

Parklife Café and Enderley Road Patients Association – Health Information Session

Topic: Artificial Intelligence (AI) Stethoscope Research Project

On the 29 February 2024, we were invited by Enderley Road Patients Association (ERPA) to undertake a health awareness session. Held at the ParkLife Café in Harrow, which ERPA has an ongoing collaboration with this session was about the AI-enabled stethoscope project that Doctor Mihir Kelshiker at Imperial College and his team are developing.

Background and development of the session

One of our Imperial Patient Experience Research Centre (PERC) Community Partners, who is a collaborator from ERPA, contacted us to help them connect their community with Dr Kelshiker, after reading about his work through the media. Dr Kelshiker is a Clinical Research Fellow in Digital Health with clinical training in Cardiology and Internal Medicine and is currently involved in a research project aiming to deploy an AI-enabled smart stethoscope in various GP practices, to determine if the tool can help diagnose heart failure. He agreed to talk more about his project with the Enderley Road Patients Association (ERPA) at Parklife cafe on the 29th of February, marking the third health awareness session held in collaboration with ERPA and Parklife.

Prior to the session we held a briefing call with Dr Kelshiker to introduce him to representatives of the ERPA and ParkLife cafe, to discuss the content of his talk and to get insight into any specific community interests. Afterwards, we developed a 1-hour face-to-face and online session focusing on his project and the expected impact on the health of the communities involved in the research.

Format for the session:

- 7:00pm Mingle and refreshments
- 7:30pm Presentation on the AI Stethoscope Research Project
- 8:00pm Q&A and Discussion
- 8:30pm Summary and Close

Aims of the session:

- Sharing research developments with underserved communities who may potentially benefit from it
- Increasing awareness about the significance of early diagnosis of heart failure and how this project aims to contribute

The session was hybrid which meant that some people were in the room and others joined on Zoom, with a PowerPoint presentation used for visual aids and to get key information across.

Attendees

ERPA and The Patient Experience Research Centre (PERC) developed flyers to disseminate the event across their community networks (see more in Appendix A).

There were approximately 20 attendees in person and 4 attendees on Zoom, including members of the ParkLife Café Community and ERPA, and their friends and family.

Agenda of the session:

During the session, the following topics were covered:

- Introduction to Dr Mihir Kelshiker and his disclosures
- Why create an AI stethoscope to support the diagnosis of heart failure
- Anatomy of the AI-enabled stethoscope
- NHS implementation and GP practices in Harrow taking part. Certain GP practices in North West London are taking part in the project by using the AI Stethoscope to diagnose heart failure
- Patient and Public Involvement in the project, including a Patient Steering Group and diverse local and national outreach activities.
- Summary and learnings

Comments shared:

- Most attendees were interested in taking part in this research project and would be happy for the project to be conducted at their GP practice
- Some attendees mentioned experiencing difficulties getting an appointment from their GP practices
- One attendee mentioned the need to improve processes in the NHS to speed up the diagnosis of conditions
- Three attendees were interested in knowing more about PERC, as they would like to be involved in research

Following the session, our ERPA collaborator, collected feedback from some of the attendees:

- They highlighted the positive atmosphere during the talk
- They mentioned the price of the device and emphasised that it is economical
- Members of other community organisations are keen to collaborate with Imperial College London to hold similar talks

Questions asked:

- One attendee asked about the cost of the device
- Some attendees asked how the technology of the device works
- Some attendees asked how they can support this project to be implemented in their GP practices
- Some attendees asked how they can take part in the research project

Feedback from the attendees:

At the end of the session, we shared with all the attendees a printed feedback form to explore the experience of the attendees, including what worked well and what could be improved, and received 15 responses. Please find the results of the feedback forms below:

Q1. Overall, how would you rate the session?					
No response	Very bad	Bad	Average	Good	Excellent
5	0	0	0	5	10

Q2. What did you like most about the session?
• “The detailed information about the program of AI”
• “Detailed explanation/information providing value of AI”
• “Knowing latest technology”
• “Incredibly informative, questions answered very well and clear, even when challenged”
• “Very informing about the use of AI to diagnose medical condition. Easy to understand.”
• “The background of the project and the community spirit (biscuits helped)”
• “How the stethoscope it shown”
• “Explanation of stethoscope”
• “Great speaker and great topic to the community. Engaged audience.”
• “Well and clearly presented”
• “Everything!”
• “The way AI works in surgeries”
• “Very informative”
• “The atmosphere”
• “Clarity of the presenters, excellent audience participation, welcome atmosphere”

Q3. Will you tell about this session to your family and friends?		
Yes	No	Not sure
15	0	0

Q4. What worked well and what could be done better next time?
• “Somebody demonstrating the device”
• “Presented very well, stopping and starting could have been smoother but not a huge issue”
• “Easy to understand sections and Q&A, more visuals to understand what will happen next-projections- how fast is growing.”

• “The man hosting the session is clearly passionate but keeps interrupting the speaker”
• “Improve waiting time for appointments at hospital”
• “Next time get a place with a screen”
• “Very well organised”
• “Everything was perfect”
• “Happy as it was presented”
• “Not sure”
• “Bigger screen for presentation”

Demographics of attendees (non-mandatory to provide):

Taken from the feedback forms:

Characteristics	n
Age groups (in years)	
25 or under	3
26 – 35	0
36 – 45	0
46 – 55	1
56 – 65	4
66 – 75	3
76 – 85	3
86+	0
Prefer not to say	1

Ethnic group (self-reported)

Characteristics	n
White	3
Asian	6
African	1
Black British	2
Mixed/Multiple Ethnicity	1
Prefer not to say	2

Appendix A – PERC flyer for the event

Artificial Intelligence Stethoscope Project

What is the project about?



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The Stethoscope has been developed to improve diagnosis of heart conditions such as heart failure and atrial fibrillation.



Please scan the QR Code for more information about the project

Event at Parklife (Harrow Weald)
on the 29th of Friday 2024 at 7pm

