



OxiWear Final Report

TEAM BLUE

CAMILLE ALEJANDRO
RUTVI ZAMRE
YUQING JIN



OUR PITCH

what we told our interviewees:

"OxiWear helps elderly people continuously monitor and track their blood oxygen levels by providing a wireless, lightweight wearable device that regularly sends data to an app without impeding their daily activities."

Purpose of research & Significance of audience

01 Purpose

Currently, OxiWear are targeting people with pulmonary conditions and how the device could help them.

By doing this research, we could gauge interest in a potential new market: the elderly

02 Audience

In 2022, there were 771 million people (almost 10% of the world's population) aged 65 years or over globally *

Talking to a mix of people

- elderly patients
 - caregivers who take care of elderly patients
 - former healthcare professionals
- would give us a holistic perspective of interest in the device and how it would help people

*data from: UN Department of Economic and Social Affairs, 2022

Methodology

INTERVIEWEES

People from a variety of backgrounds and potential stakes in using OxiWear as a product

- ✓ caregivers
- ✓ elderly patients
- ✓ medical professionals

RECRUITMENT PROCESS

Elderly people and caregivers whom we knew personally were recruited as interviewees

They would be easy to interview given the time constraints

CONDUCTING INTERVIEWS

- ✓ Conducted in three different countries over **Zoom and FaceTime**
- ✓ Average of **20–30** min interviews transcribed and coded during **November 2022**
- ✓ Interviews were **compared with each other** to extract emerging themes and findings



Interview Findings

Narrative

01

Camille:

informed patient perspective
(interviewee is a retired nurse)

02

Rutvi:

informed caregiver perspective
(interviewee 1 is a doctor) and uninformed
caregiver perspective (interviewee 2 does
not work in medicine)

03

Jess:

two uninformed patient perspectives
interviewees do not work in medicine)



Interviewee demographics

Interviewee	Significance	Age	Occupation	Ethnicity	Location	Education
Swati	Caregiver	50	Financial advisor	Indian	Pune, India	College
Vaishali	Caregiver	51	Doctor	Indian	New Delhi, India	Master's degree
De Lima	Patient	72	Retired nurse	Filipino	Anaheim, CA	College
Chonghua	Patient	66	Owner of clothing retail stores	Chinese	Shanghai, China	High school
Anjuan	Patient	65	Owner of clothing retail stores	Chinese	Shanghai, China	Middle school

Key Findings



[Informed Perspective]

People know what SO2 levels are and how to use medical-grade devices to measure them

Not a question of how to measure or knowledge of SO2 levels, but more about *why this particular device*

- ✓ **Easy to Learn?** How to use the device and app would be a bit of a learning curve for older patients
- ✓ **Cost too High** Not really willing to pay \$500 when there are cheaper options with more functions than OxiWear
- ✓ **Visual Aspect** Negative social connotations could be attached to wearing a visible medical device on the ear



[Uninformed Perspective]

People have limited awareness of SO2 levels, care about comfort the most

- Comfort comes first**
 - ✓ Low willingness to wear device (especially on the ear) 24/7
 - Prefer necklace/bracelet design
- ✓ **Not the most worried about SO2 levels** – this is not their priority
- ✓ **Low trust in untested device**
 - Real data compared to hospitals
 - Test it on real patients

Quotes from Different Personas



Informed Patient

"My Apple Watch is \$399, so why would I buy another device that has less functions. I would only pay \$500 if that's the only thing available. I don't need to because there are cheaper items."

• De Lima (72)



Informed Caregiver

"So if it has been validated and approved by the health regulatory authorities, if it is accurate, and not very expensive, then yes, it will be a useful device, and I would be willing to invest ... I would actually check whether it is going to only give me the SO2."

[When informed oxiwear costs \$500] "... then it is a bit expensive, I suppose, because there are other very economical and fairly accurate devices available."
– Vaishali (51)

Quotes from Different Personas



Uninformed Patient

"The whole SO2 tracking sounds important but I am not willing to wear any device attached to ears 24/7, not comfortable"
– Anjuan (65)

"If it were a bracelet or a pretty necklace it will be wayyyy better!"
– Chonghua (66)



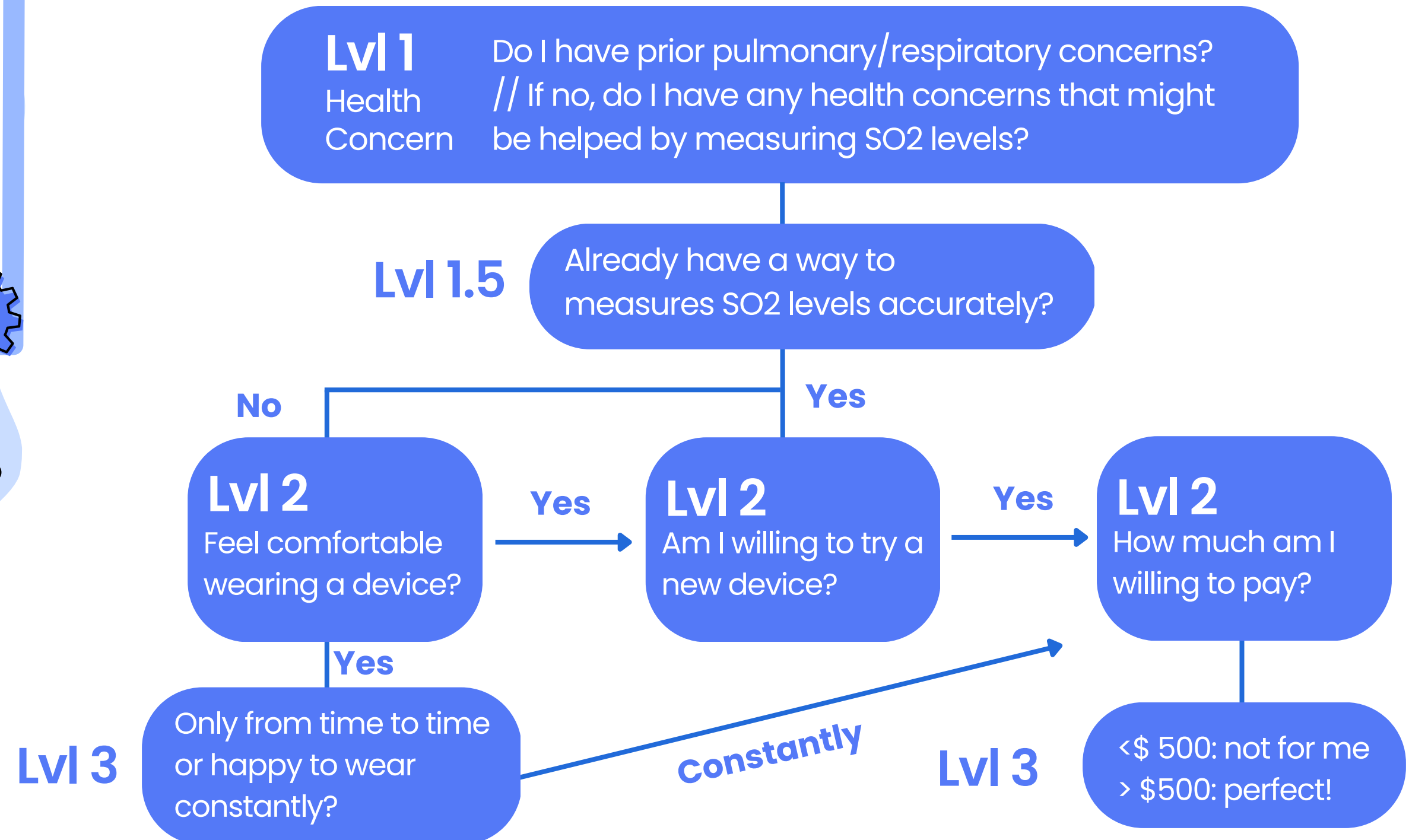
Uninformed Caregiver

"At least, we will be using it only in case if it is required – because if I don't have that [respiratory or cardiovascular] condition, I will not go for it, just because I'm a senior citizen. That's what I would say."

Otherwise, though, it will be a helpful device, I think."
– Swati (50)

Customer Decision Tree

For patients or caregivers, **this** is how they might make a purchase decision





Key Insights for OxiWear

Insights: 3 Elements



Importance of keeping track of SO2 levels & dangers of low SO2 levels



What differentiates it from other SO2 measuring devices?
OxiWear vs hospital devices or apple watches

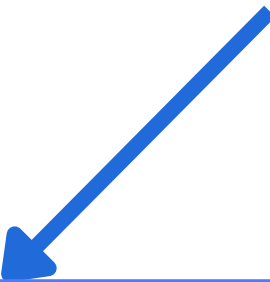


Cost: High cost vs. functionality, cover by insurance

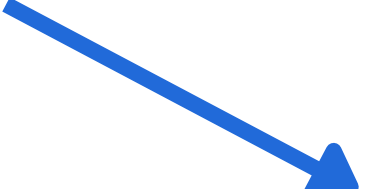


Suggestions for OxiWear (marketing)

- Stress the importance of using OxiWear as a **precautionary preliminary measure** rather than only using it when it becomes absolutely necessary



Testing across the wider market
– interview more people to see
if there is any interest



More testimonials from elderly population/people who don't necessarily have respiratory issues/diseases
– so people can see how it's actually benefiting them outside of being necessary for managing their disease

- Comparison with Apple Watch and other SO2 measuring devices and establishing more firmly why OxiWear is the superior device for this purpose
- Get reference from health regulatory authorities: doctors & hospital & real data

Suggestions for OxiWear (product)

- **Easy-to-wear:** many patients expressed unwillingness to wear ear devices 24/7, and had worries regarding wearing it for sleep, exercising, and showering. Some suggested making it a bracelet or necklace.
- **Longer battery time:** make it charge bi-weekly or even monthly & a strong, noticeable signal when low battery.
- **Lower Prices:** Many overseas countries' health insurance barely covers any physical health measurement devices, and customers need to pay themselves.

Research Advantages vs Limitations

A D V A N T A G E S

- **Deeper interviews** because people we knew
- **International perspective** – China, India, Philippines/US
- If **follow-ups** were necessary we could easily do that
- **Spoke to an informed audience** – most interviewees knew what SO₂ levels are so they immediately understood the importance of measuring them

L I M I T A T I O N S

- Small sample size
- Limited to people we know
- **None of people interviewed were in retirement facilities** – they have a degree of independence and agency that people in retirement homes may not



Thank You!