

# The E=MC2 Project: Environment = Maintaining Cleanliness, A Multidisciplinary Approach To Establish a Routine Cleaning Schedule for Medical Equipment

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**Issue:** During environmental rounds, the Infection Control Coordinator noticed many pieces of medical equipment with stains and visibly dried dust and dirt. Equipment included wheelchairs, stretchers, commodes, buckets, lifts, scales, IV poles, carts, stands, tables and stools. The issue was presented to the Environment of Care Committee and a multidisciplinary team was assigned to address the problem. The team had administrative and financial support to complete the project.

**Project:** The E=MC2 Project (Environment = Maintaining Cleanliness) was instituted as a multidisciplinary team approach involving nursing, clinical engineering, environmental services, radiology, operating room, laboratories, dietary, transport, endoscopy, cath lab, ambulatory care and central sterile service. First, all departments with medical equipment were requested to submit a list of the equipment and the method of cleaning each item, how often it was done, what germicide/disinfectant was used, and who was assigned to clean it. Companies were contacted who performed sonic scrub of medical equipment and bids were placed for the contract to clean over 1500 pieces of equipment.

**The Company Selected was EquipSystems (Sonic Scrub)**

- High Pressure cleaning or Ultrasonic submersion of devices
- PM and lubrication of devices
- Minor Painting where required
- JCAHO Documentation
- Requires hospital personnel to transport equipment to and from cleaning area
- Hours of service Eves and Weekends
- Proposed bid: \$21,000

**DEPARTMENT RESPONSIBILITIES IN THE E=MC2 PROJECT**

Infection Control	Hand Hygiene Project
Clinical Engineer	Equipment Cleaning
General Store	Store room clean-up
Nursing	Patient care equipment
EVS – “Trash or Treasure” Project	Recycle/remove project
Operating Room	OR equipment cleaning
Central Supply	CSS cleaning of carts/tables
Hospital Facelift	Construction cleanup,
	Air Handling System
	Renovations and upgrade
Environmental Services	Revised Cleaning and
	Disinfection Procedures
	(new mop system)
Food & Nutrition	Kitchen cleanup

**EQUIPMENT TO BE CLEANED:**

- Food Service
- Transport Carts/Small rolling Tables
- Trash Barrels
- Trash Carts
- Walk In Refrigerator
- Metro racks
- Misc. Carts
- Clinical Engineering
- Wheelchairs
- IV Poles
- ESD-
- Trash Carts
- Transport-
- Stretchers
- Nursing Units
- Port BP Poles
- OR
- Tables
- Mayo Stands
- Nurse Worktable
- Stools
- Prep carts
- Steps
- Ring Stands
- Kick Buckets
- Bovie Carts



**Schedule For Cleaning Movable Equipment - FALL 2004**

November 30	3:30PM-11:30	5E, 5W
December 1	3:30PM-11:30	4E, 4W,
December 2	3:30PM-7:30	JORDAN
	7:30PM-11:30	DIETARY
December 8	3:30PM-7:30	LAHEY, ICU
	7:30PM-11:30	RADIOLOGY
December 9	3:30PM-11:30	TRANSPORT
December 10	3:30PM-5:00	ENDO, CATH LAB
	5:00PM-7:30	TRANSPORT
	7:30PM-11:30	3 OR ROOMS
December 11	8:00AM-4PM	6 OR ROOMS
December 12	8:00AM-1PM	4 OR ROOMS
	1PM-4PM	ASU & NESSA

NEW ENGLAND BAPTIST HOSPITAL  
CLEANING SCHEDULE FOR PATIENT UNITS

ITEMS/LOCATION	DEPARTMENT RESPONSIBILITY	SCHEDULE	METHOD
Bathrooms	Housekeeping	Daily	Wipe w/germicideal wipe/ sol
Bed Cradle	Cen Transport/ Equip Tech	After discharge	Wipe w/germicideal wipe/ sol
Bed Extender	Cen Transport/ Equip Tech	After discharge	Wipe w/germicideal wipe/ sol
Bed IV Pole	Cen Transport/ Equip Tech	After discharge	Wipe w/germicideal wipe/ sol
Beds	Housekeeping	After discharge/ Immediately if visibly contaminated	Wipe w/germicideal wipe/ sol
Bedside Curtains	Housekeeping	Every 6 Months	Laundered thru Bond,PACU,ICU,ACU 3x Year Contracted Services

**Results:** During a two week period of time, over 1500 pieces of medical equipment were brought to the loading dock for high pressure cleaning or ultrasonic submersion of devices, preventive maintenance and lubrication of devices, minor painting where required, wheels cleaned, and tape and labels removed. Service was done in the evenings and on weekends and no equipment was damaged or lost in the process and a semi-annual cleaning schedule was developed to continue to clean the equipment.

**Conclusion:** A process to clean medical equipment on a routine basis is an important part of the environment of care program. Infection Control is an important member of the EOC team and should assure that medical equipment gets cleaned. This multidisciplinary approach made the process more organized and involved staff participation. The most important factor was the support of administration. The project resulted in staff expressing their appreciation after the cleaning was done. Routine cleaning schedules were implemented and a semi-annual process established to have the equipment cleaned by a contracted vendor. The cleaning project cost the institution approximately \$20,000.

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Beds	Housekeeping	After discharge/ Immediately if visibly contaminated	Wipe w/germicidal wipe/ sol
Bedside Curtains	Housekeeping	Every 6 Months Bond,PACU,ICU,ACU 3x Year	Laundered thru Contracted Services
Blood pressure Apparatus & Cuff	Housekeeping	Terminal Cleaning of room	Wipe w/germicidal wipe/ sol or spray w/Amphyl
Charts & Racks	Nursing/Housekeeping	As Needed	Wipe w/germicidal wipe/ sol
Code Cart			
- Exterior	Housekeeping	Weekly	Wipe w/germicidal wipe/ sol
- Interior	Nursing	When soiled	
Commode	Housekeeping	After discharge	Wipe w/germicidal wipe/ sol
Commode in patient's room or High Toilet Seat	Housekeeping	Daily	Wipe w/germicidal wipe/ sol
CSS "Dirty" Box	CSS Cen Trans collects & distributes	Weekly	Washer Sterilizer