

Nic Wray and the Tinnitus Support Team, Tinnitus UK

Correspondence: Nic Wray | T: +44 (0)114 250 9933 | E: nic@tinnitus.org.uk | W: tinnitus.org.uk | T: @uk_tinnitus

Introduction

Demand for Tinnitus UK's support services is greater than the available resource in terms of staff numbers and hours of service. In 2021, Tinnitus UK received a major digital grant from the National Lottery Community Fund. We used this to create a new website, an enhanced web chat service and a tinnitus chatbot.

What is a chatbot?

A chatbot is a computer program or app designed to simulate conversation with human users. The Tinnitus UK chatbot – Axel – uses a text-based interface to communicate.

Axel is available 24/7 and guides user to relevant Tinnitus UK resources each time they visit.

Goals for the chatbot

- Drives us forward whilst continuing to have a positive impact for people with tinnitus
- High quality, easy to use
- Increases engagement
- Increases internal efficiency and effectiveness
- Provides easily accessible information and service support to users
- Ensures users aren't alienated and feel safe

What we did

Axel is integrated with the web chat functionality of the Tinnitus UK website.

With a developer, we asked the Tinnitus UK team and user group the key areas and questions covered during web chats. Additionally, we analysed search terms and website user journeys.

This information was used by the core development team to agree the priorities and the details of the chatbot, the profiles and needs of potential users and how best to meet these needs.

A flowchart and pathways of each key profile was devised. A prototype system was then created, which was tested by the staff and user group.

The feedback informed the final version which was then connected to the website in its development phase.

Axel went live in January 2023. The launch was successful with no identified technical problems.

Results

- Increased number of users of digital support by 15.5%
- Improved capacity - Axel is broadly equivalent to one extra team member for one day per week (0.2FTE)
- More than 8 out of 10 people are interacting only with Axel, freeing staff and volunteers to spend more time on calls or webchats
- 49.9% of interactions with Axel come outside of our office hours
- 20.6% of interactions with Axel are at the weekend

Feedback

We give everyone the opportunity to give feedback after each interaction with digital support, but less than 1 in 10 users of Axel do.

Results can be seen in the table below:

Rated	Axel		Axel and adviser	
	Number	Percentage %	Number	Percentage %
Good	176	66.2	180	93.8%
Bad	90	33.8	12	6.3%
Total	266		192	

People who think Axel offers a good service talk about speed, ease of use, helpfulness and quality of information:

- "Much more 'intelligent' than other AI bots I've used."
- "This chat really helped me with my struggle."
- "Quick, helpful and efficient. Thank you."
- "Quick and easy. Problem sorted."

However, when people think that Axel offers a bad service, people highlight the limitations:

- "I expected to interact with a human not a bot."
- "I feel chatbots are always limited in what they can do but it's good there's something available when there's no one to answer texts or emails."
- "You need to be available 24/7 having tinnitus is enduring & it's 24/7 unless I am sleeping which is not often, please find a cure for us."

The future

We were always going to give Axel sometime to bed in before we reviewed him. This process is about to start.

Axel is able to learn and will be able to draw from more content as the website evolves, which will make it even more useful over time.

Axel marks a significant step forward for Tinnitus UK in our aim to reach more people with tinnitus.

Axel has made a solid start, and is the only tinnitus chatbot that is free and available to everyone, and to our knowledge, one of the first charity support chatbots in the UK.

Why Axel?

Axel is the puppy of one of the Tinnitus UK project team. Axel often joined in online meetings so when we needed a codename for the project, he was the obvious choice. As dogs are a friendly, helpful and trustworthy source of support, we realised it was actually a perfect name!

