

Needs Identification and Problem Statement

Group 5

01/25/2020

Category	Customer Need Statement	Interpretation	Priority
Functionality	I want the device to measure blood oxygen saturation level.	The device can measure blood oxygen saturation levels	3
	Device can send location(via GPS) to emergency services	Can send location (via GPS) to emergency services	1
	The user will be able to call for help in a short time.	Can call for help in under 3 minutes	1
	A single battery charge lasts up to one full day.	A single battery charge lasts up to one full day	6
Affordability	I need the device to be affordable/cheap.	Device is low cost (<\$100)	4
User-friendly	I want the device to be hands-free/ handy to carry.	The device is hands-free	5
	Durable and can be worn for long periods of time	Device is durable and can be worn for long periods of time (comfortable)	6
	Device is discrete and does not disturb one's daily life	The device is discrete and does not disturb one's daily life	7
Safety	Device is accurate	The device is accurate	2

Justification and Reasoning:

Our list of needs had been determined based on information shared during our first client meeting. The data was then written in terms of what the product has to do and expressed specifically as the raw data implied. The needs were then expressed as an attribute of the product and phrased positively.

The needs were then categorized based on aspects determined by the raw data acquired from the initial client meeting. Those categories were functionality, affordability, ability to be user-friendly, and safety. After deciding how each need fit into our determined categories, they were then numbered based on priority levels.

The priority levels had also been based on the raw data acquired from the first meeting, clearly making the major functions and requirements of the device the main priority. Our first priority had been decided to be the device's ability to send the user's location to an emergency service and its ability to do so in under 3 minutes. Next we had decided that the device being accurate was another high priority for safety and practical reasons. Following this, the device's ability to measure blood oxygen saturation levels had been another high priority due to it being the determining factor for identifying an overdose. In addition, the device's cost was another priority since it being affordable was a major condition that the client specified. Moreover, the device being hands-free, durable, worn for long periods and discrete were listed as lower priority levels since they were not as crucial.

Problem Statement:

A need exists for people who use opioids to safely have their blood oxygen saturation monitored and location quickly sent to emergency services in case of overdose, with a device that is discrete and cost-effective.