

UCLA Health Reusable Isolation Gowns

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UCLA Health – Overview



Still **#1** in California.
And top 4 in the nation.

BEST HOSPITALS

UCLA Health



Locations where
UCLA Health
provides clinical care

-  Owned and operated by UCLA Health
-  Community partner

Resiliency Reframed

- Climate Resiliency
- Emergency Preparedness
- Disposable vs. Reusables
- Blue Wrap to Masks
- COVID-19 Reusable ISO Gowns
- Reprocessing of PPE Items
- UV Light Sterilization
- Collection and Reprocessing

REUSE 
REDUCE
RECYCLE
RESILIENCY

Disposable Isolation Gowns

- Yellow single-use isolation gowns with white cuffs and ties
- 100% cotton or 50/50 cotton poly that may absorb liquids
- Used by caregivers and visiting family members as a cover gown in L&D, OB/GYN, NICU and isolation cases.
- Offers very little protection to the end user
- Each gown creates solid waste
 - UCLA Health purchased 2.6 M disposable gowns annually prior to transition to reusables and sent 234 tons sent to landfill
- Costs \$5 to 6 each
- No recycling or reprocessing program existed



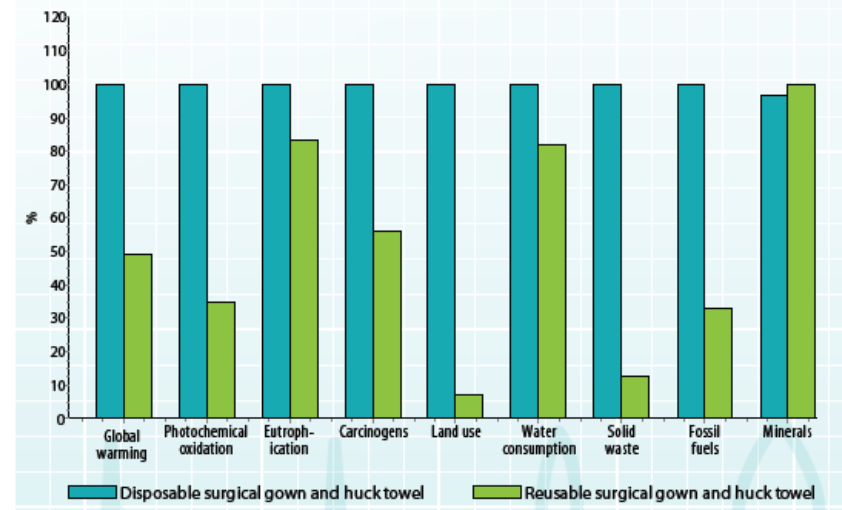
Transition to Reusables

- Invited several vendors to present their selection of isolation gowns and feedback on best practice
- Compared products specs, benefits and cost
- AAMI standards for barrier protection (1-4)
- Formed a sub-committee to evaluate products
 - Infection Control, Nursing Leadership, Caregivers, Sustainability leadership, Environmental Services, Laundry Processing Plant, Materials Management
- Evaluated delivery method, space requirement, folding, bundling, washing/drying requirements, and overall cost
- Established a pilot in areas of high-utilization (Liver Transplant, Peds, Med Surg, ICUs) to evaluate process flow and caregiver feedback

Life Cycle Assessment

- Studies on Reusable Textiles (Surgical Gowns)*
 - Six studies concluded reusable gowns are less of an environmental burden than disposable gowns
 - According to these studies, disposable gowns consume more than reusable gowns in all areas of sustainability
 - 200-300% more energy
 - 250-330% more water
 - 200-300% higher carbon footprint

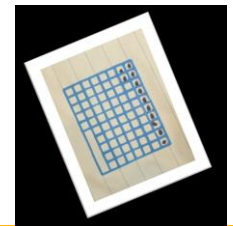
Figure 1: Comparison of life cycle factors of disposable textiles compared with reusable textiles.⁹



* A Comparison of Reusable and Disposable Perioperative Textiles: Sustainability State-of-the-Art 2012; Michael Overcash, PhD

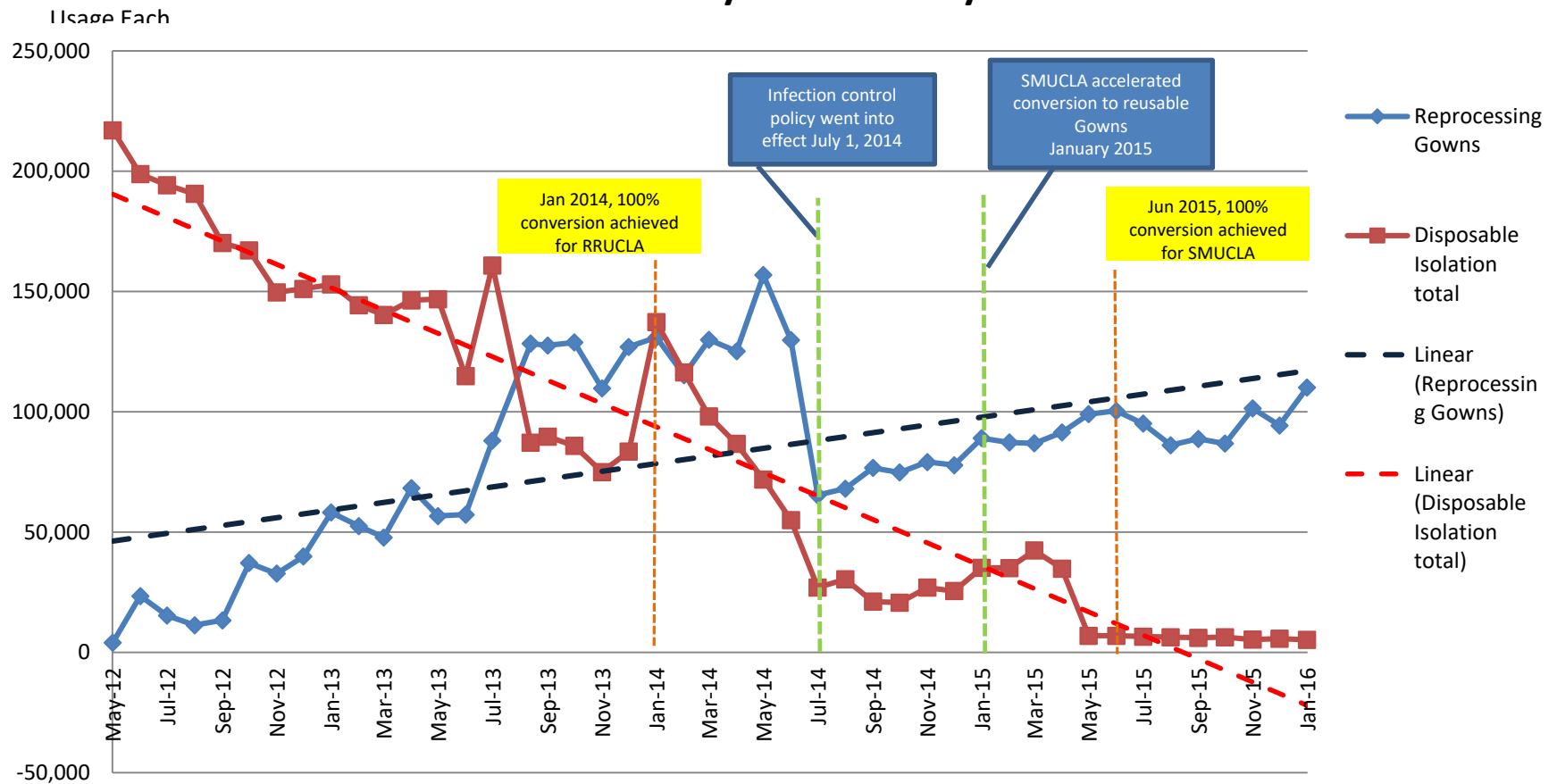
Custom made Single Use Washable Precaution Gowns

- Manufactured from a 99% tightly woven micro-denier polyester fluid resistant fabric
- 1 % Carbon fibers added to help prevent static electricity that builds up in polyester materials
- One size fits all and a 3X size option
- Shorter cuffs for increased protection and to allow for double gloves (under the cuff and over the cuff)
- Snaps (no ties) to make the gowns easy to take off quickly
- Reversible gown, no right or wrong way to put them on
- Grid on the bottom of the gown to mark number of uses
- Cost \$7 to \$10 depending on size



Implementation of Program (May 2012 to May 2015)

Iso Gowns analysis as January 2016



Buy-In, Acceptance, and Use Reduction

• Initial Resistance

- Staff did not like initial gowns proposed
 - “Disposables are easier to remove”
 - “Washables are slippery”
 - “Washables are too hot”

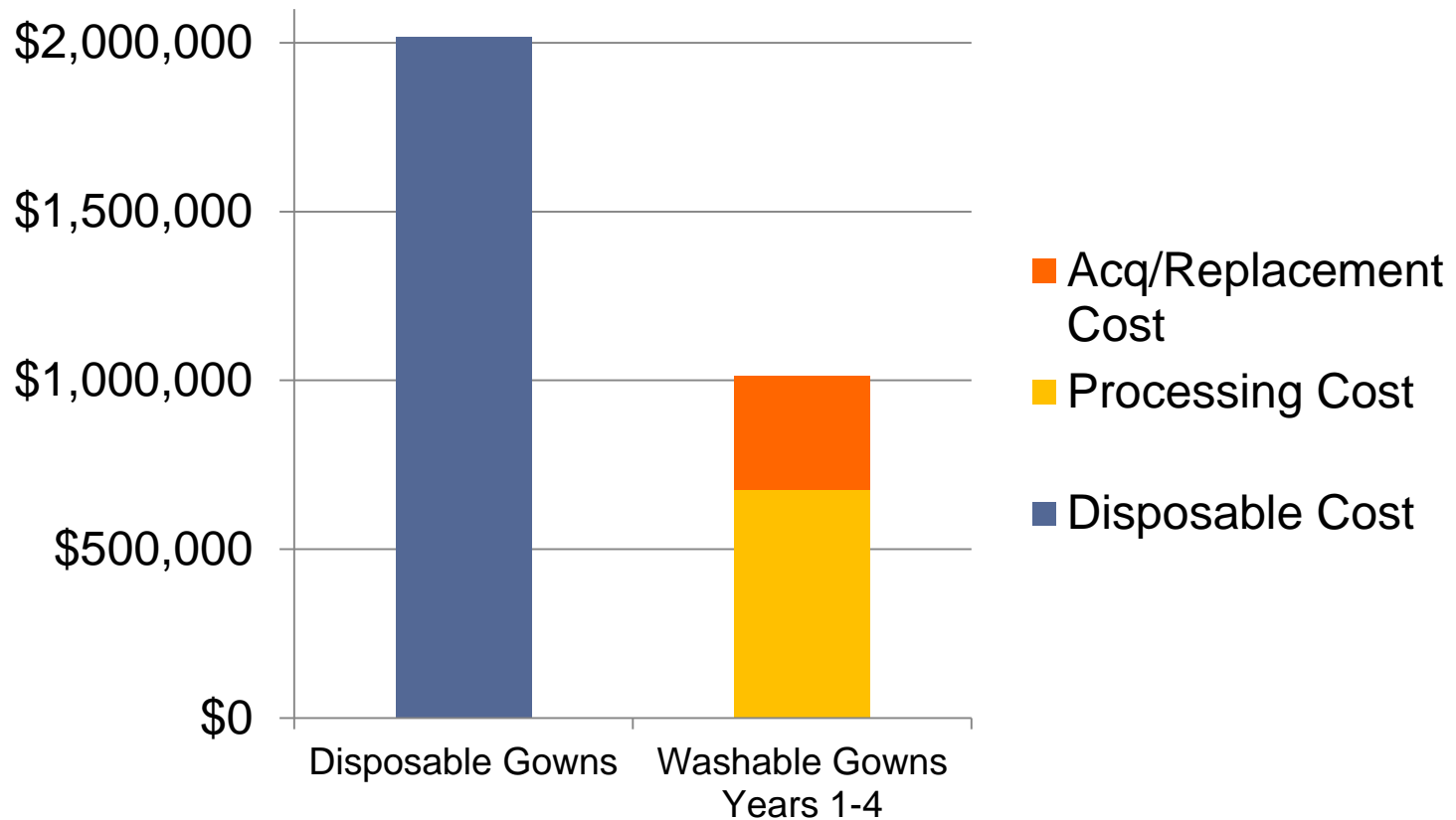
• Acceptance

- Sustainability helped push the initiative further
- Nursing leadership support
- Cost savings for senior leadership
- Infection prevention support

New isolation protocols introduced in July '14
reduced usage by 49%

	Estimated	Actual
Avg Daily Use	5,786	3,300
Inventory Level	40,502 (7 Par Level)	23,100 (7 Par Level)
Savings – 5 yr Projection	35%	49%
Savings – 3 yr Actual	35%	49%

Disposable to Washable Savings



Laundry

- Use Local Laundry Processing Plant
 - HLAC Accreditation & Hygienically Clean Healthcare Certification



- What do we do with the Reusable Precaution gowns once they can no longer be used?
 - Current linen is never thrown out, use a recycler
 - Linen is often donated to different organizations and countries
 - Evaluating other uses with vendors i.e. grocery bags, etc.

HLAC (Healthcare Laundry Accreditation Council)

TRSA Hygienically Clean Healthcare Certification

Total Savings

- Issued over 9 million washable isolation gowns since May 2012
 - Diverted from landfill
- Conversion reduced gown utilization volume by 50% from 2.6 to 1.3 million gowns annually
 - 1.3 million excess gowns not purchased, 2.6 million not landfilled
- Conversion reduced gown utilization cost from \$1.6 million annually to \$500,000 for reusable.
 - \$1.1 million initial savings from rollout of program
 - Rollout took from May 2012 to May 2015 (Slide 17), IP policy* July 2014
- Total Cumulative Savings of Program: \$3 million
 - Average annual savings \$450,000

**IP standard precaution protocols for MRSE (Methicillin-resistant Staphylococcus Aureus) and VRE (Vancomycin Resistant Enterococci)*

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