

Revolutionizing Endoscopic Ultrasound in Ambulatory Surgical Centers: The EVS™ Advantage



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Endoscopic ultrasound (EUS) has long been a valuable diagnostic and therapeutic tool in gastroenterology, traditionally confined to hospital settings due to high costs and technical requirements. This white paper introduces the

EndoSound Vision System™ (EVS™), a groundbreaking solution that makes EUS accessible and profitable for Ambulatory Surgical Centers (ASCs) and smaller hospitals. By addressing traditional barriers to EUS adoption in outpatient settings, EVS is poised to transform the landscape of advanced endoscopy, improving patient care, physician satisfaction, and ASC profitability.

Background: EUS in Gastroenterology

Endoscopic ultrasound (EUS) has been a cornerstone of advanced gastroenterology for over three decades. This hybrid technique combines endoscopy with high-frequency ultrasound, allowing for detailed imaging of the gastrointestinal tract and adjacent structures. EUS has proven invaluable for:

- Diagnosis and staging of gastrointestinal cancers
- Evaluation of submucosal lesions
- Assessment of pancreaticobiliary disorders
- Guided fine-needle aspiration (FNA) and biopsy procedures
- Therapeutic interventions such as pseudocyst drainage and celiac plexus neurolysis

Despite its clinical utility, EUS has primarily been confined to hospital-based settings due to several limiting factors.

Traditional Barriers to EUS in ASCs

Historically, several factors have prevented the widespread adoption of EUS in the ASC:



High Capital Costs: Traditional EUS systems require substantial upfront investment, often exceeding \$200,000 for the ultrasound hardware alone.



Additional Scope Requirements: Conventional EUS systems necessitate the purchase of specialized echoendoscopes, which can cost over \$80,000 each. This represents a significant additional expense beyond the ultrasound hardware.



Extensive Training: The complexity of traditional EUS systems demands extensive training for endoscopy technicians, increasing operational costs and potential scheduling difficulties.



Space Constraints: Many ASCs lack the physical space to accommodate bulky EUS equipment, limiting their ability to offer this service.

These barriers have effectively relegated EUS to larger hospital settings, limiting access for patients and potentially increasing healthcare costs.

The EVS Solution

The EVS represents a paradigm shift in EUS technology, specifically designed to overcome the traditional barriers to ASC adoption. Key advantages include:

1. Low Capital Cost: The EVS is offered at a fraction of the cost of traditional EUS systems, making it accessible to a wider range of healthcare providers.
2. Compatibility with Existing Endoscopes: Unlike traditional systems, EVS works with standard endoscopes already in use at ASCs. This eliminates the need for additional expensive echoendoscopes, allowing for immediate implementation regardless of the current scope vendor.

3. High-Quality Imaging: Despite its cost-effectiveness, EVS provides high-resolution ultrasound images comparable to those produced by many traditional systems.
4. Minimal Additional Training: The system's user-friendly interface and compatibility with existing endoscopes minimize the learning curve for endoscopy technicians.

Compact Design: The EVS's small footprint allows for easy integration into existing ASC environments without requiring additional space. Additionally, it can be easily moved between rooms and can potentially be shared across facilities due to its compact size.

Financial Benefits for ASCs

Implementing the EVS can drive significant financial benefits for ASCs:

1. Expanded Procedure Offerings: ASCs can now offer EUS procedures, attracting new patients and retaining existing ones who would otherwise be referred to hospitals.
2. Increased Revenue: EUS procedures are reimbursed at the higher end of the EGD CPT code table, providing a new revenue stream for ASCs.
3. Improved Utilization: The addition of EUS can help optimize underutilized ASC capacity, increasing overall procedure volume and profitability. As the EVS works directly with your existing equipment, setup and room turnover is minimal, allowing EUS exams to be performed within the standard block schedule without delay.

Physician Satisfaction: By enabling gastroenterologists to perform advanced procedures in the ASC setting, the EVS can improve physician satisfaction and potentially attract new practitioners to the facility. Existing physicians may find the need for increased block time to accommodate wider use of the EVS, in addition to scheduling additional EGD and Colonoscopies to fill their additional block time.

Case Study: Realizing the EVS Advantage

To illustrate the real-world impact of the EVS, consider the following case study from a current user:

An established gastroenterologist implemented the EVS in his ASC practice, with the following results:

- Pre-Implementation (2023):
 - 112 EUS cases performed over 8.5 months in a hospital endoscopy suite.
- Post-Implementation (2024):

- 96 EUS procedures performed at the hospital endoscopy suite
- 88 EUS cases performed at the ASC using the EVS
- Total EUS Volume:



With EUS now available at the ASC, more patients were scheduled for expanded indications including chronic abdominal pain and diarrhea, pancreatic cancer screenings, pancreatic cyst surveillance, dilated bile ducts, small gastric submucosal lesions, and others.

Case Study: Key Outcomes:

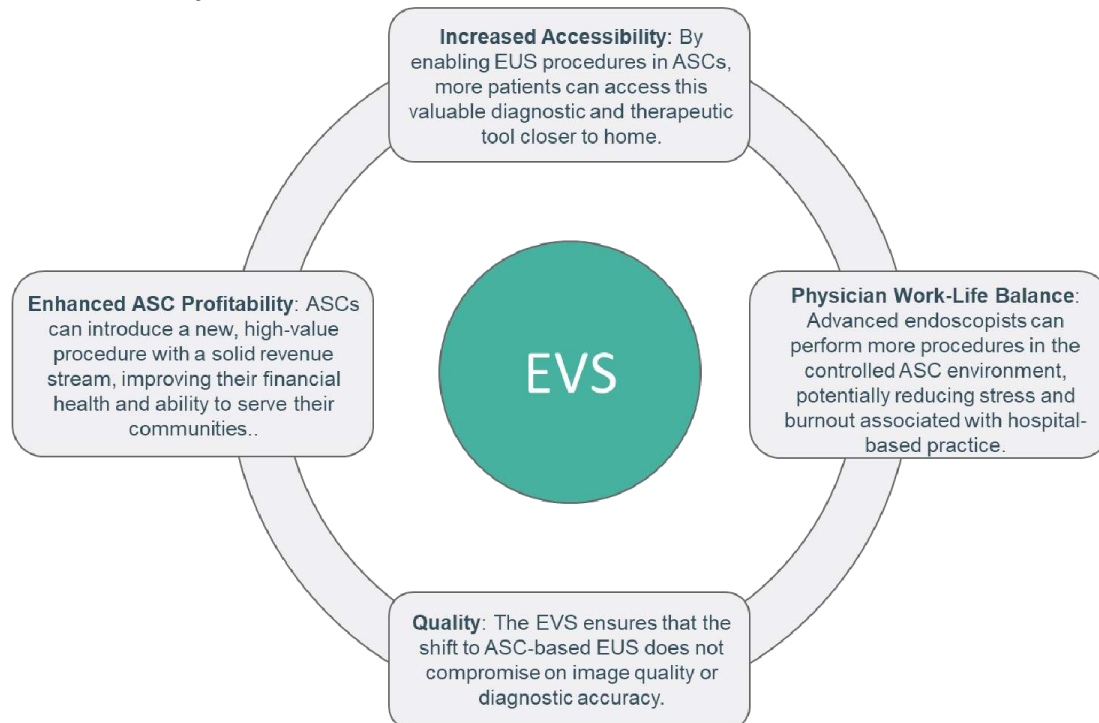
1. Practice Growth through EUS availability and Echo-Endoscopy:
 - The physician didn't simply shift volume but significantly expanded his EUS practice.
 - This was partially accomplished by scheduling more patients with EUS, a term called Echo-Endoscopy meaning “*Ultrasound-Enhanced Endoscopy*”.
 - Using EUS in conjunction with regular EGD has the potential to enhance diagnostic yield and data from this case study confirms that result.
 - Additional volume was created when Partner physicians were able to efficiently refer their own patients for EUS with the EUS physician for exams at their own ASC
2. ASC Revenue Boost:
 - EUS procedures code with higher reimbursement
 - Increased volume of EGD and colonoscopy procedures on days allocated for EUS. When physicians schedule EUS exams, they will often perform additional EGD and colonoscopy cases to fill out their schedule.
3. Improved Efficiency: The EVS allowed for efficient scheduling and performance of EUS procedures in the ASC setting.
4. Enhanced Patient Experience: Patients benefited from the convenience and typically lower costs associated with ASC-based procedures.¹

This case study demonstrates that implementing EVS can be a win-win situation for gastroenterologists, ASCs, and patients alike.

¹ <https://www.medicare.gov/procedure-price-lookup/cost/43259>

A New Paradigm for EUS

The introduction of the EVS has the potential to create a new standard for EUS delivery, aligning it more closely with common procedures like EGD and colonoscopy. This shift promises several key benefits:



Conclusion

The EVS represents a significant advancement in making endoscopic ultrasound more accessible, efficient, and profitable in the ASC setting. By addressing the traditional barriers to EUS adoption, this innovative technology opens new possibilities for gastroenterologists, ASCs, and patients alike. As demonstrated in the case study, implementing EVS can lead to practice growth, increased ASC profitability, and improved patient care. Furthermore, with Echo-Endoscopy the practice used ultrasound with a standard EGD to drive more clinical results and increase volume.

The future of EUS lies in its broader adoption in outpatient settings, aligning with the ongoing shift towards value-based care. The EVS is at the forefront of this transformation, promising to revolutionize the delivery of advanced endoscopic services in gastroenterology.

Further Information:

 A square QR code with a teal and black color scheme. In the center of the QR code is a white square containing a stylized blue 'E' logo.	Stuart Akerman, MD – Tutorial (Using EVS)
 A square QR code with a teal and black color scheme. In the center of the QR code is a white square containing a stylized blue 'E' logo.	EndoSound Vision System Clinical Case Video