SOLITA

NursEyes
Hands-Free UX to Ease Paramedics' Tasks

Productive Pandas

01

Concept Idea

NursEyes – Reducing Paramedics' Cognitive Load

MVP Features

Smart Glasses Form Factor

Have minimal intrusion while providing maximum input and output modules.

Smart Audio-Based Documentation

Transcription and Generative AI to record and summarize voice-recorded notes.

Live Patient Data Visuals

Interconnected data visualization to easy to view patient metrics

Hands-free Voice / Video Communication

Communication via different channels while streaming video to share patient condition.

Storyboard 1

Hands-free Comms

There's an accident where one of the passenger gets a deep cut in his leg.

Petra arrives at the scene, but finds out that the person's leg had recently been operated from the medical records.

The cut is deep, and Petra is unsure about how she should work around the operated area to take out the glass.

Petra uses Nurseyes to call the hospital where she gets the call transferred to a specialized doctor.

The doctor listens to Petra, and then opens up the care summary generated by Nurseyes which is useful in guiding Petra.

Using the doctor's advice, Petra is able to provide immediate care to the patient, and then gets ready to take him to the hospital.

Storyboard 2

Handsfree UX of smart glasses for documentation patient's infoprmation

Scene 1

Petra receives an emergency call reporting a motor vehicle accident. She and her team quickly gear up and head towards the accident scene

Scene 2

When they arrived the scene, she found injured individuals requiring immediate medical attention and swiftly assesses the situation then starts helping the patients.

Scene 3

Through the smart glass, she immediately begins documenting patient information upon arrival at the scene. Using voice commands, she effortlessly findings, and treatment procedures in real time.

Scene 4

Upon arriving at the hospital, Petra quickly hands over the patient to the hospital staff and send all the pre-recorded information to the patient care department

Scene 5

Petra is happy and reflects on the seamless integration of technology into her patient care documentation process,

Storyboard 3

NurseEye

HANDS FREE UI DESIGN FOR PARAMEDICS

FRAME 1

Petra and her partner receive an urgent call via Virve, that there's a poisoning case.

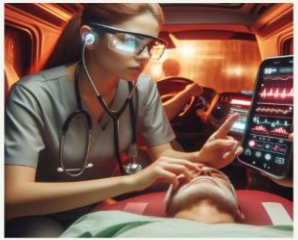
FRAME 2

Petra uses her voice command -based logging system to log details about what they see.

FRAME 3

While Interviewing patient details, She logs the details into the system by using a voice command, and the system also suggests her to ask specific questions

FRAME 4



while her partner starts to drive. The smart glasses she uses display her the patient's vitals also on the patient, easing the monitoring.

FRAME 5

Petra also uses a voice command to active video stream for the doctor about the situation.

FRAME 6

At the same time, the system automatically informs Petra, the doctor and the field manager of a possible diagnosis.

FRAME 7

the report which was automatically created with time stamps during the care through voice commands handed over to Dr.

FRAME 8

When they are back at the station, Petra goes through the report once more to check that everything is covered and looks right which was automatically created recording and a transcript with timestamps.

02

MVP Evaluation

Qualitative + Quantitative Data

Participant Summary

N=6

Participants in Total

4 participants from the user study phase, 2 totally new ones

50/50

Gender Distribution

50% males (N=3)
50% females (N=3)

28-48

Age Distribution

From a student to professional of around 20 years of experience

4

Wellbeing Services Counties

North Savo, South Ostrobothnia, North Ostrobothnia & Pirkanmaa

Semi-structured Interviews

Qualitative feedback | Mainly in English | Online


Documentation
General Opinion
AI Summary
Editing
Formatting
Image Documentation
Concerns
Smart Glasses
Legal and Privacy Issues
Reliability
Knowhow
Translation
Patient Data
Visualizing/Fetching Patient Data
Collecting Patient Data
Miscellanious
Storyboard Feedback
Use Cases
Threat Detection System
Communication & Collaboration
Video Calls
AI Summary
Collaboration
Image Sharing
Device Acceptance
Opinions about Glasses
Preferred Device
Device Usability
Integration with others

Main Findings

Biggest concerns are related to the **glasses' form factor, privacy issues and reliability.**

Not much use as such in their daily tasks, **in urgent cases yes.**

Documentation, translation / interpretation & video streaming are the most liked features.

The device **should support collaboration** between paramedics and other parties.

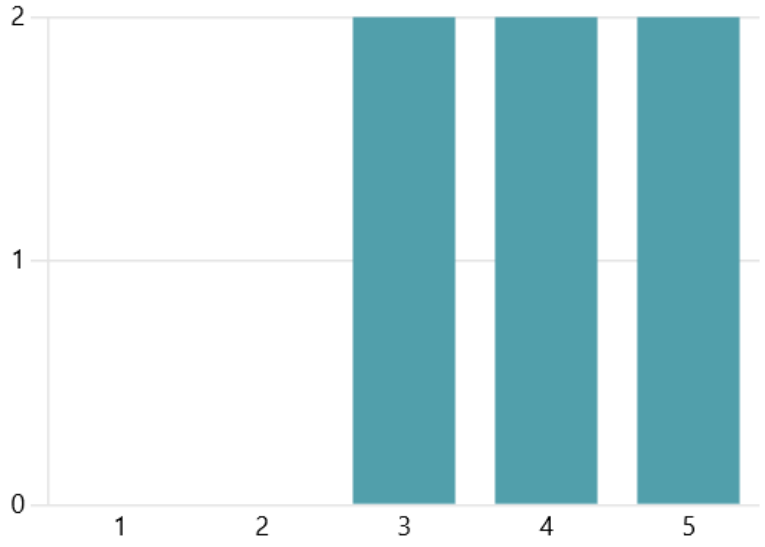
Self-made Questionnaire

Quantitative (+ some qualitative) feedback | Microsoft Forms

1. How would you rate the concept idea?

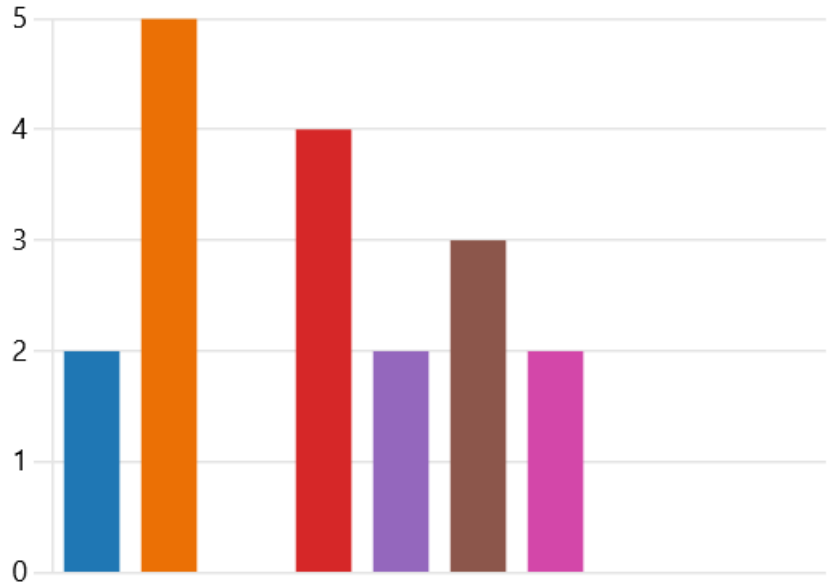
4.00

Average rating



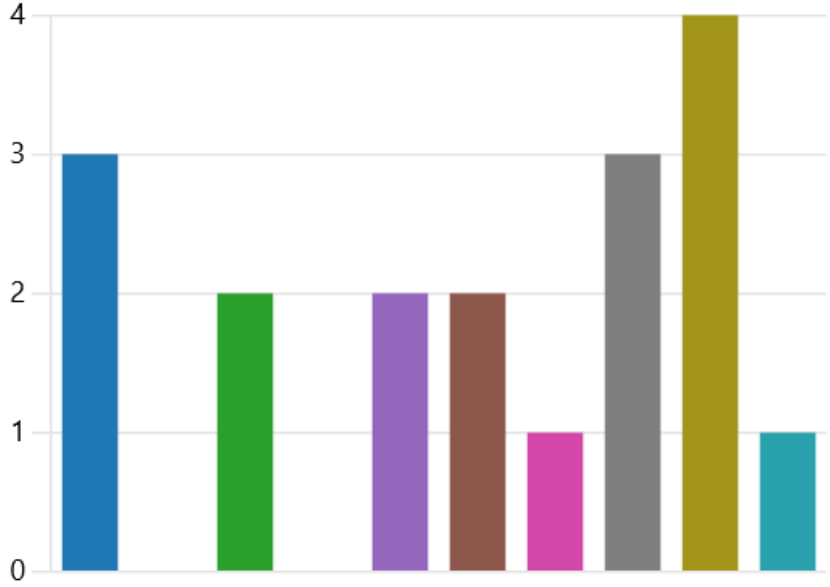
2. Please pick the three (3) features that would be **most** important to you.

Fetching patient data with voice	2
Documenting with voice	5
Automatic transcription and aud...	0
Video/image capturing and shar...	4
Visualising patient's vitals/metri...	2
Translation/interpretation of the...	3
Automatic summary of the colle...	2
Threat detection system for e.g. ...	0
Light indicator for recording	0
Other	0



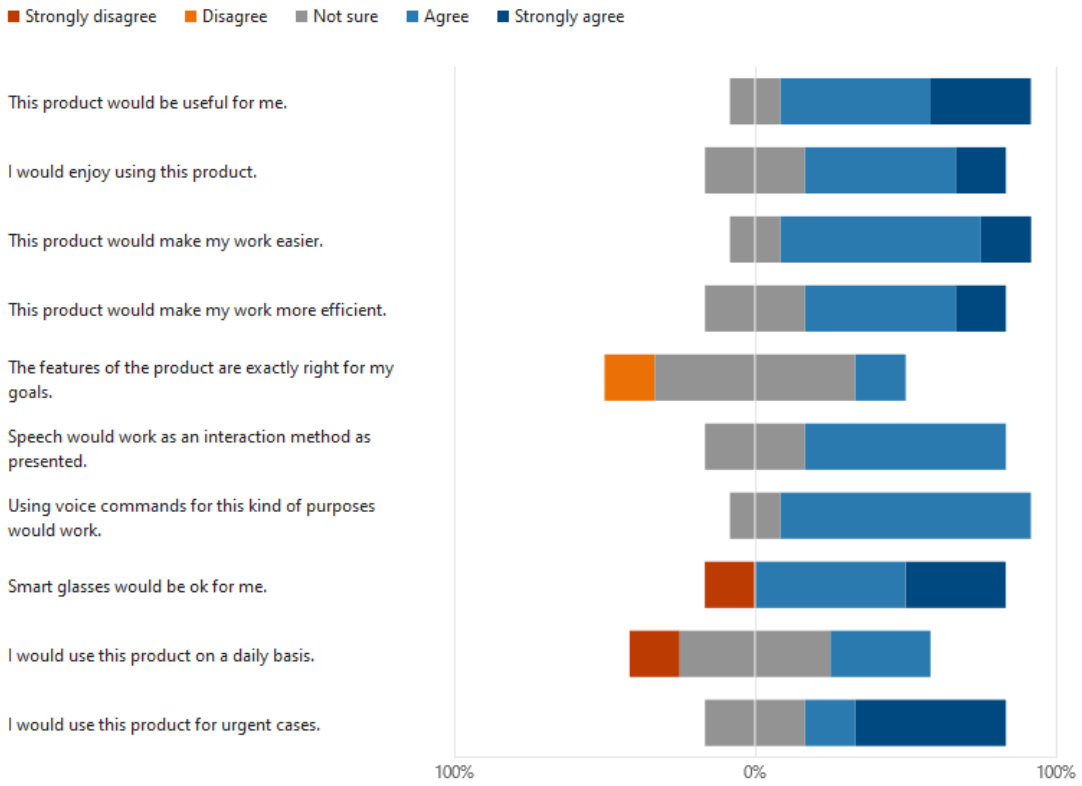
3. Please pick the three (3) features that would be **least** important to you.

Fetching patient data with voice	3
Documenting with voice	0
Automatic transcription and aud...	2
Video/image capturing and shar...	0
Visualising patient's vitals/metri...	2
Translation/interpretation of the...	2
Automatic summary of the colle...	1
Threat detection system for e.g. ...	3
Light indicator for recording	4
Other	1



For the option “Other”, the participant had answered “Virve adaption”.

4. Please answer the following statements (with options "strongly disagree", "disagree", "not sure", "agree", "strongly agree"):



5. Free word! Anything you would like to mention, add, or explain, for example? Regarding the evaluation session, storyboards, concept idea, this questionnaire, or anything.

It depends on were everything is being recorded. Is the information presented as augmented reality or does it show up for example on a computer screen or something else.
Device user experience, easiness of use and appropriate is determinant! Paramedics are nurses not it-troubleshooter.

Experiences and Lessons Learned

- Concept idea needs to be refined/reformulated.
- Storyboards needs to be updated based on more everyday use cases.
- Not one solution fits all.
- How can we design a solution that doesn't exist yet and that is futuristic enough? Addressing issues with current technological limitations.

Experiences and Lessons Learned

- The participants who aren't that familiar with futuristic technology have difficulty visualizing the concept.
- We need to work on interaction commands and methods.
- Finnish language should be used in the interviews to gain more data.
- Have an open mind while iterating over the product needs and requirements.

Thanks

Any questions?

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