Centralising Endoscope Decontamination
Galway experience.
University Hospital Galway.

Flexible endoscopes users.

- Medical endoscopy
- Theatres
- ENT OPD
- Maxillofacial OPD
- Urology OPD
- ED
- ICU
- Radiotherapy
- CRF
University Hospital Galway-
Time line of the journey to a centralised EDU

- Internal review of compliance to JAG accreditation • Jan 2010
- JAG Baseline visit • May 2010
- EDU plans completed • July 2010
- EDU opened • April 2013
- Centralized EDU • 2017
National Cancer Screening Service (2011)

**FINDINGS**

- Separation of clean/dirty 17%
- One way flow for scopes 20%
- Correct PPE 30%
- EWD compliant to EN15883 13%
- Double Sinks 20%
- Tracking of endoscopes and valves 30%
- Appropriate transportation + storage of scopes 27%

**Knowledge of current decontamination practices** 27%*

- Table 4. JAG baseline audit on basic standards in decontamination in 2010 (NCSS, 2011:34)
UHG (2010)- where were we

3 locations reprocessing flexible endoscopes-
- Medical endoscopy
- ENT OPD
- Surgical day ward- theatre
Options available

1. Redesign current locations to ensure the 3 locations comply with standards.

2. Build a new centralized unit to reprocess all flexible endoscopes for all locations within UHG.
Building a new Unit (2010)

Advantages

- Shared scopes so reduced numbers required.
- Compliant with National building standards and HSE standards
- Correct work flow.
- Segregation of clean and dirty.
- Controlled reprocessing similar to HSSD.
- Safe place to work.
- Away from patient treatment areas
- Dedicated technicians
  - Trained & competent
  - Less breakdowns

Disadvantages

- Cost of additional scopes, EWD, Controlled Environment Storage Cabinets, transport trolleys
- May require additional staffing.
- Addition transport issues
Centralisation of Endoscope Decontamination.

  - Decrease risk of infections.
  - Synergies & efficiencies.

  - Advocated centralising Endoscope Decontamination.

- Bonner (2007) Centralization provides
  - Quality assurance.
  - Consistency of practice.
  - Value for money.
July 2010-
Design and planning completed

- Planned & designed to comply with HSE code of practice, JAG standards and EN standards.
- Controlled decontamination area.
- Segregation of clean and dirty*.
- Unidirectional flow.
July 2010 -
Design.

- Capacity to reprocess the current amount of endoscopes and all testing.

- Capacity planning for the future development.

- Capacity for supply services to be able to cope with expansions.

- Capacity to develop the service without impacting on service.
July 2010-
Design completed

- Designed for up to 8 pass thru EWD
  - 4 new AERs pass thru initially.
- 3 double height adjustable sinks
- Ventilation- Cleanroom designed to cleanroom class 7
- Ventilation- Washroom designed as class 8 cleanroom
- Cleanroom designed for up to 7 Controlled Environment Storage Cabinets
To Err is Human-

“errors are caused by faulty systems, processes, and conditions that lead people to make mistakes or fail to prevent them”

“mistakes can be prevented by designing the health care system at all levels to make it safer— to make it harder for people to do something wrong and easier for them to do it right”

Institute of Medicine (1999) To Err is Human: Building a safer Health System.
DON'T PUT ALL YOUR EGGS IN ONE BASKET
Concentrate your energies, your thoughts and your capital. The wise man puts all his eggs in one basket and watches the basket.

Andrew Carnegie
Centralized EDU
Business continuity-

- We must ensure that the unit is planned, designed, developed and maintained to ensure business continuity.

- Units must be planned to be to cope with a failure in any part of the decontamination process. Duty Standby

- Inhouse Maintenance involved in planning.

- Testing and preventative maintenance.

- Localized monitoring, as well as BMS system on all services.
Centralized EDU

Business continuity:

- Maintenance contracts in place on all key equipment.

- Trained maintenance staff- EWD, Boilers, water treatment.

- Catastrophic Failure.
Centralized EDU- Capacity Planning

- Capacity planning for future growth-
- Expansion of the service.
- Designed to facilitate the installation of decontamination equipment without interfering with the daily service.
PLAN
Education and Training.

- Competency assessment tool.
  - Professional Accountability - Understanding legal, regulatory national and local policies relating to decontamination.
  - Understanding, managing and maintaining endoscopes and associated equipment.
  - Understanding the process of decontamination.
Education and Training.

Competency assessment

- All staff working in EDU
- Competency assessed yearly.
Education and Training sessions

- All scope suppliers.
- All decontamination equipment suppliers.
- All process Chemicals suppliers.
- Infection Prevention and Control.
- Decontamination processes.
Centralised EDU

Monday to Friday

- 7 am - 8.30pm.
- Deliveries go out from 8.30
- Delivers 9, 11, 13.30, 15.00, 16.30
- Regular collections every 45 minutes.

Weekends

- Service requirements.
- Staff allocated from HSSD
- Any overnight scopes reprocessed.
- Theatre Cabinets checked to ensure stock levels.
- Scopes required during working hours are issued from EDU.
Supply of scopes out of hours. Theatre scope storage

Controlled Environment Storage Cabinets

- 4 Gastroscope
- 4 colonoscopes
- 3 Gastroscopes
- 9 nasoscopes

Sterile Flexible Endoscopes

- 5 urethra renosopes
- 5 cystoscopes
- 5 bronchoscopes
- 4 Lumened Nasoscope
Out of hours- reprocessing

Theatre.

- Preclean at point of use immediately after use-
- Manual cleaning carried and signed for by trained HCA in a designated room in SDW.
- Stored in contaminated trolley, designated room in SDW.
- ENT scopes used out of hours- returned to theatre for collection.

- The following morning, scope are returned to EDU and treated as contaminated scopes and undergo full reprocessing including manual wash.
- If scopes are returned and the manual cleaning has not been completed, scopes are reprocessed in accordance with manufacturers instruction for delayed reprocessing.
- Q-pulsed as a incident.
## Benefits of a centralised EDU-HIQA monitoring programme

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Thank you.