

What strategies can I use to maintain and improve my pharmacotherapy knowledge base after residency?

Calvin Chan, PharmD
PGY1 Pharmacy Resident
Eskenazi Health
Indianapolis, IN

Your life after residency will change in many ways. One of the most obvious will be the trajectory of your learning without an active approach. Developing and expanding your pharmacotherapy knowledge will require your commitment to specific strategies. Your learning should include adapting your pharmacotherapy knowledge to new information with a depth of understanding and maintaining breadth.

One key step will be perpetually identifying areas where your knowledge is suboptimal. Start by keeping a list of therapeutic areas for development. Review this list often, and look for opportunities to improve specific topics. Consider focusing on new information that matches your areas of need. Three specific strategies should make this easier.

(1) Find a daily “update strategy” that keeps you current.

To improve and grow your pharmacotherapy database, create a systematic plan to identify NEW knowledge in a timely fashion. In most areas of therapeutics, this will be knowledge that changes with product labeling or off-label use information. On a daily basis, try to keep up with new information using a consistent approach that helps you focus on evolving information. Once you identify new information, you will need to determine the extent to which you should look into these small portions of news. This identification process should take 10–15 minutes per day. Many medical news sites and professional organizations provide daily electronic updates. Daily identification and rapid assessment of the practice impact of new drug information will help you maintain your skills as the drug therapy expert on your health care team.

(2) Continue your education by learning from the “experts.”

To maintain your pharmacotherapy database, you can consider two main areas of focus. First, review new “major guidelines” for common disease state thoroughly shortly after publication. This first-time, independent, post-training review will help you update your knowledge base. Subsequent publications of any guideline will become much easier to adapt to your practice after you have independently reviewed any entire guideline. The expert guideline writers can assist with educating you on practice-changing data.

However, reviewing recent guidelines is unfortunately not enough. As a second important step in maintaining the breadth of your pharmacotherapy database, identify areas where your knowledge is suboptimal between guideline revisions. You will need to continue expanding your depth and breadth of knowledge by focusing on review articles to maintain knowledge between guideline updates. Consider the review of guidelines to provide a standard of care and the review of articles to assist in keeping the guidelines current with details. Both guidelines and review articles contain thoughts from the “experts.” Use guidelines and review articles to help maintain your pharmacotherapy database.

(3) Focus on the primary literature.

Finally, developing depth in order to improve your knowledge will likely require you to focus on the primary literature. In general, the key will be limiting this to areas of focus or interest during your first few years after graduation. Reading practice-changing primary literature will require a keen eye for things that vary considerably from the current standard of care. News services and journal summaries will assist in this process. Once you identify the primary literature, you should determine a process that allows you to completely read and digest a portion of your identified primary literature while skimming and gaining general insight into other pieces.

Take-home Points:

Develop a daily scan of pharmacotherapy news focusing on new therapies, product label changes, and potentially useful off-label uses. During your first years as a clinician, read with a focus of breadth. Consider a reading balance of 75% guidelines/review articles part of your broad-based learning, with 25% of time in primary literature/new in-depth learning as a suggestion for your first 3–5 years post-residency. As you become more comfortable with your broad-based pharmacotherapy knowledge in a few years, you will naturally find areas of therapeutics to read with depth more often. Members of health care teams value commitment to lifelong learning. Using an active approach, you in your career as a pharmacist will serve effectively as the drug therapy expert on your health care team.

Peter G. Koval, Pharm.D., BCPS, CPP
Associate Professor of Clinical Education
UNC Eshelman School of Pharmacy, University of North Carolina at Chapel Hill
Director of Pharmacy Education
Greensboro Area Health Education Center
Cone Health Family Medicine