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FNP Certification Intensive Review

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Fifth Edition

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What a great time to be a nurse practitioner.
This is our *decade, girls (and guys). I dedicate this book to you.*
What a privilege it is to be able to make a difference in someone's health.
Wow.
Of course, my grateful thanks to
Ed, Mary, Chrissy, and my parents.

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PREFACE

Welcome to the fifth edition of *FNP Certification Intensive Review*. This review book is designed to help you study effectively and efficiently for the family nurse practitioner certification exams of both the American Academy of Nurse Practitioners Certification Board (AANPCB) and American Nurses Credentialing Center (ANCC).

The goal for all of my nurse practitioner (NP) certification review books is to provide you, the NP test-taker, with a tool to effectively and rapidly review and prepare for your exam. This book is also a valuable resource for current NP students and educators. Many students credit these books with helping them pass not only their certification exam but also quizzes and tests when they were students. Students report that the review book has helped them successfully pass their school's dreaded "exit" exam.

The book's format remains the same as in the popular and best-selling first four editions, with the addition of hundreds of new questions and a more navigable format. The book is styled as a "mega-review" study guide because it combines six different resources in one:

1. Certification exam information that is highly specific for both the AANPCB and ANCC exams
2. Useful test-taking techniques to help you prepare and strategize for exam day
3. Question dissection and analysis tools to help you break down questions for further study and hone critical-thinking skills
4. A thorough review of pharmacology; health promotion, screening, and disease prevention; and primary care diseases and conditions, with pertinent normal physical exam findings, danger signals, exam tips, and clinical pearls
5. ***New:*** Hundreds of additional end-of-chapter "knowledge check" questions designed to help you assess knowledge retention and application
6. Four full practice tests—two in print, two digital only—based on the blueprints for the AANPCB and ANCC certification exams, with answers and detailed rationales

The fifth edition has been significantly updated and features new disease topics, tables, procedures, updated clinical content, and the latest practice and treatment guidelines (note that it may take 1 to 2 years for new guidelines to appear on the certification exams). In addition, it has many full-color images of dermatologic diseases and other conditions and more than 1,200 practice questions.

Readers receive 6 months of free digital access to the interactive digital version on ExamPrepConnect (see access details on inside front cover). Features include:

- Review all the high-quality content from the book.
- Take four full-length timed practice tests.
- Build custom quizzes or study by exam topic.
- Sharpen your test-taking skills with interactive Q&A tools.
- Keep on track with your Personalized Study Plan.
- Take notes, highlight, and bookmark content.
- Use flashcards to review key terms.
- Study with your peers in the community discussion boards.
- Access everything on any device.

This book and my *AGNP Certification Intensive Review* have become the most sought-after and relied-upon review books for use in studying for both the AANPCB and ANCC certification exams. The contents and procedures in this book are designed for review purposes only. They are not intended for use in clinical practice.

Maria T. Codina Leik

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I want to extend my deep gratitude to Ricardo G. Codina and Thelma Y. Codina. And, of course, kudos to Angelica, my assistant, who wears so many hats.

PASS GUARANTEE

If you use this resource to prepare for your exam and do not pass, you may return it for a refund of your full purchase price, excluding tax, shipping, and handling. To receive a refund, return your product along with a copy of your exam score report and original receipt showing purchase of a new product (not used). Product must be returned and received within 180 days of the original purchase date. Refunds will be issued within 8 weeks from acceptance and approval. One offer per person and address. This offer is valid for U.S. residents only. Void where prohibited. To initiate a refund, please contact Customer Service at csexamprep@springerpub.com.

1

CERTIFICATION AND EXAM INFORMATION

1 CERTIFICATION EXAM INFORMATION

AMERICAN NURSES CREDENTIALING CENTER

www.nursingworld.org/ancc
Credential: FNP-BC
Toll-Free Phone: 1-(800)-284-2378
Electronic Transcripts: aprnvalidation@ana.org

The American Nurses Credentialing Center (ANCC) is the independent credentialing body of the American Nurses Association (ANA). It is the largest nurse credentialing organization in the United States. The current edition of the ANCC Family Nurse Practitioner (FNP) exam was released on September 28, 2022.

The ANCC currently offers certification exams for the following nurse practitioner (NP) specialties: Family NP (FNP-BC), Adult-Gerontology Primary Care NP (AGPCNP-BC), Adult-Gerontology Acute Care NP (AGACNP-BC), and Psychiatric–Mental Health NP (PMHNP-BC). You must first establish an online account at the ANCC website before you can apply for any of the exams.

Prometric Computer Testing Centers

www.prometric.com/ANCC
Toll-Free Phone: (800) 350-7076
Special Conditions Department (Special Accommodations): 1-(800)-967-1139

The ANCC uses Prometric testing centers to administer its exams. Before you can schedule an appointment, you must have your candidate eligibility number; this is provided in the Authorization to Test Notice email sent to qualified candidates who meet eligibility requirements and have completed their application documentation.

You can schedule, reschedule, cancel, and/or confirm an appointment on the website or by telephone (1-800-742-8738). Prometric has 8,000 test centers in more than 180 countries, including the United States, Puerto Rico, the U.S. Virgin Islands, Canada, and the United Kingdom. There are also test centers in Africa, Asia, and Europe.

International Testing for Military Personnel

Military nurses who want to take the exam outside the United States are allowed to take their exams at one of Prometric's global testing centers.

Qualifications

One must graduate from an approved master's, postgraduate, or doctoral degree program with a specialization in family NP (plus the required minimum of 750 faculty-supervised clinical practice hours) from an institution of higher learning. The program must be accredited by the Commission on Collegiate Nursing Education (CCNE) or the Accreditation Commission for Education in Nursing (formerly known as the National League for Nursing Accrediting Commission). In addition, the candidate must possess an active RN license in any state or territory of the United States. The ANCC will, on an individual basis, accept the professional legally recognized equivalent (of NP status) from another country if the applicant meets its certification criteria. If the applicant is educated and/or licensed outside the United States, there are additional requirements.

AMERICAN ACADEMY OF NURSE PRACTITIONERS CERTIFICATION BOARD

www.aanpcert.org
Credential: FNP-C
Toll-Free Phone: 1-(855)-822-6727
Certification Administration: 1-(512)-637-0500
Email: certification@aanpcert.org
Electronic Transcripts: transcripts@aanpcert.org

The American Academy of Nurse Practitioners Certification Board (AANPCB) is an independent organization that is affiliated with the American Association of Nurse Practitioners (AANP) and the American Academy of Emergency Nurse Practitioners (AAENP).

The AANPCB currently offers three specialty exams: Family NP (FNP-C), Adult-Gerontology Primary Care NP (AGNP-C), and Emergency NP (ENP-C). The current FNP, AGNP, and ENP exams were released in January 2023. Their Adult NP exam was retired in December 2015, and their Gerontologic NP exam was retired in December 2012. A new Psychiatric-Mental Health NP (PMHNP) certification exam is slated to debut in 2024.

You must first establish an online account at their website before you can apply for the exam. Applicants enrolled in an MSN or post-master's certificate program may begin the application process 6 months before completion of the program. If you are enrolled in a DNP program, you can begin the application process as early as 1 year prior to completion of the program. But you must complete all the NP program didactic courses and supervised clinical practice hour requirements before you can sit for the exam. In addition, an official transcript showing the doctor of nursing practice (DNP) degree awarded and conferral date is required to release your exam score. The certification start date will be the date the score is released (not the date the examination was taken).

Prometric Computer Testing Centers

www.prometric.com/test-takers/search/aanpcb
Toll-Free Phone: 1-(800)-350-7076
Special Conditions Department (Special Accommodations): 1-(800)-967-1139

The AANPCB also uses Prometric testing centers to administer its exams. Before you can schedule an appointment, you must have your candidate eligibility number; this is provided in the Authorization to Test Notice email sent to qualified candidates who meet eligibility requirements and have completed their application documentation.

You can schedule, reschedule, cancel, and/or confirm an appointment on the website or by telephone (1-800-742-8738). Prometric has 8,000 test centers in more than 180 countries, including the United States, Puerto Rico, the U.S. Virgin Islands, Canada, and the United Kingdom. There are also test centers in Africa, Asia, and Europe.

Important information about applying for the ANCC and AANPCB exams is provided in Table 1.1.

EXAM BACKGROUND INFORMATION

The ANCC usually releases a new edition of their exam every 2 years. Each ANCC exam edition has several versions. The AANPCB releases a new edition of their exam annually in January; each edition has at least two versions. If you have failed the exam and retake it, you will get a different version of the exam. The version of the exam that you are taking is assigned by the testing-center computer system. For example, you may be taking a different version of the exam than your classmate even though both of you are taking the same edition of the exam on the same date and time at the same testing center.

Table 1.1 Application Timeline for Certification Exams

Timeline	Recommended Activities Before Graduation
6 months before graduation	Open an account on the ANCC and/or the AANPCB website and start the application process. Find out about the certification requirements. Download and read the General Testing Booklet, Test Content Outline, and Reference List. Visit your SBON website and read the licensure requirements for NPs in your state. Download the licensure application.
4–6 weeks before graduation	Order three to four copies of your official final transcript.
2–3 weeks before graduation	Ask the NP director of your program to sign the ANCC Education Validation form.

AANPCB, American Academy of Nurse Practitioners Certification Board; ANCC, American Nurses Credentialing Center; NP, nurse practitioner; SBON, state board of nursing.

Exam Format

The formats on the ANCC exam include "drag and drop"; multiple-select questions with five or six answer options (you are asked to select all answers that apply); "hot spot" (a picture is presented that is divided into four quadrants, and you click on the correct quadrant as the answer); color photographs of skin and eye conditions; EKG strips; and chest x-ray films. (See Chapter 2 for more information.) Most questions on the ANCC exam are still multiple choice with four answer options and only one correct answer.

Similarly, most AANPCB exam questions are the classic multiple-choice format with four answer options and only one correct answer. There may be one EKG strip, a chest x-ray film, and some multiple-select questions with five or six answer options (you are asked to select two to three answers).

The exams are computer-based tests (CBTs). Unlike the NCLEX-RN® exam, which is a computer-adaptive test, the NP exams do not shut down automatically after you have earned enough points.

Test Content Outline and Reference List

Both the ANCC and the AANPCB provide test content outlines (TCOs) and a reference list on their website. It is important that you read these documents carefully and concentrate your studies on the designated topic areas.

Total Number of Questions and Time Allowance

- ANCC FNP exam (released September 2022): There are 175 total questions. Only 150 questions are graded; 25 are pretest questions that are not scored.
  - **Total Time:** Total counted testing time is 3.5 hours.
- AANPCB: FNP exam (released January 2023): There are 150 total questions. Only 135 questions are graded; 15 questions are pretest questions that are not scored.
  - **Total Time:** Total counted testing time is 3.5 hours.

Computer Tutorial

For both exams, each testing session starts with a computer tutorial session of 10 to 15 minutes. This time is not counted as part of the testing time; it is "free" time. When the tutorial time expires, the computer will automatically start the exam, and the first question will appear on the screen. The countdown clock (upper corner of the screen) will start counting down the time. The countdown clock will not stop for "breaks," but if you need a break, inform a testing center staff member who is monitoring the testing area. Watch the time clock closely because when the allotted testing time expires, the computer will automatically shut down the exam.

Time Allotted per Question

For both the ANCC and the AANPCB certification exams, each question is allotted approximately 60 seconds. If you find yourself spending too much time on one question, pick an answer (best guess), and then "flag" it so that you can return to it later. Never leave any question unanswered. If you guess correctly, it will be counted; if you leave it blank, it will be marked as an error (0 points).

Sample Exam Questions

I highly recommend that you try the free sample exams on the ANCC's website even if you are planning to take only

the AANPCB exam. The ANCC's sample exam is web-based and contains 25 questions. It can be taken as many times as desired at no charge (and it is scored every time). The AANPCB also has free questions, which are included in their candidate handbook (no answer key is provided). If you want to familiarize yourself with the format of the AANPCB exam, you can purchase their 75-item practice examination (timed at 90 minutes), which is taken online and graded. It can be taken only once. The ANCC also sells sample exam questions, but their free web-based sample exam provides a good opportunity to practice using their exam formats.

COMPARING THE ANCC AND AANPCB EXAMS

1. What are the pass rates for the two exams?

ANCC FNP exam: 87%
AANPCB FNP exam: 74%

2. What are the major differences between the two exams?

There are two major differences between the exams. First, the ANCC exam contains nonclinical questions. These nonclinical questions cover many topics, such as ethical behavior, how to act in a culturally respectful manner, medical orders for life-sustaining treatment, clinical practice guidelines, third-party payers, leadership, health promotion, and many others. Second, different question formats, such as drag and drop, photographs, EKG strips, chest x-ray films, and multiple-select questions with five to six answer options, were added beginning with the 2016 ANCC exams.

The questions on the AANPCB exam are all on clinical topics. The current version (January 2023) does not contain nonclinical topics. Most of the questions are the classic multiple-choice format with four answer options and only one correct answer, but there may be some multiple-select questions that have five to six answer options (you are asked to select two to three answers). An EKG strip and/or chest x-ray film is not always included on the exam.

3. If I join their respective membership organizations, will I receive a discount on my fees?

ANCC: To be eligible, you need to be a member of the ANA. If you belong to a state nursing association, you may already be a member of the ANA. Check with your state's nursing association. To apply for membership, apply online at the ANA's website (www.nursingworld.org). A word of warning: If you are not a member, you have only 5 business days after you apply for the exam to claim the membership discount. Exam discount claims received after this time are not allowed, and "refunds will not be issued."

AANPCB: To be eligible, you must be a member of the AANP (www.aanp.org). If you already applied for the exam as a nonmember, you have up to 30 days to apply for membership. To receive the membership discount (as a refund), inform the AANPCB by email that you are a member (certification@aanpcert.org).

4. How do I apply for the ANCC or AANPCB certification exam?

For both agencies, you must initially open an online account on their website. To avoid loss of information, it is best to complete your online application within 30 days of starting it. The application forms are in editable PDF format so you can enter the information directly on your computer and then print a hard copy for your records. If you apply by mail, do not forget to photocopy the entire contents of your application package. If you plan on using the U.S. Postal Service to mail your package, it is recommended that you pay the extra fee for registered mail.

ANCC: The ANCC accepts applications online and by email, standard mail, and fax.

AANPCB: The AANPCB accepts applications online and by mail. Applying online does not expedite processing. The organization automatically charges a nonrefundable application processing fee for all "paper" applications (PDF sent by email or printout sent by mail or fax). There is no charge for processing of supporting documents for certification and recertification (e.g., unofficial transcripts, RN license).

5. How early can I apply for the certification exam?

ANCC: The ANCC allows students to apply as early as 6 months before graduation. It will not process an application until payment has cleared. A completed application must contain a copy of your RN license, an official copy of your final transcripts, and the original copy of the Validation of Education form, signed by your NP program director.

AANPCB: Applicants enrolled in an MSN or post-master's certificate program may apply 6 months prior to graduation. DNP students may apply up to 12 months before graduation, but the AANPCB will not release the exam scores or grant certification until the MSN or DNP degrees are issued. If you apply before you graduate, you are required to submit an official copy of your current transcript (the interim transcript). The interim transcript is your most recent transcript, which contains all the coursework that you have completed up to that date. When the official final transcript is released, either you or the registrar's office of your school can mail or email it directly to the AANPCB. In addition, the AANPCB requires a hard copy of your RN license. Do not forget to download the State Board of Nursing Notification form from the board's website so that it can release your exam scores to your state board of nursing.

6. How long does it take to process a completed application?

ANCC: It takes about 4 to 6 weeks to process an application. Be warned that the ANCC will not process an application until it is complete and all required documents have been received (copy of RN license, original of the signed education validation form, final transcript). If there are problems with your application, an email will be sent to you. Answer all the questions on the forms, and do not leave any blanks.

AANPCB: It generally takes between 4 and 6 weeks after you have paid the fees and submitted all the required documentation to process an application. Fill out all the questions, and do not leave any blanks or forget signatures. An error can delay your application significantly.

7. What is the ANCC's "expedited application" process?
This option shortens the processing time to 5 business days ($200 nonrefundable fee). Download and print the Certification Expedite Review Request form from the ANCC website and fax it to (301)-628-5233. If your school has not released your final transcript, it will delay the expedited application. The Validation of Education form can be signed by electronic signature (give your NP director's email address), and an electronic copy of your final transcript can be emailed directly by secure transmission from your school's registrar office (aprnvalidation@ana.org). Call to verify that the ANCC has received your faxed application.

Note: Mailing the ANCC "expedited" form will delay processing; it should be faxed. If you both fax and mail it, you will be charged the processing fee twice.

The AANPCB does not expedite applications.

8. What are the final transcript and the "official" transcript?
The final transcript is the one that is issued after you graduate from your NP program. It should indicate the type of degree you earned along with the NP specialty (e.g., family or adult-gerontology NP).

A transcript is considered official only if it remains inside the sealed envelope in which it was mailed from your college registrar's office or if it is mailed directly from their office to the certifying agency. An electronic copy of your transcript can be transmitted directly by secure transmission from the registrar's office (aprnvalidation@ana.org). Order at least three to four copies of your final transcript and keep the extras unopened to keep them official. Open one copy (yours) and check it for accuracy.

9. What is the ANCC Validation of Education form?
This one-page form is a requirement for ANCC applicants only. Most NP programs have this document signed in bulk by the current director of the NP program. Ideally, it should be distributed to the students before the final day of school. Only electronic-signature PDF forms will be accepted; printed, scanned, handwritten, or paper versions of this form will not be processed.

Note: It is probably a good idea for all NP students to get this document signed, even if they plan to take only the AANPCB exam. Because the ANCC requires this form, it will save you precious time in the future if you decide to apply for their exam. You will always have the option of applying quickly for the "other" certification exam if you fail the first. Do not forget that you will need another official final transcript (another good reason why you should have at least four copies).

10. Is it possible to take the exams at any time of the year?
You can take both certification exams at any time of the year, whenever Prometric testing centers are open.

11. When should I schedule my exam?
Do not wait until the last minute to schedule your exam because the testing centers in your area may no longer have the date (or the time) that you desire. Morning time slots tend to get filled very quickly. Prometric testing centers allow test takers to schedule, reschedule, or cancel an appointment on their website or by phone, but you should give them notice. A processing fee is charged if <30 days' notice is given.

Note: Avoid scheduling yourself at the time of day when you tend to get tired or sleepy. For most, this is usually after lunchtime. Simply picking the wrong time of day can cause you to fail the exam, sometimes by as little as two points.

12. What should I do if the time slot or date that I want is no longer available?
Look for another testing center as soon as possible. For some, it may mean a long drive to another city, but it may well be worth the extra time and effort if your Authorization to Test letter is about to expire.

13. Can I take the exam if my name does not match my primary picture identification?
The name that you used to register must match exactly the name on your primary picture identification with signature. If it doesn't, you will not be allowed to test. If you need to modify your name, call the ANCC as soon as possible prior to scheduling your appointment.

14. If I have a disability, how can I obtain special testing accommodations?
You can download the Special Accommodations form from each organization's website (ANCC and AANPCB). It requires a description of the disability and limitations related to testing. It should be dated and signed by the provider. For example, if a student has severe test-taking anxiety, a special accommodation (if approved) is an extension of the testing time. Check the agency's website for further instructions.

COMMON QUESTIONS ABOUT ANCC AND AANPCB EXAMS

1. What are the passing scores?
ANCC: The passing score is 350 points or higher. The maximum possible score is 500 points.

AANPCB: The passing score is 500 points or higher. AANPCB scores range from 200 to 800 points.

2. Will I find out immediately if I pass (or fail) the exam?
Yes, you will. After you exit the testing area, ask the proctor to print a copy of your results (pass or fail format). This is the "unofficial" score. If you pass the

exam, you will not get a number score. According to the AANPCB, a preliminary pass score at the testing center is not considered official notification. It does not indicate active certification status, and it may not be used for employment or licensure as an NP. A letter with your official score will be mailed to you at a later date, indicating the type of certification and the starting date. If you fail the exam, you will receive a scaled number score with diagnostic feedback information for each domain, such as:

- Low: Your score from this content area is below the acceptable level.
- Medium: Your score from this content area is marginally acceptable.
- High: Your score from this content area is above average.

Concentrate your studies on the domain(s)/category(ies) in which you scored "low" or "medium."

3. How many times a year can I retake the FNP certification exam?

ANCC: You can take this exam up to three times in a 12-month calendar period. You must wait at least 60 days between each exam. If you fail, you can reapply online (retest application), but wait about 5 days (after taking your exam) before you reapply online.

AANPCB: You can take the exam up to two times per calendar year. Although there is no wait-time requirement prior to retesting, the AANPCB requires test takers to take 15 contact hours in their area(s) with the weakest score (your "areas of weakness"). Reapply for the exam online by using the Retake Application form. Note: The CE hours that you took before sitting for the certification exam are not eligible. The contact hours must be taken after you failed the exam. If you took a review course, it can be retaken again with the new dates. When you have completed the required 15 contact hours, email or fax the certificate of completion as proof. Call the AANPCB certification office first before faxing any documents.

4. What happens if I fail the ANCC or AANPCB exam the second time?

You must resubmit a full application along with all the required documentation (like the first time) and pay the full test fee.

5. What happens if my Authorization to Test letter expires, and I have not taken the exam?

Immediately call the certifying agency for further instructions. Both the ANCC and the AANPCB will allow you to reschedule your exam (one time only). You must pay a rescheduling fee. If you fail to test on your extended testing window, you must reapply like a new applicant and pay the full registration fee again.

6. Is it possible to extend the testing window?

ANCC: You can request (one time only) a new 120-day testing window. It must occur <6 months from the last day of the initial testing window. Your request for extension to the ANCC should be received after the end of the initial 120-day testing period.

AANPCB: You can request an extension (one time only) by sending an email to certification@aanpcert.org. If an extension is granted, it will be for 60 days only. If you do not retake the exam during that time, you must reapply to take the examination (like the first time) and pay the full fee.

7. Is there a penalty for guessing on the exam?

No, there is no penalty for guessing. If you are running out of time, answer the remaining questions at random. Do not leave any questions "blank" or without an answer, because this will be marked as an error (0 points). You may earn a few extra points if you guess correctly, which can make the difference between passing and failing the exam.

8. Is it possible to return to a question later and change its answer?

Yes, it is, but only if you "flag" the question. You will learn about this simple command during the computer tutorial at the beginning of the exam. Flagging a question allows the test taker to return to the question at a later time (if you want to change or review your answer). On the other hand, if you indicate to the computer that your answer is "final," then you will not be allowed to change the answer. Do not worry about forgetting to "unflag" the questions if you run out of time. As long as a question has an answer, it will be graded by the computer.

9. Does the certifying agency inform the state board of nursing of my certification status?

The AANPCB and ANCC will not automatically send your scores to the state board of nursing. For both certifying agencies, you must sign their Release of Scores consent form when you apply for the exam.

10. How can I obtain an "official" verification of my national certification for my employer?

Both agencies have verification request forms on their websites. If you just took the exam, the AANPCB recommends you wait at least 10 days after your testing date. A nominal fee is charged.

11. I am getting married or divorced or otherwise changing my name. Is there a problem with changing my legal name after I applied for the exams using my birth name or married name?

Yes, there may be a problem. The name that you use in your application must be the same as the one listed on your primary ID (e.g., unexpired driver's license, passport, military ID). Check the agency's website or call for more details. If you get married after you applied for the exam, it is better to wait until you have taken and passed the exam before changing the name on your driver's license.

COMMON QUESTIONS ABOUT CERTIFICATION RENEWAL

1. **How long is my certification valid?**
   Certification from the ANCC as well as the AANPCB is valid for 5 years. A few months before your certification expires, both the ANCC and the AANPCB will send you a reminder letter. However, if you do not receive your reminder, you are still responsible for renewing your certification.

2. **Can I still use my professional designations after my certification expires because I forgot to renew it?**
   No, credentials cannot be used once they have expired.

3. **What should I do if I change my legal name, have a new email address, have a new telephone contact number, or move to a new address?**
   You need to update your online account at the ANCC or the AANPCB website within 30 days if there are any changes in your contact information, such as your legal name, residence address, email address, or phone number.

4. **Is there a time period that must be followed to renew certification?**
   Yes, there is. All of the contact hours and practice hours must be completed within the current 5-year certification period.

5. **When should I submit my renewal application?**
   The process can be started as early as 12 months before your certification expires. It is best to start early because if you do not have enough CE/clinical/pharmacology contact hours, you still have enough time to obtain them. Recertification applications should be submitted no later than 12 weeks prior to the expiration date of the current certification to allow time for reviewing, processing, and issuing the new certificate before the expiration of the current certification.
   Note: Save a digital or hard copy (or other proof) of all your CE hours and clinical practice hours. If you are audited, you will be asked to submit proof of your CE hours (i.e., certificates) and clinical practice hours.

6. **How many clinical hours of practice are required to renew my certification every 5 years?**
   The ANCC no longer requires clinical practice hours for recertification, although the AANPCB does require 1,000 hours of clinical practice in your area of specialty (completed in the previous 5 years before recertification), plus 100 hours CE, of which 25 hours must be pharmacology CE. If you plan to use your clinical volunteer hours as an NP, keep a notebook to record each clinical site's address, the number of hours that you practiced, and the name/signature of the supervising NP/physician. If you do not have enough clinical hours, another method you can use to recertify is to retake the examination combined with the required CE hours. For adult nurse practitioners (ANPs) and gerontological nurse practitioners (GNPs), you do not have the option to recertify by retaking the examination, because the exams for your specialty have been retired.

7. **How many CE contact hours are required for recertification?**
   ANCC: 75 contact hours of CE are required. You also need one or more of the eight ANCC renewal categories (i.e., academic credits, presentations, preceptor hours, quality improvement project, professional service, practice hours, retake exam, publication or research).
   AANPCB: 100 contact hours of CE are required.

8. **How many pharmacotherapeutic contact hours are required per renewal cycle?**
   ANCC: Of the 75 contact hours, 25 of those hours must be in pharmacotherapeutics. If you double the 75 (150 contact hours), only 25 contact hours are required.
   AANPCB: Of the 100 contact hours, 25 contact hours in advanced pharmacology are required.

9. **What happens if my certification lapsed (I forgot to renew it)?**
   There is no "grace period" or backdating. On the day when your certification expires, you are prohibited from using your designation after your name. In addition, you will have a gap in your certification dates. The ANCC recommends that you check with your state licensing board to determine whether you can continue to practice as an NP. They also recommend that you check with your employer and with the agencies that are reimbursing your services.

10. **If my specialty certification exam was retired, can I continue with my specialty designation?**
    Yes, you may. You can renew your certification only through CE and clinical hours. If you let your certification lapse, you no longer have the examination option. Unless there are other options in the future (check the websites for updates), only students who have graduated from an AGNP program are permitted to take that exam. ANPs and GNPs are not allowed to take the AGNP exam.

11. **Is there any reciprocity between the ANCC and the AANPCB?**
    No, there is not. Both the ANCC and the AANPCB discontinued their reciprocity program many years ago.

EXAM QUESTION CLASSIFICATION

American Nurses Credentialing Center

See Table 1.2 for the ANCC FNP exam domains.

American Academy of Nurse Practitioners Certification Board

See Table 1.3 for the AANPCB FNP exam domains and Table 1.4 for breakdown by patient age group.

Table 1.2 ANCC FNP Exam: Domains

Domain (Released September 2022)	% of Questions	# of Questions
Assessment	19	29
Diagnosis	17	26
Planning	19	29
Implementation	29	43
Evaluation	15	23
Total	100*	150 scored questions

ANCC, American Nurses Credentialing Center; FNP, family nurse practitioner.
*Total does not come to 100 because of rounding.
Source: Data from American Nurses Credentialing Center. (2022, September 28). (See Resources section for complete source information.)

Table 1.3 AANPCB FNP Exam: Domains

Domain (Released January 2023)	% of Questions	# of Questions
Assess	27	36
Diagnose	26	35
Plan	25	34
Evaluate	22	30
Total	100	135 scored questions

AANPCB, American Academy of Nurse Practitioners Certification Board; FNP, family nurse practitioner.
Source: Data from American Academy of Nurse Practitioners Certification Board. (n.d.). (See Resources section for complete source information.)

Table 1.4 AANPCB FNP Exam: Age Groups

Age Group	% of Questions	# of Questions
Prenatal	2	3
Pediatrics (newborn, infant, and child)	11	15
Adolescent (early and late)	14	19
Adult (young and middle)	43	58
Older adult	22	30
Elder adult	8	10
Total	100	135 scored questions

AANPCB, American Academy of Nurse Practitioners Certification Board; FNP, family nurse practitioner.
Source: Data from American Academy of Nurse Practitioners Certification Board. (n.d.). (See Resources section for complete source information.)

FAST FACTS ABOUT THE ANCC AND AANPCB EXAMS

1. The ANCC FNP exam has approximately 10% nonclinical questions, or about 15 questions (out of 150 graded questions).
2. The current AANPCB FNP exam released in January 2023 does not contain nonclinical topics.
3. The ANCC and AANPCB FNP certification exams are designed for entry-level (not expert-level) practice. Most test takers who sit for the FNP certification exams are new graduates.
4. There are 25 pilot-test questions on the ANCC exam and 15 pilot-test questions on the AANPCB exam. These questions are not graded. There is no way to identify the graded questions from the pilot-test questions.
5. New clinical information (treatment guidelines or new drugs) released within the 10 months prior to the current exam will most likely not be included.
6. Keep in mind that the questions will be on primary care disorders (e.g., primary care clinics, public health clinics). If you are guessing, avoid picking an "exotic" diagnosis as an answer.
7. The AANPCB exams will list the normal lab results when they are pertinent to a question.
8. Unlike the AANPCB, the ANCC does not list the normal lab results. If you are taking the ANCC exam, it is important to memorize some normal lab results and to write them down on scratch paper during the computer tutorial time period.
9. Expect a few questions regarding pregnancy-related topics (obstetrics). Example: Uterine involution is when the uterus contracts and shrinks in size until it returns to its prepregnancy state; the process takes about 6 weeks.
10. Learn the significance of abnormal lab results and the type of follow-up needed to further evaluate the patient.
    - Example: An elderly male patient complains of a new-onset, left-sided temporal headache accompanied by scalp tenderness and indurated temporal artery. The NP suspects temporal arteritis. The screening test is the sedimentation rate, which is expected to be much higher than normal (elevated value).
    - Example: A patient with an elevated white blood cell (WBC) count >11,000/mm^3 accompanied by neutrophilia (>70%) and the presence of bands ("shift to the left") most likely has a serious bacterial infection.
11. Sometimes there will be one unexpected question relating to a dental injury. Example: A completely avulsed permanent tooth should be reimplanted as soon as possible. It can be transported to the dentist in cold milk (not frozen milk).
12. There may be a question on epidemiologic terms. Example: *Sensitivity* is defined as the ability of a test to detect a person who has the disease. *Specificity* is defined as the ability of a test to detect a person who is healthy (or to detect the person without the disease).

13. Learn the definitions of some of the research study designs. Example: A cohort study follows a group of people who share some common characteristics to observe the development of disease over time (e.g., the Framingham Nurses' Health Study).
14. Several emergent conditions that may present in the primary care area will be on the exam. Examples: Navicular (or scaphoid) fracture, acute myocardial infarction (MI), cauda equina syndrome, anaphylaxis, angioedema, meningococcal meningitis.
15. Become familiar with the names of some anatomic areas. Example: Trauma to Kiesselbach's plexus will result in an anterior nosebleed.
16. Some questions may ask about the "gold-standard test" or the diagnostic test for a condition. Example: The diagnostic or gold-standard test for sickle cell anemia, glucose-6-phosphate dehydrogenase (G6PD) anemia, and alpha or beta thalassemia is the hemoglobin electrophoresis.
17. Distinguish between first- and second-line antibiotics. Example: A 7-year-old child with acute otitis media (AOM) who is treated with amoxicillin returns in 48 hours without improvement (complains of ear pain, bulging tympanic membrane). The next step is to discontinue the amoxicillin and start the child on a second-line antibiotic such as amoxicillin–clavulanate (Augmentin) twice a day × 10 days.
18. Become knowledgeable about alternative antibiotics for penicillin-allergic patients. If the patient has a gram-positive infection, possible alternatives are macrolides, clindamycin, or quinolones with gram-positive activity such as levofloxacin or moxifloxacin.
19. If a patient has an infection that responds well to macrolides, but they think they are "allergic" to erythromycin (symptoms of nausea or gastrointestinal [GI] upset), inform them that they had an adverse reaction, not a true allergic reaction (hives, angioedema). Example: Switch the patient from erythromycin to azithromycin (usually a Z-Pak).
20. If a patient fails to respond to the initial medication, add another medication (follow the steps of the treatment guideline). Example: A patient with chronic obstructive pulmonary disease (COPD) is prescribed ipratropium bromide (Atrovent) for dyspnea. On follow-up, the patient complains that the symptoms are not relieved. The next step would be to prescribe an albuterol inhaler (Ventolin) or a combination inhaler.
21. Disease states are usually presented in their full-blown, "classic" textbook presentations. Example: In a case of acute mononucleosis, the patient will most likely be a teen presenting with the classic triad of sore throat, prolonged fatigue, and enlarged cervical nodes. If the patient is older, but has the same signs and symptoms, it is still mononucleosis (reactivated type).
22. Ethnic background may give a clue for some conditions. Example: Alpha thalassemia is more common among Southeast Asian (e.g., Filipino) people. Beta thalassemia is more common in Mediterranean people.
23. No asymptomatic or "borderline" cases of disease states are presented in the test. Example: In real life, most patients with iron-deficiency anemia are asymptomatic and do not have either pica or spoon-shaped nails. In the exam, they will probably have these clinical findings plus the other findings of anemia.
24. Become familiar with lupus or systemic lupus erythematosus (SLE). Example: A malar rash (butterfly rash) is present in most patients with lupus. These patients should be advised to avoid or minimize sunlight exposure (photosensitivity).
25. Become familiar with polymyalgia rheumatica (PMR). Example: First-line treatment for PMR includes long-term steroids. Long-term, low-dose steroids are commonly used to control symptoms (pain, severe stiffness in shoulders and hip girdle). PMR patients are also at higher risk for temporal arteritis.
26. The gold-standard exam for temporal arteritis is a biopsy of the temporal artery. Refer the patient to an ophthalmologist for management.
27. Learn the disorders for which maneuvers are used and what a positive report signifies. Example: Finkelstein's test—positive in De Quervain's tenosynovitis. Anterior drawer maneuver and Lachman maneuver—positive if anterior cruciate ligament (ACL) of the knee is damaged. The knee may also be unstable. Flexion pinch sign—positive in meniscus injuries of the knee.
28. Some conditions need to be evaluated with a radiologic test. Example: If suspected soft tissue damage in a joint, order an x-ray first (but MRI is the gold standard).
29. The abnormal eye findings in diabetes (diabetic retinopathy) and hypertension (hypertensive retinopathy) should be memorized. Learn to distinguish each one. Example: Diabetic retinopathy: Neovascularization, cotton wool spots, and microaneurysms. Hypertensive retinopathy: Atrioventricular (AV) nicking, silver and/or copper wire arterioles.
30. Become knowledgeable about physical exam "normal" and "abnormal" findings. Example: When checking deep tendon reflexes (DTRs) in a patient with severe sciatica or diabetic peripheral neuropathy, the Achilles reflex may be absent or hypoactive. Scoring: Absent (0), hypoactive (1), normal (2), hyperactive (3), and clonus (4).
31. There are only a few questions on benign or physiologic variants. Example: A benign S4 heart sound may be auscultated in some elderly patients. A geographic tongue, torus palatinus, and fishtail uvula may be seen during the oral exam in a few patients.
32. Some commonly used drugs have rare (but potentially life-threatening) adverse effects. Example: A rare but serious adverse effect of angiotensin-converting enzyme inhibitors (ACEIs) is angioedema. A common side effect of ACEIs is a dry cough (up to 10%).
33. Learn about the preferred and/or first-line drug used to treat some diseases. Example: ACEIs or angiotensin receptor blockers (ARBs) are the preferred drugs to

treat hypertension in diabetics and patients with renal disease because of their renal-protective properties.

34. When medications are used in the answer options, they will be listed either by name (generic and brand name) or by drug class alone. Example: Instead of using the generic/brand name of ipratropium (Atrovent), it may be listed as a drug class (an anticholinergic).
35. Most of the drugs mentioned in the exam are the well-recognized drugs. Examples (additional examples are listed in Chapters 2 and 3):
    - Penicillin: Amoxicillin (broad-spectrum penicillin), penicillin VK
    - Macrolide: Erythromycin, azithromycin (Z-Pak), or clarithromycin (Biaxin)
    - Cephalosporins: First-generation (Keflex), second-generation (Cefaclor, Ceftin, Cefzil), third-generation (Rocephin, Suprax, Omnicef)
    - Quinolones: Ciprofloxacin (Cipro), ofloxacin (Floxin)
    - Quinolones with gram-positive coverage: Levofloxacin (Levaquin), moxifloxacin (Avelox), gatifloxacin (Tequin)
    - Sulfa: Trimethoprim–sulfamethoxazole (Bactrim, Septra)
    - Tetracyclines: Tetracycline, doxycycline, minocycline (Minocin)
    - Nonsteroidal anti-inflammatory drugs (NSAIDs): Ibuprofen, naproxen (Aleve, Anaprox)
    - COX-2 inhibitor: Celecoxib (Celebrex)
36. Category B drugs are allowed for pregnant or lactating patients. Example: For pain relief, pick acetaminophen (Tylenol) instead of NSAIDs such as ibuprofen (Advil) or naproxen (Aleve, Anaprox). Avoid nitrofurantoin and sulfa drugs during the third trimester (these increase risk of hyperbilirubinemia).
37. The preferred treatment for cutaneous anthrax is ciprofloxacin 500 mg orally twice a day for 60 days or 8 weeks. If the patient is allergic to ciprofloxacin, use doxycycline 100 mg twice a day. Cutaneous anthrax is not contagious; it comes from touching fur or animal skins that are contaminated with anthrax spores.
38. Approximately 15% of the questions will be about infants and children. Example: The American Academy of Pediatrics (AAP) recommends that breastfed infants should be started on vitamin D during the first few days of life; then at age 4 months, iron-supplementation is recommended (formula contains vitamins/minerals so no need to supplement).
39. A common question design regarding pediatrics is to query about growth and development norms (or abnormal). Example: At the age of 6 months, infants can sit without support; roll over front to back, then from back to front; transfer objects from one hand to the other; use a raking grasp; and babble.
40. Physical exam findings in children that are abnormal with serious consequences might be included. Example: Leukocoria (white color) is noted on one eye while checking for the red reflex. Rule out retinoblastoma of the eye, which is a malignant tumor of the retina.
41. There are some questions on theories and conceptual models. Example: Stages of change or "decision" theory (Prochaska) include concepts such as precontemplation, contemplation, preparation, action, and maintenance.
42. Other health theorists who have been included on the exams in the past are (not inclusive) Alfred Bandura (self-efficacy), Erik Erikson, Sigmund Freud, Elisabeth Kübler-Ross (grieving), and others. Example: If a small child expresses a desire to marry a parent of the opposite sex, the child is in the oedipal stage (Freud). The child's age is about 5 to 6 years (preschool to kindergarten).
43. Starting at the age of about 11 years, most children can understand abstract concepts (early abstract thinking) and are better at logical thinking. Example: When performing the Mini-Mental State Exam, when the NP is asking about "proverbs," the nurse is assessing the patient's ability to understand abstract concepts.
44. Keep these good communication rules in mind: Ask open-ended questions; do not reassure patients, avoid angering them, and respect their culture. There may be two or three questions relating to abuse (e.g., child abuse, domestic abuse, elder abuse).
45. Follow national treatment guidelines for certain disorders. Note that it may take 1 to 2 years for the latest guidelines to appear on the certification exams. Following is a list of treatment guidelines used as references by the ANCC and the AANPCB.*
    - **Asthma:** Global Initiative for Asthma. (2022). *Global strategy for asthma management and prevention.* https://ginasthma.org/wp-content/uploads/2022/07/GINA-Main-Report-2022-FINAL-22-07-01-WMS.pdf
    - **COPD:** Global Initiative for Chronic Obstructive Lung Disease. (2023). *Global strategy for the diagnosis, management, and prevention of chronic obstructive pulmonary disease (2023 report).* https://goldcopd.org/2023-gold-report-2
    - **Diabetes:** Kahn, S. E. (Ed.). (2023). Standards of care in diabetes. *Diabetes Care*, 46(Suppl. 1), S1–S291. https://diabetesjournals.org/care/issue/46/Supplement_1
    - **Ethics:** Fowler, M. (2015). *Guide to the code of ethics for nurses with interpretive statements: Development, interpretation, and application* (2nd ed.). Nursesbooks.org.
    - **Healthy People:** Office of Disease Prevention and Health Promotion. (n.d.). *Healthy People 2030: Browse objectives.* https://health.gov/healthypeople/objectives-and-data/browse-objectives
    - **Health Promotion:** U.S. Preventive Services Task Force. www.uspreventiveservicestaskforce.org/uspstf
    - **Hyperlipidemia:** Grundy, S. M., Stone, N. J., Bailey, A. L., Beam, C., Birtcher, K. K., Blumenthal, R. S., Braun, L. T., de Ferranti, S., Failla-Tommasino, J., Forman, D. E., Goldberg, R., Heidenreich, P. A., Hlatky, M. A., Jones, D. W., Lloyd-Jones, D., Lopez-Pajares, N., Ndumele, C. E., Orringer, C. E., Peralta, C. A., ... Yeboah, J. (2019). AHA/

* Not an all-inclusive list.

ACC/AACVPR/AAPA/ABC/ACPM/ADA/AGS/APhA/ASPC/NLA/PCNA Guideline on the Management of Blood Cholesterol: A report of the ACC/AHA Task Force on Practice Guidelines. *Circulation*, 139(25). https://doi.org/10.1161/CIR.0000000000000625

- **Hypertension:** Whelton, P. K., Carey, R. M., Aronow, W. S., Casey, D. E., Jr., Collins, K. J., Dennison Himmelfarb, C., DePalma, S. M., Gidding, S., Jamerson, K. A., Jones, D. W., MacLaughlin, E. J., Muntner, P., Ovbiagele, B., Smith, S. C., Jr., Spencer, C. C., Stafford, R. S., Taler, S. J., Thomas, R. J., Williams, K. A., Sr., ... Wright, J. T., Jr. (2017). Guideline for the prevention, detection, evaluation, and management of high blood pressure in adults: A report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines. (2018). *Journal of the American College of Cardiology*, *71*, e127–e248. https://doi.org/10.1161/HYP.0000000000000065
- **Mental Health:** American Psychiatric Association. (2022). *Diagnostic and statistical manual of mental disorders* (5th ed., text rev.). https://doi.org/10.1176/appi.books.9780890425787
- **Pediatrics:** American Academy of Pediatrics. (2017). *Bright futures: Guidelines for health supervision of infants, children, and adolescents* (E-book; 4th ed.). https://doi.org/10.1542/9781610020237
- **Sexually Transmitted Infections:** Centers for Disease Control and Prevention. (2021). *Sexually transmitted infections treatment guidelines*. https://www.cdc.gov/std/treatment-guidelines/toc.htm

46. The ANCC exam has several questions about evidence-based medicine that are designed in the drag-and-drop format. Review Chapter 2 to become familiar with this format.

47. If the question is asking for the initial or screening lab test, it will probably be a less expensive and readily available test such as the complete blood count (CBC) to screen for anemia.

MAXIMIZING YOUR SCORE

1. The first answer that "pops" into your head is usually the correct answer.

2. If you are guessing, make an educated guess. Pick what you think is the most likely answer. Try not to change it unless you are sure that you should.

3. Use the "flag" command so that you can return to a question later when you complete the exam.

4. Avoid changing too many answers. If you are not sure, then leave the answer alone. I advise my students not to change more than three answers.

5. Avoid choosing "exotic" diseases as answers if you are guessing. Remember, these are tests for primary care conditions.

6. One method of guessing is to look for a pattern. Pick the answer that does not fit the pattern. Another is to pick the answer that you are most "attracted" to. Go with your gut feeling, and do not change the answer unless you are very sure.

7. Remind yourself to read slowly and carefully throughout the test. Avoid reading questions too rapidly. Make sure that you understand the stem of the question.

8. If you are having problems choosing or understanding the answer options, try to read them not only from the top down, but also from the bottom up (e.g., from option D to A, or from 4 to 1).

9. Eliminate the wrong answers after you have read all the answer options. If an answer option contains all-inclusive words (*all*, *none*, *every*, *never*), then it is probably wrong.

10. Be careful with certain words, such as *always*, *exactly*, *often*, *sometimes*, and *mostly*.

11. Assume that each question has enough information to answer it correctly. Questions and answers are carefully designed. Take the facts at face value.

12. The first few questions are usually harder to solve. This is a common test design. Do not let it shake your confidence. (Guess the answer if you need to, and flag it so that you can return to it later.)

13. Save yourself time (and mental strain) by reading the last sentence of long questions and case scenarios *first*. Then read the question again from the beginning. The advantage of this "backward reading" technique is that you know ahead of time what the question is asking for. When you read it again normally, it becomes easier to recognize important clues that will help you answer the question.

14. When reading a lengthy or complicated question, read it at least twice (or more) until you understand it. Do not ignore modifiers (e.g., *only, first, initial, preferred treatment*) because they will help you determine the correct answer. Usually, most questions can be answered without major difficulty. For some, you will have to differentiate between two possible answer options. Read the question again; you may have missed the key words that will help you to narrow it down to one answer.

15. Just because a statement or an answer is *true* does not mean that it is the correct answer. If it does not answer the stem of the question, then it is the wrong answer.

16. Design and memorize your "scratch paper" a few weeks before you take the exam. Choose what you want on it wisely. Remember to keep it brief.

17. Use the time left from the "free" computer tutorial time to write down the facts that you memorized for your scratch paper. If you run out of time, skip this step.

18. Some suggestions of facts to write down on your scratch paper are lab results (e.g., hemoglobin, hematocrit, mean corpuscular volume, platelets, WBC count, neutrophil percentage, potassium, urinalysis). Other popular choices are the murmurs, the cranial nerves, or helpful mnemonics.

19. Do not leave any of the questions blank or unanswered, because there is no penalty for guessing. Questions that are left blank are marked as errors (0 points). If you are running out of time and you are not done, quickly answer the remaining questions at random.
20. Do not change your answers unless you are very sure that you have made a mistake. Remember, the first answer that comes into your head is usually the correct answer. Do not second-guess yourself! I have had students fail the exam due to changing too many answers during their "leftover" time.
21. If you spend more than 60 seconds on a question, you are wasting time. If you are not sure, pick the most likely answer, and then flag the "difficult" question so that you can return to it later (after you finish the entire test). Look at the clock often (upper half of screen) so that you do not run out of time.
22. Most test takers who finish the exam will have several minutes left. If so, go over the exam and make sure that you have not skipped any questions. All questions should contain an answer.
23. Consider a quick break (if you have enough time) if you get too mentally fatigued. Solving 150 to 175 questions is pretty intense. If you feel "fuzzy" or tired, go to the restroom and get a drink of water, and splash cold water on your face. This can take fewer than 5 minutes. You can bring bottled water, but you have to leave it outside the testing area.
24. The countdown clock on the computer does not stop for breaks. Do not use more than 5 minutes for your quick restroom break. When the time expires, the exam will automatically be shut down by the computer.
25. If you have failed the test before, try not to memorize what you did on the previous exam you took. The answers you remember may be wrong. Pretend that you have never seen the test before so that you can start out fresh mentally.
26. Do not panic or let your anxiety take over. Learn to use a calming technique, such as deep breathing (see below), to calm yourself quickly before you take the exam.
27. Consider listening to a test-anxiety hypnosis program; use it every night for at least 2 to 3 weeks for maximum effect.
28. One of the most important pieces of advice that I can give you is to make sure that you get enough sleep the night before the exam. Aim for at least 7 to 8 hours of sleep. Better yet, make sure that you get enough sleep a few nights before, not just the night before.
29. Before the test, practice answering questions and check the rationales afterward. The ANCC has free questions per specialty that you can take online and score. Buy practice questions from the ANCC or the AANPCB (depending on which test you are taking).
30. Check out the website allnurses.com and search for examination tips from others who have taken/failed an FNP certification exam. You can also do this directly by searching online.

PREPARING FOR THE EXAM

Review Timeline

1. Start seriously reviewing for the exam at least 3 months in advance. Study time can range from 2 to 3 hours per session, or you can break it up into 1-hour segments. Be consistent. The best time to study is the time of day you are most alert.
2. Prepare a study schedule by organ system. Photocopy the table of contents of your primary care textbook. Place check marks next to the diseases that you want to concentrate on, and then schedule the date and time period for each organ system.
3. Concentrate your studies on your weaker areas. For example, if orthopedics is one of your weak areas, devote more time to it. Spend 3 days on orthopedics versus 1 day for the "easy" organ systems (since you understand them better).
4. I highly recommend that you attend at least one quality review course and buy another online review course. I teach review courses live and by webinar.
5. Buy a new notebook. If you find that you are having a problem understanding a concept, write it down in your notebook, then research it and find the answer to your question.
6. Meet with someone in your local area or by an online meeting platform who is also taking the exam. Practice quizzing each other.
7. Note the diseases and topics that I have highlighted in this book. Some organ systems have more "weight" on the exam than others. Become more familiar with these areas.
8. If you are taking the ANCC exam, I highly recommend that you devote at least 30% of your study time to learning about the nonclinical topics.
9. If you learn better in a group, organize one. Decide ahead of time what organ systems or diseases to cover together so that you do not waste time.

Testing Center Details

1. Call the testing center or confirm your appointment online 4 weeks before to verify your scheduled date and time.
2. Locate and travel to the testing center 1 to 2 weeks before taking the exam. Save the address of the testing center on your GPS or map app.
3. Arrive at least 45 to 60 minutes before your scheduled time so that you have enough time to park your car, locate the testing center, and check in for your appointment.
4. Carry acceptable forms of unexpired primary ID (photo with signature). If you do not have the proper forms of identification, you will not be allowed to take the exam.
   - Primary IDs include driver's license issued by the Department of Motor Vehicles (DMV), state ID card issued by the DMV, passport, and U.S. military ID.

- Secondary (nonphoto) IDs include cards with your name and signature (e.g., credit card, debit card, Social Security card, voter registration card, employee ID).
- Expired IDs are not acceptable.
- The name that is printed on your primary ID must match the name that you used when you applied for the exam.
- Check that both your primary and secondary IDs and the letter with your Prometric identification number match; be sure that all your IDs are inside your wallet/handbag.

5. Biometrics are used for enhanced security. The test-taking room is also monitored closely by video and microphones. Your glasses will be checked visually, and you will be asked to show your arms and ankles, as well as empty your pockets from an agreed-upon safe distance.
6. A whiteboard (8.5 × 11 inches) with a marker, or scratch paper and a pencil, will be given to you by the testing center staff (and collected after you are done). If you are given paper and tend to write a lot, ask for extra paper.
7. You can request noise-reducing headsets or earplugs; consider this option if you are sensitive to noise.
8. Cell phones, watches, cameras, pagers, jewelry (except for engagement and/or wedding ring), and food or drink are not allowed inside the testing area.
9. Testing computers are predetermined. Each test taker is assigned one small cubicle with one computer. If you are having problems seeing the computer screen, bring it to the proctor's attention as soon as possible.
10. Verify that you are given the correct examination as soon as you sit down. Check that the title and the examination code on the screen match the information sent by the testing agency for your NP specialty.
11. No food or drink is allowed inside the testing room. You can bring drinks and food (e.g., snack bars) into the building and place them outside your locker (on top of the locker) so that you do not have to open your locker. You are not permitted to unlock your locker during the testing period.
12. If you need to go to the restroom, you must first sign out with the proctor/testing staff. Remember, the time clock will continue to count down the time. It does not stop for breaks.
13. Do not forget your glasses if you need them to read text on the computer.

The Night Before the Exam

1. Avoid eating a heavy meal or consuming alcoholic drinks the night before the exam. Avoid eating 3 to 4 hours before bedtime.
2. Get enough sleep. Aim for at least 7 to 8 hours. Getting adequate sleep is probably one of the most important things you can do to help you pass the exam.
3. If you are scheduled to take your exam in the morning, set two alarms to wake you up on time. Give yourself extra time if it is a weekday (traffic congestion).

The Day of the Exam

1. Avoid eating a heavy breakfast or eating only simple carbohydrates. The best meals are a combination of a protein with a complex carbohydrate (e.g., eggs, whole-wheat bread, nuts, cheese).
2. If you get drowsy and "fuzzy" during the exam, there are several ways to "wake up" rapidly. Excuse yourself and go to the restroom to splash cold water on your face. You can perform 10 to 20 jumping jacks. Drinking cold water, a caffeinated beverage, or coffee can be very helpful. (However, don't drink too much.)
3. Avoid drinking too much fluid and do not forget to empty your bladder before the exam.
4. Wear comfortable clothing and dress in layers in case of temperature changes.
5. Jewelry is not allowed inside the testing area, except for wedding and/or engagement rings.

Test Anxiety

It is normal to feel anxious before taking an exam. A little anxiety helps us to become alert and vigilant, but too much anxiety can wear you down both emotionally and physically.

Your internal perception about how well you will do on the exam is very important. If you tend to become very anxious (or you are now more anxious because you previously failed the exam), there are calming methods that may prove helpful in controlling your anxiety. Following are some suggestions to help reduce test-taking anxiety a few weeks before the exam:

1. Make sure that you have devoted enough time for your review studies. If you feel in your gut that you have not studied "enough" or that you are not ready, it will worsen anxiety.
2. Consider taking one or two review courses.
3. Avoid negative "self-talk."
4. Improve the nutritional content of your diet, especially about 4 weeks before the exam.
5. Hypnotherapy audio files are sold online. For maximum effectiveness, it is best to listen to them daily for 2 to 4 weeks.
6. "Tapping" is another method used to counteract test anxiety (or increase self-confidence). The technique is demonstrated in videos on YouTube.

Your Panic Button

If you find yourself feeling panicky during the exam, try the following calming technique. Practice this exercise at home until you feel comfortable doing it.

1. Close your eyes. During inhalation, tell yourself gently, "I am breathing in calmness." Then hold your breath and count from 1 to 3.
2. During exhalation, tell yourself gently, "I am breathing out fear," while counting from 1 to 5.
3. Inhale deeply through your nose and exhale slowly through your mouth.
4. Complete one cycle of three inhalations and three exhalations. Repeat as needed.

2 QUESTION DISSECTION AND ANALYSIS

EVIDENCE-BASED MEDICINE

I. Discussion

Questions about evidence-based medicine (EBM) are typically designed in "drag-and-drop" format on the American Nurses Credentialing Center (ANCC) exam. They are presented as two boxes with three sections each. The example that follows illustrates this format. On the left side, three types of article summaries (or research studies) are marked A, B, and C (in the exam, they will appear as blue boxes). On the right side, you will see the rankings from 1 to 3 (in the exam, they will be yellow boxes). You "drag" one of the articles from the left-hand box and "drop" it into the correct ranking or hierarchy in the right-hand box. Your job is to rank the three research article summaries as best evidence (1), moderate evidence (2), or weakest evidence (3).

II. Example

Example of Drag-and-Drop Formatted Question

Article Summaries	Strength of Evidence (Strongest to Weakest)
A. An experimental study on 500 patients with early dementia who were given ginkgo biloba daily for 6 months versus the control group, which was given placebo pills	1
B. A specialty society opinion paper regarding the effectiveness of ginkgo biloba supplementation in dementia	2
C. A meta-analysis on MEDLINE and Cochrane databases that found 53 randomized controlled trials about ginkgo biloba use in patients with early dementia	3

III. Correct Answer

Article C is ranked 1, Article A is ranked 2, and Article B is ranked 3.

IV. Question Dissection

Best Clues

The easiest way to answer this type of question is to memorize and understand the highest level of evidence (e.g., meta-analysis, systematic review, randomized controlled trial [RCT]) and the types of studies that have the lowest level of evidence (e.g., opinions, editorials). The "leftover" study belongs in the middle (#2 ranking). The first sentence of each article summary usually gives a clue about the study design. Notice that in option C of the example, it is a "meta-analysis"; in option A, it is an "experimental study"; and in option B, it is a "specialty society opinion paper."

I teach a three-step system to students in my review courses:

1. First, identify the research study that has the highest/best level of evidence (#1 ranking). An easy way to do this is by searching for key words in the question such as *meta-analysis*, *systematic review*, or *RCT* combined with *Cochrane Database of Systematic Reviews (CDSR)*, MEDLINE® database, and/or Cumulative Index to Nursing and Allied Health Literature (CINAHL®).
2. Next, look for the research study that has the weakest evidence (#3 ranking). It usually contains key words such as *expert opinion*, *opinion*, *editorial*, or *specialty society*.
3. Therefore, view the study that is leftover as having the middle ranking (#2 ranking). In addition, keep in mind that if the choices do not include a meta-analysis or systemic review, then the study with the highest ranking would be an RCT or an experimental study. The ANCC exams usually have several of this type of question.

The full levels of evidence rankings are:

- Meta-analysis and/or systematic reviews (Cochrane/MEDLINE/CINAHL/PubMed)
- RCTs (used for testing medical treatment effectiveness, subjects assigned at random to either a control or treatment group)
- Experimental studies (control group, intervention group, randomization)
- Cohort/case control studies
- Retrospective chart reviews
- Expert/specialty society opinions

PHOTOGRAPHS

I. Discussion

On the ANCC exam, expect to see several color photographs of skin conditions and a few on the eyes/fundi. In the future, there may be pictures from other organ systems. The stem of the question usually will ask for the possible diagnosis, differential diagnosis, or type of treatment. If you plan to take the ANCC exam, you need to memorize how a skin condition or eye finding appears in a color photo. It is a good idea to use a search engine (e.g., Google)

to look for the images. For example, you want to become familiar with the appearance of skin cancers, such as basal cell carcinoma and melanoma, and funduscopic findings in diabetes and hypertension.

II. Example

The nurse practitioner (NP) is performing a routine physical exam on a 54-year-old White male farmer who is an emigrant from Australia. The NP notices a round skin lesion on the patient's head. It has a firm texture with indurated edges and telangiectasia (Figure 2.1). The patient reports that the lesion does not itch, but it has slowly enlarged over the past few years. Which of the following conditions is most likely in this patient?

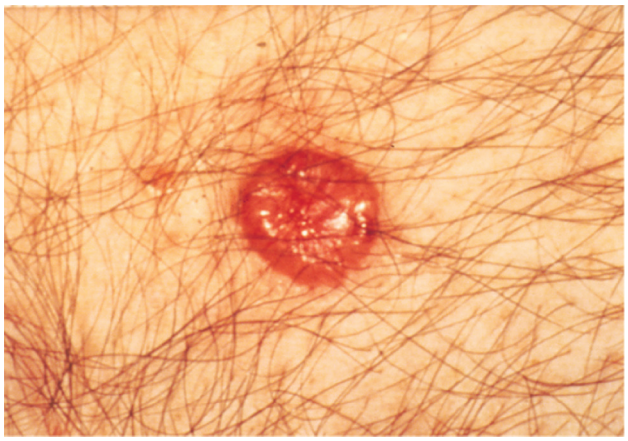

Figure 2.1 Example of an exam image.
Source: National Cancer Institute.

A. Nodular melanoma
B. Squamous cell carcinoma
C. Basal cell carcinoma
D. Actinic keratosis

III. Correct Answer: Option C

C. Basal cell carcinoma

IV. Question Dissection

Best Clues

- Notice that the skin lesion has a pearly or waxlike (shiny) appearance with telangiectasia, which is "classic" for basal cell carcinoma; some lesions may show central ulceration.
- Patient has risk factors for skin cancer, such as light-colored skin, and he is from Australia, which has high rates of skin cancer.
- The skin lesion is located on a sun-exposed area.
- It is probably not nodular melanoma, which usually has pigment such as brown or black color with irregular borders.
- Actinic keratosis is a precancer of squamous cell carcinoma and is usually located on the scalp (males), face, and back of the hands (dorsum); they appear as a crusty/scaly growth that slowly enlarges over time.
- The gold-standard test for skin cancer is the skin biopsy.

MULTIPLE-CHOICE QUESTIONS WITH MORE THAN ONE CORRECT RESPONSE

I. Discussion

Expect to see some "select all that apply" questions with five or six answer options in both the ANCC and the American Academy of Nurse Practitioners Certification Board (AANPCB) exams. The question will ask you to select all of the answers that are correct. For example, you may be asked to pick two or three differential diagnoses for a case of skin rash. The clues are given in the presentation of the signs and symptoms.

II. Example

A 75-year-old woman with mild dementia, hyperlipidemia, and emphysema is brought in by her middle-aged daughter as a walk-in patient in a community clinic with a complaint of a sudden onset of red rashes on her left lower arm and hand. During the skin exam, the NP notes that there are a few blisters. When the NP touches one of the blisters, it ruptures and drains clear serous fluid. Which of the following conditions should the NP consider in the differential diagnosis?

A. Contact dermatitis
B. Erysipelas
C. Psoriasis
D. Impetigo
E. Thermal burn

III. Correct Answer: Options A, D, and E

A. Contact dermatitis
D. Impetigo
E. Thermal burn

IV. Question Dissection

Best Clues

- Easily ruptured blisters (fragile) are a classic finding for bullous impetigo, an acute bacterial skin infection caused by *Staphylococcus* or *Streptococcus*.
- Contact dermatitis can present with just red skin or red skin with blisters. The rash can be located anywhere on the body, and it may have a pattern (like a belt) or no pattern.
- The timing of the rash is very important. Is it acute or chronic? Rule out option C (psoriasis), which is a chronic skin disease.
- Erysipelas is a type of cellulitis caused by strep. It resembles a bright-red, warm, raised rash (plaque-like) with discrete borders usually located on the face or the shins. Blistering is not present.
- A thermal burn is a burn caused by heat (e.g., fire, heat). Consider a second-degree burn in the differential diagnosis because of its acute onset. Also, the patient has mild dementia, which puts her at a higher risk for accidents.

DIAGNOSTIC IMAGING

I. Discussion

Questions about diagnostic imaging tests may appear on the exam. You may get a multiple-choice question alone or a question that is accompanied by a chest x-ray film. I recommend that you use a search engine (e.g., Google) to search for

images of chest films with lobar consolidation due to community-acquired pneumonia (CAP), right middle lobe pneumonia, pulmonary tuberculosis (TB) infection, and emphysema/chronic obstructive pulmonary disease (COPD).

II. Example

A 34-year-old male smoker presents in an urgent care clinic complaining of a productive cough, chest congestion, fever, chills, and poor appetite for 1 week. Cough is productive of greenish sputum, which is sometimes tinged with a small amount of blood. Vital signs are as follows: temperature of 101.2°F, pulse of 100 beats/min, respirations of 24 breaths/min, and blood pressure (BP) of 122/88 mmHg. A radiograph of the chest is obtained (Figure 2.2). What is the most likely diagnosis in this patient?

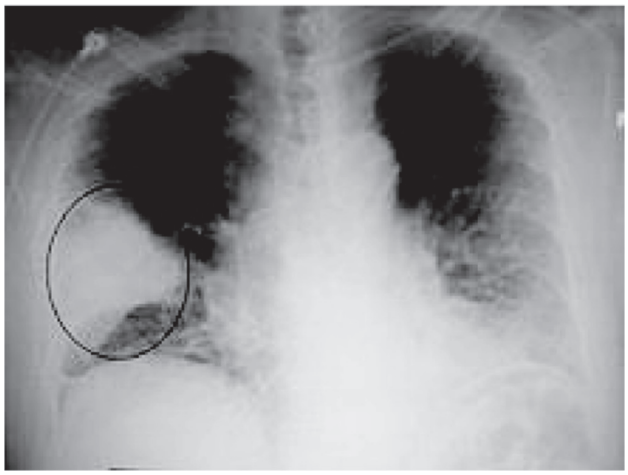

Figure 2.2 Example of an exam image.

A. Acute bronchitis
B. Right middle lobe pneumonia
C. Right lower lobe pneumonia
D. Legionella pneumonia

III. Correct Answer: Option B

B. Right middle lobe pneumonia

IV. Question Dissection

Best Clues

- The signs and symptoms of CAP include fever and cough productive of green sputum with a small amount of blood (or rust-colored sputum). Rust-colored sputum is associated with *Streptococcus pneumoniae* infection.
- Most of the middle lobe of the right lung is anatomically in the anterior chest by the right nipple area. Notice that lobar consolidation occurs in the same area.
- Patients with acute bronchitis may have chest congestion but not fever, chills, or productive cough with purulent sputum.
- Legionella pneumonia (Legionnaire's disease) is uncommon in primary care. Look for a history of exposure to "nebulized" water sources (e.g., air conditioners, fountains). Presents with pneumonia signs/symptoms that are accompanied by gastrointestinal (GI) symptoms (diarrhea, nausea/vomiting).

CULTURE

I. Discussion

There will be several questions on the ANCC exam that address culture. The questions will address knowledge of respecting diversity and inclusivity.

II. Example

The nurse practitioner (NP) is working in a primary care clinic where the patient population represents many different cultures. Which of the following should the NP consider when planning care for their patients to reflect cultural competency? (Select all that apply.)

A. Cultural diversity is limited to people of certain cultures and races.
B. Patients may be members of multiple cultural groups.
C. Cultural practices may change and evolve over time.
D. Culture may determine what behavior is acceptable for members of that group.

III. Correct Answers: Options B, C, and D

B. Patients may be members of multiple cultural groups.
C. Cultural practices may change and evolve over time.
D. Culture may determine what behavior is acceptable for members of that group.

IV. Question Dissection

Best Clues

Option A is not inclusive of all cultures and races.

Cultural competence is the ability of an individual to understand and respect values, attitudes, and beliefs that differ across cultures. Furthermore, the NP who demonstrates cultural competence also is able to consider and respond appropriately to these differences in planning, implementing, and evaluating healthcare, patient education, and health promotion.

LAB RESULTS AND DIAGNOSTIC TESTS

I. Discussion

Laboratory tests, such as hemoglobin and hematocrit, mean corpuscular volume (MCV), total white blood cell (WBC) count, percentage of neutrophils in the WBC differential, thyroid-stimulating hormone (TSH), prostate-specific antigen (PSA), and urinalysis (UA), are commonly encountered in the exams. Learn the significance of the abnormal results and the follow-up tests that are needed to evaluate them further.

The AANPCB exam does list the norms for some of the common laboratory tests. They will appear only when needed to answer a question (such as an anemia question).

In contrast, the ANCC does not list any of the normal results in its certification exams. Therefore, if you plan to take the ANCC exam, it is important that you memorize the normal results of these laboratory tests.

Be warned that lab results are also used as distractors; the labs listed may not be necessary to solve the exam question correctly. The normal results for these labs are also included in the pertinent review chapters of this book (e.g., TSH is found in Chapter 9).

II. Example

An elderly man of Mediterranean descent has a routine complete blood count (CBC) done for an annual physical. The following are his lab test results: hemoglobin is 12.0 g/dL, hematocrit is 39%, and mean corpuscular value (MCV) is 72 fL. His prostate-specific antigen (PSA) result is 3.2 ng/mL. Urinalysis (UA) shows no leukocytes and few epithelial cells. Which of the following laboratory tests are indicated for this patient?

A. Serum iron, serum ferritin, total iron-binding capacity (TIBC), and the red cell distribution width (RDW)
B. Serum vitamin B_{12} and folate level with a peripheral smear
C. CBC with white cell differential and UA
D. Urine culture and sensitivity with microscopic exam of the urine (Tables 2.1 and 2.2)

III. Correct Answer: Option A

A. Serum iron, serum ferritin, total iron-binding capacity (TIBC), and the red cell distribution width (RDW)

IV. Question Dissection

Best Clues

- Low hemoglobin and hematocrit for gender (male) and age (abnormal CBC result)
- An MCV of 72 fL, which is indicative of microcytic anemia (assessment)
- The ethnic background of the patient (demographics)
- Ignore the UA and PSA tests because they are not necessary to solve the problem

Table 2.1 List of Laboratory Norms (Adults)

CBC	Reference Ranges
Hemoglobin	
Males	13.0–17.5 g/dL
Females	12.0–16 g/dL
Hematocrit	
Males	40%–50%
Females	36%–45%
MCV	80–100 Fl
RDW	>14.5%
Platelet count	<150,000/mm³ (increased risk of bleeding, disseminated intravascular coagulation)
Reticulocytes	0.5%–1.5% of red cells (↑ acute bleeding), starting treatment for vitamin deficiencies (iron, B_{12}, folate), acute hemolytic episodes
Total WBC count	4,500–11,000/mm³ (↑ bacterial infections)
Neutrophils (or segs)	55%–70% (↑ bacterial infections)
Band forms (immature WBCs)	>5% (↑ severe bacterial infections)
	Also called "shift to the left"
Eosinophils	>3% (↑ allergies, parasitic diseases, cancer)

CBC, complete blood count; MCV, mean corpuscular volume; RDW, red cell distribution width; WBC, white blood cell.

Table 2.2 List of Blood Chemistries

Laboratory Test	Reference Ranges
TSH	>5.0 mU/L (hypothyroidism)
	<0.4 mU/L (hyperthyroidism)
PSA	<4.0 ng/mL (benign prostatic hyperplasia [BPH], prostate cancer)
Ferritin	<15 mcg/L (iron-deficiency anemia)
ESR; sed rate	Men 0–22 mm/hr Women 0–29 mm/hr Elevated (giant cell arteritis, rheumatoid arthritis [RA], lupus, inflammation)
CRP	Elevated (inflammation, autoimmune diseases, a risk factor for heart disease)
CTnT	Elevated in myocardial infarction (MI), heart damage, heart failure
	Sensitive test for myocardial cell damage (MI, unstable angina)
BNP	Elevated (elevated in heart failure)
Potassium	<3.5 or >5.5 mEq/L (critical values <2.5 or >8 mEq/L)

BNP, B-type natriuretic peptide; CRP, c-reactive protein; cTnT, cardiac troponins; ESR, erythrocyte sedimentation rate; PSA, prostate-specific antigen; TSH, thyroid-stimulating hormone.

NOTES

- You must go through three steps to answer this question correctly:
  First step: A hemoglobin of <13.5 g/dL in males (but not in females) is indicative of anemia. An MCV of 72 fL is indicative of microcytic anemia (norm 80–100 fL).
  Second step: The MCV will direct you in the differential diagnosis (microcytic, normocytic, or macrocytic).
  Third step: The differential diagnosis for microcytic anemia is iron deficiency and alpha or beta thalassemia trait or minor for the exams.
- In iron-deficiency anemia, the following results are found: Serum ferritin and serum iron levels decreased; TIBC and RDW elevated.
- In alpha or beta thalassemia trait or minor, the following results are found: Serum ferritin and serum iron levels normal; TIBC normal.
- The gold-standard test to diagnose any anemia involving abnormal hemoglobin (e.g., thalassemia, sickle cell) is the hemoglobin electrophoresis.
- The RDW is a measure of the variability in size of red blood cells (RBCs; or anisocytosis). An elevated RDW is one of the earliest indicators of iron-deficiency anemia.
- In clinical practice, rule out iron-deficiency anemia first (most common anemia in the world for all ages/races/sexes) before ordering a hemoglobin electrophoresis.