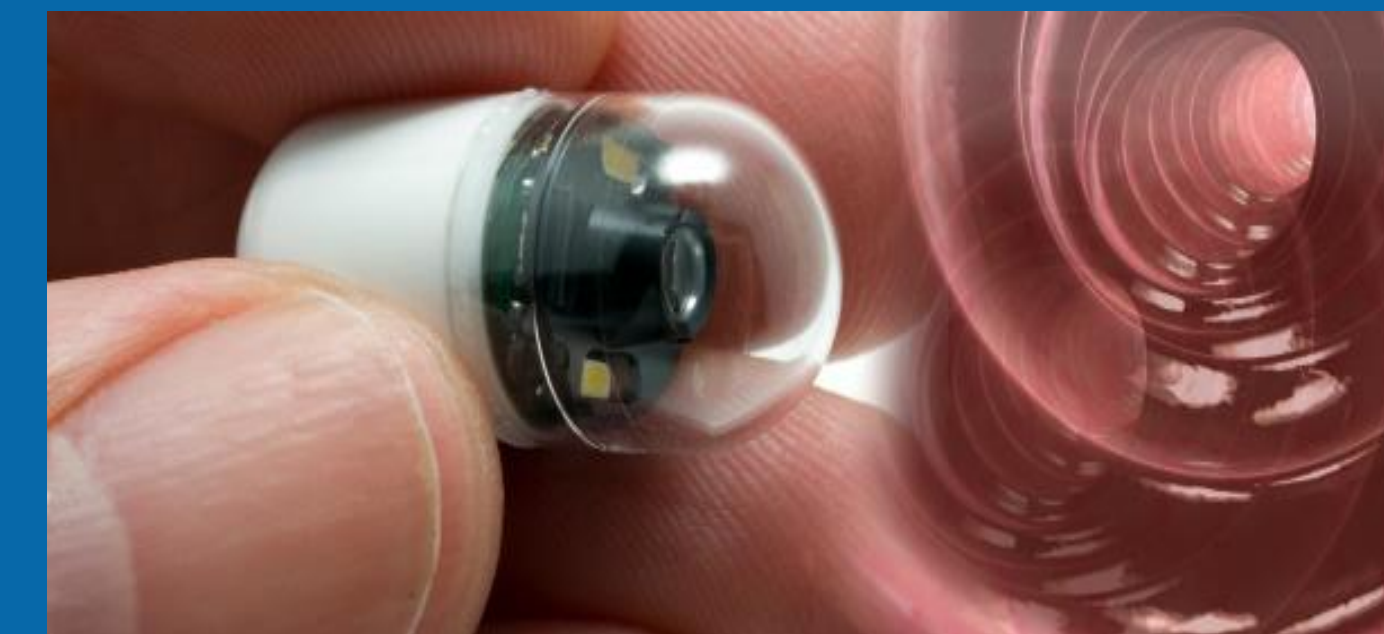




Capsule Endoscopy Pilot Implementation at a Regional Hospital

Kerry Niro, BSN, RN, CGRN
 Cleveland Clinic Hillcrest Hospital
 Digestive Health Center



Identification of Purpose

Hospitalized patients with a diagnosis of gastrointestinal (GI) bleed, unknown source of anemia, received a delay in care due to diagnostic testing being unavailable at a regional hospital.

To evaluate the small intestine in patients with an unknown source of GI bleeding, including overt and occult and iron deficiency anemia, a small bowel study is indicated.

Quality Improvement

A need for inpatient small bowel diagnostic testing was identified to improve patient care and outcomes:

- An increase in endoscopy patients diagnosed with GI bleed being discharged home without small bowel testing.
- Small bowel diagnostic testing was not being performed at regional hospital sites.
- Introducing small bowel testing at a regional hospital was attainable.

Methods

To implement capsule endoscopy at a regional site:

- Coordination with the main campus facility for implementation at a regional hospital.
- Small capsule education to support endoscopy caregivers.
- Hospital wide nursing education to include; reason for capsule endoscopy, the need to follow instructions for pre-procedure diet, post-procedure diet and medication administration, as well as complications of capsule placement.
- Two methods of placing a capsule; swallow or via endoscopy.
- Capsule study video upload education for nurses for transmission to registered nurse specializing in capsule endoscopy review.
- Reviewed reports are generated to the ordering physician, within 24 hours, for treatment evaluation.

Implications for Nursing Practice

- Expansion to regional hospitals' endoscopy units.
- Assessment of patient, patient education, and installation of capsule by swallow method is performed by a nurse, as ordered by a physician.
- Partnership and collaboration of nurses and physicians across Cleveland Clinic facilities.



References
 American Society for Gastrointestinal Endoscopy. *Gastrointestinal Endoscopy*, 2013, 78(6), 805-813.
 Beltran, V. P., Suarez, B. G., Asanza, C. G., Perez-Caudrado, E., Diez, S. F., Grueso, M. J.,...Fernandez-Pacheco, P. M. *Digestive Disease Science*, 2011, 56, 2900-2905.
 Cave D. <http://www.uptodate.com/contents/evaluation-of-suspected-small-bowel-bleeding>. 2015, December.
 Shim, K., Moon, J. S., Chang, D. K., Do, J. H., Kim, J. H., Min, B. H., & Choi, M. *Clinical Endoscopy*, 2013, 46(1), 45-53
 Travis, A. C., & Saltzman, J. R. <http://www.uptodate.com/contents/evaluation-of-occult-gastrointestinal-bleeding?source>. 2016, October 1.

Outcomes and Measurements

The Cleveland Clinic regional hospital capsule endoscopy testing commenced in June of 2014.

Data was collected from June 2014 to April 2016:

- 98 patients received a capsule study.
- 39 of 98 patients received a positive test result requiring additional endoscopic treatment.

