"SURVIVING CLINICAL ROTATIONS"

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FOLLOW THE LEADER!
Most, if not all programs have "rules and regulations" of clinical rotations. It is most important to observe those guidelines at all times. Many schools have clinical rotation handbooks, which, students should refer to if questions arise. Similarly, every clinical site has its own set of "rules and regulations" that need to be followed. If your program policies are in conflict with those of the clinical site, get clarification from your program faculty. When in doubt, contact the program office/clinical coordinator(s).

BE PREPARED!
Pen/pencil
Smart phone/Index cards
Tape measure
Penlight
Short white coat
Identification name badge
Stethoscope
Medical equipment (as necessary)-i.e., make sure you have your reflex hammer if you are doing a neuro, OB or primary care rotation. Many places do not have a reflex hammer or tuning fork for neuro or ENT so carry one with you.

BE A CARD-CARRYING MEMBER!
Have electronic access to or carry a wallet size copy of your current immunizations with you at all times. Many sites now require proof of hepatitis titer, varicella titer and measles, mumps and rubella titer in addition to immunizations.

Influenza vaccination is now required in many hospitals and clinics. You may be able to get this immunization at no cost through your university or medical school. Some sites may offer it at no cost but others want proof of vaccination before you are allowed at their site.

PA students should follow the CDC recommendations for immunizations for healthcare workers. You can get that guideline by going to CDC website *Vaccines and Immunizations for Specific Groups of People* https://www.cdc.gov/vaccines/index.html Click on *Healthcare Workers* and then click on *Healthcare personnel vaccination recommendations. http://www.cdc.gov/vaccines/adults/rec-vac/hcw.html*.

Tuberculosis testing may need updating every 6-12 months. Even though programs may forward that information to clinical sites prior to your arrival, it doesn't hurt to have it with you especially if you sustain any kind of injury at the rotation site. The CDC now recommends a "two-step" tuberculosis test (giving a second PPD after an initial negative PPD reaction is called two-step testing) or a TB blood test (also called interferon-gamma release assays or IGRAs, or brand name QuantiFeron Gold-QFT) or a T-SPOT test. Information on TB testing and diagnosis can be found on the CDC website at https://www.cdc.gov/tb/topic/testing/default.htm

HAVE A PLAN!
Exposure control plan. Make sure you are aware of your program's exposure control plan for both bloodborne and airborne pathogens. The *Centers for Disease Control* (CDC) recommends starting anti-retroviral therapy as early as one to two hours post exposure. It is important to know the program policy for it may require that you obtain treatment at a site other than the one where the exposure took place. Generally, there is a report form that must be filled out and submitted to the clinical site and/or PA program. If your program does not have an exposure control plan in place, you should review the CDC web site (www.cdc.gov) for the latest information on prevention of healthcare associated infections like HIV and Hepatitis http://www.cdc.gov/hiv/workplace/occupational.html http://www.cdc.gov/hepatitis/populations/healthcaresettings.htm

FLAIR FOR FASHION!
Look presentable. First impressions set the tone for your entire rotation. Minimize jewelry, heavy perfumes/cologne/aftershave/body sprays. Keep nails trimmed short and hair out of your face. Men need to consider a "clean" face (lack of facial hair) during surgical rotations.
Women: Dress, skirt, dress pants, blouse. Avoid-shorts, jeans, low-waisted pants, low cut tops, T-shirts, midriff baring tops or sheer tops
Men: Shirt, collared shirt, tie, casual pants. Avoid-shorts, jeans, T-shirts
Shoes: Comfortable and practical. No high heels or open toes. No "flip-flop" type sandals.

SCOUT IT OUT!
If at all possible, try to make the drive to your rotation site 1-2 days prior to starting to find the site. Listen to the traffic report for a week or so prior to starting the rotation to get a sense of traffic patterns. Estimate commute time, find parking, locate the office to which you are to report, and scout out the cafeteria! Download a GPS app on your phone that has up to the minute traffic alerts (e.g., Waze or Google maps)

TO BE OR NOT TO BE!

To Be	Not to Be
Enthusiastic	Sickening sweet
Assertive	Aggressive
Empathetic	Sympathetic
Efficient	Pokey slow
Prepared	Off the cuff
Open (to change, criticism)	Defensive
Communicative	Assuming
Team player	Selfish
Inquisitive	Know-it-all
Confident	Arrogant
Organized	Obsessive-Compulsive

SMART PHONE!

Connect with your contact person at least 2-3 days prior (preferably one to two weeks prior) to starting your rotation to introduce yourself and arrange when and where to meet. Leaving a message or email is not acceptable. Keep trying until you actually connect. Ask your preceptor about housing, “call time,” time off (i.e., weekends, nights). If you cannot get in touch with your preceptor contact your clinical coordinator to ask for help.

MAKE IT CRYSTAL CLEAR!

It is important to familiarize yourself with all aspects of your clinical rotations. This includes familiarizing yourself with the community (characteristics and resources), the office or institutional protocol (workspace, reference materials, dress code, hours of operation, educational opportunities like Grand Rounds). Make sure to clarify expectations from your preceptor. This includes work hours, student level of responsibility and autonomy in providing patient care, rounds, night and weekend call, amount of reading expected. Learn about office/hospital policies like directions for writing chart notes, dictating, writing prescriptions, making referrals, length of time to spend with each patient, absence policy (how to reach preceptor, how to notify office). Clarify the expected preceptor/student interaction (format of case presentations, time and process for feedback, student self-evaluation before discussing preceptor evaluation).
Try to work with your preceptor to develop <u>four to six achievable rotation objectives</u>. Familiarize yourself with the criteria included in your evaluation form. Use a checklist to remember key points. A great way to familiarize yourself with the community is to look up the city, town or county where you will practice on the *U.S. Census Bureau State and County Quick Facts* at:
https://www.census.gov/quickfacts/fact/table/US/PST045217

EQUIVALENT BUT NOT EQUAL!

Remember that each student has a different experience on his/her rotation. The goal of programs is to provide students with equivalent experiences. This means that you will most likely NOT see and do exactly what your classmate did on the same rotation. There are many variables that enter into each rotation and these are ever changing. In large teaching institutions, rotations are many times resident dependent. Keep this in mind when you return to callback and over hear a classmate raving about a rotation that you did not especially enjoy. To some extent, a rotation is what YOU make of it. Take advantage of any opportunity to attend medical staff meetings at the hospital and any other medical meetings your preceptor may attend (Grand Rounds, Noon conference, evening CME programs etc.) Medical “politics” are an integral part of modern medicine. As a student, you will not be exempted from the difficult patient or the difficult preceptor. You need to develop copping skills so that you do not jeopardize your learning experience.

RESCUE 911!

If at any time you encounter problems on your rotation, you should contact the program/clinical coordinator. This does NOT mean that every time you have a bad day or you are corrected or get feedback you do not like that you run to the program. What it does mean is that if there are issues of competency, lack of supervision, or <u>any type of discrimination, harassment or student mistreatment, you should check in with the program immediately</u>. You don’t learn by watching and if that is all you are doing, it will be extremely difficult to manage patients when left on your own. Remember the old saying "*See one, Do one, Teach one*". You should also remember to call the program and your preceptor if an emergency arises and you need to be excused from your rotation site.

HEAR NO EVIL, SEE NO EVIL, DO NO EVIL!

Communicate with your preceptor at least twice during a rotation. Get specific feedback on how you are doing and what you can improve upon (see "X-ray Vision"). Follow up on suggestions made to you.

Communicate with your program. Complete site and preceptor evaluation forms. Remember, it is easy to complain, but it takes some thought to give corrective feedback or suggestions on how to improve a rotation site.

Communicate with your classmates. As you progress through the clinical phase of your training, you will give and receive helpful "tips" from your classmates. Not all these "tips" will be helpful to your but at least you can get a feel for a rotation.

ALPHABET SOUP!

Read. Read. Read. Though you probably will not have time to read major texts of medicine and surgery as you did in the didactic phase of your training, it is critical that you read something. This is a time when "pocket" books and handbooks may be helpful. Do not feel the need to spend a fortune on more "books" (this includes *e*-books and electronic resources). Any of the texts you currently own will do just fine. You are now reading at a different level and for a different reason. This is (hopefully) not the first time you have read the material and you are just scanning if for the highlights (signs, symptoms, lab tests, differential diagnoses and treatment options). Always attempt to read up on surgical cases the night before and review the appropriate anatomy. It is most helpful for students to review a surgical atlas (i.e., Zollinger or Gliedman) prior to starting the rotation and before scrubbing in on each case (read the night before the case). Most hospitals have libraries and physicians in private offices usually have a bookshelf.
Read journal articles. As student members of the AAPA you have access to JAAPA and the major medical journals are available at the hospital. Physicians and physician assistants will frequently refer to journal articles since that information is much more current than texts (which are already outdated at the time of print). The worldwide web is another valuable tool for gathering information. There are hundreds of medical sites that have information including practice guidelines. www.cdc.gov has a section called "CDC Recommends" in which you can find practice guidelines for:

- Immunizations
- HIV/AIDS
- Sexually transmitted diseases
- Screening for cervical cancer
- School health programs to promote lifelong healthy eating

Read by **QxMD** provides a single place to discover new research, **read** outstanding topic reviews and search PubMed. **Qx Calculate** is a next-generation clinical calculator and decision support tool for iPhone, iPad, Android, Windows 10, and web, freely available to the medical community. It provides point-of-care tools in the areas of cardiology, internal medicine, nephrology, general practice and hematology etc.
https://qxmd.com/

WRITERS CRAMP!
Keep a notebook, note cards, a log on your phone or some kind of electronic tablet with you at all times. Record the various illnesses/cases that you see each day. Also, keep a log of clinical "pearls" for each rotation. Each program has its requirements for logging clinical experiences. Make sure to track/log all procedures, diagnoses, clinical skills (type of note-admission, discharge etc.) and age of all your patients.

GOOGLEMANIA!
Google (and other search engines) have changed our world but should not be your primary source of information in clinical rotations. It is easy to feel overwhelmed when trying to establish study techniques for clinicals since they tend to be much different from the didactic year. Be wise and study efficiently and use reliable, evidence-based medical resources. There are many federal agencies like the CDC, AHRQ etc. that provide the best information and all at no cost! Here are some pearls:

- Utilize PA program clinical goals & objectives as your guide!
- Integrate studying into your clinicals on a daily basis
    - Review lab values
    - Review adult and child immunization schedules
    - Review developmental milestones for children
- Utilize the NCCPA "blueprint" to guide your studying
    - NCCPA→Maintain Certification→About PANRE→Exam Content
    - *Medical Content Categories*
    - *Task Categories*
    - https://www.nccpa.net/pance-content-blueprint
- Use the National Vital Statistics Report
    - http://www.cdc.gov/nchs/products/nvsr.htm

WEEKLY SPECIALS!
One of the better ways to learn during your clinical rotations is one on one discussion with your preceptor. These can be in 1 or 2 sessions per week lasting from 10-15 minutes. Some possible "topics of the week" include:

1. Headache
2. Acute abdomen
3. Chronic Obstructive Pulmonary Disease
4. Coronary artery disease
5. Urinary Tract Infection
6. Normal prenatal care and delivery
7. Hypertension
8. Diabetes Mellitus
9. Low back pain
10. Syncope

TOP TEN LISTS!

Become familiar with common diagnoses. Review the Table of Contents of Internal Medicine, Pediatric, OB/GY, Behavioral Health, Surgery and Emergency Medicine textbooks. Make a list of the ten most common diagnoses listed. Make sure to review those diagnoses before your rotation in that specialty. While on rotation, look for patients with these diagnoses. In addition, go to the CDC's *National Vital Statistics Reports (NVSR)* and look up the top 15 causes of death for the current year.
http://www.cdc.gov/nchs/products/nvsr.htm

GRAVEYARDS, GHOSTS AND GHOULS!

You must have time to yourself and you need your sleep. We accept that. However, many interesting cases and learning experiences seem to come along at 2:00 a.m. The student who is willing to make the sacrifices will reap the greater benefit (she/he will also dazzle the preceptor with their enthusiasm). Put in "extra" time. Offer to do extra once you finish your daily requirements. Offer to take odd shifts. Most floors and emergency departments are staffed by skeleton crews on nights, weekends and holidays. Fatigued, over worked residents usually cherish the thought of an extra pair of hands on these shifts. If you think about it, most babies are born at night or in the early morning and most motor vehicle, accidents take place at night or on weekends.

FOOD CHAINS!

It is a fact of life that "students" are low on the predatory food chain. They get the least amount of respect and are often delegated the dirtiest of "scut work". Remember, "scut work" is necessary work and it can be educational if viewed correctly. Also remember that someone else did it before you came and someone will have to do it long after you are gone. *To demean the task is often to demean the person who performs it.*
HOWEVER, there are ways to work around these issues and achieve a level of respect from preceptors and other medical professionals. Hard work and following the guidelines listed throughout this handout can help move you up in the ranks. It is important that you know your position as a student. This may be your most challenging job especially since it can change with each new preceptor. BE RESPECTFUL of ALL medical professionals. The x-ray tech may point out some radiology pearls or the med tech may show you how to draw a blood gas. These individuals are important members of the health care team that you will soon be part of when you graduate. Remember the following:

1. Smile
2. Give each person the credit and respect due him or her.
3. Help out where and when you can. If a particular task is not beneath their dignity then it should not be beneath yours.
4. Each clinical site has ways of doing things that fit their situation and personnel. Do not be offended if they do not jump at your idea to change a procedure.

WHAT'S UP DOC!

The physician. He/she will be your supervisor but that does not mean you will not have autonomy or responsibility or a collegial relationship. A very important factor in determining the overall success of your clinical rotation/clerkship experience will be the relationship established between you and your preceptor. This relationship should ideally be open, honest and fair from both sides. As a student, you should try to earn the respect of your preceptor, whoever it may be. This can be very difficult because of the many different

personalities involved. If a preceptor was pimped throughout their training, you can bet they will pimp you. It is once again, a matter of developing coping skills to work around these issues. It is most important to keep your cool and not become disrespectful.
As a student, you are representing your school as well as the PA profession. Take the middle of the road attitude and try to get along with everyone. No one likes an arrogant student. Here is some food for thought.

1. You will be a "short term" part of an established medical practice and an established community. What for you is a 4 to 8 week learning experience is a way of life and livelihood for your preceptor. The patients you see are his/her patients.
2. There is a fine line between assertiveness and aggression.
3. Confidence is great. Over confidence can be quite literally fatal.
4. These are old axioms, but worth repeating:
    - "No question is a dumb question if you do not know the answer"
    - "Tis better to ask than to mess up"

THIRD EYE BLIND!
We each have two eyes to see with. Our third "I" is that of insight and many times the "I" that is blind! Demonstrate insight into yourself and your performance. Critically assess your performance during rotations and identify those areas of weakness. Avoid asking preceptors the broad and all-encompassing question "How am I doing?" This can scare off your preceptor and result in a very generic, less than honest answer. Identify two or three areas of weakness and bring those to the attention of the preceptor and ask them for advice on how to improve. When asking preceptors for feedback it is important to define the time, you are asking for (i.e., May I have three to five minutes of your time). There is nothing more frustrating for a preceptor than to have a student ask to sit and discuss their performance (it conjures up visions of a three-hour discussion!).

THE FOUR T'S!
- **Time**-Ask for feedback in a timely manner; 5 to 15 minutes
- **Topic**-Be specific about your ask; 1 to 3 minutes
- **Thoughts**-Conduct a self-assessment about your performance
- **Take Action**-Take action with the feedback you receive

PASS THE POPCORN!
Learn to give a good oral presentation. Be accurate and clear, make it compelling, be concise and cut to the chase with oral presentations. If your preceptor has time to get coffee and a bagel or go to the concession stand for popcorn and a soda, you have gone on way too long. Most preceptors will cut you off at the knees when they have had enough. Give a quick HPI, history (pertinent positives), assessment and treatment plan. Remember to make your presentation flow in a logical order or the preceptor will get bored and not listen to what you are saying.

LAW AND ORDER!

Know your legal limitations. Be informed of what you can and cannot do as a PA student in your state and PA program. For example, if your program does not allow a PA student to administer chemotherapy to a cancer patient, do not do it. If asked, explain that you are not covered to do that procedure and refer the preceptor to the program for clarification. Review your program's policy on students obtaining "consent" forms, especially in surgery. Remember to "sign and date" (electronic signature) all of your chart notes and orders. These are legal documents and part of the patient's permanent record.

HIPAA, HIPAA, HOORAY!

The *Standards for Privacy of Individually Identifiable Health Information* ("Privacy Rule") establishes, for the first time, a set of national standards for the protection of certain health information. The U.S. Department of Health and Human Services issued the Privacy Rule to implement the requirements of the *Health Insurance Portability and Accountability Act of 1996* (HIPAA). The Privacy Rule standards address the use and disclosure of individuals' health information.

A major goal of the Privacy Rule is to assure that individuals' health information is properly protected while allowing the flow of health information needed to provide and promote high quality health care and to protect the public's health and well-being. The "rule" establishes a balance that permits important uses of information, while protecting the privacy of people who seek care and healing. All students should adhere to the following general HIPAA guidelines:

- Patient information should not be discussed where others can overhear the conversation such as hallways, elevators, water coolers, at home or at social events.
- Confidential papers, reports or computer printouts should be kept in a safe and secure place.
- Confidential papers should be picked up ASAP from copiers, mailboxes or faxes.
- Confidential papers should be appropriately disposed of by being shredded or torn up.
- Accessing any information other than what is required to do your job is a violation of confidentiality policies.
- It is the provider's duty and responsibility to keep health care information totally confidential.
- Computer "passwords" must not be written down or shared with anyone else.
- You cannot use someone else's "password" to access an institution's or practice's computer system.

SAY CHEESE!

Remember, taking pictures of a patient's physical findings is a HIPAA violation unless you have a signed consent or you are placing the photo in the medical record for documentation. Personal cell phones with cameras and Smart phones should never be used to take pictures of patients or their physical findings, even during surgical procedures or trauma cases unless you have documented consent from the patient.

HEAD TO HAND!
Having a good fund of knowledge and being able to recite medical factoids is important but as a student, you must be able to go “head to hand”. This means you need to be able to synthesize and interpret information to understand the significance of clinical findings from the history and physical exam, develop a differential diagnosis and to establish a therapeutic treatment plan.

PERSON TO PATIENT!
Only a few “big” items here.

1. The first law of medicine, “Primum non nocere” (first of all do no harm).
2. Remember that the patient at the other end of the stethoscope is a person too.
3. The patient did not come in to be dazzled with medical terms and scholarly dissertations. They came for help of some sort. Something in their world is not right. It may not be what they complain about. Your job is to find the problem and to help them solve it. If your native intelligence shines through to impress them, consider it a bonus.
4. If you do not know, what is wrong with a patient then “I do not know” is an acceptable diagnosis. Send for reinforcements!

PA-ZAAZ!
Work hard, but enjoy yourself. This is the time to put it all together. You have worked hard in the didactic phase of your training and now it is your chance to apply what you have learned. It is very important to be prepared for rotations, especially the first few. Many times students “waste” their first few rotations getting used to the technical aspects of rotations and miss out on the educational experience. In some instances, it may be your only opportunity to attempt a procedure or technique that you may never do again (depending on your area of practice). Do not be afraid to jump in and help. Practicing physician assistants and physicians may have little time to hold you by the hand and it is easy to forget the student in the corner. Know your capabilities and limitations. Most people are willing to teach if you admit what you do not know, but are willing to learn. Above all, keep a smile and remember to never stop learning.

OUTLINE FOR ORAL CASE PRESENTATIONS

1. Opening Statement
    - Patient profile
    - Reason for visit or admission
    - Duration of problem or complaint.

2. Body of Report
    - Description of present problem(s)
        - Use one or more of the following organizational formats for this section: symptom characterization, chronological report, or problem solving
    - Relevant PMH, SH, FH, ROS
    - Relevant PE
    - Relevant diagnostic tests and procedures (lab, x-ray etc.)
    - Assessment/Impression
    - Plan
        - Diagnostic
        - Treatment
        - Patient Education
        - Follow-up
3. Summary

GUIDELINES FOR CASE PRESENTATIONS

1. Follow an outline when presenting your oral report.

2. The time for your report should be five (5) minutes.

3. Prepare to present any and all of the cases you see on your rotation.

4. Be prepared to answer questions about your case.

5. Be prepared to take suggestions for improvement from preceptors.

OUTLINE FOR AN ADMISSION NOTE

“ADC VAAN DISML”

1. Admitting diagnosis, location and physician responsible for the patient
2. Diagnosis pertinent to nursing care
3. Condition of the patient
4. Vital signs-type, frequency and parameter for notification of the physician
5. Activity limitations
6. Allergies
7. Nursing instructions (Foley catheter to gravity drainage, wound care, daily weights etc.)
8. Diet
9. Intravenous fluids including composition and rate
10. Sedatives, analgesics and other per request medications
11. Medications, including dose, frequency and route of administration
12. Laboratory test and radiographic studies

OUTLINE FOR AN OPERATIVE NOTE

1. Name of surgery
2. Indication/reason for procedure
3. Surgeon and assistants
4. Anesthesia (local, general, regional)
5. Preoperative diagnosis (presumptive diagnosis before surgery)
6. Postoperative diagnosis
7. Pathology samples
8. Estimated blood loss
9. Drains (types and placement)
10. Complications
11. Disposition

OUTLINE FOR A PROCEDURE NOTE

1. Name of the procedure
2. Indication for the procedure
3. Consent (include risks, benefits, potential complications, name and relationship of person giving consent)
4. Anesthesia
5. Details of the procedure
6. Findings
7. Complications

OUTLINE FOR A DELIVERY NOTE

1. Type of delivery (vaginal, C-section)
2. Estimated gestational age of fetus
3. Viability of fetus
4. Gender of fetus
5. APGAR scores at 1 and 5 minutes
6. Weight
7. Delivery of placenta (number of vessels, placenta intact)
8. Lacerations/episiotomies (degree and how repaired)
9. Estimated blood loss
10. Condition of mother immediately postpartum

OUTLINE FOR DISCHARGE SUMMARY

1. Date of admission
2. Date of discharge
3. Admitting diagnosis
4. Discharge diagnosis
5. Attending physician
6. Referring and consulting physician (if any
7. Procedures (if any)
8. Brief history, pertinent physical findings and lab values (at time of admission)
9. Hospital course
10. Condition at discharge
11. Disposition
12. Discharge medications
13. Discharge instructions and follow up
14. Problem list

GUIDELINES FOR WRITING A DISCHARGE SUMMARY

1. Discharge orders must be completed when a patient is ready to leave the hospital.

2. The discharge summary should provide a narrative of the events of the entire hospitalization, especially treatments and the patient’s response to treatments.

3. Discharge instructions should be specific, not vague or general.

GUIDELINES FOR PRESCRIPTION WRITING*

*As a practicing PA, you will use electronic prescriptions.
In an effort to improve patient safety, the Institute of Medicine (IOM) called for all prescribers to be able to write and all pharmacies to receive prescriptions electronically.

The following is a guideline of the information that should be included on a prescription (electronic or written).

1. Date prescription written
2. Prescriber information (name, title, address, telephone number, supervising physician)
3. Patient information (name, address, age/DOB)
4. Inscription-name and strength of medication to be taken in each individual dose
5. Subscription-dosage from and number of units or doses to dispense. *Note that many hospitals are now requiring prescribers to write out dosing information and to not use abbreviations to avoid errors.
6. Signa ("sig")-route, special instructions and how often to take medication
7. Indication-required in some states
8. Refill information-written as the number of times script can be refilled
9. Generic substitution-if generic permitted or write DAW (dispense as written)
10. Warnings-supplied by pharmacist
11. Container information-"childproof" vs. non-child proof container
12. Prescriber's signature-authenticates prescription; include name and title of prescriber

Abbreviations, Symbols and Dose Designations in Prescription Writing:
Today, the practice of using abbreviations, symbols and dose designations in prescription writing is strongly discouraged because they are frequently misinterpreted and involved in harmful medication errors. This includes internal communications, telephone/verbal prescriptions, computer-generated labels, labels for drug storage bins and medication administration records.

Even though most health care systems and providers use some form of electronic prescribing, these formats still typically allow the user to "customize" the prescription. Today, the general practice is to avoid abbreviations and to write out the full prescription and its directions. The Institute for Safe Medication Practices (ISMP) has developed a list error prone abbreviations, symbols and dose designations. This list can be found at: https://www.ismp.org/recommendations/error-prone-abbreviations-list

CLINICAL ROTATIONS BOOKLIST

Yes/No Medical Spanish. Tina Kaufman, Ticiano Alegre.
ISBN: 978-0-8036-2124-4

The Medical Letter (twice a month; Apple and Android apps available)

Prescriber's Letter (monthly; student rate available)

MPR Physician Assistants Prescribing Reference.
http://www.empr.com/

Sanford Guide to Antimicrobial Therapy –Yearly.
http://www.sanfordguide.com/

EMRA Guide to Antibiotic Use in the Emergency Dept. (Yearly) B. Levine, MD. Emergency Medicine Residents Assoc. ACEP Store or Amazon.
http://www.emra.org/publications/books/

Tarascon Pocket Pharmacopeia (Yearly)–iPhone App, Mobile edition or pocket handbook.

- Tarascon Pediatric Emergency Pocketbook
- Tarascon Adult Emergency Pocketbook
- Tarascon Internal Medicine and Critical Care Pocketbook
- Tarascon Primary Care Pocketbook
- Tarascon Orthopaedia Pocketbook (19.95)

http://www.tarascon.com/products/pharmacopoeia/

Maxwell Quick Medical Reference. (Spiral bound) Maxwell Publishing Co.
Maxwell Publishing Company.
http://www.maxwellbook.com/

Pocket Medicine: The Massachusetts General Hospital Handbook of Internal Medicine. (Pocket Notebook; Ring-bound). Wolters Kluwer (Yearly).

First Aid for the OB/GYN Clerkship (series). McGraw-Hill.

Step-Up to Medicine. (Series). Wolters Kluwer.

Harriet Lane Pediatric Handbook. Mosby.

The Washington Manual of Medical Therapeutics. LWW/Wolters Kluwer.

The Mont Reid Surgical Handbook. 7th ed. 2017. Elsevier. ISBN: 9780323529808

Abernathy's Surgical Secrets. Mosby. (Series).

Surgical Recall. LWW/Wolters-Kluwer (series).

Cope's Early Diagnosis of the Acute Abdomen. 22nd ed. 2010. William Silen. Oxford Press. ISBN: 9780199730452

Emergency Medicine: The Medical Student Survival Guide. 3rd ed. 2015.

Knechtel M: The Physician Assistant Student's Guide to the Clinical Year: 7-book series. 2019. Springer. ($199).
Family Medicine; Internal Medicine; Emergency Medicine; Pediatrics; Surgery; OB/GYN; Behavioral Medicine.
ISBN: 9780826195210
https://www.springerpub.com/the-physician-assistant-student-s-guide-to-the-clinical-year-seven-volume-set-9780826195210.html
25% discount July 2020 with code SUMMER

Utilize the NCCPA "blueprint"

- NCCPA→Maintain Certification→About PANRE→Exam Content
    - *Medical Content Categories*
    - *Task Categories*
    - https://www.nccpa.net/pance-content-blueprint

"GO TO" REFERENCE BOOKS (everyone should have one of these types of books in their library)**:**

Ferri, Fred. Ferri's Clinical Advisor 2021. Elsevier. 2020.
This book is available as hard copy or an *e*-book

Domino, Frank: The 5-Minute Clinical Consult 2021. 2020. LWW/Wolters- Kluwer.
This book is available as hard copy or an *e*-book

McPhee, Stephen J., Papadakis, Maxine A., & Rabow, Michael.: Current Medical Diagnosis and Treatment 2020. McGraw-Hill. 2020. (new edition comes out in the fall)
This book is available as hard copy or an *e*-book with apps.

BOARD REVIEW BOOK LIST

1 O'Connell, Claire: A Comprehensive Review for the Certification and Recertification Examinations for Physician Assistants. 7th ed. 2017. Lippincott Williams & Wilkins. ISBN: 9781496368782 ($56.00)

2 Diamond, Morton: Davis's PA Exam Review. 3rd ed. 2019. FA Davis. ISBN: 978-0803668096 ($42.00)

3. Kinzel J, Auth P: PA Review for PANCE. 5th ed. 2019. Wolters Kluwer. ISBN: 9781496384188

4. Simon A, Carlson R, McMullen B: Lange Q&A Physician Assistant Examination. 7th ed. 2016. McGraw-Hill Medical. ISBN: 978-0071845052 ($58.00)

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PA BOARD REVIEW SOFTWARE

1. Kaplan Medical PANCE Qbank

Kaplan's Qbank is a resource for students preparing for the Physician Assistant National Certifying Exam (PANCE). PANCE Qbank contains more than 1,200 exam-relevant practice questions and allows you to custom-design your own PANCE practice tests. Provides comprehensive "5-in-1" explanations for all 1,200 questions that discuss not only why the right answer is correct, but also why all of the distracters are incorrect. Students can test themselves in a variety of ways including by timed conditions or tutorial style, with unused, incorrect or all available questions, by organ system and task or a combination of both. Continuously updated onscreen performance feedback. Access is available 24 hours a day, 7 days a week. Once at the site, got to Allied Health → Our Programs → PANCE Prep
https://www.kaptest.com/pance/practice/qbank
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Kaplan's Live Online PANCE/PANRE Review Course gives you complete, live prep in 9 evenings in Kaplan's interactive online classroom. No expensive travel or hotels—just log-in and you're there… Plus, this course now includes PANCE/PANRE On Demand. Access 20 hours of high-yield lecture and 1,100 up-to-date, exam-like questions from now until 90 days after your live online class starts.

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http://www.qxmd.com/

4. CDC Immunization Schedules.
https://www.cdc.gov/vaccines/index.html

5. Immunization information for travelers.
https://wwwnc.cdc.gov/travel/destinations/list

6. Medical Eponyms-Whonamedit.com is a biographical dictionary of medical eponyms. It is our ambition to present a complete survey of all medical phenomena named for a person, with a biography of that person. Eventually, this will include more than 15,000 eponyms and more than 6,000 persons.
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7. Quizlet-Quizlet is a place where everyone can share knowledge in any subject, at any level and gain confidence as a learner. All the content in Quizlet is created by our users and 87% share what they create or study. Use an app and create hundreds of test questions to share with your colleagues.

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8. MEDCOMIC-Medcomic is a visual learning tool that combines cartoons, humor, and medicine to make studying a breeze. Developed by a PA, Jorge Muniz, PA-C
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