

Expandable Nasogastric Tube

Week 4 October 5th – October 11th

Team: Darren Klaty – Co-Team Leader
Mike Rossmiller – Co-Team Leader
Alex Broderick – BWIG
Megan Halley – Communicator
Sarah Czaplewski - BSAC

Advisor: Paul Thompson

Client: Dr. Steven Yale

Problem Statement:

Nasogastric tubes (NG tubes) are commonly used for aspiration of gastric contents and gastric decompression in patients with small bowel obstruction. Placement of a NG tube causes discomfort and pain during insertion due in part to the large diameter of the tube. The project requires a nasogastric tube which is small enough to reduce discomfort, while still being functional. Secondary design specifications include pH sensitivity, to allow visual confirmation of when the tube reaches the stomach, and recyclability.

Previous Weeks Goals:

- All- Choose three designs to compete in our design matrix
- All- Complete Design Matrix and choose design for remainder of semester

Team Role Accomplishments:

- Leaders – Completed Progress Report.
- Communicator – Communications with client, set up training facility time.
- BWIG – Put progress report online.
- BSAC – Will attend next BSAC meeting

Summary of Design Accomplishments:

- All – Developed individual design ideas.
- All – Design Matrix
- Sarah – Met with polymer expert
- All – Research on design implementation
- All – Client meeting for device feedback

This Week's Goals/Individual Goals

- All- Write up power point slides
- All- Begin mid-semester paper write-up
- All – Prepare for mid-semester presentations

Difficulties:

None this week.

Activities:

Person(s)	Task	Time (hrs)	Weekly Totals	Semester Totals
Darren	Progress report	.5		
	Design implementation	1.5		
	Power point slides	1.0	3.5	10.5
Mike	Tube fabrication research	2.0		
	Progress report	.5	2.5	9.25
Alex	Updating website	.25		
	Talking to Nurse	.5		
	Background Research	1.0	1.75	9.25
Sarah	Polymer expert meeting	0.5		
	Research	3.0	3.5	15.0
Megan	Research, expert meeting	4.0	4.0	10.5
Team	Design Matrix meeting	1.0		
	Client meeting	1.0		
	Advisor meeting	0.5	2.5	6.5

Project Schedule:

Tasks	September				October				November				Dec	
	7	14	21	28	5	12	19	26	2	9	16	23	1	7
Product R&D														
Background Info	X	X	X	X	X									
Design Alternatives				X	X									
Final Design					X									
Materials														
Design Modeling														
Testing														
Presentations														
Mid-Semester														
Final														
Deliverables														
Progress Reports	X	X	X	X	X									
PDS	X													
Mid-Semester Report														
Final Report														
Meetings														
Team Meetings	X	X	X	X	X									
Advisor Meetings	X	X	X	X	X									
Client Meetings	X				X									
Website	X	X	X	X	X									

Expenses:

No expenses to date