

Endo Staff Under Pressure

Understanding Colonoscopy-Related Ergonomic Hazards

Hello, I'm Dr. Marybeth Spanarkel



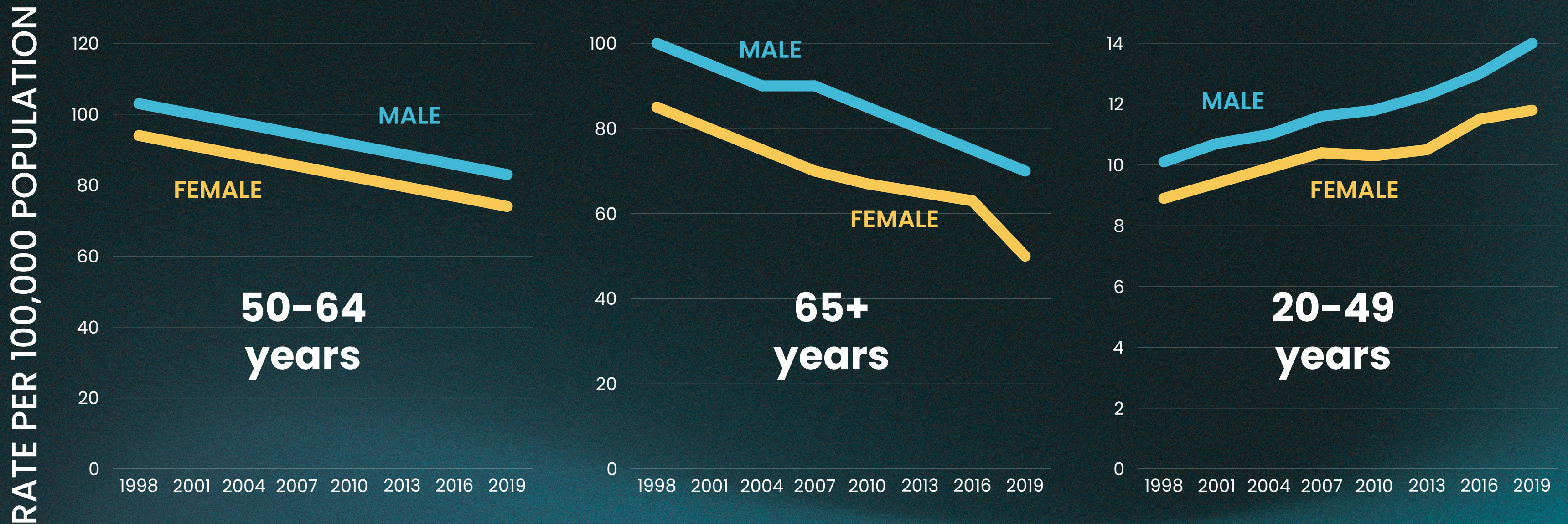
- Duke Medical School, University of Pennsylvania
- John Hopkins & NIH Training
- 25 years Clinical GI in Durham, NC
- Performed over 20,000 colonoscopies
- Disclosures / COIs:
 - Co-Founder, Senior Medical Advisor, ColoWrap

Today, let's discuss:

- 1.Importance of Colonoscopy
- 2.Manual Pressure & Repositioning
- 3.Hazards for Endoscopy Staff & Patients
- 4.Potential Solutions

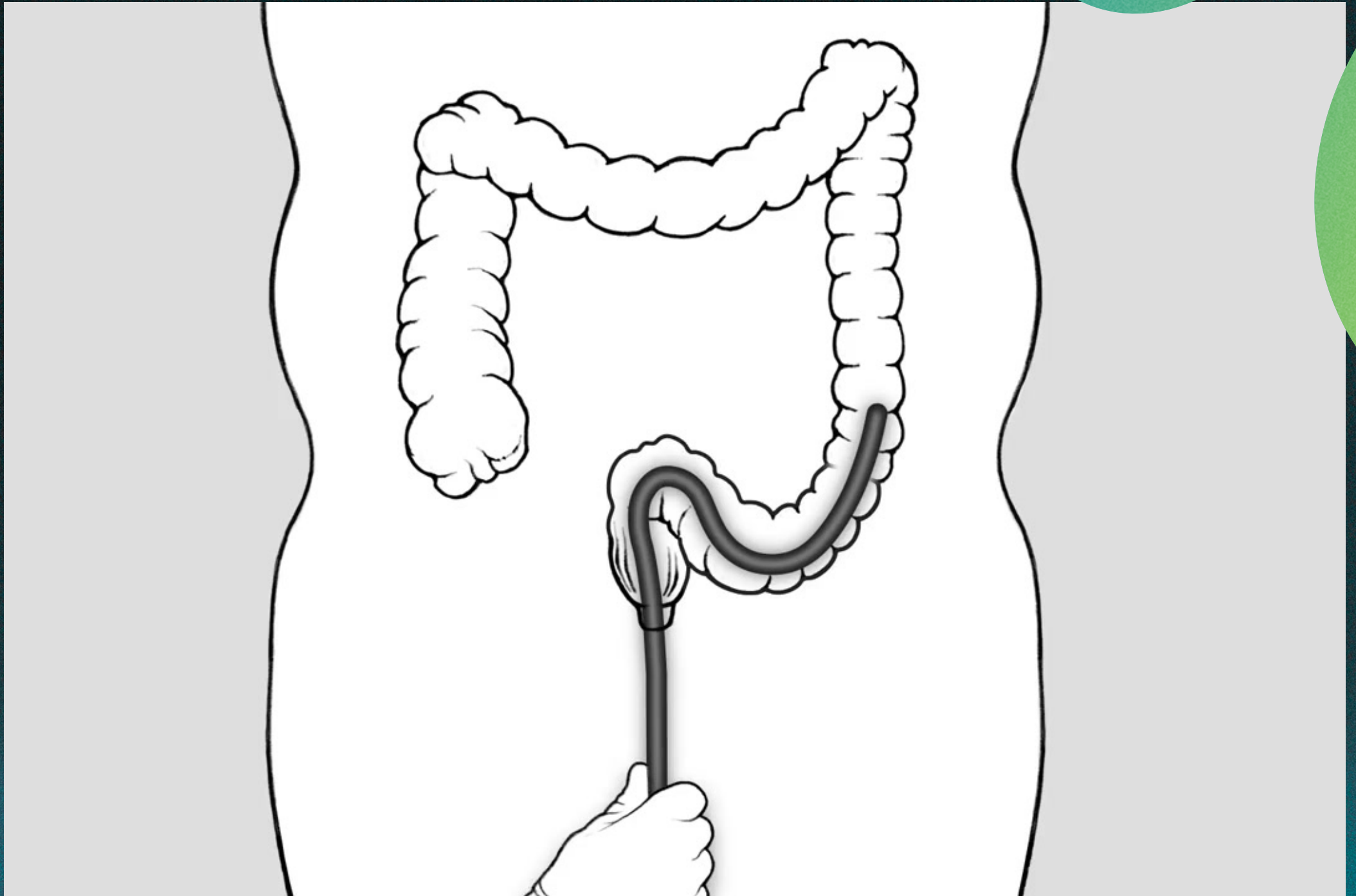
Colonoscopy is here to stay.

Trends in Colorectal Cancer Incidence 1998–2019

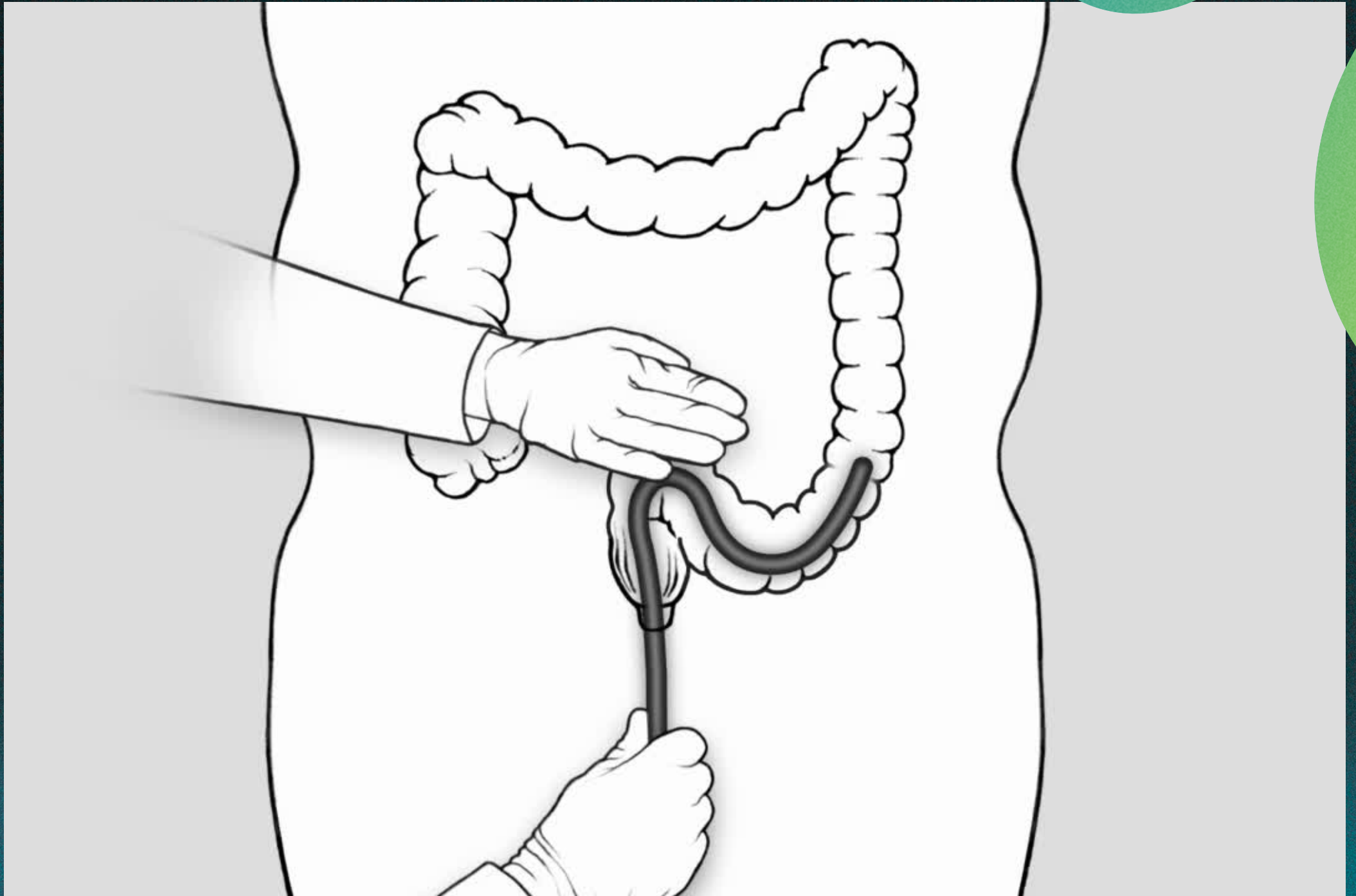


SOURCE: AMERICAN CANCER SOCIETY

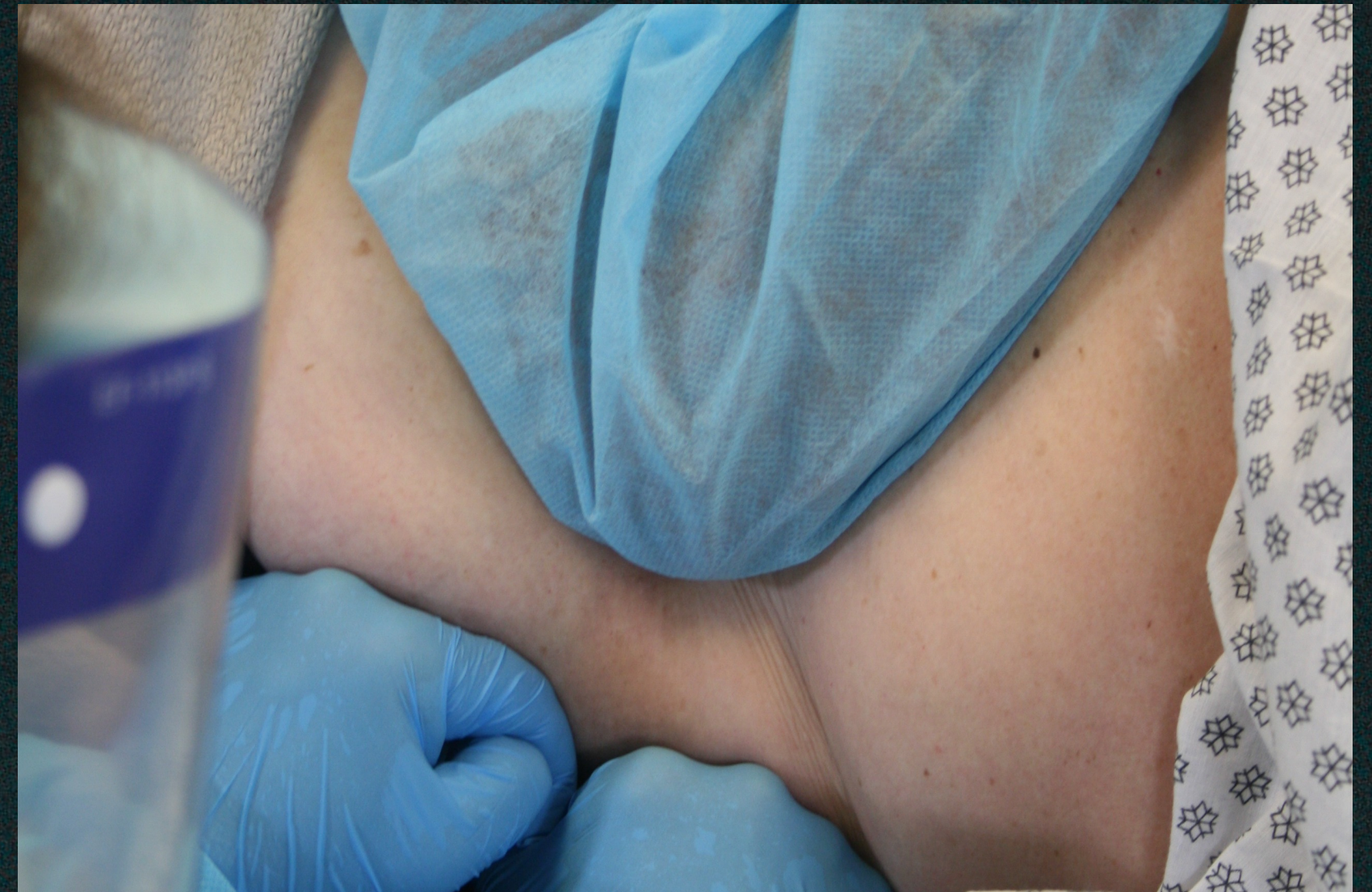
A Challenging Technical Procedure



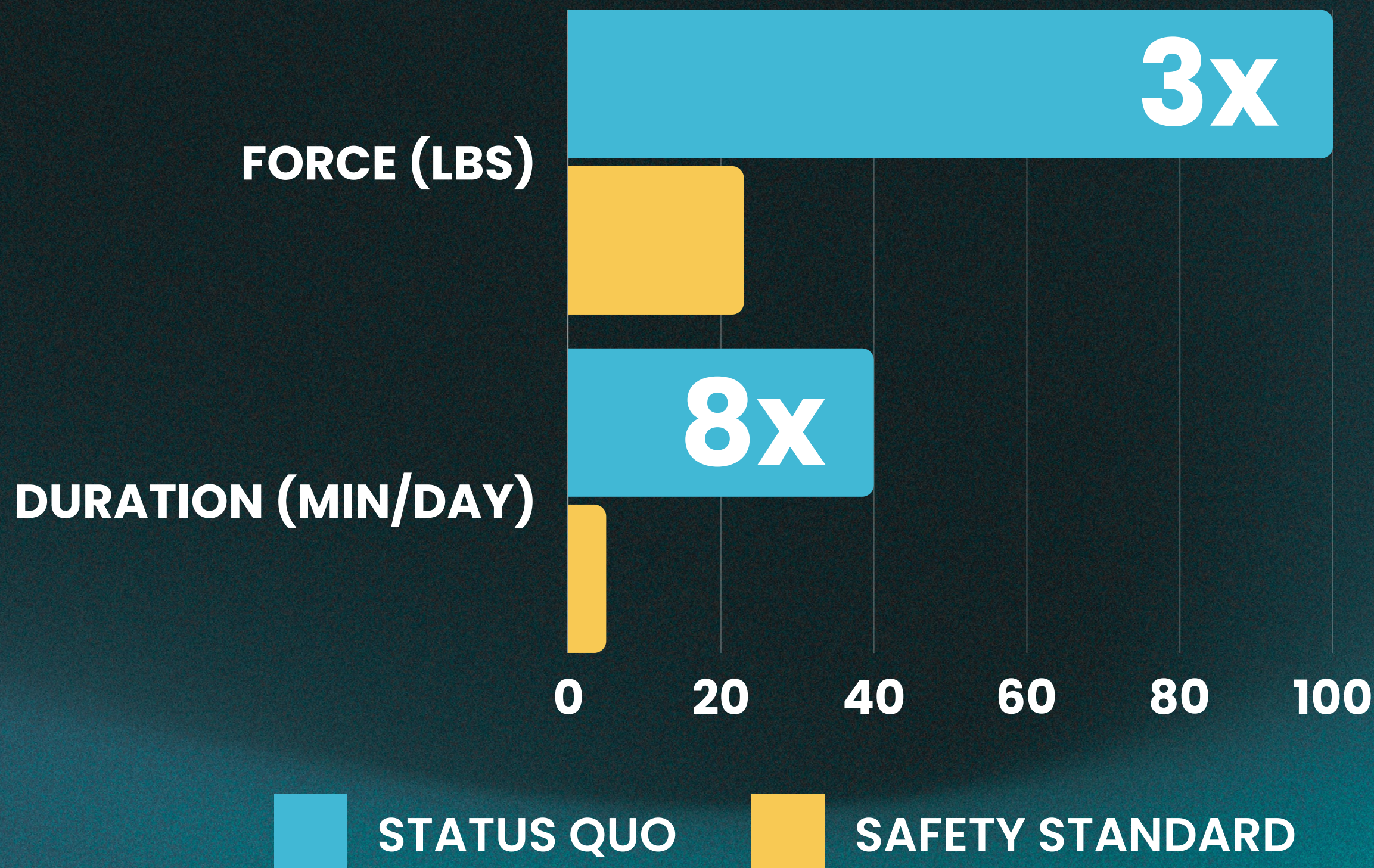
A Challenging Technical Procedure



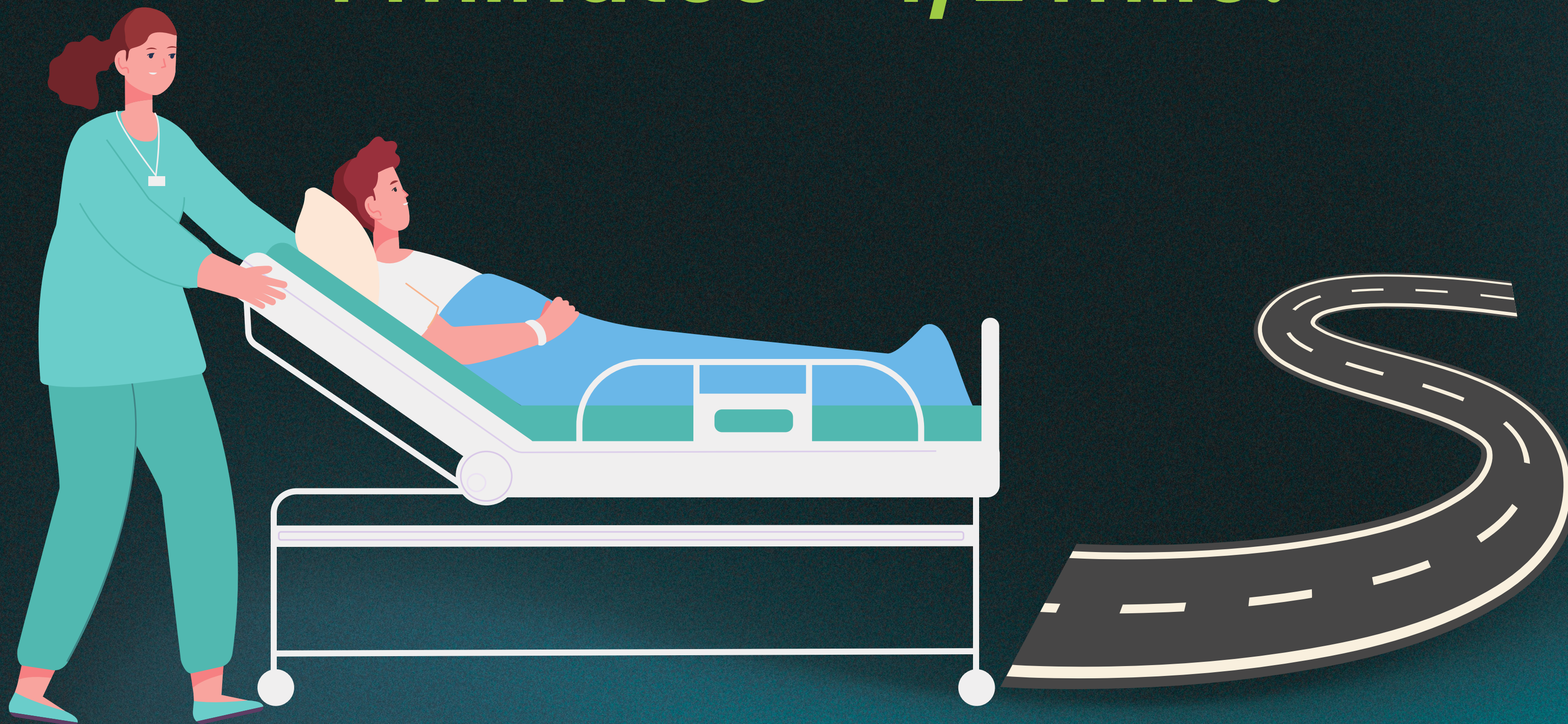
Status Quo: Make Endo nurses and techs deliver pressure



Extreme force and duration



4 minutes = 1/2 mile!



High Rates of MSDs in Endo Staff

85%

of Endo staff report
MSD from pressure

28% missed
work


48% used
analgesics

14% had
surgery

Patient Risk Exists

25%

observed patient
complication from
manual pressure

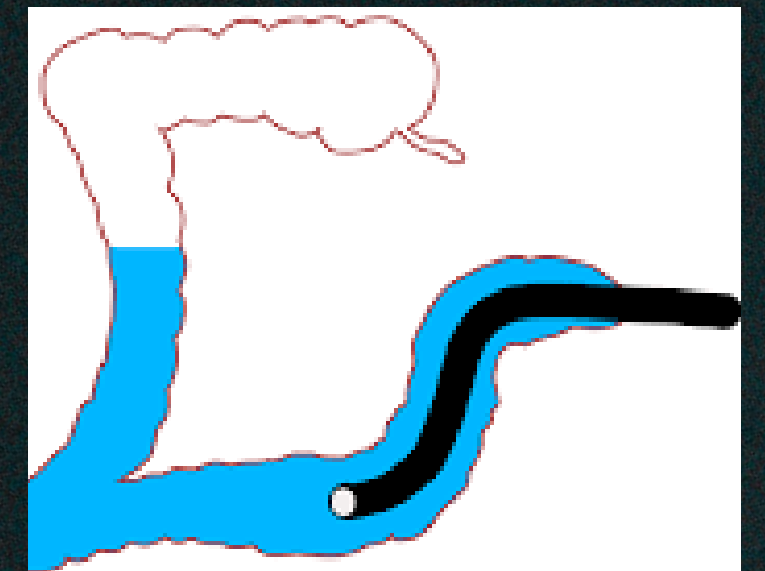
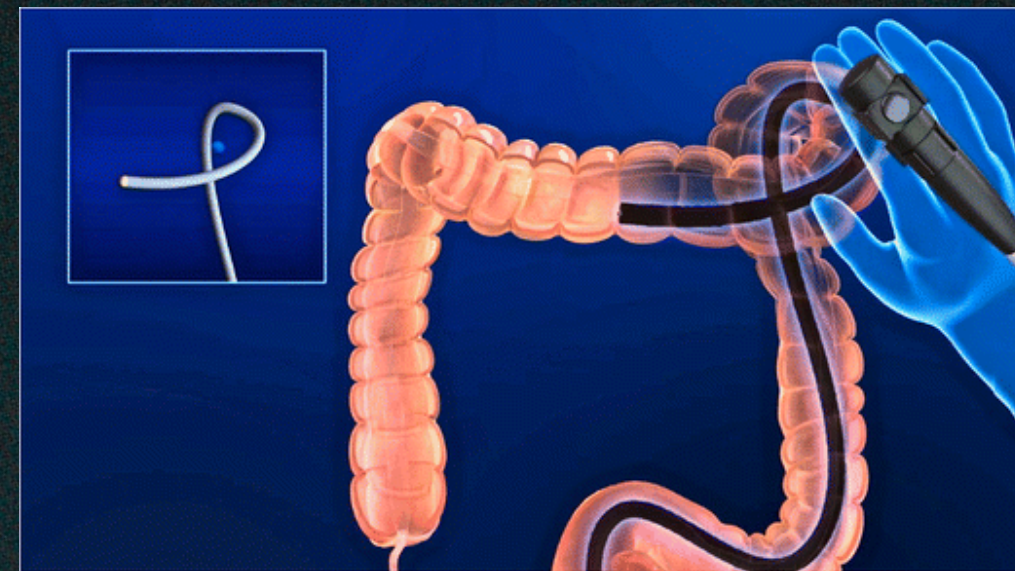
- 
- bruising
 - post procedure pain
 - [rare] splenic injury, mesenteric tear

There has to be a better way to support colonoscopy...

1. Stop doing manual pressure?
2. Apply manual pressure more safely?
3. Find an alternative?

**Stop doing
manual pressure?**

Multiple attempts to solve the challenge of getting to cecum



None address the anatomical basis of looping

**Apply manual
pressure more
safely?**

Yes, A is better than B

A



B



But how much? For how long?

**Find an
alternative?**

Colonoscopy Compression Device



Colonoscopy Compression Device



Keep the Pressure, Lose the Pain

90%

reduction in
need for manual pressure

85%

reduction in
staff-reported MSK pain

Clinical benefits for
patients:

- Faster insertion
time; less sedation
- Better polyp and
adenoma detection

Let's review

1. Stop doing manual pressure?
2. Apply manual pressure more safely?
3. Find an alternative?

\$105,000

**Average cost of one
staff injury**

Up to 12%

**Nurses leave profession
annually
MSK/Injury – Top 4 reasons**

\$64,500

**Direct cost of replacing
one nurse**

A 360° Process for High-Precision



**The way we do colonoscopy today places
unsustainable burden on Endoscopy staff**

**Take the initiative and examine
the risks within your unit**

Questions?