



Transition Guide

Managerial Epidemiology: Cases and Concepts, Third Edition

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This book provides an introduction to epidemiology and explains how to use epidemiological concepts and tools to improve decisions about the management of health services. As health administration becomes more focused on population and community health, understanding the impact of disease on populations in a service area is more important than ever. This book blends theory and application by presenting basic principles and expanding discussion on healthcare management in chapters that are filled with case studies, examples, and exhibits to reinforce concepts.

A major update to this edition includes the addition of more than 60 new cases, bringing the total number of cases in the book to more than 100. Three levels of cases provide multiple options for coursework:

- Fifteen new in-depth capstone cases expand on concepts covered in the book. The capstone cases can be used as problems sets or exams, or they can form the foundation for a case-study approach to classroom instruction. Answers to the capstone cases are stored in a secure page in the online Instructor's Resources for this book.
- In-chapter cases are accompanied by in-chapter answer guides. These case/answer guide combinations are presented as an integral component of the learning process offered by the book. By working through the cases, using the answer guides, students will learn new material and gain application reinforcement of concepts presented elsewhere in the chapters.
- End-of-chapter cases provide additional exercises for application practice. Answers are provided at the end of the book so that students can self-quiz and use the cases to build their understanding of epidemiology.

Chapter Breakdown

Chapter 3

This chapter develops the measurement of morbidity more thoroughly through discussions of the natural history of disease and diagnostic and screening tests. Three exercises were added at the end of the chapter.

Chapters 4 - 5

These chapters discuss planning and quality assurance activities respectively. Both are important population health activities, the former for determining how health care resources can be used to meet population health needs, and the latter how the measurement of health care outcomes can be used to compare the quality of care

across various populations. Updates to Case Study 4.1 and two exercises at the end of the chapter 4. In chapter 5, additional expert opinion was reviewed and revised to add recent content.

Chapter 6

Statistics, tables, figures, and case studies were updated and four problems were added at the end of the chapter.

Chapter 7

Further development of Chapter 3 is discussed on how disease is distribution across time, place, and person. Case studies, figures, and tables were updated and two problems were added at the end of the chapter.

Chapter 8

A small section of Accountable Care Organizations was added to this chapter and a problem at the end of the chapter based on the Society of Actuaries forecast of the implications of the Affordable Care act. A more indepth case based on their report is included in one of the fourteen capstone cases at the end of the book.

Chapter 9

This chapter demonstrates the importance of population health in financial management decisions by considering not only the current burden of illness in a “covered” population, but also the burden of risk factors across that same population.

Chapter 10

This chapter was updated by adding a small section of multivariate models and analysis and two exercises at the end of the chapter.

Chapters 11-13

The chapters on case-control, cohort, and randomized clinical trials demonstrate how studies can be designed to determine whether various “exposures” such as diet and behaviors are important determinants of the health of a population. An understanding of the determinants of health and outcomes is an critical part of population health.

In chapter 11, the editor included the methods behind the calculation of the prevalence ratios and prevalence difference in the cross-sectional studies section and added three problems at the end of the chapter. In chapter 12, the editor expanded the section of disease burden and added four problems at the end of the chapter. In chapter 13, three problems were added at the end of the chapter.

Chapter 14

This chapter added three end-of-chapter exercises.

Chapters 15-17

These three application chapters focus on the population health of three different populations (those with cardiovascular, HIV, or Alzheimer’s disease). It summarizes many different concepts and skills taught in previous chapters. The AIDs chapter was entirely rewritten and updated by a new author from the Center from Disease Control & Prevention. The cardiovascular disease chapter was updated by the editor and co-authors and two end of chapter exercises were added to the end of each chapter.

Chapter 18 – New!

This new chapter on leadership discusses how an understanding of population health using the tools of epidemiology is important for leadership decisions.

Instructor Resources

Answers to capstone case studies.