

# Pharmaceutical Waste Management

## Program Development

Julie Scholten BSN, RN, OCN, NE-BC  
Project Manager  
October 6<sup>th</sup>, 2011

# Agenda

Spectrum Health background

Program background

Program development

Next steps

# Spectrum Health Background



Hospital Group, Medical Group, Priority Health

- 17,000 staff
- 1,500 physicians
- FY 09 \$2.7 billion revenue



# Awareness...OR...Lack Of?

2007 Clean Med Conference

DEQ & EPA announcements & workshops

Internal team development

Daunting task & lack of ownership

Project fizzled until 2009



# Timeline

- Team Developed: March 2009
- RFP Developed: June 2009
- Vendor Selection: September 2009
- Leadership Approval: December 2009
- Facility Walkthrough's: January 2010
- Formulary Review: February 2010
- Pharmaceutical Identification & Labeling: March 2010
- ES Collection Method: March 2010
- Hazardous Waste Room: March 2010
- Supply Chain Logistics: March 2010
- Container Placement & Definition of Empty: March 2010
- Champion Training Rollout: April 2010
- Staff Training On-Line Rollout: April 2010
- Pharmaceutical Waste Management Policy: April 2010
- EPA ID Numbers: April 2010

# Team Development

- Purchasing: Vendor Selection, Contract Negotiation & Development
- Sustainability: Project Lead, Regulations, BMP, Process Development, Vendor Liaison
- Nursing: Project Lead, Managers, Educators, Process Development, Sorting Procedures & Location
- Pharmacy: Project Lead, Process Development, Sorting Procedures, Labeling, Formulary Review
- ES: Collection Process, DOT Training, Container Location, Hazardous Waste Storage Area
- Supply Chain: Product Logistics
- Resources: Safety, Operational Improvement & IC

# RFP/Vendor Selection

## Define

- Researched vendors, attended conferences/seminars
- Created and sent RFP to 4 vendors
- Developed Vendor Scorecard
- Selected 2 vendors to give presentation
- Developed Vendor Presentation Outline
- Made final decision

## Successes

- Vendor selection: knowledgeable & process oriented

## Challenges

- Largest organization they had rolled out (state & nation), lengthy process (leading edge process)

# Senior Leadership Approval

## Define

- Senior Leadership “Operations Team” Presentation
  - Cost & waste impact analysis
  - Regulatory issues
  - Environmental/human health impacts

## Successes

- Program approved
- Leadership understanding of community image, environmental impact

## Challenges

- Cost implications & nursing time & efficiency



# System Approach

## Define

- Hospital based team's
- Team Lead at each hospital

## Successes

- Consistency across system
- Regulatory compliance

## Challenges

- Main hospital looked upon as implementers vs. resource
- Long –term care used contracted pharmacy services

# Implementation Strategy/Action Plan

## Define

- Created action plan
- Timeline
- Assigned responsibility
- Identified barriers throughout process
- Re-evaluated team & added members & impacted departments as necessary

## Successes

- Accountability, on-task, systematic-approach, organized, etc.

## Challenges

- Inclusion of all stakeholders from beginning

# Facility Walkthrough's

## Define

- Determine container placement
- Define ES collection process
- Hazardous waste storage room requirements
- Staff & Leadership engagement

## Success

- Vendor support & benchmarking
- Gained staff support
- Container inventory
- Identified barriers & challenges

## Challenges

- <sup>11</sup> • More containers = space constraints & cost increase

# Formulary Review

## Define

- Compile & provide formulary to vendor
- Vendor analysis & report
- Defined non-hazardous, hazardous, narcotics & incompatibles

## Success

- Vendor support

## Challenges

- Size of formulary – system approach



# Pharmaceutical Identification & Labeling

## Define

- Sort black, blue & incompatibles
- Label only black & incompatibles
- Pyxis, eMar & stickers

## Success

- Staff identification of pharmaceuticals
- Ease of implementation
- Labeling of inhalers

## Challenges

- Black & Blue container sorting – education



# ES Collection Method

## Define

- Collection added to current route system
- Soiled Utility collection points

## Success

- ES took ownership of process
- No added FTE's
- Soiled utility – centralized collection

## Challenges

- Logistics of containers (full & empty)

# Hazardous Waste Collection Room

## Define

- No open drains
- Eye wash or portable station
- Access to phone
- Labeling
- Inspections
- PPE

## Success

- Identified rooms

## Challenges

- Space & meeting requirements



# Supply Chain Logistics

## Define

- Define warehousing, distribution, par levels for:
  - Containers, bags, stickers, labels, absorbent pads

## Success

- Well defined process for Supply Chain

## Challenges

- Space for materials at unit level



# Container Placement & Definition of Empty

## Define

- Finalize container placement based on nursing/staff input
- Define “empty” for IV Bags, tubing, vials, etc.

## Success

- Staff satisfaction
- Erred on side of caution – education & regulatory compliance

## Challenges

- Space
- Control container amounts
- Erred on side of caution – higher pharmaceutical waste generation

# Education & Training

## Define

- Mandatory on-line education
- Champion training
- Vendor training & facility walkthroughs

## Success

- Receptive & embraced training
- Staff support
- Culture – eco-conscious mentality

## Challenges

- Skepticism about champion model
- Time consuming for core team

# Policy Development

## Define

- Outlined purpose, responsibility, on-site storage, handling & disposal

## Successes

- System approval & adoption

## Challenges

- Tried to develop before process identified

# Next Steps

Improving collection, handling & disposal of incompatibles

Re-educating on definition of “empty”

Refining ES packaging process

Expanding scope to include offsite facilities



# Contact

Julie Scholten, Project Manager

- [julie.scholten@spectrumhealth.org](mailto:julie.scholten@spectrumhealth.org)
- 616-391-1205

Josh Miller, Sustainability Coordinator

- [joshua.miller@spectrumhealth.org](mailto:joshua.miller@spectrumhealth.org)
- 616-391-5125