

BOSTON SCIENTIFIC

ENDOSCOPIC MUCOSAL RESECTION DEVICE



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Boston Scientific is dedicated to **transforming lives** through **innovative medical solutions** that improve the health of patients around the world.

ENDOSCOPIC MUCOSAL RESECTION



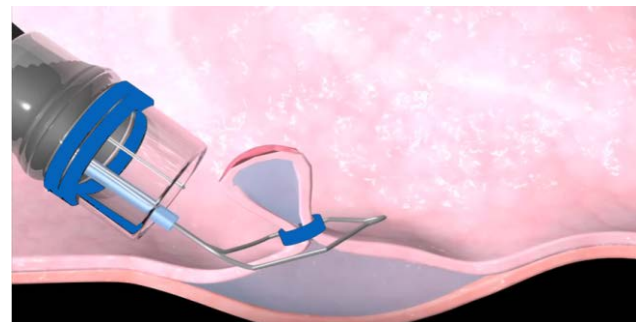
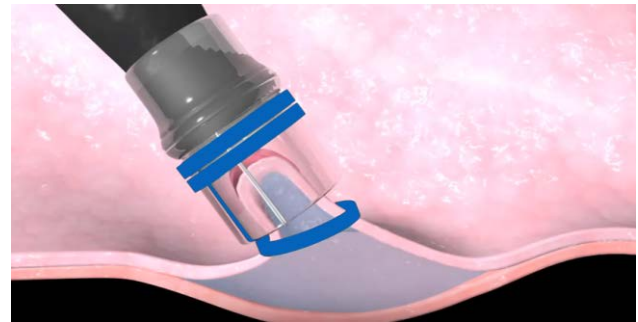
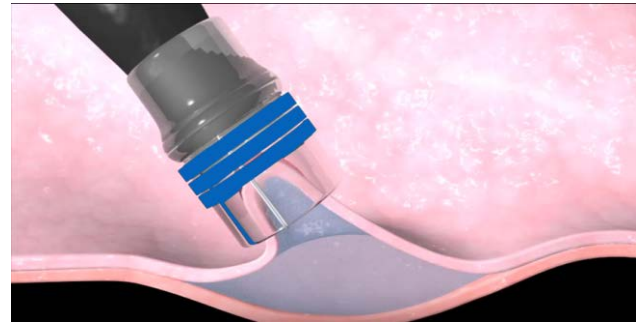
EMR treats **Barrett's esophagus** and early gastric cancer patients.

About **2.1 million** Americans suffer from these conditions.

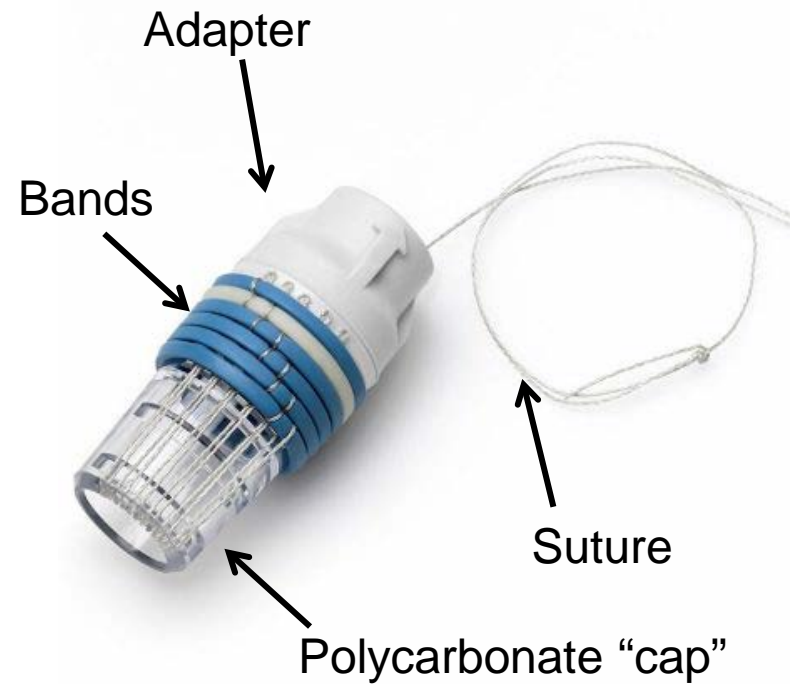
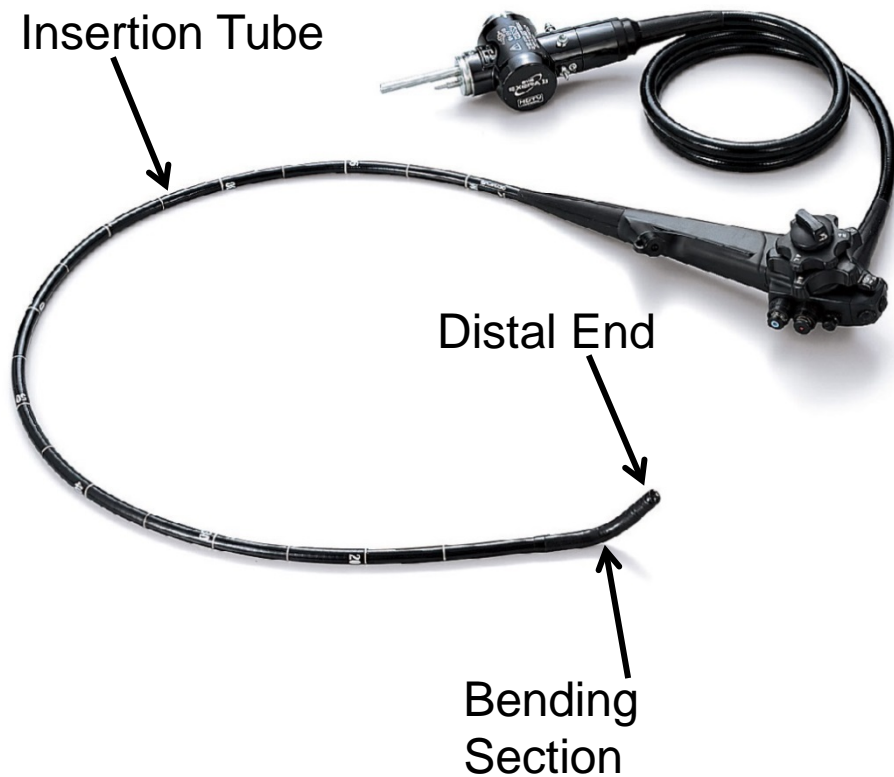
EMR is a **less invasive** and **cheaper** alternative to other surgeries.

HOW IS EMR PERFORMED?

1. The lesion is sucked into the EMR cap
2. A band is deployed around the lesion
3. The lesion is caught in the snare and it is tightened to resect



TERMINOLOGY (CURRENT DEVICE)



THE PROJECT DESCRIPTION



Two Caps

- Standard and Large
- Fit scope OD 9.0-9.9 mm and 11.3-11.6 mm

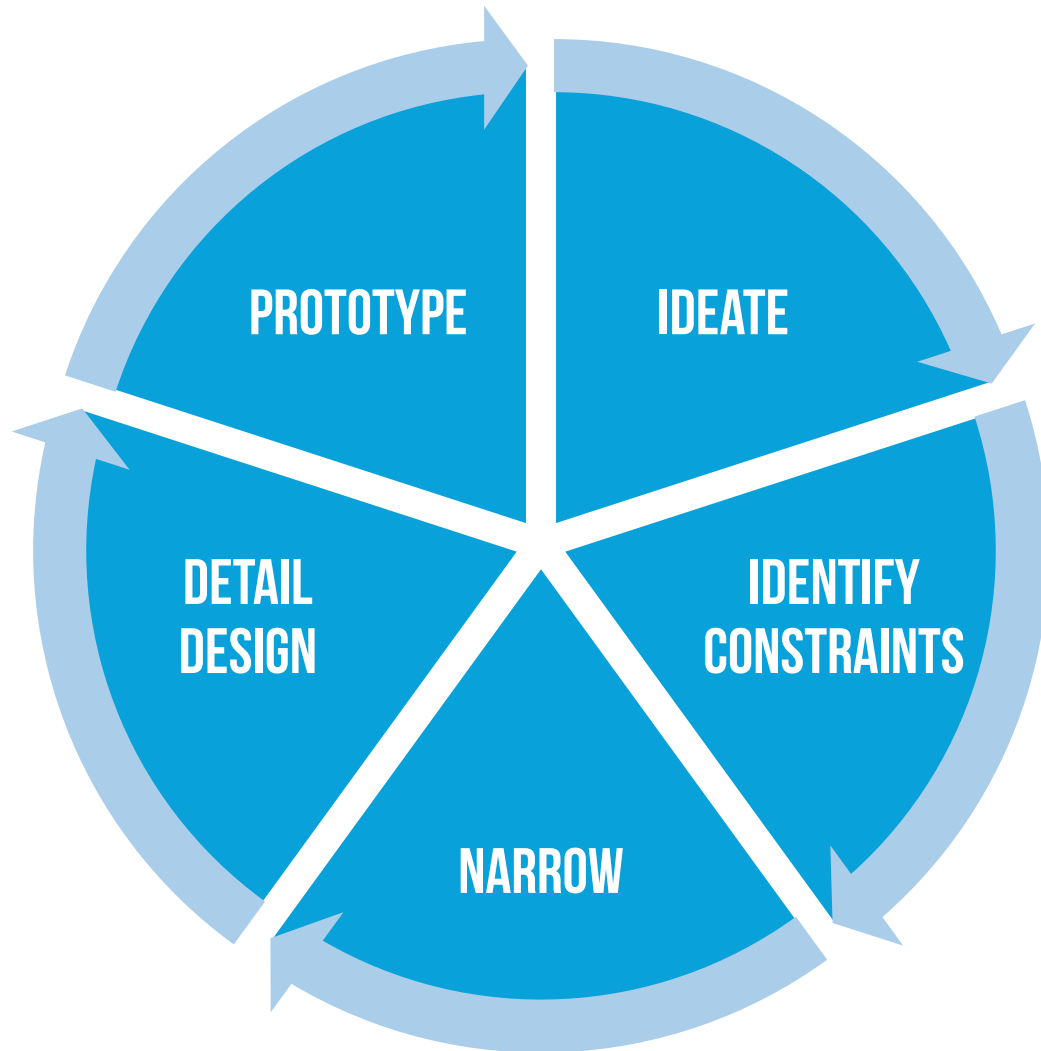
Endoscope Sizes Vary

- 8.7-11.96 mm range
- BSC does not manufacture endoscopes
- Users don't measure

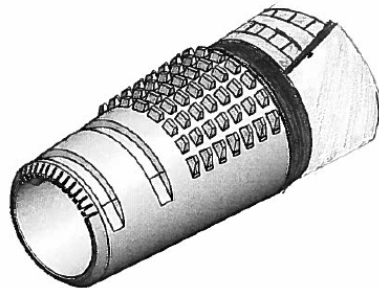
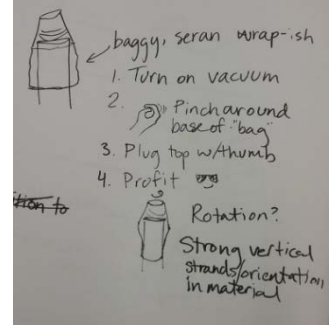
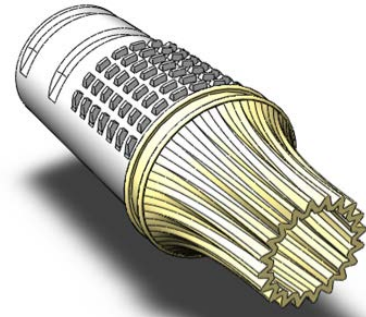
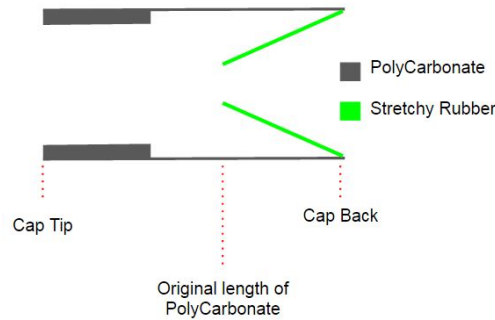
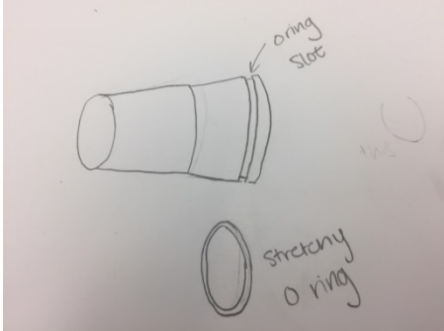
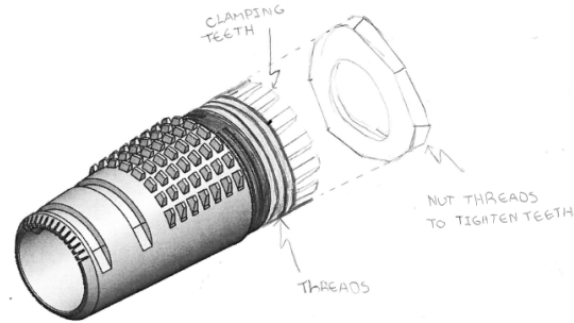
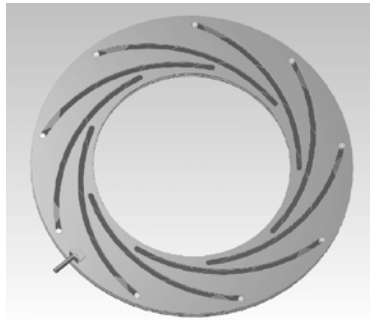
End Goal: One Cap

- One size fits all
- Bands, view, and tool compatibility unchanged

OUR PROCESS



BLUE SKY IDEATION



CONSTRAINTS

- 8.5-12 millimeter fit
- Atraumatic
- Low Risk of Damaging Scope

High

- Low Removal Force
- Good Suction
- Intuitive Setup

Medium

- Scope Maneuverability
- Retains Alignment
- Small Cap Outer Diameter

Low

GOALS AND ACCOMPLISHMENTS

Goal: Identify a successful concept and show its feasibility.
Stretch Goal: Prototype this such that it can be tested.



Design

Analyze

Prototype

Test

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