



Sustainability: Investing in the Future of Texas

Linking Waste
Management to Wellness

November, 2015

Objectives



- **Understand** a) the link between waste and wellness, b) best practices for the reduction of waste streams, and c) opportunities to effect the bottom line.



The Link Between Sustainable Business Operations and the Environment

- ***Problem Statement:*** *Hospitals generate significant amounts of waste, not only in daily operations, but in hospital and departmental moves.*

- 5.9 million tons of waste annually*
- 20-30% originates in operating rooms*
- Staff inappropriately disposes of up to 90%**
- 215 million metric tons of carbon-dioxide equivalent
- Air pollution from the health care sector's own electricity usage increases cases of asthma, respiratory illnesses, and emergency department visits to the tune of \$600 million a year***
- Landfill can contaminate drinking-water if not properly constructed.****

- *Practice Green Health

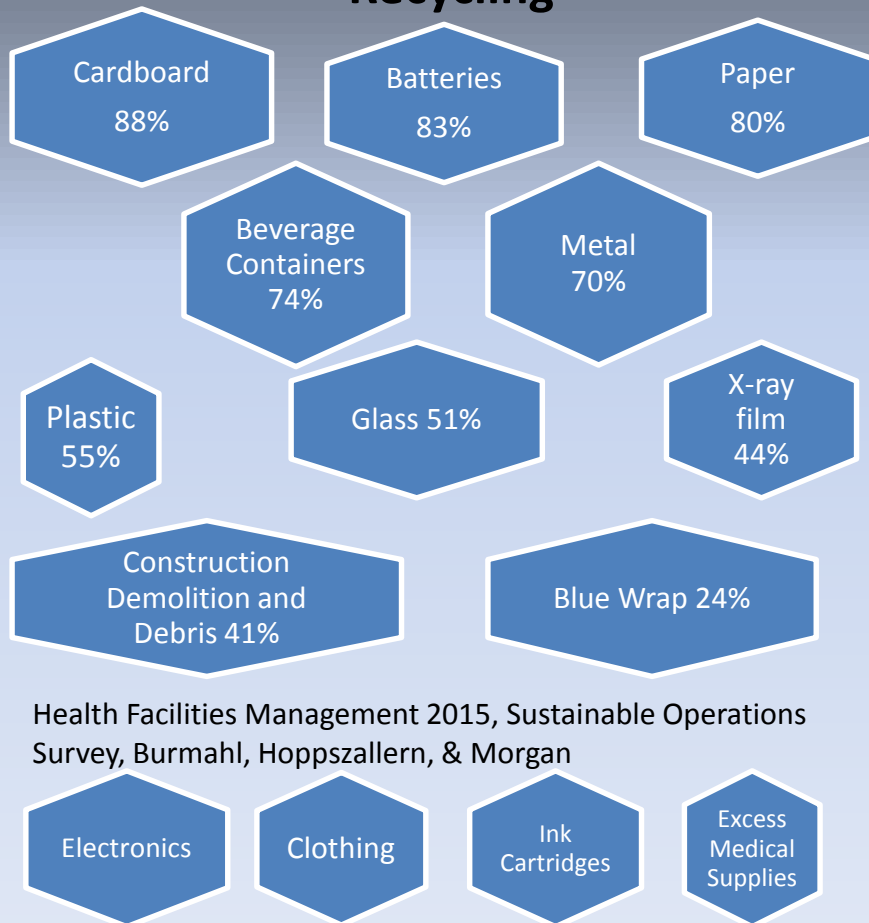
- ** Lee, R., Mears, S. (2012). Greening orthopedic surgery. *Orthopedics*, 35, e940-e944. doi:10.3928/01477447-20120525-39

- *** Healthcare Without Harm

- **** World Health Organization

Latest Survey from American Hospital Association

Materials Healthcare Facilities are Recycling



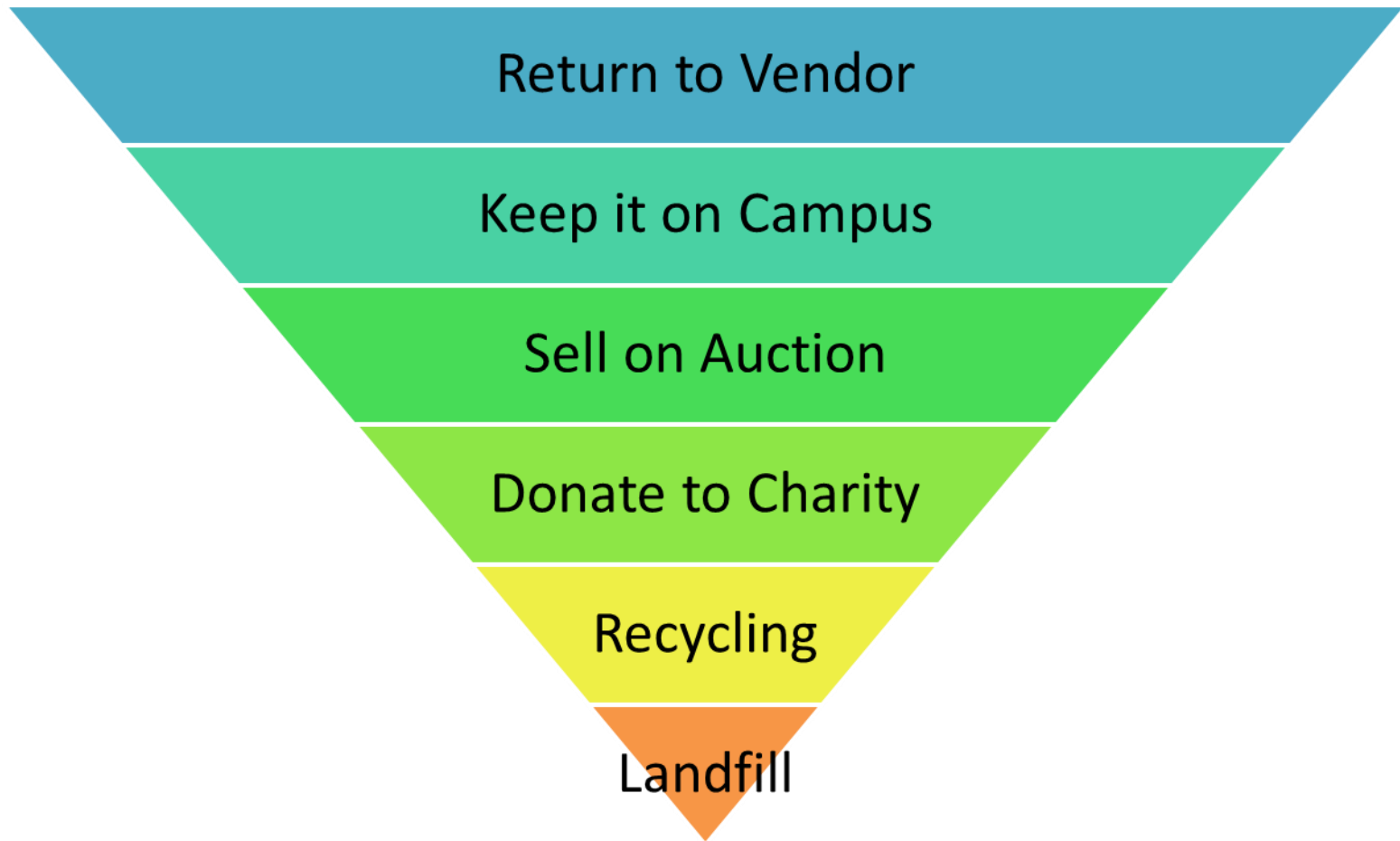
Health Facilities Management 2015, Sustainable Operations Survey, Burmahl, Hoppszallern, & Morgan

- Only 69% are measuring energy
- Only 37% include in performance metrics
- Only 61% track waste volumes
- Only 62% use a recycling management company to manage waste

Additional Opportunities to Reduce Waste

- Medical device reprocessing and reuse
- Disposable Medical Supplies
- Redbag, Sharps, and Trash
- Cafeteria Operations
- Electronics: Batteries, Ink Cartridges and Toner
- Moves: Furniture, Equipment, Office Supplies

Desired Materials Hierarchy



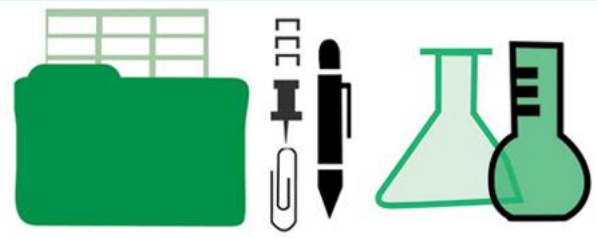
Return to Vendor: Stryker



Reprocessing can cut supply expense in half: \$1 million opportunity

- SCD Sleeves
- Blood Pressure Cuffs
- Pulse Oximeters
- EP Catheters
- Trocars/Shavers and Scalpels

Keep it On Campus



Welcome to the UT Southwestern Supply Swap Site



This SharePoint site is a collaboration between the Office of Sustainable Business Solutions and the Health Sciences Digital Library and Learning Center.

Supply Swap Shop
Home

Help

How to Use This Site
Campus Recycling/Reuse Initiatives

The UT Southwestern Supply Swap Site is an online community message board where faculty, staff and students may offer or obtain new or gently used campus office supplies and equipment taking up valuable storage space or headed for your nearest dumpster.

Swap Boards
Office Supplies
Computer/Printer Supplies
Labware

Click on the video player image to the right to watch the **brief orientation video** to the Supply Swap Site for viewing on the UTSW Library's YouTube Channel. Closed captioning is provided, if necessary.

Related Links
Sustainability at UT Southwestern
Surplus Warehouse & Inventory Control
Environmental Health & Safety
Health Sciences Digital Library & Learning Center

Don't have time to keep an eye on the site all day waiting for new entries? No problem! **Set up an email alert** to notify you when new items are posted.

Please watch the orientation video and familiarize yourself with the **How To Use This Site** instructional page before posting or responding. This is a UT Southwestern community-operated website. Please report any technical issues or misuse to GreenChampions@UTSouthwestern.edu.



Search Office Supply Listings

Search Computer/Printer Supply Listings

Search Labware Listings

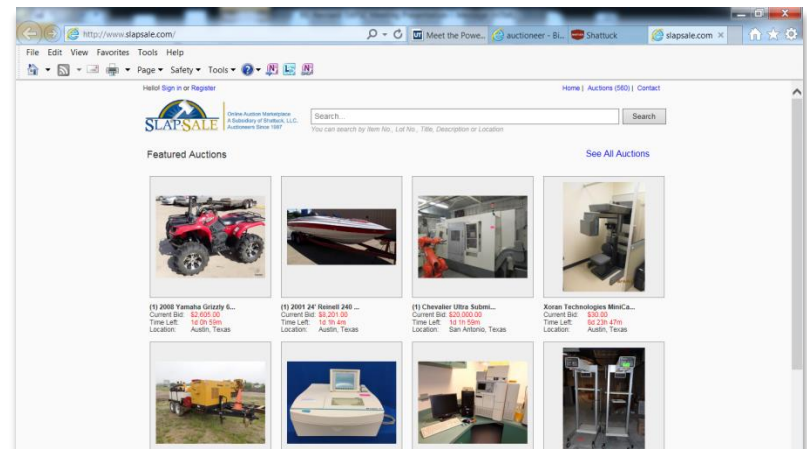
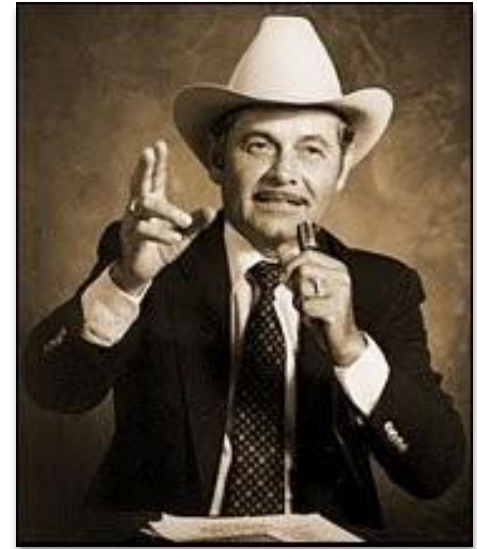
Add a New Office Supply Entry

Add a New Computer/Printer Supply Entry

Add a New Labware Entry

Sell on Auction

- Pennies on the Dollar, but better than nothing
- Create your own site vs. vendor



Donate to Charity: Supplies

Providing community benefit is required for hospitals to be tax-exempt charitable organizations under section 501(c)(3) of the Internal Revenue Code.



Recycling: Bin Placement

- **Product:** Rubbermaid “slim jim” recycling bins and lids
- **Location:** Near copy machines
- **Results: Priceless!**



23 gallon container



What should you feed
Ben?




Electronics Recycling

Fourth Annual

Nov. 13, 2015
7AM – 2PM

Free Open to the public


BioCenter Parking Lot
2330 Inwood Road, Dallas



Pull up, we'll unload

Recycle your:

- Clothing & Shoes
- Electronics, Ink, Toner
- Books & Pens



De-clutter closets, drop off unwanted or broken personal electronics. Anything that plugs-in or runs on batteries will be recycled. Textiles, books, plastic wrap, ink cartridges, and writing utensils also accepted.

Parkland Sustainability | planet care UT Southwestern | childrens MEDICAL CENTER | ECS REFINING Recycled & Asset Management Solutions | UT Southwestern Medical Center

For more information contact: 214-590-1342
Emma.Donachie@phhs.org



Offer collections and drives for:

- Electronics
- Batteries
- Cell Phones
- Ink Cartridges, Toner

Hospital Landfill Impact

Waste Generation

- Typical American: 4.3 lbs. per day (Duke University)
- Typical U.S. Hospital: 33.9 lbs. per day/staffed bed

Should be: 85 – 90%



10 - 15%

Usually is: 50 - 60%

40 - 50%



\$\$ Cost of Disposing 1 lb. waste \$\$



1 – 8 cents

20 – 50 cents



1 - 2.5 \$



Positive options



- By implementing programs to reduce waste, health care nationwide can save over \$700 million dollars
- Education and enhanced awareness about medical waste disposal would conserve precious resources and save money
- Average opportunity 300 – 500 thousand dollars every year



Shredding is the most environmentally friendly option available, as the plastics may be recycled.

Cafeteria Waste Reduction

Initiative	Value
Food Recovery	Feed Hungry People
Food Digesters	↓ Grease Trap Maintenance
Cooking Oil Recycling	↓ Grease Trap Maintenance
Tray-less Dining/Reusable Trays	Keeps the Café Classy
Discounts for Reusable Mugs, China Plates	↑ Employee Engagement
Compostable Take-Away Containers	Air Quality
Local and Organic Food	Supports Local Economy, ↑ Health
Healthy Dining Options	↓ Healthcare Costs

Make Moves Sustainable

LAB GLASSWARE

Laboratory glassware in good, usable condition should be posted on the supply swap website:
utsouthwestern.net/supplyswap.
Contact: 214-648-5893 to notify Green Champions of large quantities available.



MEDICAL SUPPLIES

Expired and unwanted medical supplies should be boxed and labeled. Pick-up is available through hospital materials management: 214-645-1115.



ASSET TAGS

Items with asset tags (pictured) *must* be returned to Inventory Control when broken or otherwise unwanted. If uncertain about an item call: 214-648-6042.



BENEFITS OF "GREEN" MOVES:

1. Less material is sent to the landfill
2. Disposal costs are reduced or eliminated
3. Supplies and books are given to those in need
4. Increased recycling revenue
5. Confidential information is protected



UT Southwestern
Medical Center



UT Southwestern
Medical Center

CAMPUS MOVES

Your guide to responsible management of UT Southwestern Medical Center resources during transitions.

For more information, contact 9-5893,
GreenChampions@utsouthwestern.edu.

Make Moves Sustainable

OFFICE SUPPLIES

YES	Knick-Knacks	Stationery
Desk Supplies	Ink Cartridges/ Toner (unused)	NO
Filing Supplies	Packing/Mailing Supplies	Asset Tagged Items
Holiday Decor	Picture Frames	Equipment

Office supplies in good, usable condition should be made available to other departments on campus through the supply swap website: utsouthwestern.net/supplyswap.

Items not exchanged on the site should be boxed and labeled "Recycle: Office Supplies" for pick-up by campus movers.



BLUE BIN RECYCLING

YES	Glossy Paper	NO
Cardboard	Junk Mail	Confidential Documents
Catalogues	Magazines	Carbon Paper
Colored Paper	Office Paper	Greasy Boxes
Envelopes	Phone Books	Wax Paper

Roughly 50% of waste is paper and cardboard. Please request a temporary recycling bin through housekeeping, 214-645-6096 or use blue bins already in place for paper recycling. Staples and paper clips may be left on paper.

Confidential documents should be shredded. Contact Shred-It: 469-322-1123, or reach out to another vendor for document destruction needs.



BOOKS

YES	NO
Board Books	Magazines (paper recycling)
Paperback Books	Journals
Hardcover Books	Periodicals

Books should be boxed separately and labeled, "Recycle: Books" for pick-up by campus movers. During renovations yellow crates may be placed in communal areas for collection.

Books are taken to the Better World Books dropbox located in the solar panel parking lot at the Bass Center.

BWB donates a book to someone in need for every book sold on betterworldbooks.com. Donated books that are outdated or otherwise unusable are recycled.



For more information, contact GreenChampions@utsouthwestern.edu, 214-648-5893

Know Where to Throw

Education is crucial to success:

- Green Champions
- In-person training
- Online training
- Recycling video
- Recycling plant tours
- Earth Day, events
- Bin audits
- Newsletters
- Website
- Posters



Mixed Recycling

YES!

NO!

What should you feed Ben?



Mixed Paper



Plastic Containers
(#1-5, 7)



Plastic Bags &
Plastic Film



Shredded Paper



Cardboard & Boxboard



Metal Cans



Styrofoam & Plastic
Utensils



Paper Towels &
Tissue Papers



Cartons



Toys



Metal Hangers



Diapers



Clothes

What ?

Where?

Books: Better World Books drop box - Forrest Park Bass Parking Lot

Clothing: Bryan Williams Student Center

Excess/Expired Medical Supplies: NL Building

Electronics/Furniture: Fill out Warehouse pick-up form

Film: Bags return to grocery store, other film trash

Glass bottles: Not recyclable at UT Southwestern, take home

Ink Cartridges/Toner: Send to : Recycling mail services

Lab/Office Supplies: Supply Swap Website

Light Bulbs: Physical Plant

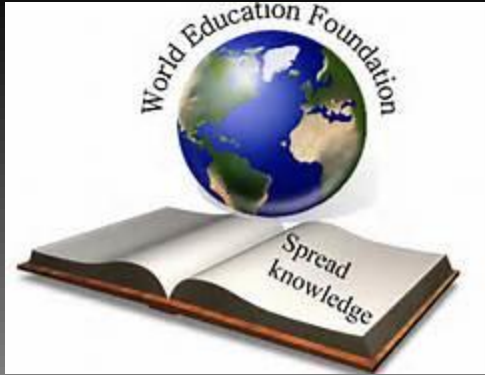
Metal: Physical Plant Warehouse

Paper Towels/Tissues: Trash

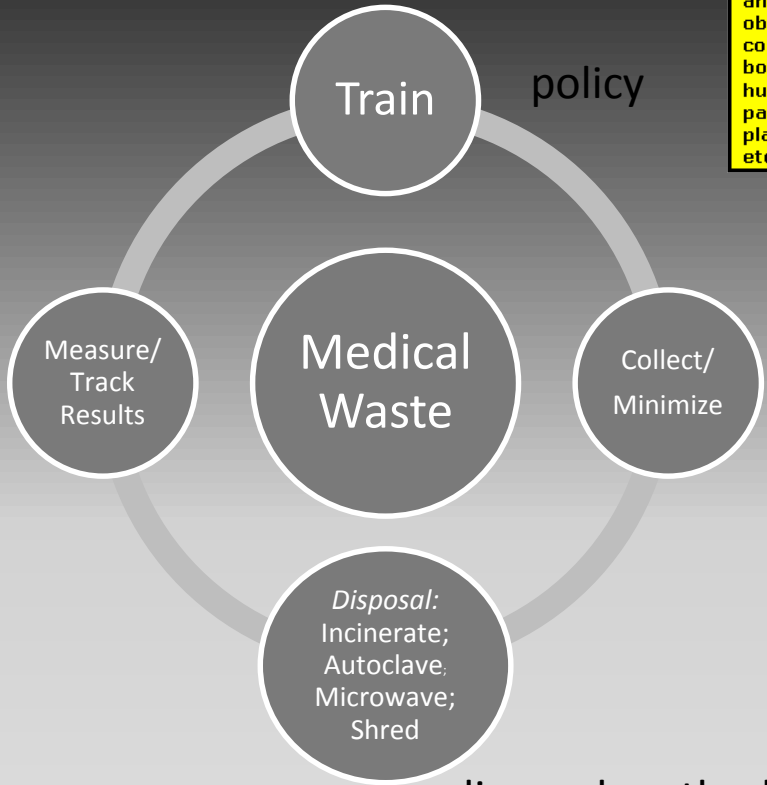
Shredded Paper: Contracted vendors on campus/blue bin

Styrofoam: Trash

Toys: Donate to a local charity



Call to action



YELLOW BAGS
 Infectious waste, bandages, gauze, cotton or any other objects in contact with body fluids, human body parts, placenta etc.

RED BAGS
 Plastic waste such as catheters, injection syringes, tubings, iv bottles

BLUE BAGS
 All types of glass bottles and broken glass articles, outdated & discarded medicines

BLACK CARBOY
 Needles without syringes, blades, sharps and all metal articles.



segregate



disposal method

Learn from the past!
 Make change with passion!
 Have hope for the Future!

