

# Low Temperature Sterilisation

A User Experience



# Aim

- Change in dynamics of medical devices and how CSSD processes these devices
- The Quality Improvements being made in MMUH
- Effects this has had on the management in CSSD
- Effects this has had for the end user in Theatre
- Where we are and where we are going



**Low Temperature Sterilisation**  
A User Experience



# Introduction

- Mater hospital set about making improvements in the area of Low Temperature Sterilisation (LTS)
- Risks were identified and categorized
- Medical devices types and complexities were reviewed
- Patient safety standards to be maintained and if possible improved



**Low Temperature Sterilisation**  
A User Experience



# Medical Devices

- Currently there are a number of medical devices that require LTS in MMUH
  - ✓ *Rhizotomys, Defibrillator paddles, Doppler probes*
- Complexities have seen an increase in manufactures recommending LTS for flexible scopes and laparoscopic probes in recent years
  - ✓ *Urethroscopes, Cystoscopes, Videoscopes , 3D Endoeyes*
- New technologies in Robotics has also increased the need for LTS



# Low Temperature Sterilisation (LTS)

- Compatibility studies was undertaken within the LTS market place
- Ensuring department meets compliance standards
- Patient safety and recommendations reviewed
- Future proofing department for new technologies



# Benefits of LTS

## Compatibility

Da Vinci systems  
3D Endoeye  
Flexibles scopes  
Ultrasound  
probes/transducers

## Efficiency

Potential to reduce  
inventories  
Faster reprocessing times  
Increase procedures  
Key performance indicator

## Costs

LTS less invasive than steam  
Reduce damage & repairs to  
fragile medical devices

## Patient Safety

Quality assurance  
Availability  
Data and information storage



Low Temperature Sterilisation  
A User Experience



# Operation

- Operator Load



Low Temperature Sterilisation  
A User Experience



# Operation

- System cycles



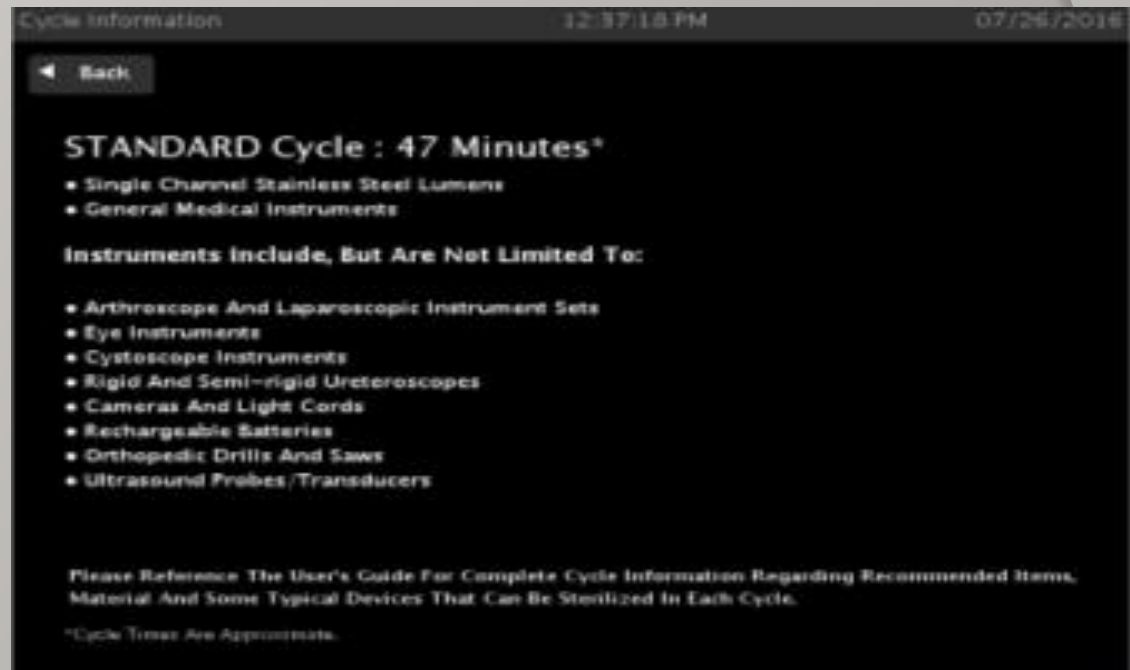
Low Temperature Sterilisation  
A User Experience





# Operation

- Cycle Information



Low Temperature Sterilisation  
A User Experience



# Operation

- Cycle Biological indicator (Bi) information

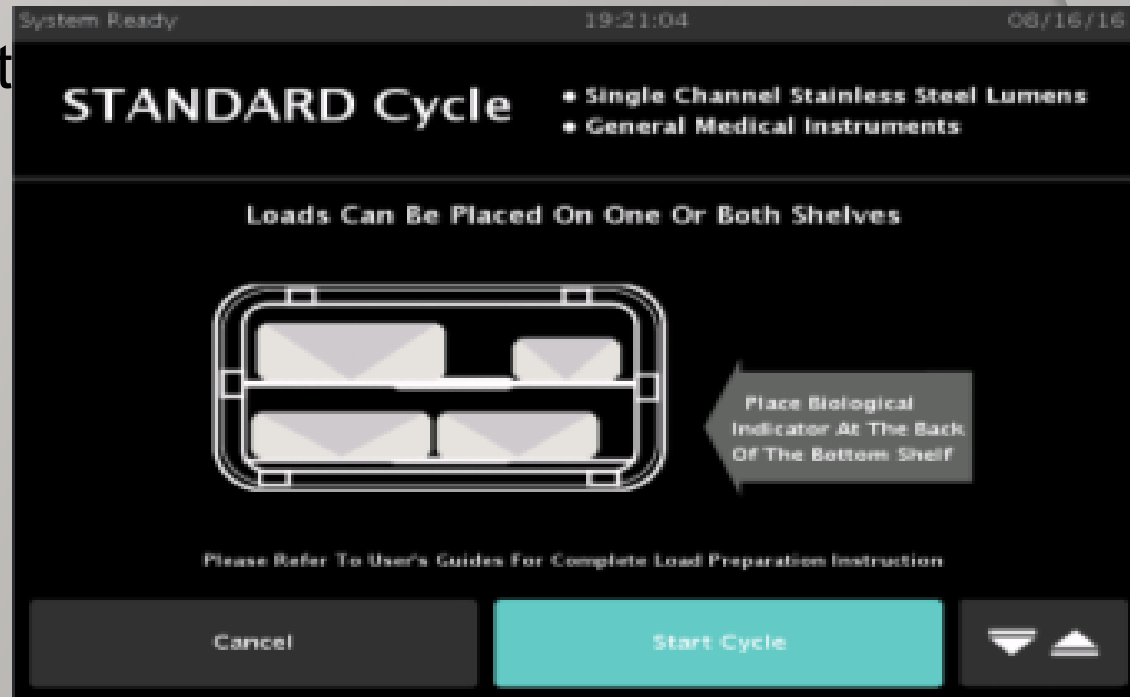


Low Temperature Sterilisation  
A User Experience



# Operation

- Load placement

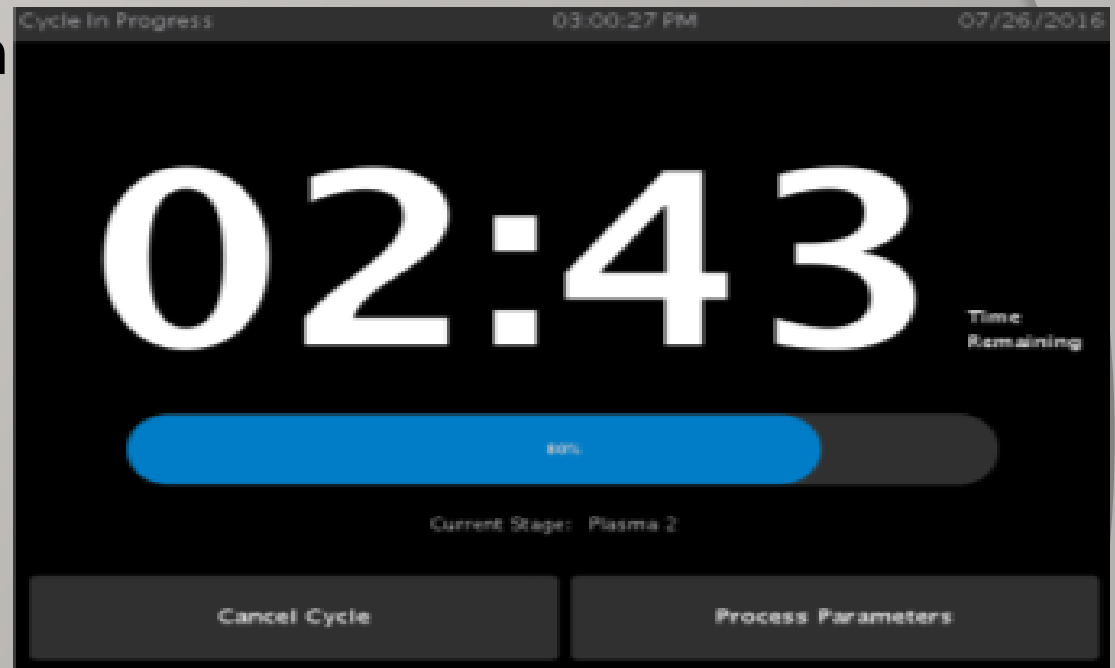


Low Temperature Sterilisation  
A User Experience



# Operation

- Cycle countdown



Low Temperature Sterilisation  
A User Experience



# Operation

- Cycle Completion



Low Temperature Sterilisation  
A User Experience

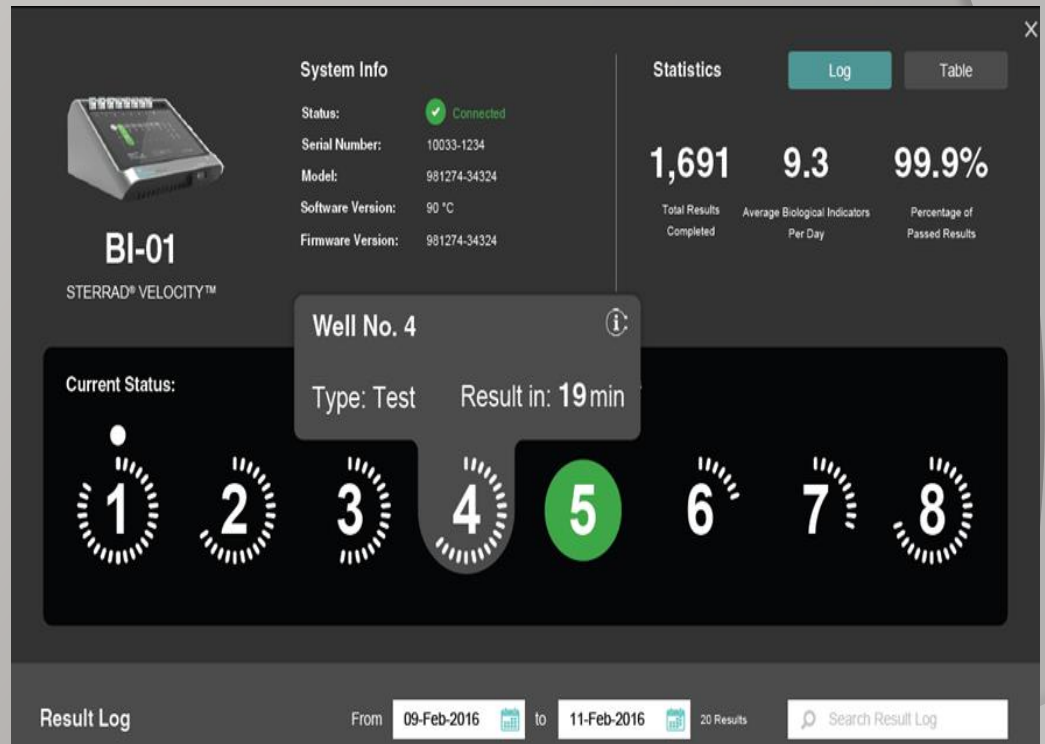


# User

- ⦿ Easy to use display
- ⦿ Step by step user mode
- ⦿ User safety
- ⦿ New technology

# Management

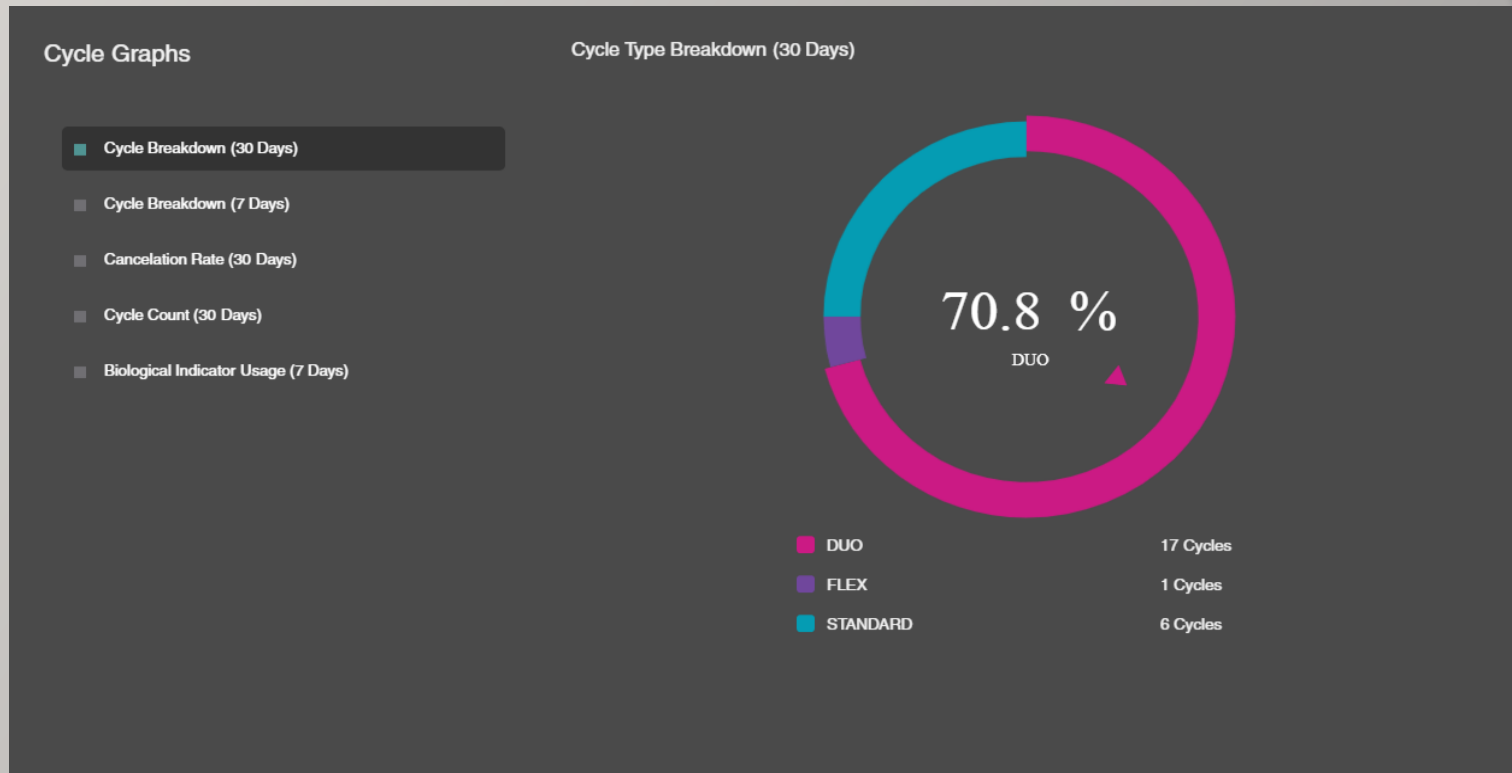
- Ecosystem
- Parametric release
- Bi Velocity Reader
- ASP Access
- Auditing / Reports



Low Temperature Sterilisation  
A User Experience



# Management

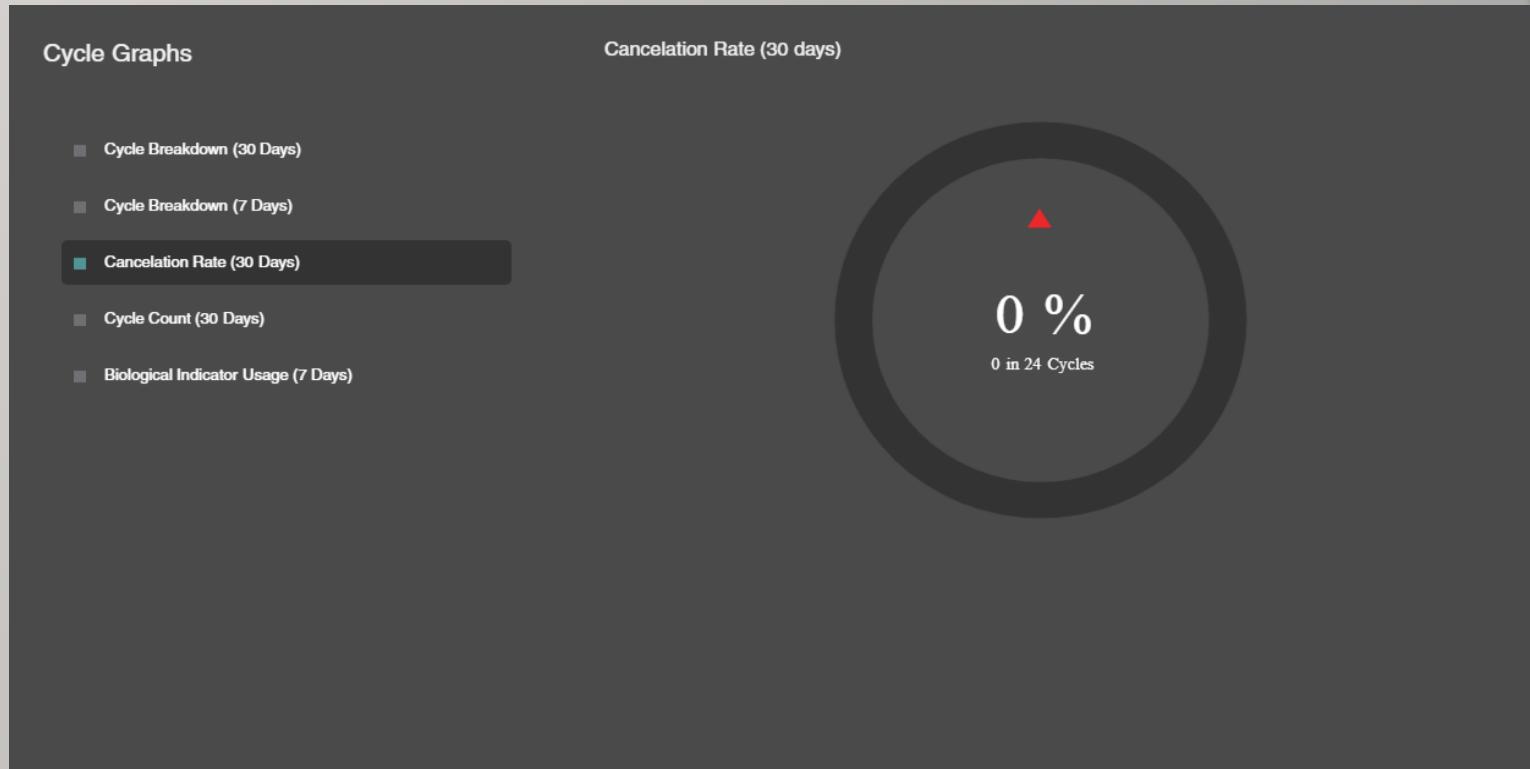


Low Temperature Sterilisation  
A User Experience





# Management



Low Temperature Sterilisation  
A User Experience



# End User

- Right medical device for the right patient
- Quality assurance
- Faster turn around times
- Less damages and repairs



**Low Temperature Sterilisation**  
A User Experience



# Staff Engagement

- Change
- Training
- Embraced Technology
- Determination and Excitement



**Low Temperature Sterilisation**  
A User Experience



# Where we are and where we are going

- ◉ Continually adding to our data base
  - ◉ Continually adding KIPs
  - ◉ Reviewing medical device compatibility
- 
- ◉ Link with HSE national track and trace provider
  - ◉ Paperless systems with theatre integration

# Thank You !

**I CAN'T CHANGE**  
the direction  
♦♦ OF THE WIND ♦♦  
**BUT I CAN ADJUST**  
❖ my sails ❖  
**TO ALWAYS REACH MY**  
*Destination*

**Contact Details:**

Trevor Duffy

Decontamination Manager &  
Hospital Lead MMUH

Ext: 01 803 2543 E-Mail:  
trevorduffy@mater.ie



**Low Temperature Sterilisation**  
A User Experience

