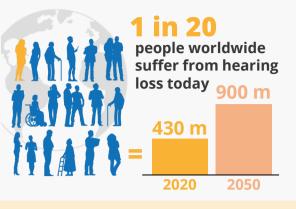


## Adult hearing loss and the project MOSAICS

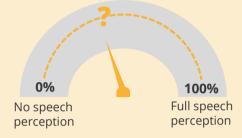


60 million suffer profound hearing loss and limited participation in society



could be treated by a cochlear implant (CI) to restore hearing

But **treatment outcomes vary** greatly among Cl users



Variability is mostly unexplained

Receiver (implanted) sends processed Microphone sound to the detects sound brain; this is the sound heard Speech by the CI user processor processes the **Transmitter** sound detected sends processed sound to the receiver

# **MOSAICS**

aims to better understand and minimize the variability in treatment outcomes among CI users to **maximize** their **participation** in society

**How?** Through a holistic approach of combined disciplines



## **Biophysics**

Investigate obstacles to the flow of sound in the auditory pathway to better predict CI user outcomes



#### **Neuroscience**

Understand how the brain interprets sound from the CI to improve the prediction of treatment outcomes



#### **Engineering**

Adapt the design and fitting of CIs to the users with machine learning techniques, to improve treatment



## Sociology

Develop personalized rehabilitation programs for Cl users to maximize their CI treatment results

#### Learn more



www.mosaics-eid.eu



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