

High-Risk Equipment Management

November 5, 2020



MASSACHUSETTS
GENERAL HOSPITAL



MASSACHUSETTS GENERAL
PHYSICIANS ORGANIZATION

EDWARD P. LAWRENCE CENTER FOR QUALITY & SAFETY

Why is High-Risk Equipment a Concern?

- “High-risk medical equipment includes all **life support equipment** and any other device for which there is a **risk of serious injury or death to a patient or staff member** should it **fail**. The term high-risk equipment is equivalent in scope and nature to the CMS term critical equipment.” TJC 2020
- Any piece of High-Risk equipment must be maintained as prescribed by the manufacturer* or the equipment should not be in use.
- Biomedical Engineering can only track the equipment they know about.

Likelihood to Harm a Patient/Staff/Visitor

<i>Immediate Threat to Life</i>			
HIGH	<ul style="list-style-type: none">- ED occupancy type	<ul style="list-style-type: none">- Suicide prevention- HLD/Sterilization- Universal Protocol- Equipment maintenance- Pressure relationships	<ul style="list-style-type: none">- Equipment/sterile supply storage
MODERATE	<ul style="list-style-type: none">- Smoke/Fire doors- Fire cabinet maintenance & grounding- Use fire & life safety risk assessment that matches code	<ul style="list-style-type: none">- Medication titration orders and administration documentation- Medication labeling- Cal stat dispensers- PPE use- Precaution awareness	<ul style="list-style-type: none">- Equipment cleaning- Obstructed gas valves, panels, fire extinguishers- 2 hour separations/duct penetration between occupancies- Medication safety
LOW		<ul style="list-style-type: none">- Therapeutic duplication- Floor drain maintenance program	<ul style="list-style-type: none">- Medication Storage
	LIMITED	PATTERN	WIDESPREAD
	Scope		

Actions Needed

Identify

Identify location of all high-risk equipment in your unit

- Email response form using template to [MGH Biomedical Engineering](#)
- Remain flexible with Biomed and/or vendor to complete maintenance
- REMOVE FROM USE all High-Risk Equipment out-of-date for maintenance or inspection

Locate

Locate any pieces of equipment without Biomed labels or not on your list


- These pieces of equipment need to be added to the Biomed equipment database
- Fill out Excel inventory form doc and email to [MGH Biomedical Engineering](#)

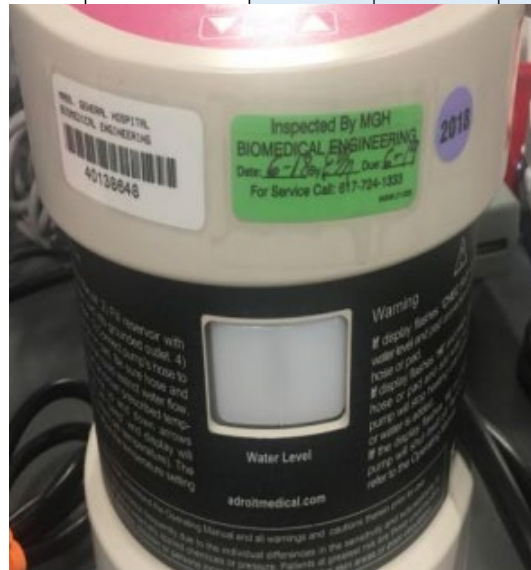
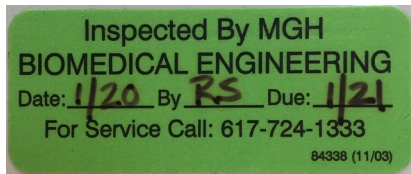
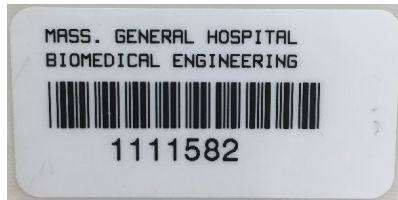
Communicate

Improve communication and purchasing procedures for future-state

- Provide a good point of contact from each clinic to work with Biomedical Engineering

Biomed Labels and Inventory Form

 MASSACHUSETTS GENERAL HOSPITAL BIOMEDICAL ENGINEERING		Clinic / Department:		Dept. Cost Center:		Requestor/Contact(s):			Biomed use only			
		TMS Owner/Account:		TMS Account:								
	Biomed use only TMS Device Category	Biomed Control #	Equipment Type	Manufacturer	Model	Serial Number	Purchase Order #	Purchase Date	Purchase Price	Warranty Period	Location / Room Name & Number	Comments
1	EXAMPLE	40132586	Defibrillator	Zoll	R Series	R008423	0010826554	2/15/2018	\$ 5,420.00	2 years	Hallway by Room 24	On code cart
2												
3												
4												
5												



High Risk Medical Equipment in Ambulatory Practices

Major Categories (Larger Quantities)

- Defibrillators (Zoll R Series)



- AEDs (Philips FR2+ or FRx)



- Syringe IV Pumps (Medfusion 3500)



- Fluid Warmers
- Lasers
- Electrosurgical Units
- Hyfrecators
- Sterilizers
- High Level Disinfection Systems
 - Includes Trophons

High Risk Medical Equipment in Ambulatory Practices

All Equipment Categories
And Quantity in Inventory

Equipment Category	Asset Qty
APHERESIS SYSTEM	9
COAGULATOR, ARGON BEAM	1
DEFIB, AED ONLY	115
DEFIBRILLATOR	83
ELECTROSURGICAL UNIT	21
FIBEROPTIC SCOPE, RIGID	1
HYFRECATOR	8
INFUSION PUMP, SYRINGE	45
LASER	32
MORCELLATOR	1
RF GENERATOR	1
SINK, PRE-PROCESSING	2
STERILIZER	12
STERILIZER, GLASS BEAD	3
STIMULATOR, DEEP-BRAIN	1
STIMULATOR, MAGNETIC	4
SYSTEM, ABLATION	1
SYSTEM, DISINFECTION	21
SYSTEM, SCAN,LASER OCT	2
ULTRASONIC CLEANER	4
ULTRASONIC SCALER	3
WARMER, FLUID	42
WASHER, SCOPE	4