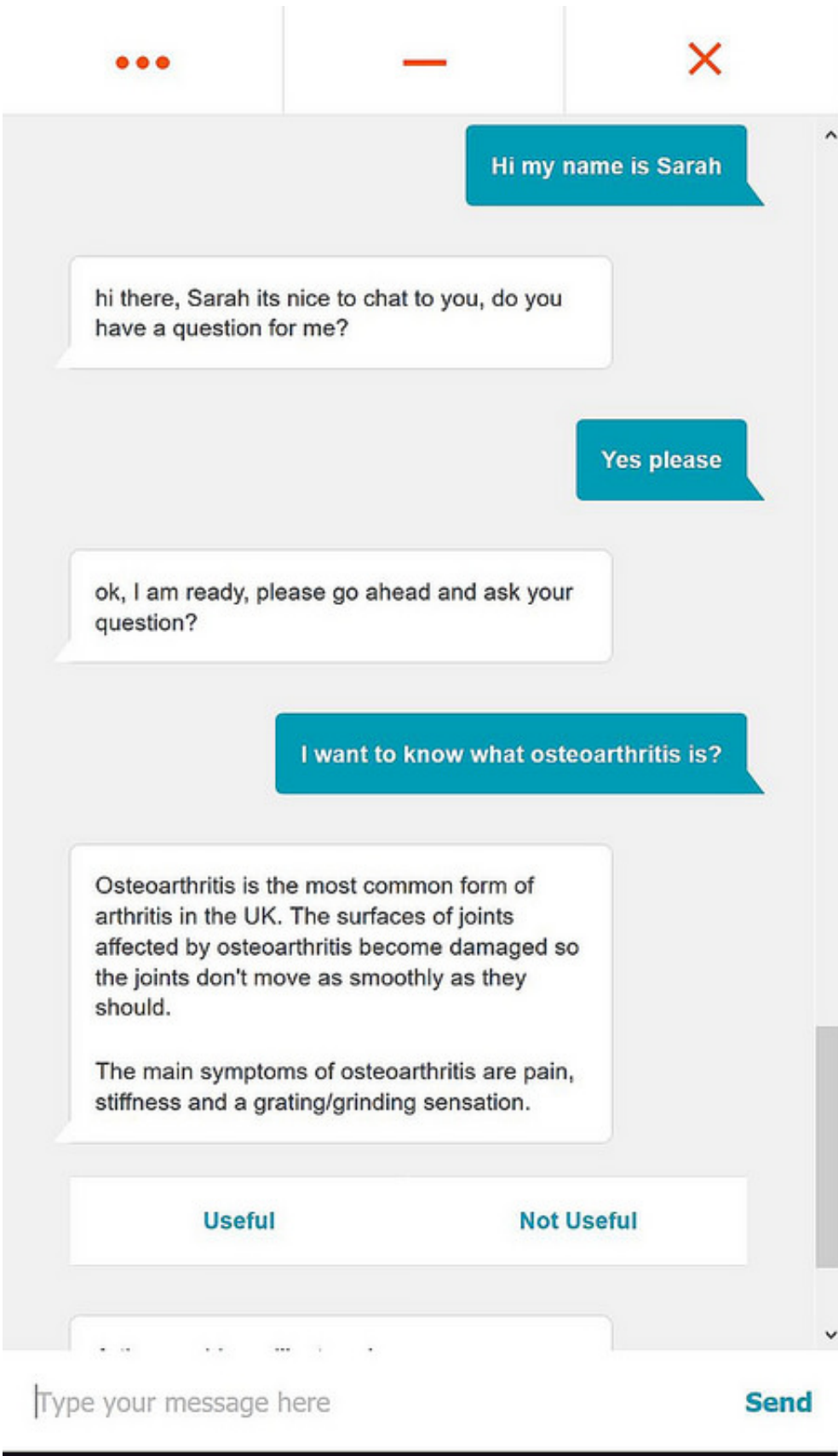


IBM Watson-powered 'virtual assistant' to provide information and advice to people with arthritis

March 14 2017, by John Galvez



The screenshot shows a chat window with a header bar containing three icons: three red dots, a red horizontal line, and a red 'X'. The chat history includes:

- A teal message bubble: "Hi my name is Sarah"
- A white message bubble: "hi there, Sarah its nice to chat to you, do you have a question for me?"
- A teal message bubble: "Yes please"
- A white message bubble: "ok, I am ready, please go ahead and ask your question?"
- A teal message bubble: "I want to know what osteoarthritis is?"
- A white message bubble containing text about osteoarthritis: "Osteoarthritis is the most common form of arthritis in the UK. The surfaces of joints affected by osteoarthritis become damaged so the joints don't move as smoothly as they should. The main symptoms of osteoarthritis are pain, stiffness and a grating/grinding sensation."

Below the chat history are two buttons: "Useful" and "Not Useful". At the bottom of the chat window is a text input field with the placeholder "Type your message here" and a "Send" button.

Credit: IBM

Arthritis Research UK and IBM today announced the development of a Watson-powered 'virtual personal assistant' to provide information and advice to people living with arthritis. The charity has teamed up with IBM to ensure people seeking help will have access to personalised information from the Arthritis Research UK website, delivered in a form that feels like a natural conversation. The service will be accessible on mobile phones and computers, without the need to download an app. There are currently 300 people with arthritis helping Arthritis Research UK to test and feedback before it is launched publicly on the charity's website later this year.


For the millions of [people](#) living with the lifelong impact of all kinds of [arthritis](#) and musculoskeletal conditions, finding an answer to questions about their condition can be a challenge. Arthritis affects people in different ways, so for some turning to the internet and sorting through pages of conflicting advice can be daunting and confusing. Every year, Arthritis Research UK's website receives thousands of personal questions about the impact arthritis has on day to day life, symptoms and [treatment options](#).

By tapping into IBM's Watson Conversation API, the charity has found an innovative way for people with arthritis to quickly and easily get answers to questions as soon as it pops into their head – no matter where they are or the time of day. This new service will mean that for the first time Arthritis Research UK will be able to provide every person in the UK seeking information about arthritis, immediate access to the best and most accurate information tailored to them. It will be supported by the charity's information and enquiries line, where a team will be on hand to help answer detailed or complex questions.



What exercises are good for hand pain?

Exercising your hands is important because it can help you to ease stiffness and improve joint movement. You should try to do stretching and strengthening exercises, as well as general fitness exercises. Here are some hand exercises for you to try.



Make a fist

Make a fist and then straighten your fingers. Repeat 5 times and hold the position for 5–10 seconds. Do twice daily.

Useful **Not Useful**

Type your message here

Send

Credit: IBM

Liam O'Toole, Chief Executive Officer at Arthritis Research UK, said:
"We know that there are millions of people in the UK living with arthritis whose lives are severely limited as they struggle with unanswered questions. We want to ensure that everyone has access to information and support, whenever and wherever they need it.

"We're really excited to be working with IBM Watson on this innovative new service that will enable us to have conversations with anyone seeking help, that we simply wouldn't be able to answer so quickly otherwise. We're confident that this new virtual assistant will help more people push back the ways arthritis limits their lives."


The digital personal assistant was developed over five months using the charity's 80 years of research based knowledge and expertise as well as advice from health care professionals, people with arthritis and IBM Watson [cognitive computing](#) experts. Over 350 people with arthritis have been involved during this time, to help develop, test and improve the tool. Initially, the service will be able to provide general information about arthritis and exercise that people can print out or save online.

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What exercises can I do for knee pain?

You should try to do stretching and strengthening exercises when you have knee pain, as well as general fitness exercises.

Here are some knee exercises for you to try.



Leg raise

Sit on a chair, keeping an upright posture with your feet on the floor. Straighten one knee fully. Hold for a slow count to 10 and then slowly lower your leg. Repeat at least 10 times. As you improve, try using ankle weights. If your knee is hot or swollen, seek advice before using ankle weights.

Useful

Not Useful

Type your message here

Send

Credit: IBM

In time, this knowledge base will grow to enable Arthritis Research UK to answer more questions – including those around diet and treatment options. As IBM Watson learns from each interaction, it will refine the information that is surfaced. Following this, Arthritis Research UK plans to leverage Watson cognitive voice input/output and location services to extend its capabilities, for example to understand questions delivered via speech (versus typed via a keyboard).

"Arthritis Research UK developed the Watson-powered digital personal assistant themselves, providing a terrific example of how IBM's open, cloud-based Watson development platform is making cognitive computing broadly accessible to organizations and individuals worldwide," said Cameron Brooks, IBM European Director for Watson in the Public Sector. "Further, Arthritis Research UK's use of Watson APIs is a model for organizations thinking about how they might integrate cognitive computing into their services in order to positively impact the lives of people living with a serious health condition."

Provided by IBM

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