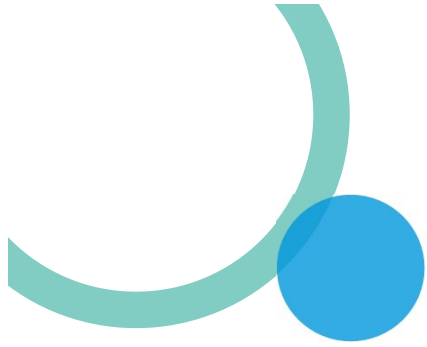


Decontamination of Semi-invasive Probes

A large, decorative graphic consisting of a thick teal curved line that starts from the left side of the slide and curves upwards and to the right. At the end of this line is a solid blue circle. The text 'Health Facilities Scotland' is centered within this circle.

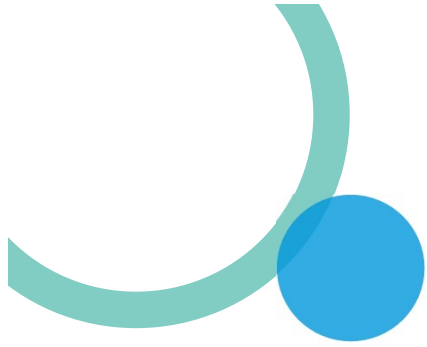
Health
Facilities
Scotland

Dr. Sulisti Holmes
Head of Decontamination & Incident
Reporting Investigation Centre



Agenda





United Kingdom

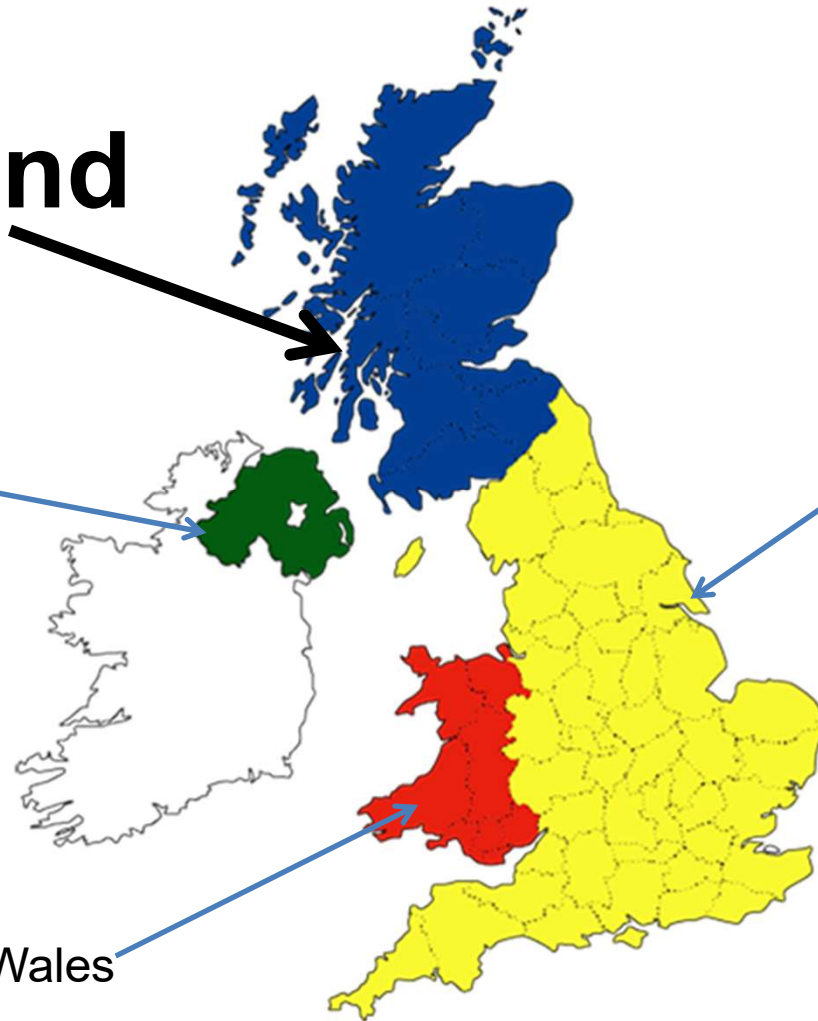


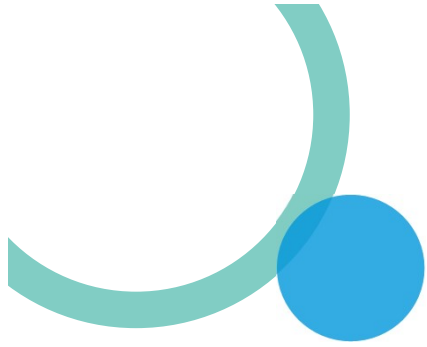
Scotland

Northern Ireland

England

Wales





Identifying problems

News

Alert

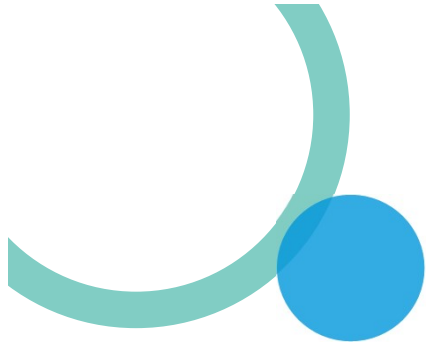
Literature

Design

Manufacturer Instructions

Survey

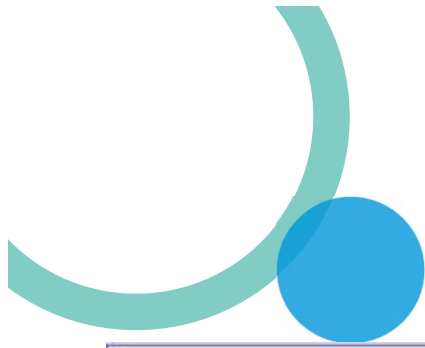
Level of Contaminants



News



Mother dies as 150 heart patients told they are at risk from Hepatitis B in NHS hospital outbreak



Medical Device Alert

Ref: MDA/2012/037 Issued: 28 June 2012 at 14:00

Device

Reusable transoesophageal echocardiography, transvaginal and transrectal ultrasound probes (transducers).

All models.

All manufacturers.



Literature

**Low level or no
disinfectant**

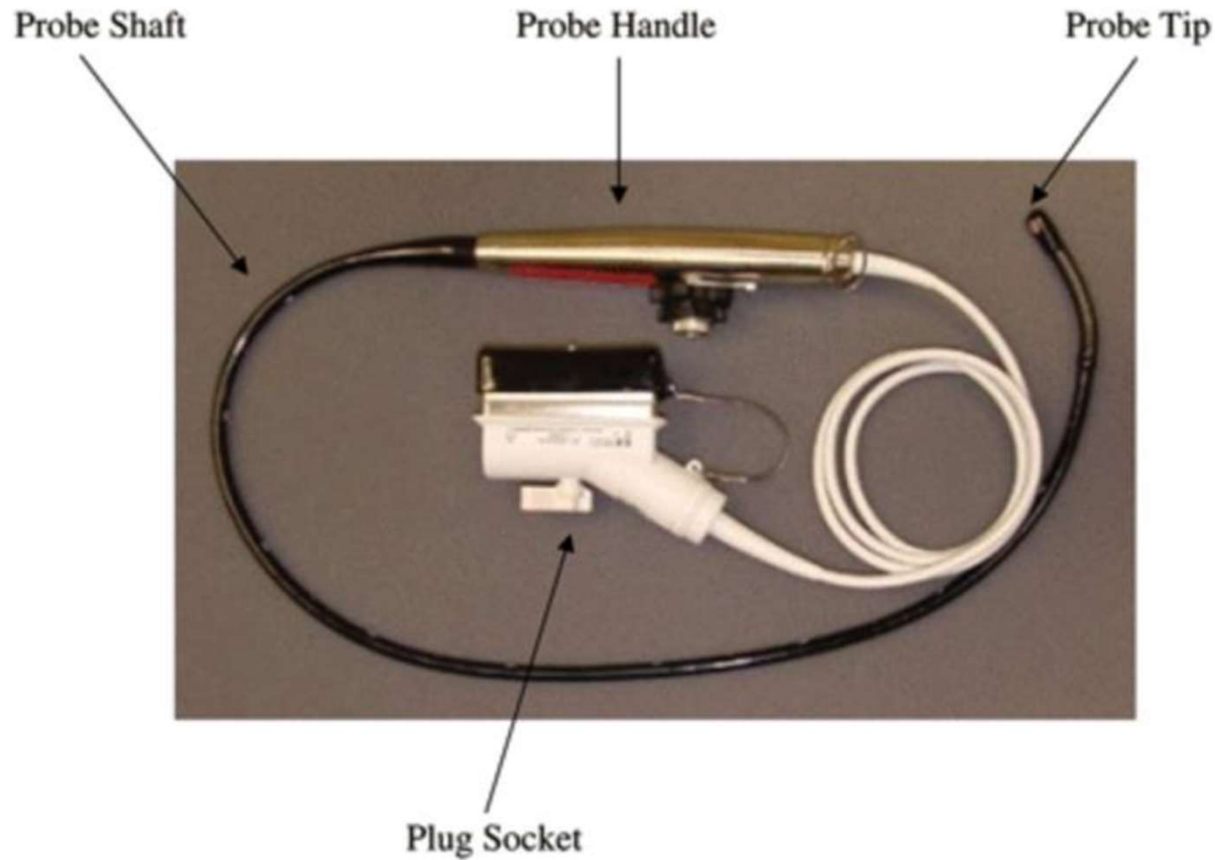
Probe defects

**Microbial
Contamination**

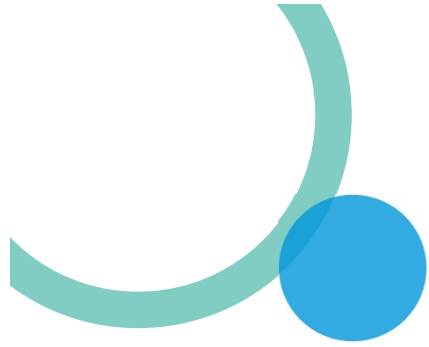
**The use of probe
sheath**

Probe handle

Design



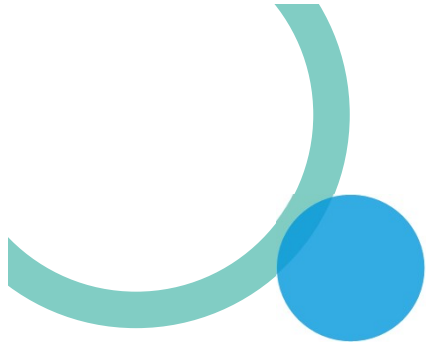
TOE (Transoesophageal
echocardiographic) probe



Design & Demands



Transvaginal ultrasound probes (TVUP)
Transrectal ultrasound probes (TRUP)

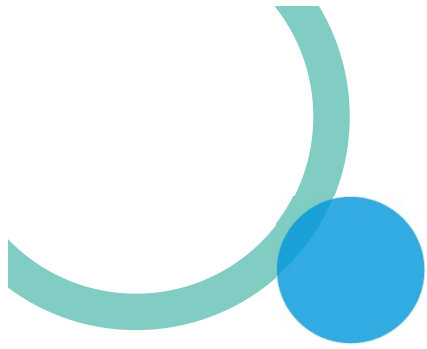


Probe Manufacturer Decontamination Instructions

Variation

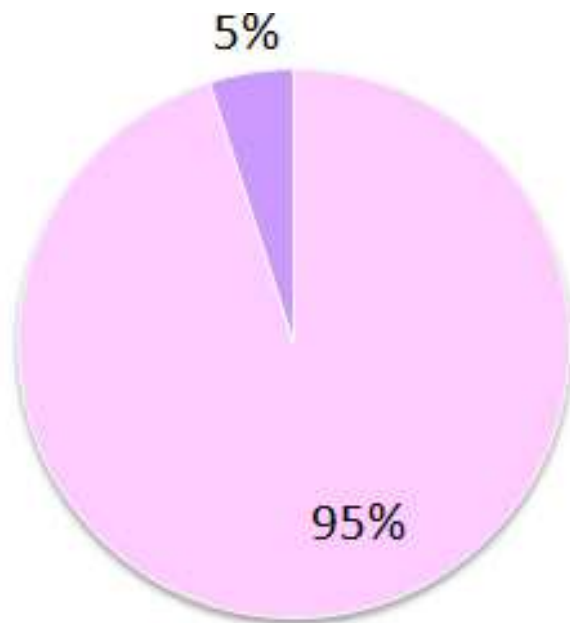
Inappropriate
detergents
and
disinfectants

Material
compatibility



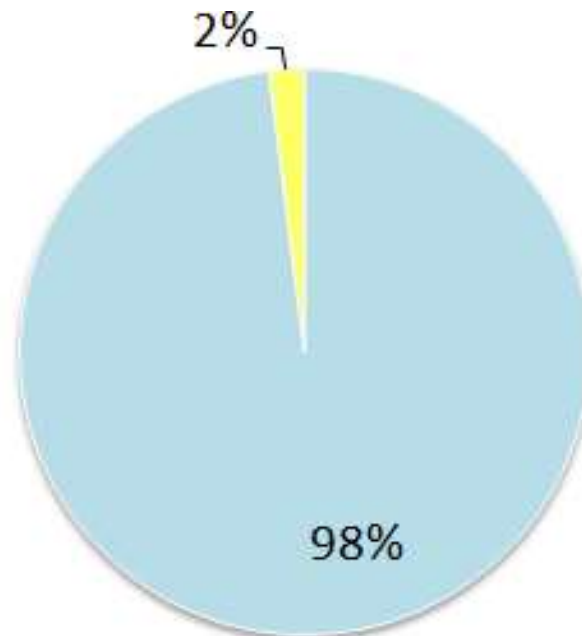
Survey Results

Awareness of the Alert



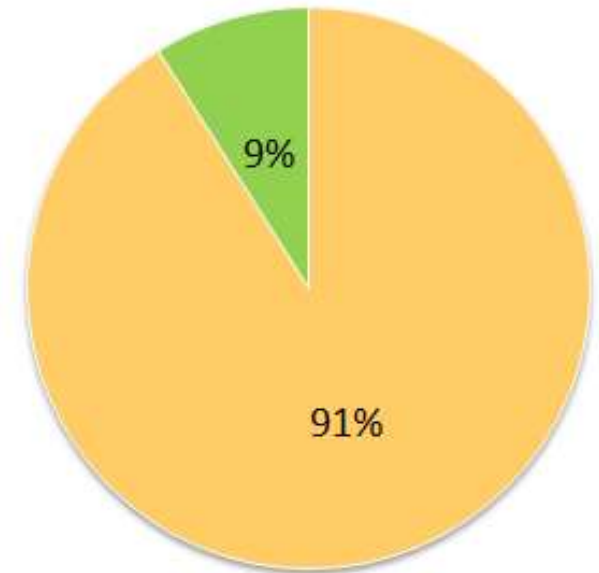
- Aware
- Not aware

Decontamination staff

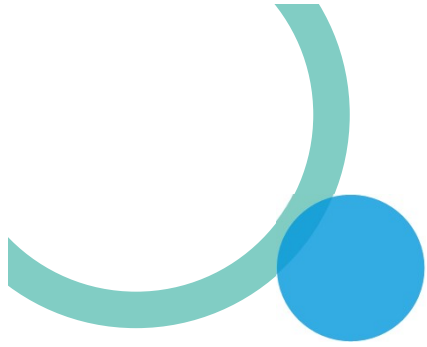


- Clinical staff
- Dedicated staff

Location of decontamination process



- Clinical area
- Dedicated room



Survey Results

- **60%** - **No** Standard Operating Procedures
- Most units **did not** follow manufacturer instructions
- **Variation** in decontamination practice
- **Inconsistent** use of sheath

Protein Test of Probe Surface

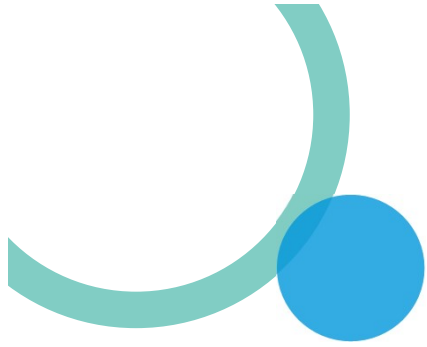
26%
Positive



- 38 probes, 5 departments, 3 hospitals

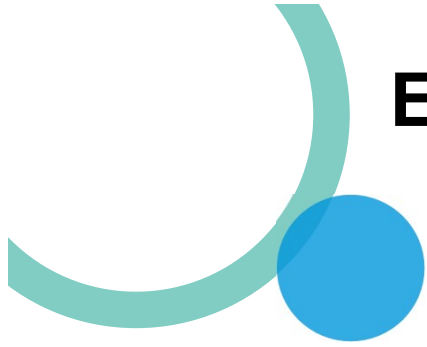
Finding Solutions





TOE Probes





Evaluation of Disinfection Systems for TRUS and TVUS



Project team

- Microbiologists
- Infection control team
- Occupational health
- Medical physicist
- Decontamination lead
- Sonographer
- Decontamination engineer

Evaluation Methodology

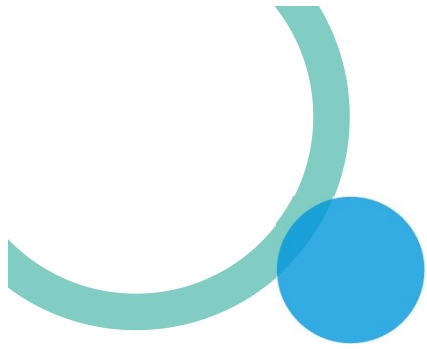
Set of criteria of assessment

Invitation to suppliers

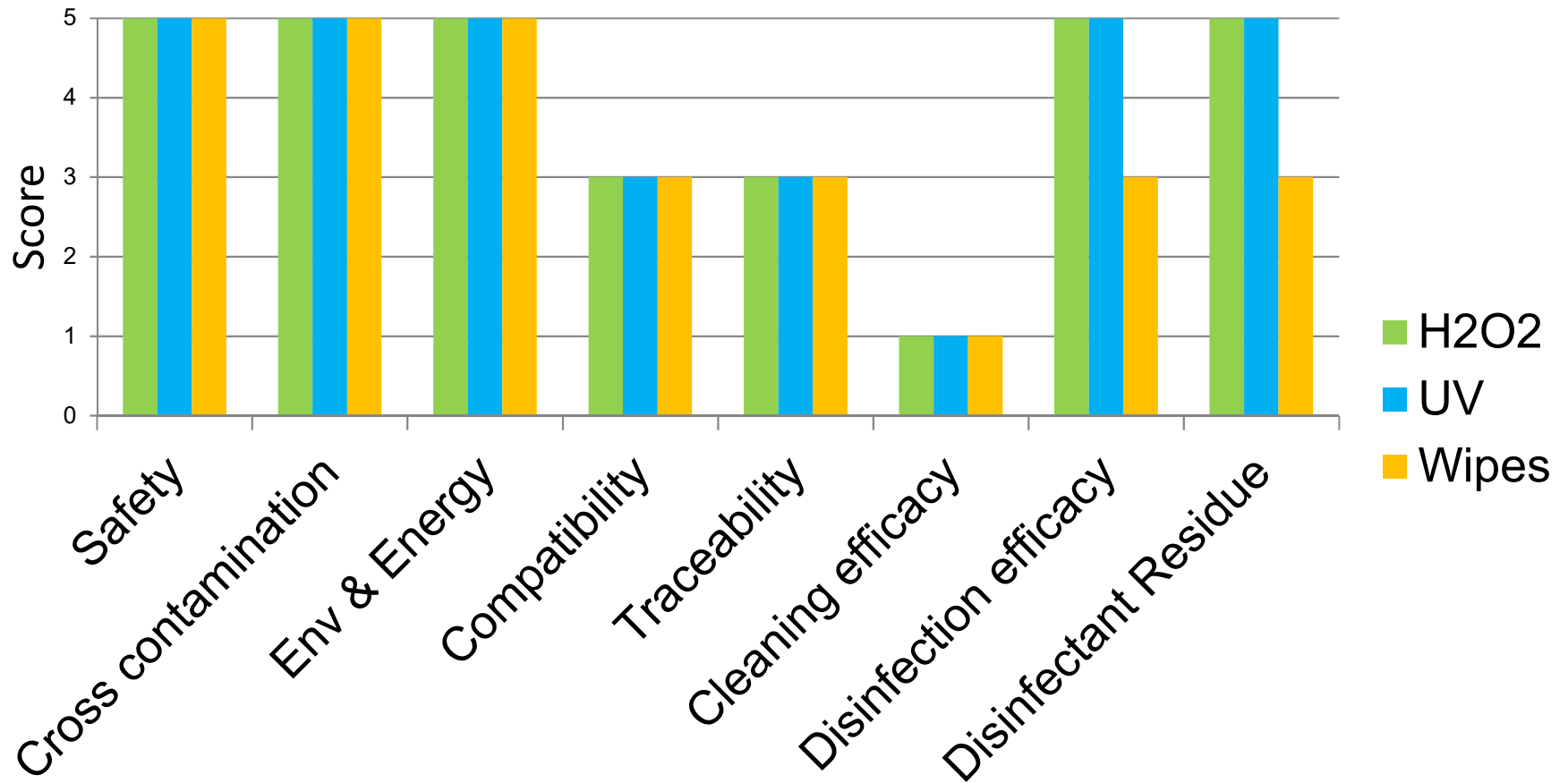
Review documentation

User trial



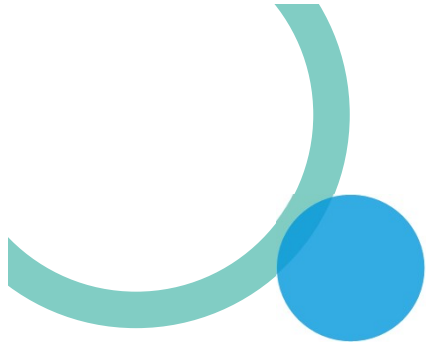


Assessment Results of Disinfection Systems



User Trial





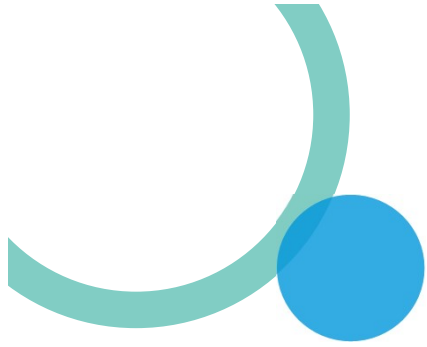
Hydrogen Peroxide System User Feedback

Training
Size
Safety
Ease of use
Reliability
Traceability manual



Adequacy of manual
Cycle time
Replacing the canister
Purging





Ultraviolet System User Feedback

Rapid cycle time
Easy to use

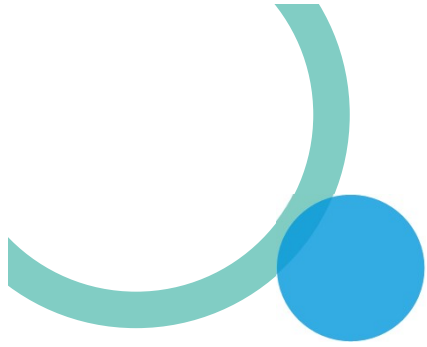


Bulky
Poor Power plug



Reliability and
confidence
Training
Label supply





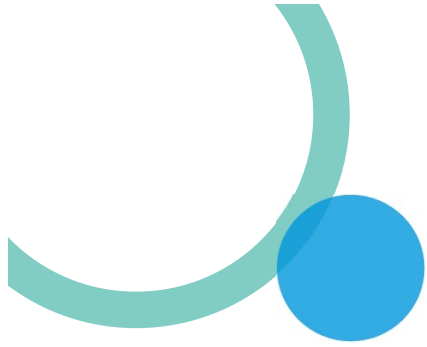
Three Wipe System User Feedback

Training
Speed of use
Small footprint
Manufacturer
instructions



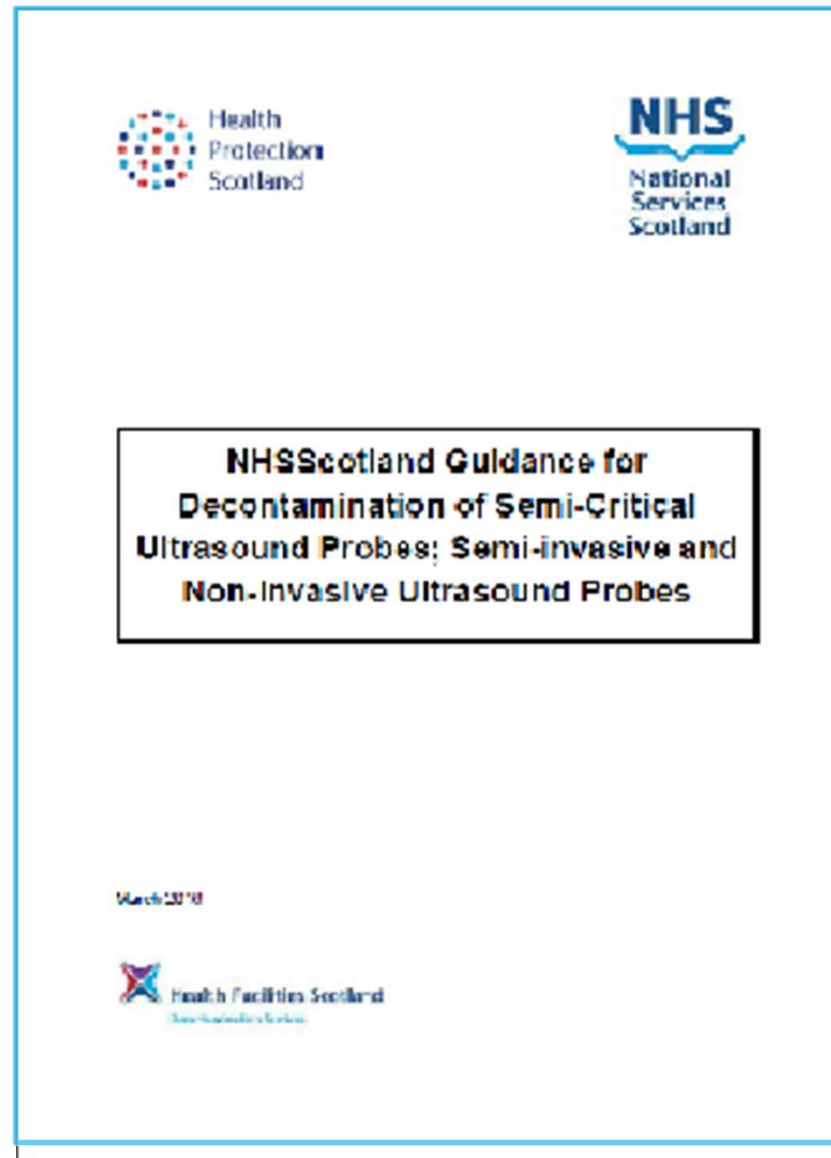
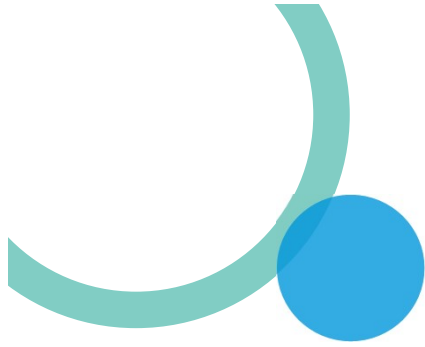
Traceability – not
linked to the hospital
IT system





Solutions

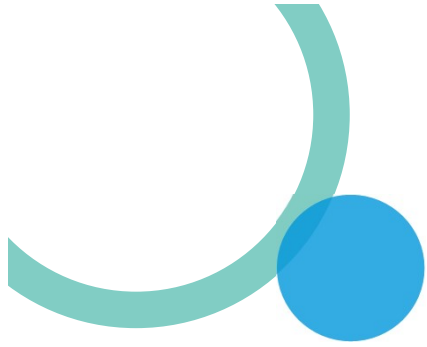
- Decontamination **after each use** despite the use of the sheath
- **TOE** probes – **compatible Endoscope Washer Disinfector** in dedicated Endoscope Decontamination Units
- **TRUS and TVUS - 3 different disinfection systems** (preferably validated), locally by trained staff. Cleaning is still manual, not ideal but an improvement



<http://www.hps.scot.nhs.uk/haic/decontamination/resourcedetail.aspx?id=1703>

Monitoring Outcomes





Thank you



[linkedin.com/in/sulisti-holmes-94202676](https://www.linkedin.com/in/sulisti-holmes-94202676)