



# Decontamination and the role of the Decontamination Lead

4<sup>th</sup> Annual Decontamination Conference  
14<sup>th</sup> & 15<sup>th</sup> May 2025

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Who Am I



# How do we decide what devices are sterilized?



**Critical** – RIMD: requires sterilization

**Semi-critical** – Endoscopes: requires high level disinfection

**Non-critical** – Blood pressure cuffs: requires low level disinfection



# Standards and Guidelines

SSD

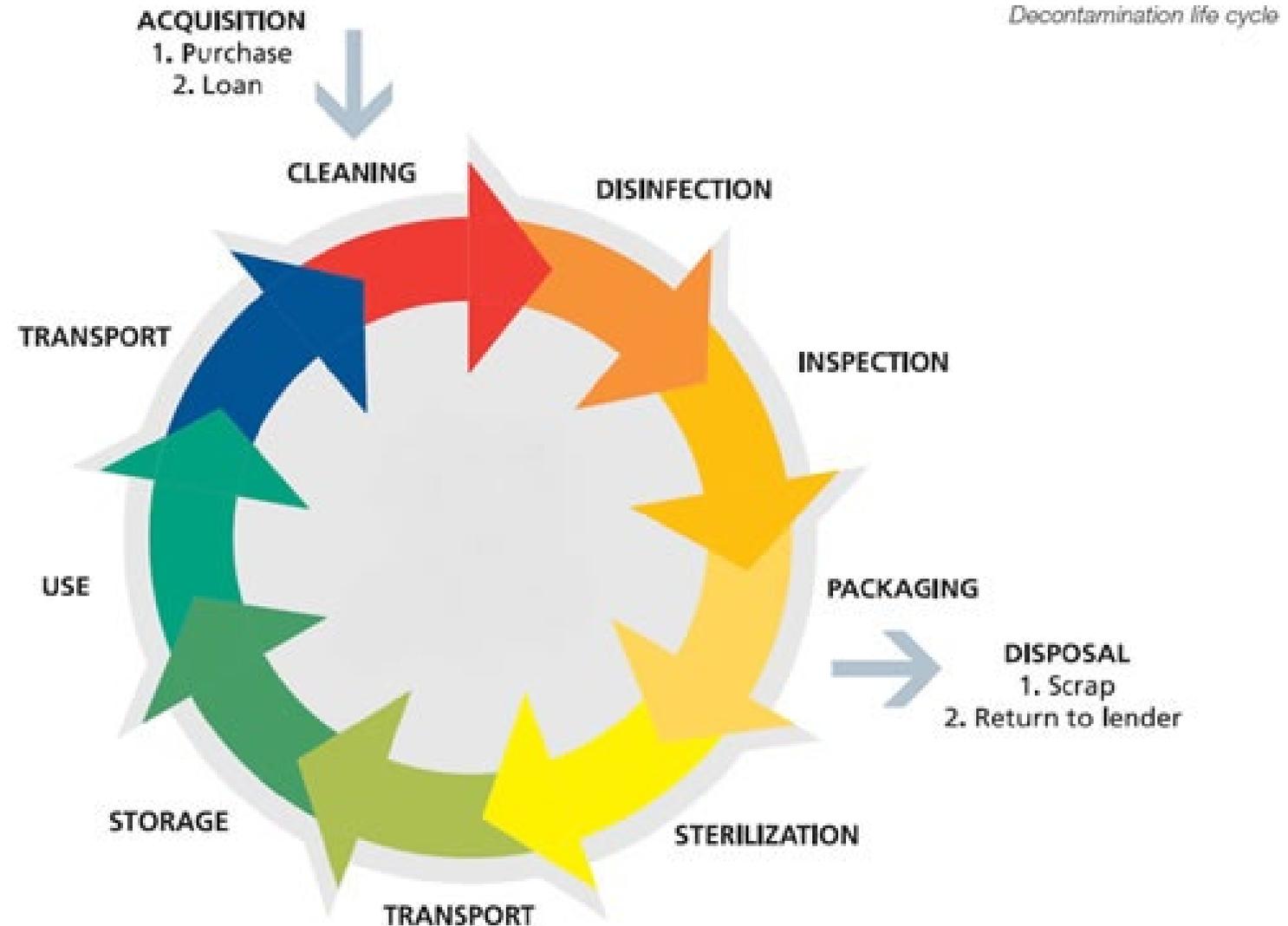


**Patient  
Safety**

Policy

Rules &  
Regulations

# Decontamination Life Cycle



# Decontamination

Decontamination of Reusable Invasive Medical Devices or RIMD is the removal of pathogenic microorganisms from objects so they are safe to handle, use or discard

It involves three steps:

1. Cleaning
2. Disinfection
3. Sterilization



# Cleaning

The manual removal of visible blood and soil from objects using water, detergent, various brushes, water gun, air gun and ultrasonic washer where appropriate. This can also be achieved by automated machine.



# Disinfection

This is achieved by using an Automated Washer



Time



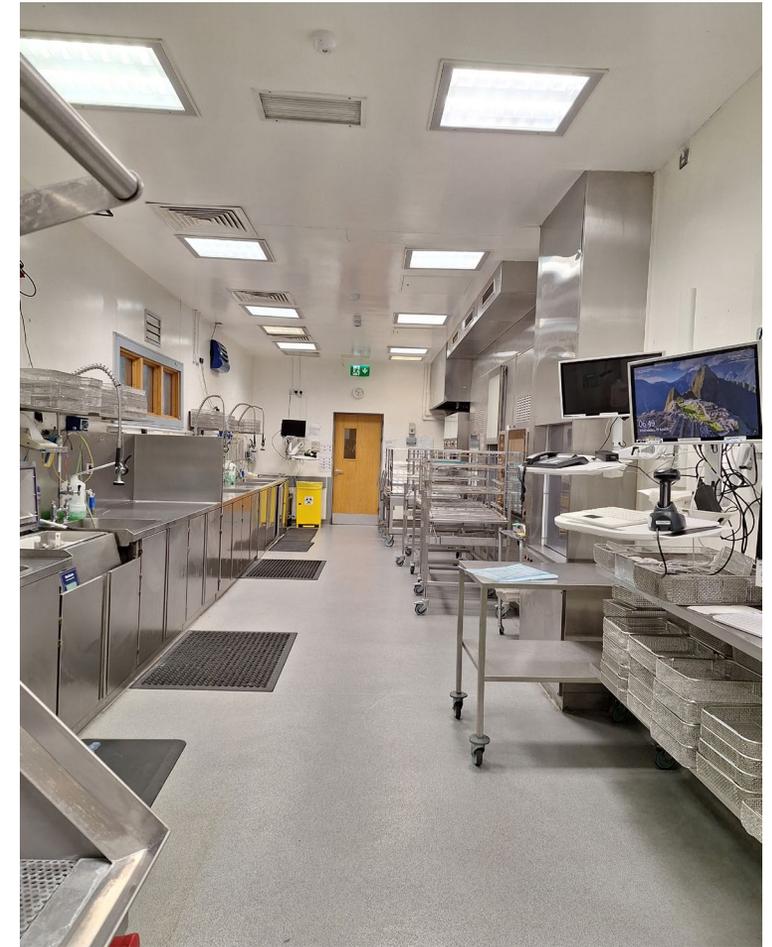
Temperature



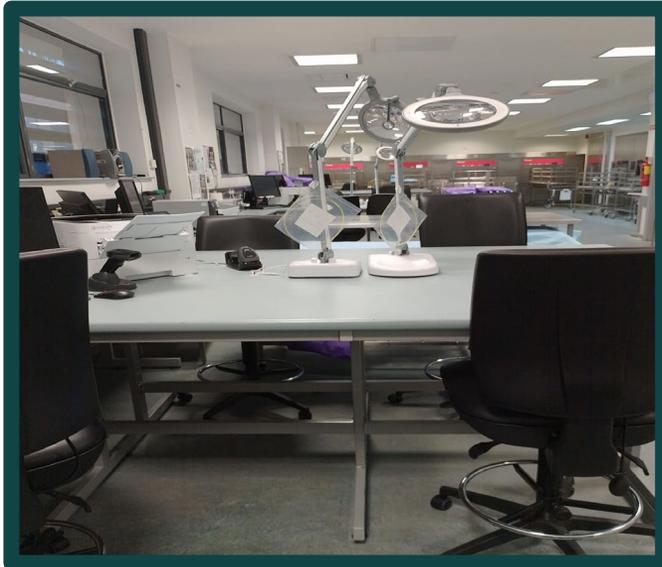
Detergent



# Wash Decontamination Room

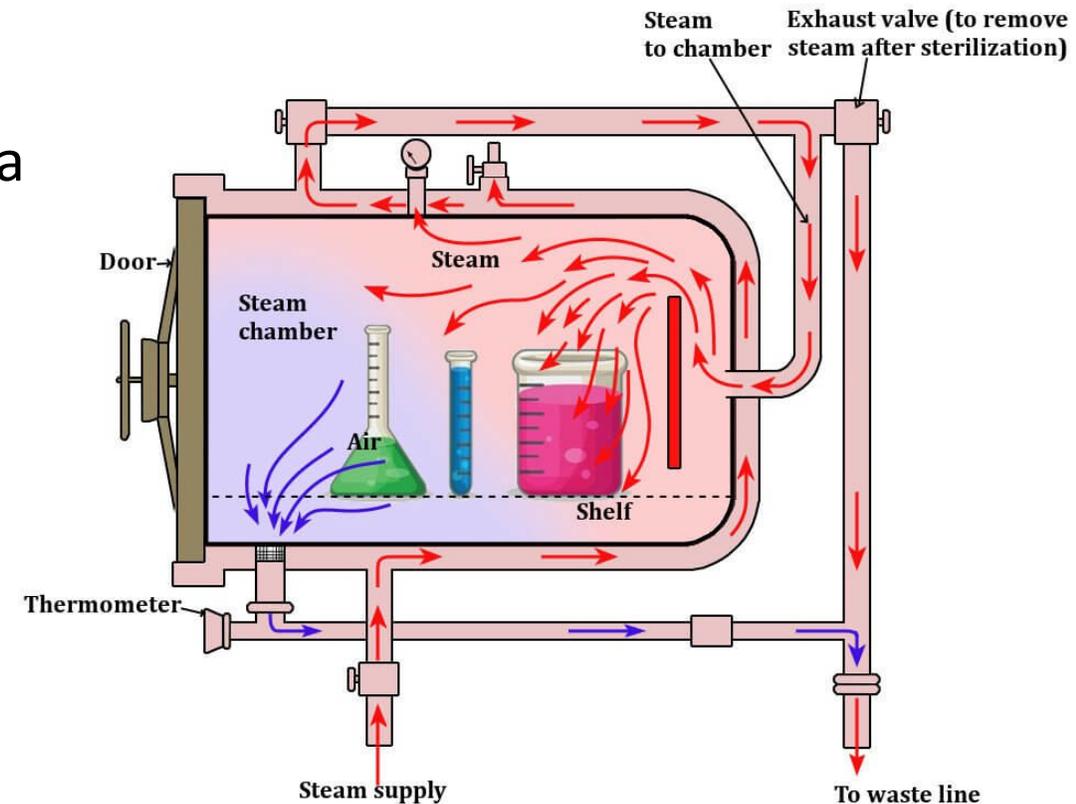


# Clean Room



# Sterilisation

- The complete destruction of all microorganisms including bacterial spores.
- A sterile device is free from viable microorganisms whereas we can presume a disinfected device has reduced microbial levels
- Steam: 134 -137 degrees Celsius for a minimum of 3 minutes
- Other types of sterilisation include Low temperature Hydrogen Peroxide



# Standards and Guidelines

Endoscopy



Policy

Rules & Regulations

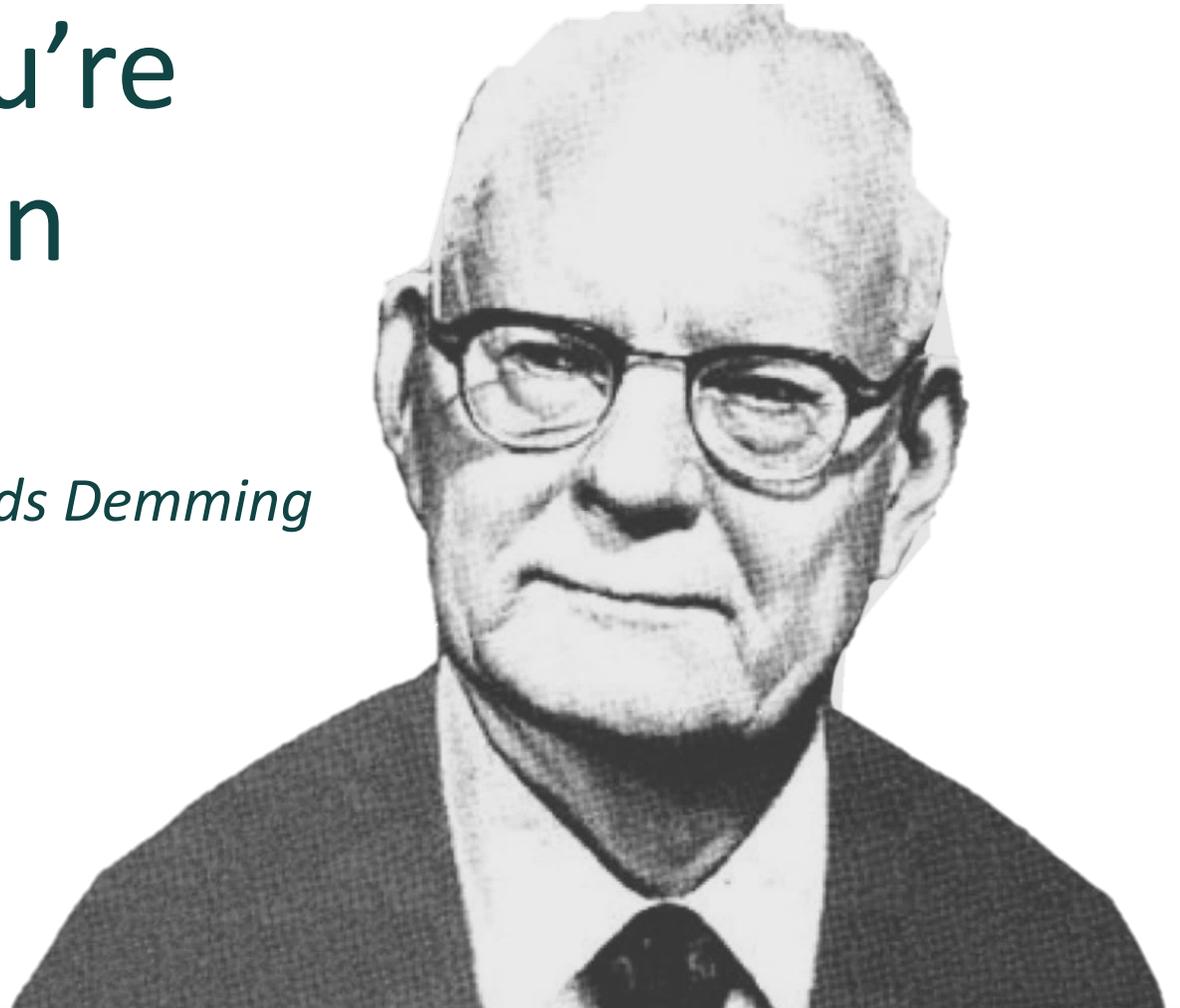
# Endoscopy Decontamination





“Without data, you’re  
just another person  
with an opinion”

*-W. Edwards Demming*



# New Technologies



# Standards and Guidelines

## Ultrasound Probes

**Policy**

**Patient Safety**

Type of decontamination	Cleaning	Cleaning and disinfection	Cleaning and sterilisation
<b>WHEN TO USE</b>	<ul style="list-style-type: none"><li>Intact skin e.g. transdermal dopplers, obstetric structures, fetopetal</li></ul>	<ul style="list-style-type: none"><li>Broken skin</li><li>Intact skin</li><li>Contact with known pathogenic microbes</li><li>Intracavity examinations with mucosa membrane contact e.g. hysteroscopy or transvaginal ultrasonography</li></ul>	<ul style="list-style-type: none"><li>Use in a sterile area of the body e.g. introperative or intracranial decontamination</li></ul>
<b>HOW TO USE</b>	<ul style="list-style-type: none"><li>Manufacturer approved wipes</li></ul>	<ul style="list-style-type: none"><li>An automated decontamination system is best practice. Where this is not possible manufacturer approved wipes and cleaning system</li></ul>	<ul style="list-style-type: none"><li>Manufacturer approved sterilisation device</li></ul>
<b>ADDITIONAL INFORMATION</b>	<ul style="list-style-type: none"><li>Approved options for every patient</li></ul>	<ul style="list-style-type: none"><li>Audit trail of decontamination for every patient</li><li>Handle with care and where relevant use personal protective equipment</li></ul>	<ul style="list-style-type: none"><li>Audit trail of decontamination for every patient</li></ul>

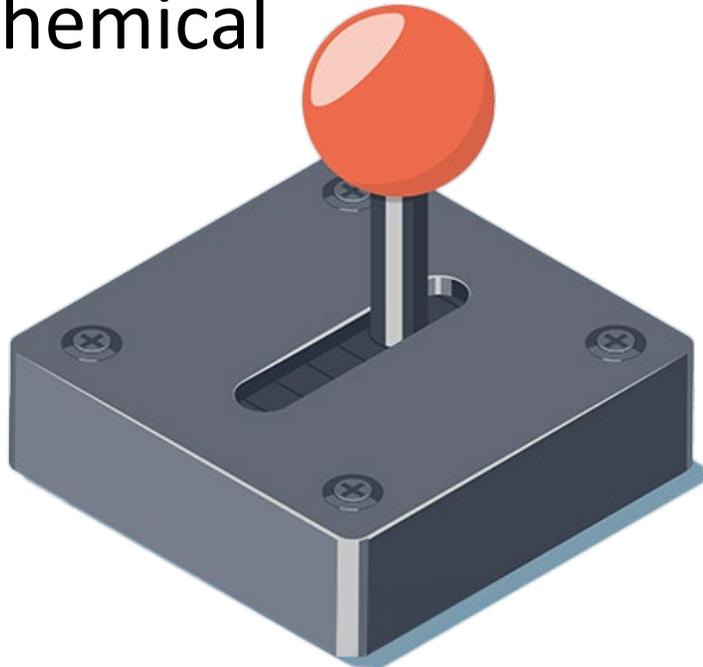
Policy

Guidelines

# What are our options?

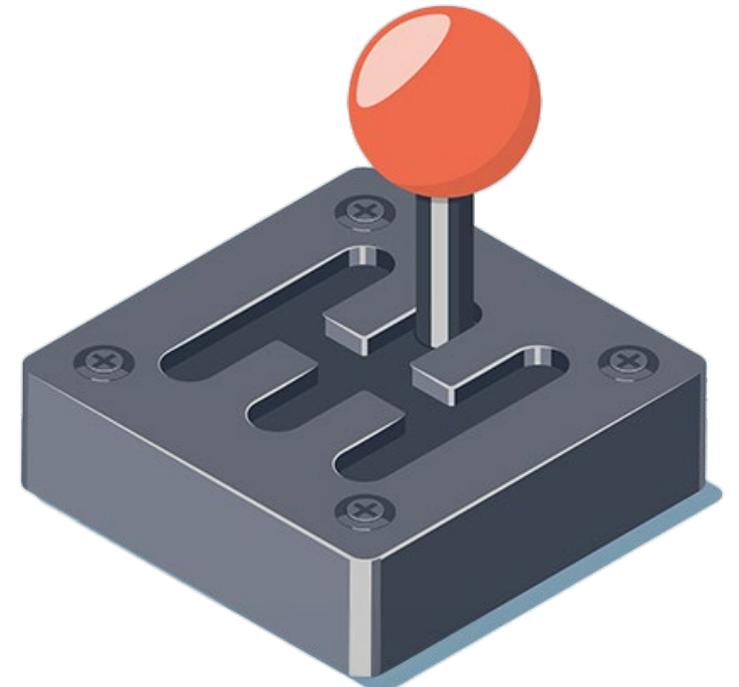
## Automated

- UV C
- Chemical



## Manual

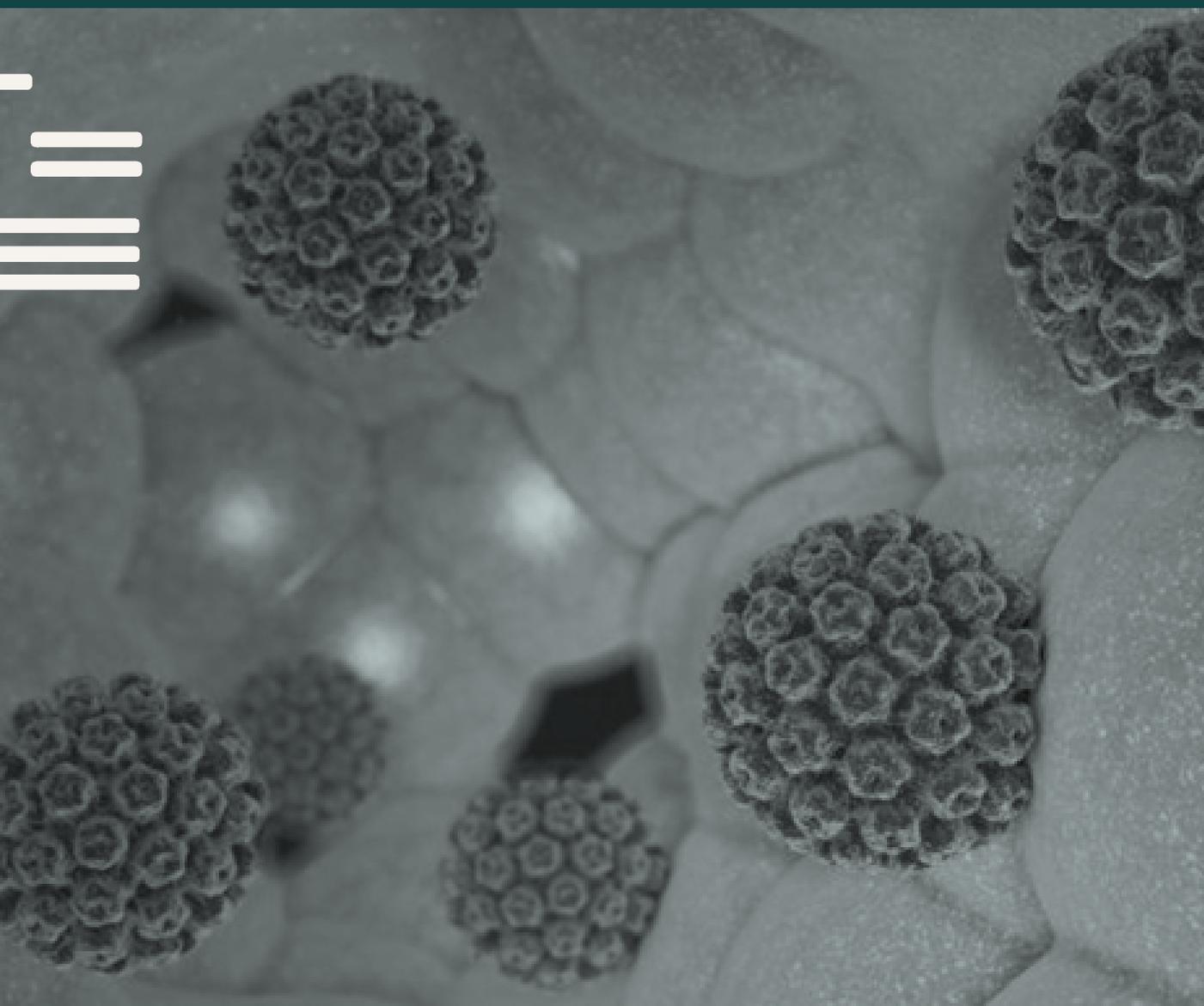
- Tristel wipe system



# Ultrasound probe decontamination

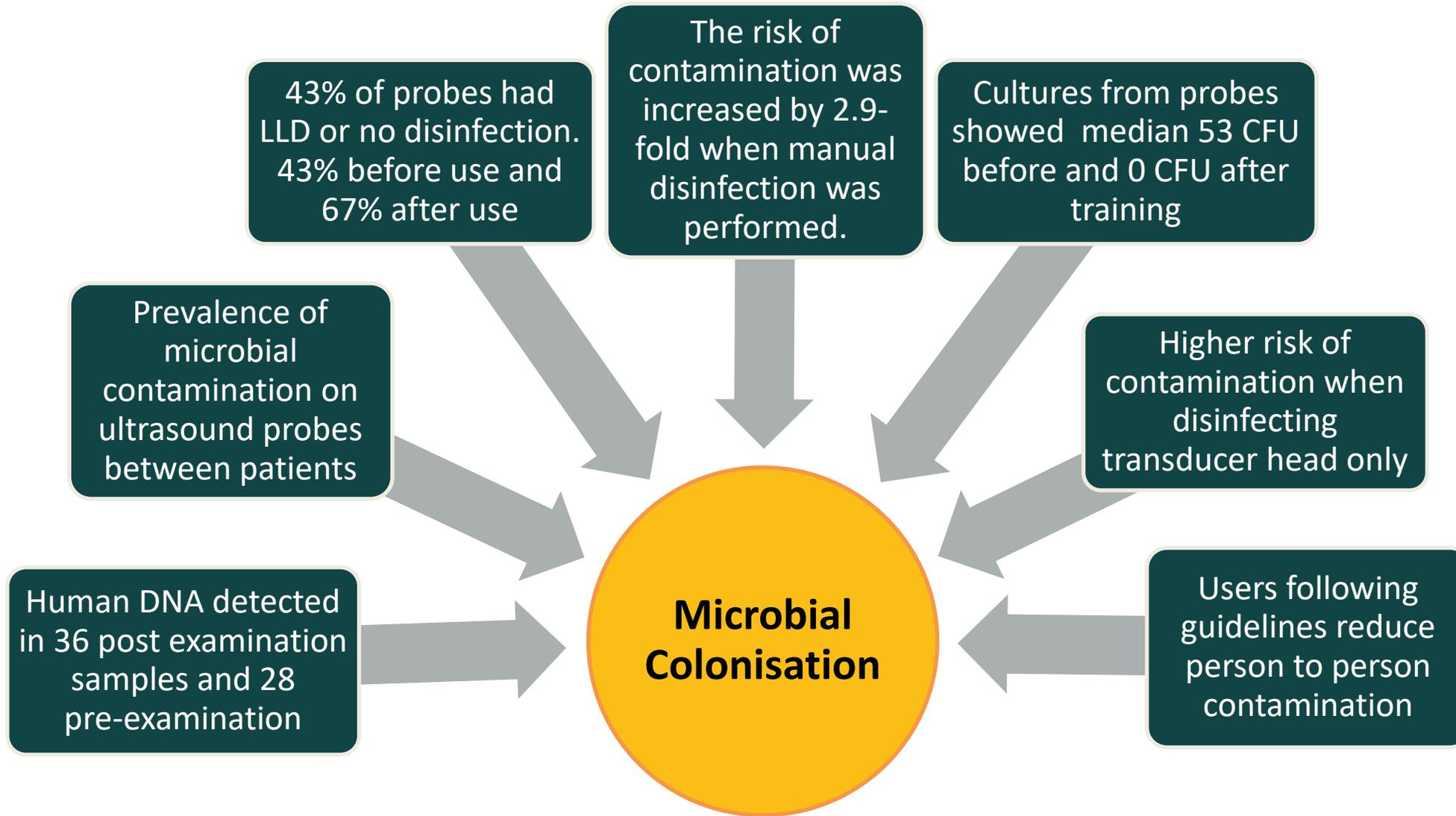


# What are the risks/cause?

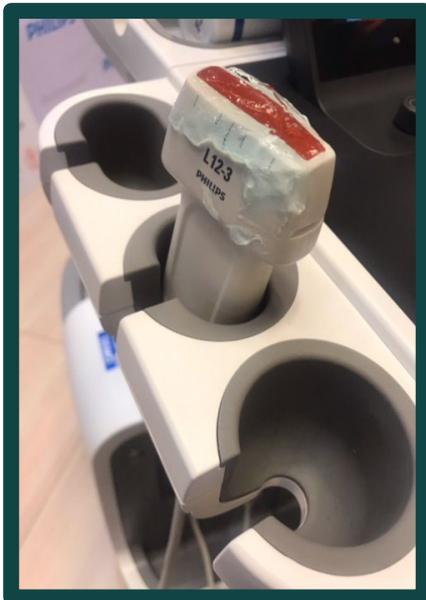


**Caution: human error**

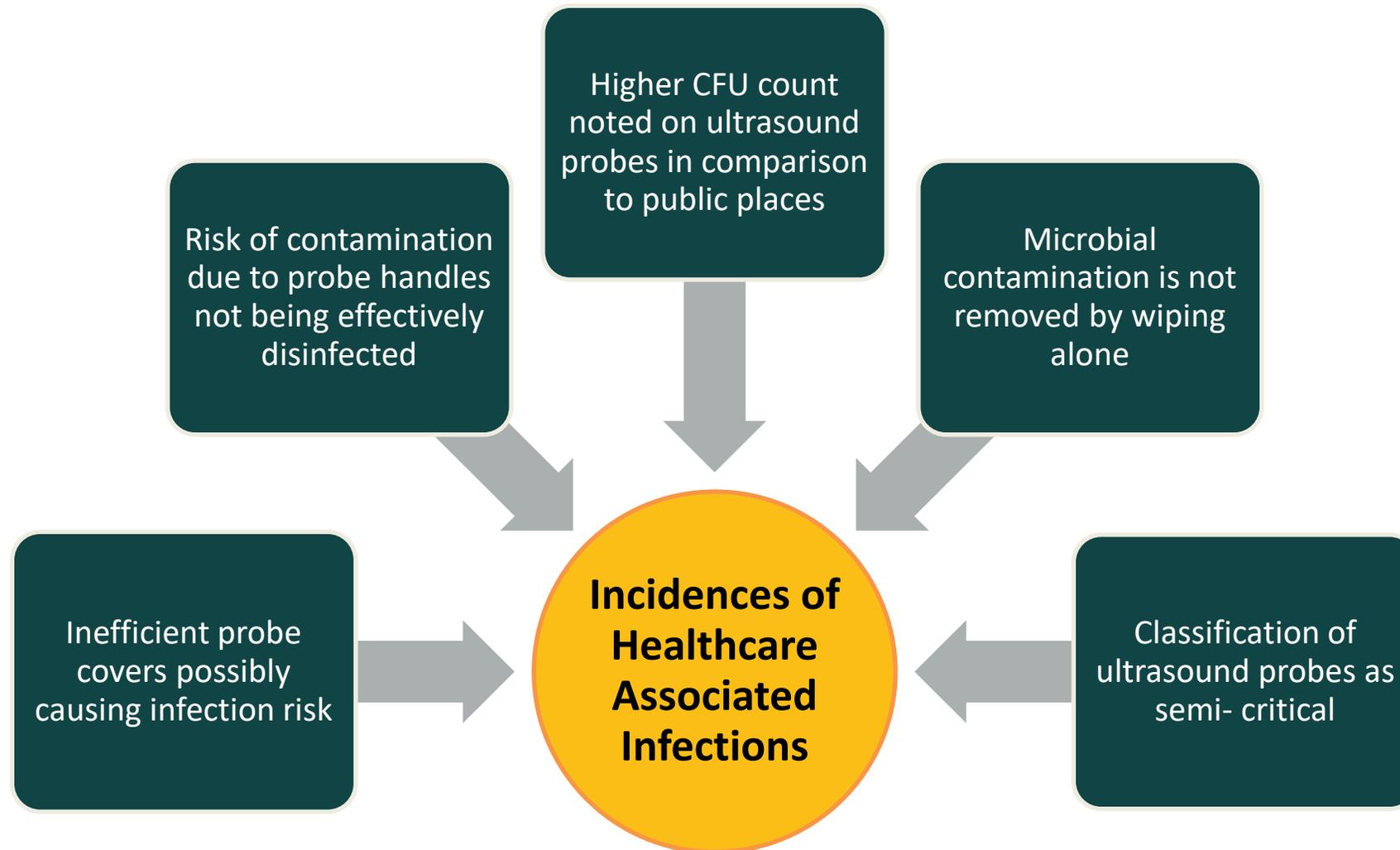
# Microbial Contamination



# When things go wrong

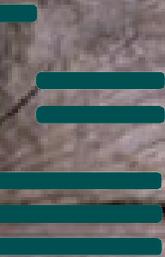


# Incidences of Healthcare Associated Infections



# The future

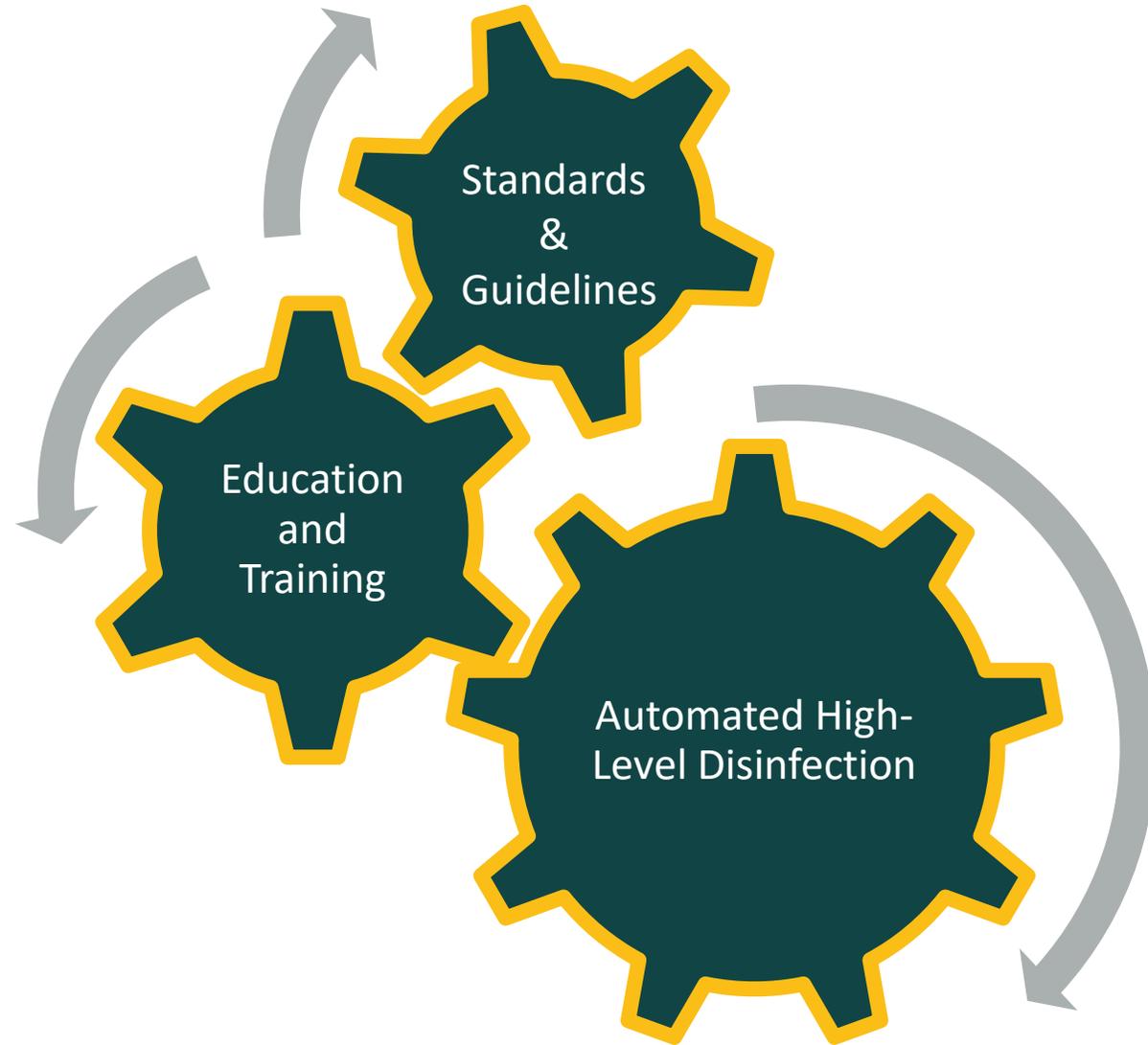




# Continuing Education



# Conclusion of my research



# External probes that may require HLD

There are up to 70 procedures where probes risk contact with sterile tissue e.g. puncture sites

- Intra-operative scanning – breast surgery
- Wound scanning – deep wound assessment
- Biopsies – liver or breast biopsy
- Other ultrasound guided procedure – spinal pain procedures



**“The most dangerous phrase in the language is “we've always done it this way.”**

*-Grace Hopper*



# ENT Decontamination Service





***“Research is  
creating new  
knowledge.”***

*- Neil Armstrong*





Ease of use

Good success rate

Staff involvement



# Communicating the change

Develop the plan

Discuss with all the stakeholders

Share your vision

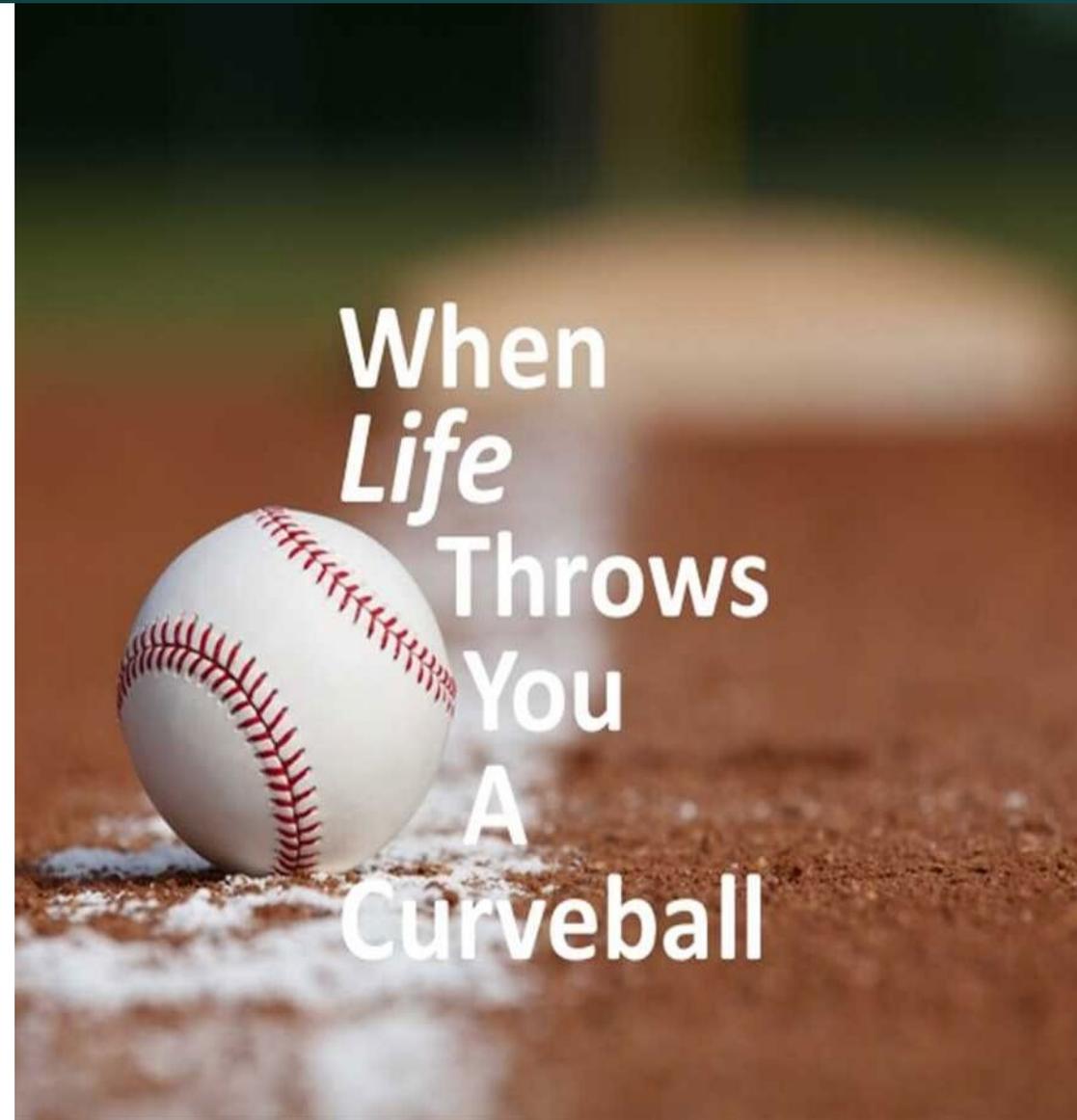
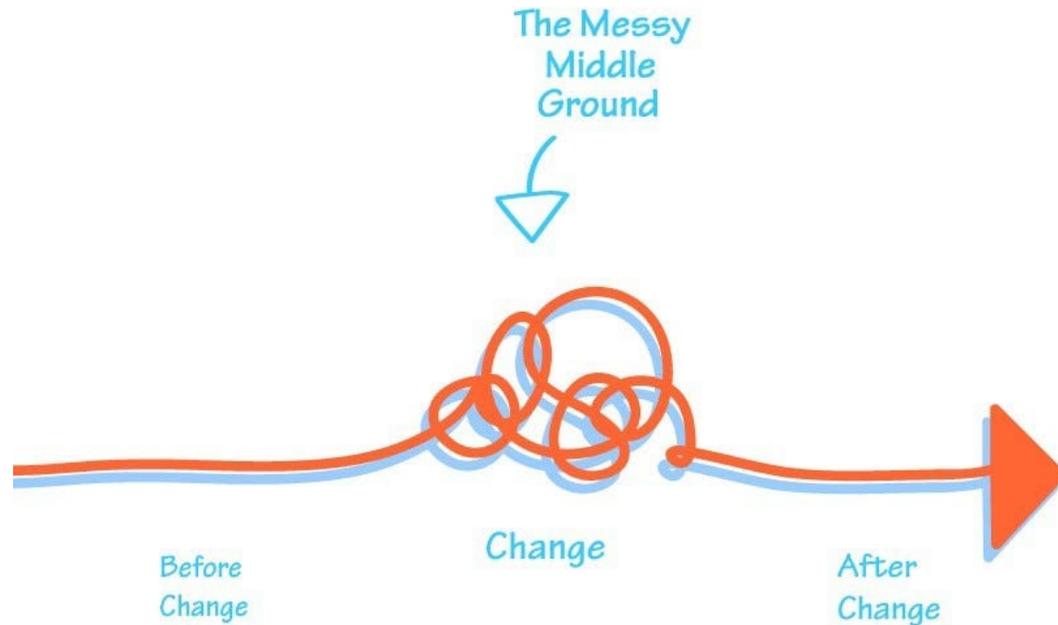
Constructive criticism

Be adaptable to change

Safe space to comments

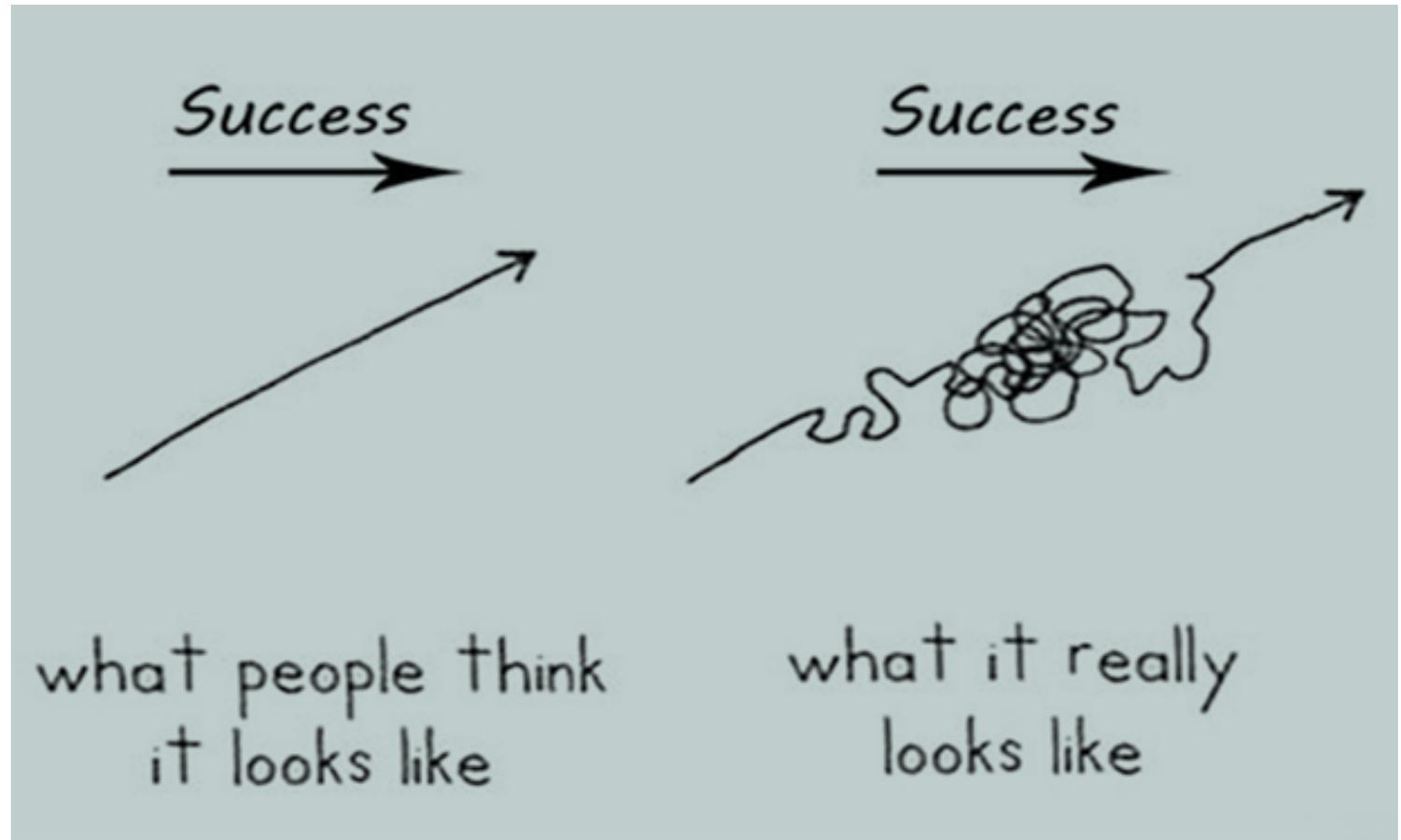


# How we view change



## Trajectory of Improvement

Slow, Simple,  
Boring & Not  
Always  
Straightforward



# Take home message



To remove human error

Remove the human

# Leadership



# Role of the Decontamination Lead

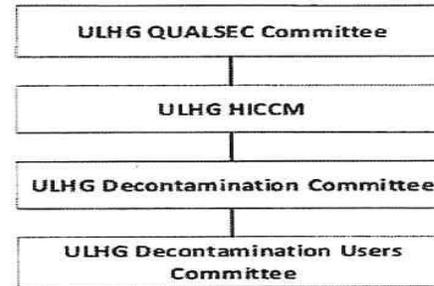


# Equipment Decontamination Governance

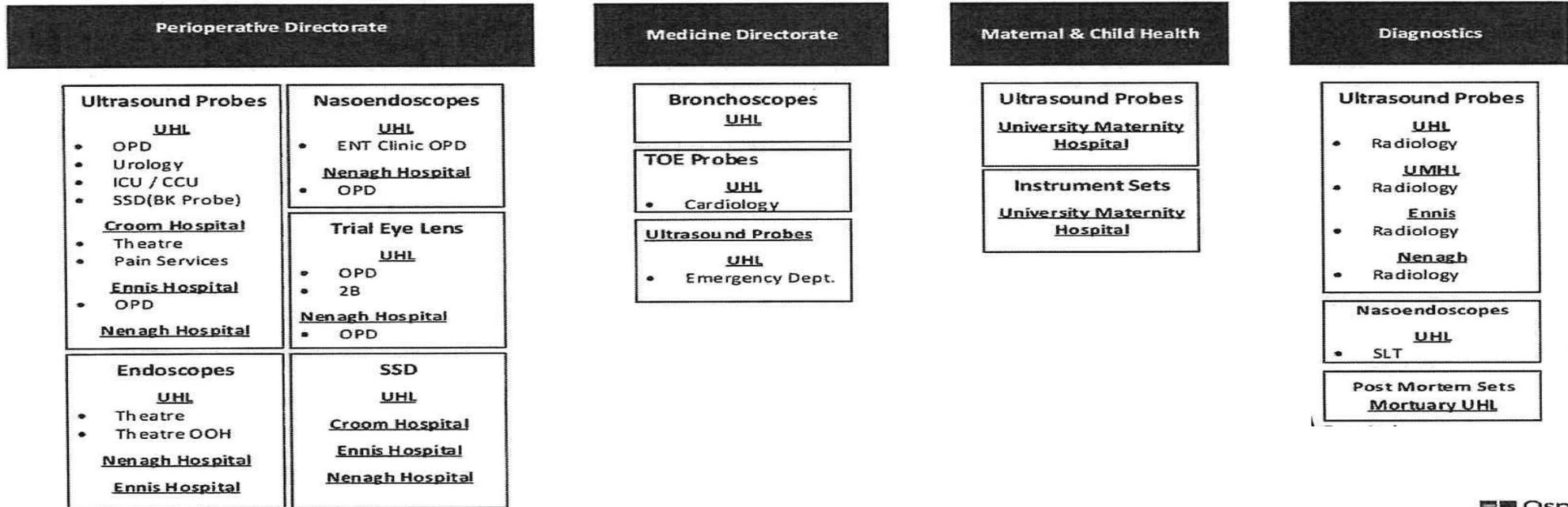


# Equipment Decontamination Governance

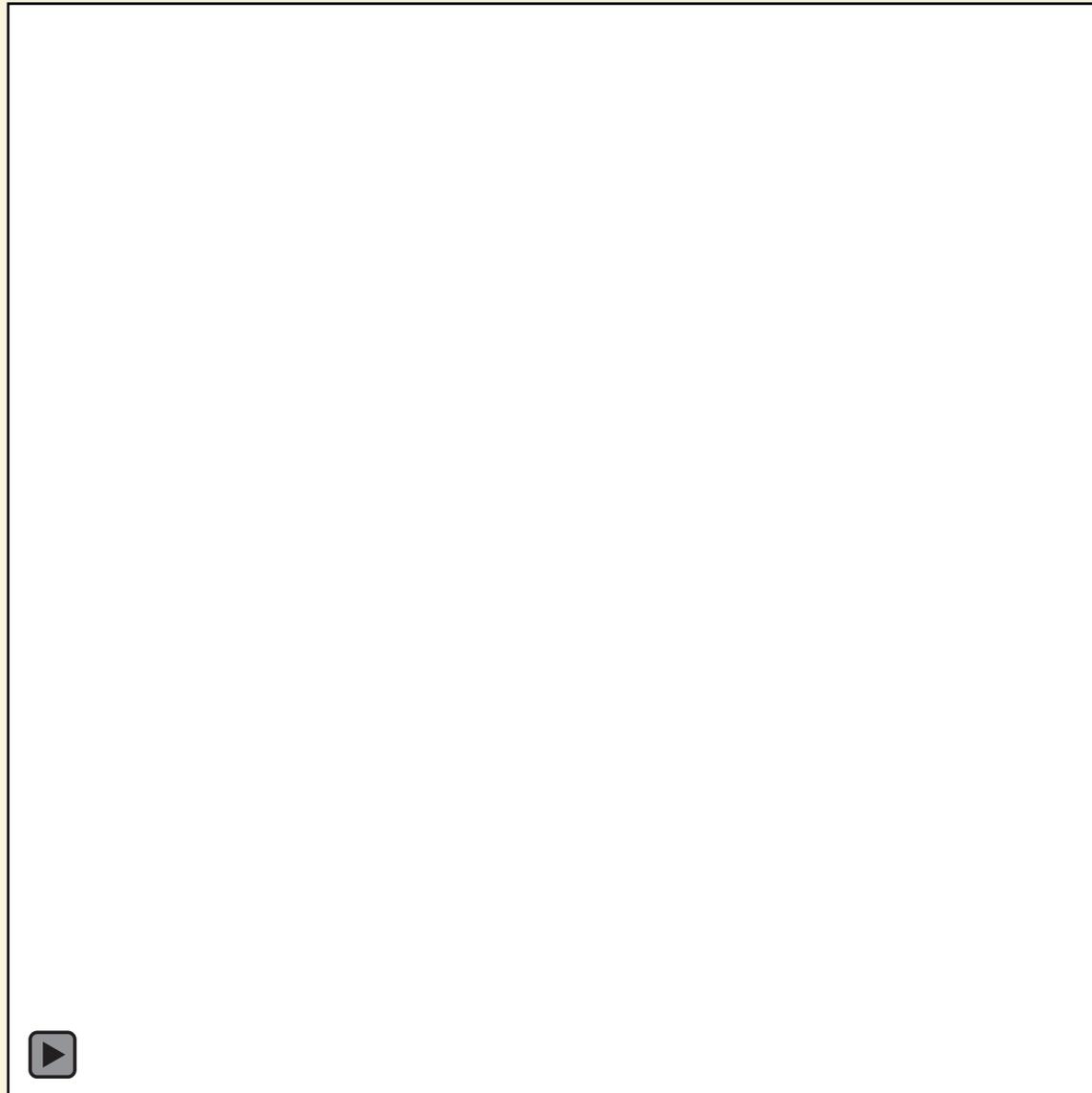
UL Hospitals Group Equipment Decontamination Organisational Governance, Version 3, January 2024



## Directorates

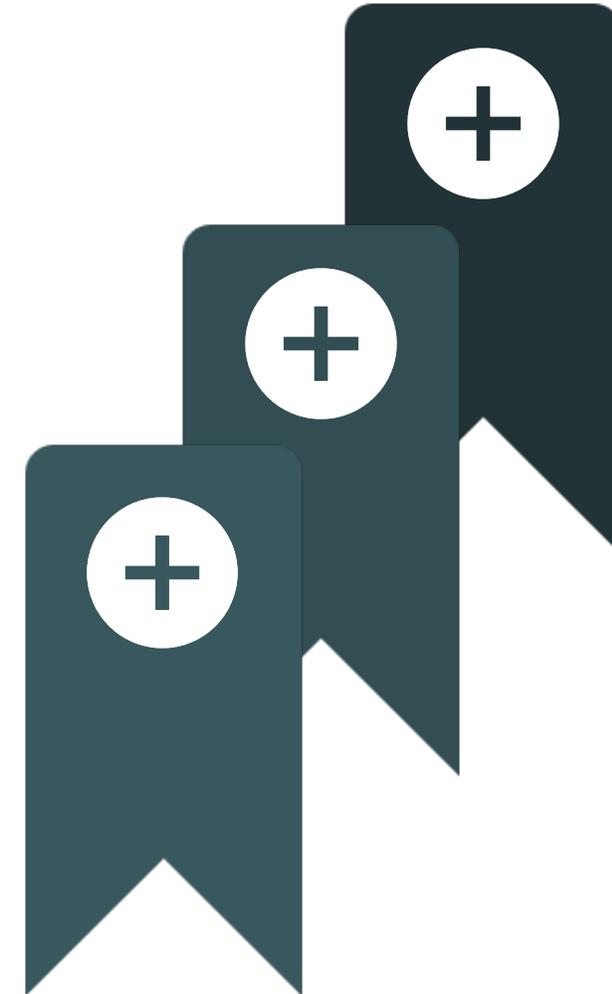


# Who are our patients



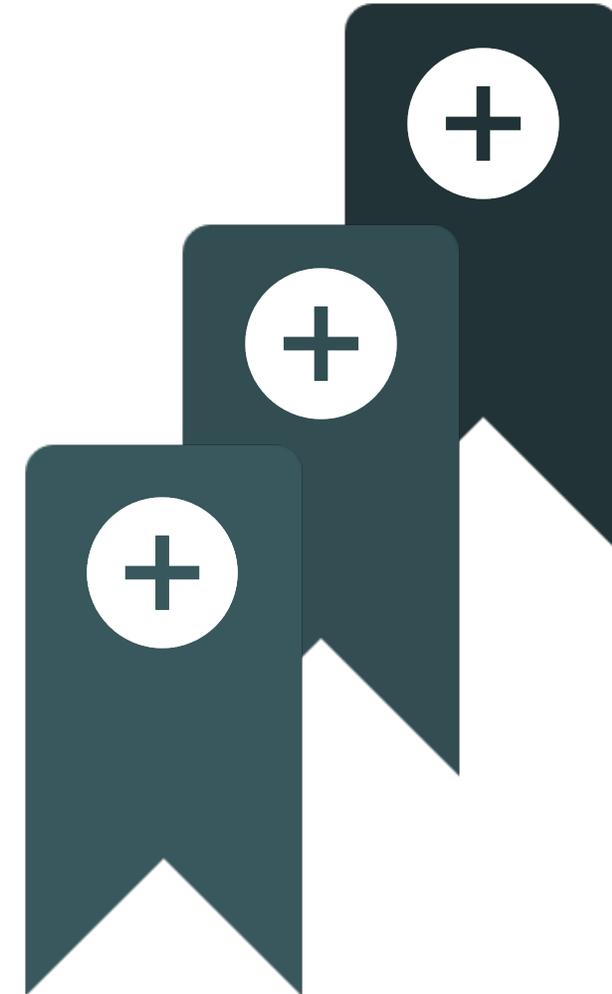
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# Thank you any questions

# That's a wrap

