

## **Patient Satisfaction With Hearing Aids And Machine Learning Technology In Real-Life Listening Environments**

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**Objectives:** This study examines the effectiveness of the new Widex EVOKE hearing aids in a range of real-life situations, compared to patients own hearing aids. Patient satisfaction while streaming is also examined, as is use of a machine-learning algorithm as a means of patient-driven fine-tuning in real-life sound environments to optimize sound quality and performance in real time.

**Background:** The new Widex EVOKE hearing aid platform was recently launched with machine learning technology - a world's first. Early evidence suggests users prefer the EVOKE instruments and its associated features over existing technology. This study aims to examine this in greater depth.

**Methods:** This study will be conducted at multiple clinics across Canada, with up to 25 subjects. Target subjects are experienced hearing aid wearers, with various hearing loss configurations. Subjects will evaluate their current hearing aids and WIDEX EVOKE 440 RICs. Subjects will assess both sets of instruments in their own daily lives and fill out survey questions (based on the MarkeTrak IX questionnaire) 4 times over a 7-week period (rating their own instruments and the EVOKE instruments 2x each over that span).

**Results:** We are particularly interested in learning whether the Widex EVOKE hearing aids will give users greater overall satisfaction compared to their own hearing aids, particularly in challenging environments, including restaurants, large lectures halls, and outdoors in wind. Satisfaction while streaming will also be evaluated, along with an app-based machine-learning tool that allow patients to personalize their hearing aid settings in real-life situations. Preliminary evidence suggests increased hearing satisfaction when using EVOKE hearing instruments alone and along with the machine-learning app.

**Conclusions:** We expect that this study will demonstrate the effectiveness of Widex EVOKE's advanced features in real-life situations, resulting in higher satisfaction levels compared to subjects own hearing aids, particularly in challenging environments.