AbilityNet Webinar.

Date: 12 Sept 19

MARK: Hello everybody, it is 2:00 o'clock, hopefully, you have been waiting patiently to join us, I am Mark Walker from Abilitynet I am your host of the Webinar and this is a Webinar about how assistive technology can help people with arthritis and so just to check you are in the right place, and make sure that you can hear me, if you can hear me, could you mention in the chat box that you can hear me, thanks Rob, Megan, Katherine, so having encountered the chat box, tell me if there is something you can't do or questions about, we will come to housekeeping in a moment. If there is anything immediately you need to know about the technology or making sure, I can see Katie, you have raised your hand. If you put something into the chat box. If you have got a question, put it in the chat box, I can try and deal with questions you have got anything about. We have got ‑ I can see loud and clear, appears the sound is working, if there are questions you have, and can't see the chat box, you should be looking at menu box, you will probably find chat under the three dots that say more, and there is a chat box in there. I don't have a question, but I am curious ‑ hello Katie. Go ahead if you want to ask questions. While you are thinking of your question Katie, there is a Q&A box. That is where we will answer questions during the session. The chat box is useful to check you can hear me, if you haven't got it. Open the Q&A box, in there, I will get you to ask questions and we will manage, and you will be able to see the questions people have asked and see the answers. I can see, use the chat box it asks me a question so I know whether I can help you, we won't use sound. We have huge problems with sound if we open it up to people, be aware we are using the chat box and Q&A to ask questions. Today is about Q&A both about the topic and anything else. Please use those Q&A functions or chat functions whichever one is comfortable for you.

       You should be able to see some captions, these are live, provided by a human being, thanks to my clear text, so we use live captions in our Webinars, we know there are automated systems that are usually okay, but in a public thing like this, we think that live captions are better. Hopefully, that will make sense to any of you that have issues using sound. If there are issues about using the captions let me know, we have got them at a size that we think works for you.

       What have we got now? Forty people on board already? I think we will keep going a couple more minutes. Then we will get going. I will organise my screen. Great, so somebody, has already said the captions are really helpful so that is brilliant. Good to know, we are helping you out there.

       So, a couple of other things I will mention, the slides available after. They will be all sorts of follow up information we will mention in a minute and as I say, definitely encouraging you to interact with us as much as possible through the software.

       So, welcome everybody, this is the Abilitynet and Versus Arthritis Webinar, about how assistive technology will help with arthritis, you will hear from me, Alex Barker and Mags. We are expecting to be done in about 40 minutes. I am chiefly in charge of time keeping amongst other roles, so I will be trying to make sure we hit that mark and then the, there will be various opportunities for you to ask questions but please do as we are going along and if there are any questions you have, that you can't answer, we will pick them up and share them later. Can I see, I can hear somebody breathing into their mic somebody is saying. Our panellists, which it must be, if you can mute yourself when you are not on and to keep the noise down thank you.

       Great thank you, so how can technology help with arthritis? Let's get going, we will tell you more about Abilitynet and Versus Arthritis and the services we offer so you can see where you can come to us and ask questions through help lines and Abilitynet will talk about how we can help if you are living with arthritis and then Versus Arthritis will talk about their services and we have questions that came in by advance and we want to leave it to you to come up with questions. Ask us a question at any time. I will be curating that, if there is nothing we have picked up at the end, we will do a full Q&A at the end.

       I have introduced you to myself, Alex? What is your role?

ALEX: Yes, of course I can, I am Alex Barker, I am the advice and information officer for AbilityNet and I field enquiries from anyone who wants to know so people call in on the phone or email or use on‑line chat and ask us all sorts of questions about how they can make the technology work for them in a better way and I also take requests for organisations volunteers to go on out to individuals as well.

MARK: Thank you Sarah, tell us what you do?

SARAH: I am responsible for developing new products and services and with a view to generating some income for the charity. But really, from our research looking to listen to the needs of the, of people with arthritis and ensure that products and services are being developed according to the issues that they have raised.

MARK: Thank you and Mags Hi?

MAGS: I am a help line adviser, so we answer any queries about the condition, how to manage it, how it is affecting different aspects of their lives and I will talk later about how people can approach the help line and the different ways.

MARK: Welcome, I should say that from AbilityNet point of view, we are a pan disability organisation and working with an organisation like Versus is great, finding the common ground with specialist charities is what we do.

       What we would like to know, stuff about you, we will ask you questions, I will launch a poll and ask you whether you are someone living with arthritis, someone caring for someone with arthritis, a hair care professional or other. If the answer is other, please use the chat box, so we can understand your interest. There is clearly a whole range of stuff we will talk about and we can then tailor the information we provide to particular needs that you have.

       So, chat box good place to tell us who you are and what you are doing if it is not listed and if not, tick one of the boxes and we will get the skew on what information is useful to you.

       A couple of answers coming in, we have got a somebody saying they are a digital accessibility specialist, a DSA needs assessor, for disability students’ allowance, someone living with RA and a health professional, have RA and osteopathy student, adviser in university, charity professional. Have relatives living with arthritis, accessibility champion in university. Heather from SkyScanner, Hi and yes, so a real range there. So, I think, what I am showing you is the poll. So it shows that most people on here have an interest with someone living with arthritis and then people caring for others and then the others is a real range, people in different settings probably looking into insight around, how technology can help people with arthritis, I am confident we will cover that ground across all of that, looking at the materials we have, if there is anything we missed. We won't delve too much into digital design, it is much more about assistive technology but certainly we can touch on that as we go along.

       A bit about Abilitynet we want to create a digital world accessible to all, all about offering a rake of services to people, to help people achieve their goals. We help people access information and use it in a variety of settings, we have a tool, free guide to all of the accessibility features in all mainstream settings, mainstream operating systems and a range of free on‑line fact sheets including some around arthritis which I am sure we will mention.

       So, Alex over to you, starting with us, what can we do to help people with arthritis?

ALEX: As you start to do say, we have lots of resources on our website so we have got over 20, over 25 different fact sheets again from how to help someone if they have got arthritis right through to visual impairment and how to fund a computer. We have been doing Webinars for maybe, 3 or 4 years now and got all of them archived so if you wanted to come to a Webinar that can get to it, you can always play it back as Mark said we have got my computer my way. So if you have got a smartphone, if you have got a tablet, or if you have got a lab top or desk top and just need to make simple changes to your computer that are free and easy, you can do it that way. An example might be to slowing your keyboard down to not get too many unwanted characters. We have got quite a lot of useful link to sign post other organisations and charities. Part of our work is to try and raise awareness with people about how websites can be made more accessible. So, we have got really useful digital disability resources.

       One of the other things we can do is we can do a workplace assessment so if have got, if you are working at the moment and you need some advice and you want someone to come in and have a look at your working environment, we can do that under the workplace adjustments.

MARK: Everything except the workplace assessment is free. Someone has asked about My Computer My Way. That is up to date with the latest operating systems as they are released. I think we will have updated changes coming through on the operating system. It is practical and specifically about making the changes, which menu you have to presses and the button.

ALEX: It is also step by step.

MARK: Alex you are part of the help line and that is also part of our service. You can ask about anything, we work across all technologies and disabilities. How often you hear about arthritis in terms of calls we get?

ALEX: I would say probably about 20 to 25% of the calls that we take and lots of people are fairly of an older age group, saying after 20 years, I started to get arthritis and I don't know what to do and can you help me? We come with uses for them.

MARK: For everybody here, the difference between living with arthritis when you first experience it and one of the things we are aware of, because it is one of the things that changes with age, is also your experience and usage of technology may change with age as well. Clearly different uses and different things people are doing with computers at different times in their life. Arthritis may affect them in work, home, education, maybe different tasks you are trying to do I think Mags is going to tell us.

MAGS: Yes, we have a new charity, merging of arthritis ... and arthritis care, 17.8 million people living with arthritis, so that is 3 in 10 people which is consistent with in the number of people that are contacting you.

       Arthritis affects people's lives, whether that is work, living independently, it has a massive impact on people's quality of life, or it has the potential too. And it is very often dismissed, seen as an inevitable part of aging and can be seen as something which is only an older person's condition, which is clearly isn't the case. It can be just shrugged off as "a bit of arthritis, what do you expect at your age" as a charity, we don't believe that is acceptable. We are doing cutting edge research, quality services and advice. We campaign for it to be treated as a health priority, so the pain isolation and fatigue are no longer tolerated. We don't think that is acceptable.

MARK: I don't know if we come on to this, in terms of your research, do you have information around the impact of technology or the impact of arthritis on people's use of technology?

MAGS: I am not personally involved in the research side of things, but I am sure we will have the information. A report coming out of the muscular skeletal health report. I think it has that kind of data in it. You can look at the research information on our website to see what we already put together in that information.

MARK: I guess I might be stealing Sarah's thunder there.

SARAH: Not at all!

MARK: Another question, because clearly this is a huge scale in terms of the people living with arthritis, anything about the demographics of that, is it primarily older people, we might think it is, ‑

MAGS: Socio‑economic factors play a big role. That report I mentioned highlights the impact that can have on people's lives. A lot of people who have arthritis it affects whether they are in work or not. The cause and effect is something that the researchers looking at and trying to find out places where they can make the biggest impact with that. So yes ‑ it is not to do with age obviously. Things like osteoarthritis, the potential to get that increases as we get older, but arthritis can affect people of any age group. Dangerous to assume that it only happens to older people. Because the diagnosis can be missed.

MARK: Sarah I think you will tell us more about the support you offer? Is that right? Or is that you Mags? I can't remember whose slide this is.

MAGS: I will do that bit as well. What we offer is we have ways that people can engage with us as a charity and with other people with arthritis, so we have a help line, a multichannel help line, an on‑line community groups and groups and services where we meet face‑to‑face. I will tell you about the help line first. So, at the help line, we aim to provide information advice and emotional support and to anybody who is supporting someone who is living with arthritis. So what we want to do, empower people to understand more about their condition, to know more about the treatment options and the self‑help options available, providing people with the most up to date evidence based information so that is all based on the latest research and insight and using medical information.

       The idea really is to empower people with information to manage their own condition and manage treatments available to them and the necessary support. So, the help line it is open from 9 until 8 Monday to Fridays, multichannel, call us, email, write to us, contact us through social media. We try to answer people’s questions and if we can't answer them or we know there is a more appropriate organisation to support them with, we will sign post, like Abilitynet does to other organisations and support groups. We are not medically trained on the helpline; we are used to having conversations around arthritis. The help line was set up. A lot of people said, I want to talk it through with somebody else. There is little time in medical appointments to get your head around the information.

       We can't give medical advice; we can say about drugs and side effects and risks, but we are not medically trained it is important to know we can't provide that information.

       The help line is free, so it is a free phone number when people are calling from within the UK. Our evidence is really aimed at people in the UK in terms of you know, treatment options and that is available in the UK in terms of support. So just briefly, the on‑line community is a safe place where people can talk to each other about living with arthritis and find useful information from each other, so more of a peer support environment. You can also chat to the help line through that on‑line forum. The idea is that people can ask each other questions, share about how they are feeling and just tell others about tips and hints and the sharing of information.

       The groups and services are run some of them are run by people with arthritis for people with arthritis and their families. And it is run differently in different areas so across the nation, I think 500 across the nation. So, there are offering face‑to‑face peer support, over the phone or drop in or by attending group sessions and we also have services for young people and families and activities and events that people can attend.

       There is also a lot of information that can be available, that is available through our website and booklets that we send out within the UK and you can ask for virtual assistance, if you don't want to ring the help line and speak to somebody, you can ask the question, learning as it goes along, able to answer quite a lot of information now and sign people through to information. Then if it can't answer the question, it would encourage you to ring the help line.

MARK: What sort of numbers of people are asking you for help currently? Thousands, hundreds?

MAGS: Hundreds a day, depending on how busy we are. And all the emails and letters.

MARK: If you have questions, use the Q&A box, we will ask you some questions, but I am also wanting to encourage you to know what you want to know, so we can answer your questions. So, the interactive bit now. The poll. Turned out a reasonable proportion of you do have arthritis and what area of your body experiences the most pain? Look at technology useful with that. If you have anything outside of the questions, we have asked you can put something in the chat box and indicate something to us.

       We have got 55 people on at the moment, I am looking at how many of you answered. Somebody mentioned knees. Most joints is another answer, all of the above presumably? It is picking up the chat box things there. Somebody saying I have CP and can only use one hand. Years of use ‑ okay, so, I will close the poll. Last chance to click on something. I will share that with you and show that most of the people have mentioned their hands. 50% of the people who answered mentioned hands and then impact on hips and knees. My assumption would be that the impact on of not being able to use your hands in the way you did before, that has a direct impact on computer usage, that is what we would expect. Using a computer mouse or keyboard will be challenging for anybody with issues with their hands.

       Do you have any observations about that, Mags, Sarah, hands, hips, knees, relevant for people around those issues?

ALEX: In terms of hands it is all about trying to reduce the amount of time use on a keyboard or maybe give someone a different keyboard so that they are not experiencing so much pain. I know sometimes even though your hands might be in pain, you still want to get a piece of work done so it is about trying to reduce the pain whilst still giving you the opportunity to access your computer.

MARK: Cool and Sarah or Mags? Do you have anything that you experienced on the help line support. Presumably these things come through.

MAGS: I was expecting hands to come up more. Any of the inflammatory conditions that impact on the hands. So yes.

MARK: Sorry just one extra, neck as well. That is often the case about posture and other things.

MAGS: Yes, that's true.

MARK: Cool, so we have got some questions which we asked you to tell us what you were interested in, in advance, I will read these out. These are questions from you, anything that you think you arrived with a question, it is good to have a record, the Q&A is recorded within the software, so we have a way of seeing what concerns and issues you have, even if they are not covered today. Please use the Q&A box.

       The first one, is I am a touch typist but the pain in my hands from arthritis is making it increasingly difficult to type? What advice do you have? An Alex answer first?

ALEX: I would say several things to look at. First thing to see whether the keyboard you are using can be adapted in any way or whether your keyboard that you are using is the most suitable one. So, a lot of people have got quite a bit of an almost clicky keyboard and that might be causing you difficulties. There are lots of soft touch and light touch keyboards out there. Even keyboards made out of rubber which give you a totally different keyboard accent. It might be worthwhile looking at one of those. Might be worthwhile looking at voice recognition and also might be worthwhile looking at technologies such as word Alexa or autocomplete in Word. That might be easier to, and ... you may well find though that it is just not one answer, there is not one golden, there is not one golden answer. It might be several different pieces of technology that help you out.

MARK: Sarah or Mags anything to add around that.

MAGS: I think what you are trying to do to avoid too much of the repetitive movement which is leading to some of the problems really. There are exercises that would be recommended for people with problems in their hands to keep the hands as mobile as possible and try and avoid them from getting stiff and painful. That can be make a big difference to managing that condition. There are exercises you can do, recommend by a hand therapist or physiotherapist. We have information that we can send out. At the moment there is not much information on our website about hand pain. Our content team are currently updating the information so that will be on there at some point soon hopefully. But in the meantime, we can send some information out by email. If you want to contact us, we can certainly help you with that kind of information. But, in general, trying to keep the movement in the hands there are things that can be done to help with the pain obviously when you are resting your hands and things you can do. Try to do the movements and not touch time for too long as Alex said, breaking up the activities can be helpful. Wax bath therapies can be helpful and working and resting splints. Seek medical advice in your situation to manage that situation.

MARK: Anything you want to add Sarah?

SARAH: Nothing further to add, I think Alex and Mags have covered it.

MARK: One thing that cropped up here is apart from the key on board, I think using voice ‑ we will talk about it later on or not, people talking about speech to text and dictation, which means you don't need to use the keyboard. Alex, there is a question specifically here about what we think of, or whether we recommend particular software on Mac iOS it says on here, do you have bits of software, or you hear people use most successfully of controlling the computer with their voice?

ALEX: Using the Mac is interesting because at one time dragon used to make a voice recognition programme specifically for the Mac however it is no longer supported, and you can't get that package. What you do have on the Mac is you have some inbuilt speech recognition which although I have never used it, it is supposed to be fairly good and get to it from the menu on the top left‑hand corner so if you click on the Apple menu and control panel, you should be able to sort it out. If you go to my computer my way, you can get more information. Also, if you have got a Mac, you have got Siri built into it. So Siri for those people who don't know is almost like a personal assistant so you can ask it questions and it will go away and find out the answers and certainly iPad and iPhones, you can do it, send a text to a certain contact by just using your voice.

MARK: I certainly voice is something I should mention, we have a fact sheet about controlling the computer with your voice, covers lots of areas. There. Things like Alexa are coming mainstream. Dictation in office 365 is surprisingly good, getting the right equipment for voice control is important. Some will work better if you have got a decent headset and can follow your voice better. The other one somebody asked about using otter and grammarly, my experience of using voice, it is easy to get the information in, in the first place but very difficult to then go back and correct things successfully. You almost end up putting it in with voice and then correcting on the keyboard, that is a challenge, if you are not using things like dragon, which are designed to control computer as well as type.

       The technology changes all the time, it possibly comes up in your forums and people are asking, "I have got Alexa anybody tried this? " We see that as well.

       Next question, do you have to live with the pain all day and all night. That sounds like a Mags or Sarah question?

MAGS: Yes, so, hopefully no, there is a lot of treatment and self‑help options available. It obviously depends on the condition that the person has, I believe the person that asked this question, has osteo and rheumatoid arthritis. It is something that people want information on. It is about making informed decisions. Treatment options first and then we will talk about self‑management. I am having to keep it general. If you phone the level, we can be more specific and explore what someone's options were and what they are interested in and their preferences. Provide advice accordingly really.

       But in general, the pain relief options would be simple paracetamol, painkillers like paracetamol, the anti-inflammatory drugs. Reduce the pain and inflammation. Next level, things like codeine and then the opioids, most of those painkillers are available in the form of gels patches and creams, so you won't have to ingest them. Apply to the skin itself.

       They are part of the picture, obviously there is a big concern about people become over reliant on medication, sometimes people don't want to take medication at all. They are worried about becoming over reliant on it. The important thing is to manage the pain in some way, and somehow switch the pain signals off. Over relying on drugs is not a necessarily a good thing.

       There are risks and side effects and benefits of each of those drugs really. A lot of people on the help line call us because they can't take the anti-inflammatory drug and they want to know what alternatives are available. There are various reasons that people don't want to take it and certainly you wouldn't want to be self‑medicating for long‑term pain in that way. We would advise you to seek a medical opinion. Long‑term use things like ... there are ways around it. Drugs can be prescribed to protect the stomach lining, for those, who didn't want to tell their GP's how reliant they are on the drugs, but there are ways around it. Mainly the advice about pain is, it is important to get pain under control so that you can move. So the rheumatologist that trains us, is clear about, when he is training other medics who would say, don't just give painkillers so someone can just lie around and not be in pain, give them so they can do something active when their pain is as well managed as it can be. It is that movement that will make the biggest difference. Again, like we said, it is depending on the type of arthritis we know about. Pain management. There are drugs that help dampen down the immune system for types of arthritis, they are not painkillers, but they get the condition under control and alleviate the pain [signal breaking up].

       There are therapies as well. So, physiotherapy, hydro therapies and CBT which can be helpful. Researchers shown the link between the brain and body. Not to say that it is all in the mind, but the feedback loop between physical pain and the brain is becoming more and more well recognised. So, anything that you can do to break the pain cycle, even if it is a temporary thing will be really useful in terms of managing the condition.

       Other treatment options like, if you are at the point where surgery is necessary to alleviate pain, that can be a good solution for people, can help reduce pain and mobility.

       There are excellent pain management programmes available, so, going to a department in a hospital, being referred to a pain management clinic, but there is a really good programme that since January this year has been rolled out across the country, something that Versus Arthritis invested in, at the beginning, so successful, run the departments in hospitals initially. People who have a specific condition osteoarthritis but, in the knees, and hips. Incredibly useful for people to attend that pain programme and you will find more information about that. If you Google escape pain or on our website.

       In terms of self‑management options the only real treatment and surgery really for osteoarthritis is self‑management. So, the idea with osteoarthritis is to try and keep the muscles as strong as possible around the joint. Making sure that posture is good, using joint protection techniques, they can be helpful in terms of managing yourself.

       Obviously with advice from a physiotherapist usually. But even things like heat packs, wheat bags, the ... for the hands, that is a paraffin wax you can melt and put your hands in that wax. So ... pharmacies, some sports shops and ‑ sorry that is mostly with splints.

MARK: Sorry, I want to, I am conscious of the time, can you point us to a place on the website with that type of health information.

MAGS: Go with the section on the website. Two places, one to look for the painkillers and go to about arthritis, choose treatments, look at them from there go to drugs and from there go it painkillers and then for the self‑management option, under the specific condition. So, for osteoarthritis, whichever form of arthritis you have, find that information under the condition and then go manage symptoms and find out a lot more there.

SARAH: Can I quickly add, we are investing over 24 million into new pain treatments so that is recently been launched so because there has been no new advance in pain treatments, so we are heavily investing into this. We are supporting research which looks at retraining the brain, so the body no longer feels pain.

MARK: Thank you. Somebody mentioned a tens machine as well. I am sure there are other devices, I am keen to get back to the assistive technology bit as much as we have. We have 16 questions coming up in here.

       Another question, we have touched on this a bit. A good voice dictation that picks up a female voice, somebody mentioned they didn't think Siri is not good at understanding north's eastern accents. Alex, the ways in which the voice technology can deal with different voices?

ALEX: Sure, we would say as an organisation, that dragon or nuance is the industry standard. I was really interested when I saw this question and if I had a chance to talk to the person who raised this question, I would be saying, I would want to know, what sort of microphone they used or how they set the device up or perhaps I would want to get one of our volunteers to go out and have a look because dragon really beats anything else hands down and we would always say that if it is set up properly and you have got the right microphone, you should be able to, and you have a bit of time and patience, you ought to be able to get it to work. If it is not working, it soon, it would seem to me that something is not right somewhere else.

MARK: Cool so the standard is that it should work broadly, no reason why a female or any particular accent should cause a problem. Our experience suggests that is true in general, particularly when you are using a headset. That means Alexa or Google assistant where you are not using a headset is not so good. I think that is it the industry standard. There is a difference between using the voice control to input content and then when you are speaking to it and then the other bit controlling it. It maybe that there is a difference in that, maybe better at hearing your spoken word in terms of getting text in it but not quite as good with instructions.

ALEX: It is all about doing the basics right so you have got it get into a nice easy conversational chat with dragon, I would be chatting like this and it would be printing out what I wanted it to and it is also worthwhile saying that if you used it 6 years ago and it didn't really work, you might be put off it. Voice recognition technology has come on leaps and bounds. For example, only took me 10 minutes to set voice recognition up a couple of years ago, where before it would take you an hour and you would have to read several paragraphs of text and that just shows how technology has changed. So, don't get a bad experience that you might have had before putting you off in using voice recognition now.

MARK: Got an interesting question from somebody who raised that, what reasonable adjustments will employers tolerate and in particular, intolerant colleagues when using dragon ‑ it needs to be something that works for you in a practical sense. We assess the workplace and don't just recommend the technology, we look at solutions that can fit best, if you are in a place where you can't talk and hear your computer, that may cause problems with your colleagues that is not a reasonable adjustment. It needs to work in the context of the work you are given. We do a lot of work around that with employers and working with employees, particular bit to do the assessment, but what information about what is and isn't reasonable. That is much more about the relationship with the employer, in terms of the use of technology in the workplace for people with arthritis, it isn't just about software, but making sure it works for you and in terms of your work pattern and the types of tasks you are given. Not saying that one piece of technology will fix everything. That is part of the challenge.

       Equally means you may need multiple solutions; you say it affects in different ways at different times. That is part of being reasonable as employer, you may have solutions in place, our mantra is one size never fits all. It is never that one piece of software is the right thing in every situation, it is down to the individual set up and support from the occupational health colleagues in the team and are they being reasonable in the support they are giving. That is difficult to answer from the point of view from technology, from employment point of view, what is reasonable to understand.

       I think a quick one here, I will jump over this one. I am interested in sharing with you the information we have. I am conscious we have mentioned some links and things and on here you will find where you can get it from Abilitynet. These will be shared after. You can go to, you can go it our free resources and our factsheets and help line, our help line number is on here. 0800269545 and we have tools and free advice which links to your use of technology in the workplace and we have clear talents which identifies your own needs. There is a free version of that, but it is a tool that employer would use, there is lots of information there. These will be shared after.

       From Versus Arthritis, your website here. Your help line number is 08005200520 and ‑ I wanted to get that in before we looked at anymore questions, so you know, these answers where they can be found.

       Another one here about, this is more of a health related one. This is for you at Versus Arthritis. What can I do if the wait time for hospital is over 6 months and I can't get access to the physio team?

MAGS: Depends on the type of arthritis, you can find lots of information from our website about managing different conditions, I don't know, I can't see the question, I don't know if the person says what type of arthritis they have?

MARK: No.

MAGS: Okay, so in general, self‑help techniques will be around movement really trying to get the pain under control. Like I said before, if you can see the information on there about the self‑management tips, on the rheumatoid arthritis, there are tips on managing a flair up, it is about trying to self‑manage and speaking to the GP in the meantime until you get through to that appointment. Sorry, can I say as well, I just remembered, we have exercises for all the different joints on the website as well. You can find that under common aches and pains and then go to joints and then find specific exercises for joints.

MARK: Cool, a top tip from Louisa about headsets, we use USB headsets, they definitely work better and also talk to dragon in a BBC English type voice, which sounds annoying, but I wonder whether that work you might have a dictation voice, but it works sometimes. We have Alexa and Google in our house, it responds in different ways. We know there is inconsistency there, the headphone tip, having the best equipment you can and back to the fact you are at work, that is something your employer should help you with.

       Louisa also saying distraction techniques work best, listen to go music, reading and watching TV. Noise cancelling may work better and make your voice clearer and can hear more clearly. Certainly, in terms of the equipment that you are using to control it with your voice, that is one thing. I think Alex, just to round up about the keyboards, because I think that is very much an area just to remind people, we have resources around alternatives to keyboards and mice. I am sure that is a lot of what you talk about.

ALEX: It is, voice recognition, to say one of the issues we have with voice recognition, their computer isn't that powerful, and you do need quite a lot of memory for voice recognition to work. So, the more memory and the higher processor the better. Keyboards yes, there are probably about 10, 15 different types of keyboards and what we would always say, there are lots of companies out there, mice, roller balls, keyboards, they will have them on sale or return basis, if you look the look of it, it might meet your requirements but then again it might not. Also, it might be worthwhile pointing out that there is lots of software that can take away or negate the need to click on the mouse cursor or the roller balance cursor. These are all simple ways of just being able to reduce the pain and discomfort when you are using a computer.

MARK: Thank you. So, unless there is any other questions, I think what we want to do to launch the last poll. We hope we have been helpful in this; we know we have only scratched the surface, but hopefully given you a pointer to specific technical advice particularly also and some great sign posting from versus to their website and some of the most often answered questions they have. We just, it is always useful to know how well we have met that need and also, we would like to know any questions we haven't answered. More than welcome to put questions in now and we can find a way to come back to you with information in the future. So please do hello everybody us know that. While you are filling that in, I want to say a huge thank you to Mags, Sarah and Alex and Neil you are raising a hand here? I can't do much with that, can you use the chat box, that is the only thing I can do.

       So, Mags Sarah and Alex thank you very much. The thing to emphasise, this is the day job, answering questions, make a note of the help line numbers and email. We have a network of 300 volunteers that can go into people's homes that are used to helping people with all sorts of needs and can make practical you know, support in terms of technology but also have a good idea around issues such as arthritis about the sorts of technologies that may help you. You can ask us to find a volunteer for you to come into your home, they can also work with you remotely if that is more appropriate. We have volunteers all over the country, so again that is something we can give you practical help with, if that is what you need. Great. So, Neil you are saying I have set up ITC's co‑op, so, is that something that you want to pass on? We can pass on links to other people.

       Thanks Mags, Sarah, Alex, thank you all for attending, it looks like most of you found it helpful. If there are things we didn't answer, use any contact method you want to keep in contact with us, we will share all of our resources after, so you can make use of the information. Thanks everyone.

       Bye bye ...