Pharmacy Technician Certification Review and Practice Exam. 2nd edition


The Pharmacy Technician Certification Review and Practice Exam manual is a helpful, easy-to-read review of most aspects of pharmacy technician practice. It is intended to assist technicians in preparing for the US pharmacy technician certification examination and other similar examinations. The editor, who is director of Inpatient Pharmacy Services at Carle Foundation Hospital in Urbana, Illinois, recommends that this publication be used in conjunction with the third edition of the Manual for Pharmacy Technicians, as well as on-the-job experience.

The Pharmacy Technician Certification Review and Practice Exam covers many areas of hospital pharmacy practice that are relevant to technicians in either an inpatient or outpatient setting. Each of the manual’s 7 chapters begins with a list of learning objectives and ends with self-assessment questions and answers. Most chapters also have suggestions for further reading. The second edition has been fully updated to reflect current US practice standards and the current examination of the US Pharmacy Technician Certification Board. This edition also includes an interactive CD that provides a timed review exam (for review of the material in the book) and a timed practice exam (in preparation for the certification exam). I would recommend upgrading to the second edition for these reasons, particularly if the text is being used as a technician certification tool. The manual can be purchased through the ASHP Web site for the prices listed above, but I also found it on the Web site of the University of Toronto Bookstore, where it sells for Can$39.95.

Chapter 1, “Assisting the Pharmacist”, is probably the best chapter in the book. It describes the many daily tasks of a technician working in a hospital pharmacy. Specifics such as processing medication orders in both the inpatient and outpatient settings are covered, and there are 18 examples of questions a technician might have to answer under 7 different categories such as cost, storage, and pharmacy law. The chapter gives a detailed overview of aseptic preparation of parenteral products, including definitions of aseptic technique and sterile compounding area and a description of how to work in vertical and horizontal laminar airflow hoods. The manual emphasizes proper training for any sterile products program. I could see this chapter being used in conjunction with hands-on training for a hospital pharmacy IV room. The manual provides good detail about personal attire, hand-washing, equipment, and supplies in an IV room. There is also a good section on syringes and needles with a few helpful diagrams.

Chapter 2 covers medication distribution and inventory control systems, with sections on formulary drugs, ordering and receiving pharmaceuticals, maintaining and managing inventory, and techniques for proper disposal of pharmaceuticals. There is a good section on automation and how it can help with “just in time” inventory management. Chapter 3 covers pharmacy operations in terms of policies and procedures and US pharmacy law. This chapter gives a good overview of the topic, but Canadian readers need to keep in mind that the “legal acts” described in this American publication are different from what pertains in Canada. Chapter 4 covers pharmacy calculations. Chapter 5, “Commonly Prescribed Medications”, lists 32 commonly prescribed groups of drugs, with both generic names and US brand names. Chapter 6 describes how to take a test, and chapter 7 is a practice exam, the same one that is on the CD. The 75 questions on the practice exam cover the entire manual, although 16 of the questions relate specifically to US law and some of the “US acts” mentioned in the manual. The manual also includes a comprehensive index that appears to be complete (based on verification of a dozen or so terms).

I would recommend this manual to technicians who wish to become certified through the American Pharmacy Technician Certification Board or through the Alberta or Ontario certification boards. The contents seem to closely match the exam categories for technician certification in Alberta, so if used in conjunction with the Alberta study modules should only enhance the technician’s knowledge. The Ontario College of Pharmacists lists this publication as one of many readings for technician certification in that province. I would also recommend this manual to hospital pharmacies that hire technicians from a retail environment. It could be used as a hospital pharmacy refresher, particularly for technicians who have been out of school for a number of years.

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Pharmacist Disease Management: Diabetes. 3rd edition


This book provides a practical, thorough review of the basics of diabetes for pharmacists. The book is divided into 3 modules, each of which is preceded by learning objectives and followed by learning reinforcement exercises (“fill-in-the-blank” questions, with answers displayed upside-down after each question) and a 20-question self-study exam (for a total of 60 questions). Completion of all 3 exams qualifies the reader for 15 contact hours or 1.5 continuing education units from the American Pharmacists Association (APhA). Much of the
content was originally published as a certificate training program titled “Pharmaceutical Care for Patients with Diabetes”, developed jointly by the American Association of Diabetes Educators and the APhA. This third edition replaces the second edition, which was published in 2003.

Module 1 reviews basic disease information such as pathophysiology, diagnosis, acute and long-term complications, landmark clinical trials demonstrating the benefit of optimal glycemic control, and current targets for blood glucose and glycosylated hemoglobin (HbA1c).

Module 2 describes in detail the use of nutrition therapy, physical activity, and insulin therapy, as well as treatment with oral antihyperglycemic agents. Also included are sections on monitoring glycemic control and the treatment of dyslipidemia, hypertension, and long-term microvascular complications (neuropathy, retinopathy, and nephropathy). The remainder of the module addresses proper care of the skin, feet, eyes, and teeth, as well as immunization and smoking cessation.

Module 3 focuses on diabetes education, psychosocial issues, behavioural counselling, cultural sensitivity, and implementation of diabetes care in the pharmacist's practice.

The strengths of this book include the wide variety of aspects of diabetes management that are addressed and the fact that it was developed specifically for pharmacists. The basic disease information in module 1 is clear and concise, providing just enough detail for a solid understanding without being unnecessarily complicated.

Module 3 should prove particularly helpful to pharmacists interested in providing intensive diabetes education and disease management for their clients. The inclusion of teaching strategies and the provision of insight into behavioural issues should enable the reader to become an effective member of the health care team delivering diabetes care.

The book was written by, and is intended primarily for, American pharmacists. Accordingly, it cites the guidelines, recommendations, and standards of the American Diabetes Association. This limits the applicability of some of the material for audiences outside the United States. Canadian pharmacists should be familiar with, and should provide advice based on, the recommendations of the Canadian Diabetes Association (CDA). Specifically, the CDA’s 2003 Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada should generally take precedence over corresponding material in the APhA textbook.

Other country-specific limitations of the book include the fact that the standards (e.g., eligibility requirements) for certified diabetes educators presented in the book are those of the American Association of Diabetes Educators, which differ from those of the CDA. As well, readers should be aware that the book generally does not use SI units for blood glucose values and blood lipid concentrations (mmol/L). Finally, the drug products listed reflect availability on the US market, which differs substantially from the Canadian market.

References to support the information presented are limited. Although the source of material in tables and figures is often identified, statements in the body text are not referenced. Instead, each section within each of the modules is followed by a list of “Additional Resources”.

One area of weakness, in the opinion of this reviewer, is the section on oral antihyperglycemic agents. Although basic information is provided, there is no discussion about the relative efficacy (HbA1c-lowering capacity) of the various agents and no information concerning their place in therapy (e.g., first-line or otherwise). This reviewer advises readers to consult the CDA guidelines for the pharmacologic management of type 2 diabetes.

In summary, this resource can be recommended to Canadian pharmacists as a primer on diabetes. Despite its American content, it has many strengths, including a practical approach, broad coverage of the issues, inclusion of continuing education quizzes, and provision of unique material relating to delivery of diabetes education and teaching of self-management skills by pharmacists for their clients with diabetes.

References

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