Importance of this Design?

As cervical cancer is the leading cause of women’s cancer deaths in Peru, we designed a portable cervical cancer screening chair.

Currently, there are insufficient clinics around Cusco and many women are not aware of the associated health risks.

Thus a portable version of a typical screening table will bring medical aid to impoverished and remote areas.

Challenges

As this design has a very specific expected use, some challenges we needed to take into account include:

1. Lightweight
2. Backpackable, easy to transport
3. Intuitive setup and breakdown
4. Sanitary
5. Ergonomic design that takes into account appropriate screening positions

Objectives

Based on our customer needs and input from professionals in the field, some objectives were prioritized, the five most important being:

1. Ergonomic design
2. Coating/material for medical use
3. Minimal Bill of Materials (BOM)
4. Articulating motion—taking into account appropriate procedure positions
5. Durability/ruggedness

Doctor’s Stool Prototype Development

Images (from left to right): Concept generation through product realization of the doctor’s stool.

Final Product:
• Adjustable stool heights
• Same materials used as in patient’s chair