

Gastroenterology & Hepatology Research Newsletter

Spring 2023

By the GI/Liver
Specialty Group and
the DARE program

Welcome to the **TPMG Gastroenterology & Hepatology Research Newsletter!**

In this issue, we present current or recently completed research projects led by the TPMG GI/Liver clinician researchers as well as ongoing studies led by investigators at the Division of Research that involve our GI/Liver clinician researchers and our outstanding GI fellows.

Conducting research to improve care is important to many TPMG clinicians and DARE is proud to provide our physicians with research collaboration opportunities through several DARE funding mechanisms.

In addition, we also provide you a list of recently published articles by the TPMG GI/Liver clinician researchers



A Deeper Look Inside This Update:

- Research Highlight
- Upcoming Events
& Funding
- GI Fellows Corner
- Active and Recent Research
Projects
- Recent Peer Reviewed
Publications

Research Highlight:

Association of Physician Adenoma Detection Rates With Postcolonoscopy Colorectal Cancer

Joanne E. Schottinger, MD; Christopher D. Jensen, PhD; Nirupa R. Ghai, PhD; Jessica Chubak, PhD; Jeffrey K. Lee, MD; Aruna Kamineni, PhD; Ethan A. Halm, MD; Celeste Sugg-Skinner, PhD; Natalia Udaltsova, PhD; Wei K. Zhao, MPH; Rebecca A. Ziebell, BS; Richard Contreras, MS; Eric J. Kim, MS; Bruce H. Fireman, MA; Charles P. Quesenberry, PhD; Douglas A. Corley, MD (JAMA 2022 Jun 7;327(21):2114-2122. doi: 10.1001/jama.2022.6644)

Main findings: In this retrospective cohort study of 735 396 patients at 3 large integrated health care systems (Kaiser Permanente Northern California, Kaiser Permanente Southern California, and Kaiser Permanente Washington) with 852 624 negative colonoscopies (without detection of cancer), higher physician adenoma detection rates were significantly associated with a lower risk of postcolonoscopy colorectal cancer (hazard ratio, 0.97 per 1% absolute adenoma detection rate increase [95%CI, 0.96-0.98]) and death from postcolonoscopy colorectal cancer (HR, 0.95 per 1% absolute adenoma detection rate increase [95%CI, 0.92-0.99]) across a broad range of adenoma detection rate values. Compared with adenoma detection rates below the median of 28.3%, detection rates at or above the median were significantly associated with a lower risk of postcolonoscopy colorectal cancer (1.79 vs 3.10 cases per 10 000 person-years; absolute difference in 7-year risk, -12.2 per 10 000 negative colonoscopies [95%CI, -10.3 to -13.4]; HR, 0.61 [95%CI, 0.52-0.73]) and related deaths (0.05 vs 0.22 cases per 10 000 person-years; absolute difference in 7-year risk, -1.2 per 10 000 negative colonoscopies [95% CI, -0.80 to -1.69]; HR, 0.26 [95%CI, 0.11-0.65]).

Conclusions and Relevance: Within 3 large community-based settings, colonoscopies by physicians with higher adenoma detection rates were significantly associated with lower risks of postcolonoscopy colorectal cancer across a broad range of adenoma detection rate values. These findings may help inform recommended targets for colonoscopy quality measures.

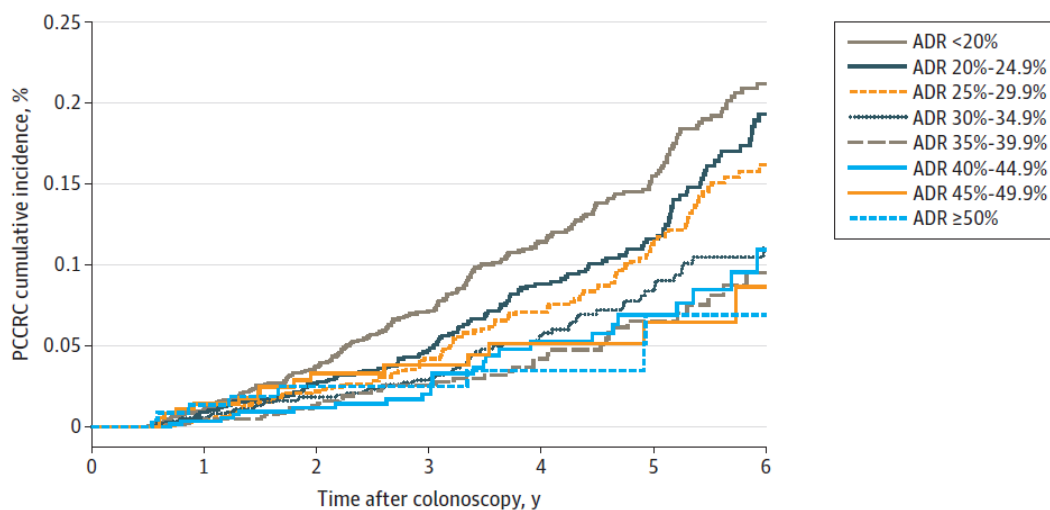


Figure 1. Postcolonoscopy Colorectal Cancer Cumulative Incidence Stratified by Physician Adenoma Detection Rate Group

Upcoming Events

Digestive Disease Week

Dates: May 6-9, 2023

Location: McCormick Place, Chicago, IL

For more information: www.ddw.org

Northern California Society of Clinical Gastroenterology (NCSCG) 19th GI Symposium

Dates: May 20-21, 2023

Location: Hyatt Regency Hotel and Spa,
Monterey, CA

For more information: norcalgastro.org

ACG Annual Scientific Meeting 2023

Dates: October 20-25, 2023

Location: Vancouver Convention Center,
Vancouver, Canada

For more information: acgmeetings.gi.org

The Liver Meeting

Dates: November 10-14, 2023

Location: Hynes Convention Center, Boston, MA

For More Information: aasld.org

Internal Funding & Research Resources



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GI Fellows Corner

Third Year Fellows



Nicole Evans MD

I was born and raised in Los Angeles County and completed my undergraduate degree at the University of California, Berkeley. I then received my master's degree in biomedical sciences at Rosalind Franklin University of Medicine and Sciences, medical degree at Drexel University College of Medicine, and internal medicine residency at the University of Southern California + Los Angeles County Medical Center. I am currently a third-year Chief gastroenterology fellow at Kaiser Permanente in San Francisco, and I am very pleased to announce that I will be joining the Southern California Permanente Medical Group in Downey, CA this coming August.

My academic and clinical interests include general gastroenterology, medical pancreatology, and colorectal cancer prevention. Most recently, I published a case write-up on vulvar Crohn's diagnosis and management in *Digestive Diseases and Science*, as well as a systematic review and meta-analysis on the global burden of post-colonoscopy colorectal cancers in the journal of *Alimentary Pharmacology & Therapeutics*. I am currently working on several studies related to pancreatology, one of which is assessing the rates of oncologic therapy initiation and completion in older adults with pancreatic adenocarcinoma, and the other is evaluating healthcare utilization rates and patient outcomes following implementation of a radiology-based management algorithm for pancreatic cystic lesions. Additionally, I am interested in quality improvement research and completing several projects aiming to have an impact on a regional level. The first project is looking at optimization of ergonomic tools available in the endoscopy lab for clinical gastroenterologists and the second is in the final steps of implementing an acute pancreatitis management orderset to help standardize evidenced-based inpatient care.

Eshan Boparai MD

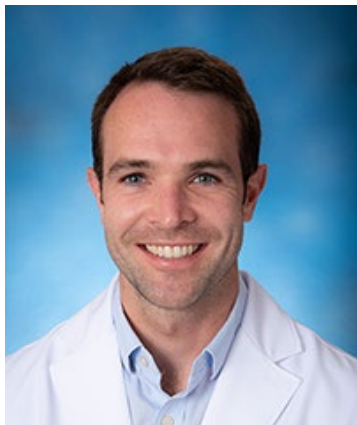
I am originally from the Bay Area and went to college at UC Berkeley. For my medical education, I was in Washington D.C. at the George Washington University School of Medicine. I returned to San Francisco to complete my medicine residency at KP San Francisco. In July 2023, I will be joining Kaiser Permanente Walnut Creek / Antioch's Gastroenterology department.

My interests include general gastroenterology, colorectal cancer prevention, and the brain-gut interaction. Most recently, I have worked on a project evaluating incidence of colorectal cancer in patients with IBD related dysplasia and a KP project evaluating the effectiveness of three outreach interventions (i.e., mailed letter, secure messaging, and telephone call) on patient adoption of the new 10-year surveillance interval recommendation for low-risk adenomas. My prior research included a multi-center project evaluating the efficacy of ESD for superficial gastric neoplasia, findings of which were published in *Clinical Gastroenterology and Hepatology*. Currently I am working on a quality improvement project to improve Blakemore Tube



access/education for management of variceal bleeding and assisting in a meta-analysis evaluating the efficacy of gut-directed hypnotherapy for IBS symptoms.

Second Year Fellows



Kevin Kane MD

I'm originally from New Jersey, but California has been my home for close to 20 years, where I love to surf, hike and enjoy the outdoors in my free time. I completed my undergraduate degree in biochemistry at UC Riverside before moving to the Bay Area in 2012 to attend medical school at UCSF. I completed my residency at Stanford and subsequently worked at the San Francisco VA as a primary care/emergency physician prior to starting GI fellowship at KP, where I am currently in my second year.

My clinical interest is in general GI and I am working to gain additional skills in advanced polypectomy/EMR, in addition to those required to become a well-rounded gastroenterologist. My research interests are in early-onset colorectal cancer, and I am currently working on a retrospective analysis of KP patients aimed at identifying additional risk factors. My goal is combine these interests to contribute meaningfully to the prevention of colorectal cancer while also taking care of patients with a wide variety of gastrointestinal disorders.

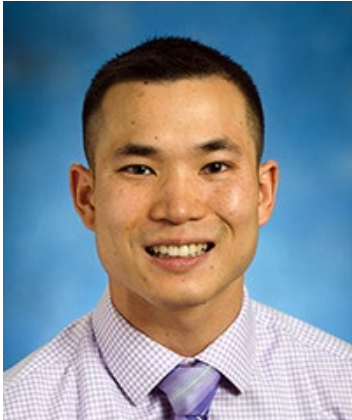
Elie Adler MD

Elie is a Bay Area native (born at Kaiser SF!), who mistakenly thought she'd like snowy winters. She attended Brown University followed by Mount Sinai for medical school via the Humanities in Medicine track, and happily returned to San Francisco for Internal Medicine residency at UCSF. Elie has always had an interest in integrative and lifestyle approaches to chronic health issues, and she completed a yearlong research fellowship at UCSF's Osher Center for Integrative Medicine. During her residency at UCSF, she acted as an editorial fellow for *JAMA Internal Medicine*, where she helped review Gastroenterology and Hepatology content and published a commentary on lifestyle interventions for NAFLD. Her work in Hepatology via *JAMA IM* led to Elie being named an AASLD Emerging Liver Scholar. Elie is also interested in the microbiome, and her research on capsule-delivered FMT for patients with UC was published in *Digestive Diseases and Sciences*.



During fellowship so far, Elie has continued to cultivate her interest in the gut-brain interaction, and she has completed clinical training in gut-directed hypnotherapy. She is currently working to establish a gut-directed hypnotherapy niche clinic for patients with refractory IBS with Dr. Yao Heng. Her current research project focuses on summarizing the literature on gut-directed hypnotherapy via a meta-analysis. Elie is also a physician writer. Her narrative medicine essays have been published in *Annals of Internal Medicine* and *The New England Journal of Medicine*.

First Year Fellows

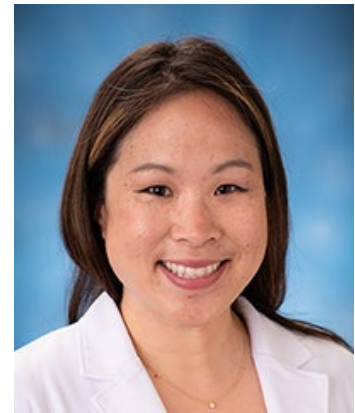


Lawrence Leung MD, MPH

I was born and raised in the SF Bay Area and completed my undergraduate degree at UC Berkeley. I then served an AmeriCorps term focused on disaster preparedness in disadvantaged communities in the Bay Area. Subsequently, I returned to UC Berkeley for my MPH prior to moving east for medical school at the University of Vermont. I returned to the SF community to complete my internal medicine residency and gastroenterology fellowship here at KPSF. My clinical interests include luminal GI (particularly CRC screening and complex polyp resection), pancreaticobiliary endoscopy, and technology and innovation.

Marcia Leung MD

I was born and raised in Ewa Beach, Hawaii and completed my undergraduate studies at Santa Clara University where I majored in Bioengineering. I then completed my residency at UC Davis where my research interests were in establishing referral pathways for NASH patients and quality improvement in inpatient management of cirrhosis patients. My research has been published in the *Journal of Hepatology*. My current clinical interests are in general gastroenterology and hepatology, and my current research is focused on validating Baveno VI criteria in the KP population.



Active Research Projects and Collaborations

- **An Organized Hepatitis B Surveillance Program increases Patient Identification and Optimizes Management**
Krisna Chai, Joanna Ready, Andy Avins | RAU | Ongoing
- **Assessment of the Risks of Biologic Therapy in Elderly Patients with Inflammatory Bowel Disease**
Jennifer Chan | CH | Ongoing
- **Colorectal cancer screening decisions based on predicted risk: the PREcision ScreENing randomized controlled Trial (PRESENT)**
Jeffrey Lee | NCI | Ongoing

- **Comparative analysis of safety and effectiveness of non-transplant treatment options for early-to-intermediate stage hepatocellular carcinoma across a large, integrated health care system in Northern California**
Nizar Mukhtar | CH | Ongoing
- **Comprehensive Colorectal Cancer Risk Prediction To Inform Personalized Screening**
Doug Corley, Jeffrey Lee | NCI | Ongoing
- **Contemporary Probability of Occult Colorectal Cancer in Patients with Colitis-Related Dysplasia undergoing Colectomy**
Fernando Velayos | Other | Ongoing
- **COVID-19 Pandemic: Impact on Colorectal Cancer Screening and Adenoma Surveillance Outcomes (PICASO)**
Theodore Levin | Other | Ongoing
- **De-implementation of Outdated Colonoscopy Surveillance Interval Recommendations Among Patients with Low-risk Adenomas (DESIRE)**
T.R. Levin, Jeffrey Fox, Jeffrey Lee | DSGP | Ongoing
- **Effect of Screening for Hepatocellular Carcinoma on cancer-related and all-cause mortality in patients with cirrhosis-a population-based case control study**
Sreepriya Balasubramanian, Julie Schmittiel | RAU | Ongoing
- **Effectiveness of Screening for Colorectal Cancer in Average Risk Adults: Colonoscopy vs. FIT (SCOLAR2)**
Doug Corley, T.R. Levin | NCI | Ongoing
- **Esophageal adenocarcinoma risk in patients with Barrett's Esophagus without dysplasia. Is ongoing surveillance endoscopy warranted?**
Tanaaz Baldawala | CH | Ongoing
- **Hepatocellular Carcinoma Biomarker Study with Glycotest®**
Varun Saxena | Other | Ongoing
- **Implementation success of integrated program on hepatitis B identification, surveillance, and treatment**
Krisna Chai & Joanna Ready, Andy Avins | RAU | Ongoing
- **Improving health outcomes and reducing healthcare costs in individuals with Helicobacter pylori infection in a large, community-based population**
Dan Li | PRP | Ongoing
- **International Travel for Liver and/or Kidney Transplantation**
Joanna Ready | Other | Ongoing
- **K Award**
Jeffrey Lee | NCI | Ongoing

- **Non-endoscopic management of acute esophageal food impaction (EFI) in the emergency department**
Linda Lee | CH | Ongoing
- **Optimization of Hepatocellular Carcinoma Surveillance Protocols**
Varun Saxena, Julie Schmittiel | DSGP | Ongoing
- **Optimizing Colorectal Cancer Screening PREcision and Outcomes in Community-baSEd Populations (PRECISE)**
Doug Corley, T.R. Levin | NCI | Ongoing
- **Phase III, randomized, double blind, parallel group, placebo controlled, multicentre study to assess efficacy & safety to adult allogeneic expanded adipose-derived stem cells (eASCs) for treatment of complex perianal fistulising Crohn's disease**
Fernando Velayos | Other | Ongoing
- **PICASO study of pandemic related impact on colorectal cancer screening outcomes**
TR Levin | Other | Ongoing
- **PREDICT PCCC: PREDICTing Post Colonoscopy Colorectal Cancer**
T.R. Levin, Jeffrey Lee, Vincent Liu, Charles Quesenberry, Oleg Sofrygin | PRP | Ongoing
- **PREDICT: Predicting advanced neoplasia on surveillance colonoscopy**
TR Levin | Other | Ongoing
- **Predicting Serious Colonic Growths to Risk Stratify People Coming Due for Surveillance Colonoscopy**
TR Levin | PRP | Ongoing
- **Prednisone, but not biologics or immunomodulators are associated with severe COVID-19 outcomes: A community-based study**
Fernando Velayos, Jennifer Dusendang, Julie Schmittiel | Other | Ongoing
- **PREEMPT CRC screening trial. Multicenter study of a multi-omics based blood based screening test**
TR Levin, Aasma Shaukat | Industry | Ongoing
- **Prior immunosuppressive therapy and severe illness among patients diagnosed with SARS-CoV-2: a community-based study**
Fernando Velayos | Other | Ongoing
- **Reproductive Health Following Liver Transplant**
Sreepriya Balasubramanian | Other | Ongoing
- **Retreatment of Hepatitis C Infection in Patients who Previously Failed Sofobuvir/Velpatasvir/Voxilpravir**
Varun Saxena | Other | Ongoing
- **Retrospective Validation of MeScore for Identification of Colorectal Cancer (CRC)**

Doug Corley, T.R. Levin | Industry | Ongoing

- **Sarcopenia and Frailty Among Liver Transplant Recipients**
Sreepriya Balasubramanian | Other | Ongoing
- **SARS-CoV-2 Serological Antibody Testing for Disease Surveillance and Clinical Use**
Jacek Skarbinski, Larry Kushi, Douglas Corley | NIH | Ongoing
- **System-Level Capture of Family History Data to Assess Risk of Cancer and Provide Longitudinal Care Coordination**
Doug Corley | PCORI | Ongoing
- **Tenofovir Disoproxil vs. Entecavir on the Risk of Hepatocellular Carcinoma, All-Cause Mortality and Liver Transplantation in Kaiser Permanente Northern California Members with Chronic Hepatitis B Virus**
Suk Seo | CH | Ongoing
- **Volumetric Lase Endomicroscopy in dysplastic Barrett's esophagus: Can we see the invisible lesions?**
Ben Hassid | Other | Ongoing

Recent Peer Reviewed Gastroenterology & Hepatology Authored Publications in 2022

1. **Risk of nonalcoholic fatty liver disease and associations with gastrointestinal cancers** [[PubMed Abstract](#)] Lee, Jeffrey K | 12/1/2022 | Hepatology Communications
2. **Evaluation of Harms Reporting in U.S. Cancer Screening Guidelines** [[PubMed Abstract](#)] Corley, Douglas | 11/1/2022 | Annals Of Internal Medicine
3. **Physician Adenoma Detection Rates and Colorectal Cancer-Reply** [[PubMed Abstract](#)] Corley, Douglas; Jensen, Christopher D | 10/11/2022 | JAMA
4. **Impact and recovery from COVID-19-related disruptions in colorectal cancer screening and care in the US: A scenario analysis** [[PubMed Abstract](#)] Levin, Theodore R | 10/10/2022 | Cancer Epidemiology, Biomarkers & Prevention : A Publication Of The American Association For Cancer Research, Cosponsored By The American Society Of Preventive Oncology
5. **Developing Meaningful Health Care Quality Metrics: An Example From Colonoscopy and Adenoma Detection** [[PubMed Abstract](#)] Corley, Douglas | 10/1/2022 | Annals Of Internal Medicine
6. **Gaps in the screening process for women diagnosed with cervical cancer in four diverse US health care settings** [[PubMed Abstract](#)] Corley, Douglas; Raine-Bennett, Tina R; Silverberg, Michael J | 9/15/2022 | Cancer Medicine

7. **Risk of colorectal cancer and colorectal cancer mortality beginning ten years after a negative colonoscopy, among screen-eligible adults 76-85 years old** [[PubMed Abstract](#)] Corley, Douglas; Levin, Theodore R | 9/13/2022 | Cancer Epidemiology, Biomarkers & Prevention : A Publication Of The American Association For Cancer Research, Cosponsored By The American Society Of Preventive Oncology
8. **CMV Colitis Masquerading as MALT Lymphoma in an Immunocompetent Patient** [[PubMed Abstract](#)] Lam, Angela; Lee, Jeffrey K | 9/1/2022 | Acg Case Reports Journal
9. **Risk of Metachronous Advanced Neoplasia After Colonoscopy in Patients Aged 40-49 Years Compared to Patients Aged 50-59 Years** [[PubMed Abstract](#)] Anderson, Meredith; Li, Dan; Liu, Liyan | 8/12/2022 | The American Journal Of Gastroenterology
10. **Estimating Cancer Screening Sensitivity and Specificity Using Healthcare Utilization Data: Defining the Accuracy Assessment Interval** [[PubMed Abstract](#)] Corley, Douglas | 8/2/2022 | Cancer Epidemiology, Biomarkers & Prevention : A Publication Of The American Association For Cancer Research, Cosponsored By The American Society Of Preventive Oncology
11. **Evaluating and Improving Cancer Screening Process Quality in a Multilevel Context: The PROSPR II Consortium Design and Research Agenda** [[PubMed Abstract](#)] Corley, Douglas | 8/2/2022 | Cancer Epidemiology, Biomarkers & Prevention : A Publication Of The American Association For Cancer Research, Cosponsored By The American Society Of Preventive Oncology
12. **Strategies Facilitating Video Visit Implementation by a Medical Group Serving a Diverse Population** [[PubMed Abstract](#)] Altschuler, Andrea; Awsare, Sameer V; Chen, Yi-Fen I; Dixon, Matthew R; Hsueh, Loretta; Lee, Edward R; Lieu, Tracy A; Reed, Mary E; San, Karen H; Warton, Margaret M | 7/20/2022 | The Permanente Journal
13. **Management of Incidentally Detected Gallbladder Polyps: Society of Radiologists in Ultrasound Consensus Conference Recommendations** [[PubMed Abstract](#)] Szpakowski, Jean-Luc | 7/5/2022 | Radiology
14. **Iron deficiency and symptoms in women aged 20-49 years and relation to upper gastrointestinal and colon cancers** [[PubMed Abstract](#)] Szpakowski, Jean-Luc; Tucker, Lue-Yen S | 7/1/2022 | Bmj Open Gastroenterology
15. **eQTL set-based association analysis identifies novel susceptibility loci for Barrett's esophagus and esophageal adenocarcinoma** [[PubMed Abstract](#)] Corley, Douglas | 6/16/2022 | Cancer Epidemiology, Biomarkers & Prevention : A Publication Of The American Association For Cancer Research, Cosponsored By The American Society Of Preventive Oncology
16. **Telemedicine implementation trends in surgical specialties before and after COVID-19 shelter in place: Adjusting to a changing landscape** [[PubMed Abstract](#)] Choe, Giye; Douaiher, Jeffrey; Kuehner, Gillian E; Reed, Mary E | 6/13/2022 | Surgery

17. **Association of Physician Adenoma Detection Rates With Postcolonoscopy Colorectal Cancer** [[PubMed Abstract](#)] Corley, Douglas; Fireman, Bruce; Jensen, Christopher D; Lee, Jeffrey K; Quesenberry, Charles P; Udaltsova, Natalia; Zhao, Wei K | 6/7/2022 | JAMA
18. **Biopsy of Non-tumor Sites After Biopsy of a Colorectal Cancer is not Associated With Metachronous Cancers: A Case-control Study** [[PubMed Abstract](#)] Corley, Douglas; Jensen, Christopher D; Lee, Jeffrey K; Merchant, Sophie A; Sedki, Mai | 5/26/2022 | Clinical Gastroenterology And Hepatology : The Official Clinical Practice Journal Of The American Gastroenterological Association
19. **Age-stratified prevalence and predictors of neoplasia among US adults undergoing screening colonoscopy in a national endoscopy registry** [[PubMed Abstract](#)] Corley, Douglas | 5/25/2022 | Gastroenterology
20. **Understanding the Protective Effect of Helicobacter pylori Eradication on Gastric Cancer after a Quarter Century: New Insights from an Old Trial** [[PubMed Abstract](#)] Li, Dan | 4/29/2022 | Gastroenterology
21. **Delayed Initiation of Rescue Therapy Associated with Increased Length of Stay in Acute Severe Ulcerative Colitis** [[PubMed Abstract](#)] Velayos, Fernando | 4/7/2022 | Digestive Diseases And Sciences
22. **Quality Indicators for the Detection and Removal of Colorectal Polyps and Interventions to Improve Them** [[PubMed Abstract](#)] Lam, Angela | 4/1/2022 | Gastrointestinal Endoscopy Clinics Of North America
23. **Declining Colectomy Rates for Nonmalignant Colorectal Polyps in a Large, Ethnically Diverse, Community-based Population** [[PubMed Abstract](#)] Alam, Asim; Corley, Douglas; Fox, Jeffrey M; Gupta, Suraj; Hamerski, Christopher M; Jensen, Christopher D; Jiang, Sheng-Fang; Lee, Jeffrey K; Munroe, Craig A; Velayos, Fernando | 3/28/2022 | Clinical And Translational Gastroenterology
24. **Survey Study on the Experience, Practice Patterns, and Preferences of the Fellows of the Society of Radiologists in Ultrasound for Evaluation and Management of Gallbladder Polyps Detected With Ultrasound** [[PubMed Abstract](#)] Szpakowski, Jean-Luc | 2/25/2022 | Ultrasound Quarterly
25. **Association between Improved Colorectal Screening and Racial Disparities** [[PubMed Abstract](#)] Corley, Douglas; Jensen, Christopher D; Levin, Theodore R; Zhao, Wei K | 2/24/2022 | The New England Journal Of Medicine
26. **American Society for Gastrointestinal Endoscopy guideline on screening for pancreatic cancer in individuals with genetic susceptibility: methodology and review of evidence** [[PubMed Abstract](#)] Jue, Terry L; Lee, Jeffrey K | 2/15/2022 | Gastrointestinal Endoscopy
27. **Models to Predict Development or Recurrence of Hepatocellular Carcinoma (HCC) in Patients with Advanced Hepatic Fibrosis** [[PubMed Abstract](#)] Saxena, Varun | 2/10/2022 | Current Gastroenterology Reports

28. **American Society for Gastrointestinal Endoscopy guideline on informed consent for GI endoscopic procedures** [[PubMed Abstract](#)] Jue, Terry L | 2/1/2022 | Gastrointestinal Endoscopy
29. **Risk Stratification for Early-Onset Colorectal Cancer Using a Combination of Genetic and Environmental Risk Scores: An International Multi-Center Study** [[PubMed Abstract](#)] Corley, Douglas; Lee, Jeffrey K; Sakoda, Lori C | 1/13/2022 | Journal Of The National Cancer Institute
30. **Appropriateness of Medical and Surgical Treatments for Chronic Pouchitis Using RAND/UCLA Appropriateness Methodology** [[PubMed Abstract](#)] Velayos, Fernando | 1/10/2022 | Digestive Diseases And Sciences
31. **Hepatotoxicity during legacy cancer chemotherapy in patients infected with hepatitis C virus: A retrospective cohort study** [[PubMed Abstract](#)] Baer, David; Pauly, Marypat; Szpakowski, Jean-Luc; Tucker, Lue-Yen S | 1/1/2022 | Canadian Liver Journal