

Turn right as you leave the lift on the fifth floor at Chelsea and Westminster Hospital and the sign that greets you says it all: Decontamination Services - Sterile Services Department / Endoscope Decontamination Unit.

Nurses no longer have to split their time between patient care and endoscope decontamination, and waiting times are not an issue in terms of endoscope decontamination. Previously widely dispersed and unreliable endoscope decontamination units in the trust have been replaced with a compliant, purpose-built facility.

Fully trained decontamination professionals now process the trust's 80 endoscopes in a unit that's received a five-year Joint Advisory Group (JAG) approval and is heading for full Medical Device Directive (MDD) accreditation too.

"We had nine endoscope reprocessors spread around the hospital and have experienced much downtime with the old machines. Only two were compliant with HTM 2030 and some decontamination areas did not have clean and dirty separation," Chelsea and Westminster Hospital NHS Foundation Trust's head of decontamination services, Olga Sleigh, told *Inside Hospitals*. "People were using the machines sporadically, with no standard procedures."

Assistant director of nursing and emergency preparedness, Melanie van Limborgh, who has previously managed the trust's theatres and sterile services, explained: "Olga was originally recruited with the objectives of taking the sterile services department to Medical Device Directive accreditation." With increasing challenges with endoscopy decontamination, Olga and Melanie worked on a paper to submit to the trust's board to create an endoscope decontamination unit for the

The way forward

Cutting waiting times and lowering risk, Chelsea and Westminster Hospital NHS Foundation Trust has adopted a radical new approach to endoscope decontamination



Fast action: each machine decontaminates two scopes in an efficient 20-minute cycle

whole hospital.

Melanie said: "The biggest issue was risk to patients and the cancellation of lists. There's always a risk when people are doing things differently. Nursing staff always have to prioritise patient care first and this causes a pressure when also having to allocate time for processing endoscopes."

The business plan outlined providing the service differently in a centralised unit by employing dedicated endoscope decontamination staff. Olga explained: "How can you manage the risk if you don't manage the staff? How can you manage a machine if you don't manage the staff?"

"In the business case we proved it could be efficient to have staff dedicated to decontamination and new machines."

Melanie added: "It's all about lowering risk. Like many

hospitals we had experienced issues that had challenged risk management and we were aware of the issues from the Hine Report, so when facing the targets needed to provide patient care and balancing services we had, we knew the provision of endoscope decontamination

had to be done differently.

"Three options were provided in the business case to the board: no change to service, purchase new machines or establish a separate dedicated facility with fully trained staff.

"The chief executive and the

bidder. We spoke separately to the staff undertaking decontamination responsibilities and wanted to know how the manufacturer supported users."

What met the matrix criteria the trust had set? Labcaire's radical new automated

endoscope reprocessor, the Autoscope ISIS.

The state-of-the-art decontamination facility at Chelsea and Westminster has an impressive array of four Autoscope ISIS machines. With their fast and efficient 20-minute cycle for one or two scopes the machines easily handle the trust's requirements with



Easy loading: the dynamic oscillating load carrier allows operators to connect scopes away from the machine and has a simple lock-and-load mechanism

board were fully supportive and we went out to the *European Journal* for the plant we required."

The project team included advisors from procurement, finance, IT, estates, infection control and the trust's authorised person (AP), Peter Hooper, while Melanie, as project manager, represented the director of nursing who was the project sponsor. Fiona Kennedy, a consultant who had worked with the sterile services team before, guided the team on quality management and compliance with the MDD.

"We laid down in the

spare capacity to cover servicing and to allow for future growth.

The design for machine was driven by the strict requirements of HTM 2030, BS EN ISO 15883-1: 2006 and HTM 01. The pass-through machines have an integrated RO water treatment plant, multi chemical compatibility, full independent monitoring system, user selectable alcohol flush, HEPA air purge, leak test at start and finish of each cycle and in-built printers for cycle/process validation, and a scope and operator recognition system

The team especially like the

Continued on the following page



Teamwork: Melanie van Limborgh, assistant director of nursing, emergency preparedness (left), and Olga Sleigh, decontamination services manager

Continued from the previous page

dynamic oscillating load carrier that allows operators to connect scopes away from the machine and has a simple lock-and-load mechanism.

The ISIS's compatibility with a wide range of detergents and disinfectants frees users from dependence on a particular mixture of washing chemicals and allows them to purchase more cost-effectively.

"We liked it. It was a new concept," said Olga. "It has a 20-minute cycle and an independent RO system. We'd had problems with total viable counts before so a reliable machine was essential to us and we're very happy with the new AERs.

"I like how you have the wheel to load the endoscope in front of you while you're loading the scope. You can work comfortably - not bending into the machine while making the connections. Labcaire also made a special scope carrier for ultrasound scopes," added Olga. "Water testing is on the door. Labcaire also offered flexibility - you can use other chemicals in the machines."

Also in the preparation room are two adjustable height sinks from Goldsworth Medical. Olga said: "They were specifically made for us and address Health and Safety issues. People appreciate them they're really helpful - preventing backaches. We're now replacing the sinks in sterile services too."

Melanie said: "We wanted as far as possible to have all the equipment from one manufacturer. We also liked Labcaire's endoscope storage cabinets."

Offering secure, 72-hour storage with full traceability, the storage cabinets provide HEPA filtered air over all surfaces and into all channels of flexible endoscopes. In addition, the channel air supply is molecularly dried ensuring endoscopes are not exposed to any potential contamination that could be associated with storage of instruments in conventional cabinets and any residual microbial contamination after reprocessing is removed. Staff can access the cabinets using an



operator tagging system, similar to that installed within the Labcaire AERs.

As Olga explained: "We have eight storage cabinets: four in theatres for emergency, two in endoscopy and one in the treatment centre."

There are also storage cabinets for the endoscope connectors. These hold attachments for all the trust's endoscopes enabling them to be quickly attached to the scope carrier.

Describing the track and trace system, Melanie said: "It's a new development that will be complementary across both products - the AERs and storage cabinets and the endoscope tracking system, and we are working on that system with a software provider at the moment and are hopeful of very exciting results to our requirements."

Melanie added: "Labcaire's engineers have been very helpful but Labcaire is only a part of the success. The staff and other equipment are equally important. No endoscopy staff transferred to decontamination - they're still all working in their departments but now fully devoted to patient care."

The new facility has a staff of six dedicated to endoscope decontamination - two team leaders and four technicians, plus a contracted porter who is responsible for transporting scopes to and from decontamination in colour coded packaging on dedicated trolleys.

Team leader Amos Dahn said: "We now provide an out-of-hours service. It provides risk reduction and ensures the same standard of service that's delivered during the day happens out-of-hours."

Staff training was intense, as Olga explained: "We were well

supported by Labcaire's trainer Sue Ott, who was a tremendous help. Labcaire also trained the estates department engineers. Due to some delays we were able to train staff on a daily basis for four weeks. Staff also undertook training on every scope model with Olympus Keymed."

Olga and the team leaders also went on a residential



Integrated: a track and trace system is being installed

training course at Eastwood Park and there's comprehensive NVQ training for all staff.

How has the change been received by endoscopy staff?

Senior endoscopy nurse Camilla Gosling said: "Having decontamination centralised makes nurses' jobs more clinical - instead of doing a job they're not trained for. And having scopes immediately to hand in the department speeds up the process. We can fill-up the storage cabinets the night before so patients don't need to wait. It makes us more efficient and means we can handle more patients."

Endoscopy assistant Colin Bee added: "We used to have to clean and decontaminate all the scopes and the old machines were always breaking down. It delayed the lists. Now decontamination is centralised there are no real problems and we can focus 100 per cent on patient care."

The new department opened at the end of September 2008.

Working to a phased programme it was planned to take over the decontamination of endoscopes from main theatres and intensive care unit in the first week. However, scopes from the treatment centre were added following yet another breakdown of one of the old machines. Next were paediatric theatres and so on, until all endoscope decontamination was the responsibility of the new service by the end of October.

After its success with the JAG audit, the department is now going forward for compliance with Medical Device Directive 93/42EEC and ISO13485.

"The name of the game is compliance," explained Peter Hooper, Chelsea and Westminster Hospital NHS Foundation Trust's AP. "The trust was committed to resolving problems with endoscope disinfection and keen to ensure the equipment was compliant to HTM 2030. They have produced a department that is well constructed, well managed and well equipped.

"It's an example to anybody thinking of doing the same. I think decontamination of endoscopes is a full time job and needs to be managed as such. The trust should be congratulated."

There are compliments from Labcaire too. The company's business development manager, Steve Cole, said: "Chelsea and Westminster have developed an innovative approach to endoscope reprocessing that is likely to be widely adopted."

Indeed, keen to learn from the experience of Chelsea and Westminster, a number of

Continued on the following page



Praise: senior nurse endoscopy, Camilla Gosling, says the service gives more time for patient care and has helped cut waiting times



More time for patient care: Lillian Anya, staff nurse endoscopy and Colin Bee, endoscopy assistant

Continued from the previous page

hospital teams have already visited the new facility. Melanie said: "People should not underestimate the cost - it's more than just the cost of the machines. You need to understand all the 'spend' in the various departments and bringing it all together in a business case brings out costs that were previously unseen.

"We had to buy a number of new scopes too. We're now doing decontamination for which there was never a full budget for before and doing it to a level that had not been done before.

"There's also the amount of time that a project like this takes and the workload it creates. Olga and I worked on this project nearly full time for about six-months, and that was only

the commissioning time.

"An important message from another trust, where we saw the Labcaire installation, was not to decommission the old machines until the new equipment is proven, staff were aware of completely how to use them and that all was running smoothly.

"Now everything is done under decontamination procedures. We've given the time back to nurses and the decontamination to people who specialise in that, and we've met JAG and Healthcare Commission requirements by doing it this way."

Olga added: "There were regular user group meetings. We wanted all users to be part of the programme - we work as a team, we all have a responsibility. This is very important.

"Accreditation is a good way of looking at what you do. Our main role here is to reduce infections. We used to have problems everyday on lists, in one area or another. There's never a problem now and we're now introducing a Saturday list too."

What does Olga say to hospital teams that have visited the new facility and asked if she'd buy the same equipment again? "The answer is yes. The department follows the NHS and nursing objectives of efficiency and productivity at no risk - plus a quality service."

Melanie added: "If we can see standards coming up and changing we want to be ahead, and for us this is the way forward.

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For more information on Labcaire call 01275 793000 or visit www.labcaire.co.uk



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