

Title: Progress Report 4

Date: 02/20/2025

Client: Dr. Andrew Ross

Advisor: Dr. Megan McClean

Team:

Student 1: Ana Toscano

Student 2: Rini Anand

Student 3: Gabriela Cecon

Student 4: Sofia Yeates-Delahoz

Problem statement

Design and develop a prototype that securely supports, stabilizes, and precisely maneuvers needles during awkward, image-guided minimally invasive radiology procedures to enhance ergonomics, reduce operator fatigue, and improve accuracy and patient outcomes

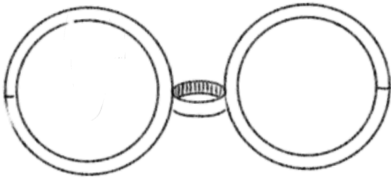
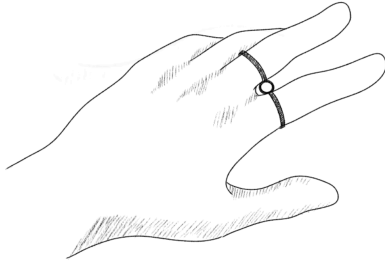
Brief status update

Team presented the oral preliminary presentation and is brainstorming alternate design ideas as a result of client feedback.

Difficulties / advice requests

None to report.

Current design



This image depicts the current proposed design for the Needle Navigator device. There will be changes made to this proposed design in the upcoming week.

Materials and expenses

Currently, there are no expenses as the project is still in the preliminary research phase.

Item	Description	Manufac-turer	Mft Pt#	Vendor	Vendor Cat#	Date	#	Cost Each	Total	Link
Category 1										
									\$0.00	
									\$0.00	
Category 2										
									\$0.00	
									\$0.00	
								TOTAL:	\$0.00	

Major team goals for the next week

1. Client Meeting
2. Complete Preliminary Report
3. Make changes to the design matrix

Next week's individual goals

- Ana Toscano

- Work on preliminary design
- Make modifications to the design matrix
- Rini Anand
 - Set up client meeting
 - Work on preliminary report
- Gabriela Cecon
 - Work on preliminary report
 - Make any necessary changes to the design
 - Start thinking of prototyping plans and materials
- Sofia Yeates-Delahoz
 - Work on the preliminary report
 - Attend and observe a cervical injection procedure
 - Make modifications to the design matrix

Timeline

Task	Jan	Feb				March				April				May	
	30	6	13	20	27	6	13	20	27	3	10	17	24	1	8
Project R&D															
Empathize	X	X	X												
Background...		X	X												
Prototyping															
Testings															
Deliverables															
Progress Reports	X	X	X	X											
Prelim presentation				X											
Final Poster															
Meetings															
Team	X	X	X	X											
Client		X													
Advisor	X	X	X												
Website															
Update	X	X	X	X											

Activities

Name	Date	Activity	Time (h)	Week Total (h)	Sem. Total (h)
Ana Toscano	2/13 - 2/20	- Brainstormed alternative design ideas - Practiced slides for the preliminary presentation	3	3	13

Rini Anand	2/13 - 2/20	-Created and practiced preliminary slides -Brainstormed alternative design ideas	2	2	12
Sofia Yeates-Delahoz	2/13 - 2/20	-Created and practiced slides for the preliminary presentation	2	2	11.5
Gabriela Cecon	2/13 - 2/20	- Wrote slides for preliminary presentation - Discussed design ideas with the group	3	3	12