



EndoVault[®] *Powered by EndoSoft[®]*

SPECIALTY SPECIFIC SOLUTIONS
WITH AI TECHNOLOGY

Vendor Neutral ■ Image Management ■ Procedure Documentation

CONSENT FORMS

A built-in, digital, consent management module saves time and resources while giving patients clear and concise information regarding their specific procedure.

- Fully Customizable Templates
- Multilingual
- Paper Record Storage Elimination
- Consent to Discharge within the Application
- Admin Resource Savings
- Completed Consents are Available In Patient Portal and Patient App



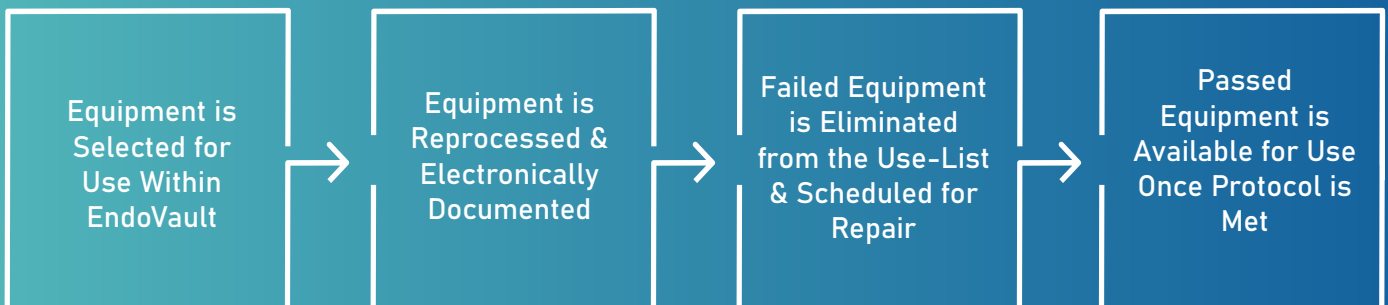
EndoVault®

INFECTION CONTROL & SCOPE TRACKING

EndoVault Infection Control & Scope Tracking module offers comprehensive tracking of equipment and scopes. Scanning the scopes' RFID code allows for documentation of the entire workflow within one application. Equipment sterilization records, equipment repairs, and scope-use on patients' are all tracked. Tracking your scopes can assist in rectifying a suspected infection or contamination outbreak immediately.

TRACK CONTINUOUSLY FROM PROCEDURE TO STOCK

- Outbreak Management • Quality Assurance • RFID/Barcode Scanning • Expiry Date Management
 Automated Scope Availability • Repair Management • Time & Material Billing
 Automated Failure Elimination



ENDOSCOPY IMAGING

Capture from various sources simultaneously including endoscopes, ultrasound, fluoroscopy, microscopes, and other imaging equipment. Capture & view full size 1080p HD images & HD video clips from up to four sources simultaneously using RGB, Composite, S-Video, HDMI, HD/SDI, DVI, Firewire and USB outputs in native resolution.

EndoVault®



GI SPECIFIC MEDICAL CONTENT

Colonoscopy • Sigmoidoscopy • Gastroscopy • ERCP • EUS Liver Biopsy
Paracentesis • Enteroscopy • Capsule Endoscopy

IMAGE MANAGEMENT

EndoVault applications are vendor-neutral and can integrate with any manufacturers' scope, processor, ultrasound, and fluoroscope. Anatomical diagrams in the image management section allow physicians to annotate the location of findings directly on the diagram for drag-and-drop identification and image labeling. EndoVault records an HD video of the patient procedure and has a built-in video editor where additional images can be pulled from frames of the recorded video and saved in the image management section of EndoVault.

EndoVault®

INTEGRATED PACS

EndoVault PACS provides accelerated image retrieval, economical storage, and simultaneous access to images across multiple healthcare sites. EndoVault can also function as a VNA or PACS for an internal system.

The built-in DICOM viewer gives providers real-time access to images from PACS. EndoVault PACS supports DICOM visible light still and streaming video capture, as well as encapsulated PDF.

PROCEDURE REPORTING THAT EXCEEDS STANDARDS

EndoVault is 100% compliant with guidelines established by CMS, TJC, AGA, ASGE, and ACG for quality of care in Endoscopy. Automatically extract data to submit quality measures for Meaningful Use, GIQuIC, AGA, MIPS/MACRA and CDC. EndoSoft is part of the National Program Directive for Gastroenterology, AORN, AAAHC, ASPAN, and SGNA.

EndoVault®

- Customized Consent Forms
- Pre-Endoscopy Evaluations
- Capture Images
- Landmark Identification
- Automated Metrics, Withdrawal Times & Procedure Times
- Procedure Report
- Anesthesia Documentation
- Automated Generation of Pathology Requisitions with Intuitive Specimen Jar Record Based on Biopsy
- Post-Procedure Instructions
- Letter to Referring Physicians
- Discharge Instructions

ASC-9 & OP-29

Quality of Bowel Prep, Boston Bowel Prep Score, Withdrawal Time, Extent of Exam

Automated G-Codes, CPT (I, II, III), ICD 10 Coding for Indications

Procedure Report

EndoSoft
EndoSoft Surgery Center
135 Broadway
Schenectady, New York 12305

Patient Name: John Smith
Date of Birth: 09/15/1950
Record Number: 0159834
Date / Time of Procedure: 2/24/2019, 07:56:49
Referring Physician: Frank Black, MD
Endoscopist: Debbie Doe, MD

PROCEDURE PERFORMED: Colonoscopy - complete to terminal ileum.

INDICATIONS FOR EXAMINATION:
Blood in stool.

FINDINGS:
Normal to the terminal ileum, internal hemorrhoids

ENDOSCOPIC DIAGNOSIS:
Normal colon, internal hemorrhoids without complication

RECOMMENDATIONS:
Follow-up procedure in 10 years
Continue current medications
High fiber diet
Await biopsy results

INSTRUMENTS: CF 180 254875 QUALITY OF BOWEL PREP: Adequate
MEDICATIONS: Versed 3mg IVP, Fentanyl 100 mg IV
BOSTON BOWEL PREP SCORE: RIGHT COLON: 3 TRANSVERSE COLON: 3 LEFT COLON: 3 TOTAL: 9
WITHDRAWAL TIME: 0:08:05 EXTENT OF EXAM: Terminal ileum
LANDMARKS IDENTIFIED: Terminal ileum ESTIMATED BLOOD LOSS: 3
VISUALIZATION: Good TOLERANCE: Good COMPLICATIONS: None LIMITATIONS: None

PROCEDURE TECHNIQUE: A physical exam was performed. Informed consent was obtained from the patient after explaining all of the risks (perforation, bleeding, infection and adverse effects to the medication), benefits and alternatives to the procedure which the patient appeared to understand and so stated. The patient was connected to the monitoring devices and placed in the left lateral position. Continuous oxygen was provided with a nasal cannula and IV medicine administered through an indwelling cannula. After adequate conscious sedation was achieved, a digital exam was performed and the colonoscope introduced into the rectum and advanced under direct visualization to the terminal ileum.

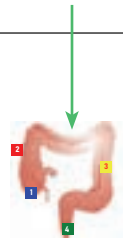
The terminal ileum was identified by visual landmarks. The scope was subsequently removed slowly while carefully examining the color, texture, anatomy and integrity of the mucosa on the way out. In the rectum, the scope was retroflexed to evaluate for internal hemorrhoids and anorectal pathology. The patient was subsequently transferred to the recovery area in satisfactory condition.

CPT Code:
45384 Colonoscopy, flexible, proximal to splenic flexure; with removal of tumor(s), polyp(s), or other lesion(s) by hot biopsy forceps or bipolar cauter.





ICD 10 Codes:
R19.5 Blood in stool
K64.8 Internal hemorrhoids without complication

EndoSoft This procedure was electronically signed off on: 02/24/2019, 08:56:49 AM by Debbie Doe, MD PHOTOREPORT by EndoSoft®

Anatomical Diagrams



Colonoscopy

Images

TYPICAL REPORTS

Frequently performed procedure reports can be finished in minutes with EndoVault's fully customizable typical reports, macros, and picklists. Each physician maintains their own library of favorite typical reports. Physicians have access to hundreds of provided pre-built GI reports to create a custom workflow.

PRINT, EMAIL, E-FAX, AND/OR COLOR FAX REPORTS INCLUDING IMAGES

Generate multilingual discharge instructions to include images, patient education, written instructions, appointment information and community agency referrals.

PATHOLOGY REQUISITION

A built-in pathology requisition module allows providers to automatically & intuitively send patient information and submit tissue samples to the lab. Requisition information is pulled directly from EndoVault and includes information related to a patient's procedure, such as:

- Indications for Examination
- Tissue Submitted with Location
- Findings
- Endoscopic Diagnosis
- Recommendations
- Associated CPT® and ICD 10 Codes
- Automated Pathology Requisition Based on Procedure Report
- Print Labels & Barcodes with Designated Jars for Biopsy
- Tissue Submittal Details Pre & Post Operative Diagnosis
- Electronic Sign-off Requisition & Results
- Set Recalls Based on Results

Colonoscopy

Pathology Request

EndoSoft Surgery Center
135 Broadway
Schenectady, NY 12344

Patient Name: John Smith
Date of Birth: 09/13/1950
Medical Number: 025824
Date / Time of Procedure: 7/24/2018, 07:56:49
Referring Physician: Frank Black, MD
Endoscopist: Debbie Doe, MD

PROCEDURE PERFORMED:
Colonoscopy - complete to terminal ileum.

INDICATIONS FOR EXAMINATION:
Blood in stool.

Tissue Submitted:
Jar 1: Biopsy from the ascending colon to exclude Crohn's disease.

FINDINGS:
Normal to the terminal ileum
Internal hemorrhoids



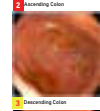

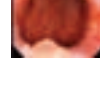
ENDOSCOPIC DIAGNOSIS:
Normal colon
Internal hemorrhoids

RECOMMENDATIONS:
Follow-up procedure in 10 years
Continue current medications
High Fiber diet
Await biopsy results

Signature: _____ Debbie Doe, MD

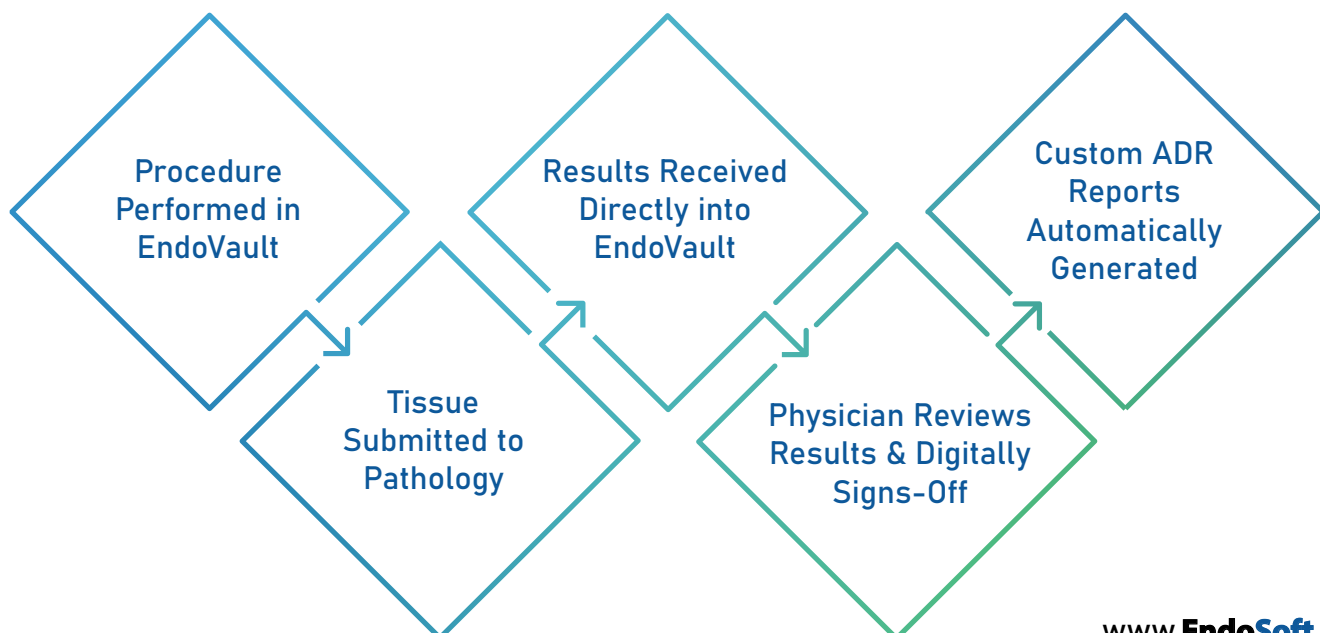
CPT Code:
45384 Colonoscopy, flexible, proximal to splenic flexure; with removal of tumor(s), polyp(s), or other lesion(s) by hot biopsy forceps or bipolar cautery

ICD Code:
R19.5 Blood in stool

02/20/2018, 08:50:49 AM PHOTOPOINT by EndoSoft

AUTOMATED ADENOMA DETECTION RATE REPORTING





QUALITY INDICATORS REPORTING

Integrate with GIQuIC, RHIOP, and more to systematically track and collect data for submission to state and federal registries. Submission is completed electronically on quality indicators for colonoscopy to be measured against practices on a national level.

Polyp Detection Rates ■ Quality of Bowel Prep ■ Withdrawal Time
ADR ■ IBD Scoring

EndoVault®

RECALL MANAGEMENT

Automatically set recalls based on CMS recommendations for ASC 9 and OP 29 for an appropriate follow-up interval for a normal colonoscopy. Users can track the number of automatic recalls being sent via mail, certified mail and/or e-mail. EndoVault is also compliant with ASC 12 and OP 32 for delayed complications.

CODING

The built-in coding and revenue recognition mechanism maps appropriate codes directly to procedure documentation increasing coding efficiency. The mechanism automatically assigns CPT Categories (I, II, III), HCPCS Level II, ICD-10, G-Codes, CMS ASCQR, Hospital OQR, and SNOMED CT® codes to be compliant with CMS quality measures for registries.

OPERATIONAL REPORTING & ANALYTICS

With over 150 standard reports and custom reporting tools, EndoVault reporting instantly turns patient data into expert reports.



INTEROPERABILITY

EndoSoft offers highly interoperable solutions that keep patient records complete and help meet important standards and regulations. Keeping these standards and regulations top priority, EndoSoft solutions achieve the overall goal of an improved quality of care.

- ✓ Demographics (ADT)
- ✓ Observation Results (ORU)
- ✓ Order Messages (ORM)
- ✓ Pathology Requisition & Results (PATH)
- ✓ Scheduling Information & Notifications (SIU)
- ✓ Detailed Financial Transactions (DFT)
- ✓ Master Data Management (MDM)
- ✓ Master Files Notification (MFN)
- ✓ Digital Imaging & Communications in Medicine (DICOM)
- ✓ Continuity of Care Documents (CCD & CCDS)
- ✓ Government Registry Reporting (GIQuIC®, AGA)
- ✓ XDS-I & XDS-B

EndoSoft is a member of IHE with a certified profile and actively participates in IHE Connectathons along with the HIMSS Interoperability Showcases. These platforms allows EndoSoft to demonstrate the breadth of experience interfacing with various HIS, devices, and vendors. EndoSoft applications are HL7, XML, DIRECT Protocol and ODBC compliant. Applications are also DICOM compliant for work list and storage along with supporting DICOM Visible Light and DICOM encapsulated PDF. EndoSoft is capable of converting JPG, TIFF, and BMP images and videos into DICOM and interface with a PACS and/or VNA.

EndoVault®

TECHNICAL SPECIFICATIONS

EndoSoft applications are designed with Windows technology MS SQL database and are compatible with Microsoft Server 2008 & higher, Virtual Server and Citrix. All applications operate on Microsoft operating systems (Windows 8 & higher) and are Windows Active Directory (AD/LDAP) compliant. EndoSoft applications run seamlessly using CCOW single sign-on.



STREAMING VIDEO

Broadcast streaming video and audio in real-time to remote locations using the intranet or internet for live workshops or student education.

SECURITY

EndoSoft applications are designed with advanced security systems to protect patient privacy. EndoSoft applications are also HIPAA compliant and is a certified Health IT Module 2015 Edition, Electronic Health Record (EHR), certified by the ONC-ACB which include all security measures established by CMS. EndoVault has also received Pre-Implementation Certification from Canada Health Infoway as an Ambulatory Electronic Medical Record.

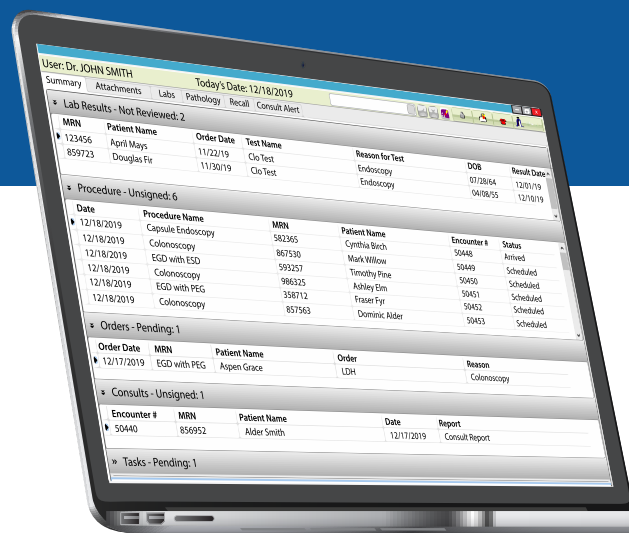
System security safeguards of password protection, encrypted passwords, encryption AES and EndoSoft Audit Trail are incorporated into the system to ensure data integrity and confidentiality of the stored patient and business information. EndoVault also has been given the Authorization to Operate by the Armed Forces, VHA Directive 1015 and met IT Security VA Information Systems Security & Privacy.

MEMBERSHIPS

EndoSoft is a proud member of HIMSS and the EHR Association to enhance and address interoperability. EndoSoft also complies with their Code of Conduct ensuring patient safety, security, data portability, and more.

over **25** years of
Experience

EndoVault offers a complete solution backed by over 25 years of experience that can improve the workflow of a facility of any size. Whether you're a one-room facility, ASC, or a hospital system, our custom solution and expert data migration team will create your most efficient and complete workflow.



MIGRATION EXPERTS

Making an application change can result in multiple pain points in daily workflow. EndoSoft understands these problem areas and has developed a proprietary data migration tool to migrate all data, including images, video, and discrete data, into our solution to look native.

CHANGE YOUR SOFTWARE, NOT YOUR EQUIPMENT

EndoVault's vendor-neutral application allows current scopes to be retained, easing change fatigue and lowering implementation costs.

KEEP YOUR ANALYTICS COMPLETE

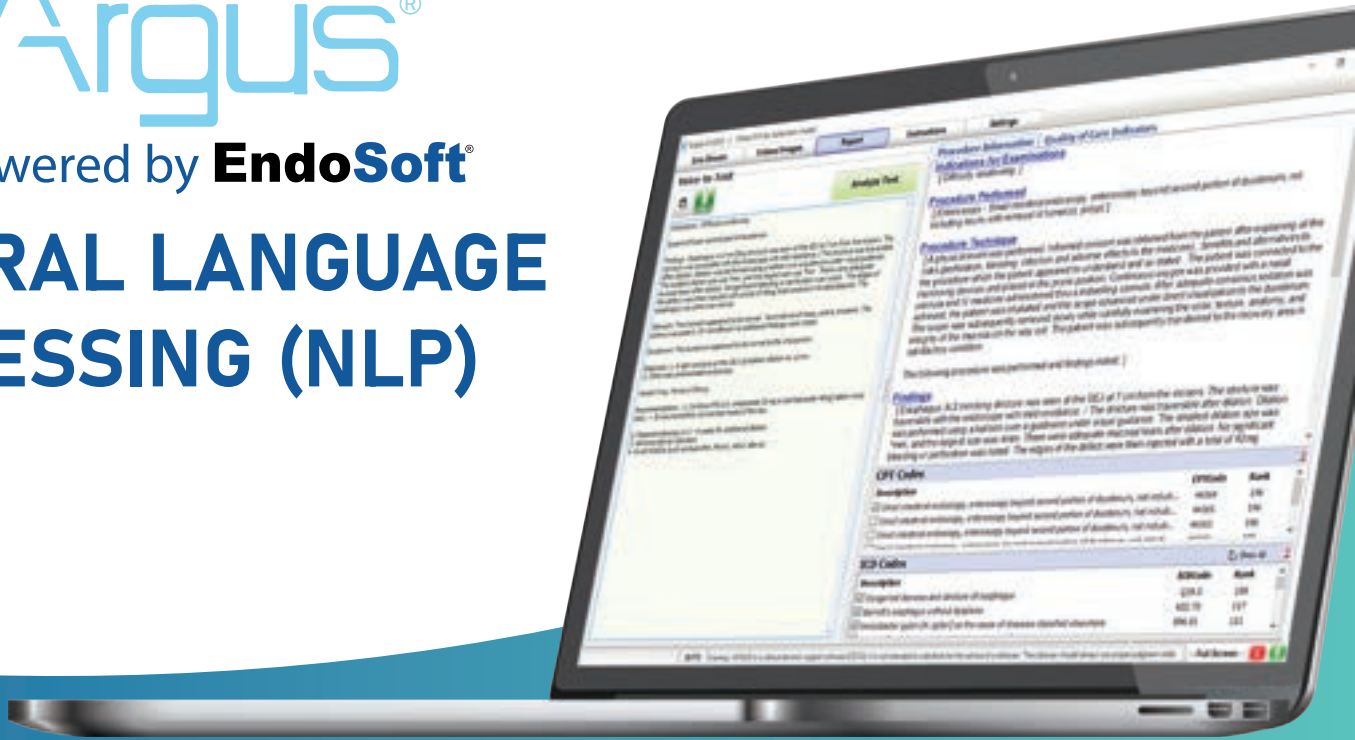
EndoSoft's complete migration tool keeps all of your data where you need it. No need to open a separate application or have your information siloed, all migrated data will appear native in EndoVault so it can be reported on and analyzed as usual.

ACCESS ENDOVAULT® ON THE GO WITH THE MOBILE APP




Clinician and patient mobile app access completes the full circle of EndoVault solutions by allowing easy and convenient access to records, schedules, patient information and more to be accessed and updated in real-time.



NATURAL LANGUAGE PROCESSING (NLP)



GET TIME BACK IN YOUR DAY WITH ARGUS®

-  Use Your Voice to Command Image Capture, Argus® Intelligently Labels Images with the Location
-  Automatically Timestamp Images, Landmarks and Completes Quality Measures During the Procedure
-  Parse and Organize the Procedure Documentation Information in Real-Time

Adding Argus® intelligent report writer to your workflow gives you time back in your day using Natural Language Processing (NLP) to complete the procedure documentation. Argus® allows you to label images, document your procedure report, and auto-capture and record quality measures in real-time.

With Argus®, the days of spending excessive time completing reports are gone. Let Argus® see, hear, and document all aspects of your procedures in real-time.

Argus® is a vendor-neutral AI technology that integrates with existing EHRs/ERWs, endoscopes, and processors without changing your existing workflow.

ARTIFICIAL INTELLIGENCE IS MORE THAN JUST POLYP DETECTION



AUTOMATED QUALITY METRICS REPORTING



Start of Exam



Insertion Time



Cecal Intubation



Retroflexion in Rectum



Withdrawal Time



Total Procedure Time



Bowel Preparation



Complications



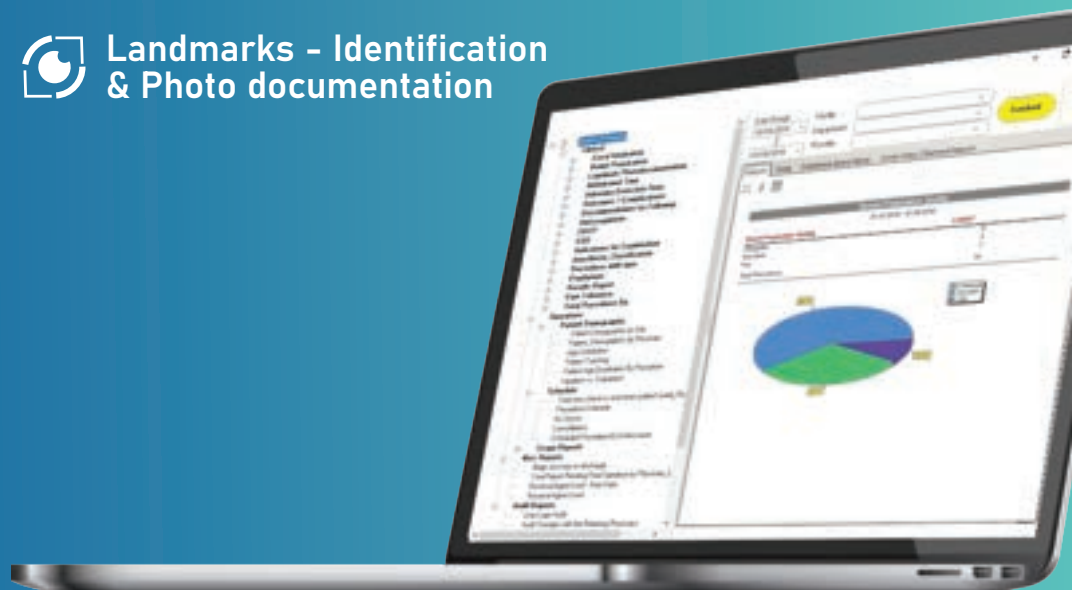
Adenoma Detection Rate (ADR)



Adenoma Per Colonoscopy (APC)



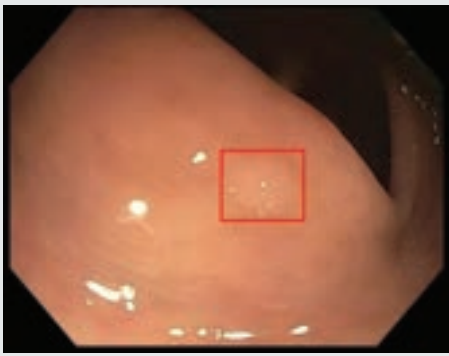
Landmarks - Identification & Photo documentation



*Argus is clinical decision support software that functions within an EMR, and is not intended for use as a medical device. It does not make a diagnosis, identify suspected adenomas, or direct treatment decisions, but it does organize information for the clinician relating to polyps. It is not intended to substitute for the advice of a clinician. The clinician should always use proper judgment in patient care, and should disregard Argus recommendations where clinically appropriate.

Argus®

AI Polyp Detection Plus+ Sizing



Clinical Decision Support Software*

Patented Technology to Support Polyp Detection & Sizing

Argus® is a vendor-neutral AI technology that integrates with existing EHRs/ERWs, scopes, and processors without changing existing workflow. Utilizing Argus during colonoscopy has shown to increase polyp detection rates and assist clinicians with appropriate patient recall times. Argus aides in the detection of polyps using CAde (computer-aided detection) and accurately sizes polyps with CAPs® (computer-aided polyp sizing), both in real-time. Argus automatically detects polyps using artificial intelligence and machine learning while capturing images and video simultaneously.

Argus Users Increased Polyp Detection by 19%

Each **1%**

Increase in Adenoma Detection Rates is Associated with a **3%** Decrease in the Risk of Developing Colon Cancer ¹

EndoSoft LLC. AI systems for detecting and sizing lesions.
US 10,957,043 United States Patent and Trademark office, 23 March 2021.

¹New England Journal of Medicine. 2014 Apr 3; 370(14):1298-1306.
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4036494>

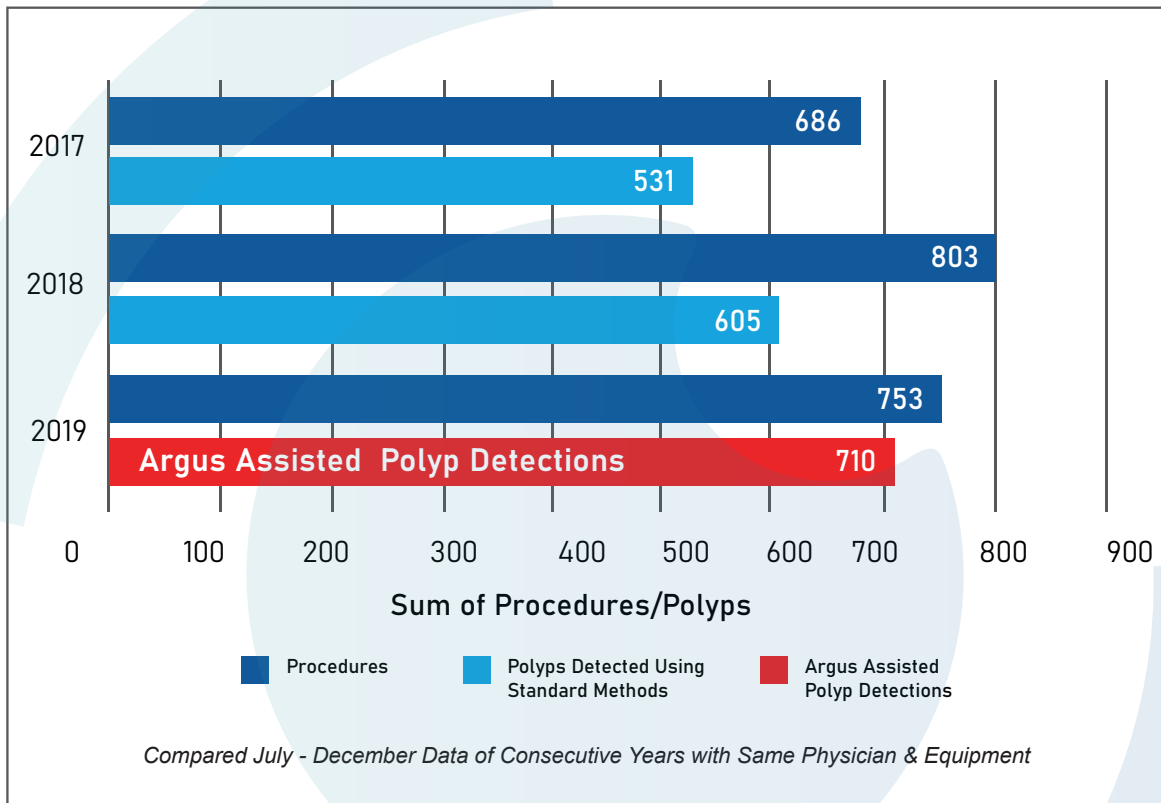
Detection

Argus assists in the detection of polyps by automatically highlighting abnormalities on the video image prompting the clinician to inspect the area of interest further. Argus does not alter the image provided by the video processor. The AI technology provides additional observation of colonic mucosa during each procedure.

Sizing

Argus assists the clinician in determining the size of polyps during colonoscopy. Appropriate sizing affords the clinician to adhere to standard guidelines and set suitable patient screening intervals.

Argus Users Increased Polyp Detection by 19%



Argus® Assists Clinicians with:

- Polyp Detection
- Polyp & Non-Polypoid Lesion Sizing
- Setting Patient Screening Intervals

Utilizing a robust database of videos and images, Argus has vast polyp identification intelligence to assist clinicians with detection and sizing of all types of polyps, including flat.

Ready to Implement AI into Your Workflow?

Argus® AI Technology Is Now Commercially Available

sales@endosoft.com | 518-831-8000

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