



# 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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University Hospital Limerick



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**

Standards and  
Recommended Practices for  
Central Decontamination Units

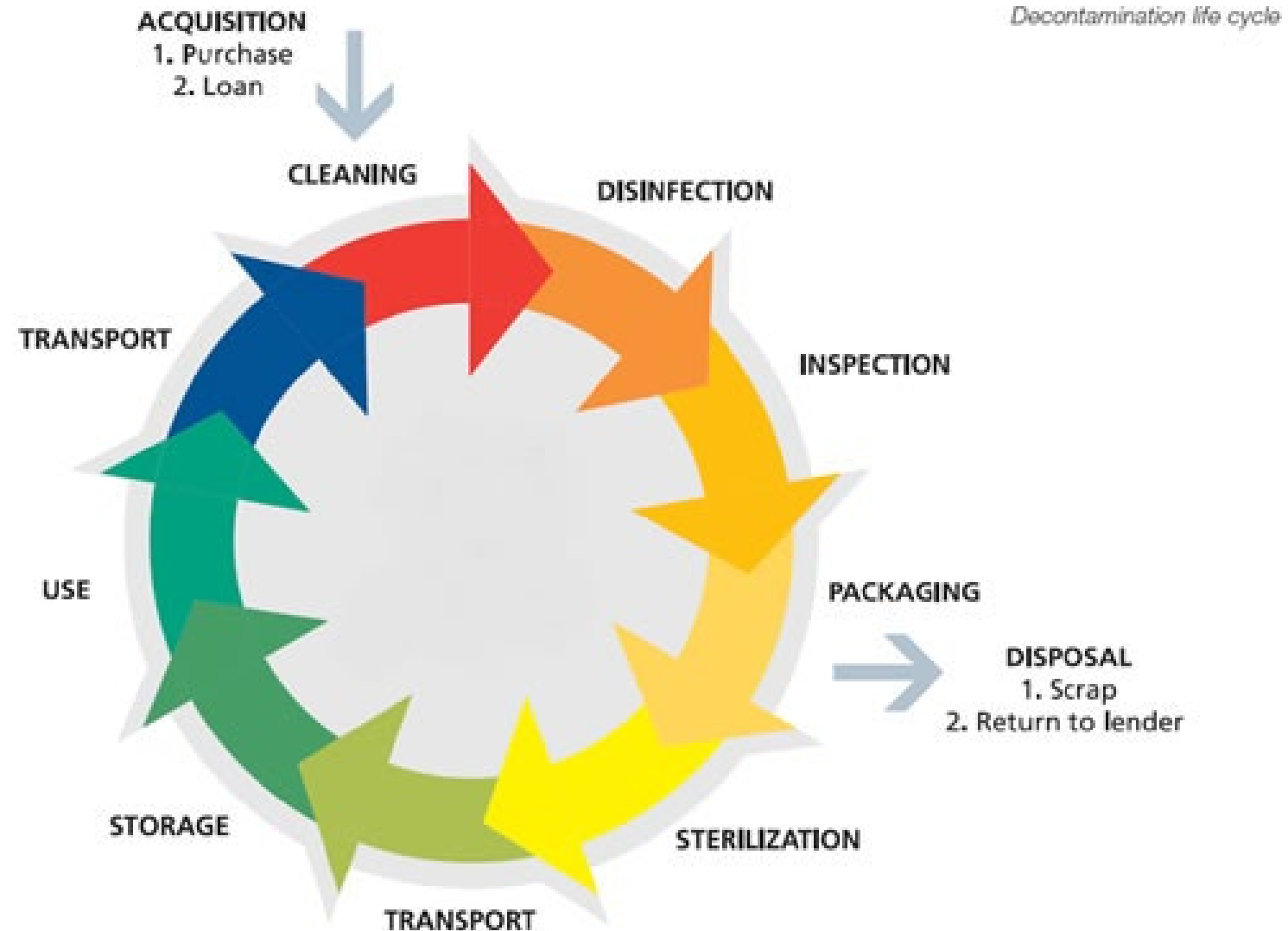


Policy



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.



This is achieved by using an  
Automated Washer



Time



Temperature



Detergent



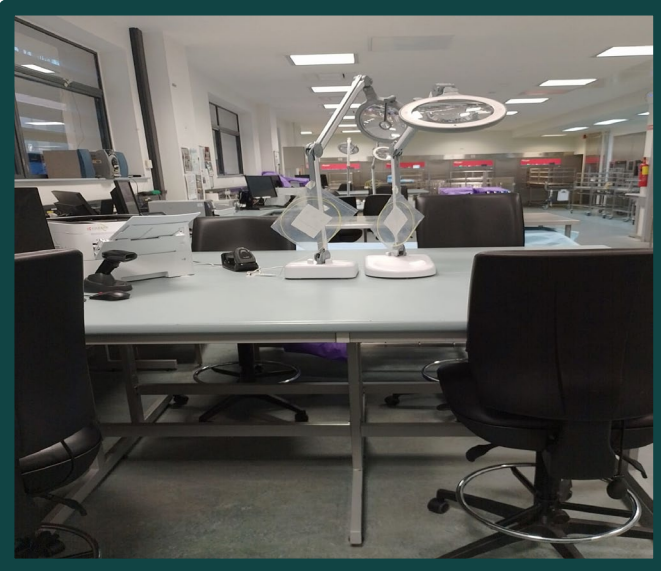


# Wash Decontamination Room



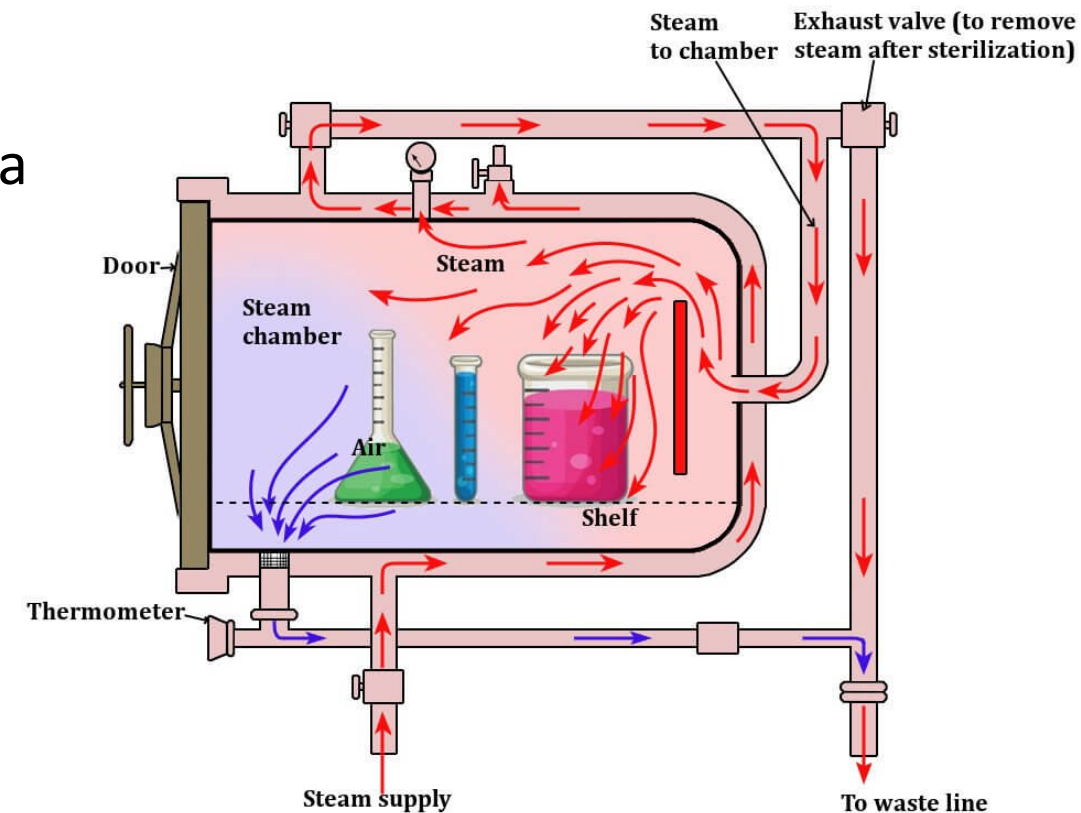


# Clean Room



# 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

**Patient  
Safety**

Guidelines for Commissioning, Validation  
and Testing in  
Endoscope Decontamination Facilities



Policy

Rules &  
Regulations






# Endoscopy Decontamination

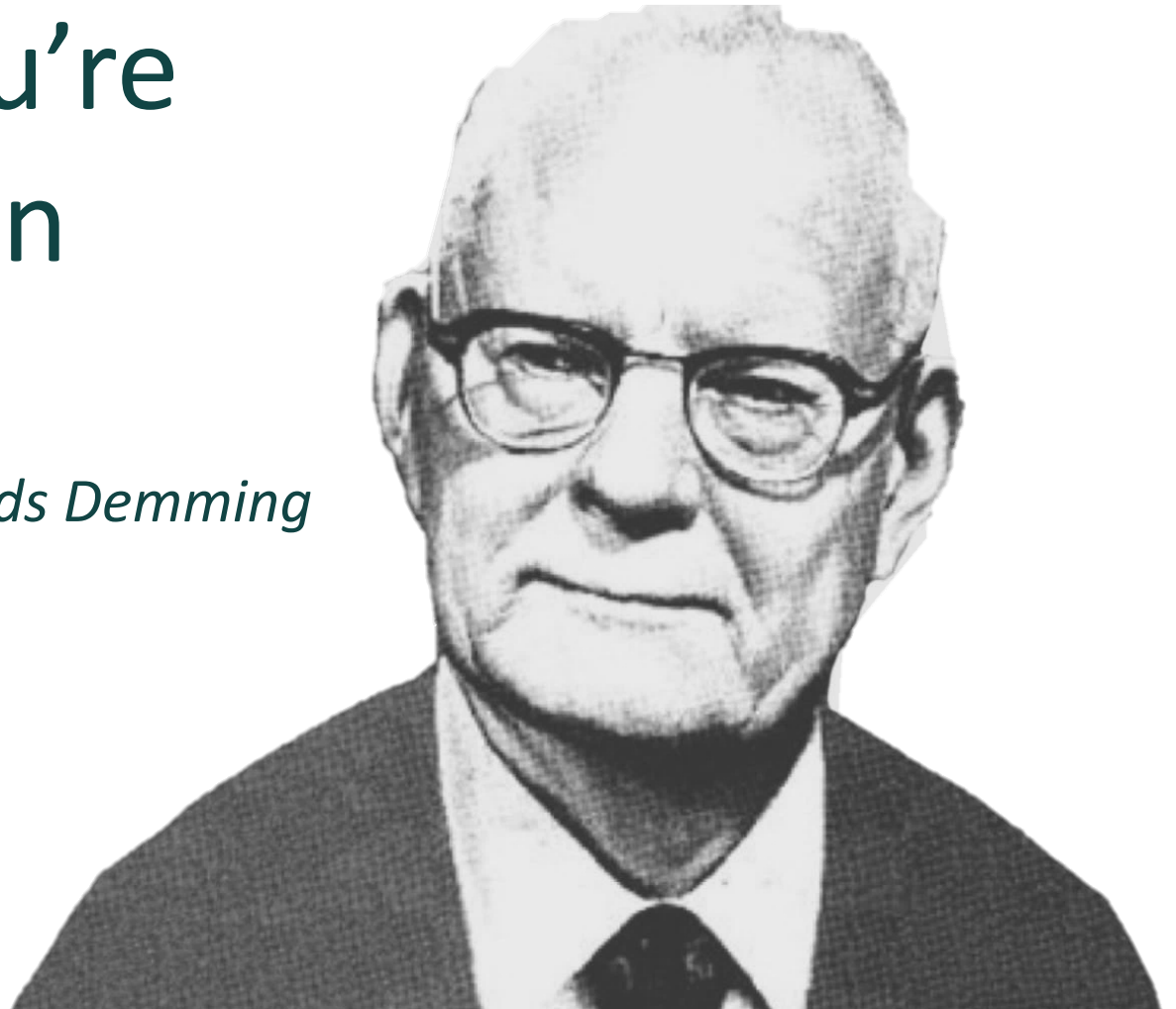






“Without data, you’re  
just another person  
with an opinion”

*-W. Edwards Demming*



# New Technologies



# Standards and Guidelines

## Ultrasound Probes



Policy

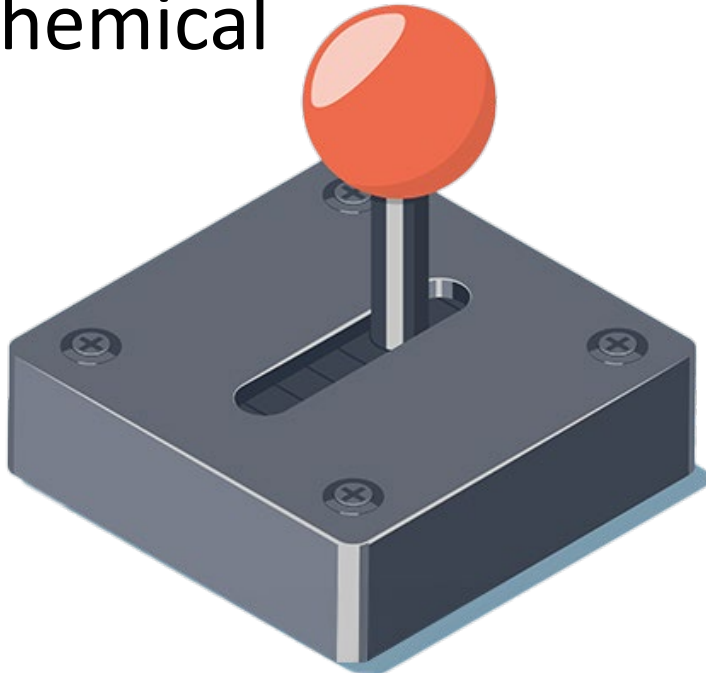
Guidelines

Patient  
Safety

# What are our options?

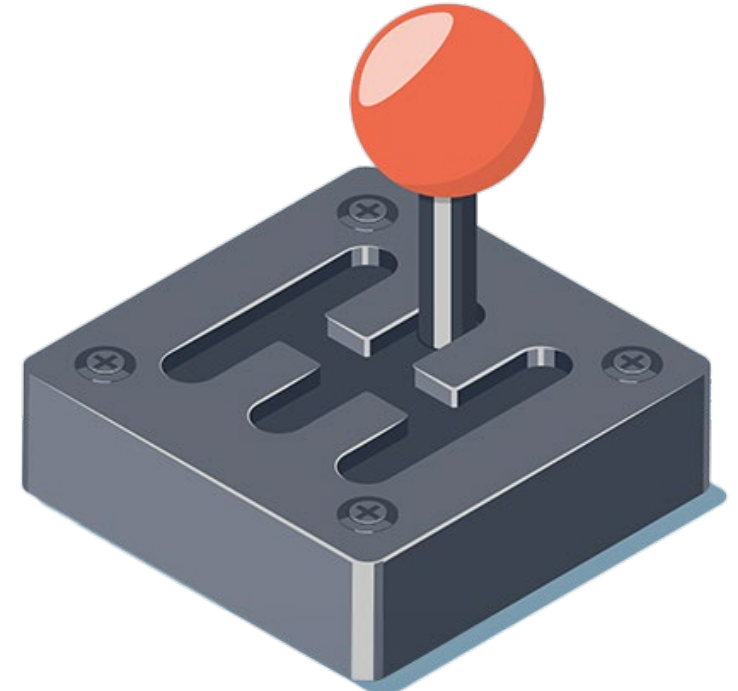
## Automated

- UV C
- Chemical



## Manual

- Tristel wipe system

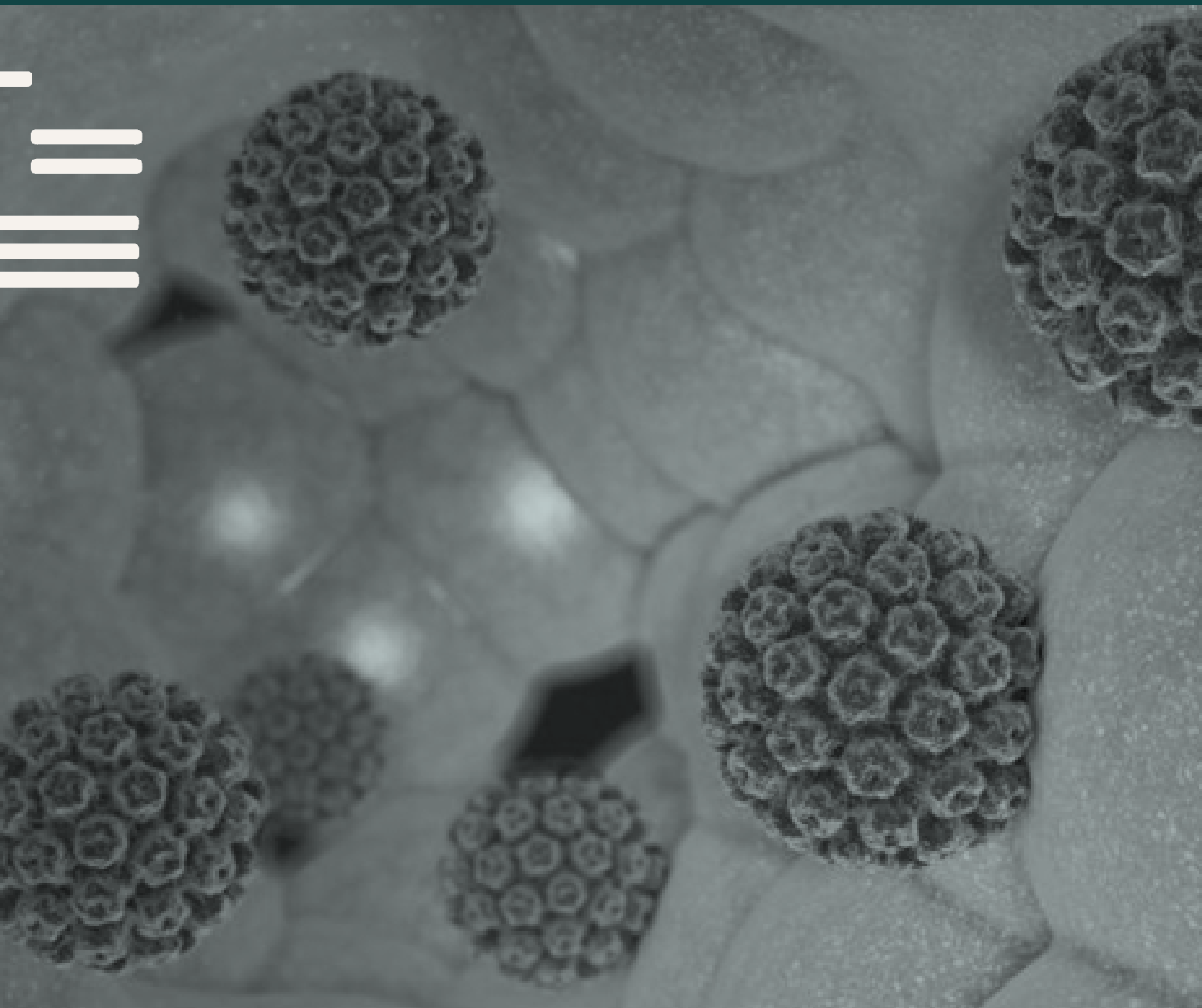


# Ultrasound probe decontamination



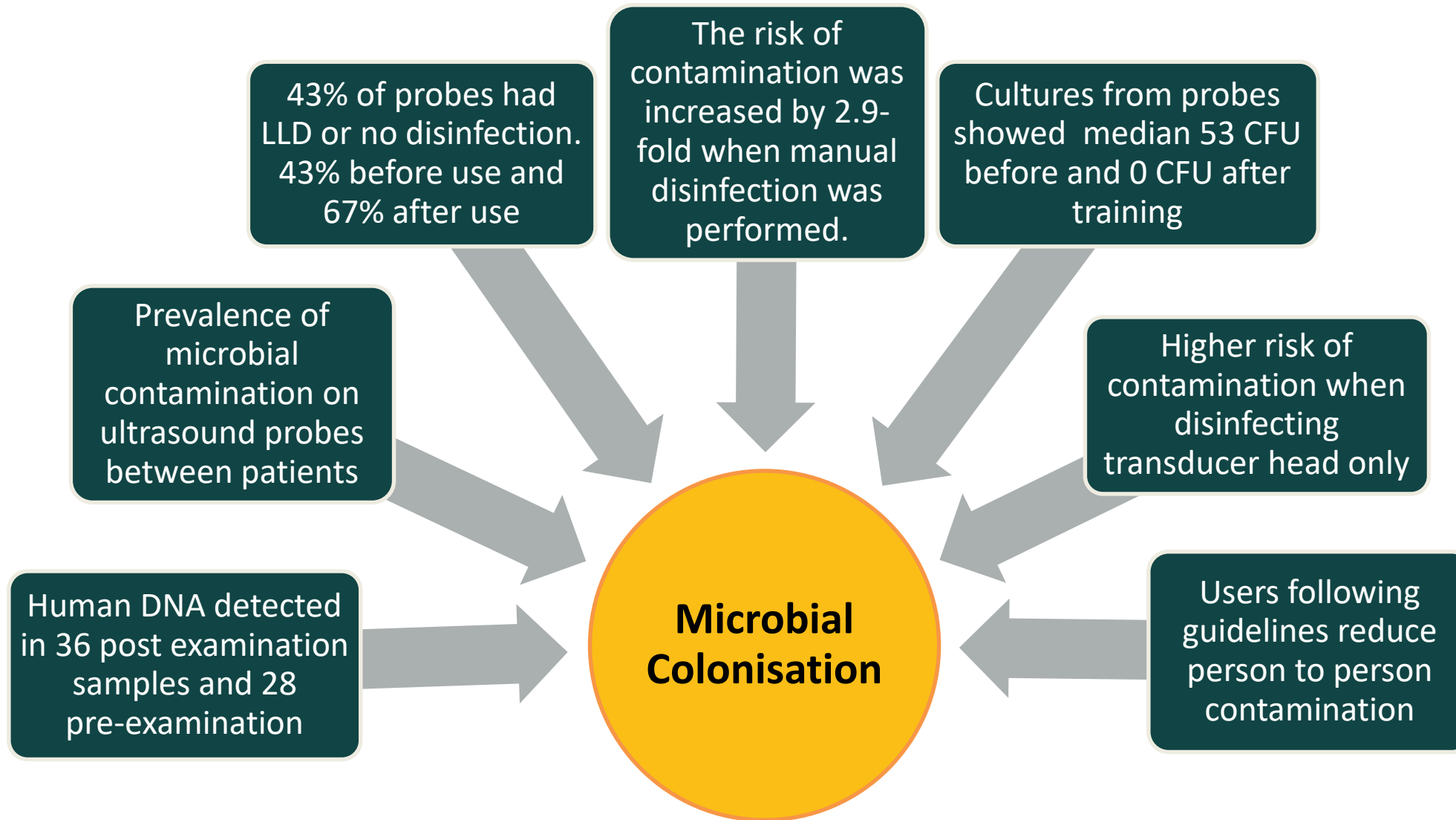


# What are the risks/cause?

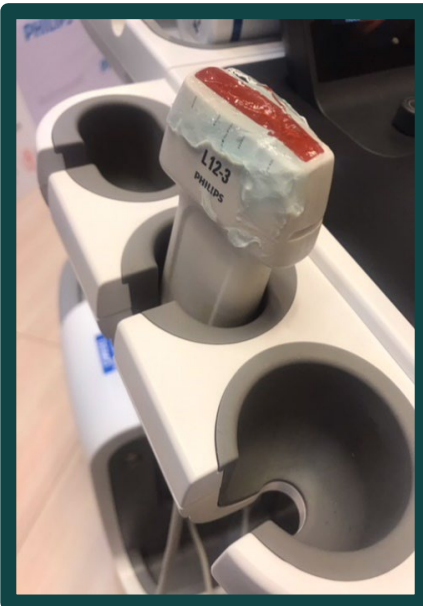


**Caution: human error**

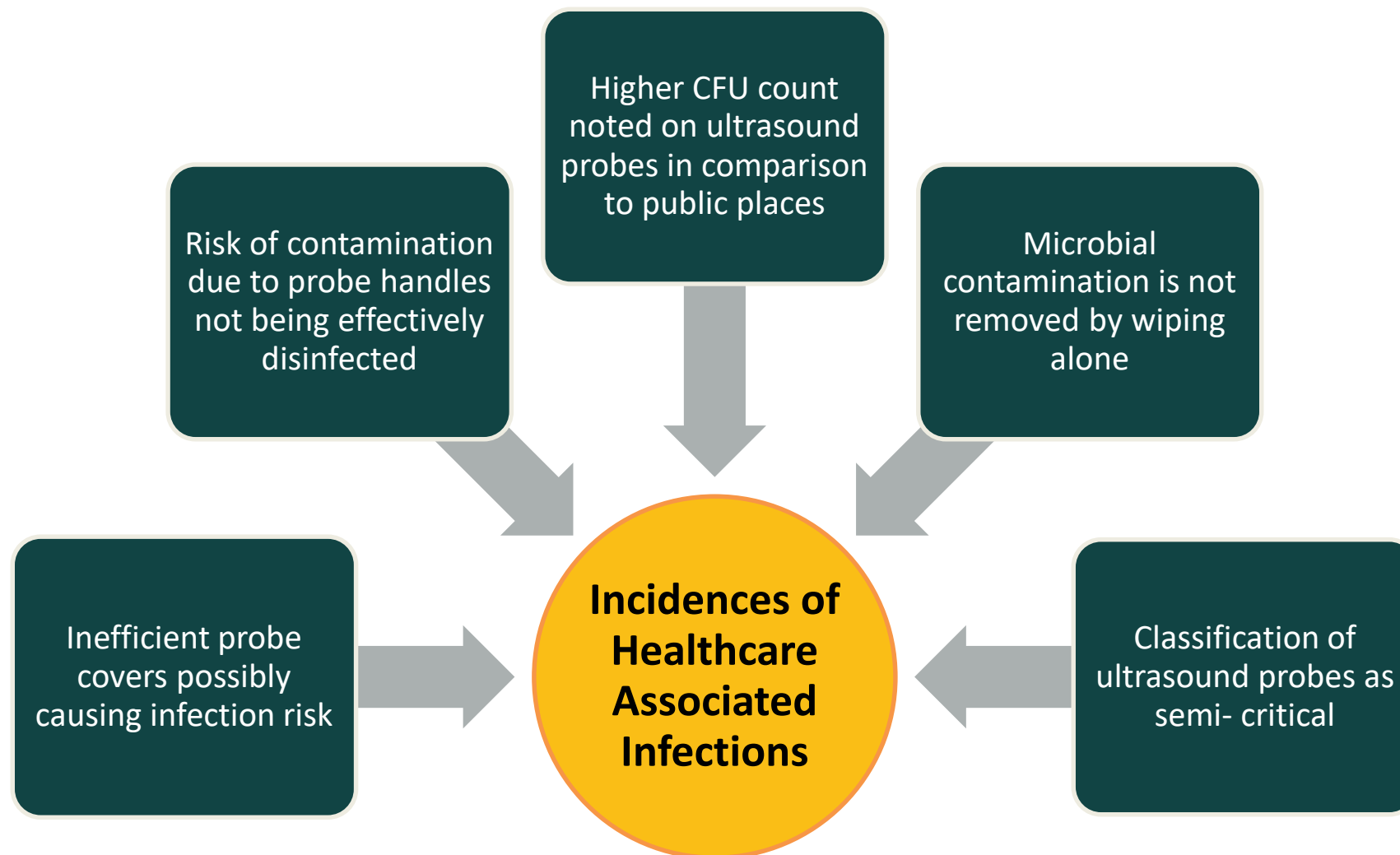
# Microbial Contamination



# When things go wrong



# Incidences of Healthcare Associated Infections





# The future

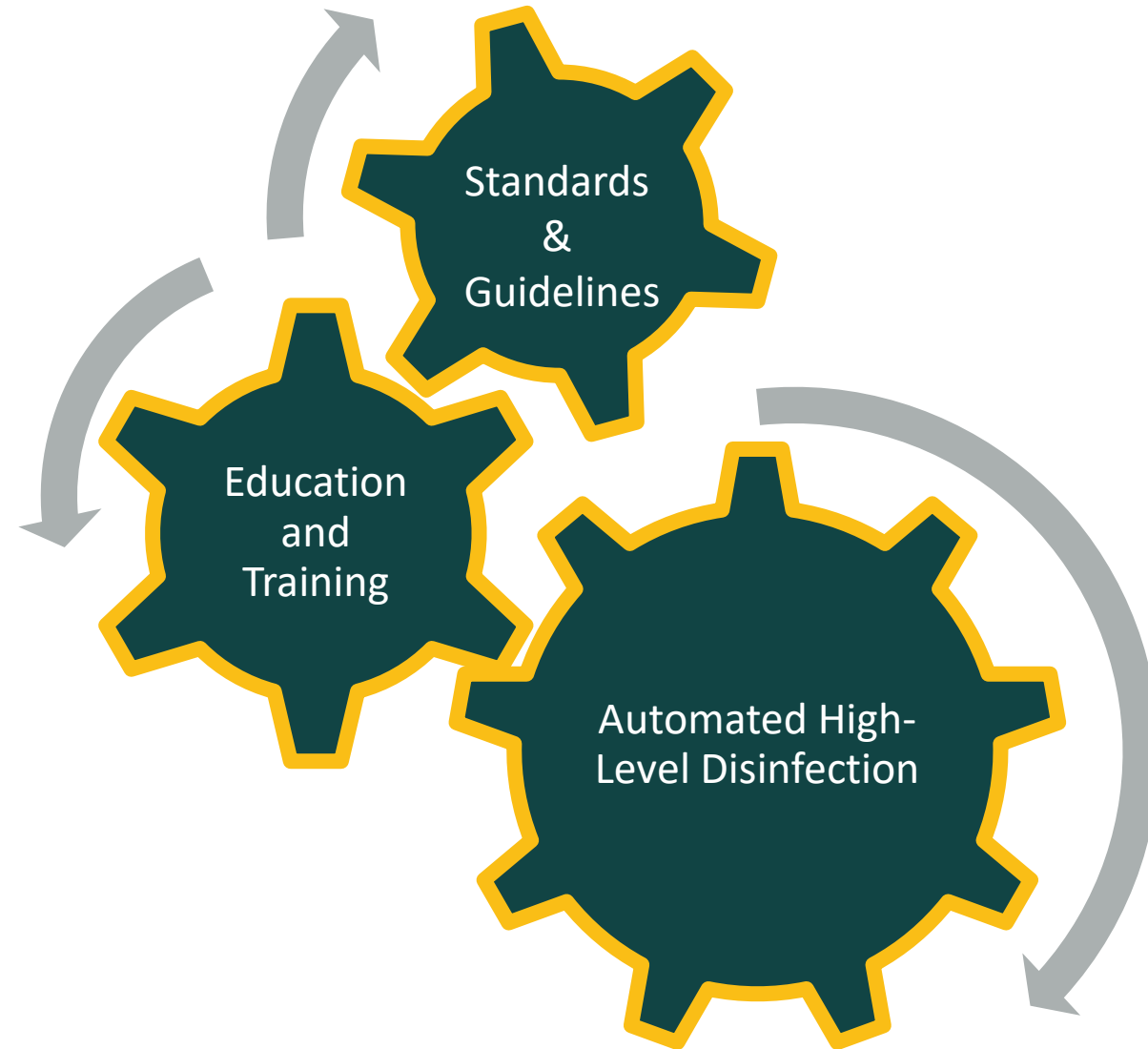






## Continuing Education

# 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

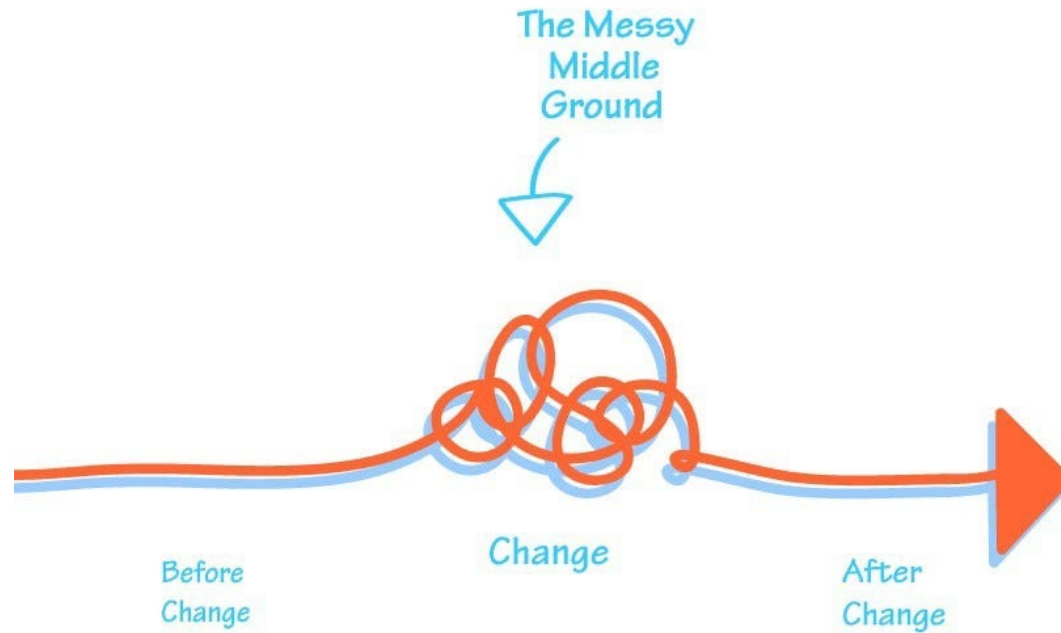
Constructive criticism

Be adaptable to change

Safe space to comments



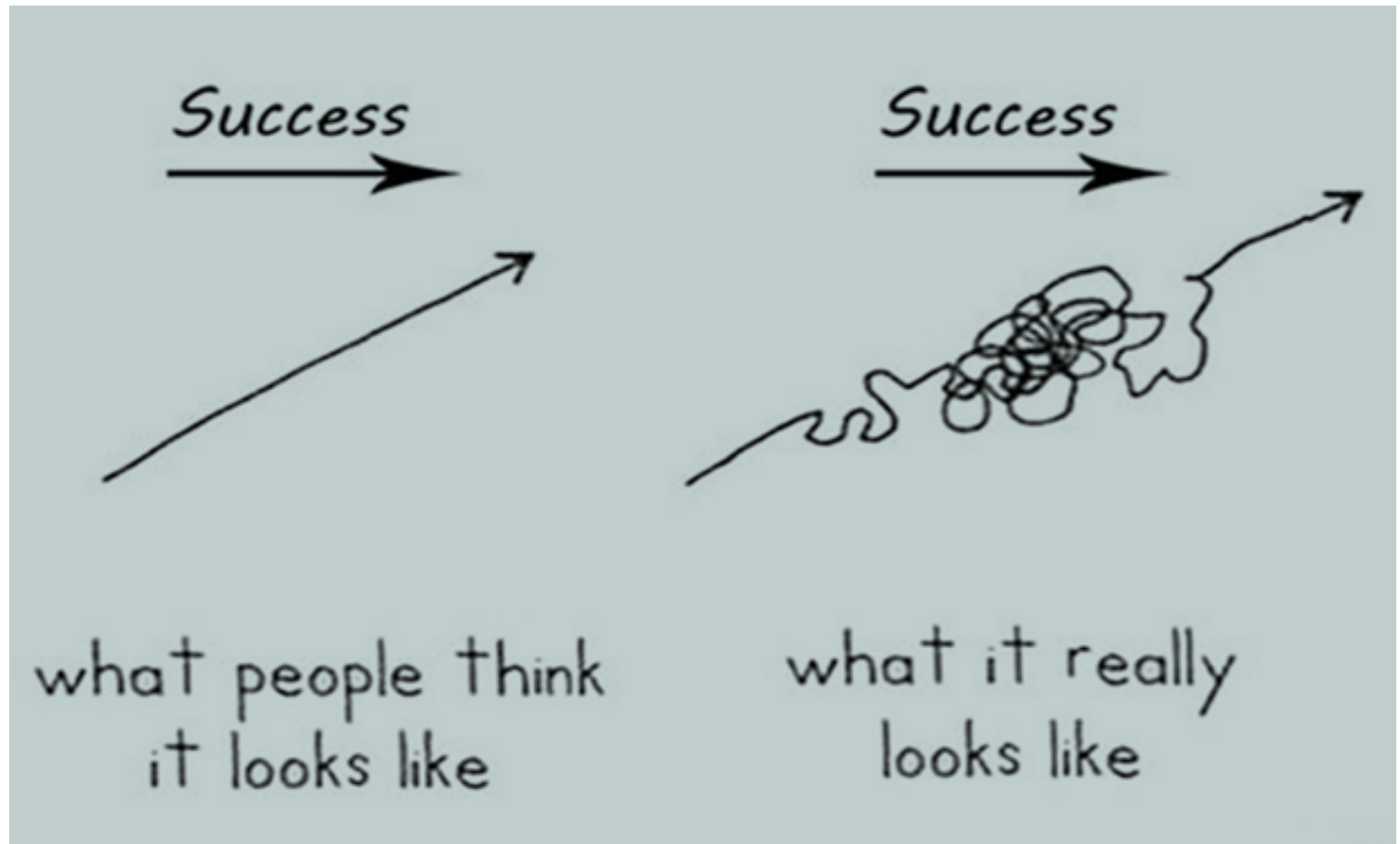
# How we view change





## 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



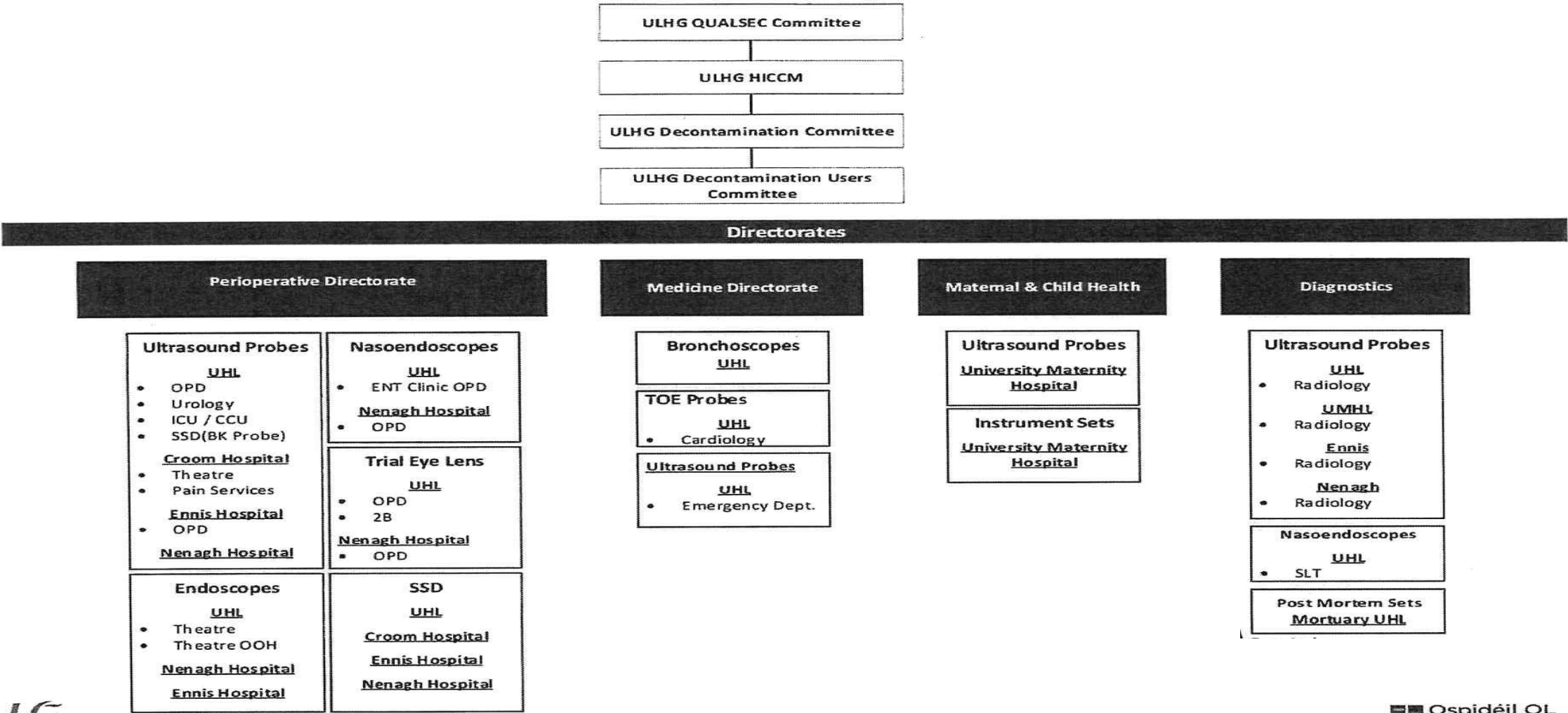


# Equipment Decontamination Governance

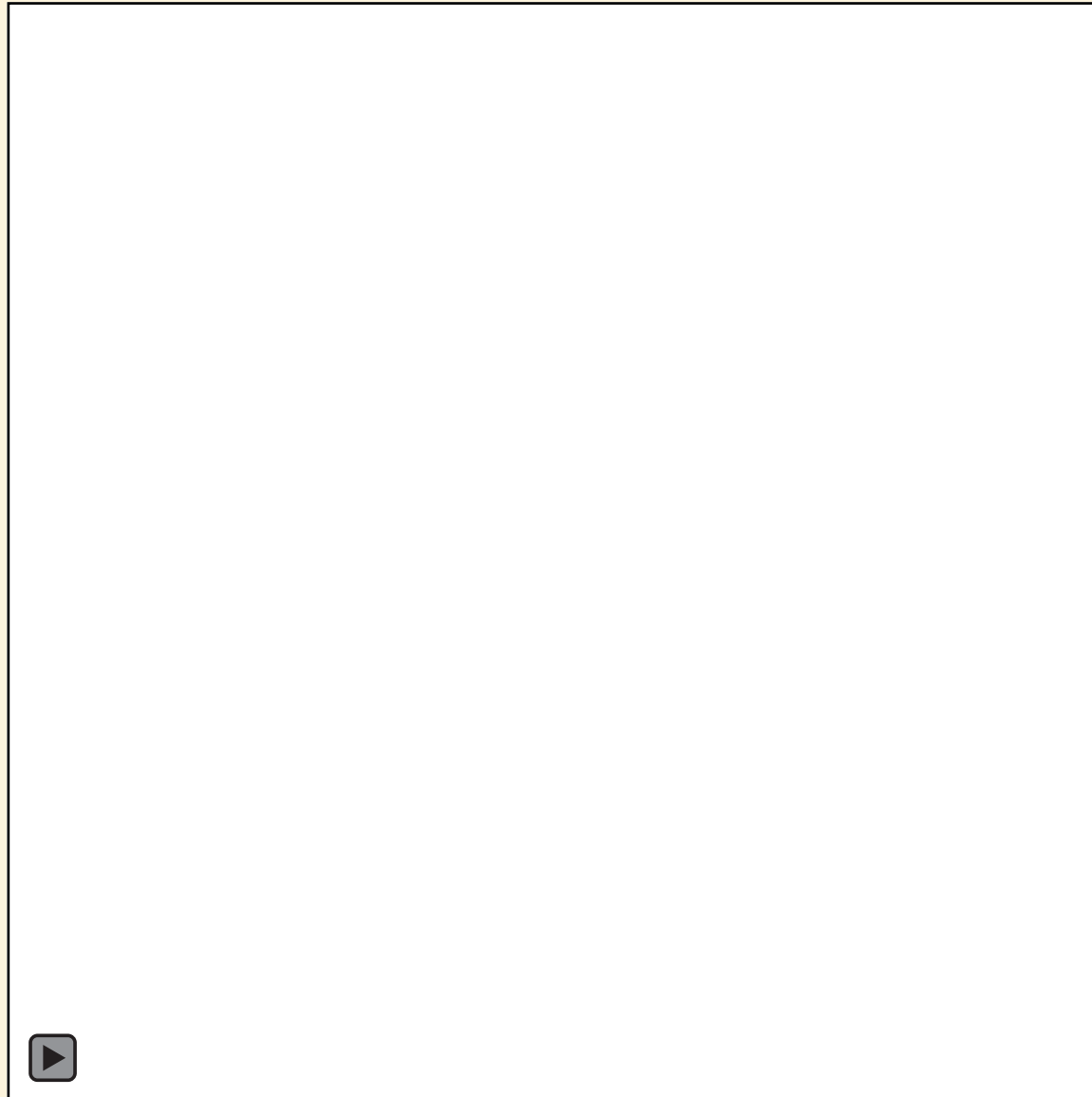


# Equipment Decontamination Governance

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



# Who are our patients



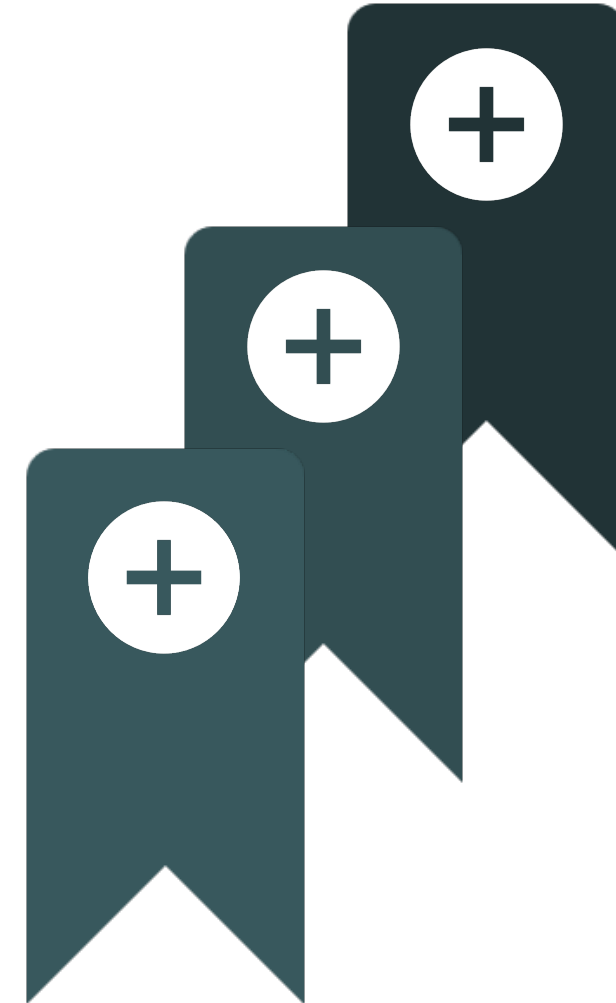
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# Thank you any questions

That's a wrap

