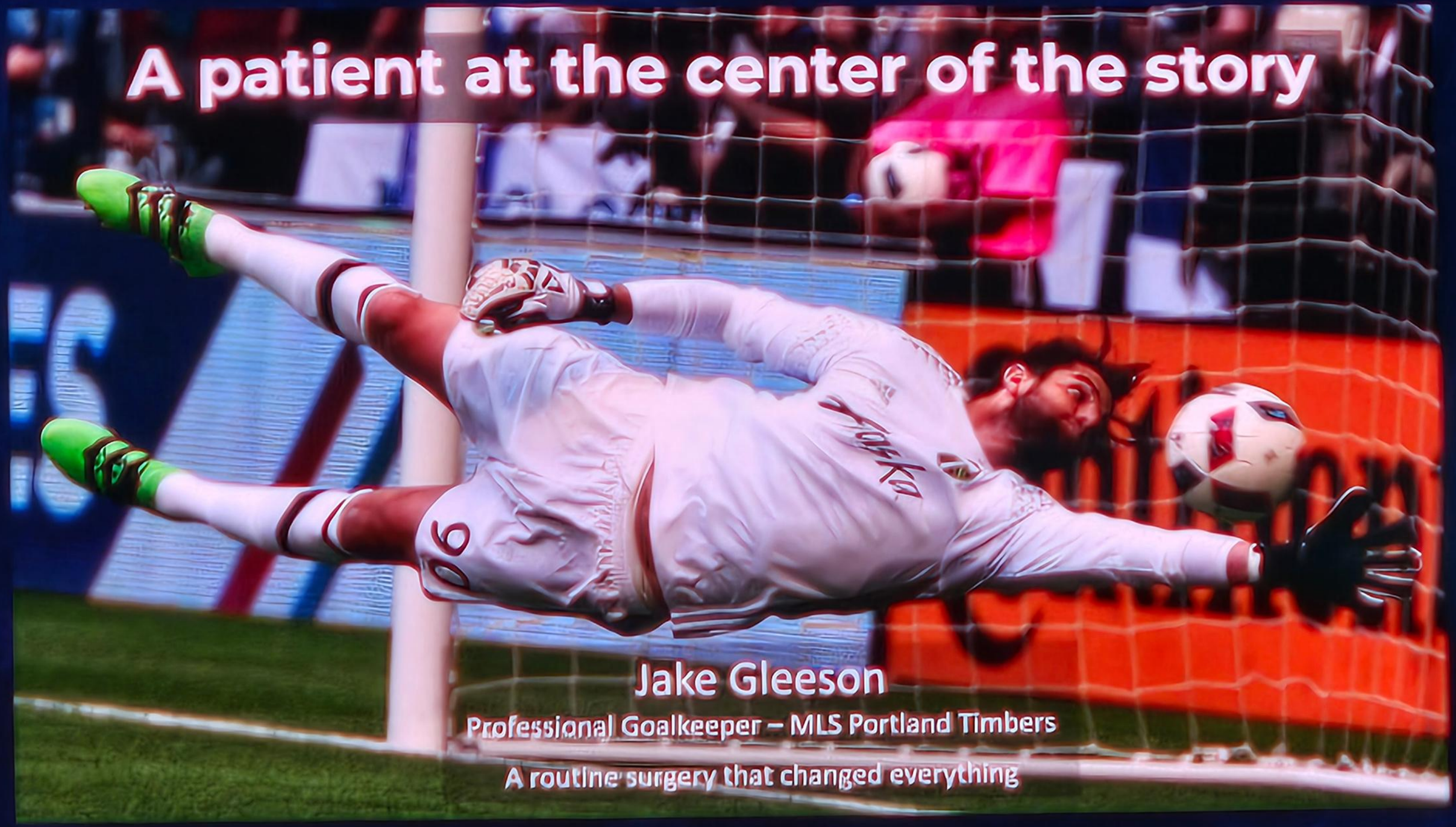
HUMAN COST OF STERILE PROCESSING SHORTCUTS

Emily Barnard, MPH, AL-CIP, CIC, FAPIC, CDIPC, CER, HACP-CMS

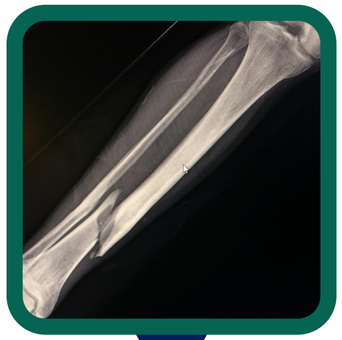
HSPA 2026 BALTIMORE

THE $21.6 MILLION SHORTCUT

One athlete. One injury. One operation. One critical decision. What followed changed the course of a professional career while bringing national attention to the patient safety risks and healthcare implications of Immediate Use Steam Sterilization (IUSS).


A patient at the center of the story
Jake Gleeson
Professional Goalkeeper – MLS Portland Timbers
A routine surgery that changed everything

DECISIONS HAVE CONSEQUENCES



Bilateral Tibial Fractures
Confident Orthopedist
Surgical Intervention

Hardware Missing
Surgical Intermission
Dangerous Decisions

MRSA Infection & SEPSIS
Pathogen Translocation
Reduced Quality of Life

BUILDING A CASE: EXPERT TESTIMONY

Surgical Consequences

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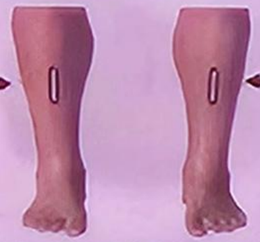

Flashed i.e., IUSS'd Implant → ← Terminally Sterilized Implant

R L

Diagnosis: Bilateral Stress Fractures	Aug 9th		2018
1st Surgery: Bilateral Plating	Aug 15th		
Diagnosis: Infection	Sep 1st		
	Sep 14th		
Hardware Removal	Sep 26th		
	Oct 1st	Infection Develops	
Incision & Drainage of Infection	Oct 2nd	Hardware Removal	
	Oct 12th		
	Oct 15th		
	Oct 17th		
Bilateral Tibial Rodding	Feb 19th		2019
	Apr 3rd		
Incision & Drainage of Infection	Apr 10th		
	Apr 12th		
Rod Removal	Apr 23rd		
2023 Rod Removal	Aug 18th		

The Critical Decision

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"After being put under anesthesia, the doctor discovers the implants are missing.

Chaos ensues.
Multiple people coming in and out of the surgery room.
Surgery goes an extra hour.

And at that moment, the doctor made a decision he admits he had never made in 20 years at that surgery center.

He ordered someone to bring in a loaner implant from another facility...

knowing nothing about its sterilization...
and instead of following the policy of the surgery center —
a four- to five-hour sterilization process —

He did a quick flash sterilization."

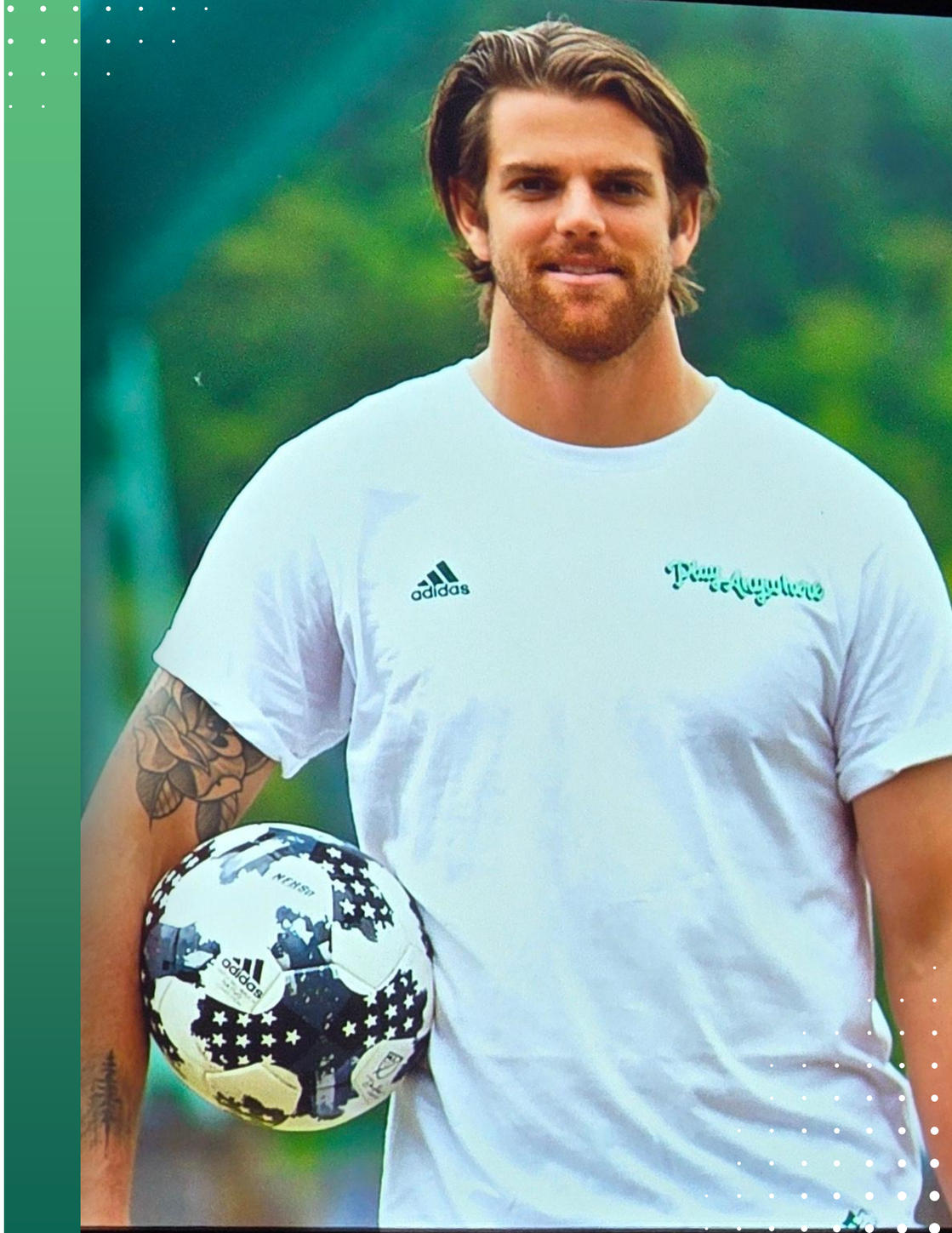
- Jason Kafoury, Closing Argument

PERSON CENTERED APPROACH

Establish a set of parameters specific to IUSS with a goal of ZERO.

Create a culture of safety and empower employees to speak up at critical moments.

Establish a system for communicating IUSS rates, with zero tolerance for implantables.



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Tabletop Termination

Strategically Eliminating Medical Office Reprocessing

Garrett Hollembeak CRCST, CIS, CHL, CER, CIC

Objectives

- Identify high-risk characteristics of medical office reprocessing environments
- Learn how to build a system-wide strategy for eliminating or centralizing reprocessing
- Explore replacement options like single-use devices, centralization, or outsourcing

The Lagging Indicators

A METRIC THAT SHOWS WHAT HAS ALREADY

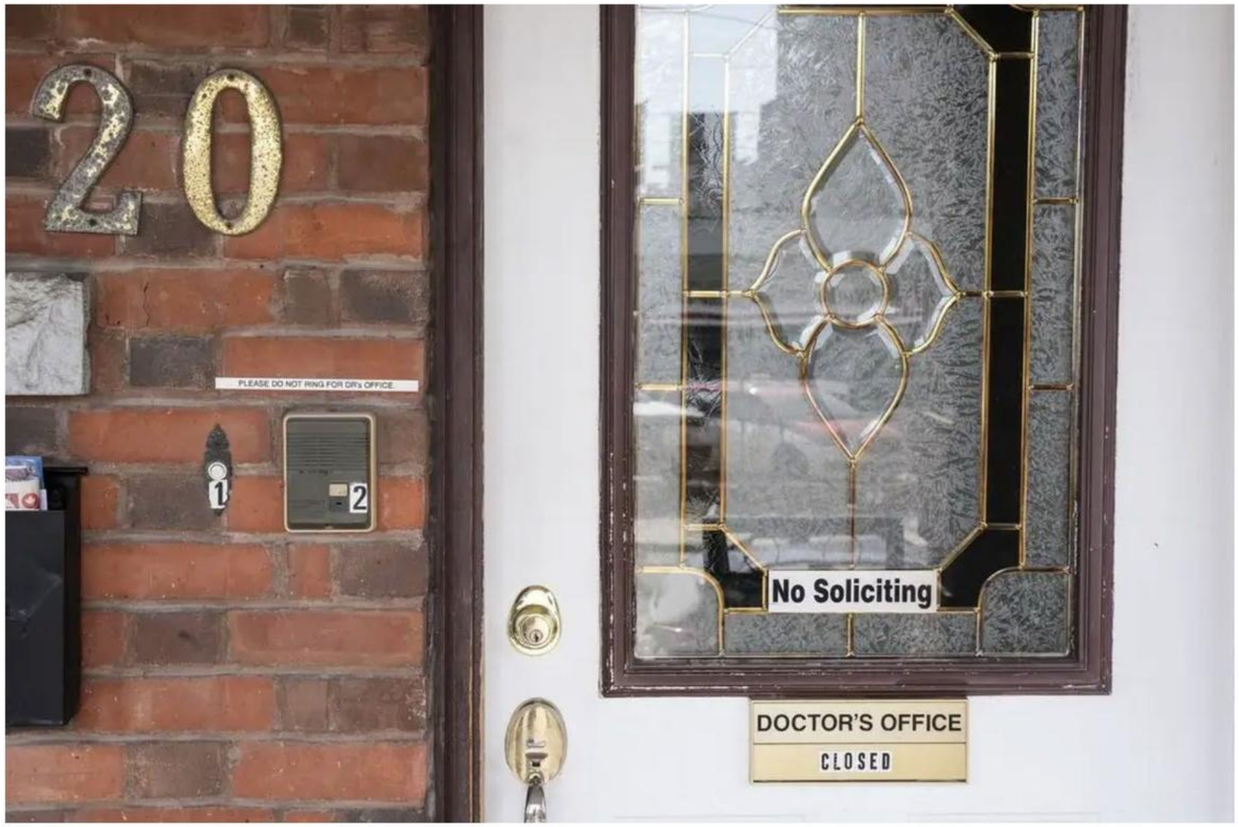
HAPPENED, MEASURING THE RESULTS OR

OUTCOMES OF PAST ACTIONS

Toronto gynecologist under scrutiny for disinfection of tools resigns from college

By Hannah Alberga • The Canadian Press

Posted April 28, 2025 1:30 pm · Updated April 28, 2025 8:36 pm · **3 min read**



The Lagging Indicators

ARTICLE · 10 MARCH 2025

Thousands Of Patients Of Toronto Gynecologist Potentially Exposed To HIV, Hepatitis

A Toronto gynecologist's office is currently under investigation after reports of an "infection prevention and control issue" surfaced, potentially exposing approximately 2,500...

‘I am terrified,’ Thousands of patients at risk of infection after Toronto doctor failed to properly clean medical tools

MARCH 6, 2025 / BEATRIZ FERREIRA

Toronto Public Health saw ‘many deviations’ at gynecologist’s clinic with potential HIV, hepatitis exposure

The Leading Indicators

A METRIC THAT HELPS PREDICT FUTURE

PERFORMANCE OR OUTCOMES, OFTEN

REFLECTING ACTIVITIES OR CONDITIONS THAT

ARE EXPECTED TO DRIVE RESULTS

Environmental Controls0

Appropriate Equipment

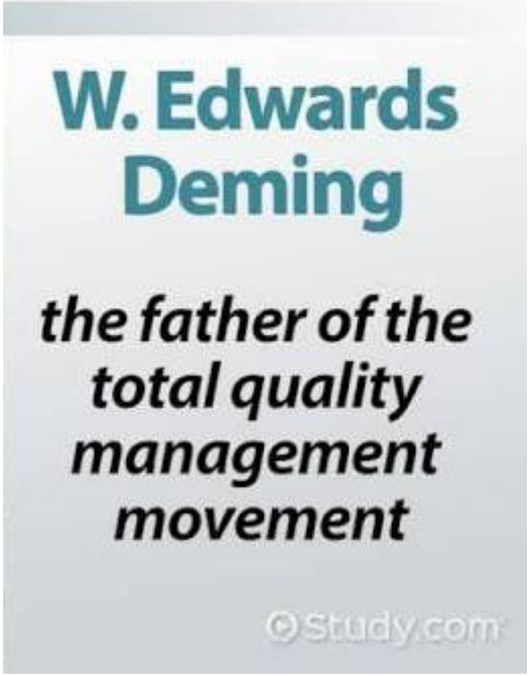
Training Competencies

Appropriate Surveillance

Standard Design

“A bad system will beat a good person every time.”

- W. Edwards Deming



The Leading Indicators

- Workflow and Design Considerations
- Reprocessing Tools
- Consumable Supplies
- Employee Safety and PPE Considerations
- Maintenance of Equipment

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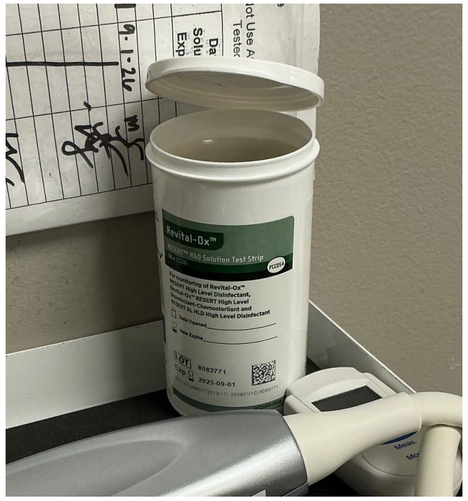

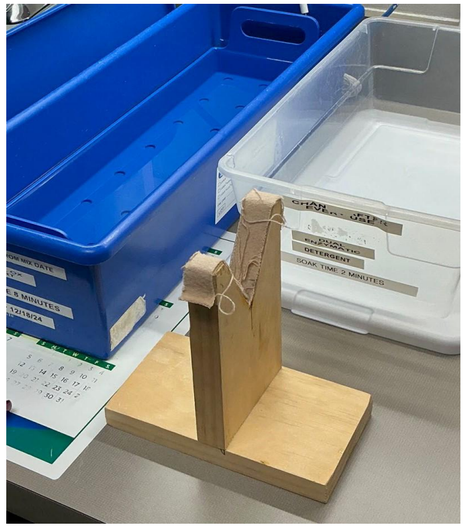

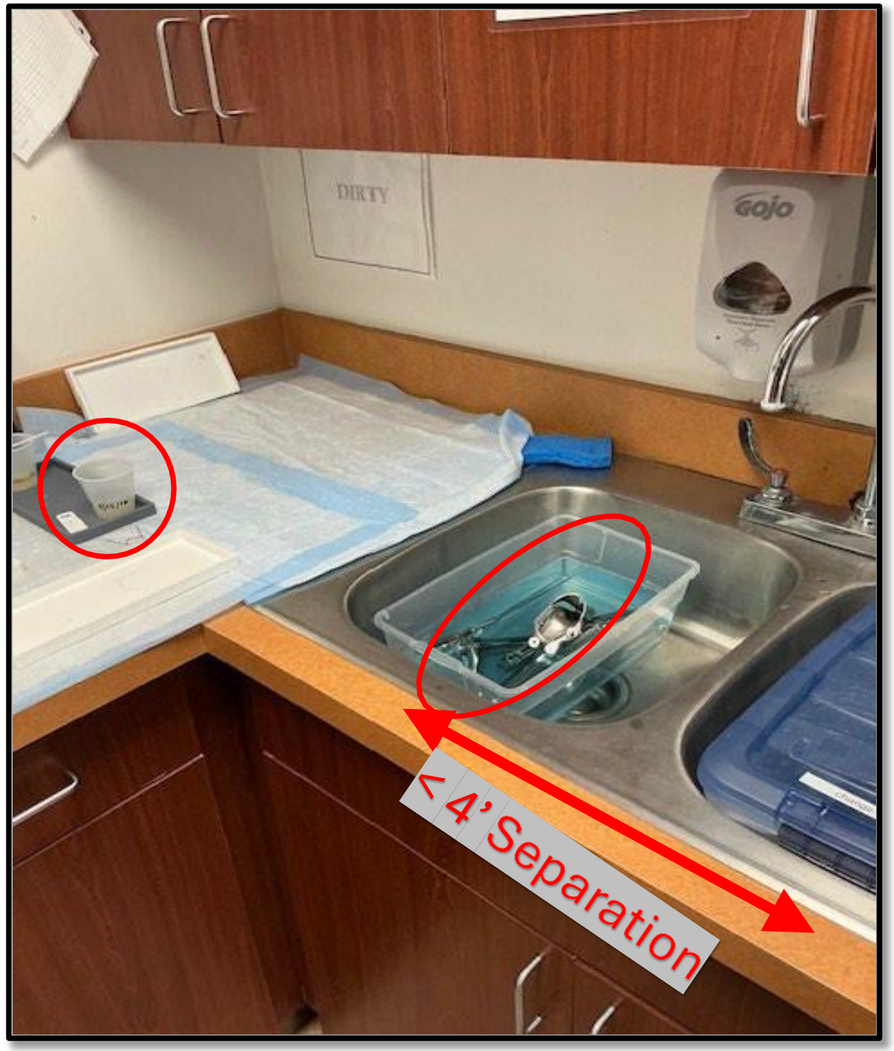

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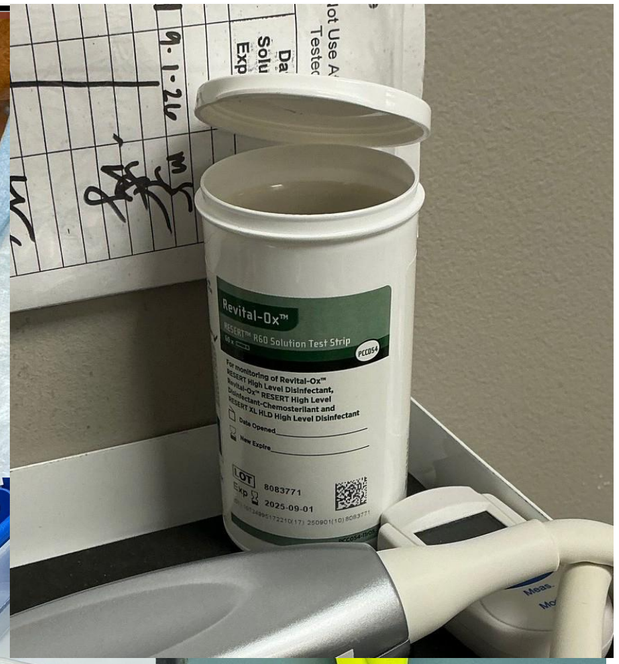

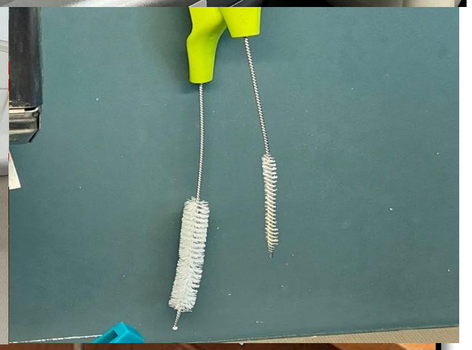

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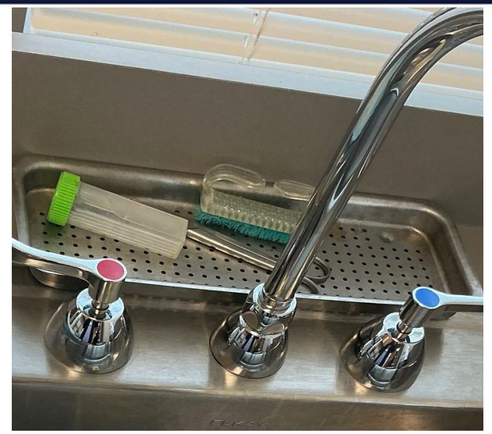
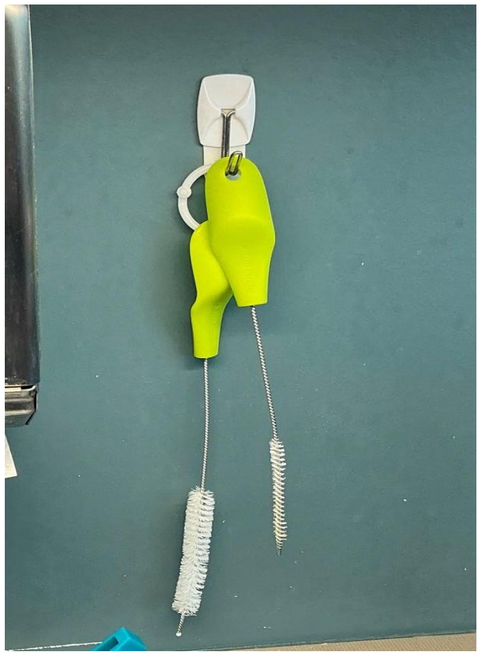
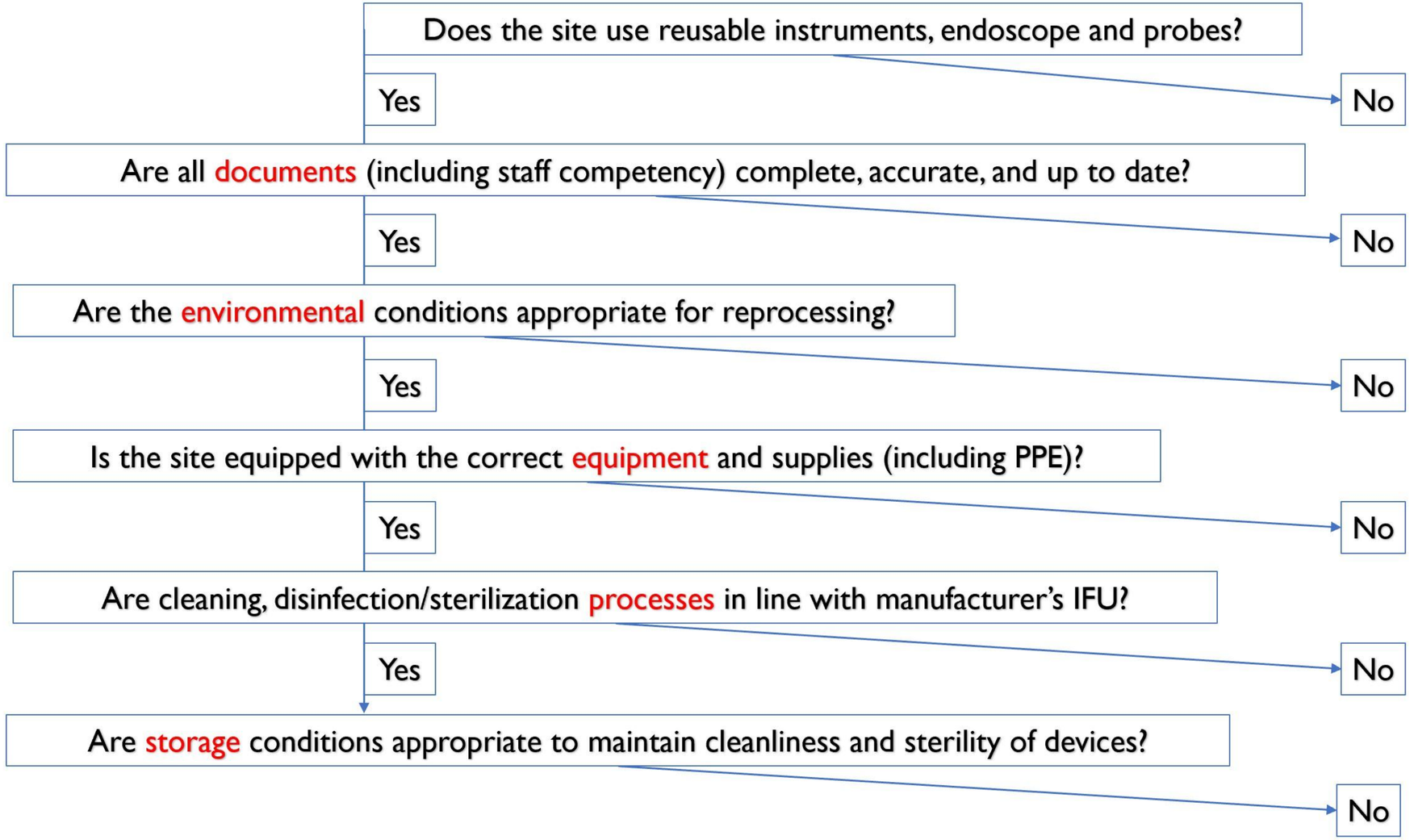




The Goal


Does the site use reusable instruments, endoscope and probes?
Yes
No
Are all documents (including staff competency) complete, accurate, and up to date?
Yes
No
Are the environmental conditions appropriate for reprocessing?
Yes
No
Is the site equipped with the correct equipment and supplies (including PPE)?
Yes
No
Are cleaning, disinfection/sterilization processes in line with manufacturer's IFU?
Yes
No
Are storage conditions appropriate to maintain cleanliness and sterility of devices?
No

The Mistakes

1) Follow-up is not the same as follow-through

The Rule of 7

This marketing principle is a maxim that was developed in the 1930s by the movie industry, which found through research that a potential moviegoer had to see a movie poster at least seven times before they would go to the theatre to see a movie.

The Mistakes

1) Follow-up is not the same as follow-through

2) Information does not equal education

The Mistakes

1) Lack of consistent messaging

2) Information does not equal education

3) Measure the impact
   - Transportation
   - Cost analysis
   - Patient satisfaction scores
   - Executive buy-in
   - Deferred workload

Risk Matrix

Risk	Impact	Total Score
Environmental Conditions do not Meet Policy	2	28
Non-Compliant Reprocessing Equipment	3	15
Non-Compliant Storage Conditions	2	26
Manual Reprocessing Takes Place	1	9
Non-Compliance to Manufacturer's Instructions for Use	2	28
Employee Safety Requirements Are Not Met	3	39
Total for All Sites	13	145

Rubric

- 3: Non-compliance with patient and associate safety
- 2: Non-compliance with policy, guidelines, and manufacturer's instructions for use
- 1: Non-compliance with industry best practice standards

Total score is based on risks identified at all sites assessed.

The Solutions

1) Move any applicable inventory to single use instrumentation

2) Centralize reprocessing activities to Central Sterile

3) Standardize the use of transport equipment and Point of Use Treatment solutions

The Results

Risk	Initial Score	Site Exclusively Uses Single Use Instruments	Automated HLD Used for US Reprocessing	Updated Risk Score
Environmental Conditions do not Meet Policy	28	-24		4
Non-Compliant Reprocessing Equipment	15	-15		0
Non-Compliant Storage Conditions	26	-26		0
Manual High-Level Disinfection Takes Place	9	-1	-5	3
Non-Compliance to Manufacturer's Instructions for Use	28	-24		4
Employee Safety Requirements Are Not Met	39	-30		9
Total for All Sites	145	-120	-5	20

CLOSING

With a spirit of collaboration and a focus on patient safety, HSPA provided a platform to learn from sterile processing leaders and help make a real positive impact.

Please consider sharing your research or success stories at a national conference. Your voice is essential whether you are sharing insights or speaking up in a culture of patient safety.

Thank you for your attention and for the opportunity.