



Part 5. To the Future and Back - Taking What We Learned so Far and Applying it to Your Facility

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Re-Cap of Prior Webinars

Part 1 – Discussion of What's Broken and why we are conducting these webinars

Part 2 – Discussion of the Baseline hazardous waste regulations

Part 3 – Discussion of the Hazardous Waste Pharmaceuticals rule at 40 Part 266 Subpart P

Part 4 – Discussion of Regulated Medical Wastes (RMW),and Amendments to RMW regulations

Today's Objective – Facilitate improved hospital and other healthcare facility compliance with the Hazardous Waste and Regulated Medical Waste (RMW) Regulations

- Starts with leadership, organizational culture, and communications
- Continues with processes and procedures and continuous improvement, including the importance of training staff
- Linking and addressing the most frequent violations and potential solutions
- Tools you can and may want to use (Checklists)
- Do's and don'ts
- Questions from audience (about anything we have discussed)
- Where do we go from here?

What do most of Healthcare Facilities have in common?

- Most have multiple locations for hazardous waste and RMW generation/accumulation (med rooms on patient floors, ED, infusion, specialty floors (orthopedics and oncology), pharmacy, laboratory, maintenance, etc.)
- 24-7 operation
 - Hundreds of generators
 - Variable shifts/travelling workers
 - Staff turnover
 - Thousands of pharmaceuticals in use daily & new ones each week
- Persons in charge of managing hazardous waste also typically have RMW, hospital laundry, solid waste, operating room equipment, etc. to manage
- Also must deal with subcontractors who collect/manage hazardous waste

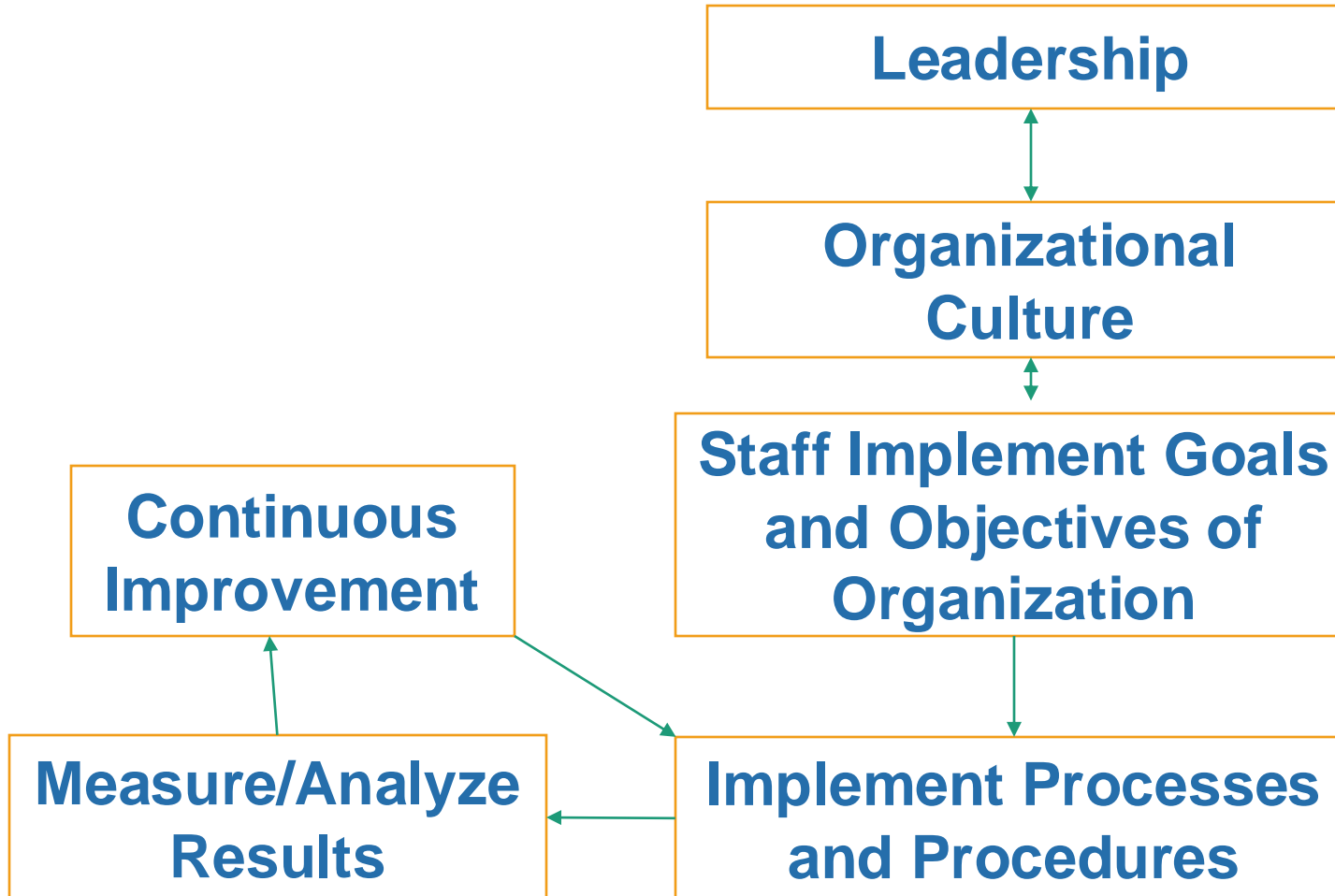
The Challenge/Goal: Improve Quality of Life for Patients

Primary Objective:
Improve Patients Health

Secondary Objective:
Provide Quality Service in
Support of Patient Care,
including Waste Management

Training Pertinent Staff to
Identify and Manage
Hazardous Waste and RMW
Effectively

Approach to Achieving Goal: Continually Improving

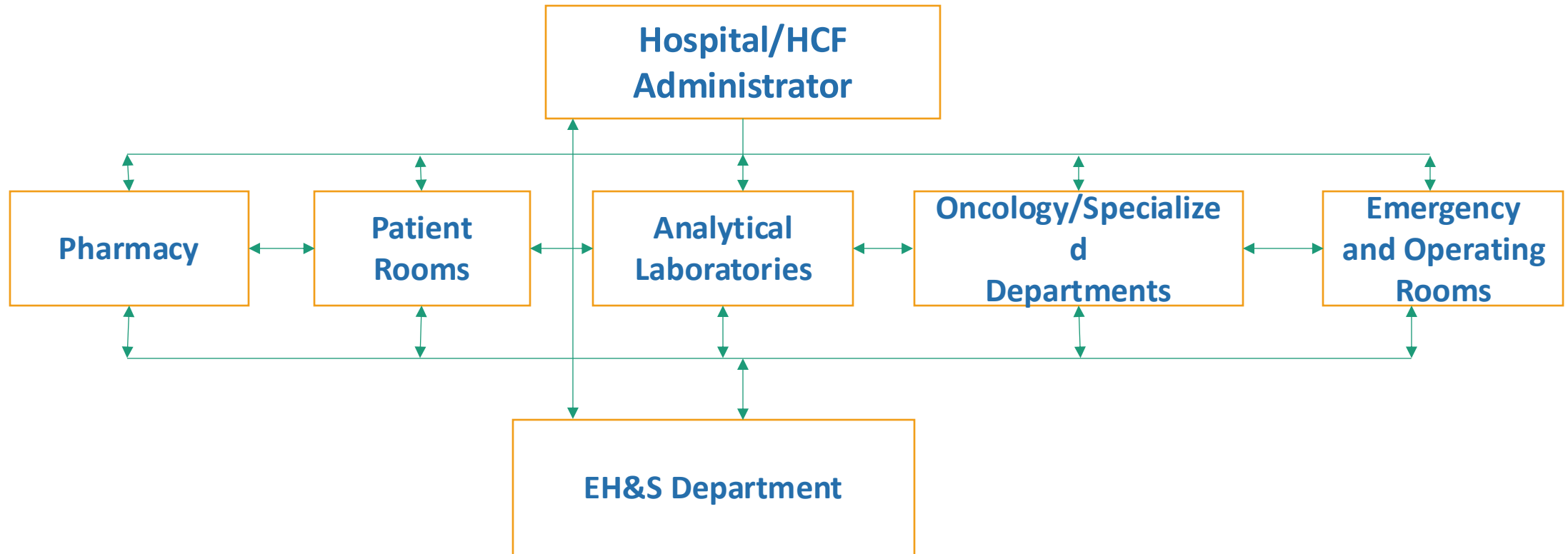


The Importance of Organizational Culture

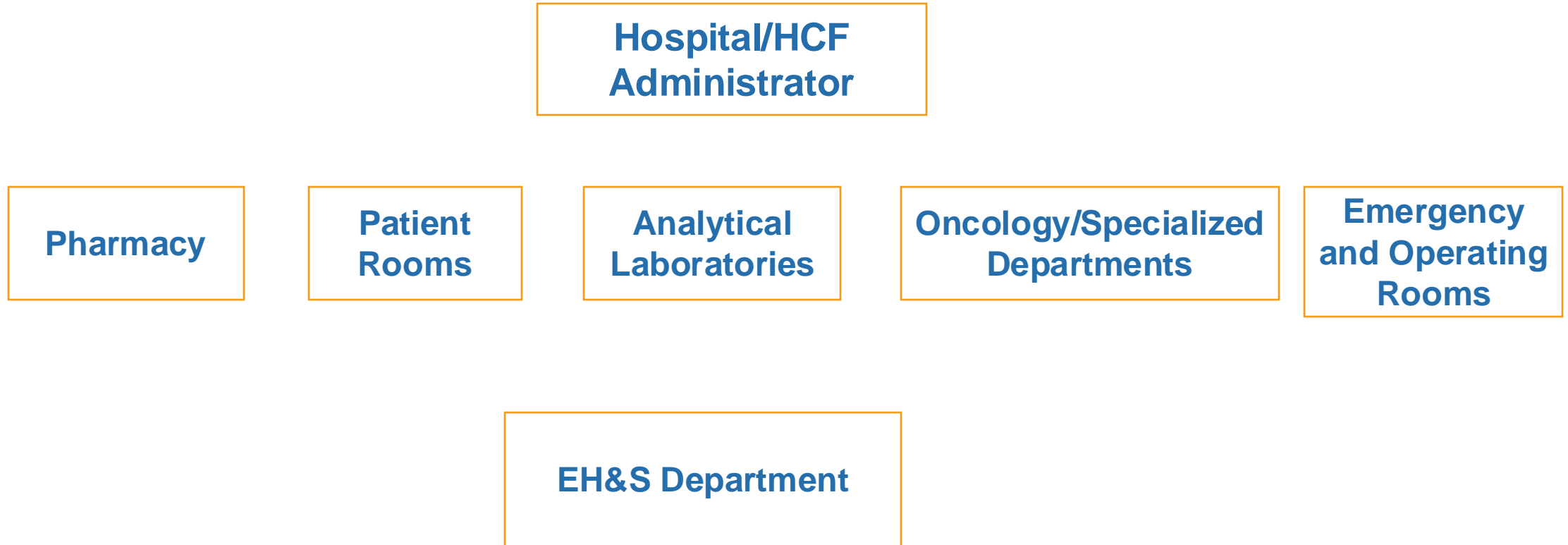
- What culture works best for hospitals and other healthcare facilities?
 - Market – results-oriented to maximize profit
 - Adhocracy - emphasis on creativity and innovation
 - Hierarchy – vertical management with strict control
 - Clan – collaborative, team-building, close-knit
- Vision, values and practices drive organizational culture
- Organizational leadership sets the tone with worker feedback (hopefully!)

Source: Workhuman website

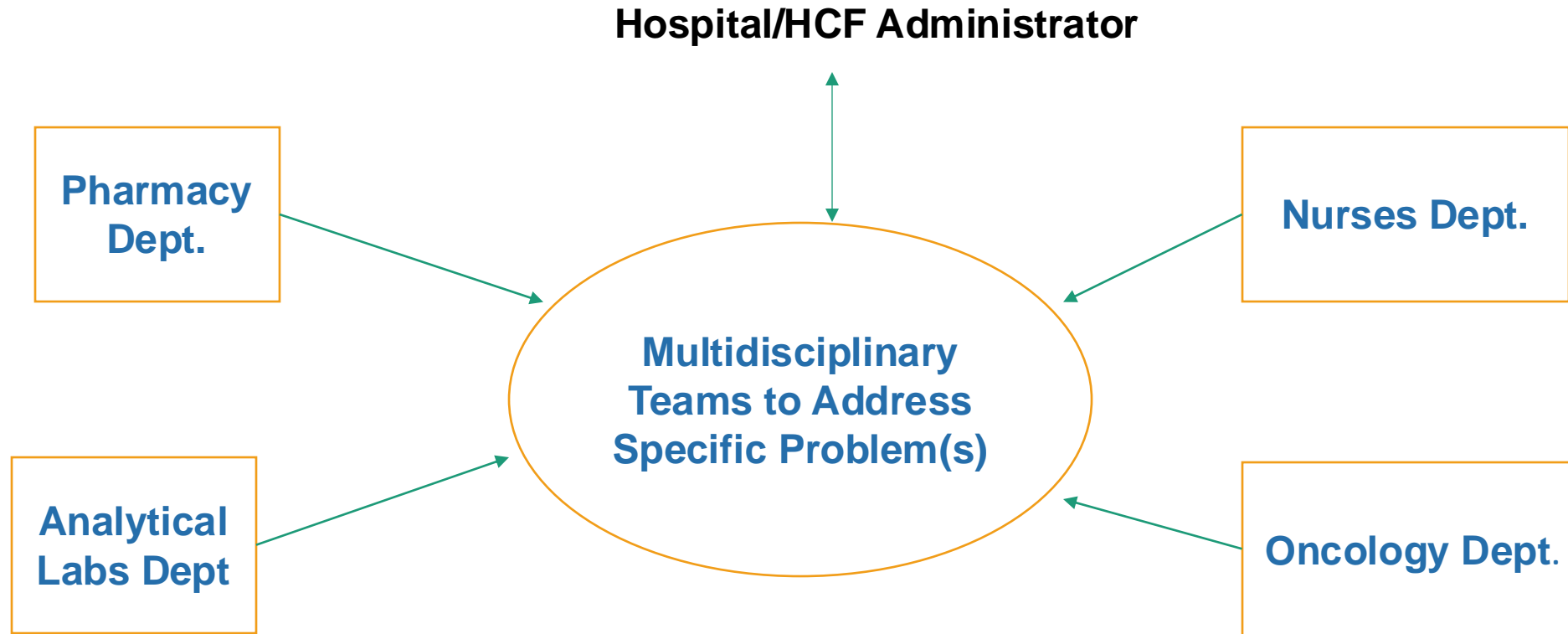
Hierarchical Culture



Adhocracy Culture



Clan Culture



Why is this important?

It doesn't matter which culture or structure your organization has, or if you are a profit or not-for-profit healthcare facility, so long as patient care and quality of life comes first.

BUT, non-compliance with the regulations can possibly adversely affect patient care and also result in fines that can hurt your bottom line!

The Importance of Training Staff

- If employees responsible for wastes do not understand, or are not familiar with the hazardous waste regulations, then both the identification and subsequent management of any hazardous wastes generated becomes problematic!
- **Without knowledgeable leadership, training, and written procedures, your facility will almost always be out of compliance with the applicable regulations.**

Training Staff Predicated on your Generator Category

Very Small Quantity Generators (VSQGs)

There is no requirement for training.

Small Quantity Generators (SQGs)

- There's a non-specific description of what is required. **(See 40 CFR 262.16 (b)(9)(iii))**. Instead, workers must be “thoroughly familiar” with requirements

Large Quantity Generators (LQGs)

- Specific training timeframes (within six-months of hire, annual refresher, etc.) with recordkeeping requirements

See 40 CFR 262.17 (a)(7) for details

Regulatory Requirements:

Subpart P Training of personnel managing non-creditable hazardous waste pharmaceuticals at healthcare facilities.

A healthcare facility must ensure that all personnel that manage non-creditable hazardous waste pharmaceuticals are **thoroughly familiar** with proper waste handling and emergency procedures relevant to their responsibilities during normal facility operations and emergencies.

Similar to SQG Training Requirements

Training staff - Questions to Ask

- What positions require knowledge of the hazardous waste regulations?
- For each position, what components of the regulations require training?
- Are training materials available? Classroom training? Online training?
- Do you know the names of staff in those positions and whether they are trained or not?
- How are new staff trained?
- Do relevant departments keep records?
- What processes are in place to keep track?

Hypothetical Training Program Documentation

<u>Name</u>	<u>Position</u>	<u>Training Requirements</u>	<u>Date Taken</u>
Mary	Nurse	Basics of Waste Identification and Procedures for Managing Waste	6/20/2022
Joe	EH&S	Procedures/Process for Accurately Identifying SW/HW/HWP/RMW	1/15/2020
		Procedures for Managing Waste Once Generated in SAA	3/10/2020
		Procedures for Managing Waste in CAA	3/10/2020
		Procedures for Completing HW Manifest	4/30/2020
		Procedures for working with TSDF and ensuring waste arrives in timely manner	4/30/2020

Bottom Line

Whether your hospital or HCF is a VSQG, SQG or LQG:

You need processes in place to:

- Identify what staff need to be trained, and when,
- Identify the types of wastes generated in a particular department, and/or
- Manage any wastes generated in their department effectively.

Someone should be checking staff and contractors to ensure that they are completing the tasks and that they are following training procedures!

Are communication processes in place to identify and manage hazardous wastes?

- Is there someone in each hospital or HCF department responsible for working with, if not reporting to, the individual(s) in charge of identifying and managing hospital wastes?
 - Do periodic meetings occur between departments?

Bottom Line: Hospitals will most likely fail in identifying and managing its wastes effectively without a clear, accountable organizational structure along with effective communications between and among all relevant departments.

Some Best Management Practices to Consider

Waste Identification: Do you have a process for identifying and managing the wastes you generate?

- Is there an organization/individual in your hospital coordinating waste identification across all departments?
 - Solid wastes
 - Hazardous wastes (HW)
 - HW Pharmaceuticals
 - Regulated medical wastes
- Have you established a process for identifying all chemicals and associated wastes generated within your hospital?

Waste Identification

Starts with the chemicals you use— do you know the following?

- Does your hospital have a list/inventory of all chemicals that it uses, such as pharmaceuticals, chemicals used in laboratories, patient and operating rooms, supporting facility maintenance operations, etc.?
- Does your hospital have a process in place to continually update and maintain this inventory to account for changes, such as the introduction of new pharmaceuticals, or discontinued pharmaceuticals, as well as other types of chemicals used in its operations?

Waste Identification (Continued)

- Do your hospital staff know which pharmaceuticals and other chemicals used on site may become hazardous wastes upon disposal?
- What was the source of that information? Is it reliable?
- If so, did in-house staff develop this list? Pharmaceutical and other chemical suppliers? Both?
- Who manages these waste streams, meaning, who is charge of knowing the generator requirements and making sure they are met.

Important! Do they know which hazardous wastes must be counted and documented?

Waste Identification (Continued)

- Does your hospital have in place the necessary processes and procedures, such as signage, for describing what:
 - **Nurses, pharmacists, etc.** should do with discarded pharmaceuticals, and other chemicals that may become hazardous wastes when disposed?
 - **Laboratory technicians and diagnosticians** for wastes generated as part of laboratory testing operations?
 - **Doctors and other medical staff** handling patient and chemical wastes?
 - **Facility maintenance staff** handling used lamps and batteries?

Container Management

Basic rules. Make sure you:

- Keep containers closed unless adding and removing HW
- Mark and label containers with the appropriate language
- Do not mix wastes that are **not** compatible with each other and container
- Here are some good examples to consider:

Container Management: Laboratory Waste Accumulation:



Do you think that this would be considered a closed container?

Container Management: More Laboratory Waste Accumulation:



No hazardous waste labels

No hazards of the waste

No emergency postings

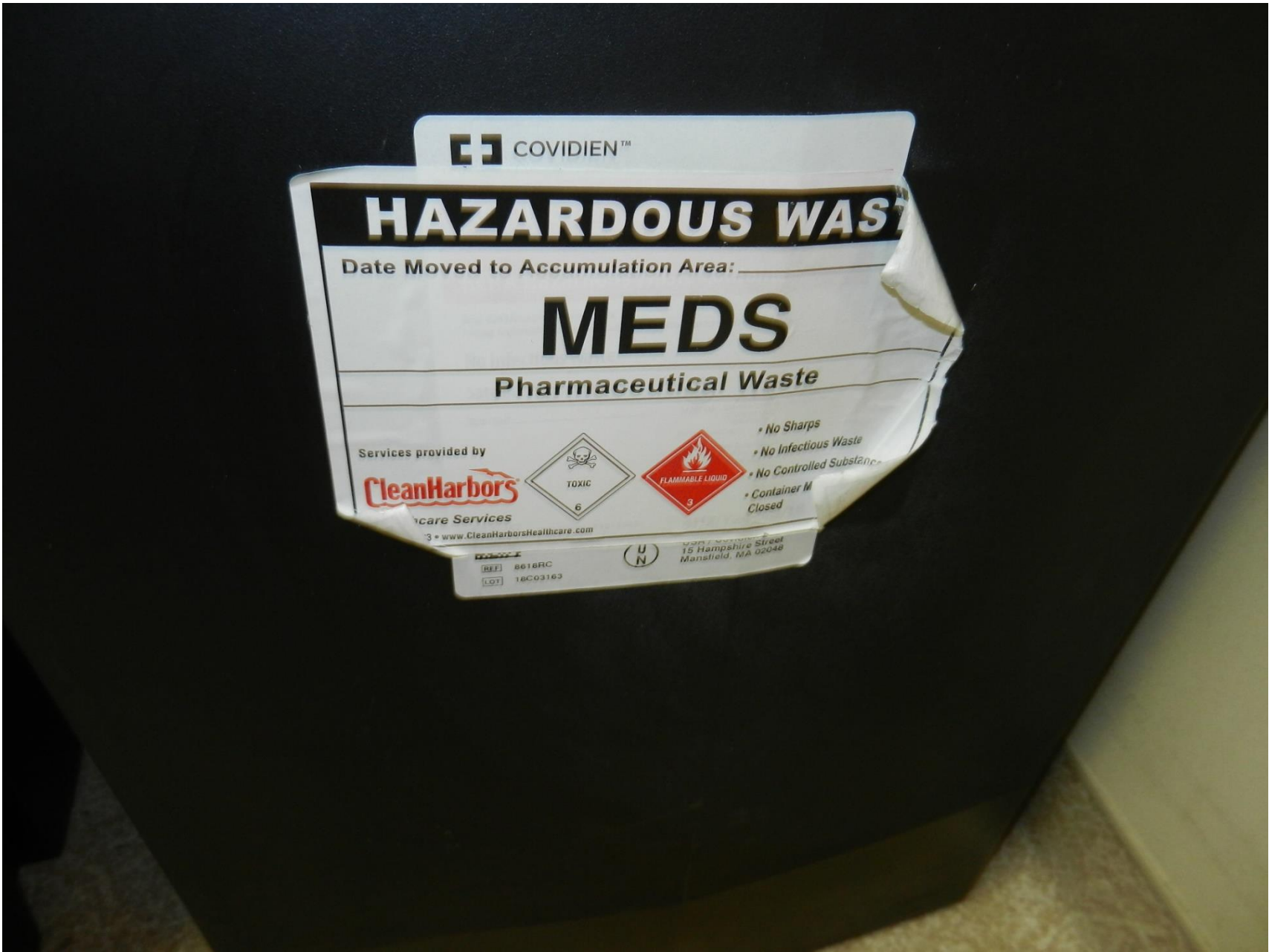
Possibly no training too!

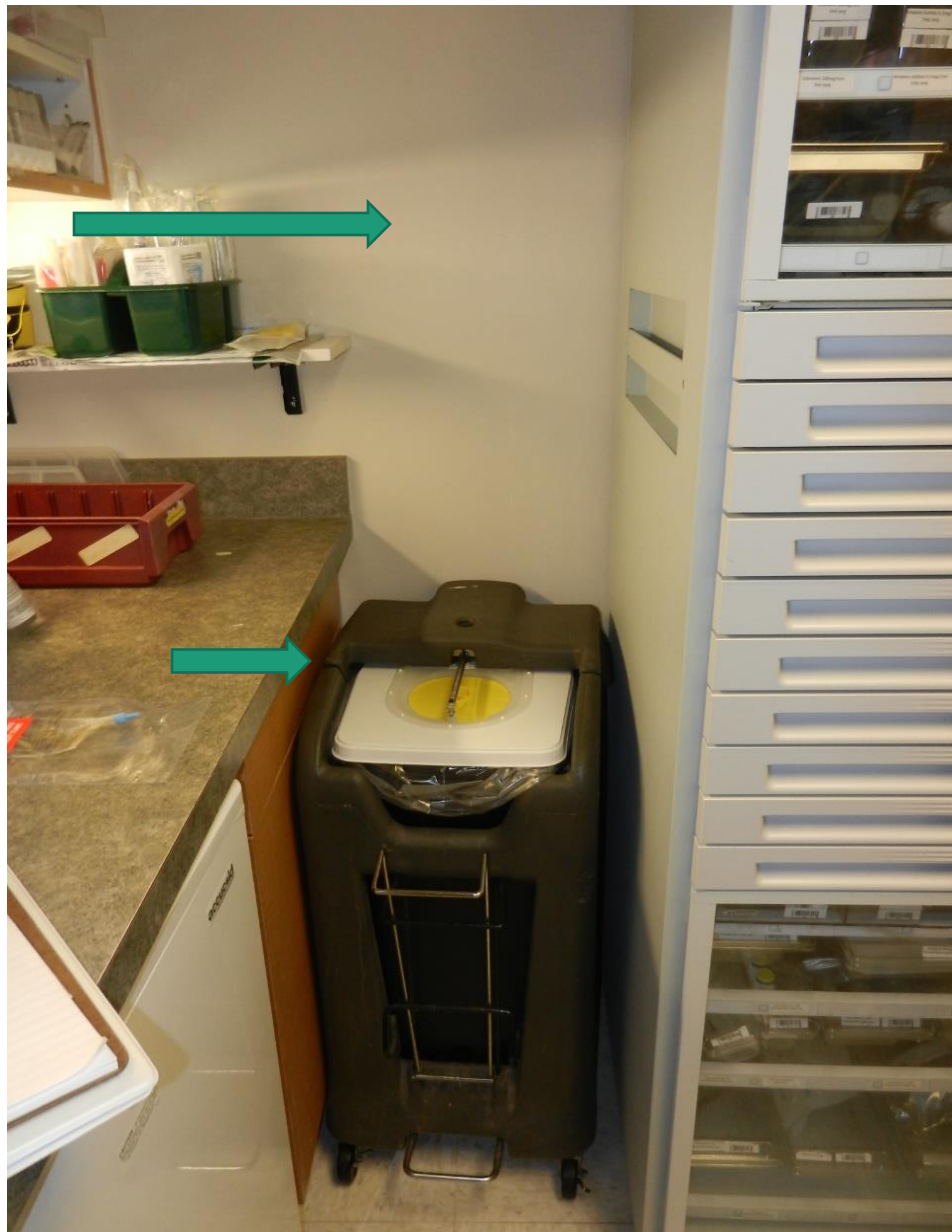
Subpart P Container Requirements

- **Non-creditable HWPs** must be in closed, secured containers that are not unattended or in public areas
- Must be labeled "hazardous waste pharmaceuticals"
- Must be accumulating no longer than one-year (best way to do this?)

Subpart P encourages facilities to combine all HW and non-HW pharms into one container (note: one caveat to that statement is that there are a handful of Pharms that require additional treatment and cannot be put into a container with other HW Pharms unless they are all treated with the more stringent treatment requirements)

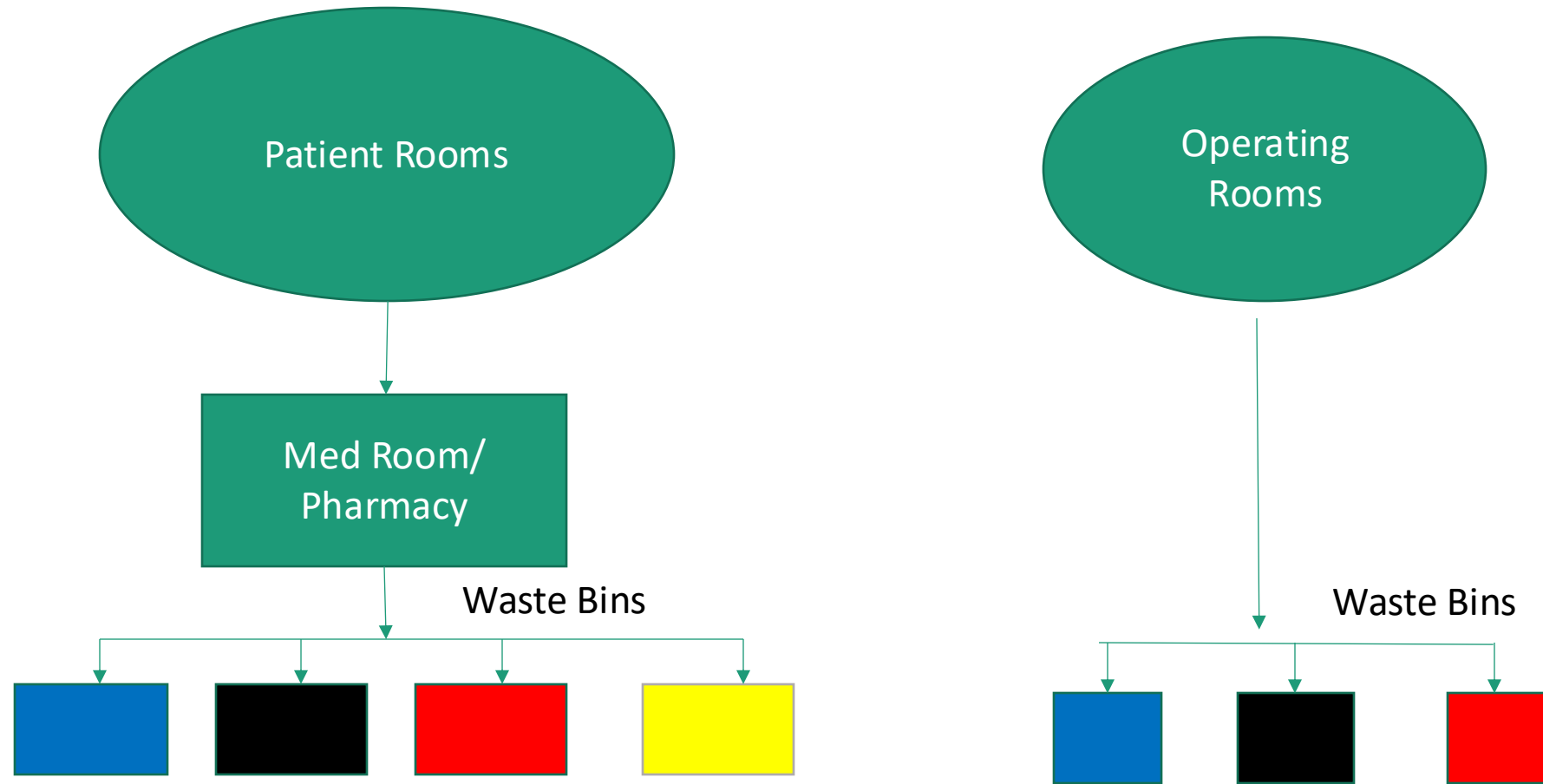








Accumulation of Pharmaceutical Waste





And Don't Forget Wastes Supporting Facility Operations. The Forgotten Wastes!

- Used aerosol cans
 - Spent fluorescent lamps
 - Spent solvent-contaminated wastes
 - Batteries
-
- Are processes and procedures in place to identify and account for these wastes?

Question: How does a hospital or other HCF, whether VSQG, SQG or LQG, comply with so many regulatory citations?

- VSQGs must comply with approximately 40 regulatory citations
- SQGs must comply with approximately 200 regulatory citations
- LQGs must comply with approximately 234 regulatory citations

AND that doesn't include the 60 regulatory citations for the Hazardous Waste Pharmaceuticals rule

Potential Answers:

1. Memorize individual regulatory citations
2. Pray your hospital never gets inspected
3. Use the eCFR to identify regulatory requirements
4. Use checklists that identify regulatory requirements

We hope you answered No. 4

The Use and Benefits of Checklists

- Keeps you organized - Lists all the tasks and activities one must comply with
- Assists in setting up the requisite processes and procedures to comply with a regulatory citation
- Fosters accountability, consistency, productivity and transparency
- Keeps your eyes on the ball

See *The Checklist Manifesto: How to Get Things Right*, Dr. Atul Gawande

Important Regulatory Checklists You Should Use

- Waste Identification
- Universal Wastes
- Specific Generator Category
- Satellite Accumulation
- Container management
- Preparedness and Prevention
- Recordkeeping and Reporting
- Packaging, Marking and Labeling
- Land Disposal Restrictions
- Manifesting

We will send you copies of the more important checklists to use. This can help in establishing/improving existing processes and procedures.

Do's - Have a Plan

- Know which HW pharms are incompatible or require additional treatment (D004-D011) - Why??
- Have options for odd HW pharms wastes: What happens if a HW pharm is too big for the container on the wall?
- Make sure 1-year accumulation dates are correct and visible. We see many hospitals that have HW Pharms in containers with no dates or beyond 1-year.
- Why is this occurring?
 - Containers are reused and labels are not being updated
 - Containers are in less busy areas that are not checked regularly

Do's – Controlled Substances (CS)

- Let staff know that only CS wastage can go into a sequestration unit. If any HW pharms get put in there, it is now a HW container (for hospital pharmacy only. Retail pharmacies do not generate CS wastage)
- Send the sequestration units off for proper incineration to avoid DEA issues
 - Can be sent to several types of incinerators for destruction
 - Can be combined with HW pharms and sent to a TSDF

Do's

- Keep track of creditable HW pharms through inventory, removal for shipment, assessment, and off site
- If you see that you are not getting credit for a HW pharm on a regular basis, manage it as a non-creditable HW pharm
- Maintain records
- Contact DEQ and ask questions! We are happy to help you with compliance

Don'ts

- Do not assume that your disposal contractor is keeping you in compliance with HW regulations or that they know if you are or are not managing HW pharms under Subpart P.
- Do not assume that everyone is doing things correctly at the med stations or throughout the pharmacy. Complete frequent checks on containers and quiz personnel
- Do not overlook non-prescription pharms that may be HW pharms (i.e. Centrum Silver or similar vitamins)

Don'ts

- Don't assume that you don't have to apply Subpart P for pharmaceutical waste management. If you are part of a hospital, you are already likely required to be managing under Subpart P
- Don't assume that Subpart P would be easier than managing HW pharms under RCRA (this is for VSQGs only)

Do's – Regulated Medical Waste

- Know where and how your waste is being treated – generator is responsible for making sure regulated medical waste is treated at a permitted treatment facility prior to disposal
- Keep records of regulated medical waste received, treated onsite, or sent offsite, including dates, quantities, and contact information for transporters, intermediate handling facilities, and final destinations for treatment and disposal



Averda



Veolia

Do's – Regulated Medical Waste

- Know what types of regulated medical waste are considered Category A waste
- Be familiar with the more stringent management standards for Category A waste

Agent	Category A Substances		Select Agents		
	UN 2814 <i>(Infectious substances affecting humans)</i>	UN 2900 <i>(Infectious substances affecting animals only)</i>	HHS Select Agent	USDA Select Agent <i>(animal pathogens)</i>	USDA Select Agent <i>(Plant Protection and Quarantine, PPQ)</i>
Ebola virus	✓		✓		
Lassa fever virus	✓		✓		
Marburg virus	✓		✓		
Mpox virus (Clade I)	✓ (cultures only)		✓		

Note: This is not a complete or exhaustive list. See US DOT PHMSA's Planning Guidance for Handling Category A Solid Waste for more information.

Don'ts – Regulated Medical Waste

- Don't use red biohazard bags for any other purpose – waste packaged as regulated medical waste must be handled as such
- Don't put untreated regulated medical waste in the regular trash or send it to a landfill
- Don't autoclave, incinerate, solidify or otherwise treat regulated medical waste without a permit from DEQ



Reddit



Solidified regulated medical waste is still **untreated** regulated medical waste

What matters to you?

- **Would you do anything different** in your hospital based on today's discussion (as well as previous webinars) to improve compliance with the hazardous waste and RMW regulations?
- **Organize your hospital operations differently to address challenges of hazardous waste and RMW?**
- **Change communications processes?**
- **Train staff?**
- **Improve the identification and management of a hazardous waste to improve compliance at your hospital?**
- **Use checklists?**

Would You, if you haven't already:

- **Develop a list/inventory of all chemicals** (electronically preferred!) such as pharmaceuticals, chemicals used in laboratories, patient and operating rooms, supporting facility maintenance operations, etc. your hospital uses?
- **Establish a process to continually update and maintain this inventory of all chemicals in the hospital** to account for changes, such as the introduction of new pharmaceuticals, or discontinued pharmaceuticals, as well as other types of chemicals used in its operations?

Considering everything we have discussed the last five weeks, what grade would you give your organization when it comes to identifying and managing hazardous waste and RMW?

Grade	Comment
A	Everything covered/addressed.
B	Most areas covered, but can still improve
C	Need improvements in several areas
D	Need improvements everywhere
F	Almost beyond help!

That's All She Wrote!

Thanks for joining us.

Hopefully we have given you some “food for thought” these last five weeks

Where Do We Go From Here?

That's Up to You!

If there's topics you want us to discuss more thoroughly, just let us know, and if enough interest, we'll set up another webinar

DEQ contacts for additional questions

- Lisa Ellis, HW Compliance Coordinator
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Any Closing Questions or Comments?