

Tracheotomy tube security device

Client: Dr. Timothy McCulloch

Team Members: Katie Pollock (Leader)

Becca Clayman (Communicator)

Kim Safarik (BWIG)

Paul Fossum (BSAC)

March 6 to March 12, 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

- Present the project to the class.
- Complete the mid-semester report.
- Begin ordering materials for the project.

Summary of Accomplishments

- The team presented our project to the class on Friday March, 6
- Individually, each member of the group wrote a portion of the paper corresponding to the material they presented in class.
- We met as a team to put the paper together and verify that our notebooks were in sync.
- The team will be meeting on Friday to discuss the next steps in the project and assign duties for over spring break

This week's goals (for after spring break)

- Look up pricing information and begin the ordering process
- Meet with our client again to ensure we are on the right track

Project Difficulties

We are having difficulty obtaining price information for some of the materials. Katie emailed a woman at the distributing facility for a quote on one of the one way valves and she hasn't responded.

Activities –Team total should be added to each individual total

Member	Activity	Hours	Cumulative
Katie Pollock	Rehearsal	.25	6
	Editing	.25	
	Progress report	.25	
Becca Clayman	Editing	.25	4
	Rehearsal	.5	
Kim Safarik	Update Website	.25	3.25
	Rehearsal	.5	
Paul Fossum	Additional research (back credit for last week)	.75	3
		.25	
	Rehearsal		
TEAM	Project presentation	.25	19.075
	Individual work on paper	1.5	
	Evaluations	1	
	Editing and notebook meeting	1	

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 materials	1/30/09	2/13/09	14	█	█	█														
4	Refined brainstorming	2/4/09	2/5/09	1			█														
5	PDS	2/5/09	2/27/09	22			█	█	█												
6	Design Matrix	2/13/09	2/20/09	7				█													
7	Select final Idea	2/21/09	2/27/09	5					█												
8	Work on mid semester presentation	2/27/09	3/5/09	7						█											
9	Mid semester report	3/5/09	3/11/09	7							█										
10	Mid semester presentation	3/5/09	3/11/09	1							█										
11	Order materials	3/11/09	3/14/09	4								█									
12	Spring break	3/14/09	3/22/09	8									█	█	█	█	█				
13	Fabrication of strap	3/22/09	4/10/09	18																	
14	Comfort testing/safety evaluation	4/10/09	4/17/09	7																	
15	Redesign	4/17/09	4/24/09	7																	
16	Final testing	4/24/09	4/25/09	1																	
17	Final presentation	4/24/09	5/1/09	4																	
18	Report	5/2/09	5/8/09	5																	

We are currently on schedule. We presented our project on Friday and completed our mid-semester paper. We will begin ordering materials as soon as we obtain permission from our client to go ahead with our design plans.

Expenses

None incurred at this time