-

DN: So many?

SB: Yeah, even if there's only three, we should perhaps be worried.

DN: Well there are a lot. I remember 20 years ago or so when starting to get involved in looking at these questionnaires, essentially the questionnaires, but these PROMs. At the time I think there was a book that was published on a whole bunch of outcome patients. It's a very thick book and you could flick through all of them and it had all of the ones that you could use. Of course they can range from for any condition. There was a bunch of PROMs that are condition specific. There'll be outcomes for people that are attending for constant behavioral therapy. There'll be outcomes for people that are taking drugs for schizophrenia, there'll be outcomes for people that have asthma. There'll be outcomes for the Oxford knee if you had an operation on your knee and there'll be MSK ones and so on.

There are a lot of them. Now within the MSK field there are quite a few as well. Some of them are older, some of them are newer. There have been a number of attempts to get a bunch of experts together and sort of come up with consensus, what should you use as a consensus bunch of these particular PROMs. I think the most recent one, I can't remember when it was, but the recent one I think was around that you should use a general health one. You should use a condition specific one, should use pain and I think they were the three. Three areas. Something about disability, that was it, something about disability, something about pain and something about general quality of life. Now there are lots of different questionnaires within each of those three categories.

Condition specific ones are things like the neck disability index. General health ones are things like EQ-5D. Euroqol's got that. Things like SF 36, I think is a general one.

SB: I bet you're scaring 90% of our audience at the moment, because it's all something really difficult.

DN: Yeah. I think we've done a lot of research on BQ. We're beginning to do some research on the MSK-HQ, but the BQ was one of the first questionnaires that really took into account the biophycho social model. It didn't just ask about disability and pain, which is what most of the older ones tend to have done.

SB: We can put it up on hope on here in a second. The one we're showing on the screen now is the abbreviated version.

DN: That's the neck.

SB: It says neck but it could be for any parts-

DN: It could be for low back pain and it could be for your pain-

SB: As you say, part of it is neck pain. Part of it is how anxious you are, how depressed you are, how it's affected your work, or your work has affected the pain.

DN: You think about biocphycho social modal that says that there are factors that we know that affect improvement from low back pain or neck pain, MSK pain generally, that are either biological, psychological or in the social field. The BQ was developed to try to cover all of those. For example, you can see some obvious psychological ones in terms of anxiety and depression. You can see some social ones, which is about how it's affecting your work and some other psychological ones about self efficacy at the bottom there, so how much do you think you're in control of this. Then we've got like your pain at the top and then this affecting disability.

SB: Is this the basis of the E-PROMs that you're developing as it is for the NCORs?

JF: Just like the NCOR system that the care response system doesn't actually produce a new PROM. It's an electronic system to deliver validated PROMs to patients in an easy way, to collect them, to bring them back to patients. There are moves afoot to try and come up with more standardized PROMs, but you have issues. If I ask someone about that, "What's your quality of life like generally," if I ask all the patients who presented with neck pain, "What's your quality of life generally," and I ask them at the beginning of care and end of care, even if their neck premes improved a lot, we might only have a small change in that scale because their quality of life is related to other stuff that's going on, how well their jobs going, how's their daughter getting with her boyfriend, all these other stuff that's going on in life.

If they've got neck pain, I only asked a question that asks about, how stiff is your neck, how painful is your neck. Like the neck disability index, I'm going to get a much more response. I'm going to get a bigger change. It's easier for me to measure the impact, but actually are we just interested in their neck or are we interest in their overall quality of life? We get these very condition specific things or we can ask the general quality of life, or we get these ones that blur it together. I think as Dave has just said, the Bournemouth Questionnaire was one of the first ones to try to do that, to ask some more general health related quality of life. The MSK-HQ is looking to do that as well.

There's a group of us in the UK who have been working called quality and private MSK practice in the UK and this group involves a lot of the insurance industry. Some of the big providers, the physiotherapy, osteopathy and chiropractic professions are represented there. This is exactly what we're struggling to come up with, this a unified PROM which will capture what we want to capture. A little bit like what Dave has been saying, is we think it ought to have something to do with pain, something to do with disabilities and something to do with their real quality of life.

SB: It also needs to be manageable, doesn't it?

JF: Absolutely, so how do we make it as parsimonious, how do you make it as short as it needs to be, to answer the question you want to. One of the shortest PROMs what might be to a patient to say, "Thinking back to how you were before you came in on a scale of nought to 10, how's your pain now?" They rate that. That's really, really short and very, very easy to score, but you are relying on patient's memory of how they were before. An issue we know that clinicians have is that patients will come in over the first six visits. How are you doing on feeling? I'm feeling a bit better today, thank you. How're you doing? I'm feeling a bit better.

At the end of care, we've had our six sessions. We want to move you on to more of a supportive program. We want to discharge you. Patient says, "Well, I'm no better." I say, "Well hang on a second, I'm looking at my notes. Every time you've said you've improved." If we actually ask them a bunch of questions at the start, how far can you walk, how much can you lift, whatever these questions are, and we then ask them the same questions at a subsequent time at a follow-up assessment, we can directly compare the two and not relying on their memory so much so. A very short PROM is useful, but actually misses some of the richness.

SB: Also is probably thinking off top of my head, it's probably important to in some way, distance it from the practitioner because the way I ask a question will influence the response. The way I phrase it on a piece of paper will influence the response, if they're in my treatment and they want to please me.

JF: Yeah. There's other reasons we want to complete a primary treatment, which we can talk about in a bit. We use a PROM we use a validated PROM. I was a little bit nervous when you said you took the Bournemouth questionaire and made it slightly more friendly, because the moment you change the wording of a PROM, you de-validate it and it has to go back to-

SB: I understand that. I understand that. I did it because the one that I managed to download from somewhere, I tried to download it recently and I can't find it anywhere on the internet, but it was just so wordy and so unpleasant. I just thought my patients won't fill this in.

JF: You're absolutely right. Some of these, there's a question that we should call the SF 36 and it's the short form 36 quality of life assessment questionnaire. How can a questionnaire with 36 questions be the short form? Goodness knows what its grandfather was like, before it was shortened down. You need to select your PROMs and need to decide, do you want a PROM that goes into more details, got more academic robustness, do you want a PROM that's actually clinically usable. The big issue we've got with PROM is actually how do we get patients to complete them. Are they completing them in the waiting room before they come in? What if a patient's arrived five minutes late or they'd moved their appointment and when they change the

appointment, the receptionist forgot to put the flag on it to give them the PROM before the assessment questionnaire.

When they've completed it in the waiting room, they come through with a bit of paper. You've now got to score that and dig up the other one and score that and compare the two together. There's some very practical issues around that, which were to some of the electronic delivery systems are good because you can actually send it out to patients the day before their visit. They fill it in online, so by the time they've arrived it's all nicely scored on the practitioners look it up on the internet.

SB: I have to come clean about our particular PROM that we used. We were bidding for an NHS contract and you will know that bidding for, they call it the-

DN: EQP?

SB: -EQP, the early qualified practitioner contract and they are monstrous. There's so much data you have to fill in on stuff which is totally irrelevant to a single practitioner or a small clinic. It's catastrophic emergencies in a huge hospital they're asking about. One of the things was, how are you going to measure outcome measure. They didn't tell us how. They didn't say what they wanted us to use, so I had to come up with something. I asked them what they wanted and they wouldn't tell me. I just said, "Well this is what we're going to do." I don't think they even paid any attention, as long as I ticked the box to say-

JF: Yeah, that's a real shame if the-

SB: There were no electronic ones that we could turn to in those days. That was the reason we went for it. Just turn to this one small, because of course I've only put the questions up here, these on the paper, Bournemouth Questionnaire have a zero to 10 tick box grading with no pain, lots of pain, no difficulty, lots of difficulty. On the electronic version it's a genuine visual analog scale where you can drag a slider. I don't know how that translates into the scores.

JF: That's not shown with Bournemouth Questionnaire.

DN: No.

JF: The Bournemouth Questionnaire is only being validated on a nought to 10 scale.

SB: Sorry, I'm talking about the osteopathic use of these questions on their-

DN: There's a slider on the app.

SB: There is a slider on the app.

JF: That I'm presuming has to go back through and revalidate that.

DN: Potentially.

SB: Well I use the demo version, so I could be wrong. On the demo version it was-

DN: There is this thing in statistics called categorical data and continuous data. Continuous data is this idea that you've got the smallest increments and it's a sliding scale from whatever, from from A to B, whatever you choose it to be. On those types of continuous data, you can move the cursor if you like on a slider and it could go from nought to 99, 98, 97, so once you get that very great detail, whether that's actually useful in terms of pain, you don't ... probably isn't, what's different between 98 and 97, for example in a hundred point scale, but it is continuous. Or you can get things like ... A patient, global impression of change is an example of this.

Let's go back. You can get a dichotomous one where you could say, "Are you better, yes or no?" That's the opposite end of the scale, where there's just two options, or you can get these ones where there's more categories. An obvious one is seven categories for the patient, global impression of change from my treatment's made all the difference, to, actually I'm a little bit worse and I'm about the same in some other variables.

JF: You actually select a statement, not a number.

DN: Going back to the nought to 10, the nought to 10 is somewhat in the middle between those, but it's important that it remains nought to 10 because that's how the questionnaire is being valid. We can talk about validity if you like.

SB: I was about ask, how the hell do you judge whether this is a valid questionnaire or not?

DN: Okay. This is an area that people like myself and other scientists are involved in, particularly scientists that have no friends whatsoever or any social life.

SB: Do you measure their friendliness?

DN: You could, naught to ten scale. You could. This is an area called clinimetrics. Clinimetrics are like the performance. If you consider a questionnaire to be like a car, then how fast it goes from nought to 60 and how big the engine is, is the performance. In a way, that's what clinimetrics are about, about PROMs or questionnaires. There are normally some key areas that you want to know about when you're developing a PROM or when you're using a PROM. One would be validity, one would be sensitivity or responsiveness, and the other one would be test, retest or repeatability.

DN: Let's take the two simple ones first of all. Test, retest, and repeatability is simply, if a patient says, "I'm a three on a pain scale," or some questionnaire that you're asking between nought and 10, "How do you feel about this particular area," there would be pain and disability. If they say, "Three," and then you give it to them five minutes later and they say, "Ten," either something catastrophic has wrong with the treatment, or if you haven't treated them, or it's not very repeatable. You want that repeatability in short time periods. That's test retest. You would normally do that on one day when you are validating a questionnaire or you're doing the clinimetrics in the questionnaire. You might do it a number of hours later or you might do it in the next day or so on. You would try to get that short term reliability, repeatability. Clearly things could change in terms of pain, so you have to be careful about what time period you do it over. If you wait one day, do it the next day with MSK pain, that might have changed a lot, but if you do it within half an hour, you would expect to get something similar.

The next one is responsiveness. Responsiveness is ... or sensitivities. Responsiveness is better, is the idea that if you get very big changes in your perceived say pain, you would want their questionnaire to reflect that. If you've found that the questionnaire was worded in such a way that when somebody you know reduced in pain a lot, you already got a one point change in your scale, then it wouldn't be very sensitive. You want it to have ... If you've got a big change in your actual perceived stuff going on, you'd want that reflected in a big change on the score. That's another area. The last one is validity. Validity's really important because without validity the other two don't really mean very much. Validity is, is this thing actually measuring what you want it to measure.

Now there are a number of ways you can do that. One is simple, one is called face validity and that is you give it to a bunch of clinicians and say, "Does this wording make sense?" Actually took a bunch of patients, well, does this wording make sense. If I ask it in this way, do you know what I'm talking about. That's face validity. The other more important one is concurrent validity. That is, you want to know whether your thing is measuring the thing it's opposed to. With the Bournemouth Questionnaire, when that was done, it was measured against a prior questionnaire that we already had, we already been using for a number of years. I think it we've measured against the Oswestry. The Oswestry is a standard questionnaire that it's a sort of gold standard. It's been there for many years.

You come up with a new questionnaire and if it's got similar domains in that question into the old questionnaire, if you give both questionnaires to the same patients at the same time, they should correlate. If one is very different to the other one, then there's something going on. That's the validity. Those three areas are really important and most PROMs have had those done. In fact, our study for the MSK-HQ, which is the new one from Keele, we're looking at, not validity, but responses-

JF: To test, retest.

DN: Test, retest and responsiveness.

JF: Actually, we are going to validate it against the Bournemouth Questionnaire.

DN: That's true.

JF: We're going to run the Bournemouth Questionnaire and the MSK-HQ and see, not interested in the raw scores, but if we do them both, starts to come both at the end of the care, we understand the Bournemouth Questionnaire well, does the MSK change by a broadly similar amount, because there's a huge difference between it. Then we have to ask,-

SB: How many do you need to call this valid?

JF: It's interesting.

SB: How many returns on the-

JF: It would really depend how many questions and actually, the range of things you're looking at.

DN: It's difficult to... There are ways of doing some fancy maths that might give you some idea about how to do that. It's called Power Statistics, so you would have some margins of error that you could calculate, but...

JF: So I think in our validations, I think we're-

DN: It's 400 we're after, is it?

JF: Yeah, we're looking for... We'll have 400 hundred sets of data, and that will give us a robust feel.

SB: That sounds like a manageable set, and that's an NHS questionnaire.

JF: Well, it's been developed by, using UK government money. So, taxpayer's money through Arthritis Research UK given to people.

SB: The only reason for the question was if you don't limit it to chiropractic patients it's much easier to get 400 people to carry out the validity testing isn't it?

JF: So, we're going to validate it in a chiropractic private practice population.

SB: Okay.

JF: I believe it has been validated in an osteopathic-

DN: Yeah, so that's the other thing. Questionnaires may perform differently in different settings.

SB: Right.

DN: Because you've got different patient characteristics coming in, they're not always from the same population. We know for example in the NHS that low back pain patients are probably worse off, and generally tend to be a little bit more severe or more chronic. So, I think in the independent sector, both for osteopathy, I suspect in chiropractic and probably in the independent sector for physiotherapy as well. They tend to be a different patient set. So, you would want to know that your... I guess it's like your car again, you can take your car around up the motorway and it performs well there. Well how does it perform going around a bend or how does it perform on a wet road? You want it performing similar ways.

SB: How does it perform with an osteopath driving or a chiropractor driving?

DN: Yes. Yeah. I'm not sure where that would be a good experiment to have a look at.

JF: But we do know that NHS patients are fundamentally different from private practice patients. Generally, they're less financially well off. Generally, they're less well educated. Generally, they've got more common morbidity. They're iller people. And so it's a different group of patients. So a questionnaire that's validated for them might be less appropriate for a private patient or it might not. We don't know. So you have to validate it.

SB: You mentioned something you can do with numbers and when you're comparing the two PROMs systems. Earlier on, you were saying that the numbers in the NHS are much worse than the outcome measures you'd get in chiropractic or osteopathic.

JF: Right. So you have-

SB: It was before we came on air.

JF: So we compared a data set, and I can't remember how big it was. It was sort of 20,000 patients.

DN: There was eight. That was eight. This is the one we compared to NHS, I think it was 8,500 in total. So, there were, there were 4,000 in... Around about 4,000 per week.

JF: So, we compared an NHS chiropractic patient population to a private practice, NHS private practice chiropractic population. So, they were both issued chiropractors but come from different routes. And what we found was the NHS patients more unwell with more common morbidity and more

chronicity. More people that had had problems for longer than... The people seeing the private practitioners improved more. So, generally their scores were better at the end of it than the NHS ones. But if you controlled for the confounders, the fact these people had diabetes or widespread pain or whatever it was. You can do that statistically if you controlled for that. There was actually no difference. So the difference wasn't the chiropractic didn't work differently. It was just that the patients were more complicated casement.

And that's a really good example of where you can actually use PROMs in research, and that's where PROMsstarted as a measure to measure the outcome in clinical trials. And it went from there to be used to monitor and evaluate services, such as the reporting to our commissioners for our contracts. And now you can use it at a clinic level just to see how well your clinic's doing to actually... You can use it for marketing to explain how patients do when they come to see you. Or just to make sure that the services you're providing, either you're getting better and better at treating patients, or there's no degradation in the equality you're getting if you introduce a new service, if you bring in with the machine in it or something. But increasing right, we're actually now starting to use it with individual patients in the treatment room to actually help the care, improve the care of that individual patient to get him better health outcomes and better satisfaction.

SB: How does that work?

JF: How does that work? It works at a range of different levels. So, if a patient completes a questionnaire, it could be the Bournemouth questionnaire or there's a range of other questionnaires out there. Some have been specifically developed for this. There's something called the Mind Map, which is very well known, which is a measure yourself medical outcome profile. It's a series of questions patients complete with the condition. If a patient comes in to see you, and they completed a Bournemouth questionnaire, and on the question they say "Well my pain is a six, and my disabilities five, my anxiety is nine." You could sit with the patient and say, "This is interesting. Do you want to tell me a bit more about your anxiety?"

Now the anxiety score of nine may have absolutely nothing to do with what's coming in, maybe something completely left field in their life. Or it may very well be they had a relative who had a similar problem when they come in with, and it turned out to be a dreaded disease. Or it may well be that they believe if you've got back pain, it's got a very negative outcome, and they can see their health or their life dropping down with having to lose their jobs and things. So, we can actually improve the communication between the caregiver and the patient. We know patients who complete PROM questionnaires do better than patients who don't complete PROM questionnaires. So, PROM questionnaires are actually therapeutic reactive,

which we're trying to prove this with our PhD students at the moment to try to test it.

SB: You mentioned that. Because if they're not completing a questionnaire, you know they've got better or worse?

JF: So, what is a very, very bright young lady called Michelle Holmes, is one of her PhD projects. And what we're doing, we've got three groups of patients coming through a group of clinics. And some patients are given a PROM at the first visit and a PROM at the last visit. But the clinician doesn't get to see those. Another one is given PROMs at the standard times. And in this protocol, patients complete one before the first visit. They complete one at 14 days, one at 30 days and one at 90 days. And the reason for that is that in chiropractic studies, we know patients who aren't showing any sort of improvement by 14 days aren't going to improve however much care you give them unless you change their care. So you ask how can we affect an individual patient? If I get a baseline, and I get one in 14 days and there's no difference, I need to do something different. We need to use different exercises, or introduce manipulation or acupuncture. There needs to be a change of some sort.

SB: Yeah.

JF: So, in this study, some patients are getting their standard protocol, and there's some other poor patients who are getting two a week. They're been bombarded with these PROMs very, very regularly. So that said, we've got these three arms and then we'll compare them statistically. We know from very large trials, which have been done, patients involved in randomized control studies do better than those same patients when they're in the normal clinical practice. And the reason is that patients who are completing our questionnaires for studies, they believe they're more important. They're being listened to by these scientists, the experts and the doctors more. And therefore they feel more supportive, and more engaged in their care. And we think that's how PROMs are therapeutically active, but because the patient's completing it, they feel a bit more listened to as long as the-

SB: That's actually a great first takeaway point for everybody watching, isn't it? Because, there are obstacles to people employing PROMs in their practice.

JF: Absolutely.

SB: And eventually it's improving patient outcomes just because you're doing it. And it's worth it-

JF: It improves patient outcomes. Definitely improve this communication between the patient, they feel they're being listened to by their doctor. Really useful for improving shared decision making, which ought to be in all of our minds at the moment, cause this is the age that we live in. If after 14

days the patient isn't improving, you can sit down with the patient and say, "I've looked at our scores." Maybe when they first came in they said, "Well, I don't want to have acupuncture. I don't like the idea of acupuncture."

So, as you know, patients have a view of what they want and we tailor our care to that. We might not give them acupuncture. But at 14 days there's been no difference, they're having the manipulation, they're having the exercise and the self help advice. We're saying we need to change something. Can we now have that discussion again about introducing acupuncture, so you can have this shared decision making being driven by PROMs. A patient whose come in for assessive six sessions who the PROMs show really good improvement to, but that patient feels they want to keep coming back in quite regularly because they're fearful about managing on their own or they feel like they haven't improved a lot. You can show them the PROMs scores and have the discussion about how things seems to be improved, "Well, we might now want to span out the next appointment for a few months ahead." Or maybe it's going to let them self manage on an SOS basis, so they can come back in and say...

We can use it for discussions and also things that are getting worse. If patients aren't improving, they can use it to highlight, "My pain is going up or my pain is going down but my disability is going up." It improves decision making.

SB: Can I just interrupt? We've got questions coming in. Particularly, they're largely about how do we use these things in clinic. But one of them is to pick you up on something you said about, I think it was you actually Dave. This whoever you are, I don't know your name, but you've sent in I'm an NHS patient and I'm well educated. So, one example that defines your rule. But-

DN: Did I say they weren't educated?

SB: Yeah, yeah. They're less well educated than the generally more. Was it you that said it?

JF: Actually that's... I'm an NHS patient. I'm fairly well educated as a group.

SB: Someone else has asked, and this is part of the questions that we threw up on the screen here. They said how well qualified do you think we are to deal with asking questions about stress, et cetera.? Or probably dealing with the stress itself? I worry, says this viewer, that we could be opening a can of worms that we're not equipped to deal with.

JF: So, I think that's another whole conversation. And I think as MSK practitioners, if we want to work with patients who have got more psychological stuff going on. And that's the start back tool, this stratification tool tells us that about 20 to 30% of patients seeing us have got psychological factors influencing their presentation. We do need to be engaging, but the

engagement might be there's stuff going on in your life which I think might be effecting your presentation. Yet, I'm not competent to manage it. But I can sign post you off to somebody who is. It might not be that, I'm not suggesting that all chiropractors and physical therapists become psychological specialists. That's not what it's about.

DN: I agree. I think, I suspect it's true in the osteopathic profession as well. There's debates and conversations around do you have a clinician that sort of a jack of all trades, that covers the whole biophycho social model with all of the therapeutic interventions that may be congruent there? Or do you have a multidisciplinary practice where you can either refer to or you can refer out. And I think there are some, and it's true in osteopathy as well. There are some osteopaths and chiropractors that both work with each other, and work with CBT practitioners and counselors and so on and so forth in these multidisciplinary practice. And in fact if you look at... And that may become more common, if you actually look at things like the King's fund.

JF: Right.

DN: Several years ago now, there was a whole bunch of research around increasingly seeing the patient as a center of a team. And now actually, the patient now is part of a team. So, there's this evolving thing around this idea that teams need to be sort of including the patient and it needs to be a bunch of people. So, it is a different one I think. I think that the nature of this sort of consultation that happened in the independent sector in particular I suspect, which often afford more time and more perhaps give... Have more resources that you don't have in the NHS to spend. More focused on the patient. I think they, in and of themselves, bring quite a lot of psychological impact without you necessarily being an expert.

SB: I imagine that the person who asked that last question has asked this follow up here. It's fine to say that we can refer on, but most patients that we see just want to be out of pain. They don't want to be told to go and see a counselor. And actually I can say as a practitioner it's quite hard to have that conversation, to say I think you ought to go see a counselor as well.

JF: But I'm not sure we're actually saying that. I mean we all see patients who come in, the psychological factors might be, "I'm a bit worried about my back." It might be, "I've been off work for three days. My boss is going to be getting at me so I've got job stress." And these are things that I think every, certainly every osteopath I know, is very well skilled to manage. Osteopathy is a very holistic profession. Engaging with the patients. I don't think we're saying anything new here at all. I know that certainly with the Royal College of Chiropractors that I've been involved in, we now have a diploma program. Postgraduate diploma people can look at this stuff.

The world of osteopathy has got similar things, Keele on the start back tool. These programs aren't long. We're talking three or four days of training and we're not making people into clinical psychologists. We're taking physical therapists and enabling them to deliver psychologically informed physical therapy. So, a very simple example is, a patient comes into see me with low back pain and I give them some exercises. I don't just perceive those exercises are there to strengthen their back or loosen their back. I perceive it as exercise, also have a role in demonstrating as the patient is safe to carry out those motions. It's the same exercise, and my rationale for delivering it is slightly different. And maybe the messaging I use to give it to the patients is slightly different.

DN: And to pick you up on the point around... To expand on the point that that particular individual was making. I think it was something like patients coming in and they're not worried-

SB: They're concerned about their pain and they want to be out of pain. They don't believe they need to see a counselor.

DN: But, now we know that psychological support directly affects pain. So, if you want to get them out of their pain, you're going to have to take that into account.

JF: Yeah.

DN: So it really does, it depends on what you think you're doing in your therapeutic encounter as to what is actually helping the patient. And in fact, all of these things help the patient and they all actually impact on the pain. And we know that both from studies that show that psychological factors are very important in terms of predicting recovery. And we also know that from some really key neurological studies using MRI, and how the actual pain processing works.

SB: I just brought this back up on the screen here again because a question has just come in, referring I think to this particular questionnaire, but possibly to others as well. Asking whether you think that this is written in such a way as it's likely to get a negative response?

JF: It's written in a way to get a responsive response. We want to make sure we're actually asking them about what's important. Because I think if we take a questionnaire over the past week, how depressed, down dumped, sad, low in spirits, pessimistic, lethargic, unhappy, have you been feeling? So, if a patient has been feeling low in spirits, we want them to put a score on to that. But if their mood changes, we want that score to change. So, there's no point to asking you a question where the question is so extreme. And in past week have you felt suicidal is not a good question to get to the patient's line

of psychology, cause it's so end loaded. Everyone's going to answer the same. You want to get a range of responses from it.

SB: Perhaps, the question most of these is, if you only see the questions. Which, if you say how depressed have you been? It presupposes you've been depressed. But of course at one end of the scale it says-

DN: Yeah, it's nought to 10. Yeah, yeah. The least and the most.

JF: And that's why when it was developed, we'd say how depressed have you been feeling. It also puts in the words how down in the dumps, sad, low in spirits, pessimistic or unhappy have you been feeling. So, if someone says to me how depressed have you been in the last week, I might say, "That's a silly question. I haven't been depressed." But if they said how pessimistic have you been or something, maybe there are some things that I'm being less positive about. So, I might score it slightly differently. But that's part of the skill of writing these things. And actually writing a PROM and validating a PROM is a really complicated process.

DN: There's a lot that goes into thinking around that. But you're right, whoever was thinking that the what you ask and how you ask it, can often impact on both what they say, what patients score. But also how they're feeling. And so there was some worry, for example, around asking people about their pain. There was some early research that suggested that if you ask people about their pain, and get them to think about that pain... If you, to go back one, we know that to distract people from their pain often has an impact on reducing the pain. And we will know if you're distracted, or whatever that you suddenly think I'm in pain. And then you start thinking about it again, you're in pain again. So, there was some worry around that. So, certainly asking people to think about things can have impact on that. We do know from the chiropractic population, they're actually very, very low scores generally on depression and anxiety. So, generally they're not that-

SB: But also, if this questionnaire is not meant to be a one off questionnaire, is it? And if you're measuring change, it's to some extent it doesn't matter whether it influences you as long as that same influence is-

JF: It does matter if it influences you. I wouldn't want to give a patient a questionnaire which made them think about suicide, for example, if they were tending that way. And I don't want to give them questionnaires that can make a patient dwell on pain. So, we know the patients in the low risk start back group, these are the patients are essentially very, very well, they just need to be reassured and got moving. We know if they had a long course of physiotherapy, they actually tended to do less well than if they're just given advice to go away because they were coming in for course code. They're focusing on their problems. So, it actually had a bigger impact on their life.

SB: Okay.

JF: So, we do have to be careful about how we use words. They are very powerful things, words.

SB: Tell us about the obstacles that you've come across to employing PROMs in practice. Because, we've had some questions here about exactly that.

JF: With some of the studies that we did for my doctorate, where we actually looked at the barriers to it, and some of the problems are actually very, very practical. We touched on them earlier. It's getting people to complete the various bits of paper at different time courses. And when I started out, 15 years ago working, so this was exactly what we did. We have patients complete bits of paper, these forms. And at the end of the year we'd sit back and look at a filing cabinet, and we felt warm and furry cause it was full of bits of paper about the patients.

We couldn't do anything with it. So, you need a way of actually getting the information from those questionnaires into where you can actually use it with the individual patients. Or cloak collated effectiveness or spreadsheet, so you can look at a service and that takes time. It takes time to score the questionnaires with patients. The question that you've got on the screen now, if a patient had completed that and a practitioner wants to discuss it with the patient. There's a certain amount of skill to actually understand the questions, and if a patient talks about something around it to actually know where to go with it. So, there's a certain amount of practicality. There's-

SB: I've been asked if we can put that up full screen for a second, so that people can have a chance to look better at the question. We'll carry on talking. They can read that while we're talking.

JF: Yes. So, there's a barrier in terms of practicality. There's a barrier in terms of times the patients. If you get them to complete before an appointment, will they arrive in time? How long before the appointment do we get them to do it?

DN: You put them off coming back. I think, in certainly in the independent sector, is this a barrier to patients spending... Patients are not going to come back?

JF: Patients returning to do it. There can be cost implications. So, for example, one way of doing PROMs is to actually post them out and get patients to send them back. And we tried that for a while. Then it gets quite expensive by the time you put it in envelopes, place some of this stuff and send it, get it back and... So, there are cost issues around it.

Practitioners don't feel they're skillful enough to know what to do with the results. If you've got a questionnaire, for example the Bournemouth questionnaire, you might say there's been a 20% change in the score for

better or worse. But what does that actually mean? Because something we haven't talked about is something called clinically important change or clinically meaningful change. A change of two points in the nought of 100 point questionnaire might not mean something, but a change of 30 points might. So, they need to have some degree of understanding that not all practitioners felt was important.

SB: Yeah.

JF: There are so many questionnaires out there, which ones do you choose? We've talked now, so there's some complexity around that.

SB: Do you think the practitioners don't actually want that choice, or the practitioners just want to be told use this one?

JF: I think there's probably two groups of practitioners. Some who feel very, very strongly and they want to measure a particular set of things in a particular way. And with academics, we would steer them to use validated PROMs to do that rather than writing their own PROMs. And there are people exactly like you say, who just want to go give us the recommendation. We'll go with that recommendation. And in chiropractic, up until now, it's probably been the Bournemouth questionnaire. Osteopaths got a bit of variation on it. The NHS, the only qualified provider contracts did recommend the Bournemouth questionnaire. I know your commissioners didn't say that to you, but that actually was the national guidance. Onto it, I think the MSKHQ is probably going to be the way that things are going broadly that way. And if this quality and private MSK group get ourselves sorted out, We will come out with recommendations, which which will be very helpful for people to make the choice.

We need to find a way of actually making use of the questionnaires. There's no point just collecting the data, and there's issues around the collation of the data. How do you actually report? How do you describe the results you've got? You've got results from ten patients or a hundred patients or a thousand patients. How do you actually describe that, put the robustness around this?

SB: Don't modern methods make that easy now? Cause you can give a patient or a practitioner a unique identifier, which keeps their identity safe and secure.

JF: You're absolutely right and particularly if we're using electronic systems. And this is where these items are, this EEPROM is the end core system or the all the care response system have a lot of advantage. Cause they can anonymize patients or pseudo anonymized patients. You can collate the results. You can say, alright, show me the results of all of my patients for the last year. Or my practice results with patients from last year.

DN: And they take the practitioner out of the loop in terms of collecting them. I think that's a really important point, isn't it? Because it just happens automatically, and then it just arrived back to the patient-

JF: So, what David's saying, with the care response system we've got, is before a patient arrive. When they're on the phone making the initial appointment, the practice will say, "We would like to send you a questionnaire to find out about your health data. Is that okay?" If the patient gives consent, the patient's name, date of birth and email address is entered into a system with the dates of the first visit. And the system then sends a patient by email, a questionnaire that they complete online, and when it's completed that's then immediately available to the practitioner. And then the at set points in the future be at the 14, 30, 90 days or whatever the practitioner sets. It automatically sends out these follow ups. When they arrive back, the practitioner will get an email with a summary or they can log on their printers, their shopping screens, it's pretty for graphs. And it's very, very easy to explain the results of the patient's progress and the graphs. If the graph is going down, your pain's reducing. Or if it's going up, your disability's increasing. And you can have that conversation about where you go with care, with it.

These tools can also be used if you're working with insurance world. And increasingly we're going to see, I know we're going to see more and more of that. If you've got a patient who's being funded externally, they're going to want to know what the progress is. Particularly, if you're applying for a second tranche of care. These patients had their 6 sessions or 10 sessions, whichever was authorized. And you say, no, they need some more care. If you can show a graph that's going down and continuing to go down, you can say this patient's had an improvement. We can quantify that as 30 points on the Bournemouth questionnaire, or 50% on the MSKHQ, and we perceive that with another cycle of care we can get further benefit. They're much more likely to authorize it, than if you have a graph which is just completely flat. You've had no change over the last six sessions. Why should we fund anymore? Any more change?

SB: Just on the subject of those questionnaires. We've put this questionnaire, this single example of a Bournemouth questionnaire up a couple of times now. But of course it's too fast for people to take it in. Would we be able to download a copy of the MSKHQ questionnaire, and we can just give people as a example-

JF: Yes. They're available from the universities that produce them. The Bournemouth questionnaire is available from the AECC university college website. And the MSKHQ is available from Keele University. But if you Google Bournemouth questionnaire or you Google MSKHQ, you'll find them available.

SB: I'll do that again. When I Googled them earlier on to try and have them available here, actually I got lots of scientific articles which insisted that I had to go through a paywall.

DN: So there is on the AECC University college website, there's a research tab. And there is a tab or an area of PROMs. It says PROMs, and if you click on there, then they're downloadable. The neck and the low back pain. And the generic one, I think as well.

SB: And the MSKHQ?

JF: It's from Keele. If you go into Keele University website, or Google MSKHQ Keele.

SB: So, after the program this evening, we will put those on the website. So, you can download and have a look at them. But we will be talking in a very short while about how it's much easier for you to use PROMs in your practice, I am very sure. And I should just tell you that we had one of the cynics on this evening. Yvon who said, it's all very well being this objective, but we know statistics are only 67% accurate.

DN: That much?

JF: You know what this mean, it means it's true.

SB: Yeah. So, let me have a look at some of these other questions while we're going to figure this out. Thanks for telling us where to get the questionnaires. That's helpful. Are these the same questionnaires that NCOR send out to Osteopaths? Should we use those instead? Does it matter? Perhaps we'll want to come back to what I believe NCOR are doing shortly. Unless you can answer that question. No. Okay. Should we talk first? What are you doing? How are chiropractors using your care response from you?

DN: Before you go on to that, can I just make a point? I think it's important. What's important I think is not to think too much about whether there are professionally particular questionnaires. I think what you need to think about is which questionnaire has being validated, and which questionnaires are out there. So, I don't think really that the difference between... There's not one PROM for the osteopathic profession and whatever, cause I think they'd probably be using the same ones anyway. So what's important to think about is the validity. Is it being regularly used and I would say-

SB: Which is why I said what I did. Because for the practitioner's point of view, if they can go to their professional body and use what they are recommending, they don't have to worry about the validity because someone else has done it for them.

JF: Absolutely. Yeah.

SB: Dawn Cobbs and Carol Falts will have done it at INCOR. You and your colleagues will have done it with the care response program.

JF: So, it's very useful to have a big body of data and presume the INCOR got the data coming in from their patients. And you'll get to compare your practice results with more generic ones. The care response system isn't just chiropractic. It is free for any practitioner who can just sign in and use it. It is completely free to use. And we have osteopaths and physios and chiropractors, lots of professions using it. And we've got coming up on 200,000 sets of data points. We've got lots and lots of data and within the system. If you use it, you can actually compare your data to national statistics so you can see how you do compared to national data sets.

Another thing, there's quite a lot of utility in that. If you're trying to promote your practice, within these electronic systems, you can actually get the summary graph where you can just lift up and drop straight into your website, or into your SurveyMonkey, whatever your communication method. And it's very useful if someone's trying to decide where they're going to go for care if there can be some transparency. So, if you've got a choice of three or four different practitioners in an area, and one of them has the information. You know that 75% of patients who go there get a really good change in their health status, either get better and 95% of them are actually very, very happy and they think it was a good use of their time and their money. You might be more inclined to go down to see that practice than someone who doesn't publish any results.

SB: I'm not wishing to target any raw nerves here. But so presumably, in particular I'm thinking about chiropractic and the history you've had with the Good Thinking Society, nobody can objected to you sticking those statistics on your website.

DN: No. Because they're validated and that's what's happening.

JF: Absolutely. So, I work two days a week in general practice as I've seen patients instead of general practitioners seeing them. And I know the GPS in our practice do refer patients out to see private practices. And the practice they refer patients to are the ones who they have confidence that the patients are getting a good health outcome. And the patients are satisfied with-

SB: Who's paying for that?

JF: That's private. So, the GP-

SB: So, they're just recommending a practice?

JF: Absolutely. So, say the back treatment within general practice might be.... We rule out all the nasty things, they ought to get better with movement and

exercise. So, we're going to give you some exercise and some advice. If it hasn't improved in a month or six weeks, come back in and we'll refer you off to a community service. But if you want to go and see someone now, that's absolutely fine that it might accelerate your recovery. And here's a list of people who we might recommend. That's how it works in the practices that I work in.

SB: So, a pretty important point to take away from this as a practitioner, is that if you start doing PROMs by whatever method, using a validated form and you're still not sending letters to your local GP practices to tell them how well your practice is doing, that might influence their behavior in telling people they can come-

JF: Almost certain to. And I suggest you do it in two ways. One is I like it when practitioners write back to the patient's GP. This patient's come to see me, they came in with a neck pain and some pain down the arm. They've had four sessions or whatever it is of osteopathy, which is considered a manual therapy with some acupuncture, whatever it is. And we've seen that there is this much change. So, we've quantified their response. They say that overall they feel much improved, and they've got a 60% improvement on the Bournemouth questionnaire. And that gives us confidence that there's some rigor behind the assessment protocol practices.

And the other thing a practice can do, is if you've got all your results for all your patients in the last year. And say you've seen a hundred new patients or a thousand new patients, and you can show that the majority of them have got better. GPS and people in private care, we know that not everybody does well. Not everybody we send to any service does well. So, if you come to us and say 75% of my patients who seen me have got well enough they feel able to get on and live their lives fully and richly from my care. We're going to be quite impressed with that. Particularly, if you tell us how happy patients are, where their satisfaction is, as important in changing health status. So, if you report your patients satisfaction data.

And to send it to through as a little report. And then the next time a patient comes in we want to refer out, we have the confidence in that practice above somebody who might be giving a fantastic service, but we have absolutely no idea how happy.

SB: Yeah.

JF: I want patients I refer out to be happy with my referral and to get better. That's what we want.

SB: Yes, we actually have a standard letter that we sent out when we had already NHS contract and they insisted on outcome measures being revealed, that went out to every GP after we completed the treatment with a patient. And

in it we gave them the percentage and the scores by which they had improved on various questions on what we were using the sort-of Bournemouth questionnaire. And I was a little bit worried that GPs are thinking, "Oh God, here's another letter from people telling me something I don't really need to know." But I'm reassured to find that they are interested to see that sort of thing.

JF: In a GP practice, every piece of correspondence that comes in is scanned, and is appendaged the system. If a patient comes back in and they've got a neck pain, one of the first things you'll do as a clinician is to look back and say, "Has this patient got a history of neck pain, what did they do last time and how did they do?" So that patient in the past has seen an osteopath and they've had a good health outcome. There's a really good chance we're going to have a conversation about that patient by going back to see an osteopath.

SB: Siobhan, I think it's the same Siobhan has asked a fascinating question actually, because she says, "Is this a new move to get objective information for osteopathy in the NHS?" And she asks because as she's in Scotland, they are not allied healthcare professionals and quite frankly hopes don't get absorbed into the NHS. I'm not quite sure... I'm sure the NHS has been trying, at least in inverted commas to get objective information for some time.

DN: It's an interesting conversation around NHS and I think it's... For me, I think there's a certain amount of misinformation and perhaps some misunderstanding about. I think with certainly with chiropractic and I'm sure it's the same with osteopathy, that that, we're never going to get to the point where the professions are absorbed. I mean, that's a sort of pejorative term anyway, it's been absorbed. I don't think it's going to happen. I think that what may get is you may get a certain number of practitioners in both professions who increasingly are aligned to or working with the NHS. Now that won't be for everybody, and I don't think it should be, but I think that certainly in chiropractic it somewhat, has been for many years somewhat invisible from the mainstream sector where all of those other clinicians live, and perhaps unfairly vilified.

And it may be somewhat the same with osteopaths. But I think as you get some of these practitioners that are beginning to talk with, practice with, engage with other practitioners who were in the system, I think that that's a tide that's going to lift all boats. And I think in many ways the sort of a reputation of the professions could be very positively impacted by that certain percentage of practitioners. So I don't... When we're talking about this stuff, and Jonathan's an example of somebody that is very much aligned with the NHS and works in the NHS, in fact employed by the NHS for some of his work, I don't think the professions need to get nervous about the fact that actually some of us feel that we're just going to disappear into the NHS. Because I don't think the NHS can deliver all of the staff that the independent sector do do.

SB: Somebody here has asked, again, a somewhat cynical question perhaps, but what experience have you got of people that you believe are deliberately exaggerating their disability because they need to maintain benefits or-

JF: What a good question. What a good question and I think there are two answers here. There are definitely people who try and game the system. So they try and learn to understand, to fit, to fill out the scores, in certain ways. And maybe we as clinicians need to be quite skillful in terms of actually how we do it. But I think if a patient answered the question in a certain way, that's the answer they give and you have to take it at face value. You might have a conversation with the patient about it, but it's a lot about communication. So if someone on a pain score scores their pain at 10 and then they walk in, you hear them smiling and chatting out in reception and you might think, "Well, I wouldn't score it at a 10 you." Trying to find out a little bit why they put a 10, are they just trying to get their pain taken seriously?

Have they been to other healthcare professionals, maybe potentially their GP had? They haven't felt listened to properly. They felt they'd been belittled or brushed aside. There's a reason that they've scored it as they have.

SB: But overall, the strength again will be in the numbers, won't it? If you've got thousands of patients doing these reports, the number doing them, hopefully will be a relatively small-

JF: So we know from research that patient reported outcome data, which is essentially hugely soft, is hugely some days what the patient wrote down there, it is as useful, and as reproducible, and as scientifically valid as things like blood pressure and blood glucose is. It's at that sort of level of robustness. Of course you're going to get outliers, but I take someone's blood pressure sometimes and comes out with a completely duff result. So that's my clinical skill, not to get over worried about one erroneous score.

SB: You were comparing, I can't remember which of you it was earlier on before we came on air, you were comparing the validity or significance of PROMs with our CTS earlier on.

DN: I think Jonathan mentioned that PROMs were initially developed to measure outcomes in clinical trials. So I think that's where they came from, but they'd gone out into now being measures in routine clinical practice, I think we.

JF: We had several conversations before the cameras turned and one of them was that an RCT might come out and say that a certain percentage of patients do well with osteopathic care. And that's what it says in the RCT, but that's not necessarily what the patients are getting our individual practice. So if you can collect PROM data in your practice, you can then compare it to what the RCTs have said, and actually it might be quite interesting. Certainly that's how we got our NHS contracts in the first place because I was able to go to the

commissioners and say, "Well, this is the international... What the international literature says about how well patients do with chiropractic and osteopathic care because we have osteopaths in our service, but actually in our service we are having a high level of patient satisfaction and a high level of patient outcomes." So when they were choosing to buy our service they could have confidence in the service, they're actually actually buying.

SB: Here's an interesting one. When you came on our show last time, I rather tongue in cheek pointed out that chiropractors couldn't treat sciatica because at that time the ASA said you weren't allowed to say that which is ridiculous. And I said it for that reason. It was utterly ridiculous that that hadn't been addressed with somebody. Presumably, PROMs provide you in a clinic with reasonably robust evidence for whatever you put on your website and if you have got, I don't know how you measure the statistical significance of this, but if you've got something on your website that says that you can... I don't know what can we... What are we not allowed to say?

We can treat colic in babies because that's the outcome measures that the parents have reported. How well do you think that was stand up to the ASA scrutiny?

JF: I think that that would come out very poorly against the ASA, if you said it that way. If you said, "Of the last 100 pet families who brought their child in to see me with colicky symptoms or crying or whatever the symptom is, 75% said the symptoms had reduced with three months of their first visit and 85% of the families felt they were supported well during the care." Absolutely, you can say it because you're just reporting data that you've got.

So you say chiropractor we weren't allowed to say that they could treat sciatica. I can absolutely put a thing up, a big flashing lights on my things saying, "98% of people who come to me with low back pain, tingling in the toes and loss of reflex, which is often taken as a sign of sciatica, have good improvement and have remained well for at least three months after care." So I'm not saying I can treat sciatica, I'm just saying these are the results that the patients have come to me, have got. And you, the reader can interpret that any way that you want to.

DN: There's a methodological point here and I as a scientist, I would say this wouldn't, I? If we lose half the audience, I do apologize. But what you can't say, if you measure a lot of patients who come in with a score that is high and they go through care with you and their scores reduce, it doesn't really matter how many thousands you measure. It could be hundreds, it'd could be a million even. What you can't say is that what you've done is cause that. So there are some ways that you might say, "Well, if they've had it for a very long time and they come in it can't be just coincidental that it started to get better at that point."

But that sort of circumstantial evidence in a way. That's where RCTs come in. So if you've got a group of patients where you're treating them here and you've got a control group where you're not treating them, or you're treating them with something else or you give them a placebo, not difficult, it's difficult to do that in manual therapy then. Then if this comes out better than this one, the trial has been done very well. You can say, "Well, it's likely to be what I've done that is caused that." But you can't do that if it's a single group.

SB: Yeah. I've struggled with this though and I'm not the first person to point out that a patient who comes to you with low back pain might get one sort of treatment. This patient who comes to you with low back pain might get a different sort of treatment because of different things that come out in the case history. Different perceptions of... Doing an RCT in the past certainly has always revolved on what happens if you manipulate the L4, 5 joints.

JF: But more recently we have much more pragmatic RCTs and so the British exercise and manipulation study, one of the arms was manipulation with exercises. And the osteopaths involved in that could give whatever manipulation they like with exercises, but the arm was manipulation. There won't tell you what manipulation to use. So if you're not using manipulation, that study isn't particularly helpful for you, because you give any manipulation with exercise, then that arm of the study very much does talk to your...

DN: But that's the difference between... So if you think about there's a number of different clinical trials, you can do the answer different questions. One, the clinical trial that is going to reflect clinical practice is called a pragmatic clinical trial. And essentially what you do there is you say, "Well, we're going to randomize people into people that visit a chiropractor or an osteopath and they do what they do, and we're going to compare that to GP care, normal GP care." That's a pragmatic try because we're not... The downside to that, although it's actually representative real practice, the downside to it is if you get a a good result in this arm, you cannot then identify the element within the treatment that might've caused it.

You can do a fastidious trial where you equalize everything up and if you could do a placebo adjustment and a real adjustment, which of course we know is very difficult to do to get good shams and everything else is the same and these guys get better, then you're much more on stronger ground to say that it's, the manipulation has caused that. So you can do fastidious trials and they have been done. But generally I think people... Commissioners are not particularly interested in RCTs anyway. They're more interested in guidelines which are based on RCTS, but they're more interested in this softer data. They're the difference between the two.

SB: We've got a lot of questions and we're running out of time. Can I run through some of these?

DN: Absolutely.

SB: This is Evelyn O'Hare, who says, "Funnily enough, I always drop a short line to vets about animal patients but not to GPs about humans," which is interesting that we don't do that or so often people don't. Is there a validated PROM for patient satisfaction?

JF: Yes. Yes. And we don't call them PROM because they're not patient reported outcome measures. They call them PREMs cause their patient reported experience measures. And that the most widely used one in the UK is the friends and family tests that the NHS do.

SB: Right. We download that and put it on our website.

JF: You can do, I wouldn't necessarily recommend it for private practice because there's also all sorts of issues with it. Within the care response system use a very simple scale to see how the ....

DN: Single question.

JF: It's the Likert scale, overall how satisfied are you? And then patients can answer from your dissatisfied to extremely satisfied.

SB: But I could register with care response even though I'm not a chiropractor and-

JF: Absolutely. It's fully...

DN: There's another one called care, C.A.R.E, which is a more comprehensive one, but they generally talk about, the elements are generally around have I been listened to? Did I feel there was enough time involved? And so on. And so you can expand these out, but very simple ones like the one you have is like, are you satisfied.

JF: And if we look at all the research around osteopathy and around chiropractic, we see that osteopaths and chiropractic patients do well with spinal pain, but maybe not massively more than other services. If you look at satisfaction, if you look PREM outcome from osteopaths and chiropractors, it's extraordinarily good. Our commissioners actually came in and investigated our data because it was so good. It was something like 98% of patients are satisfied and it was 85% of patients we had significantly exceeding their expectations. And when Dave and I did our study, we compared to NHS to private chiropractic patients, was interesting was the NHS patients had their expectations even more exceeded, so we do really well at that. So I would absolutely encourage all of our viewers to start collecting PREM data. They're going to hear some really, really nice things about their practice that they can definitely stick up on their website.

They may hear some negative things about the practice, but you know what? That's what you can change. If somebody comes in and says, "Your receptionist is really grumpy today," we can do something about that. If somebody comes in and says, "Everything was great," that doesn't really help me do better, it just makes me feel warm and furry.

SB: Also, if all reports are five-star, people don't trust the reports. If there's a little bit of variation in it, then people will expect that and your treatment as being real. Somebody has come back from you on the question about... I'll handle this one if that's all right and if I get it wrong, you can correct. Me about PROM data for conditions we are not allowed to advertise to treat. So they say if you measure a load of baby patients you've treated for colic, how does that sit with the General Osteopathic Council?

General Osteopathic Council says you can only advertise things which the advertising standards agency says you can advertise and those conditions are very well stipulated. But as you've just heard, you can report the outcome measures if you've got them for whatever you've done in your planning, provided you word it as Dave has said and we'll make that clear in the transcript and in the summary document when this has gone up. And as you are probably aware, I'm always one for poking things with a stick and if I can think I can rouse a bit of interest, I will. And bear in mind if you put something on your website... Sorry. I'm going off on one of these, because this doesn't get me going, but if you put something up on your website which follows the guidelines that we have just discussed and somebody complains about it, the only thing that's going to happen if you're an osteopath is that the ASA will say you must not say that.

And you can argue and if they find against you, take it off your website. It's a little bit more tricky for chiropractors because I think the GCC has to investigate. But nonetheless, if you're following these guidelines and there's nothing to defend, you don't have to defend.

JF So if even if you're investigated by the general chiropractic council, the worst they were likely to do is exactly like you say. So you can't phrase it that way unless you're saying something, which is fundamentally honest or illegal.

DN: Like you said, you can report the data. You can say, "The data shows that these patients do this." What you can't say is that we can cure colic or-

SB: Absolutely. Somebody here has said, "Sod PROMS, I want my patients to fill in PREMs as of tomorrow."

JF: And I couldn't recommend it more. Within the NHS and within the service purchase of Bupa on people, that's what they're interested in. Meaning the insurance industry is a commercial venture, they want the buyers of their service to be happy and to keep buying their service. The NHS want the

taxpayers to be happy. So actually PREMs are as important, your experience of your journey is as important as your change in health status. And with a lots of things that we see, for example, with sciatica and radiculopathy is a horribly painful condition. But for most people it will get better on its own, but it just takes a very long time. If we can support them so they actually feel supported and they know what to do at each stage, we can actually make the journey to recovery better. Hopefully we're speeding up the journey to recovery as well, but the PREM, the real key there.

SB: Philip Hakim has asked for some reassurance, he says, "Has anyone ever asked GPs if they actually want these forms from us or in reality, but they prefer not to have to process the extra paperwork?"

JF: The GP don't process the paperwork. If you send a letter into to a GP, their receptionist drops it into a scanner which reads it and actually... Or often automatically files it to the patient if they administrate it very quickly. A GP will only read a letter from a chiropractor or an osteopath if there's a call for action. So if you were just saying, "I saw this patient and this is how they did, that's useful. It'll be put on the file." If you say, "This patient isn't doing well, they've got disturbed sleep at night. We want some anti...Can you support them with anti neuropathic agents?" That's a call for action. The GP will actually get to look at and say yes or no.

SB: But the letter will still be useful because it is there on the file and so it's a record of what we've done

JF: Absolutely.

SB: Amanda has asked, "If we were to formulate our own questionnaire, could we send it to someone to approve as a suitable tool to use therefore would that be valid research?'.

DN: If you're willing to stump up the money for a large research project in order to do that, absolutely. We'd be very happy to take your money.

SB: Sounds like reinventing the wheel there-

DN: But the point about it is... I would say no, I don't think you need to do that, the PROMS are there and there's good validated PROMs with the sorts of things you probably want to use them for.

JF: It's a very time consuming, expensive process to do what... You'd do better to talk to someone like Dave or maybe myself and we may all be able to guide you to find a problem that does what you want it to do. You can ask your patients questions that aren't PROMS. You can ask them a validated PROM and if you then want to know something else about their lifestyle because that's going to help influence the way you're going to manage that patient,

ask that. But it's not a PROM. It's just another piece of information you're going to put into the mix.

SB: And we're not sitting here trying to be parochial about this because if you wanted to... I think actually Ncore only work with osteopaths, but if osteopaths were to contact Dawn Combs or Carol Forks and we will put the email address up. It's everywhere. If you look at Ncore anyway, but if you contact them, they will help you through the process and enroll you in the ePROM process.

JF: Can I just very quickly mention another sort of PROM we haven't touched where the patient actually writes their own PROM question. It's called an individualized PROM. So rather than saying to a patient, "How stiff is your neck? How much pain are you in?" You say to your patient, "What's your main symptom? What's your second main symptom? How does this impact on your life?" And the patient will write in my main symptom is my left ear is tingling and I feel a bit dizzy, and they then get to school that on a nought to 10 or nought to seven questionnaire. And then when they come back and again you said, "Well, last time you told us your main symptom was this tingling in your ear, how would you score that today?"

DN: That's the basis of MYMOP, isn't it?

JF: So, MYMOP is measure yourself musculoskeletal outcome, medical outcome profile questionnaire called the MYMOP. That's exactly how it works. But that was developed specifically by Charlotte Patterson who was the GP as a communication tool because her patient would come in with this basket of stuff. It was really difficult to actually untangle what was important to the patient. So stuff that people who say, "Well, all these questions are great, but nothing really answered what what I wanted to get at," that might be something to look at.

JF: And some of the electronic systems like the care response system gives you the option to use that rather than just a more fixed academic Bournemouth questionnaire site.

DN: The downside to that is that it's difficult to aggregate. So because it's not the same questionnaire every time you can't add it together to thousands of records.

JF: So lots of academics have concerns, possibly radicalized concerns-

DN: Yeah but as a clinician I think it's a very good.

JF: But as a clinician, pragmatically and I think the results of a hundred MYMOP questionnaires tell me an awful lot about how my practice is doing.

DN: Absolutely. No, it's a great question.

SB: I haven't had the time to read through this question. So it comes from Amanda and she says, "There seems to be lot of talk this evening that suggests it's uncertain on how to analyze or utilize information gained from these tools, and suggestion that there is a fear of not learning how to react or respond to the information. Is the aim ultimately to provide standard training in the application and analysis, then standardized responses to the results from these questionnaires?

DN: You go.

JF: So I think we do really understand well how to analyze the results and we do understand really, really well how to use those results. There's no uncertainty around that.

SB: I think she means that the practitioner essentially.

JF: Yes. I can only talk within the chiropractic profession and at an undergraduate level and increasingly with some of our post-registration training, we include work around PROMS. National and international guidelines for the management of spinal pain call for this PROMS data to be collected. So we had a questionnaire earlier, is this to do with the NHS? It's not, it's to do with being a good and competent musculoskeletal... Especially we all ought to be doing it. Our college guidelines say that we ought to be doing it. So the knowledge is out there. If there's a call for specific training, I'm sure different organizations would be happy to put it on and run it if that was needed.

SB: Okay. I've had a number of questions about timing of PROMS. Now, purely, from what you've said, it seems like the first one has to be before the first treatment so you can baseline-

JF: It actually doesn't. There are two sorts of PROMS. One is a PROM which measures your health status today. How is your pain today? How is your stiffness today? And that you need to do before the first visit so you can then follow it up subsequently. And one relies on your recall. How improved are you?

DN: The Bournemouth Questionnaire says in the last seven days or in the last week.

JF: So there's two ways. I can ask a patient today who has never completed anything overall, how much have you improved? But I'm relying on their recourse and some people say it's a little bit less useful than actually one that you completed before and afterwards. But ideally you get a questionnaire completed at that first assessment. It can be sent out before.

SB: And then how often?

JF: It depends. If you're doing a service evaluation, you would do it at the first visit and at discharge. That's the classic way it's typically done. In research and in some services we actually do it some... We do it usually a couple of months after discharge. Do those results last? Because there's a criticism, you treat patients and they get better, they get worse the next day.

Actually, they stay well with chiropractic and osteopathy, we can prove that. In the chiropractic world, and I'm sure it's the same for osteopaths cause there's no reason it shouldn't be, if patients haven't shown significant changes in two weeks of starting care, they're not going to improve. So let's find out how they're doing at two weeks after starting care. So we recommend at your first visit, to two weeks after starting care and then wherever you put your formalized assessments in.

SB: I think Ncore have decided on before the first treatment, at one week, and after one month that they will send their questionnaires out. Of course it's quite hard isn't it? Because your course of treatment might last three treatments, it might last three months, it might last six months. And so at discharge often that's very hard to manage as well because you might be saying, "Well actually, you need regular maintenance to continue your-

DN: In terms of maintenance. In the research field there's been a number of different ways of doing it. So there's been everyday measures. I wouldn't necessarily do that in clinical practice, but it's been some very interesting stuff that's come out where SMS has been used. So you have single questions around pain and disability. Those are sent every day. And a recent study just published by some great, brilliant colleagues in in Sweden actually around looking at sending your SMS messages once a week for the whole year. And they've been able to look at how the pain goes up and down over that time period.

SB: How many are they losing in this follow up process?

DN: How many patients?

SB: Well, how many are not responding and can't be bothered?

DN: I can't remember what the dropout rate was, but I think there was a good number that did this all the way through to the end that they could statistically analyze. And they were doing this to look at whether ongoing treatment actually had an effect over the whole year compared to doing it over sort of six weeks and then stopping. But they followed everybody up. But that that's around the research. But generally, two or three times and I think care response says it four times.

JF: Yes. So if a patient was on maintenance I'm hoping that people build a review, having four visits within the maintenance program. You might want to get them to complete a PROM at that point and just say is this

maintenance still holding the benefit we're hope it to holding? We might find that their stiffness is increasing so that might be useful discussion around carer, are they're doing their exercises or modifying the care.

SB: Okay. Because most of the interest here is in how we employ PROMs in our practices from day to day. I'm going to give you the last word on the program Jonathan because we're out of time. Somebody here has said they're really nervous about starting with PROMS in their clinic because they... And other people have said they don't think patients will want to fill in the forms. Give us the sales pitch for PROMS in clinic. Okay.

JF: So at at a clinical level we can give the patient the PROMS to complete. We can use a system like the NICOR system or the Care Response system to send a PROM out electronically. It's up to the patient whether they complete them or not. We're not going to refuse to treat a patient who doesn't complete it, but we can add an extra richness to our consultation to our time with the patients, if they do do it and it gives us confidence that the patient's responding well to care or if they're not, we can change our care.

And it gives us that data in which we can analyze our service and we can actually tell the rest of world, we can be transparent in how well people do with the sort of care we're providing and their level of satisfaction with it.

DN: And using the electronic... Not to have the last word, but using the electronic system I think is the added benefit that that as long as you encourage the patients to actually do fill it in, it's not really going to impact on that day to day practice stuff where you're going to have to collect the paper and so on. Because that's a really important point.

JF: And it doesn't matter if patients don't complete it. That's up to them. And we've shown, it's part of my doctorate, the patients who didn't complete it were same as those who did it in terms of their makeup. So the data isn't skewed in a positive or negative way. We're quite confident to that.

SB: So I have to say, I came into this discussion thinking this isn't going to be... Conducting PROMS in our practice isn't going to be as difficult as most people think. But I'm going away from this discussion being extremely encouraged that not only the patients get better because they fill in the forms, we get more patients because we can tell the GPs about what we did, and because we can put statistics on our website. And actually we're improving the quality of care not just across the board but for individual patients by what we're doing with those forms.

SB: Gentlemen, David, thank you very much.

JF: Thank you for having me.

SB: Thank you for coming as well, Jonathan, lovely to see you again.

DN: Likewise.

SB: That's it for this evening's broadcast.