**Introduction to Hospital and Health-System Pharmacy Practice**

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**REVIEWER'S EXPERT OPINION**

Adrienne L Au, Pharm.D. (Temple University School of Pharmacy)

**Description**

This overview of all you need to know in hospital and health-system pharmacy practice covers computer informatics, medication and financial management, aseptic IV preparation, people management, and pharmacy career planning and training.

**Purpose**

The purpose is to provide a comprehensive overview of hospital pharmacy practice.

**Audience**

It is intended for students, educators and health practitioners.

**Features**

The book provides day-to-day pharmacy operation information in great detail. It uses an easy-to-follow format with listed learning objectives, key terms and definitions, explanations, summaries, and chapter review questions.

**Assessment**

Based on the *Handbook of Institutional Pharmacy Practice*, 4th edition, Brown (American Society of Health-System Pharmacists, 2006), this book focuses more on students' needs and current pharmacy practice and includes learning tools.

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Weighted Numerical Score: 88 - 3 Stars
**Introduction to Hospital & Health-System Pharmacy Practice**

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**Therapeutic Area:** Professional pharmacy practice.

**Format:** Softcover textbook; additional instructor material is available online.

**Audience:** This book is designed primarily for pharmacy students considering a career in a health-system practice; the authors also state that the book would be useful for students and practicing pharmacists in other settings who are interested in learning more about institutional practice or who are considering a change in practice setting. Unidentified audience members could also include the pharmacy technician practicing in the institutional setting as well as ancillary support practitioners (e.g., educators, performance improvement facilitators) seeking an overview of key pharmacy practice areas.

**Purpose:** The purpose of this book is to describe and explain the basics of institutional pharmacy practice. The authors state that this text presents “an overview of essential terms, concepts, and processes in health-system pharmacy in a concise, practical, and understandable way.”

**Content:** The contents of the book are divided into 8 parts for easy reference: Introduction, Managing Medication Use, Managing Medication Distribution, Using Technology, Financial Management, Sterile Product Preparation and Administration, Managing People, and Careers in Health-System Pharmacy Practice. The 19 chapters contained within the 8 sections are consistently organized with learning objectives, key terms and definitions, narrative content, keypoint sidebars, chapter review questions, chapter discussion questions, a suggested reading list, and a references list. Straightforward definitions and clear explanations provide a basic foundation for learning and application in practice settings.

The first 3 sections (Introduction, Managing Medication Use, Managing Medication Distribution) offer a succinct history of institutional pharmacy in the US and an interesting retrospective on the impetus for change at key points in history. The section “Using Technology” offers a useful summary and overview of electronic data management, electronic medical records, and informatics. Included are definitions, concepts, and processes that are critical to health information system experts but not routinely part of the pharmacy practice curriculum; this section will be particularly valuable for the practicing pharmacist without formal informatics training. The sections on financial management and managing people, in conjunction with the technology section, would provide an excellent impromptu preparatory management course both for students and new managers.
Usability: This book is up-to-date, easy to read, and user-friendly, with many useful graphics, illustrations, and references. The price is reasonable for both the student and the practicing pharmacist.

Highlights: The stated learning objectives, keypoint sidebars, and chapter review questions emphasize key learning points and may be useful as a foundation for demonstrating competence of both students and established practitioners.

Limitations: Because this book is promoted as an introductory text for institutional and health-system pharmacy, there may be a tendency for seasoned practitioners to overlook it as an addition to their library. That would be an unfortunate oversight, as this volume presents something for everyone, be it historical oversight or succinct summary of necessary safety processes.

Comparison with Other Related Books or Products: This book, loosely based on the more comprehensive Handbook of Institutional Pharmacy Practice, 4th edition, focuses on the essentials in order to give a broad picture of the roles and responsibilities of a health-system pharmacist. This text has a more didactic and general educational feel, as well as providing many practical applications and examples for the principles described.

Reviewer’s Summary: Introduction to Hospital & Health-System Pharmacy Practice is a text that introduces students of all ages to professional pharmacy practice in the health-system organization. Overall, it is an excellent introductory text and useful reference to be included in any practitioner’s library.

Conflict of interest: Author reported none

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Introduction to Hospital and Health-System Pharmacy Practice.
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Introduction to Hospital and Health-System Pharmacy Practice provides a review of the practice of pharmacy in health systems in the United States. While it may be considered an overview, the level of detail that is provided makes this work suitable not only for students, but also for practicing pharmacists, pharmacy educators, preceptors, and new pharmacy managers.

The book consists of 19 chapters making up 8 separate parts. The chapters in each part focus on related aspects of institutional pharmacy practice. The format provides useful tools. Each chapter begins with learning objectives and key terms with their definitions. The key terms are again defined within the text and additional explanation is provided. Throughout the book, key points and their significance are offset from the narrative to highlight their importance. All chapters conclude with a summary as well as suggested additional reading and references. Very good review and discussion questions are available at the end of each chapter to emphasize important themes and promote discourse.

Chapters 1 through 3 define institutional pharmacy practice and its history. This section examines the role of accreditation, laws, regulations, practice guidelines, and practice standards in hospital pharmacy. Varying types of hospitals and institutional practice models are presented, including influences on the way services are delivered.

Managing Medication Use is the title of the next section, which includes chapters 4 through 6. Here the reader will find information on the pharmacy and therapeutics committee, formulary management, and medication policies. This section also includes a thorough description of clinical pharmacy and the training and credentials of clinical pharmacists.

Chapters 7 and 8 focus on distribution systems, including how distribution is different for controlled substances due to federal requirements. The unit dose process is reviewed in detail with its goals and advantages.

Technology is the emphasis of chapters 9 through 11. Electronic health records (EHR) are described, including benefits of EHR such as providing data for quality assurance and continuous improvement. Information on computerized provider order entry (CPOE) and the clinical decision support system to facilitate CPOE is also given. Several applications of informatics are presented, as well as the need for the integration of assorted information systems into pharmacy processes. The position of clinical informatics pharmacist is described with the education and training appropriate for this individual. The chapter on “Automation in Practice” (Chapter 11) does an excellent job of reviewing how automation may be used, while stressing the point that technology should not provide a false sense of security and must be appropriately managed.
Chapters 12 and 13 emphasize financial issues including inventory management and budgeting. Financial terms and financial practices are described with helpful tables depicting balance sheets, budgets and productivity ratios.

The section on sterile products includes chapters 14 and 15. Here the reader will find information on intravenous admixture and the importance of processes to ensure stability and compatibility. Information is given from USP Chapter 797 with figures showing examples of floor plans for clean rooms. A good discussion is provided on the categories of infusion therapies, various delivery systems for parenteral drug therapy, and methods of parenteral administration. Risks of parenteral therapy are also a focus of this section.

Managing People is the seventh section in the text. Several definitions for leadership are considered, pointing out the difference between leaders and managers. Theories on leadership and styles of leadership are presented. Some personnel issues targeted in this section include recruitment, retention, motivation, and termination. American Journal of Pharmaceutical Education 2011; 75 (2) Article 31. 2

The final section deals with careers in health-system pharmacy. The importance of planning a career path while still in pharmacy school is stressed with details given on advanced training opportunities for pharmacists. Residencies are discussed with information on the application process and also benefits of residency training. Potential barriers to residency training also are identified.

Overall, this is an easy to read, well-organized text with many helpful figures and tables. The material provided is of sufficient detail for a thorough introduction to hospital and health-system pharmacy, and the reader is given many additional sources of information on the topics covered. This book is highly recommended and will be an excellent resource for students as well as practicing pharmacists.

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