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# Sterile Supply Services Training in Eastwood Park

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*Ward Manager  
CSSD, POH/TSWH*

HA Convention 2018  
8<sup>th</sup> May 2018

*New Territories West Cluster*





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# Overseas Corporate Scholarship Program for Clinical Leaders 2015-16

23 Nov – 18 Dec 2015

Eastwood Park, UK

1. Chan Siu Yin, NO OT, NDH NTEC
2. Chui Yuk Ling, DOM CSSU, QEH KCC
3. Lam Wing Yan, APN OT, RHTSKH HKEC
4. Lee Chun Kin, WM CSSD, POH/TSWH  
NTWC
5. Leung Wai Hung Allen, APN OT, PYNEH  
HKEC
6. Lo Yuk Fung, WM CSSD, KWC
7. Mak Yung To Stanley, APN OT, PWH  
NTEC
8. Yim Chi Cheung Thomas, WM CSSU,  
QEH KCC





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# Eastwood Park Training Center

- 8 nurses working in CSSD / TSSU for 4 weeks training in UK

- Theory

- Exam

- **Practice**

- **Clinical Visit**







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# Learning Objectives

- Competent in decontamination management
- Quality management system (QMS)
- Validation of decontamination equipment
- Application of international standards
- Improve service quality and project development
- Resource person for service enhancement and new development



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# Eastwood Park Facilities



New Territories West Cluster

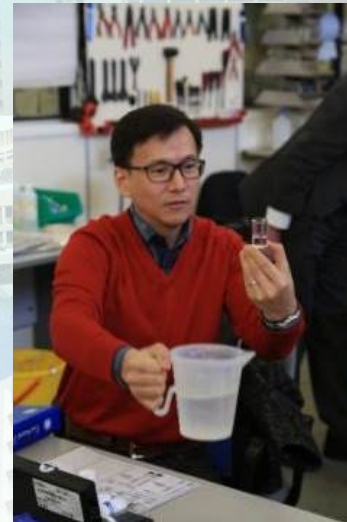


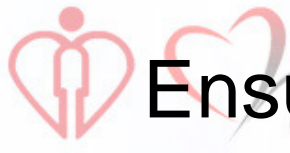


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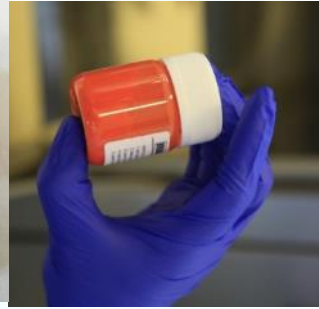
# Curriculum

- **Week 1:** Foundation knowledge and skills of standard CSSD environment
- **Week 2:** Flexible endoscope decontamination
- **Week 3:** Clinical visit: industries, laboratory & 4 hospitals
- **Week 4:** Decontamination services management





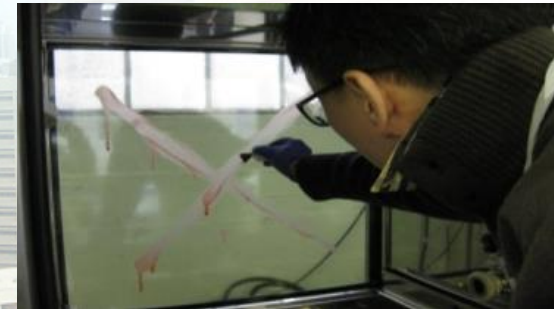
# Ensuring Washing Quality – Cleaning Efficacy Test



## Ninhydrin - Protein Residue Test



## Cavitation Efficiency Test



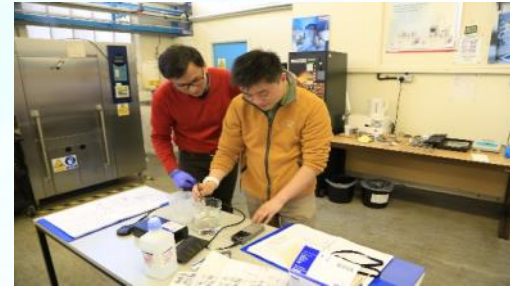
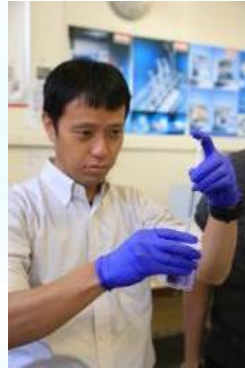
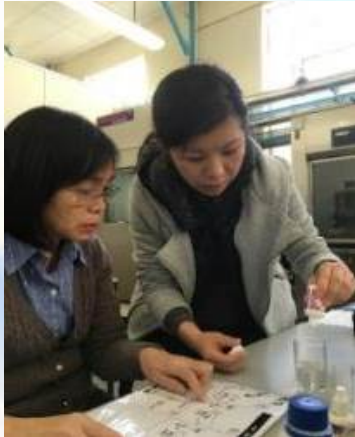
## Clean Efficacy Test



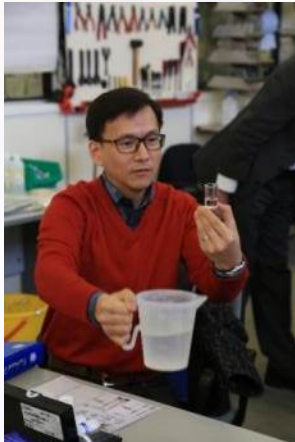


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## Good Water, Good Process



### Water Hardness Test



### Water Conductivity Test





# Validation – Ensuring Good Sterilizer Performance

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## Manual leak rate test



## Standard Test Pack



## Automatic Control Test (ACT)



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# Reflection

- Centralization and Local Centre
- Regulation, guidelines and management structure development
  - Engineer specific for decontamination services
  - Decontamination Lead
- Full validation for all decontamination equipment
  - Parametric release of sterile products
  - Quality assurance
  - Standardization among HA hospitals
- Modernization and application of technology





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# Contribution – Short Term

- Enhance staff training
- Enhance periodic tests (validation)
- Enhance record keeping
- Enhance 'On Loan' instrument logistic
- Revise operation manual
- Develop Key Performance Indicators



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# Staff Training

- **Commissioning training program**
- **Enriched the contents of the local training program**
  - International standards
  - Validation
  - New trends
  - QMS
- **Establish staff competency assessment**

SKILLS ASSESSMENT FORM  
FOR  
**STERILE SUPPLIES ASSISTANT Coordinator (PCAI)**

Staff Name: \_\_\_\_\_  
Department & Hospital: \_\_\_\_\_

Please '✓' in the appropriate column:  
*A(Ask), O(Observe), R(Record Checking)*


Section A Cleaning & Disinfection of Instruments						
No.	Assessment Item	A/O/R	Pass	Not Pass	N/A	Remarks
1.	Put on appropriate personal protective equipment (PPE) as required, such as: <ul style="list-style-type: none"><li>- gloves</li><li>- gowns</li><li>- eye protection</li><li>- face masks or shields</li><li>- respiratory protection devices</li></ul>					
2.	Demonstrate knowledge of decontamination principles in manual cleaning, automated cleaning, ultrasonic cleaning and proper disinfection					





# Validation

- Perform weekly **automatic control test (ACT)** for washer-disinfector (WD) & sterilizer
- Perform protein residues test & soil test for WD
- **Microbiological Test (TVC)** for final rinse water of Automatic Endoscope Reprocesser (AER)

 新界西·西區醫院 博愛醫院中央消毒物品及無菌物品供應部		文件號碼: POCSSD-Q-WD-004-V1 版本: 1 生效日期: 01-04-2016 下次修訂: 01-04-2018 頁數: 1	
清洗機 WD 1-3 ACT 測試表格			

Automatic Control Test for Washer Disinfector		Hospital	
Washer Disinfector	3	TMH / POH / TSWH	
Cycle Number	32690	Frequency of Validation	
Test Date	27/02/2017	<input checked="" type="checkbox"/> Weekly	
Cycle Start Time	09:40:20	<input type="checkbox"/> Quarterly	
Program	P2	<input type="checkbox"/> Yearly	
Stage	Reading Taken At	Actual	Reference (20161209) 4Q
Pre-Wash	Time at Start	1 Min 1 Sec	1 Min 1 Sec
	Time at End	3 Min 1 Sec	2 Min 3 Sec
	Temperature at end	25.0 °C	29.2 °C
Wash	Time at Start	4 Min 41 Sec	4 Min 26 Sec
	Time at End	13 Min 14 Sec	12 Min 35 Sec
	Minimum Temperature	26 °C	30.4 °C
	Maximum Temperature	54.9 °C	57.1 °C
	Dos Start Time	7 Min 1 Sec	6 Min 22 Sec
	Dos End Time	8 Min 13 Sec	7 Min 33 Sec
	Dos Duration	1 Min 12 Sec	1 Min 11 Sec
	Dos Start Temperature	40.4 °C	40.4 °C
Dos End Temperature	51.7 °C	51.7 °C	
Rinse	Time at Start	14 Min 53 Sec	14 Min 8 Sec
	Time at End	16 Min 41 Sec	15 Min 54 Sec
	Minimum Temperature	54 °C	51.1 °C
	Maximum Temperature	54.5 °C	56.6 °C
Final Rinse	Time at Start	22 Min 28 Sec	23 Min 0 Sec
	Time at End	27 Min 30 Sec	28 Min 1 Sec
	Holding Time (90 °C)	5 Min 2 Sec	5 Min 1 Sec
	Minimum Temperature	90.6 °C	90.8 °C
	Maximum Temperature	92.8 °C	92 °C
Test Person	HO WAN CHONG		
Approved by	YIP SING YAU		
Approval Date	06/03/2017		

# Record Keeping

- Developed comprehensive **maintenance record** for major decontamination equipment
- Enhance sterilization production record
- Confirmation before product release to users

[illegible]





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# On Loan Instrument

- Unique set ID assigned to 'On Loan' instrument
- Tracking & tracking by Surgical Instrument Tracking System (SITs)



# Operation Manual

- **QMS** revision & updated
- Improve service quality & efficiency of workflow
- Enhance inventory control
- Revised requisition forms

Kowloon Central Cluster - Queen Elizabeth Hospital				
Document No.: KCC/QE/CSSU/TSSU/FM0009		Effective Date	21/06/2016	
Department: CSSU		Next Review Date	22/06/2018	
Type of Document: Form		Version	Feb 16	
Title: Competency Assessment - Operation of AER ED-FLOW; Reprocessing of Flexible Endoscopes		Page	1 of 2	

Competency Assessment				
Operation of AER ED-FLOW; Reprocessing of Flexible Endoscope				
General instruction to competency assessment				
This form is for assessing staff's ability to reprocessing flexible endoscope by AER ED-FLOW correctly. Proper handling of the equipment and reprocessing of flexible endoscope should be referred to SOP - Operation of AER ED-FLOW; Reprocessing of Flexible Endoscope, machine operation manual and endoscope reprocessing manual. Candidate must be able to answer YES to all applicable statements before considering the competency.				
Observational Assessment by Assessor				
*All of the competencies must be achieved to pass the assessment				
Flexible Endoscope Information				
Pentax / Karl Storz / Olympus	Model:	Yes	No	NA
SITs code: QE.H.FES.		✓	✗	
1 Wear appropriate PPE before handling of flexible endoscope				
2 Perform manual leak test correctly				
Manual cleaning procedure & AER operation				
3 Add correct amount of enzymatic detergent (50ml) with water to marked level of the sink				
4 Wipe the external surface of the flexible endoscope by disposable lint-free towel soaked with diluted enzymatic detergent				
5 Brush all channels with appropriate nylon brush for at least 3 times and until no visible soil is observed				
6 Brush the suction valve, air/water valve and accessories (if applicable)				
7 Place the flexible endoscope on the AER's stainless steel tray securely and minimize overlapping				
8 Select correct connector set				
9 Connect all connectors, channel separator and tag correctly				
10 Press down foot pedal and launch chemical disinfection cycle				
Collecting disinfected flexible endoscope (Unloading side)				
11 Wash hand and wear clean gloves				
12 Disconnect all connectors, channel separator and tag correctly				
13 Place the flexible endoscope and its accessories on trolley draped with sterile barrier				
14 Press down foot pedal to close the door				
15 Collect the connector set, channel separator and cleaning brush then...				



## MONTHLY PERFORMANCE REPORT FOR: September 2015

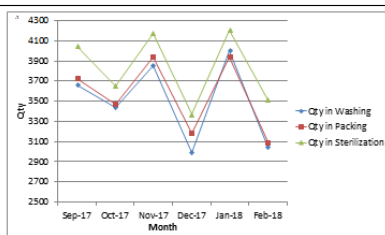




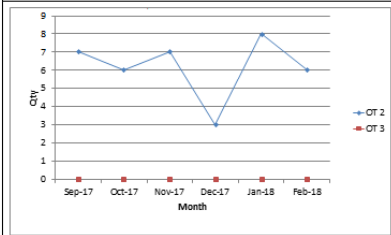
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# Key Performance Indicators

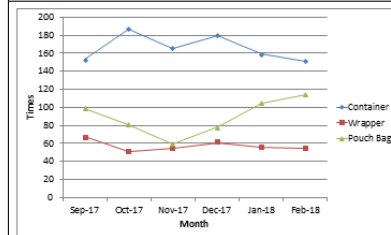
1. POH CSSD Reprocessed Instrument Set (SEPT 2017 – FEB 2018)<sup>1</sup>



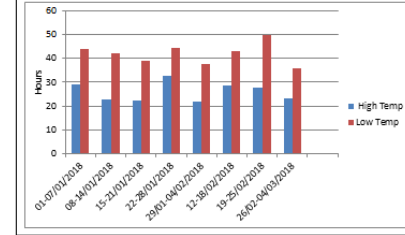
2. POH CSSD Reprocessed Fast Tracked Instrument Service Requested (SEPT 2017 – FEB 2018)<sup>1</sup>



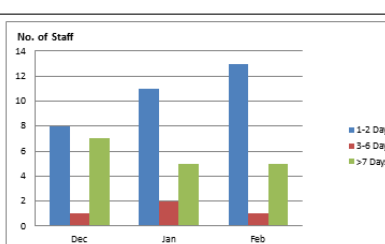
3. POH CSSD Daily Reprocessed Fast Tracked Instrument (SEPT 2017 – FEB 2018)<sup>1</sup>



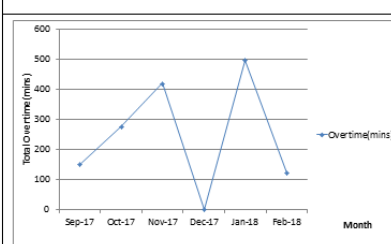
4. POH CSSD Instrument Turnaround Time as at FEB 2018<sup>1</sup>



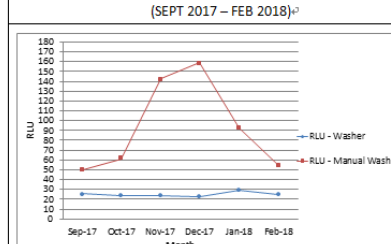
5. POH CSSD Sick Leave Record as at FEB 2018<sup>1</sup>



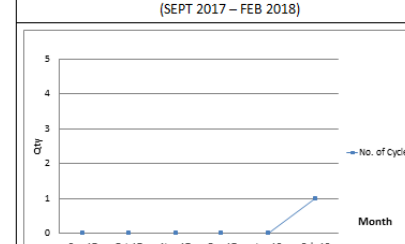
6. POH CSSD Staff Overtime Record (SEPT 2017 – FEB 2018)<sup>1</sup>



7. POH CSSD Cleaning Efficacy Test Result (ATP) (SEPT 2017 – FEB 2018)<sup>1</sup>



8. POH CSSD OT Benchtop Sterilizer Usage Record<sup>1</sup> (SEPT 2017 – FEB 2018)





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# Contribution – Long Term

- Review the **Independence Monitoring System (IMS)** as essential component for purchasing new decontamination equipment
- Installed / Planned to install **reverse osmosis (RO) water treatment system** to improve water & steam quality
- Apply international standards for CSSD renovation project







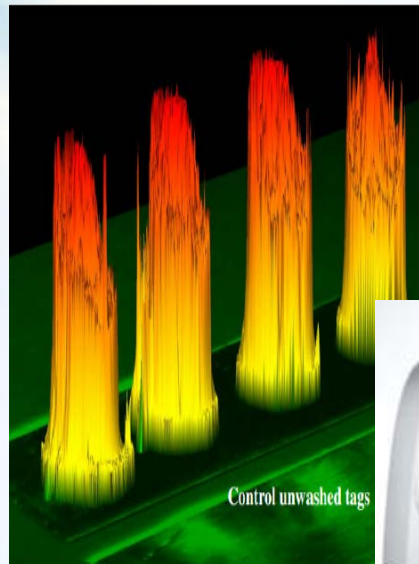
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# Way Forward

## LASER Marking on Individual Instrument



## Fluorescent Residual Protein Analysis



## RFID Tracking System





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# Acknowledgement

- **Nursing Service Department, HAHO**
- All the respective General Managers (Nursing), Department Heads and Colleagues
- All the staff of Eastwood Park Training contributed this course, for their arrangement in our accommodation and training





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# Thank You!



*New Territories West Cluster*