

Things I Learnt About Designing An Endoscopy Unit

Susan Meredith

Southend University NHS Foundation
Trust Hospital



Introduction

- In the beginning – how did I get involved in this?
- June 2008 – London
- IDSc Conference 2008
- Tony Young – Endo-urologist



The Problem

- Off site contract to provide E.N.T. and Urology out patient appointments some twenty minutes drive away.
- Current U.K. Guidelines by B.S.G. – 3 hour window
- Use a sterile flexible endoscope.
- How?



Which Scopes

- All Olympus scopes on site – 4 miles
- Three partner meeting
- Urology & E.N.T.
- Scope efficiency?
- Scope damage by process?
- Safety of scopes during transfer?
- Working together



Testing for damage

- One scope was sent to a test facility by Steris
- Medical photography
- Visual inspection for change
- On site scopes tested weekly
- Using an eye piece



Methods

- The scope tested off site passed tests but was not being used on patients, was that a fair representation of use?
- Using the eye piece – deterioration in glue spotted, is that a fair test?
- Weekly tests became two weekly –
- Process in use almost 3 years



Issues

- Boxes supplied - restraints
- Conflicting information – number of wraps
- Different wrap materials –Tyvek
- Ensure that product NOT put into steam sterilizer in error
- Indicator tape



Resolution

- 1. Use pipe cleaner
- 2. Affect on scope
- 3. Design new improved container
- Follow machine hand book – double check everything
- Request different colour wrap
- Request designated indicator tape
- Restrict handling
- Train staff



Round 1

- Three scopes processed and issued ready for use
- Phone calls – all scopes were damaged and could not be used
- User – must be V-Pro?
- Damage caused by me
- Had failed to read 'scope' re-processing instructions



The evidence - oops



Round 2

- Three scopes repaired
- The cap had not been positioned as required ' if a vacuum is being drawn'
- Scopes processed as expected
- Users very happy
- Scopegaurd



Results

- Scopeguard – using this product reduces the number of scopes you need
- Patients can be scoped in OPD –
- Scopes can be taken off site for use
- Scopes are always available for use
- There is no 3 hour window
- Better standards



Lessons Learnt

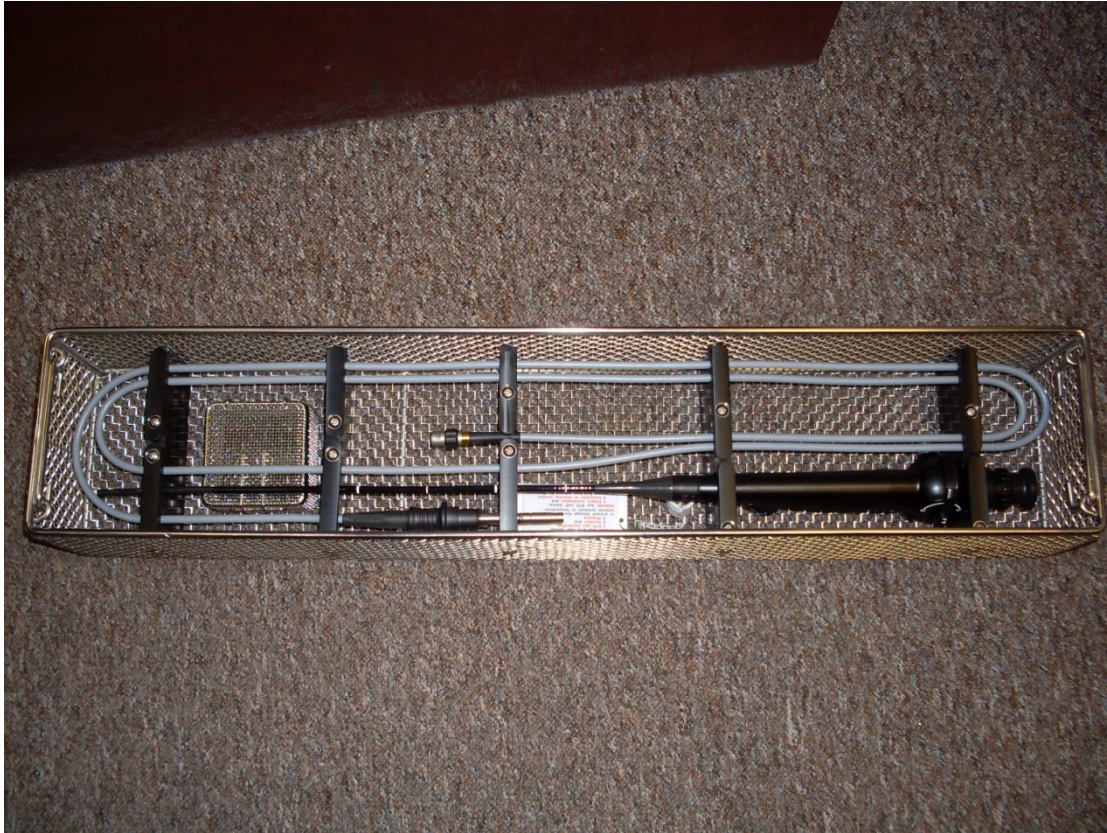
- Read the manufacturers instructions!
- Do not take things at face value – discolouration
- Talk to your suppliers & make sure they talk to each other
- Teach them why it matters
- If you don't ask – you don't get!
- Involve everyone



Basket 1



Basket 2



Future Developments

- Basket 3 being developed
- Centralised unit being established to process all flexible endoscopes used on site
- University Hospital of 900 beds
- Offering off site service
- Long term – hope for machine to do all scopes
- ?Goodbye to double standards



The New Unit

- A long and windy road – three different areas – three different designs
- Architect, mechanical engineer, facilities, manufacturers, business manager, Prof Young, my deputy, my boss & anyone else as required
- The engineering 'look'
- She can't take the load Captain
- Resignation



Honesty Required - Both

- Glastonbury
- Confident – we were 1st
- Endoscopy Unit –
Designed to HBN 13
- 6 A.E.R's
- 3 V-Pro
- Designer sinks ? Height adjustable
- What about machines?



Utilities – More Than I Wanted

- Hospital built in 3 era's
- New unit – based in 1970's
- Electricity
- Drains – the dreaded 'sump'
- Water Quality
- What lies beneath?



Assumptions by them -

- I would be thrilled by the doubts about drainage
- Excited by wonders of electricity
- Understand the utilities maps for the site (no sat nav)
- Floor loads, ceiling heights, water routes and so on



Perhaps meeting in the middle?

- Fire exit – the route
- The measurement index
- Take the cupboard out
- Do you have a dishwasher at home?
- Can I have a stop watch and a whistle?



Getting what we wanted

- Always space restrictions
- Explanations galore
- An even bigger project team
- Watch the expert..
- Train the specialists
- Sit back and wait



As of Today -

- Architect designed unit – by appointment to...?
- Not quite so 'whizzy'
- Follows work flow
- Wait for the documented science
- 2012



Next Steps

- Build and commission new unit
- Attain registration to the MDD
- Start service



Thank You To -

- Professor Young – totally committed to safe decontamination for his patients
- SGS – 18th May 2009 added V-Pro to our CE Registration
- The design team – we made it in the end
- Those who kept me semi sane
- And fingers crossed for stage two – the new build.....



Finally

- Anglia Ruskin University
- & Thank you for listening:
- susan.meredith@southend.nhs.uk

