## Instructor Resources Sample

This is a sample of the instructor materials for *Case Studies in Population and Community Health Management*, by Connie J. Evashwick and Jason S. Turner.

The complete instructor materials include the following:

- An extensive Instructor's Guide, featuring a sample syllabus, teaching tips, answers to end-of-chapter questions, and individual/group assignments
- A Glossary of key terms used in the cases

This sample includes the opening section of the Instructor's Guide, through the end of case 1.

If you adopt this text, you will be given access to the complete materials. To obtain access, e-mail your request to hapbooks@ache.org and include the following information in your message:

- Book title
- Your name and institution name
- Title of the course for which the book was adopted and the season the course is taught
- Course level (graduate, undergraduate, or continuing education) and expected enrollment
- The use of the text (primary, supplemental, or recommended reading)
- A contact name and phone number/e-mail address we can use to verify your employment as an instructor

You will receive an e-mail containing access information after we have verified your instructor status. Thank you for your interest in this text and the accompanying instructor resources.

## Digital and Alternative Formats

Individual chapters of this book are available for instructors to create customized textbooks or course packs at XanEdu/AcademicPub. For more information about pricing and availability, please visit one of these preferred partners or contact Health Administration Press at hapbooks@ache.org.

*Case Studies in Population and Community Health Management*

**Connie J. Evashwick, ScD, and Jason S. Turner, PhD**

# INSTRUCTOR'S GUIDE

## INTRODUCTION

This guide is intended for a course on community and population health, designed for graduate (or advanced undergraduate) students in a health management and policy program, public health students satisfying management requirements, nursing and allied health students looking to enhance managerial capabilities, or medical students desiring to extend their reach beyond direct patient care. The guide follows the order in which the cases are presented in the book.

We realize it is unlikely that instructors will be adopt the entire course exactly as laid out here. Rather, we expect that cases will be used in an order determined by the instructor, and we recognize that some cases or content may not be relevant to a particular course. Thus, the elements for each case are offered independent from the other cases. The potential redundancy is offset by an effort at comprehensive coverage of the topics.

The instructor resources for *Case Studies in Population and Community Health Management* assume that the primary mode of teaching will be discussion rather than lecture. Hence, a set of fixed slides for a didactic lecture is not included. Background on the content is given, as well as suggestions about topics the instructor and/or the students might want to pursue in conjunction with the overarching themes of the case. We suggest some websites for additional information, but we are constrained by the need to minimize the use of specific URLs for websites that are likely to change without warning. The web, obviously, is an incredible source of information that can be tapped for definitions, history, videos on hot topics, and conflicting information worthy of good debate.

Cases are intended to stimulate discussion. For most of the cases and discussion questions, no single answer is "the correct one." The course will be most relevant to people's daily work if students apply the various tools and ideas to their own community or institution. An answer that works for one student might not work at all well in the situation of another student. We have tried to provide enough information to spark a lively exchange, but also to provoke a deeper dive into those aspects of the case that are most relevant to the particular course. Each case concludes with a brief list of resources; much more information is available through internet searches, books, webinars, and explorations of one's own institutions and communities.

## Syllabus Components

In today's accreditation-driven environment, each university has its own syllabus template. Course time frame, number of credit units, evaluation expectations, and other mandated pedagogical elements vary. Fundamental competency models guide content and objectives for outcomes. We thus offer an outline of pedagogical elements and techniques, from which each instructor can choose those appropriate for their student audience and curriculum objectives. The following assumes a one-semester three-unit course of 16 weeks for graduate or upper-division undergraduate students in health management and policy.

## Course Description

The purpose of this course is to apply the basic competencies of healthcare management to managing relationships with the residents and organizations in the community in which the healthcare organization operates. The assumption underlying the cases is that a healthcare organization that seeks to succeed in the healthcare delivery system of the future must understand and engage with the community it serves, particularly as value-based payment methods expand and the impact of the social determinants of health gains importance. The course seeks to explain key concepts of community health, public health, and population health, and to examine the complex inter-relationships of these distinct but related fields. Comprehensive continuums of care for several discrete subpopulations are examined as examples of how healthcare executives must manage services that they control, as well as those they do not, in the interest of continuity and quality of care for their patients. Management competencies of finance, informatics, human resources, ethics, governance, and sustainability are applied to cases that require healthcare executives to manage performance within their organization, as well as external to their organization. Students build their capabilities by analyzing real-world cases, applying frameworks, identifying relevant data, using validated tools, considering the many viewpoints that might exist in a single community, and measuring organizational performance based on collective, as well as individual, goals.

**Learning Objectives**

| Objective | Week | Case # |
|---|---|---|
| Define and differentiate community health, population health, and public health | 1 | 1, 2, 5,7 |
| Analyze the characteristics of a community, its residents, and its healthcare stakeholders | 2 | 2 and all cases |
| Conduct a community health needs assessment | 3 | 3 |
| Describe the components of a community's health system | 4 | 2, 6, 8, 13, 14 |
| Assess the power structure of a community | 4 | 2, 6, 13 |
| Prepare a community health improvement plan | 3, 4 | 3, 6, 7 |
| Analyze community benefit as it pertains to nonprofit hospitals | 3 | 3, 4, 12 |
| Explain how the social determinants of health affect health status and healthcare utilization | 5 | 4, 5 |
| Apply standards of cultural competence within a healthcare organization and within a community | 5 | 5 |
| Critique the national and local organization of public health services in the United States | 6 | 6, 7 |
| Contrast population health management models managed by payers, health systems, private, and government entities | 7 | 8, 9, 11, 13 |
| Evaluate population health programs for financial and programmatic performance (including quality) | 8 | 4, 8, 9, 10, 11, 13 |
| Apply data and metrics to measure and explain changes in community and population health status | 9 | All cases |
| Articulate the ethical dilemmas confronting healthcare executives in implementing population, community, and public health initiatives | 10 | 12, 5 |
| Analyze the process and capacity for preparing the healthcare workforce based on current capacity and projected needs | 11 | 13 |
| Communicate effectively with internal and external stakeholders about community and population health issues | 12 | 15 |
| Articulate the parameters essential for sustainability of a community-oriented program within a healthcare organization | 13 | 16 |
| Analyze the business case for a healthcare organization to be involved with the community | 14 | 2, 3, 10 |
| Evaluate organizational governance models as applied to population and community health initiatives as they pertain to measurable organizational performance | 15 | 4, 6, 16 |
| Wrap Up | 16 | |

**Learning Objectives for Additional Topics**

- Differentiate the long-term care system from acute care
- Examine current national health problems: obesity, HIV/AIDS, childhood vaccination rates, homelessness, mental health, aging
- Construct an advocacy campaign intended to change cultural norms

**Management Competencies**

In analyzing the case studies, students will apply a variety of basic management competencies. Cases can be focused on a single management function or used to examine several functions.

- Leadership
  - Governance
  - Communications
  - Theories of health behavior
- Management functions
  - Organizational behavior
  - Marketing
  - Strategic planning
  - Finance
  - Human resources
  - Informatics
  - Information systems management
  - Ethics
- Health systems
  - Trends in payment systems
  - Triple Aim
  - Social determinants of health
  - Continuum of care
  - Long-term care systems

**Session Outline**

The following is a suggested outline for a 16-week (semester-long) three-unit course, with three hours of classroom instruction per week and an additional six hours of time spent by students in reading, studying, preparing assignments, and convening for group projects. The total number of hours could be offered in other configurations to meet the requirements of the university's calendar and course units. A 12-week outline is also given. The course can be offered in person or online. The mix of individual and group work can be varied, particularly through the choice of assignments. Approximately one hour of each session is devoted to analyzing and discussing the case. The cases follow the order of the course.

**Classroom Tips**

One technique to stimulate discussion involves requesting that each student select a city and state that they will use throughout the course. This technique works best if each student has a different city/state. The selection might be based on where the individual was born, where their grandparents live, or a place they would like to live once they finish school. Assignments refer students to use their selected city/state to gather information. The diversity

in real-world approaches to community and population health becomes evident once students begin sharing their examples.

Group or team work is a skill highly appropriate to community and population health. The class thus might be asked to form teams of three to four members at the beginning of the course, to be used throughout for group assignments. Alternatively, new teams can be formed for each session for which a team exercise is used. Members can further be assigned roles of specific community services whose perspectives they represent. This requires a bit of homework on the students' part to learn about the organization so that they can represent it accurately in group negotiations. Salient roles include health system executive, head of the local (public) health department, director of a mental health clinic, representative of the local school district who is responsible for the health curriculum or any on-site health clinics, and director of a community clinic or Federally Qualified Health Center.

**Relevant Side Trips**

Each case includes suggestions for additional topics that could be pursued, depending on the objectives of the course and the interests of the students and instructor. Details are not provided, but most are major themes for which information should be readily available through basic literature searches, textbooks, or the internet.

**Session Topics for 16-Session Course**

1. Introduction and Definitions: Population Health, Community Health, Public Health; Rationale for Healthcare Organizations to Be Engaged with Their Communities
2. Determinants of Health: Infectious Diseases, Chronic Diseases, Social Determinants, Prevention
3. Community Health Systems (or-profit and not-for-profit entities)
4. Community Asset Mapping and Community Benefit
5. Community Health Needs Assessments
6. Public Health Departments, State and Local
7. Population Health: High-Risk Urban Populations
8. Population Health Management: Rural Populations
9. Population Health Management: Veterans
10. Continuum of Care for Complex, Chronic Clients
11. Ethics Related to Community and Population Health
12. Cultural Competence and Health Literacy
13. Strategic Planning and Marketing: Beyond the Walls
14. Organizational Arrangements for Cooperation, Collaboration, and Collective Impact
15. Sustainability
16. Wrap-Up and Moving Forward

**Session Topics for 12-Session Course**

1. Introduction and Definitions: Population Health, Community Health, Public Health
2. Determinants of Health: Infectious Diseases, Chronic Diseases, Social Determinants, Prevention
3. Community Health Systems and Community Asset Mapping
4. Community Health Needs Assessments
5. Public Health Departments, State and Local
6. Population Health: Managing Special Populations
7. Information Systems and Data Management

8. Ethics Related to Community and Population Health
9. Strategic Planning and Marketing: Beyond the Walls
10. Organizational Arrangements for Cooperation, Collaboration, and Collective Impact
11. Sustainability
12. Wrap-Up and Moving Forward

## SESSION 1: DEFINITIONS AND DATA

The purposes of this session are to

- introduce the definitions of *community health*, *population health*, and *public health*;
- explain the rationale for why this course and subject matter are important to management of today's healthcare systems; and
- introduce sources of data, particularly those pertinent to community and public health.

These three themes will appear throughout the course.

An introductory presentation can be used to present the definitions, their distinctions, and their overlap. Similarly, a presentation by the instructor can describe the trends affecting each of these three spheres and, if slides are used, show graphically why the relevant trends make the subject matter so timely and compelling. As the latest data are continuously changing, no slides are included.

In today's world of big data and evidence-based management, the majority of healthcare executives, regardless of the stage of their career, are familiar with inpatient and outpatient data, including sources, variables, benchmarks, and information systems. Relatively few healthcare executives are equally familiar, if familiar at all, with comparable data pertaining to the community and its population subgroups. For managers to make good decisions regarding community and population health programs, they must attain familiarity with the relevant data. The first case serves to introduce the data on communities and populations.

## NOTES ON CONTENT

### Definitions

The definitions of *community health*, *population health*, and *public health* are presented in the introduction to the book. The definitions of all three terms lack consensus in the United States. To simplify the concepts for managers, we favor the definitions that include measurement—a nominator, denominator, or both, and often a specific geographic delineation. Of particular note: What happens when all three types of activities are occurring simultaneously in a single community? What if different messages are being sent regarding the same health condition? How is each measured, and how is the effect of an intervention measured over time? What benchmarks are relevant? At this point, we are too early in the course to delve into community-wide collaboration and how its impact is measured, but the subject might be introduced.

Note that the idea of "public health" is linked to the governmental public health system as organized in the United States. This model is different from that of many other countries in the world, which incorporate public health with a governmental healthcare delivery system. Public health initiatives are, of course, much broader than just the formal public health system, but using the government structure as the basis for understanding public health functions is a useful way of placing parameters around introductory discussions.

"Population health," which has risen in visibility as a result of the Triple Aim and pay-for-performance payment models, can be differentiated from "population health management." The latter has been well-established for several decades and has been advanced through a classification scheme of six categories articulated by McAlearney in 2003. Making the distinction between the two concepts can be challenging, and it may depend in part on the organization's goals and objectives and the structure for a population health program rather than an academic definition.

"Community health" is potentially such a broad concept as to be useless or confusing. We have tried to define it from a management perspective—if you can't measure something, you can't evaluate it, and thus you must be careful in allocating scarce resources. The goals and objectives for taking on community health tasks should be clear, as the outcomes might not be measurable.

The definitions as presented in the book's introduction are repeated here for the instructor's convenience (citation references can be found in the introduction). Although consensus on precise meanings is lacking, this section will propose definitions to be used in analyzing the book's cases. We offer these definitions with the understanding that good managers will see beyond the verbiage to analyze situations and propose realistic and measurable approaches based on the desired goals and objectives. Regardless of the phrasing, common management principles apply.

*[The following sections are adapted from the introduction of the book.]*

**Population Health**

Kindig and Stoddart (2003, 381) defined *population health* as "the health outcomes of a group of individuals, including the distribution of such outcomes within the group, and the factors affecting those outcomes." This definition has been adopted by the National Academy of Sciences Roundtable on Population Health Improvement (2019).

The concept of population health implies both a measurable numerator and a measurable denominator, and it incorporates the ability to measure changes over time. Populations can be subgroups within communities, can encompass multiple communities, or can cut across community lines. The following is an example using Kaiser in a given location:

Numerator: <u>All Kaiser enrollees flagged as having diabetes</u>
Denominator: All Kaiser enrollees

*Population health management* is a more explicit term that describes active interventions to control the health status or healthcare utilization of a defined and identifiable group of individuals. For example, a managed care company might have a population health management program in which it provides all of its members who have a diagnosis of diabetes with a cellular phone loaded with an app that sends daily reminders about monitoring their hemoglobin A1c level (and perhaps even reports the results to the doctor's office automatically). The company would have the denominator of all enrollees, the numerator of all enrollees with a diagnosis of diabetes, and a way of monitoring the health status of the individuals with the app. It would therefore be able to determine whether the app made a difference in utilization of healthcare services or in the long-term health status of individuals or the aggregate population. The following is an example from a Kaiser program for people with diabetes, requiring specific agreement to participate in the program:

Numerator: All Kaiser enrollees with a diagnosis of diabetes who agree to <u>participate in a special program to manage their condition</u>
Denominator: All Kaiser enrollees or All Kaiser enrollees flagged as having diabetes

## Community Health

*Community health* is a much broader term than *population health*, and it can be ambiguous. For the purpose of these cases, *community health* can be defined as the health of a group of individuals who share a bond of geography, culture, race, ethnicity, language, sexual orientation, pastime passion, or another common characteristic (Merriam-Webster 2019).

In many instances, community health offers no ability to measure either the denominator or the numerator. As a result, the success of a community health initiative in attaining its goals and objectives can be hard to demonstrate—which can be a challenge when trying to secure institutional commitment or resources for an intervention. Regardless, improving the health of populations and individuals requires improving the health of the communities in which they reside.

An example of a community health program might be a booth at a health fair at a local Catholic church at which a home care agency provides free screening for diabetes. The agency might have selected this approach because it knows that many members of the parish are Hispanic and that Hispanics have demonstrated high rates of diabetes and undiagnosed diabetes. The agency would have no idea how many people saw notices about the health fair (other than estimating based on the parish's total membership or the fair's total attendance), but it would have a record of how many people it screened and how many tested positive. Hopefully, the agency would also know how to contact those individuals whose test results called for active follow-up. The following is an example based on people identified at a health fair:

Numerator: Number of people who tested positive for diabetes
Denominator: Unknown

## Public Health

Charles Winslow (1920, 30) defined *public health* broadly as "the science and art of preventing disease, prolonging life, and promoting physical health and efficiency through organized community efforts and informed choices of society, organizations, communities, and individuals." In this book, we will use the phrase *public health* in the specific context of the public health structure of the United States.

The US public health system includes a number of government agencies that have been created to fulfill the provisions of public health legislation and to carry out the government's role in safeguarding the public. This bureaucracy includes the Centers for Disease Control and Prevention (CDC), a federal agency; departments of health for every state and territory; and local health departments (LHDs). Funds for essential public health functions flow from the federal government to states and from states to local agencies.

Most health departments serve a designated geographic area, with all residents of that area considered to be the department's responsibility. For program purposes, the denominator can usually be regarded as the number of residents of a department's geography, based on the most recent census count. However, complications arise when public health programs affect residents in adjacent areas or do not reach all residents within the designated area.

An example of a public health approach to diabetes control might involve a local radio broadcast of a series of public service announcements (PSAs) that encourage women who are pregnant and have certain symptoms to be screened for gestational diabetes at their LHD or by their own physician. The LHD would know the total number of people in its catchment area, and it might also keep count of the number of new pregnant patients who come to the

department's clinics for screening within a given period after the PSA broadcast. However, the LHD would not know the total number of pregnant women in its catchment area, the number of people who heard and remembered the announcement, or the number of women who were screened—unless it made a special effort to gather such information. The following is an example of public health program:

Numerator: Unknown
Denominator: Total number of people in geographic area served by the LHD

This example also demonstrates the circumstance where the PSA might have been heard by pregnant women served by an adjacent LHD—which means even the denominator could be wrong, underestimating the total number of people potentially engaged in the health promotion initiative.

### Overlapping Functions

As is evident from these examples, public health, community health, and population health programs often overlap, with multiple interventions reaching the same individuals. Conversely, public health, community health, and population health programs may occur simultaneously, with similar long-term purposes, yet remain distinct—for instance, by sending out different messages about the same condition or having different interventions aimed at the same long-term outcome.

The federal government and various private organizations have made great strides in setting up databases that collect evidence about the impact of certain interventions for specific populations (see, for example, the Community Guide, at www.thecommunityguide.org). The task of the healthcare executive is to sort out which programs apply to which target audiences and for what short-term and long-term outcomes. Ideally, health promotion programs and population health management interventions can then be organized to complement rather than compete with one another. Desired improvements in the health status of the community can be better achieved and sustained by collaborative efforts than by individual programs, and use of resources can be maximized.

*[Excerpt ends here.]*

### Key Trends

Key trends include the following (the introduction provides a brief overview of each):

- Move toward value-based payment for health services
- The Triple Aim and derivatives
- Recognition of the impact of social determinants of health on the health of individuals and the performance of healthcare institutions
- Demographic trends
- International attention to health equity

### Data, Data Terms, and Data Sets

Many healthcare executives lack any awareness of the availability of data other than the data, management information system, and metrics used for internal operations. Myriad data sets are readily available about community, population, and public health—but the healthcare executive needs to be aware of them and know what to look for and where to look, as well as how to interpret the information. This session sets the foundation that students can build upon

in subsequent sessions; the introduction does not need a pretense of discussing "all" relevant data sets. In addition, the unique aspects of gathering primary data as they relate to a community, different from gathering data on "patients," should be introduced. Having students find and use the data sets is perhaps the best way to reveal the wealth of information available, the challenges of gathering and interpreting the data, and how to apply it.

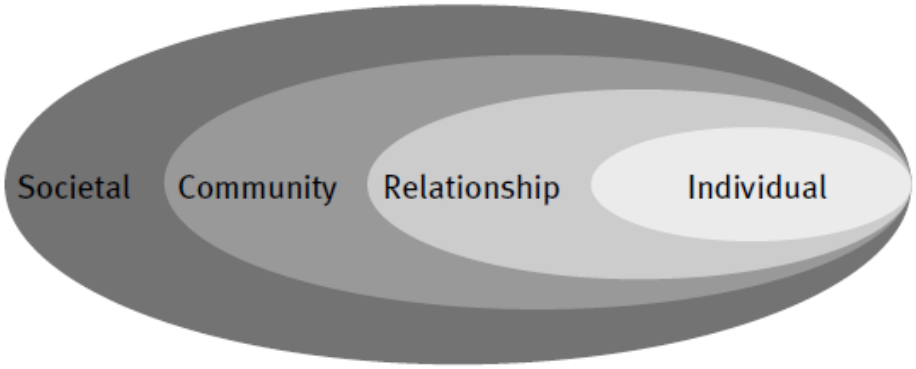
Examples of major data sets to introduce include the US Census, American Fact Finder (from the US Census), County Health Rankings, City Health Rankings, the Centers for Disease Control and Prevention (CDC), and the World Health Organization (WHO), among many others that include both socioeconomic data and health data. Most states and many cities have their own data sets. State data sets often have their unique quirks—compare data from two or more states to see the variations. Community health needs assessments (case 3) can be introduced and combed for the sources of data used by a particular community.

Often, students of healthcare management have either never been exposed to or have forgotten the basics of statistics and epidemiology. Having grown accustomed to whatever information their job requires, students might find that they need a brief refresher on terms and their meanings. The "Fact and Data Analysis" questions ask students to define various terms that are relevant to assessing community, public, and population health. Fundamental terms and concepts might be reviewed in class prior to or after the student assignment. These include the following:

- Primary versus secondary data—pros and cons, methods for gathering both
- Definitions of each element of a data set
- Measurement metrics and the pros/cons of each: number, index, percent, proportion, rank, scale, etc. (One example: Contrast the Air Quality Index with the Food Sufficiency Index. Is "1" high or low? Good or bad?)
- Unit of analysis (For example: What is the problem of using the County Health Rankings? What if a service area spans more than one county? What if the county is only part of a service area?)
- Sample size (How large must a sample be to provide valid information?)

**Ecological Model of Health**

If teaching time permits, the Ecological Model of Health can be introduced during the first session of the class. It provides a framework for identifying relevant data, potential target audiences, and health behavior status. The Ecological Model can be shown as a graphic with four or five spheres (exhibit 4.1 in the book), which indicate the factors that affect the health status of the individual. Various versions of the graphic can be found by searching the CDC website or other internet sources. The graphic is based on research done over the past two decades that shows that the health status of an individual is affected much less by the person's genetics and the formal health system than by family, community, environment, and societal policies. Understanding that myriad factors affect a person's health status will lead healthcare executives to seek out the right information to address a community problem and find appropriate ways to solve or ameliorate the problem.




*Source:* Centers for Disease Control and Prevention (2019).

The management function of *marketing* is relevant to this session. Marketing seeks to identify, characterize, and influence the behavior of customers. Healthcare organizations typically target users or potential users of health services. In contrast, community, public, and population health initiatives might target a much broader audience. The same marketing concepts and tools can be applied to a community, whether it is delineated as a specific measurable population group or a more broadly determined community. If students have already had a course in marketing in their curriculum, they can be asked to apply the concepts and tools. If some or all have not yet had a course in marketing, this is an opportunity to introduce it (though there might not be time for an in-depth study of this rather extensive subject). Health Administration Press (HAP) offers full textbooks on marketing that can be useful to instructors or students, particularly those not well acquainted with the topic.

*Health behavior* is an essential component of curricula taken by students specializing in health education or public health; it might appear in health management curricula in a small way, if at all. However, a basic understanding of the principles of health behavior is essential for shaping or changing the health of communities and populations. As with marketing, an in-depth study of health behavior is not feasible in this course, but an overview of the field and introduction to some of the most common theories can be quite helpful to analyzing this and subsequent cases and in proposing realistic solutions (or identifying barriers to proposed solutions). For instructors who are not familiar with theories of health behavior, a good introductory book is Edberg's *Essentials of Health Behavior* (Jones & Bartlett, 2020). In addition, the US Department of Health and Human Services offers a useful resource on "Models and Frameworks for the Practice of Community Engagement" (www.atsdr.cdc.gov/communityengagement/pce_models.html). A wealth of additional information can be accessed through internet searches on theories of health behavior.

## CASE 1
## Characterizing a Community: HealthforAll Health System

Case 1 can be used to explore the differences between "patients" and "communities," to explore existing data sets, and to calculate a public health task—vaccinations. The questions at the end of the case can be used to guide discussion. Class time can be devoted to having students find and explore different data sets; alternatively, these activities can be incorporated into out-of-class assignments or largely deferred for future units. Basic issues of using and

interpreting data should be reviewed, as many students either have never learned or tend to forget the subtleties of reading and interpreting data.

### Relevant Side Topics

- Vaccinations
- Evaluations of health promotion interventions—what works, what doesn't
- Databases

### Overarching Theme

The overarching theme of this case is to characterize the residents of a community, which includes defining the community and finding data about demographics, health behaviors, and health status.

### Learning Objectives

- Define a "community."
- Describe a community according to the characteristics of its individuals and families.
- Analyze a target audience for health status and the factors that affect health status.
- Apply theories of health behavior to the health status of individuals and the community.
- Compare the characteristics of a community and those of population subgroups.
- Identify data sets relevant to the health status of a community.
- Analyze trends in health status and health behaviors over time and in relationship to benchmarks.
- Explain statistics of incidence, prevalence, rate, percentile, proportion, and index.
- Define the management function of marketing, identify its key concepts, and explain its relevancy to characterizing a community.

## QUESTIONS

*Note: Answer guidelines are provided for most of the book's Fact and Data Analysis Questions. The Discussion Questions are intended to spur open discussion, so specific guidelines, generally, are avoided.*

### Fact and Data Analysis Questions

1. How will the Hospital 5 define its "community"? What alternative definitions might it consider?
   *Given that health system leadership has a hospital perspective and is not familiar with the institution or its location, the "community" is likely to be defined as the primary and secondary service areas of patients, based on zip code data from patients who use inpatient units and outpatient clinics. An alternative would be to select all zip codes within a given radius of the hospital, regardless of past hospital usage patterns. The caution that the hospital leadership must understand is that, if "free vaccinations for residents of the community" is announced, the eligibility criteria must be very clear; otherwise they risk disappointing or angering people who thought they should be eligible but are not.*
2. What is the difference between secondary and primary data?
   *Secondary data are data that already exist, typically collected by someone else and for a broad or different purpose from the one the organization might be pursuing.*

*Primary data are data that the organization decides it must collect itself for a specific purpose, typically because existing data do not have the level of detail or the population sub-sample necessary for the organization's needs.*

3. Describe five ways to collect primary data. What are the benefits and limits of each method?
   *Possible ways to collect primary data: nominal groups, focus groups, key informant interviews, surveys conducted in person, surveys conducted by phone, surveys conducted online. In general, primary data collection is more expensive than using secondary data (though not always, if payment is required to use the existing data set). Concerns of each data collection method include size and representativeness of sample, validity of survey (has the instrument been tested and found valid?), and the training of interviewers for consistency and accuracy. The benefits include the ability to reach subgroups of the population that might otherwise be left out. Similarly, topic details that might be missing in more generic data sets can be articulated.*
4. Describe five ways to access secondary data. What are the benefits and limits of each method?
   *Access public data sets (such as the US Census), compile a database of patient or customer records, seek reports of community forums (such as Chamber of Commerce records), use community health needs assessments (many of which are on file for public use), use results of research conducted by others.*
5. How are geographic areas relevant to data about populations and communities?
   *Many databases use geographic markers—such as zip code, census track, city, or county—as the basis for data. This is especially likely to be the case for demographic and economic data. The membership of a "community" may or may not align with geography. For example, the members of a church might form a community but be dispersed throughout a county. Similarly, a "population" subgroup, such as all members of a health plan who have been diagnosed with diabetes, could be living throughout the multicounty service area of the health plan. Thus, data that are pinned to geography should be examined to determine if they will be appropriate for analyzing or addressing a programmatic intervention aimed at a given community or population subgroup.*
6. What is the single most consistent data set compiled for the US population? How frequently are the data collected?
   *The US Census reaches all geographic areas and subgroups of the nation's population. It is conducted every ten years, with interim projections made for some variables, such as total population.*
7. Find and critique six data sets that contain demographic data pertaining to a community you define.
   *Examples of data sets likely to be identified by students:*
   - *US Census*
   - *American Fact Finder*
   - *County Health Rankings*
   - *City Health Rankings*
   - *State data*
   - *City data*
8. Find six data sets that have information pertaining to healthcare status, healthcare services utilization, and healthcare behaviors.
   *Examples of data sets likely to be identified by students:*
   - *CDC Healthy People 2020*
   - *SRPP*

- *SAMSHA*
- *HSRQ*
- *County Health Rankings*
- *WHO*
- *CIA (country-specific health data)*

*In addition, data sets are available for various environmental concerns, such as air quality, water quality, walkability, and food security.*

9. What is epidemiology?
   *Epidemiology is a field of medical study focused on the distribution of disease or illness within a population and the causes of that condition.*
10. Define *incidence*, *prevalence*, *rate*, *ratio*, *percent*, *proportion*, and *index*.
    *See the CDC's Epidemiology Glossary at www.cdc.gov/reproductivehealth/data_stats/glossary.html.*
11. Define *marketing*.
    *To avoid confusing the student, use the definition of whichever textbook is used by the marketing course in the curriculum. The introduction to section I also includes a definition of the term.*
12. What are the "four Ps" of marketing?
    *Product, price, place, and promotion. "Place" is a substitute for channels of distribution. A fifth "P" is people.*
13. Describe four theories of health behavior.
    *Various theories can be selected including the Health Belief Model, the Theory of Planned Behavior, the Transtheoretical Model, Social Cognitive Model, Theory of Reasoned Action, or Diffusion of Innovation.*

**Discussion Questions**

1. Contrast the definitions of *community*, *population*, and *target audience.* How can the size of each be measured?
2. In applying or comparing data from secondary data sets, describe the key considerations relating to the following:
   - Definitions
   - Measures
   - Metrics
   - Date of data collection.
     *What year were the data collected? Are they relatively current (within the past five years)? Have any major events occurred since the data were collected that would affect their validity today? If using multiple data sets, were all data collected about the same time?*
   - Sample selection criteria
3. What are the benefits and drawbacks of using a single data set, such as the County Health Rankings, as the major source of data to describe the health needs of the community?
4. What data does the Centers for Disease Control and Prevention website offer pertaining to the health of a community?
5. How do theories of health behavior pertain to the health of a community?
   *In order to change the health of a community, we need to know how to affect the health of individuals. Conversely, the behaviors of individuals are influenced by the social norms, environmental conditions, and public policies of the communities in*

*which they live. Thus, health behaviors both affect and are affected by the health context of the community.*

6. Describe the key issues in relating data about inpatients and utilization to data about the community.
7. What would HealthforAll Health System want to know about the community and population groups served by Hospital 5 that is not readily available in existing data sets (i.e., available secondary data)? What methods could be used to gather that information (i.e., collect primary data)? Identify the essential missing information and cost-effective ways of gathering it in a three-month time frame.
8. Compare data for the hospital's community to benchmarks for the state and for the nation. How can such comparisons contribute to decision making about the hospital's current and future programs?
9. Assume the hospital proceeds with its outreach effort to offer free immunizations to anyone in the community who has not had the vaccinations recommended by the CDC. Although this program seems like a positive initiative, what challenges might it face? What are realistic targets for success? In addition to the CDC, what other sources recommend or endorse vaccinations? Are all sources consistent in their recommendations?
10. From a healthcare institution's perspective, how can the functions and concepts of marketing be applied to characterizing its community as well as its patients?

**ASSIGNMENTS**

1. Ask the students to give examples of the concepts of community, population, and public health from their institution or community. Then critique the examples to see what categories they fall in and why. If the class is small and introductions are included on the first day's agenda, each student can be asked to describe one example that they know of from their own organization or community. If the class is large, the question can be opened to the floor. In either case, a list can be generated from the initial offerings. Then return for the analysis: What makes a health screening a "community health" event rather than a "population health" event? Is an event that occurs in a community "community health" or "public health"? The intent is not to criticize, but rather for students to understand: What do I need to know about this as a manager?

   It is also useful for the instructor to find out early in the course which students might have extensive experience and/or job content related to community, population, or public health. These students can be good resources in providing useful examples as the course unfolds, and they can help the instructor engage students in discussion without putting them in an uncomfortable spot.

2. Assuming each student has been asked to select a real city or county (especially applicable for rural areas) on which to focus during the course, ask the students to find the relevant data sets and describe the designated geographic area in terms of its demographic and economic characteristics, social determinants of health, and current health status. Ask what surprises were found. One step further is to compare the characteristics of the city/county to those of the state. What major deviations are found?