Adopting Reusable Surgical Gowns

Surgical gowns are a type of personal protective equipment that protect both the patient and the provider from microbial contamination and exposure to bodily fluids.

Adopting the use of reusable gowns has been shown to reduce energy consumption, GHG emissions, solid waste, and long-term costs, and may even have improved performance over disposable types of gowns.

Considerations for type of gown usage for hospitals include:

- **SUSTAINABILITY**
- **BARRIER EFFECTIVENESS**
- **COST**
- **CLINICAL USABILITY**

### LIFE CYCLE ANALYSES FOR REUSABLE GOWNS

**LCA 1** - Reductions of:
- 28% in energy consumption
- 30% in GHG emissions
- 41% in blue water consumption
- 93% in solid waste

**LCA 2** - Reductions of:
- 64% in energy consumption,
- 66% in GHG emissions,
- 83% in blue water consumption
- 84% in solid waste

### PERFORMANCE STANDARDS

The Association of Advancement Instrumentation (AAMI) created performance standards for impact penetration and hydrostatic pressure resistance and rates medical gowns according to level of protection (Levels 1-4).

**REUSABLE GOWNS HAVE SUPERIOR DURABILITY AND PROTECTION**

### DECREASES REGULATED MEDICAL WASTE (RMW)

RMW processing costs are high ($0.28 per pound)

ORs can divert **tens to hundreds of pounds** of RMW by switching to reusable products RMW.

This translates into significant cost savings for hospitals.

### BARRIERS TO IMPLEMENTATION

- Upfront cost differential
- Ensuring appropriate sterilization
- Personal perceptions of users

### ADDRESSING THE COST PROBLEM

**DISPOSABLE GOWNS** make up 80% of the market share so we need to work to identify companies that provide reusable textiles.

Reusable gowns and linens require appropriate LINEN STERILIZATION to prevent infections.

### ADDRESSING THE PERCEPTION PROBLEM

- **EDUCATION** that reusable gowns are potentially more protective as well as more cost-effective is needed.

- **MORE RESEARCH** on performance and cost-effectiveness is needed.

- **Ensure STAFF SATISFACTION** - create opportunity for buy-in by getting staff input on comfort, quality, and safety.

### BENEFITS

- Potentially better protection from bodily fluids and microorganisms.
- Decreased solid waste (particularly RMW) and less impact on the environment.

### COST SAVINGS

- Down-the-line savings outweigh the higher upfront costs of reusable gowns.

### ACCESSIBILITY

Reusable gowns should be accessible to staff.

**LCAs suggest reusable scrub caps have lower environmental impact than disposable as well.**

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