

Health Economics Module

MODULE INTRODUCTION

Welcome to the Health Economics Module.

Have you ever wondered why health care costs so much, particularly in the United States? Since you are taking this module, this question has likely crossed your mind...at least once! We will not try to answer that question in this module. What we will do, however, is discuss the many stakeholders in the health care industry – patients, providers, government entities, employers, insurance companies – and the financial incentives that influence how they interact with the system.

In the first section, you will be provided with an overview of how funds flow within the health care system in both the United States and Canada. This section will cover the types of reimbursement mechanisms used for providers, hospitals, and pharmaceuticals, and the government's impact on them in-depth. You'll learn about new reimbursement methods that emphasize quality and efficiency over utilization. You will also have an opportunity compare and contrast the United States and Canadian systems to others throughout the world.

In the second section, you will explore consumer behavior, which is sometimes irrational, when utilizing health care services. As actuaries, it's in our wheelhouse to evaluate costs and outcomes, and then make what we consider to be an optimal decision. However, when it comes to health, this pragmatic approach often is only a small part of the consideration. The availability of insurance, accessibility of care, understanding of the system itself, strong doctor-patient relationships, social media, and personal beliefs all tend to influence our health care decisions to varying degrees. During this section of the module you'll see examples of how this has played out in both the United States and Canada, as well as how actuaries can influence the economics of consumer decision making.

Because the United States' health care system is bifurcated into two types of coverage - public and private - we will look at each type separately. Section 3 is dedicated to the economic impact of government programs in the United States. You'll review the programs themselves, sources of funding, the cost effectiveness of these programs, and their impact on private insurance prices.

Section 4 is focused on commercial insurance in both the United States and Canada. Because a large portion of private insurance is from employer-sponsored group insurance, a significant part of this section will explore the employer rationale for offering group insurance and how they are managing costs. You will also gain an understanding of funding for a variety of supplemental coverage such as critical illness, medi-gap, and long-term

care insurance. The discussion wouldn't be complete without talking about the uninsured or under-insured populations.

The final section of this module takes a bit of a different turn by focusing on public health. The overall health of a population depends deeply on public health initiatives such as seat belt laws, anti-smoking campaigns, and drinking water standards. In this section, you'll review the history of public health and learn about social determinants of health. Then comes the analytical part that we actuaries love: delving into program design, economic techniques and exploring case studies where it all comes together.

We hope you find this module interesting and applicable as you continue toward your actuarial fellowship.

Module Learning Objectives

After completing this module, you should be able to:

- Describe the flow of funds in the health care system and provider role in the system.
- Describe key behaviors that affect a consumer's health status and the cost of health care overall.
- Describe how US government policy and programs affect the flow of funds in healthcare system.
- Describe the impact of commercial and other payors on the flow of funds and consumer behavior.
- Understand the role of public health and population health management in the healthcare market.

Module Sections

The Health Economics module consists of five sections

Module Introduction (You are here now.)

Section 1: Flow of Funds

Section 2: Consumer Perspective

Section 3: Government Programs

Section 4: Commercial Payer

Section 5: Public Health

In addition, this module contains an End-of-Module Test and an End-of-Module Exercise.

SECTION 1: FLOW OF FUNDS

Introduction

Economics is primarily concerned with analyzing and explaining the decisions people make about the allocation of scarce resources. Microeconomics deals with decision-making by individuals and institutions. Financial economics is a branch of microeconomics that focuses on the capital markets. It is the study of how individuals and institutions acquire, save, and invest money. Health economics relates to financial decisions within the health care environment. It includes decisions by individuals, providers, and governments about how to use scarce resources.

In the health care system, the role of the provider is key in directing the care and knowledge and therefore the flow of funds within the system.

Learning Objectives

This section will provide the background on the flow of funds in the health care system. We will first focus on systems in the United States, followed by Canada, and finally provide an international perspective on health care systems. In particular we will:

1. Establish a framework of understanding how funds flow through the health care system.
2. Describe the role that physicians play and their influence on flow of funds.
3. Analyze unique provider reimbursement arrangements and impact on the funds/quality.
4. Describe the market power of hospitals and how they compete for patients, physicians, and contracts.
5. Describe the flow of funds in the pharmaceutical industry.
6. Describe Government's role in health care policy and regulation.
7. Describe the flow of funds in the Canadian health care system and the role of the provider and government.
8. Contrast the sources of funding in the United States versus other countries.

SECTION 2: CONSUMER PERSPECTIVE

Introduction

In Section 1 you learned about the financial structure of the health care system in both the United States and Canada. In this section you will learn about how the consumer interacts and influences these health care systems.

Learning Objectives

Specifically we will discuss:

- Influencers of individual decision making such as advertising, health literacy, culture, and provider access and availability.
- The economics of consumer health care including cost benefit analysis, cognitive bias, and influence of health insurance coverage.
- Variations in consumer behavior under the Canadian health system.

SECTION 3: GOVERNMENT PROGRAMS

Introduction

In the first section you learned about the flow of funds and the large role of government in the financing of the health care system in all countries. Although public spending is lower in the United States than many other countries, a large portion of Americans have comprehensive major medical plans funded by the federal or state government. In most situations, multiple benefit plans are offered to an enrollee who must choose between them, just like with commercial coverage. Except for the lowest income people, there is some level of premiums and cost sharing. What is unique is the source of financing.

Learning Objectives

In this section, you will learn about:

- Government health care programs and distribution of spending on them.
- Financing of Medicare and Medicaid.
- Price discrimination and cost-shifting between public and private payers.



SECTION 4: COMMERCIAL PAYER

Introduction

Commercial insurance is the primary source of health care coverage in the United States for many citizens. In this section of the module we will review the commercial payer's perspective to and impact on the flow of funds in the United States and Canadian health care systems.

Learning Objectives

In this section, you will:

- Become familiar with the considerations and implications in providing employer sponsored health insurance.
- Learn about different types of supplemental products and how they complement major medical coverage, and
- Look at coverage options and considerations for the under / uninsured population in the United States.

SECTION 5: PUBLIC HEALTH

Introduction

Up until now, we have discussed health care primarily in the context of “medical care,” i.e., how hospital care, physician care, prescription, and associated ancillary services are financed and delivered.

Access to quality medical care is one of many factors influencing health. This section explores other drivers of health, including those that many of us take for granted, such as safe housing, clean water and air, and availability of affordable, healthy foods.

A person’s health is impacted by a number of factors beyond the availability of medical care. These factors are important to identify and evaluate, in order to better understand where health needs aren’t being met, what interventions would be required to close those gaps, and what resources would be necessary to perform those interventions. Given limited resources, there needs to be a means of evaluating the efficacy of those interventions so that investments can be targeted toward those interventions that best improve health. To provide the best health outcomes at the lowest cost, resource allocation should be evaluated across the entire spectrum of factors that influence health.

Learning Objectives

To better understand the complex process of intervention evaluation and prioritization, we will achieve the following learning outcomes:

- Create a framework to understand public health and population health management.
- Explain the determinants of health.
- Understand the program design and economic techniques to measure performance.
- Explore examples of public health programs and initiatives in the United States and Canada.