A few scope details still need attention

Freestanding centers are complying with most major recommendations for reprocessing gastrointestinal (GI) endoscopes. But a few areas still need attention, a new report indicates.

The report, by the AAAHC Institute, a subsidiary of the Accreditation Association for Ambulatory Health Care, compiles quality and efficiency data on colonoscopy from 69 ambulatory facilities. Most (78%) are single specialty.

GI endoscopy is one of the highest volume ambulatory procedures, with 3.7 million performed annually.

Endoscope reprocessing is challenging because of the devices’ complexity and their high bioburden. Though the incidence of endoscope-related infections reportedly is low, estimated at 1 in 1.8 million procedures, more infections have been associated with contaminated endoscopes than with any other device, according to the Guideline for Disinfection and Sterilization in Healthcare Facilities.

Failure to follow recommended cleaning and disinfection processes is a major reason for infection transmission. Cleaning is a particularly important step, in itself reducing microbial contamination by 4 to 8 logs, studies have shown.

High-level disinfection practices are an area that is checked during Centers for Medicare and Medicaid Services surveys of ambulatory surgery center infection control practices.

Most steps are followed

Of the 64 participants in the AAAHC Institute study who responded to the reprocessing questions, 95% complied with all of these recommended steps prior to high-level disinfection or sterilization:

- leak testing
- cleaning with an enzymatic cleaner compatible with the scope
- flushing and brushing all channels and ports
- cleaning all external surfaces and accessories and cleaning residue and debris until no more appears on the cleaning brushes.

All of the facilities also provided their personnel with device-specific reprocessing instructions as recommended. And 60 of the 64 tested their personnel’s reprocessing competency when hired and annually thereafter, also as recommended.
Achieving shorter colonoscopy procedure times

Procedure times for routine colonoscopy varied widely in the AAAHC Institute report (chart). These are some strategies used by facilities with the shortest times for the preprocedure and discharge phases of the procedure.

Preprocedure time

In the facilities with the shortest times:

- The staff works together to turn rooms around for the next patient.
- The front desk staff communicates with endoscopy personnel with walkie talkies to let them know that the chart and patient are ready. A “traffic director” is assigned each day to manage patient flow.
- A “calming team” gets the patient changed, documents signed, IV started, and procedure explained.
- Nurses give patients courtesy calls prior to their procedures to remind them of arrival times, review history, and allow patients to express any concerns.
- A computerized charting system follows patients from their primary physician visit to discharge. Nurses and physicians can easily access patient information, make appropriate changes, and document the procedure.
- Patients’ consents and concerns are reviewed and signed at the preprocedure visit.
- Physicians are scheduled in blocks of time so there are minimal delays between procedures.

At Pioneer Valley Surgicenter in Springfield, Massachusetts, which performs about 7,000 colonoscopies annually, the preprocedure time is in the range of about 30 minutes.

Staff are assigned to the same area each day, which helps streamline the process, says Deborah Fuentes, RN, RT(R), clinical coordinator. For example, a nurse is dedicated to starting IVs, so nurses assigned to procedure rooms can stay in the rooms.

To minimize downtime between procedures, physicians move between 2 procedure rooms. Each physician has 2 nurses; one monitors the patient, and the second is available to assist as needed. The second nurse sets up the physician’s other room but is always available. That way, the physician can go to the next room immediately after the previous procedure ends.

Discharge phase

The facility with the shortest average time for this phase, 20 minutes, uses this approach:

- The medicating nurse gives an initial IV sedation dose and titrates the dose for patient comfort and moderate sedation until the cecum is visualized. No further sedation is given routinely, unless ordered by the physician.
- Immediately following the procedure, the patient is taken to the recovery area by the medicating nurse and postop nurse. The postop nurse uses verbal stimuli continuously to wake the patient.
- The family is brought to the bedside to assist.
- The postop nurse-to-patient ratio is 1:1, allowing continuous bedside assistance with water, vital signs, etc.
- If no spontaneous flatus occurs in the first 10 minutes or so, or the patient has discomfort or cramping, the postop nurse may place a rectal tube to assist with the removal of air.
Testing of liquids lags

But compliance was lower in one area—testing of liquids used for high-level disinfection or sterilization. Fewer than 85% were following all of the steps recommended for testing:

- test at least every day of use
- test prior to each cycle/use
- use the manufacturer’s recommended chemical indicator
- document results of testing
- discard the solution if the chemical indicator shows the concentration is less than the manufacturer’s minimum effective concentration (MEC)
- discard the solution if it is beyond the manufacturer’s recommended shelf- or use-life.

A few—4 of 18—that used reusable biopsy forceps or other cutting instruments that break the mucosal barrier weren’t following recommendations to mechanically clean and sterilize these items.

Dedicated technicians

One way to ensure compliance with reprocessing steps is to have dedicated technicians for this purpose, though this wasn’t an area addressed in the study.

A study participant, Pioneer Valley Surgicenter in Springfield, Massachusetts, a multispecialty facility that performs about 6,000 colonoscopies annually, has 3 primary scope technicians. One technician is dedicated to scope reprocessing for each physician performing endoscopies on a given day.

Having dedicated techs ensures they can maintain competency and stay up to date on scope-specific instructions, says Deborah Fuentes, RN, RT(R), clinical coordinator.

The techs’ competency is evaluated at least annually, and company representatives offer regular in-services on specific scope models.

Similarly, the 4 GI endoscopy centers of Digestive Endoscopy Centers LLC, in the Dayton, Ohio, area assign 1 technician to reprocessing per procedure room. An additional technician provides backup and is immediately available to assist in reprocessing or procedures if necessary.

Boosting quality for reprocessing

Facilities can use the study results to check on their own reprocessing procedures, the AAAHC Institute suggests.

For example, a facility could develop a check-off sheet with the 25 to 35 reprocessing steps. Then personnel could use the sheet to document steps they follow for a period of 1 week to 1 month. To reduce the chance of bias, every other case could be documented, rather than just the first or last case of the day.

The goal is 100% compliance. If compliance with all the steps is found in 95% or more cases, the 100% goal is probably attainable within 6 months to a year, the institute advises.

If compliance lags by 5% or more, an intervention, such as an orientation for new instrument techs and managers, may help. Compliance would then be remeasured after 3 to 6 months. If there is no difference, another intervention can be tried, such as in-service education for all instrument techs. An additional step might be to have a checklist of infection control and reprocessing steps for technicians to use. Each time a new intervention is introduced, compliance should be monitored to see if the intervention aids in reaching the goal, the institute suggests.
In the study, each facility submitted data for 15 to 25 cases over about 6 months from January through June 2010. In all, 69% of the participating facilities were independent, and 31% were managed by a hospital, corporation, or other entity.

For more information on this study and others, go to www.aaahc.org

References


