**Background**

- PEG Tube placement is a commonly performed procedure in the U.S. with approximately 100,000-125,000 cases/yr.
- High-level endoscopic dexterity, proper identification of landmarks, teamwork, and communication are required.
- PEG Tube placement is a common procedure performed by PGY2/PGY3 level Surgery residents at most training institutions.
- There is no current simulation training model.
- Commercial simulation skill trainers and their parts are often expensive, hindering the expansion of simulation training and causing a sub-utilization of simulation center facilities.
- Many simulation centers storage rooms are flooded with outdated or non-functional devices and parts.
- A recycling protocol may be a useful tool for developing low-fidelity skill trainers and increase simulation center utilization.

**Methods**

**SimPORTAL Recycling Protocol**

**PHASE 1**

1. Identification of spare and broken components from our simulation center storage room.

2. Selection and classification of partially damaged parts age >6 months.

3. Task analysis of 5 video-recorded PEG procedure to identify:
   - Key learning points.
   - High-wear procedural steps
   - Develop a training curriculum.

4. Assembling of the PEG Skill Trainer.

**PHASE 2:**

- Validation Studies
- Performance scoring rubric

**Results**

**Phase I:** Concluded with the development of a short protocol for the identification and classification of potentially recyclable components. A low-fidelity simulation skill trainer device was developed.

**Phase II** will begin with validation studies and scoring rubric development.

**Conclusions**

A systematic approach to the selection and utilization of discarded or broken parts cluttering our Simulation Centers storage rooms is a feasible and cost-effective alternative to building low-cost skill trainers.