Overview
Every 10 years, ACGME Review Committees are required to evaluate the applicable specialty- and subspecialty-specific Program Requirements under their purview for revision. In 2017, the ACGME re-envisioned the process by which this is done and piloted a new approach with the Program Requirements for Internal Medicine. The new process, which includes scenario-based strategic planning, requires a writing group and the specialty community to think rigorously and creatively about what the specialty will look like in the future prior to proposing any revisions, recognizing that the future is marked with significant uncertainty.

Key Insights about the Practice of the Colon and Rectal Surgeon of the Future
Several themes emerged from the scenario planning efforts that provide insight into the colon and rectal surgeons of the future and their practice. It is recognized that the colon and rectal surgeon of the future will not achieve mastery of all these competencies during residency alone. Residency must serve as the foundation for career-long professional development and adaptation to changing health care system and community needs.

Proposed Definition of the Colon and Rectal Surgeon –
Colon and rectal surgeons are physicians who have specialized training in and provide medical, surgical, and endoscopic evaluation, diagnosis, and management of disorders of the colon, rectum, and anus, as well as related pathologies of the abdomen, pelvis, and perineum. They analyze patient data and literature from a variety of sources, and utilize specific technologies to support patient evaluation, decision-making, and treatment. They demonstrate critical thinking skills and adapt to practice in a wide variety of settings.

Colon and rectal surgeons are leaders who provide comprehensive, evidence-based patient care in collaboration with interprofessional and multidisciplinary teams. They are compassionate and empathetic with patients and their families. They effectively communicate with health care teams and systems while advocating for equitable patient care. They model professionalism and foster an environment of belonging, transparency, and collegiality.

Colon and rectal surgeons engage in self-directed learning to advance their clinical knowledge and enhance their technical skills, and participate in quality improvement to optimize outcomes. They educate patients and their families, other members of the care team, and the community at large.

Future Colon and Rectal Surgery Residency Education and Training
In each strategic planning scenario, strategies were developed to successfully educate and train the colon and rectal surgeon of the future. The strength of each strategy was then assessed in each of the other three scenarios. Strategies that were most successful across scenarios were
considered most likely to be useful in any potential future. Four themes emerged from the consolidation of the diverse strategies:

1. Comprehensive Training Model for Colon and Rectal Surgeons
   Colon and rectal surgeons are physicians who have specialized training in and provide medical, surgical, and endoscopic evaluation, diagnosis, and management of disorders of the colon, rectum, and anus, as well as related pathologies of the abdomen, pelvis, and perineum. Colon and rectal surgeons are leaders who provide comprehensive, evidence-based patient care in collaboration with interprofessional and multidisciplinary teams. They also demonstrate critical thinking skills and adapt to practice in a wide variety of settings.

   Colon and rectal surgery residency programs will:
   
   • Teach residents to independently recognize, evaluate, and manage colorectal disease processes.
   • Emphasize interdisciplinary management of complex colorectal pathologies (e.g., cancer, inflammatory bowel disease, pelvic floor).
   • Educate residents on challenges associated with providing quality care in different practice environments.
   • Train residents to educate patients, other members of the health care team, and the broader community.

2. Application of Technologies for Care Delivery
   Colon and rectal surgeons utilize specific technologies to support patient evaluation, decision making, and treatment.

   Colon and rectal surgery residency programs will:
   
   • Provide experiences that allow residents to develop competence in utilization of medical technologies.
   • Provide residents with exposure to virtual clinical delivery platforms.
   • Provide alternative training methods for procedures that are not commonly performed.

3. Assessment and Practice Improvement
   Colon and rectal surgeons engage in self-directed learning to advance their clinical knowledge and enhance their technical skills, and also participate in quality improvement to optimize outcomes.

   Colon and rectal surgery residency programs will:
   
   • Establish a graduated clinical assessment approach to ensure residents achieve clinical competence and autonomy.
   • Establish standardized evaluations of technical competence with real-time feedback and the opportunity for self-assessment.
• Provide residents with the opportunity to incorporate data-driven feedback to improve their clinical performance.
• Provide residents with resources to deliver appropriate feedback to other members of the care team.

4. Navigating the Practice of Medicine in Health Care Systems
Colon and rectal surgeons effectively communicate with health care teams and systems while advocating for equitable patient care. They model professionalism and foster an environment of belonging, transparency, and collegiality.

Colon and rectal surgery residency programs will:

• Partner with their Sponsoring Institution and professional organizations to educate residents about belonging, inclusion, and advocacy.
• Ensure residents understand the social influencers and/or determinants of health.
• Provide exposure to the business of medical practice.

Next Steps
The Writing Group respectfully requests feedback regarding the major themes described above, including the vision of the future colon and rectal surgeon and program strategies. The Writing Group seeks diverse perspectives—from the public, patients, families of patients, community agencies, clinicians within and outside of colon and rectal surgery, and all stakeholders in health care and population health.

A Stakeholder Summit will be held in November 2023 to consider and expand on feedback from the public comment period and adjust themes and strategies to prepare for revisions to the Program Requirements for Graduate Medical Education in Colon and Rectal Surgery.

Questions and Issues for Stakeholders to Consider
Considering that the requirements developed under the above program strategies will affect physicians practicing from approximately 2025-2050:

• What, if any, additional educational experiences should be considered in support of meeting the aspirational definition of the colon and rectal surgeon as proposed above?
• Describe any potential challenges your program might face in providing the experiences described above. What additional resources might be required to support provision of these experiences?
• In addition to the themes and strategies described above, what, if any, additional issues should be addressed in the revised Program Requirements?
• Describe any potential unintended consequences that may result from implementing the strategies above.
• What general areas within the existing Program Requirements for Graduate Medical Education in Colon and Rectal Surgery do not support the future strategies described above?

Submit comments using the comment form by August 30, 2023.
Addendum

What is scenario-based planning?
Scenario-based planning is a technique by which organizations develop and test their readiness for the future using a range of alternative futures or scenarios. In this case, these scenarios are detailed, systematically developed descriptions of operating environments that the US medical profession might face over the next 25 years or more. This is a technique for managing uncertainty, risk, and opportunity. It yields a strong strategic framework for understanding future needs and a practical basis for immediate action. The intent is not to predict what the future will be and then build a master plan, but rather to ask what the future might hold and identify actions that can be taken today that are most likely to be valuable regardless of how the future turns out. As a result, the technique relies far more on expert judgment and less on quantitative trend forecasts.

What has the ACGME done so far?
In 2013, the ACGME Board of Directors engaged in a scenario-based planning exercise using four widely varied, plausible, internally consistent scenarios describing the range of the future context for health care delivery. These same scenarios were used again during two workshops for the Review Committee for Internal Medicine’s Program Requirements revision process in 2017.

The process resulted in a summary of general insights about the practice of internal medicine in the future, followed by key insights about the internist in 2035 that worked well and were viable regardless of scenario, and final recommendations for what residency programs should do to prepare the internal medicine resident to practice in 2035. The Review Committee for Internal Medicine then used this information to design the recent major revisions to the Program Requirements for Graduate Medical Education in Internal Medicine.

The process was refined as a result of the experiences with internal medicine, and subsequently with family medicine, pediatrics, general surgery, emergency medicine, and vascular surgery. Colon and rectal surgery is the seventh specialty to embark on the ACGME’s new approach to the major revision process for Program Requirements. New scenarios were developed and updated for envisioning the future in 2050 or beyond. These are:

- Now You're on Your Own – A dynamic, high-technology world with a rich economy, characterized by a novel mix of libertarian economics and progressive social policies.
- New New Deal – Following decades of political division and economic stagnation, this world is based on social democracy, civic unity, bold government actions, economic rebound, and public optimism.
- Ex Uno, Plures – A world with a weak federal government, strong independent states, divisive culture wars, no safety nets, isolationism, and near-depression economics.
- One Giant Leap – A world of rapid temperature rise and extreme weather causing havoc and widespread anxiety, and a large shift in government priorities, as well as sluggish economics.

What has taken place for the specialty of colon and rectal surgery so far?
Thirty-seven participants representing the colon and rectal surgery community, other specialties, and related fields attended a workshop in March 2023. The focus was to provide the Review Committee with insights regarding what the practice of colon and rectal surgery could look like in each scenario.
Additionally, a literature review on key topics identified by the Colon and Rectal Surgery Writing Group was conducted, along with a series of one-on-one interviews with patients, colon and rectal surgeons who recently completed residency, and health care influencers.

Above is a summary of the results of these efforts—key insights about the colon and rectal surgeon of the future that worked well and were viable regardless of the scenario, and recommendations for what programs should do to prepare colon and rectal surgery residents to practice in 2050. The Writing Group will use these findings and public comments to begin its major revision process in 2023.