

New SGNA Standards Call for Expanded Infection Prevention Efforts in GI Endoscopy

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Infection prevention in the GI endoscopy setting took an important step forward with the recently released “Standard of Infection Prevention in the Gastroenterology Setting” (SGNA, 2015). In issuing its new guidelines, the SGNA (Society for Gastroenterology Nurses and Associates, Inc.) acknowledges that the implementation of comprehensive infection prevention processes across the continuum of care is critical to ensuring the ongoing safety of patients and healthcare personnel in the GI and endoscopy department. This guidance, which reinforces existing recommendations, including those from the ASGE (ASGE 2014), is particularly applicable in addressing the foreseeable risks inherent to a setting where contact with bacteria, bloodborne pathogens, and secretions from the GI tract is

“The entire environment must be considered when developing infection control processes”

almost a certainty given the sheer nature of the physiology and procedures commonly performed. This is especially applicable in the endoscopy setting, as GI procedures and surgeries are among the CDC’s known risk factors for acquiring or transmitting enteric infections like *C. difficile* (CDC, 2003; CDC, 2006; CDC, 2007; CDC, 2012; APIC, 2008).

Recent medical literature and news reports have increased awareness on the potentially infectious GI bacteria and pathogens that can be encountered during even routine endoscopic GI procedures. Given the established fact many of the most prevalent healthcare-associated infections are caused by enteric bacteria (CDC, 2012), it is both logical and intuitive to ensure that infection control processes implemented during GI procedures adequately recognize these known risks and integrate the

*“GI staff may encounter patients with *clostridium difficile*, tuberculosis, Vancomycin-Resistant *enterococci* (VRE), carbapenem-resistant *enterobacteriaceae* (CRE), and other infections”*

-SGNA 2015

necessary measures to prevent their spread. In the simplest of terms, infection-causing bacteria like CRE (carbapenem-resistant *enterobacteriaceae*), *C. difficile*, and VRE (vancomycin-resistant *enterococcus*) are known to ultimately originate from the GI tract, and are highly transmissible within the healthcare

environment. Unless adequately contained at their origin, these source pathogens can quickly gain entry and extensively spread throughout a hospital environment or patient care area.

These newly established SGNA Standards recognize that comprehensive infection prevention encompasses more than just the reprocessing of the flexible endoscopes. This direction echoes the recently updated ASGE Guidelines that call for establishment (and documentation) of comprehensive infection control and prevention practices across the continuum of care in gastroenterology and GI endoscopy, including the pre-procedure, intra-procedure, and post-procedure phases (ASGE, 2014).

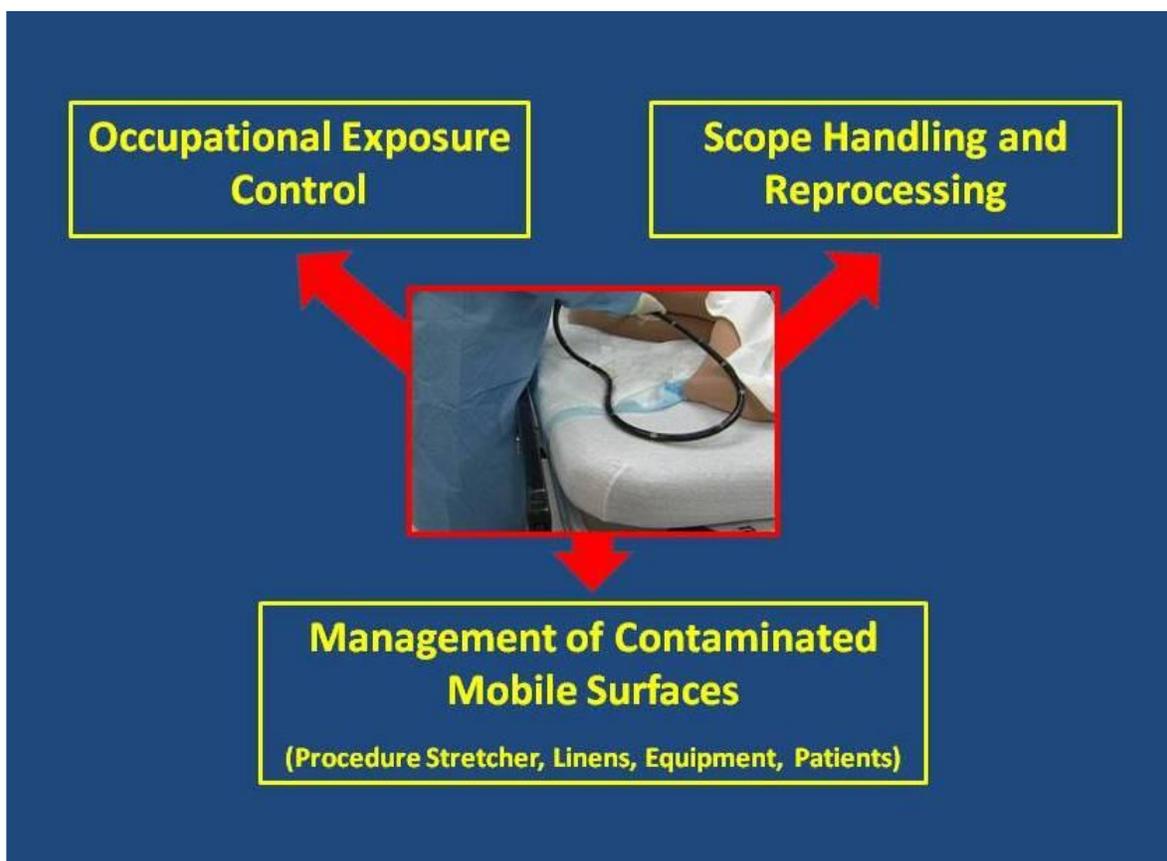
The SGNA Standards state that “the entire environment must be considered when developing infection prevention processes (SGNA, 2015; Day and Kelsey, 2013).” Based on current guidelines from the ASGE, APIC, CDC, OSHA and SGNA, in addition to having established standards in place for the reprocessing and validation of the techniques used to clean and disinfect the endoscopes themselves, facilities should carefully consider and include the following in their documented policies and procedures:

GI Tract Pathogens



- *Clostridium difficile*
- *E. coli*
- Enterococci (VRE)
- Enterobacteriaceae (CRE)
- Norovirus
- Bloodborne Pathogens
- Staphylococci (MRSA)

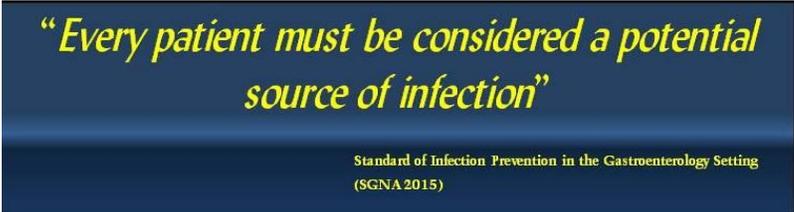
Eliminating Cross-Transmission Risks in GI Endoscopy



When establishing infection prevention processes and procedures in GI endoscopy, it is critical to carefully evaluate and include the primary risks for introduction or cross-transmission of potentially infectious bacteria and pathogens into the care environment. These include but are not limited to the following:

1. **Reprocessing of Scopes and Equipment:** This has rightfully received the most attention in terms of infection prevention and control as the thorough cleaning, disinfection, and validation of techniques used is critical to maintaining patient safety. Guidelines from the SGNA, ASGE, AORN, as well as manufacturers of the flexible endoscopes and AER's (Automated Endoscope Reprocessors) should be closely followed to establish and document a facility's process to ensure ongoing patient safety.

2. **Exposure Risks to Procedure Room Staff:** Staff and personnel will predictably come in contact with GI secretions and fluids generated in the procedure room, which can contain an array of bloodborne pathogens (Small, 2010), potentially infectious bacteria, and even viruses known to originate from the GI tract. The consistent use of appropriate PPE is critical to protecting procedure room personnel from exposure during procedures (Peters et al, 2011). Once used, PPE should be carefully removed and disposed of, and thorough hand hygiene performed prior to exiting the procedure room or receiving the next patient. Historically guided by OSHA principles, the use of PPE should also be viewed as a simple and efficient means of shielding against any bacteria, pathogens, or OPIM (other potentially infectious materials) to prevent these from carried into the next procedure, exposed to other areas outside the procedure room, or even taken home on the clothing or skin surfaces of procedure room personnel.



“Every patient must be considered a potential source of infection”

Standard of Infection Prevention in the Gastroenterology Setting
(SGNA 2015)

3. **Exposure and Cross-Transmission Risks from Stretchers and Equipment:** Adequate attention should be placed on the very surfaces on and near where the procedure was just performed. This would include the procedure gurney or stretcher (which generally moves with the patient from admission through discharge), linens, equipment and monitors, and even the skin surfaces of the patients themselves. A comprehensive infection control process should outline how this predictable risk is addressed, whether through the implementation of protective barrier (as is recommended by the CDC and APIC for such high-touch, predictably contaminated surfaces)(CDC 2003; Carrico et al, 2013), or whether these will be thoroughly cleaned, disinfected, and linens replaced prior to moving the patient and stretcher to recovery. Once introduced into the hospital environment, GI pathogens have been shown to remain viable for up to 7 months or more on environmental surfaces (Kramer et al, 2006, Muto et al, 2003). The integration of such preventative measures is an integral component of

any comprehensive infection prevention protocol to interrupt the chain of cross transmission that would begin as soon as the patient is moved from the active procedure room to recovery or PACU.

Exposure Control Plan

GI endoscopy departments and facilities should have a written exposure control plan outlining how employees are protected from exposure to bloodborne or other potentially infectious materials in performing an employee's duties. Such occupational exposure includes "reasonably anticipated skin, eye, mucous membrane, or parenteral contact (OSHA 2012)."

In an endoscopy setting, procedure room staff are predictably at risk for exposure via contact transmission from equipment and supplies implemented during the procedure, splash, spray, or aerosolized materials during suction and irrigation, and environmental surfaces that have been exposed or otherwise contacted by gloved hands, equipment or supplies. PPE should be readily available and worn at all times within the procedure room and disposed of appropriately prior to exiting.

**"Standard Precautions
assume all body fluids are
potentially infectious"**

Additionally, unless adequate preventative measures have been implemented to confine these risks within the procedure room, these mobile environmental surfaces (i.e. procedure gurney, linens, and equipment) should continue to

be classified as contaminated when received by recovery area personnel and adequate PPE worn to prevent the ongoing cross-transmission risks to the hands and clothing of staff, patients and family members in these areas.

Ongoing Education and Staff Competency

The SGNA Standards reaffirm the importance of ongoing training and staff competency in infection prevention and control efforts. Infection prevention is the responsibility of every member of a GI endoscopy team, and is a required component of establishing the culture of safety needed to ensure quality of care and the safety of patients and endoscopy personnel alike. Documentation of

Endoscopy Personnel may facilitate transmission of infection from patient to patient if they fail to adhere to general infection control principles

ASGE 2014

such training and annual competency assessment must be available for review by regulatory agencies, state surveyors, and Joint Commission accreditation (TJC, 2010) .

Summary

Endoscopic GI procedures are an incredibly valuable diagnostic and screening tool, with benefits ranging from their recommended performance for cancer screening to the identification and treatment of a wide range of GI related disorders, diseases and infections. As these have evolved in

Infection Control gaps along the continuum of care in GI endoscopy can impact patient safety

ASGE, 2015

practice, they have historically been regarded as “dirty procedures” that did not require any specific attention other than that placed on the reprocessing of the

flexible endoscopes. However, recent events have placed a much needed awareness and emphasis on the infection control and prevention processes in place for these procedures, as it is now well established that infectious GI bacteria and bloodborne pathogens are encountered and generated during their performance. In a healthcare environment plagued by infections caused by increasingly resistant GI-borne bacteria including *C. difficile*, CRE, VRE, and many others, facilities are compelled to carefully consider how these are managed in the very departments or care areas where they are most predictably encountered. Unless adequately addressed with a comprehensive infection prevention process in place that span the continuum of care in GI endoscopy, these infection risks compromise the safety of patients, staff, and can readily be transmitted throughout a healthcare facility.

About the Author:

Tom Szymczak is a licensed and practicing healthcare professional with more than 20 years of experience in safety and process analysis, work injury prevention, workplace safety, and healthcare education. He currently serves as a trainer, safety consultant, author, educator and speaker specializing in infection prevention in GI endoscopy settings, biomechanical safety, work flow analysis, exposure reduction, and workplace safety. Tom is on the executive board with Vortek Surgical, an industry leader in infection prevention and patient safety in GI endoscopy. For more information, please contact Tom directly at tom@vorteksurgical.com.

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Other Suggested Resources:

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