Material Waste in Health Care
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Practice Greenhealth is the nation’s leading health care community that empowers its members to increase their efficiencies and environmental stewardship while improving patient safety and care through tools, best practices and knowledge.
Learning Objectives

1. Understand a multi faceted approach to waste reduction.

2. Learn how hospitals are implementing best management practices.

3. Hear specific strategies to implement and measure.

4. Discuss obstacles and methods to improve.
First, Do No Harm

Patient Health

Worker Health

Community Health
Food Waste Composting
“Healthcare organizations need to be honest with themselves and ‘look in the mirror’ when it comes to environmental factors that affect human disease. Our mission is to improve the health of the communities we serve, and we cannot accomplish this mission without looking at our organization’s environmental impact and how that contributes to disease.”

Jeffrey Thompson, MD, CEO
Gundersen Lutheran Health System
La Crosse, Wisconsin
Learn from our waste
Total Cost of Ownership

The costs, direct and indirect, incurred throughout the lifecycle of an asset, including acquisition, deployment, operation, support and retirement.
What is EPP?

- Selecting products & services whose environmental impacts have been considered and found to be preferable to comparable alternatives.

- A way for purchasers to implement their values and goals as they relate to environment, health, and safety.

- Performance, availability, and price
Environmentally Preferable Purchasing

- **Surgical OR Kit Reformulation** – Fairview Medical Center eliminated 5 items from their Neuro Minor Pack, resulting in 890 pounds of waste per year and $3,313 savings.

- **Purchase EPEAT-certified Computers** – Kaiser Permanente Switched all computer supplies to EPEAT Silver and Gold products resulting in a reduction of 55,185,675 KWh, 10,398 lbs of toxic materials and 169.4 tons of hazardous waste-saved nearly $5 million
What’s Your Waste Profile?

Sales

- Solid: 52%
- Regulated Medical: 36%
- Recycling: 8%
- Hazardous: 4%
Waste Metrics

- % Recycling
- % RMW
- Lbs of Total Waste/APD
20 Different recycling streams

- **Prioritize! ($=rebate)**

<table>
<thead>
<tr>
<th>Item</th>
<th>Responsible Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardboard</td>
<td>EVS</td>
</tr>
<tr>
<td>Mixed office paper</td>
<td>EVS</td>
</tr>
<tr>
<td>Confidential paper</td>
<td>Supply Chain</td>
</tr>
<tr>
<td>Food Donation</td>
<td>Food Service/Hotels</td>
</tr>
<tr>
<td>Linen Recycling $</td>
<td>Supply Chain</td>
</tr>
<tr>
<td>Construction Debris</td>
<td>Construction Mgmt</td>
</tr>
<tr>
<td>Furniture Donation</td>
<td>Supply Chain</td>
</tr>
<tr>
<td>Medical Supply Donations</td>
<td>Healthy Environment</td>
</tr>
<tr>
<td>Device Reprocessing</td>
<td>Supply Chain</td>
</tr>
<tr>
<td>Sharps Credit</td>
<td>Supply Chain</td>
</tr>
<tr>
<td>Commingled Recycling $</td>
<td>EVS</td>
</tr>
<tr>
<td>Kitchen Grease $</td>
<td>Food Service</td>
</tr>
<tr>
<td>Batteries</td>
<td>EH&amp;S</td>
</tr>
<tr>
<td>Fluorescent lamps</td>
<td>Facilities</td>
</tr>
<tr>
<td>Computers/electronics</td>
<td>IT</td>
</tr>
<tr>
<td>Formalin</td>
<td>Lab</td>
</tr>
<tr>
<td>Alcohol</td>
<td>Lab</td>
</tr>
<tr>
<td>X-Ray film silver $</td>
<td>Radiology</td>
</tr>
<tr>
<td>Scrap Metal $</td>
<td>Materials Handling</td>
</tr>
<tr>
<td>Bulk records destruction $</td>
<td>Materials Handling</td>
</tr>
</tbody>
</table>
RMW: Why Do We Care?

- RMW costs between 5-10 times more than MSW
- Toxic by-products of incineration
- Worker safety
Common Sources of Federal Greenhouse Gas Emissions

1. Vehicles and Equipment
   - Stationary Sources
   - On-site Landfills & Wastewater Treatment
   - Fugitive Emissions

2. Purchased Electricity
   - Purchased Heating/Cooling
   - Purchased Steam

3. Transmission and Distribution Losses from Purchased Electricity
   - Business Travel
   - Employee Commuting
   - Contracted Solid Waste Disposal
   - Contracted Wastewater Treatment
   - Others*

**SCOPE 1:**
Greenhouse gas emissions from sources that are owned or controlled by a Federal agency.

**SCOPE 2:**
Greenhouse gas emissions resulting from the generation of electricity, heat, or steam purchased by a Federal agency.

**SCOPE 3:**
Greenhouse gas emissions from sources not owned or directly controlled by a Federal agency but related to agency activities.

*Additional, significant Scope 3 emission sources exist beyond the examples provided.
Thank You!

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