

Tracheotomy tube security device

Client: Dr. Timothy McCulloch

Team Members: Katie Pollock (Leader)

Becca Clayman (Communicator)

Kim Safarik (BWIG)

Paul Fossum (BSAC)

May 1 to May 7, 2009

Problem Statement

In patients who have had a tracheotomy performed, a major post surgery problem is discomfort from the tracheotomy collar. The collar must be secured tightly to keep the tracheotomy tube in place so the patient can breathe. However, if the collar is kept at the proper tension, it can cause ulcers on the patient's skin. Our goal is to design a tracheotomy strap that is comfortable, easy to clean, and equipped with monitoring devices to ensure that proper pressure is exerted on the tube and neck.

Last Week's Goals

- Complete poster presentation
- Complete project paper

Summary of Accomplishments

- The group presented the poster at our final presentation and attended the Tong presentation (we especially liked the song at the end by the professors!)
- The group finished the paper and will submit it before 9:00am on Friday. Most likely it will be submitted by sometime mid-Thursday to the copy room.

This week's goals

- Survive finals.

Project Difficulties

None to report at this time.

Activities –Team total should be added to each individual total

Member	Activity	Hours	Cumulative
Katie Pollock	Paper work	3	21.50
	Progress report	.25	
Becca Clayman	Paper work/Editing	1	17.00
	Communication	.5	
Kim Safarik	Update website	.5	12.50
	Paper work/Editing	1	
Paul Fossum	Paper work/Editing	1.5	13.75
TEAM	Project presentation	4	42.075
	Last team meeting (Tuesday)	1.5	

Project Schedule

Number	Task	Start	End	Duration	1/23	1/30	2/6	2/13	2/20	2/27	3/5	3/13	3/20	3/27	4/3	4/10	4/17	4/24	5/1	5/8	
1	Assign teams and duties	1/23/09	1/21/09	1	█																
2	Research project statement and contact client	1/23/09	1/30/09	7	█	█															
3	Initial Brainstorming Client meeting, obtained basic	1/30/09	2/13/09	14		█	█														
4	materials	2/4/09	2/5/09	1			█														
5	Refined brainstorming	2/5/09	2/27/09	22			█	█													
6	PDS	2/13/09	2/20/09	7				█													
7	Design Matrix	2/21/09	2/27/09	6					█												
8	Select final Idea	2/27/09	2/28/09	1						█											
9	Work on mid semester presentation	2/27/09	3/5/09	7						█											
10	Mid semester report	3/5/09	3/11/09	7							█										
11	Mid semester presentation	3/5/09	3/11/09	1								█									
12	Order materials	3/11/09	3/14/09	4									█								
13	Spring break	3/14/09	3/22/09	8										█							
14	Fabrication of strap Comfort testing/safety	3/21/09	4/10/09	19											█	█	█				
15	evaluation	4/10/09	4/11/09	2													█				
16	Redesign	4/11/09	4/24/09	13														█			
17	Final testing	4/24/09	4/25/09	1															█		
18	Final presentation	4/22/09	5/1/09	4																█	
19	Report	5/2/09	5/5/09	3																	█

We are finished with the project. We have finished presenting and will be submitting our paper to the copy room shortly.

Expenses

Item	Amount	Price
Jersey mesh fabric	0.5 yds	\$1.50
Box to store materials	1	\$0.99
Sponge(as back up)	1	\$1.95
Glue (Liquid Nails)	1	\$3.47
Eyehooks(no longer using)	1 bag	\$0.98
Nylon gloves	6 (1 pack)	\$2.47
Heat shrink tubing(large)	1 pack	\$1.97
Heat shrink tubing(small)	1 pack	\$1.95
LED lights	2 lights	\$1.57
Battery	1 6V medical battery	\$5.49
Duct tape	1 roll	\$6.99
Medical tape	1 roll	\$4.49
Double sided tape	1 roll	\$3.49

Total : \$37.31