# Guideline for Performance of Flexible Sigmoidoscopy by Registered Nurses for the Purpose of Colorectal Cancer Screening


Society of Gastroenterology Nurses and Associates, Inc.

*Acknowledgements*
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## Preface

Colorectal cancer is the most commonly diagnosed cancer and the third leading cause of cancer death in both men and women in the United States (American Cancer Society [ACS], n.d.). It is believed that early detection and removal of adenomatous polyps can prevent most colorectal cancers (Gruber, 1996). Current research and practice publications illustrate the safety, accuracy, and support for the performance of routine screening flexible sigmoidoscopy by registered nurses (American Society for Gastrointestinal Endoscopy [ASGE], 1999a; Ho, Jacobs, Sandha, Noorani, & Skidmore, 2006; Levin et al., 2005; Maruthachalam, Stoker, Nicholson, & Horgan, 2006; Schoenfeld, Piorkowski, Allaire, Ernst, & Holmes, 1999; Wallace et al., 1999)

Although studies found that screening flexible sigmoidoscopy in combination with annual fecal occult blood test (FOBT) can reduce colorectal cancer mortality, studies also show that colonoscopy is the most sensitive screening test for the detection of colorectal cancer or adenomatous polyps (ACS, n.d.; Kahi & Rex, 2005; Levin et al., 2005).

The Society of Gastroenterology Nurses and Associates, Inc. (SGNA) supports the position that registered nurses educated and experienced in gastroenterology nursing and trained in techniques of flexible sigmoidoscopy may assume this responsibility for the purpose of colorectal cancer screening of average risk individuals.

This guideline exists to define the qualifications and competencies necessary for successful performance of screening flexible sigmoidoscopy according to the standards set forth by SGNA.

In addition to following these guidelines for staff qualifications, SGNA also recommends that each practice setting maintain and implement a quality monitoring plan (ASGE, 1999a; Eisemon, Stucky-Marshall, & Talamonti, 2001; Eisen et al., 2002; Levin et al., 2005).

## Definition of Terms

For the purpose of this document, SGNA has adopted the following definitions:

**Flexible sigmoidoscopy** refers to the examination of the mucosal lining of the rectum, sigmoid colon and may include examination of a portion of the descending colon (American Medical Association [AMA], 2002).

**Average risk** refers to the level of risk for colorectal cancer among asymptomatic persons age 50 or older with no other prior family or personal history of adenomatous polyps, colorectal cancers, or other secreting organ cancers (Kahi & Rex, 2005; Winawer et al., 2003).

**High risk** refers to the level of risk for colorectal cancer among persons with a history of adenomatous polyps, colorectal cancer or inflammatory bowel disease, close relative(s) who have had colorectal cancer or an adenomatous polyp, or a family history of familial adenomatous polyposis or hereditary non-polyposis

colorectal cancer (ACS, n.d.; Kahi & Rex, 2005; Winawer et al., 2003). Colonoscopy is the only recommended screening method for these individuals in these high risk groups (ACS, n.d.).

**Indications for the performance of Screening Flexible Sigmoidoscopy performed by a registered nurse**

The American Cancer Society (n.d.) recommends sigmoidoscopy every 5 years beginning at age 50. Along with an annual FOBT, sigmoidoscopy is an acceptable option for colorectal cancer screening. Screening flexible sigmoidoscopy by registered nurses is appropriate for adults defined as average risk (Schoenfeld et al., 1999; Smith, 1999).

**Contraindications for the performance of Screening Flexible Sigmoidoscopy by the registered nurse**

Individuals should be interviewed and screened carefully prior to the procedure to see if they demonstrate the following contraindications for the performance of screening flexible sigmoidoscopy (Smith, 1999; Wallace et al., 1999):

1. An indication for colonoscopy
2. Inflammatory bowel disease (IBD)
3. Recent cardiac or pulmonary event
4. Acute illness
5. Symptoms of colorectal disease
6. Previous colorectal cancer diagnosis
7. Hereditary syndromes (Familial Adenomatous Polyposis [FAP], Hereditary Non Polyposis Colorectal Cancer [HNPCC]) (Winawer et al., 2003)

Individuals with signs or symptoms that suggest the presence of colorectal cancer or polyps fall out side the domain of screening and should be offered an appropriate diagnostic test (Winawer et al., 2003).

**General RN Qualifications**

The competent performance of flexible sigmoidoscopy requires both cognitive and technical skills (ASGE, 1999a; ASGE, 1999b; Eisemon et al., 2001; Levin et al., 2005). Knowledge of the anatomy, physiology, and pathology of the colon and abdomen and indications/contraindications to the procedure are essential. Experience and good hand-eye coordination are also required to perform a safe and thorough examination (Levin et al., 2005).

SGNA believes that nurse endoscopists can best document their expertise in the field through board certification and therefore recommends that registered nurses performing endoscopy hold current certification from the American Board of Certification for Gastroenterology Nurses (ABCGN).

Medical supervision is determined by institutional policy. SGNA recommends that a minimum of 50 flexible sigmoidoscopies be performed under the supervision of a skilled physician endoscopist before a registered nurse performs this procedure independently (Eisemon et al., 2001; Levin et al., 2005; Schoenfeld et al., 1999). Registered Nurses performing Flexible Sigmoidoscopy should

practice within the limits of state licensure as well as institutional policy (ASGE, 1999a; Schoenfeld et al., 1999; Sprout, 2000).

**Specific RN Competencies**

In addition to the general qualifications, the following specific competencies are required of registered nurses who perform flexible sigmoidoscopy in any practice setting:

**A. Phase I - Cognitive Skills**

(ASGE, 1999b; Eisemon et al., 2001; Levin et al., 2005)

1. Describe the indications/contraindications for screening flexible sigmoidoscopy, including the definition of average and high-risk.
2. Distinguish normal versus abnormal anatomy, physiology, and pathophysiology of the abdomen, anus, rectum, sigmoid and descending colon.
3. Identify options for patient bowel preparation.
4. Discuss risks, benefits, and alternatives to flexible sigmoidoscopy with patient in order to obtain informed consent,
5. Provides patient education, which includes
    a. the purpose of procedure,
    b. positioning and relaxation methods, and
    c. sensations the patient is likely to experience.
6. Identify indications for antibiotic prophylaxis based on current recommendations.
7. Demonstrate knowledge of and ensure compliance with SGNA guidelines for cleaning, disinfecting, and storing flexible sigmoidoscope and accessories.
8. Identify and initiate nursing interventions for adverse reactions, such as pain, perforation, bleeding, infection, and vasovagal response/abdominal distention.
9. Document per institutional policy, including informed consent, prep quality, findings and outcomes, actions and interventions, patient response, and patient education.
10. Communicate outcomes or recommendations for follow-up care to the patient's primary healthcare provider.
11. Communicate findings and recommendations to the patient as appropriate.
12. Assume responsibilities related to abnormal findings.
    a. Notify supervising physician.
    b. Document per institutional policy.
    c. After consultation with the supervising physician, refer patients requiring further work-up to the appropriate provider (primary care provider, gastroenterologist, or surgeon) for diagnostic/therapeutic studies, including follow-up of biopsy findings.

**B. Phase II - Technical Skills** (ASGE, 1999b; Eisemon et al., 2001; Levin et al., 2005)

1. Demonstrate the proper techniques of flexible sigmoidoscopy, including patient positioning and digital rectal examination.
2. Demonstrate correct functioning of equipment and manipulation of the endoscope including insertion, insufflation, advancement, and withdrawal techniques and achieves an adequate depth of insertion with minimal patient discomfort (Levin et al., 2005).
3. Obtain biopsy specimen(s) as indicated according to institutional policy.

**C. Phase III - Continued Competency and Quality monitoring**

Maintain competency and quality in performing digital rectal exam and flexible sigmoidoscopy (Eisemon et al., 2001; Levin et al., 2005).

1. Participate in quarterly monitoring of exam by gastroenterologist 3-5 times per quarter or as outlined by institutional policy (Eisemon et al., 2001; Levin et al., 2005).
2. Document continuing education and competency at least annually as outlined by institutional policy.

**Summary**

SGNA and the medical literature support the position that the registered nurse trained in the technique of flexible sigmoidoscopy may perform this procedure for colorectal cancer screening.

Registered Nurses performing flexible sigmoidoscopy in any practice setting must maintain qualifications and competencies as well as continuous quality improvement programs as outlined by this document.

## References


American Cancer Society, Inc. (n.d.). *Colorectal cancer facts and figures 2008-2010*. Retrieved March 12, 2008, from http://www.cancer.org

American Medical Association. (2002). *Current procedural terminology*. Chicago, IL: AMA Press.

American Society for Gastrointestinal Endoscopy. (1999a). Endoscopy by non-physicians: Guidelines for clinical application. *Gastrointestinal Endoscopy, 49*(6), 826-828.

American Society for Gastrointestinal Endoscopy. (1999b). Principles of training in gastrointestinal endoscopy. *Gastrointestinal Endoscopy, 49*(6), 845-853.

Eisemon, N., Stucky-Marshall, L., & Talamonti, M. S. (2001). Screening for colorectal cancer: Developing a preventative healthcare program utilizing nurse endoscopists. *Gastroenterology Nursing*, *24*(1), 12-19.

Eisen, G. M., Baron, T. H., Dominitz, J. A., Faigel, D. O., Goldstein, J. L., Johanson, J. F., et al. (2002). Methods of granting hospital privileges to perform gastrointestinal endoscopy. *Gastrointestinal Endoscopy, 55*(7), 780-783.

Gruber, M. (1996). Performance of flexible sigmoidoscopy by a clinical nurse specialist. *Gastroenterology Nursing*, *19*(3), 105-108.

Ho, C., Jacobs, P., Sandha, G., Noorani, H. Z., & Skidmore, B. (2006). *Non-physicians performing flexible sigmoidoscopy: Clinical efficacy and cost-effectiveness* (Technology Report No. 60). Ottawa: Canadian Coordinating Office for Health Technology Assessment.

Kahi, C. J., & Rex, D. K. (2005). Screening and surveillance of colorectal cancer. *Gastrointestinal Endoscopy Clinics of North America, 15*(3), 533-547.

Levin, T. R., Farraye, F. A., Schoen, R. E., Hoff, G., Atkin, W., Bond, J. H., et al. (2005). Quality in the technical performance of screening flexible sigmoidoscopy: Recommendations of an international multi-society task group. *GUT*, *54*(6), 807-813.

Maruthachalam, K., Stoker, E., Nicholson, G., & Horgan, A. F. (2006). Nurse led flexible sigmoidoscopy in primary care- the first thousand patients. *Colorectal Disease*, *8*(7), 557-562.

Schoenfeld, P., Piorkowski, M., Allaire, J., Ernst, R., & Holmes, L. (1999). Flexible sigmoidoscopy by nurses: State of the art 1999. *Gastroenterology Nursing, 22*(6), 254-261.

Smith, P. A. (1999). The role of the gastroenterology nurse in colorectal cancer screening. *Gastroenterology Nursing*, *22*(5), 217-220.

Sprout, J. (2000). Nurse endoscopist training: The next step. *Gastroenterology Nursing*, *23*(3), 111-115.

Wallace, M. B., Kemp, J. A., Meyer, F., Horton, K., Reffel, A., Christiansen, C. L., et al. (1999). Screening for colorectal cancer with flexible sigmoidoscopy by nonphysician endoscopists. *American Journal of Medicine, 107*(3), 214-218.

Winawer, S., Fletcher, R., Rex, D., Bond, J., Burt, R., Ferrucci, J., et al. (2003). Colorectal cancer screening and surveillance: Clinical guidelines and rationale-update on new evidence. *Gastroenterology, 124*(2), 544-560.

**Recommended Reading**

British Society of Gastroenterology. (1995). The nurse endoscopist. *Gut, 36*(5), 795.

Cash, B. D., Schoenfeld, P. S., & Ransohoff, D. F. (1999). Licensure, use and training of paramedical personnel to perform screening flexible sigmoidoscopy. *Gastrointestinal Endoscopy, 49*(2), 163-169.

Cass, O. W., Freeman, M. L., Peine, C. J., Zera, R. T., & Onstad, G. R. (1993). Objective evaluation of endoscopy skills during training. *Annals of Internal Medicine, 118*(1), 40-44.

DiSario, J. A., & Sanowski, R. A. (1993). Sigmoidoscopy training for nurses and resident physicians. *Gastrointestinal Endoscopy, 39*(1), 29-32.

Johnson, B. A. (1999). Flexible sigmoidoscopy: Screening for colorectal cancer. *American Family Physician, 59*(2), 313-324.

Maule, W. F. (1994). Screening for colorectal cancer by nurse endoscopists. *New England Journal of Medicine, 330*(3), 183-187.

Read, T. E., & Kodner, I. J. (1999). Colorectal cancer: Risk factors and recommendations for early detection. *American Family Physician, 59*(11), 3083-3092.

Schoenfeld, P. S., Cash, B., Kita, J., Piorkowski, M., Cruess, D., & Ransohoff, D. (1999). Effectiveness and patient satisfaction with screening flexible sigmoidoscopy performed by registered nurses. *Gastrointestinal Endoscopy*, *49(2),* 158-162.

Schoenfeld, P., Lipscomb, S., Crook, J., Dominguez, J., Butler, J., Holmes, L., et al. (1999). Accuracy of polyp detection by gastroenterologists and nurse endoscopists during screening flexible sigmoidoscopy. *Gastroenterology, 117*(2), 312-318.

Society of Gastroenterology Nurses and Associates, Inc. (2008). *Gastroenterology nursing: A core curriculum* (4th ed.). Chicago, IL: Author.

Society of Gastroenterology Nurses and Associates, Inc. (2009). *Manual of gastrointestinal procedures* (6th ed.). Chicago, IL: Author.

Speigel, T. (1995). Flexible sigmoidoscopy training for nurses. *Gastroenterology Nursing, 18*(6), 206-209.