Obstructive Sleep Apnea

Status: Filled

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adjusts automatically as you sleep in order to provide the ideal pressure at any given moment. Using an algorithm that senses subtle changes in breathing in order to raise air pressure during spike of apnea or sense when you roll on your side (apnea friendly) in order to decrease pressure.

Bilevel Positive airway pressure (BiPAP): some find it hard/uncomfortable to exhale against the constant pressure of the motor/mask. BiPAP adjusts the pressure of the delivered air depending on whether the patient is inhaling/exhaling. During inhalation, an electronic sensor tells the BiPAP to send more air through the mask to clear obstruction.

resistance to their breathing.

Our main competition in filling the contemporary whitespace is a company under the branding of "Airing" which has made a seemingly promise to deliver their concept by July 2017. However, we find their specified goals extremely lofty as a bundle; such as the product being disposable and only worth \$3. Further details about this company can be observed below:

http://www.fundairing.com/#first-ever-micro-cpap

- 1. Therefore, our aim will be:
- 2. Remove the need for a hose which would get in the way where patients are getting in to REM sleep.
- 3. Create a more compact solution. Contrary to the life masks.
- 4. Smart air pressure adjustment.

Timeline

Date	Deliverables
Feb 15, 2017	Literature survey/ experts; Fully understand our problem in a detailed way and confirm it; Identify specifications of our product.
Mar 15, 2017	Brainstorm solutions; Fully clear on our low level design.
Apr 15, 2017	Three iterations of design; At least met some of the important specifications; Get feedbacks from experts/ advisors/ customers/ etc.
May 15, 2017	First iteration of prototype; Get feedbacks from experts/ advisors/ customers/ etc.