CHAPTER 1
Introduction and Overview of the Gastroenterology Boards

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For many, taking the Gastroenterology Board Examination is a daunting experience. Uncertainty with regards to the specifics of the examination process can increase the anxiety that the boards engender. The objective of this chapter is to demystify the certification/recertification process and to delineate for the test-taker what to expect on exam day. Recent changes to the American Board of Internal Medicine (ABIM) Maintenance of Certification (MOC) program will also be discussed and explained. Hopefully, these explanations will alleviate at least some degree of test anxiety, allowing you to concentrate on learning and integrating the material that you will be tested on. A critical resource for the certification candidate is the ABIM website: www.abim.org. Through this portal, all information regarding qualifications, scheduling, payments, and test development and administration can be located. There are also numerous resources available via this website designed to prepare the candidate for the examination.

What to Expect at the Test Center
All ABIM examinations are now computer-based, and most are administered by a computer-based testing facility. You should arrive at the testing facility at least 30 minutes before the start of the examination. Late arrivals may not be allowed to sit for the examination, so it is crucial that you be familiar with the location of the testing facility and with specifics such as parking access and costs. It is highly recommended that you prepare in advance with a “dry run” trip to the testing facility well before the day of your examination. Ideally, you should do this on a weekday at the same time you plan on traveling on test day so that you have an idea of commuting requirements. You should also plan out some contingency routes in the event of significant traffic disruption on the day of the examination.

Once you arrive at the testing facility, you will be required to present your personal identification for examination security. A digital fingerprint and/or palm vein recognition scan will be performed, along with security scanning. Your signature and photograph will be taken prior to your being allowed to take the examination. Personal items are not permitted in the testing room and you will be required to leave your belongings outside in a secure storage container provided by the testing center. This includes items such as cell phones, personal digital assistants, watches, wallets, and purses. Personal earplugs, headphones, and other devices are not permitted in the test centers, though you may request earplugs from the test administrator. While outerwear such as coats and jackets is not permitted into the examination room, sweaters are allowed, so you should plan accordingly. Prior to admission to the examination room, you will be asked to read the “ABIM Candidate Rules Checklist,” agreeing to the security terms of the administration of the exam. You will be given a short orientation and then escorted to a computer workstation in the testing room to begin the examination.

The Examination
The initial certification examination consists of four 60-question tests, each administered during a 2-hour block. The entire day is scheduled to take up to 10 hours. There are 8 hours allotted for the four examinations and up to 100 minutes of optional break time that may be taken over the three intertest periods. The MOC examination differs from the initial certification examination in that only three 60-question tests are administered. The MOC test day is allotted to be approximately 8 hours, with the three 2-hour test periods and up to 80 minutes of optional break time.

A blueprint established by the Subspecialty Board of Gastroenterology, which is reviewed and updated annually in order to remain current and relevant, determines the general content of the examination. The primary content categories at the time of this writing are shown in Table 1.1, along with the percentage of the examination devoted to each broad category. The blueprint is the same for the initial certification and the MOC examinations. More specific expansion of each category is available via the ABIM website. In addition to the questions covering gastroenterology, there are also questions that are more applicable to the general practice of medicine, covering topics such as ethics and basic biostatistics. Typically, there are four to six of these general questions scattered through the tests.

The examination questions are composed of single best-answer type questions. Most describe a patient scenario that occurs in practice settings. They may include media such as radiographs, endoscopic videos, manometry tracings, or histopathology pictures to illustrate relevant findings or characteristics. The examination is designed to evaluate your knowledge, diagnostic reasoning, and judgment. Questions will adhere to a general formula aimed at testing these parameters by posing such tasks as making a diagnosis, determining a treatment plan, ordering diagnostic tests,
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Table 1.1 Primary content categories for the gastroenterology certification examination.

<table>
<thead>
<tr>
<th>Content category</th>
<th>% of exam</th>
</tr>
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<tbody>
<tr>
<td>Esophagus</td>
<td>15</td>
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<tr>
<td>Stomach/pylorus</td>
<td>15</td>
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<tr>
<td>Liver</td>
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<tr>
<td>Gastrojejunostomy</td>
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<tr>
<td>Pancreas</td>
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</tr>
<tr>
<td>Colon</td>
<td>18</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
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recognizing clinical features of a disease, and/or determining means of prevention, screening, staging, or follow-up.

A great deal of effort and thought goes into developing appropriate questions for the examination, and understanding this process can prepare you for what you will be expected to know as you take the examination. Most questions will begin with some text that presents the problem and provides the information required to resolve it. This is the "stem" of the question. The "lead line" is then presented, which is the question itself. This is followed by four or five possible choices, one of which is the absolutely correct answer, while the others are the "distractors." Typical lead lines will contain a task to be evaluated. Examples of lead-line tasks and specific question formats include:

1. Evaluating diagnostic inference or differential diagnosis: Which of the following is the most likely diagnosis?
2. Testing diagnostic knowledge: Which of the following laboratory studies should you order next?
3. Evaluating the knowledge of natural history or epidemiology: This patient is at increased risk for the development of which of the following?
4. Testing treatment knowledge: Which of the following drugs (or therapeutic interventions) should you order next?
5. Evaluation of management decision-making: Which of the following should you do next?
6. Awareness of pathophysiology or basic science: Which of the following is the best explanation for this patient’s poor response to therapy?
7. Testing of ability to interpret medical literature/biostatistics: Which of the following is the best interpretation of these results?

ABIM certification examinations are often criticized for focusing on the minutiae of specific conditions or management approaches, and a common sentiment is that whoever is writing the questions clearly must not be practicing medicine in the "real world." It is true that questions found on certification examinations often do cover some of the more esoteric aspects of a given disease or condition, perhaps especially within the subspecialty ABIM examinations. While it is easy to understand and commiserate with this sentiment, it is also important to realize that your baseline competence in recognizing and managing common conditions encountered in the practice of gastroenterology is assumed. What is being tested during a certification examination is the depth of your knowledge and understanding, which may require assessing your ability to recognize esoteric facts presented in the stems of the questions.

Maintenance of Certification Changes

An important change in the ABIM certification process occurred in 2014, when the ABIM changed its MOC program in response to increasing evidence from the public, consumer groups, and professional organizations that assessment of medical knowledge every 10 years is not sufficient for medical practice [1]. The new ABIM MOC program applies to all ABIM-certified physicians, including those who were previously "grandfathered" with indefinite certification. The hallmark of the new MOC program is exhibition of a continuous and demonstrated pattern of participation in MOC activities. Physicians who are enrolled in MOC are required to meet specific milestones every 2, 5, and 10 years. In order to continue fulfilling MOC requirements, all ABIM Board Certified physicians will be required to:

1. Earn points by completing at least one ABIM-approved MOC activity by December 31, 2015, and then every 2 years thereafter.
2. Earn 100 points, with at least 20 points in medical knowledge and 20 points in practice assessment, by December 31, 2018, and then every 5 years thereafter. A patient safety and survey requirement will also be required every 5 years.
3. Pass an MOC examination (aka, a board examination).

Diplomates with certifications that are valid indefinitely (i.e. grandfathers) will continue to be reported as "certified" by the ABIM. However, they will have to complete the aforementioned MOC milestones and pass a MOC examination by December 31, 2023 in order to be classified as "Meeting MOC Requirements." Additional information regarding these changes, as well as specific information on many unique personal situations, is available through the ABIM, and the reader is encouraged to visit http://moc2014.abim.org/whats-changing.aspx to learn more about the recent changes to the ABIM MOC program.

Specific Tips and Recommendations for the Gastroenterology Board Examination

Consider Attending a Formal Board Review Course

The Gastroenterology Board Examination is meant to test a comprehensive knowledge base, but, because it is only 180–240 questions long, there is a limit to how much content can be tested. While it is an admirable exercise in academic dedication, rereading a gastroenterology textbook that you have not opened in a meaningful way since fellowship is probably not the optimal way to prepare for the examination or to refresh your knowledge base. A more efficient use of your time would be to attend a comprehensive board review course; there are a number of very good choices available throughout the calendar year. I recommend attending one of these courses 12–18 months before you sit for the examination, to ensure that you have time to identify potential knowledge gaps, assimilate and understand any new information, and review the entire syllabus once or twice more before taking the examination. In addition to, or in lieu of, personal attendance at a board review course, it may be possible to obtain the syllabus and recorded sessions of a course for review at your leisure, though the timeframe will be compressed due to the time required to edit and package the recorded material from a course.

Review Prominent Societal Guidelines Regarding Common Disease States

Remember, the examination is meant to evaluate your knowledge, diagnostic reasoning, and judgment. Embedded in that concept is the fact that many of the questions will assess whether or not your decision-making and thought processes are within the expected standard of care for specific diseases. Review of the
most recent societal guidelines for commonly encountered conditions (e.g., gastroesophageal reflux disease, colon cancer screening or surveillance, *Clostridium difficile* colitis) will underscore the standard of care for the management of these disorders and provide the evidence for this standard. While it should be obvious, it bears emphasizing that US guidelines will be the basis of ABIM-generated questions on the ABIM examination. An excellent source of compiled guidelines is the National Guideline Clearinghouse, maintained by the Agency for Healthcare Research and Quality (www.guideline.gov). While it is unlikely that the text will ask for specific societal recommendations, familiarity with the most up-to-date evidence-based guidelines will deepen your understanding of the pathophysiology, clinical associations, and management of these conditions.

Recurring Themes
There are numerous “themes” that seem to be favorites for the Gastroenterology Board Examination, which warrant additional study prior to the examination. This is by no means meant to be a comprehensive list:

- Pregnancy and gastroenterologic diseases, either pre-existing or pregnancy-induced, are favorite targets for examination questions. Questions referable to pregnancy and inflammatory bowel disease (IBD) or liver disease are prime examples.
- There will often be a manometric tracing or picture depicting at least one of the prototypical esophageal motility disorders on the examination, so familiarity with both traditional and high-resolution manometry patterns is recommended.
- There will be multiple questions related to viral hepatitis, but these questions will typically cover noncontroversial topics and established modes of therapy; rather than cutting-edge or just-approved regimens. It should be remembered that the examinations, much like textbooks and guidelines, are developed well in advance of issuance, so extremely recent information or clinical developments are unlikely to be tested.
- There will be two or three questions on ethics and simple biostatistics. The biostatistics questions may require you to calculate values such as sensitivity, specificity, number needed to treat/harm, positive/negative predictive value, or prevalence of a disease, but are unlikely to be more complicated than that, so a rudimentary working knowledge of these concepts should be sufficient.
- While rarely encountered in clinical practice, porphyria seems to be a relatively popular topic for at least one question.
- There will typically be one or two questions related to nutritional perturbations such as zinc, thiamine, or selenium deficiencies (to name a few), so memorization of the manifestations associated with nutritional disease states is recommended.
- Radiologic and histopathologic correlates will usually be “classic” examples of diseases or conditions, and you will typically be asked to recommend additional diagnostics or therapeutics based on the information derived from the radiograph or histopathology picture. Therefore, you should familiarize yourself with "classic" plain film images such as gastric or intestinal volvulus, common cholangiograms such as the "string of lakes" appearance of primary sclerosing cholangitis, and the "onion-skinning" appearance of primary sclerosing cholangitis, to mention just a few.
- Be familiar with medical eponyms and their phenotypes, especially those referable to variants of familial colorectal cancer syndromes, as these seem to be examination favorites.
- Be familiar with dermatologic manifestations of gastroenterologic disease, including those associated with IBD, celiac disease, viral hepatitis, metabolic liver disease, nutritional deficiencies, and inherited colorectal cancer syndromes.

Practice Questions
Another valuable exercise to engage in well before sitting for the examination is taking mock tests or, at the very least, answering multiple sample questions and reviewing the answers. Just as there are many board review courses available, there are several good question-and-answer books that can be used to prepare for the boards. I would recommend establishing a dedicated period of time during each week beginning at least 6 months before the tests to do boluses of questions and review the answers and explanations. To avoid burnout, you should not do more than 60 at a sitting. If you, like most people, have certain areas that seem to come to you easier than others, then I would recommend that you do questions covering these topics last. While getting the answer correctly, you will be much better served by testing yourself on areas that you are not as comfortable with and then reviewing the rationale for the correct answers. Hopefully, this chapter has laid the groundwork for your preparation for your certification examination and has helped to explain the processes involved in certification and MOC. With that in mind, I hope that you find the information contained in the rest of the book helpful and wish you the best of luck in your future test-taking efforts.

Reference