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## WEAR ELECTRODES

## EXECUTE PATTERN

## TRIGGER ALARM

### MOTIVATION

#### Medical Need

##### Amyotrophic Lateral Sclerosis (ALS)

- 15,000 active cases in the US (National Institute for Neurological Disorders and Stroke)
- 1 new diagnosis and death every 90 minutes (ALS Association)
- Progressive illness targeting motor function

##### Locked-in Syndrome (LiS)

- Advanced stages of ALS lead to LiS
- Limits patients to voluntary control of their eyes

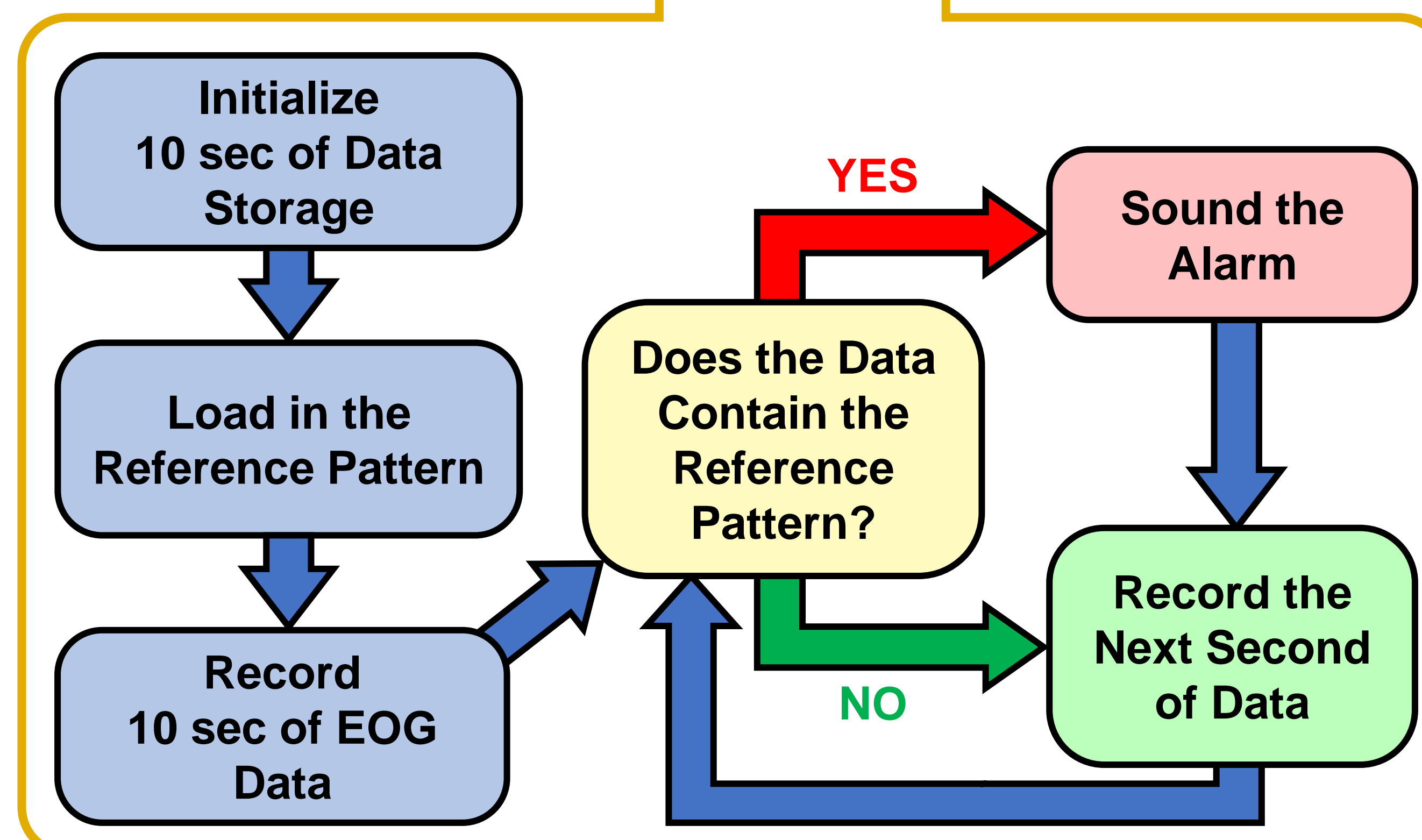
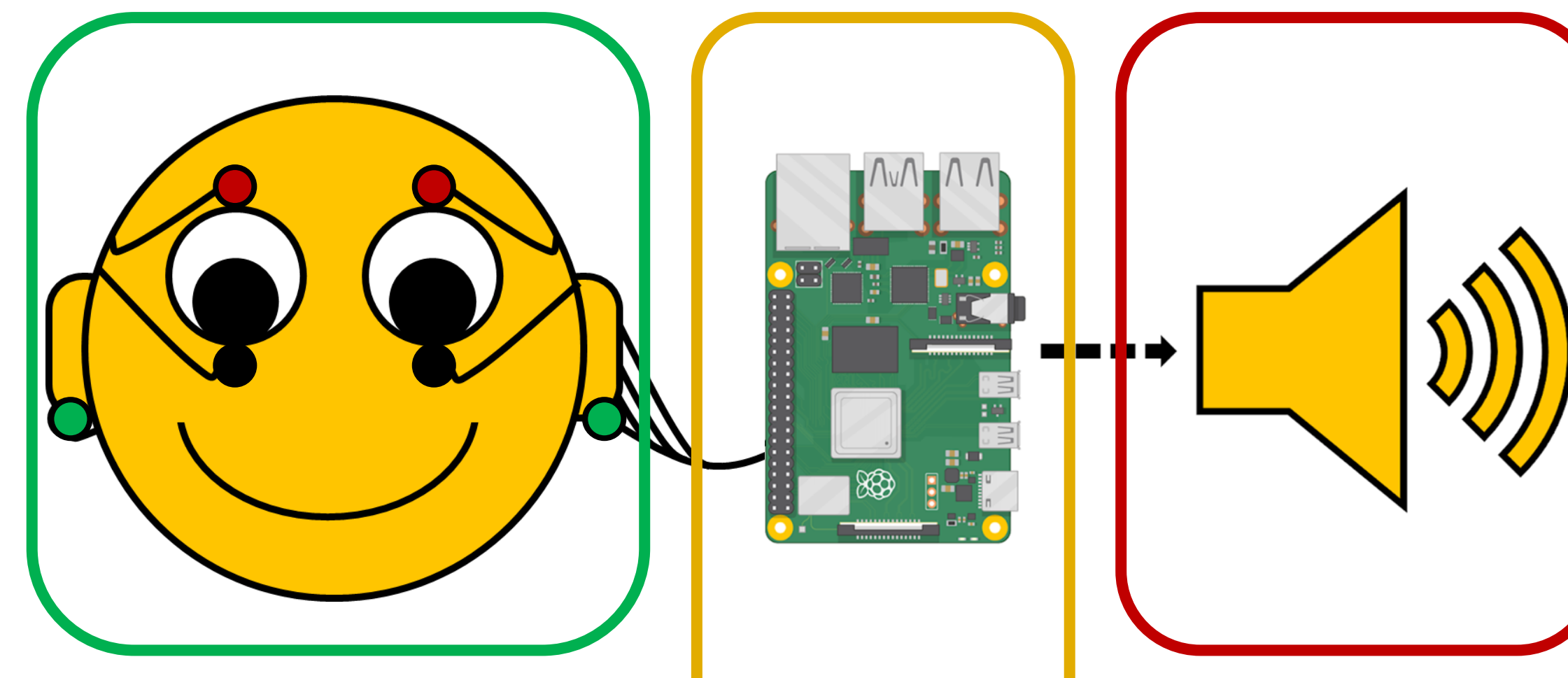


#### Project Objective

Provide a means for ALS patients with LiS to voluntarily alert their caregivers that they need help.

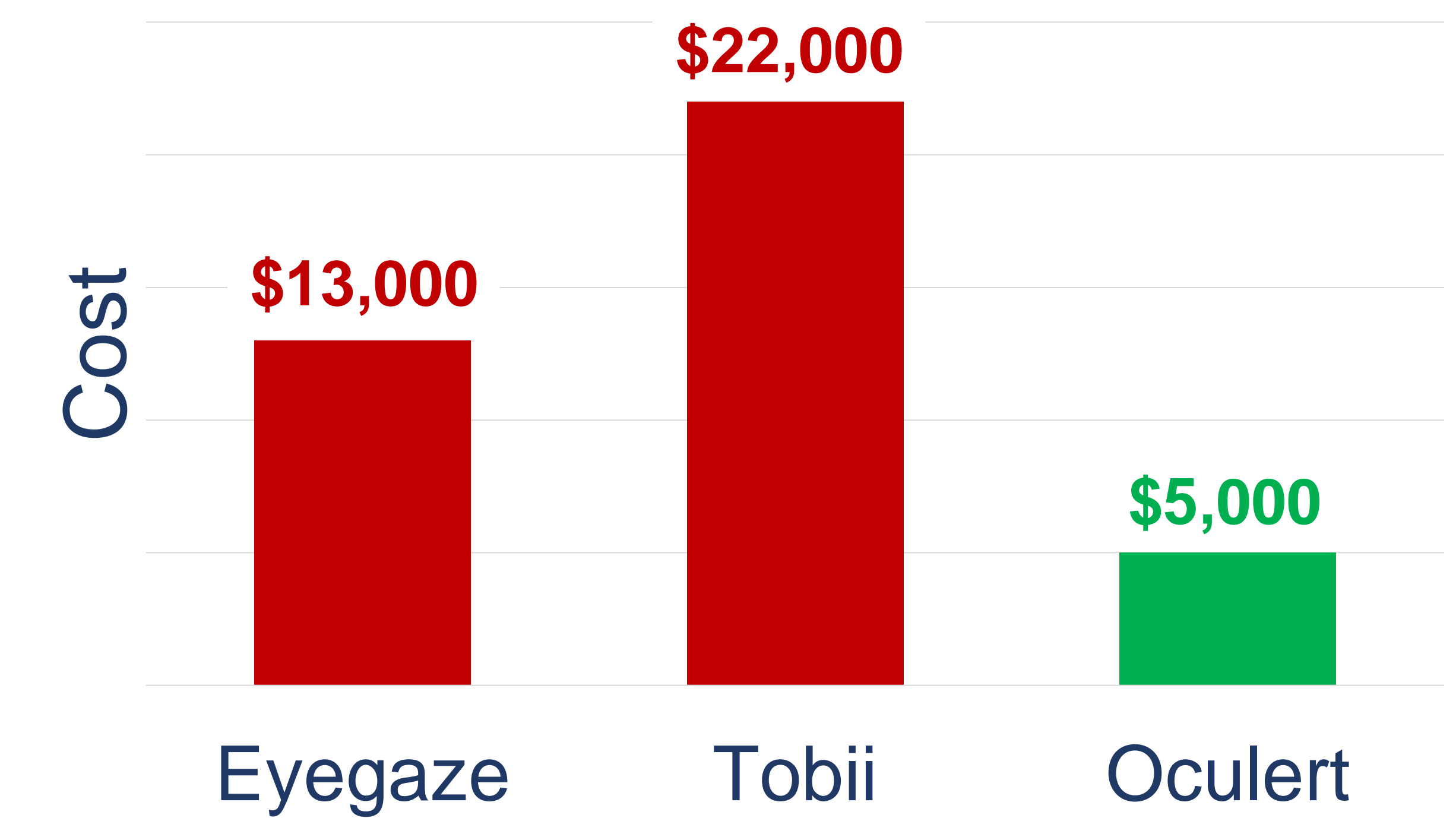
### SOLUTION

Oculert utilizes **electrooculography** to perform **real-time monitoring** of eye movement and allow users to sound a **remote alarm**



### VALUE

#### Reduced Cost



#### Societal Impact

Short Term	Long Term	
Give <b>agency and security</b> to ALS patients with LiS	Expand to patients with LiS <b>outside the ALS community</b>	Provide an <b>assessment tool</b> for identifying LiS cases
Improve quality of life for those with LiS and their caregivers		