



A 3D CAD model of a mechanical ventilator. It features a rectangular housing with a cylindrical internal chamber. A piston rod extends from the front of the chamber. A coiled tube or hose is connected to the side of the chamber. At the bottom, a blue, teardrop-shaped component is connected to two thin, curved tubes. The entire device is shown against a light yellow background with a blue semi-transparent overlay containing the title text.

Inexpensive, Automatic Ventilator

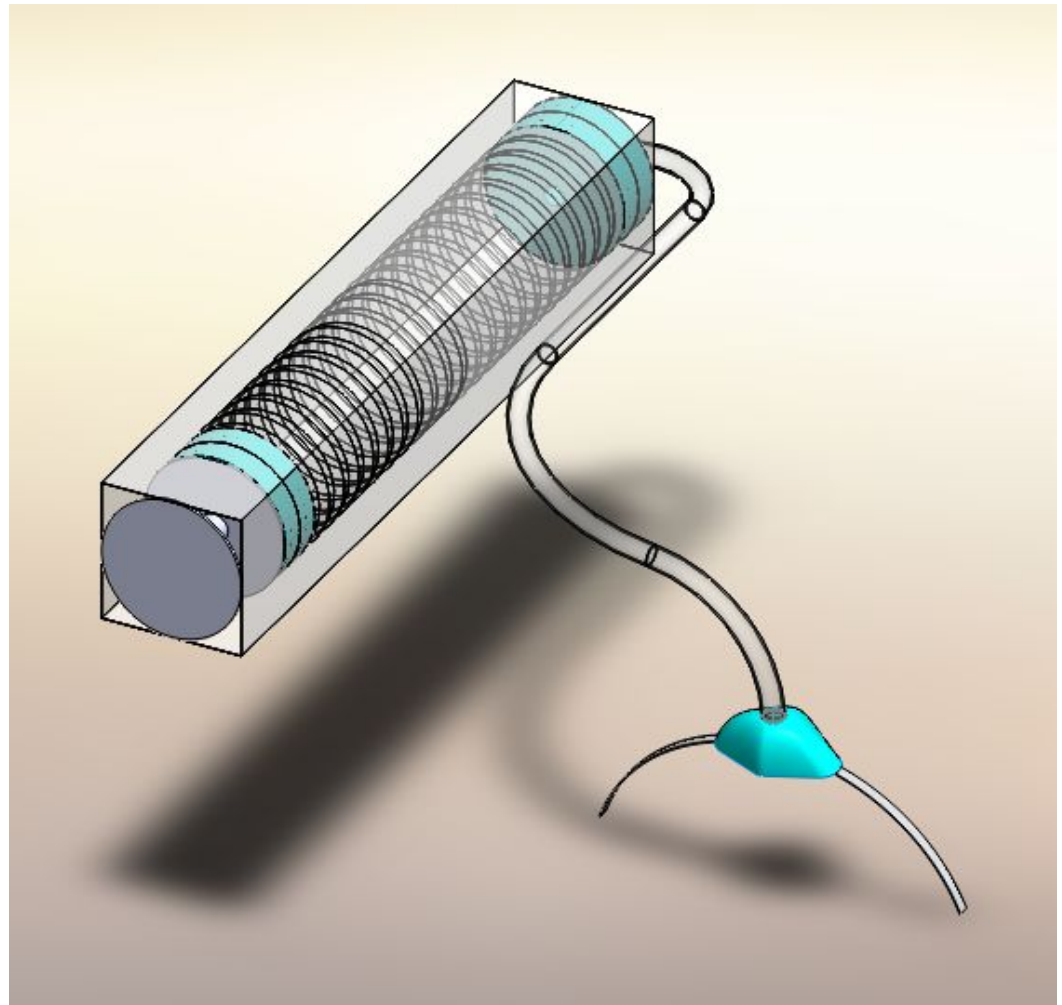
FLU PANDEMIC

Too Many Patients,
Too Few Ventilators!



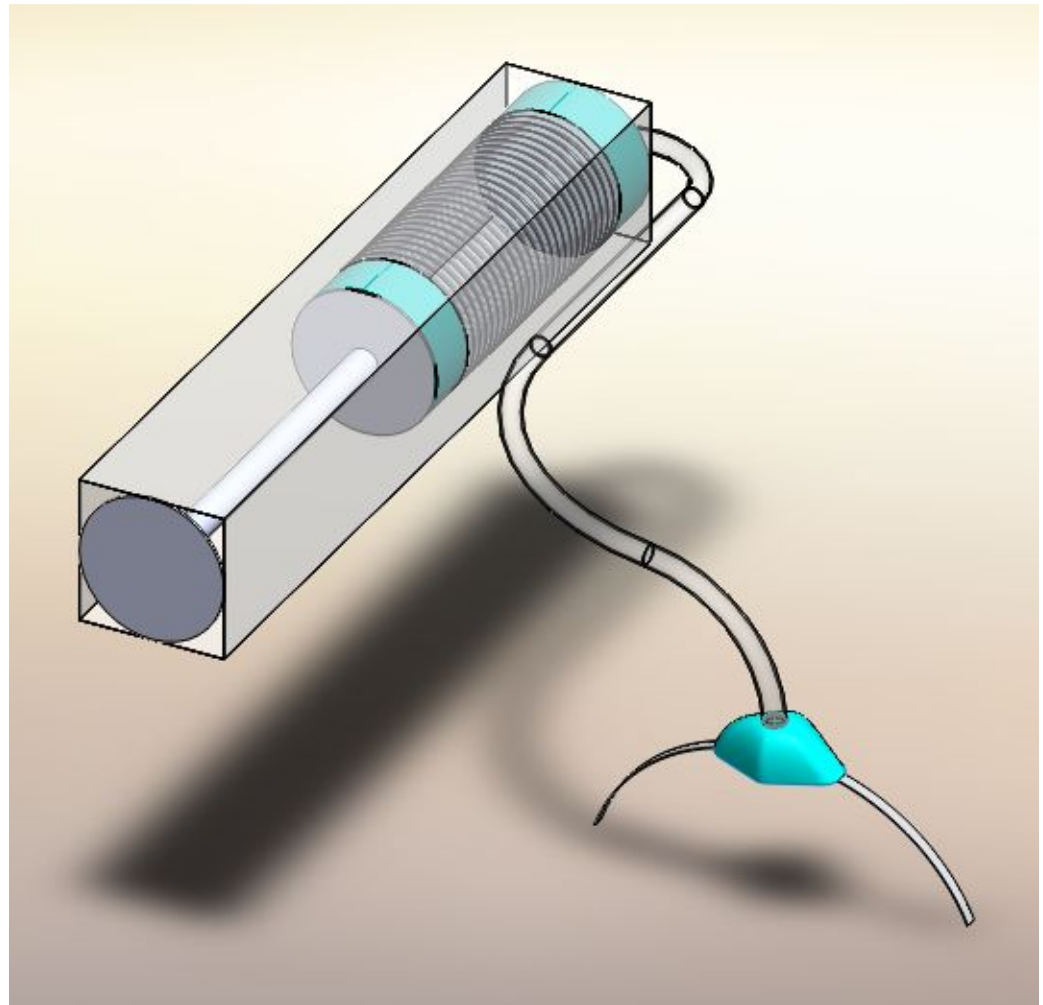
How to generate pressure?

- **Need 1 liter at 20 breaths/minute**
- **Linear Actuation**



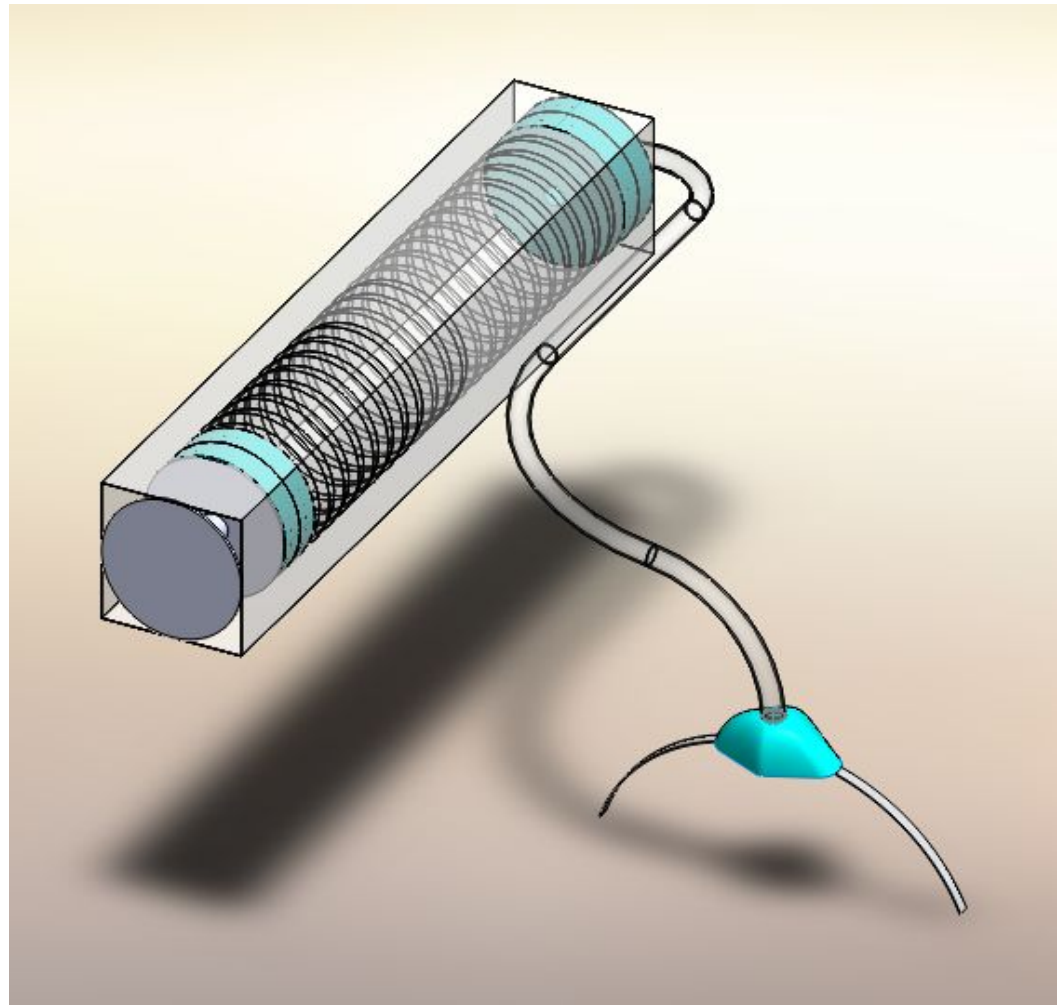
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What shape and size?

- **EMTs need control**
- **Improptu clinics need space**
- **Lie the device next to the patient**



What's out there now?

No need
here

Manual

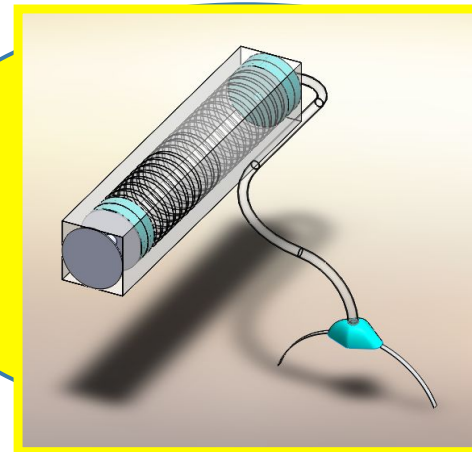


Expensive

Inexpensive



Automated



Future Study

- **Power Source**
- **Sterilization vs. Disposability**
- **Testing**

