

Bed-mounted Modular Procedural Training Surface

Date: 10/1/2026

Client: Shannon DiMarco

Advisor: Darilis Suarez-Gonzalez

Team:

Nathan Knight – Team Leader and BSAC (nknight3@wisc.edu)

Evan Koelemay – Communicator (ekoelemay@wisc.edu)

Tess Fitzgerald – BWIG (tkfitzgerald@wisc.edu)

Andrew McLaughlin – BPAG and BSAC (asmclaughlin@wisc.edu)

Problem Statement:

A secure, lightweight, procedural workstation is crucial for clinical simulation centers to conduct procedural training. Current solutions leave much to be desired as they lack stability, take up excessive floor space, or exhibit tipping hazards. To resolve this, the team is being tasked with designing a modular workstation attachment to existing bed architecture. The workstation must be compact for storage, quickly attachable, and meet desired constraints for sanitation and safety.

Brief Status Update:

- This week, the group worked on developing the preliminary presentation in order to be ready to present on Friday 10/2. Each individual of the team worked on a different part of the presentation and practiced presenting their assigned slides. The team planned to visit the simulation lab, however, the client was unable to make that work this week, so it will be pushed to next week. Overall, this week focused more on preparing for the preliminary presentation and preliminary deliverables that will be due next week.

Project Difficulties/Advice Requests:

- None to report

Current Design

- This project is still in the research phase. There is no current prototype or design as of this week.

Materials and Expenses:

- None to report, see table below:

Item	Description	Manufacturer	Mft Pt#	Vendor	Vendor Cat#	Date	#	Cost Each	Total	Link
Category 1										

Preliminary Lab Notebook																	
Preliminary Report																	
Preliminary Evaluations																	
Show and Tell																	
Final Poster Presentation																	
Final Lab Notebook																	
Final Report																	
Final Evaluations																	
Meetings																	
Team	X	X	X														
Client	X		X														
Advisor	X		X														
Website																	
Update	X	X	X	X													

Previous week's goals and accomplishments:

- Nathan Knight
 - Work on the preliminary report
 - Look into the winning material choice to ensure I am familiar with that material's specific properties
- Evan Koelemay
 - Begin work on the preliminary presentation
 - Meet with client and advisor to discuss current design ideas
 - Research material costs and amounts
- Tess Fitzgerald
 - Meet with advisor to discuss if the final design and material design choices are suitable for the project
 - Discuss the proposed final design ideas with the client to see if the client has any potential input that can impact the final design that is chosen
 - Create and complete the preliminary presentation
- Andrew McLaughlin
 - Meet with advisor and client to share and discuss design matrices
 - Begin working on preliminary presentation
 - Begin researching distributors of materials and costs

Activities

Name	Date	Activity	Time (h)	Week Total (h)	Sem. Total (h)
Nathan Knight	10/1/2026	Prepared for the preliminary presentation for friday Researched final material choice from design matrix	2	2	8
Evan Koelemay	10/1/2026	Helped complete design matrix Contacted client to organize in-person visit Reviewed preliminary presentation in preparation for Friday	2.5	2.5	9.5
Andrew McLaughlin	10/1	Worked on the preliminary presentation and worked in Solidworks to create pictures of our design	3	3	11
Tess Fitzgerald	10/1/2026	Worked on the design matrix powerpoint slides of the preliminary presentation. Conducted further research on the different materials that were part of the design matrix.	4	4	11
Team					2