



Practical AI for the GI Clinic

Streamlining Care and Improving Efficiency

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September 20, 2025



Disclaimer



- Views expressed are my own
- No financial relationships with vendors mentioned
- AI tool examples discussed are for educational purposes, not endorsements



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Objectives



By the end of this session, participants will be able to:

1. Identify entry-level AI tools
2. Describe advanced applications in gastroenterology
3. Recognize implementation strategies
4. Discuss risk & resources considerations



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The Current Problems in GI Practice



Documentation Burden

2 hrs in the EHR for **every 1 hr** of care



Prior Authorizations & Denials

90% delayed care; >80% patients abandon



Quality Reporting Requirements

ADR, SSLDR, & metrics required, but **manual & error-prone**



Clinician Burnout

Clerical work consumes **≥1/3 of physician time**; strongly linked to burnout



AI in Practice: Lessons We Can Apply



Speeds up routine tasks



Improves accuracy



Turns data into insights



Frees humans to focus on higher-value work



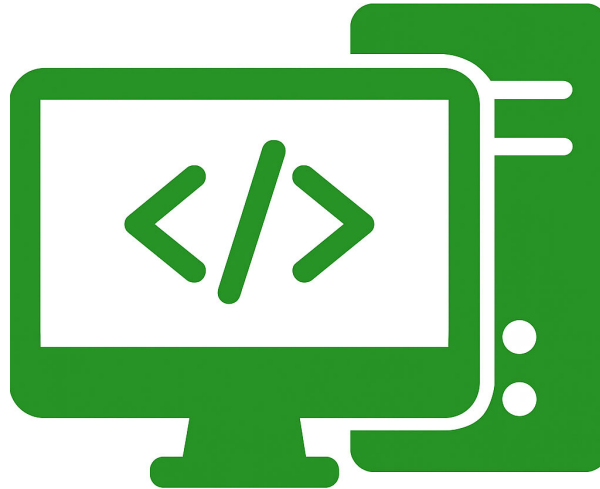
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The Roadmap: Bringing AI Into GI Care



**Entry Level
AI Tools**



**Advanced AI
Applications**



**Integration &
Strategy**



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Entry Level AI Tools



**Ambient
Scribes**



**AI Assisted
Messaging**



**Smart CME
Learning**



**Generative
Appeals**



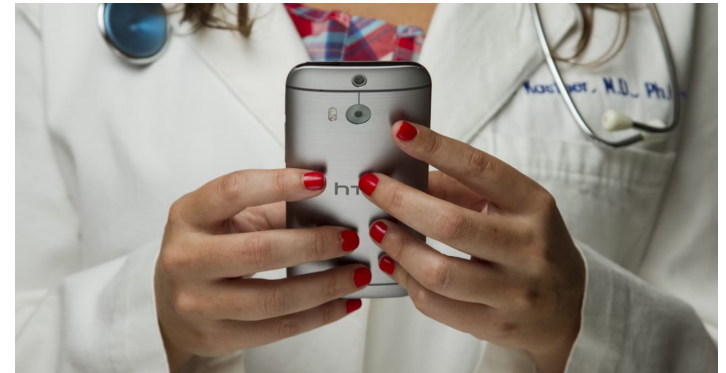
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Documentation with Ambient Scribes

- **Voice-enabled tools** that draft visit notes
 - Work via *computer microphone* or *smartphone app*
- Reduce typing, keep focus on patient
- Physician reviews/edits before signing





Ambient Scribes System Types

EHR Integrated Platforms (Epic/Cerner)

Examples:



Pros: Seamless workflow

Cons: Higher cost, IT-dependent

Standalone Platforms (Web-Based)

Example:



Pros: Flexible, browser-based

Cons: Manual copy/paste, less seamless



AdventHealth & Dragon Copilot

Workflow

Smartphone recorder → drafts in Epic in real time → physician review/sign



Microsoft Dragon
Copilot

Implementation

- Stepwise rollout
- Pilots in high-documentation specialties
- Ongoing clinician feedback loops
- Champion physicians

Use At Scale

- Over **2,000 clinicians** live on Microsoft Dragon Copilot since 2024
- Deployed across multiple specialties, including Gastroenterology

Outcomes Reported



86%
physician
burnout



80%
patient
experience



75%
less likely to leave
clinical practice



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(Sources: Becker's Hospital
Review, CIO.com)


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Generative CME Learning & Research

Commercial Generative AI

Used by millions of users worldwide for drafting, brainstorming, and productivity.



Risk in Medicine:

Not HIPAA-compliant, prone to errors → **unsafe for direct clinical use.**

Medical-Specific AI Platforms

OpenEvidence[®]

- Pulls from trusted journals (NEJM, JAMA)
- Generates evidence-linked answers
- **CME/MOC credit**



Consensus

- Summarizes **peer-reviewed research articles** for education and research
- Tracks new therapies and trial



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Generative AI for Prior Auth & Appeals

The Challenge:

- 90% of physicians report care delays
- 80% see patients abandon care

How AI Helps:

- Drafts appeal letters
- Supported by guideline-based citation
- Speeds turnaround
- Reduces clerical burden



Platforms:

OpenEvidence[®] doximity

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Generative Appeals: Step 1 — The Query

OpenEvidence®

Write an appeal letter for a denial of Xifaxan 550 milligrams TID for 14 days for a 56-year-old woman with IBS-diarrhea who has failed diet and lifestyle modification, fiber supplements, Imodium, dicyclomine, hyoscyamine, and amitriptyline neuromodulators.



Deep Consult



Write Home Care Instructions



Prepare For MOC Exams

Be specific:

- Drug & Dose
- Indication
- Denial reason
- Prior treatments

Privacy Tip:

- Avoid patient HPI
- Check HIPAA compliance

Applies to:

- Procedures
- Medical Support Letters
- Work/school accommodations



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Generative Appeals: Step 2 - Using EHR

Rifaximin Insurance Appeal

To Whom It May Concern,

I am writing to appeal the denial of coverage for Xifaxan (rifaximin) 550 mg three times daily for 14 days for my patient, a 56-year-old woman diagnosed with irritable bowel syndrome with diarrhea (IBS-D). This patient has failed multiple standard therapies, including diet and lifestyle modification, fiber supplementation, loperamide, dicyclomine, hyoscyamine, and amitriptyline neuromodulators.

Clinical Rationale and Evidence-Based Justification:

- **Diagnosis and Prior Treatment Failure:** The patient meets diagnostic criteria for IBS-D and has persistent, debilitating symptoms despite exhaustive trials of first-line and adjunctive therapies. This refractory course necessitates escalation to evidence-based, guideline-supported pharmacologic options.
- **Guideline Recommendations:** Both the American Gastroenterological Association (AGA) and the American College of Gastroenterology (ACG) recommend rifaximin for the management of IBS-D. The AGA provides a conditional recommendation for rifaximin as initial and repeat therapy in IBS-D, citing moderate-quality evidence for efficacy and safety. The ACG issues a strong

Ask a follow-up question...

Don't retype HPI

Auto-populate from chart!

SmartPhrase Templates:

Header: patient HPI (auto-filled)

→ Body: AI-generated appeal letter (evidence + citations)

Footer: signature + institutional letterhead

Result → Standardized, efficient, physician-reviewed appeal letter



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AI Assisted Messaging

Usually built into larger platforms (EHRs, AI apps)

Best use: targeted portal messaging

Benefits: saves staff time, standardizes responses, improves patient access

Options:

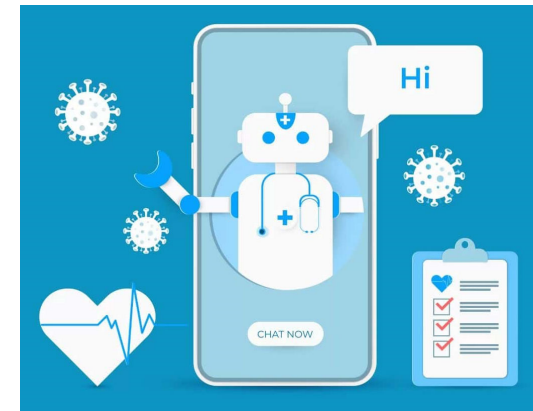
Epic ART → EHR-native drafts portal responses w/ chart context

Doximity / OpenEvidence → generate patient-friendly replies for copy/paste

AdventHealth & NavGI 360 chatbot → colonoscopy prep

Call line with automated responses built from a curated FAQ

Reduced call volume, fewer last-minute cancellations



 **BrainTree**
A PART OF SEBELA PHARMACEUTICALS®




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Tips on Choice and Use of Chatbots



Vetting Products

- **BAA signed (HIPAA)** — no PHI without it
- Verify vendor **security & accuracy**
- Choose **task-specific** tools (e.g., prep FAQs)



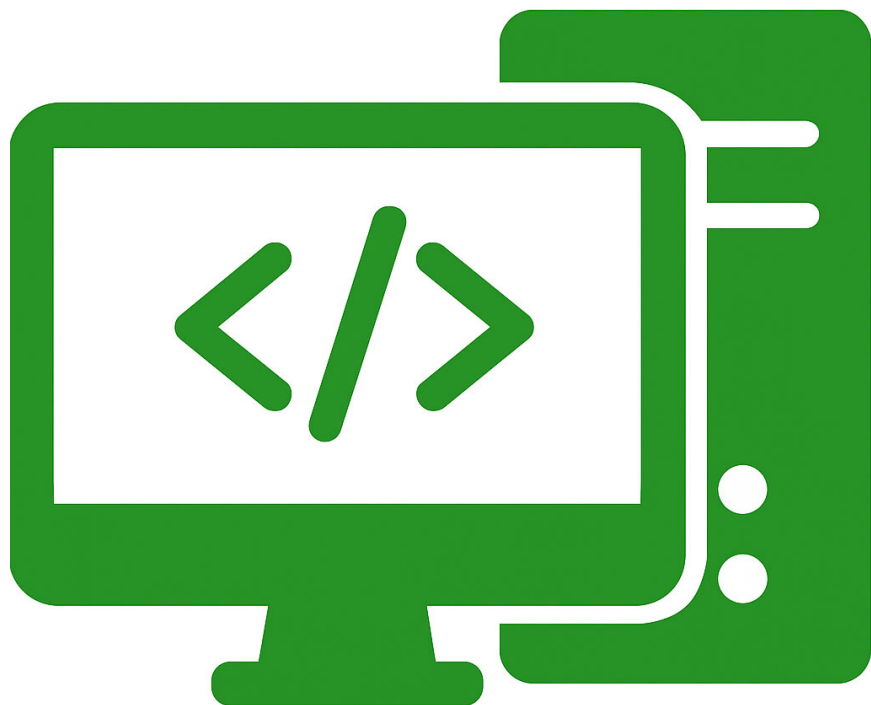
Risk Mitigation

- **Clinician-curated FAQ** (built with clinical direction)
- **Human fallback** always available
- **Pilot first**, then scale



Integration & Monitoring

- **Embed** in existing workflows
- **Track** usage & unanswered questions
- **Collect** patient feedback
- **Regular clinical review**

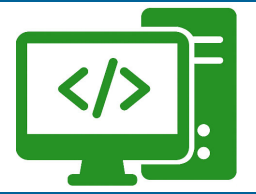


Advanced AI Applications



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NLP for Quality Metrics

Challenge

Linking endoscopy + pathology is manual & error-prone

Impact → *Metrics incomplete*

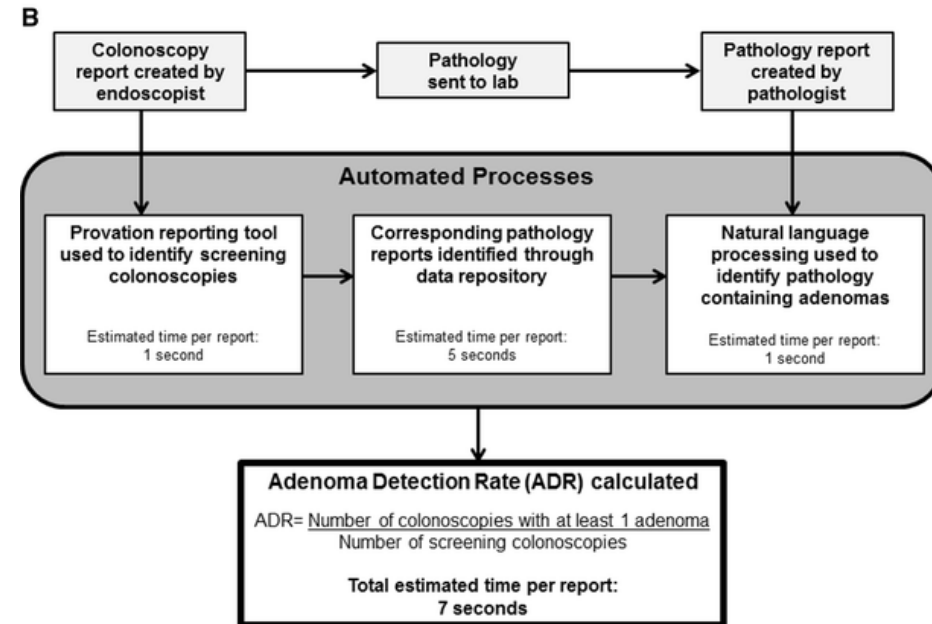
ADR, SSLDR, cecal intubation, withdrawal time, and prep quality

Proof of Concept:

NLP validated for automated quality extraction

Opportunity:

Automates **4 min** → **7 sec** per chart

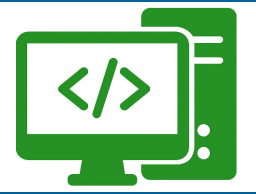


Nayor, Jennifer, et al. "Natural language processing accurately calculates adenoma and sessile serrated polyp detection rates." *Digestive diseases and sciences* 63.7 (2018): 1794-1800.



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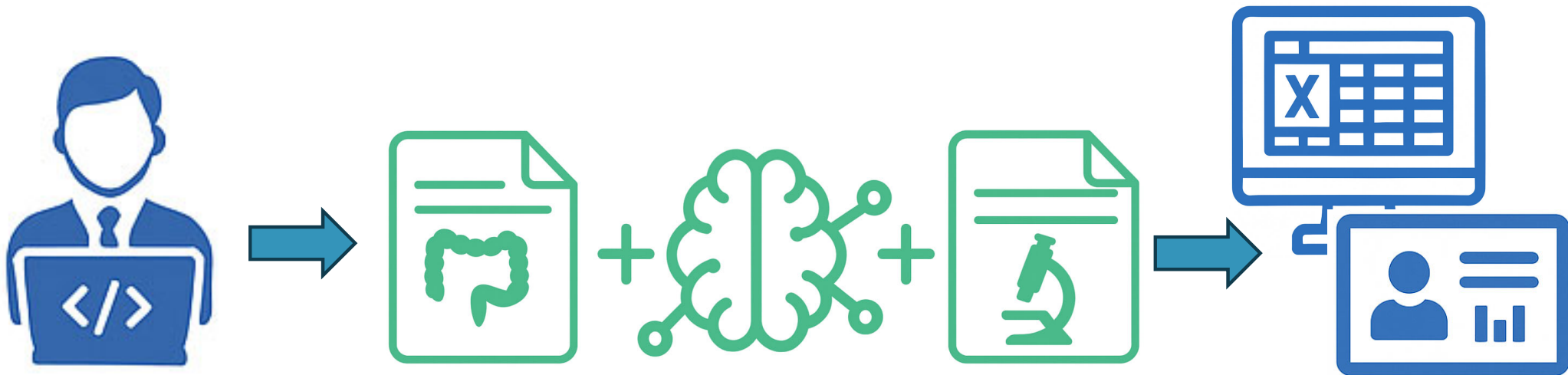
NLP Solution for ADR and SSLDR

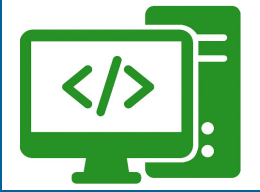
What We Did

- Partnered with **coder** (NLP expertise)
- Built NLP tool to **link endoscopy + pathology**
- **Automated data collection and linkage**

Outputs

- **Division-wide metrics** (ADR, SSLDR, cecal intubation, withdrawal times, bowel prep quality)
- Individual **physician report cards**





NLP Impact: Driving Quality & Value

Impact

- Automated, accurate, scalable quality reporting
- Physician-level report cards → accountability
- Identifies division-wide gaps (e.g., prep quality)

Value for Key Stakeholders

- Leadership: real-time dashboards
- Payors: demonstrable metrics for contracts
- Patients: transparency & reassurance

Lessons Learned

- Feasible with right partnerships
- Strong ROI when tied to quality improvement
- Builds foundation for future AI projects





Integration & Strategy



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How Do We Integrate AI Into Practice?

Integration varies by **practice setting** based on each's unique challenges & opportunities.

Private Practices

Lean resources, need flexible solutions

Regional / Multi-site Practices

Multiple sites, standardize & coordinate

Large Health Systems

Complex oversight, align with IT and compliance



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The Three C's of AI Leadership



Champions - Cornerstone of AI success

- Clinicians who identify opportunities, test solutions, and advocate for adoption
- *Necessary for success in every organization (single site practice to large health systems)*



Committees - Structured Collaboration

- *Small specialty departmental group or Multi site practices*
- Bring together champions, IT, operations, and legal for vetting and governance



Councils - Enterprise-level Coordination

- *Health Systems with multiple divisions and campuses*
- Align AI strategy across service lines, ensure compliance, & prevent “reinventing the wheel”



How Do We Build Champions?

Identify

- Early adopters
- Problem-solvers
- Informatics-minded clinicians

Support



Executive Education

- Harvard
- MIT
- Hopkins



Professional Societies

- ASGE - AI in GI Scholars
- AGA Committee for GI Innovation & Technology



Conferences

- ASGE Annual Global GI & AI Summit (September)
- AI-Med (November)
- Other Regional AI in GI conferences

Promote

- Protected time & recognition
- Visibility in leadership forums
- Cross-department opportunities

Outcome: Champions fuel a culture of innovation



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Anticipating and Mitigating AI Risks

Risk	Example	Mitigation
Errors & hallucinations	<i>AI scribe <u>invents diagnoses</u></i>	Human review before signing
Security & HIPAA	<i>Free AI tool w/o BAA <u>may expose PHI</u> (aka Shadow AI)</i>	Vendor vetting & BAA approval (use only system-approved tools)
Workflow disruption	<i>Extra clicks/log-ins <u>slow clinic</u></i>	Pilot first, refine workflows





Committees & Councils: Scaling AI in Practice

Committees

- Specialty or departmental level
- Align projects, share lessons learned, promote consistency

Example: Endoscopy Innovation Committee
piloting AI polyp detection tools before rollout

Councils

- Enterprise-level oversight
- Prevent redundancy, ensure compliance
- Scale successful projects system-wide

Example: Clinical AI Advisory Board

AdventHealth Clinical AI Advisory Board

- Meets quarterly
 - Clinicians, researchers, IT, and operations leaders
- Updates
 - AI research, Epic AI roadmap, enterprise strategy
- Critical feedback
- Use-case evaluation
- Scale solutions across system



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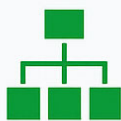
Keys to Scaling AI Successfully



Start small, scale smart



Empower champions



Build structures to fit your practice



Anticipate risk, plan oversight



Leverage shared solutions



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Path Forward with AI

AI in GI is **practical & here now** — scribes, appeals, NLP quality metrics

Clinicians must lead adoption, oversight, and innovation

Empower **champions**, start small, scale with strategy

Focus tools to **reduce burden, improve care, & demonstrate value**

AI in GI is *not about replacing* physicians. It's about empowering us to deliver better, more efficient, and patient-centered care.



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Thank you

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Question 1

Three departments are negotiating separately with different scribe vendors, creating duplication and uneven safeguards.

Which action by an enterprise council adds the greatest value?

- A. Let each department proceed to encourage competition
- B. Publish a list of “banned” products without review
- C. Centralize review for compliance/BAA, standardize evaluation metrics, and scale the best option system-wide
- D. Defer all decisions to the vendor’s marketing team



Question 2

A clinician needs to answer portal messages efficiently and wants to explore generative AI tools to save time.

What is the primary advantage of using an EHR-integrated generative AI tool instead of a standalone web chatbot?

- A. Auto-sends replies without clinician review
- B. Guarantees 100% accuracy
- C. Keeps PHI within a BAA-covered environment & pulls chart context to reduce copy-paste errors
- D. Allows use of any external data source without restrictions

