

## **Instructor Resources Sample**

This is a sample of the instructor materials for *Health Policy Issues: An Economic Perspective*, Eighth Edition, by Paul J. Feldstein, PhD, and Glenn Melnick, PhD

The complete instructor materials include the following:

- PowerPoint slides
- PowerPoint slides of the book's exhibits
- Instructor's manual with additional questions for each chapter
- Test bank

This sample includes the materials for chapter 3.

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](mailto:hapbooks@ache.org) and include the following information in your message:

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- 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**

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# HEALTH POLICY ISSUES

## An Economic Perspective



# CHAPTER 3

## DO MORE MEDICAL EXPENDITURES PRODUCE BETTER HEALTH?



# LEARNING OUTCOME

Explore the factors that affect health levels and the most cost-effective improvements

# PRESENTATION

## Medical Services Versus Health Health Production Function

- [Exhibit 3.1](#)

# PRESENTATION (CONTINUED)

## Improving Health Status Cost-Effectively

- Neonatal Infant Mortality Rate
  - [Exhibit 3.2](#)
  - [Exhibit 3.3](#)
- Heart Disease Mortality Rate
- Causes of Death by Age Group
  - [Exhibit 3.4](#)

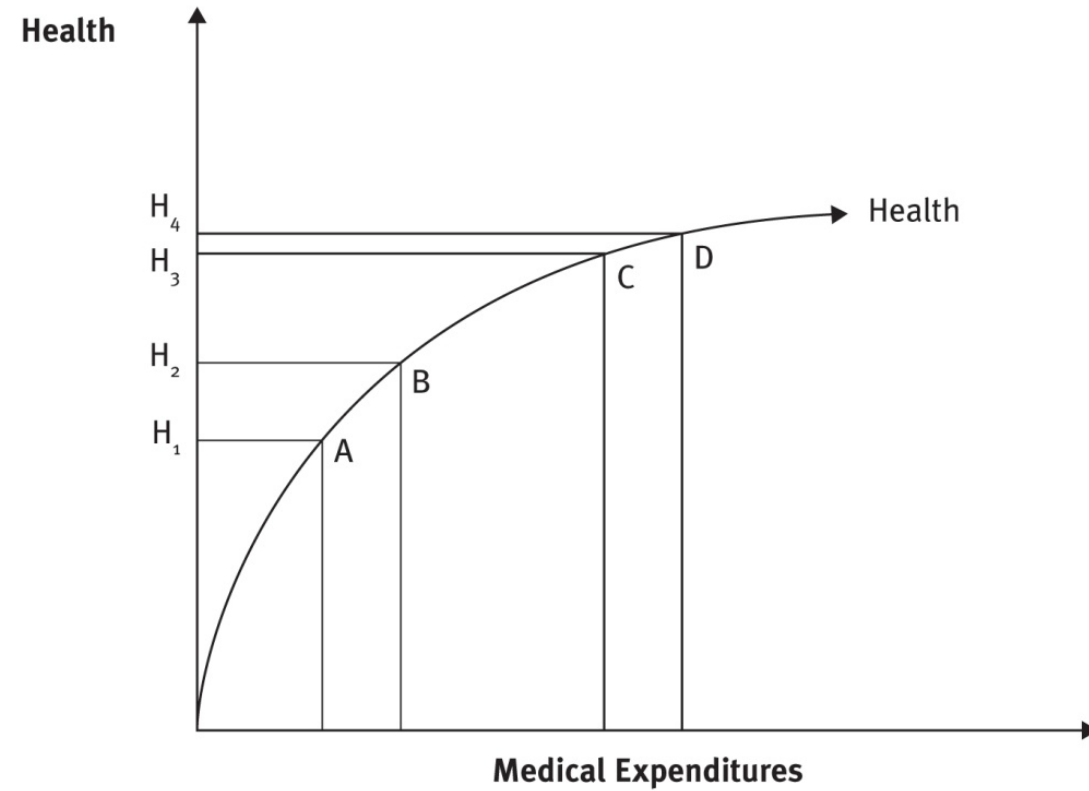
# PRESENTATION (CONTINUED)

## Relationship of Medical Care to Health over Time

- [Exhibit 3.5](#)

[continue to discussion](#)

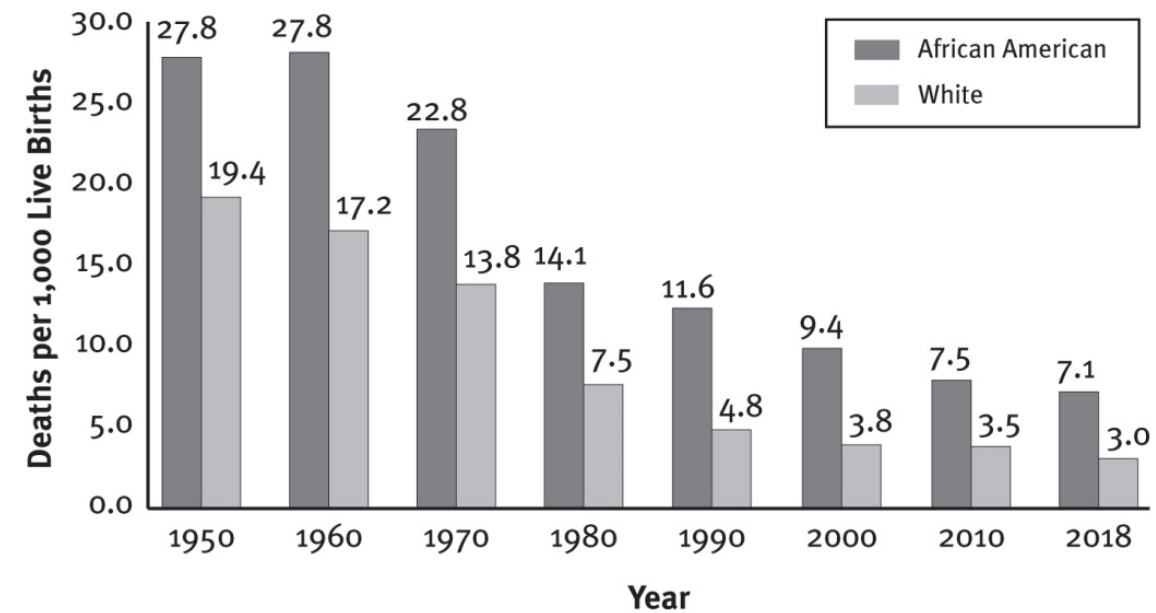
### EXHIBIT 3.1 Effect of Increased Medical Expenditures on Health



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### EXHIBIT 3.2 Neonatal Mortality Rates by Race, 1950–2018



Source: Data from Centers for Disease Control and Prevention (2017, table 2; 2020, table 1).

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### EXHIBIT 3.3 Cost per Life Saved Among Three Programs to Reduce Neonatal Mortality (Whites)

	Number of Lives Saved per 1,000 Additional Participants	Cost of Each Program per 1,000 Additional Participants <sup>a</sup>	Cost per Life Saved <sup>a</sup>
Teenage family planning	0.6	\$300	\$500
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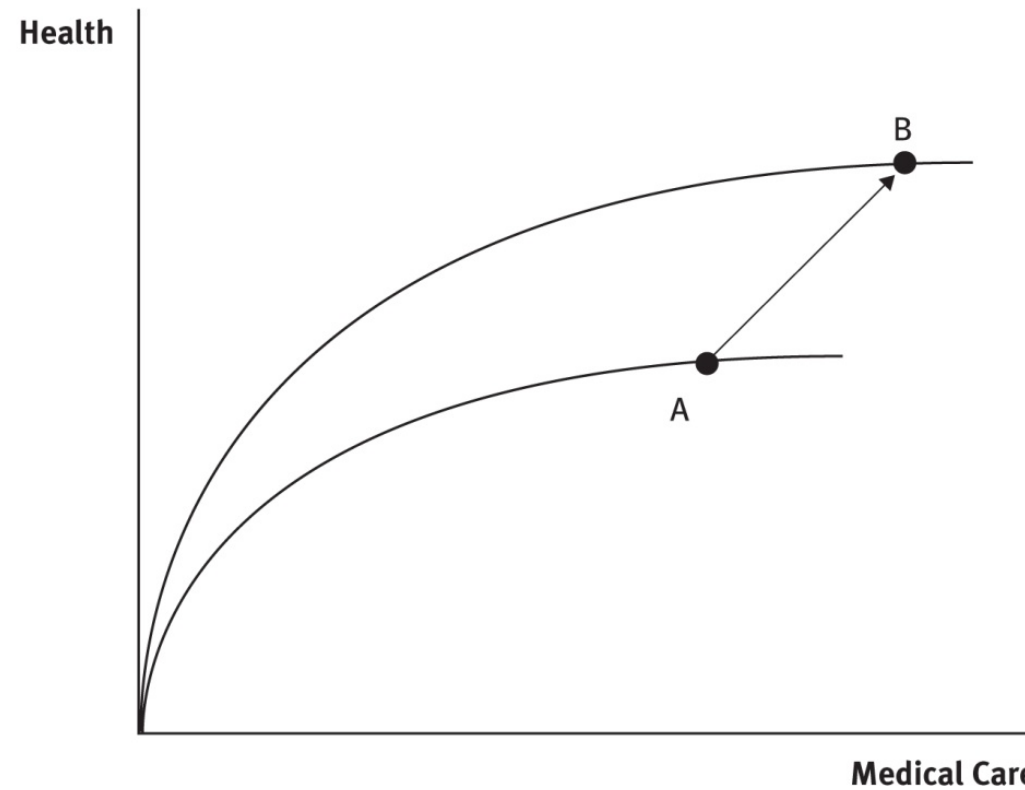
### EXHIBIT 3.4 Leading Causes of Death by Age Group, 2017

Age Group	Major Causes of Death	Deaths per 100,000
15–24	All causes	74.0
	Accident	31.1
	Suicide	14.5
	Homicide and legal intervention	11.3
	Cancer	3.2
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25–44	All causes	162.4
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	Diabetes mellitus	25.3
	Cerebrovascular disease	21.2

Source: Data from Centers for Disease Control and Prevention (2018).

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### EXHIBIT 3.5 Relationship Between Medical Care and Health



Source: Reprinted from David Cutler and Elizabeth Richardson, “Your Money and Your Life: The Value of Health and What Affects It,” in *Frontiers in Health Policy Research*, vol. 2, ed. Alan Garber (Cambridge, MA: MIT Press, 1999), 99–132, figure 5–6.

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# DISCUSSION

The textbook includes a quote from V.R. Fuchs, who wrote, “The greatest potential for reducing coronary disease, cancer, and the other major killers still lies in altering personal behavior.” What do you think are the major obstacles to altering personal behavior? How might they be overcome?

# SUMMARY


US medical care spending is increasing even though expenditures on medical services are less cost-effective in reducing mortality rates than are changes in lifestyle behavior because:

- Comprehensive health insurance coverage leads to low out-of-pocket price.
- A primary objective of government medical expenditures is to help the aged finance medical needs, rather than to improve health status and decrease mortality rates.

# SUMMARY (CONTINUED)

“Consumption” versus “investment” types of medical expenditures are appropriate as long as everyone involved recognizes them for what they are.


- Services that are not lifesaving may be appropriate personal expenditures.
- Financing medical services for those with low income is an appropriate societal goal.



# SUMMARY (CONTINUED)


When government attempts to improve the health of its low-income populations, expenditures are directed toward the most cost-effective programs—those that result in the lowest cost per life saved and lead to a greater reduction in mortality rates for a given total expenditure than is possible with any other allocation method.





# SUMMARY (CONTINUED)

The recognition by the government, employers, health plans, and individuals that resources are scarce and that their objective should be to improve health status rather than use additional medical services will lead to new approaches to enhance health.



# SUMMARY (CONTINUED)

The health production function should clarify the trade-offs between different programs and improve the allocation of expenditures.

# **Instructor's Manual**

## **Health Policy Issues: An Economic Perspective**

**Eighth Edition**

**Paul J. Feldstein | Glenn Melnick**

# **Health Policy Issues: An Economic Perspective**

## **Instructor's Manual**

### **Introduction**

*Health Policy Issues: An Economic Perspective* provides a comprehensive look at the rapid rise in medical expenditures in the United States over the past five decades, the measures that have been proposed to address this problem, and the political obstacles that have made enacting healthcare and entitlement reform difficult. Specifically, this book examines the impact of managed care, the dynamics of competition in the healthcare industry, and the role of government in medical care. It also discusses the Affordable Care Act (ACA) of 2010. Issues are explored from an economic perspective, which is helpful not only for understanding the forces pressuring for change in healthcare but also for explaining why the health system has evolved to its current state. Even the political issues surrounding the financing and delivery of health services can be better understood when viewed through an economic perspective—that is, one that considers the economic self-interest of participants.

Healthcare reform has been an ongoing process for decades. At times, legislation and regulation have brought about major changes in the financing and delivery of medical services. At other times, competitive forces have restructured the delivery system. Healthcare reform and related legislation and regulation, together with market forces, will influence how the public pays for and receives its medical services. Because it affects the lives of so many and involves such a large portion of our country's resources, health policy will continue to be the focus of debate, legislative change, and market restructuring. Hopefully, this book will help clarify some of the more significant issues underlying the politics and economics of healthcare.

This instructor's manual includes a brief overview of each chapter, a list of key topics covered, answers to the discussion questions that appear at the end of each chapter, and some additional questions and answers that can be discussed in class or included in an exam. This textbook was developed for graduate students studying the economics and politics of healthcare, as well as for a broader audience of people interested in health policy issues.

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- 2 How Much Should We Spend on Medical Care?
- 3 Do More Medical Expenditures Produce Better Health?
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- 6 How Much Health Insurance Should Everyone Have?
- 7 Why Are Those Who Most Need Health Insurance Least Able to Buy It?
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- 10 How Does Medicare Pay Physicians?
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About the Authors

*Note:* For this eighth edition of *Health Policy Issues: An Economic Perspective*, the chapters and exhibits have been updated. In addition, a new chapter, “Comparative Health Systems,” has been added and one (“Physician Malpractice Reform”) deleted.

## **Chapter 3**

### **Do More Medical Expenditures Produce Better Health?**

#### **Chapter Overview**

Although the United States spends more per capita on medical services and devotes a larger percentage of its gross domestic product to medical care than other countries do, Americans' health levels are not proportionately higher. Is our medical system less efficient at producing health than other countries, or are medical expenditures less important than other factors that affect health levels? This chapter explores these questions and points out that further expenditures on medical services are not the most cost-effective way to increase health levels. Researchers have concluded that changing lifestyle behavior offers the greatest promise for lowering mortality rates, at a much lower cost per life saved.

#### **Main Topics Covered**

Medical Services Versus Health

Health Production Function

Improving Health Status Cost-Effectively

- Neonatal Infant Mortality Rate

- Heart Disease Mortality Rate

- Causes of Death by Age Group

- Contributing Factors to the Increase in Life Expectancy 1990–2015

Relationship of Medical Care to Health over Time

Incentives

#### **Textbook Discussion Questions**

1. How can the health production function allocate funds to improve health status?

Economists have used the concept of a health production function to determine the relative importance of medical expenditures in decreasing mortality rates. Health status can be improved in various ways, such as through increased medical expenditures, changes in lifestyle, patient education, and environmental improvements. The health production function concept allows expenditures to be directed toward programs that are most cost-effective—that is, programs that result in the lowest cost per life saved. Allocating funds in this manner will achieve a greater reduction in mortality rates for a given total expenditure than any other allocation method. The health production function concept is increasingly being used by employers and managed care organizations that face financial pressure to reduce their medical costs.

2. Why does the United States spend an ever-growing portion of its resources on medical services, although they are less cost-effective than other methods in improving health status?

First, health insurance coverage, which is subsidized through the tax system, has been so comprehensive, with low deductibles and small copayments, that individuals face a very low out-of-pocket price when they go to the hospital or to a specialist. Thus patients use more medical services than they would if they themselves had to pay a greater portion of the cost. It is not surprising, given these low copayments and the incentives inherent in fee-for-service payments to providers, that the medical community lobbies for increased expenditures.

Second, the primary objective of government medical expenditures has *not* been to improve health and decrease mortality rates. Medicare benefits the elderly, and approximately one-half of Medicaid expenditures are for care of the elderly in nursing homes. The purpose of these government expenditures is to help finance the medical needs of the aged, who make up the most politically powerful group in society. Enormous resources are spent on people in their last year of life. The result has been rapidly rising medical expenditures and limited reductions in mortality rates. Had the government's objective been to improve the nation's health, the types of services financed would be very different, as would be the age groups that would most benefit from the expenditures. More resources would be spent on promoting lifestyle changes or providing services such as prenatal care. However, proponents of these programs are not as politically powerful as the aged.

3. How can employers use the health production function to decrease their employees' medical expenditures?

Employers can decrease medical expenditures by recognizing that their employees' health can be improved more cost-effectively through changes in lifestyle behavior. Employers can use health-risk appraisal questionnaires to determine the types of diseases their employees have and the factors that put them at risk for each disease. Then they can give employees incentives to make lifestyle changes—for example, to stop smoking, reduce their weight, and exercise. This approach enables employers to retain a skilled workforce longer, while also reducing medical expenditures.

4. Describe the health production function in decreasing deaths from coronary heart disease.

A decrease in deaths from coronary heart disease can be achieved by increasing medical inputs such as coronary artery bypass operations and coronary intensive care units within a hospital, which increase the survival rate for those with heart disease; prescribing drugs, such as statins, to patients to reduce the risk factors



associated with heart disease; and emphasizing lifestyle changes, such as changes in diet and exercise, to those at greater risk for heart disease.

The next step in developing a production function for decreasing coronary heart disease is to determine the relative effectiveness (marginal contribution) of each factor. A number of studies have concluded that lifestyle changes are more effective (have a higher relative marginal contribution) than medical interventions in reducing mortality from heart disease and are also much less expensive. These changes include reduction in smoking, increased exercise, and changes in diet, which lower cholesterol levels. Such lifestyle changes are more likely to be undertaken by those with more education.

5. Describe the health production function in decreasing deaths among young adults.

The approach for developing a production function for decreasing young adult deaths would be similar to the approach described above. First, the factors affecting young adult deaths would be specified, and second, the relative marginal contribution of each would be determined. Using information on the relative cost of changing each factor, together with the relative marginal contribution of each, a decision can be made as to which input would be most cost-effective for reducing young adult deaths.

The main causes of death for young adults are accidents (particularly automobile accidents), homicides, and suicides. Programs to encourage young adults to alter their behavior—to drive more safely, for example—would provide the inputs needed to determine, together with relative costs, which approaches are the most cost-effective way to reduce mortality rates in this age group.

In-Class Discussion Questions—15–20 min

1. Are medical services synonymous with health?

When policymakers talk of “health reform,” they often make the mistake of assuming that medical services are synonymous with health. In fact, they are really referring to reform of the financing and delivery of medical services. Medical services consist of diagnosis and treatment of illness, which can lead to an increase in health. However, medical services also include amelioration of pain and discomfort, reassurance to the worried well, and heroic treatments to those who are terminally ill. In the United States, 21.0 percent of all medical expenditures—\$766 billion in 2018—are spent on just 1 percent of the population. Increased medical expenditures, therefore, may have relatively little effect on our health levels. Increases in health levels would require expenditures on programs not considered medical services, such as programs focused on smoking cessation or drug use among children.

2. Although the marginal contribution of medical care to improved health has been shown to be relatively small, major technological advances have greatly reduced

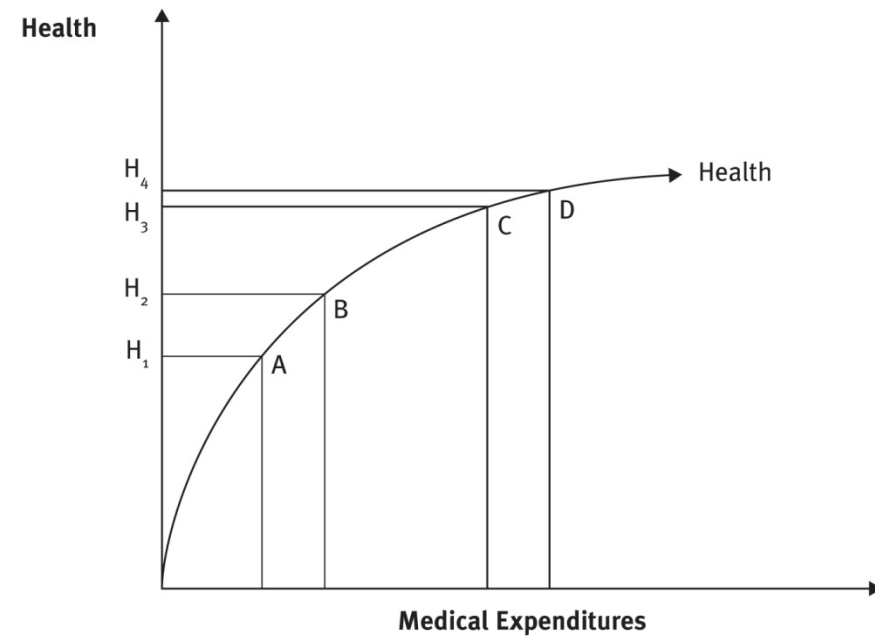
mortality rates and increased life expectancy. How can these seemingly contradictory findings be reconciled?

Cutler and Richardson separate medical care's effect at a point in time from its technological contribution over time. The authors use the graph in exhibit 3.5 to illustrate the relationship between the total contribution of medical care to health and greater quantities of medical care. The combination of comprehensive health insurance and fee-for-service physician payment reduces both the patient's and physician's incentive to be concerned with the cost of care. As a result, the medical care system moves to point A in the exhibit, where the marginal contribution of medical care to health is very small. Additional medical care expenditures increase health, but at a decreasing rate.

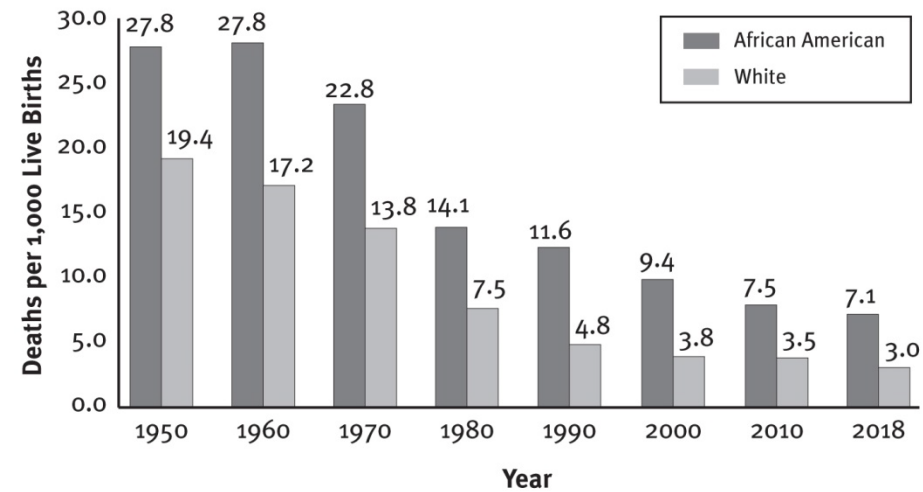
Over time, however, medical advances shift the production function for health upward. The level of health has increased, as has the number of patients treated, but the marginal contribution of medical care is still low, at point B. Too many patients whose need for treatment is doubtful are treated with the new technology, and/or excess capacity occurs as too much of the new technology is made available.

Thus, although the public believes the medical care they receive today is much more valuable than treatments received 30 years ago, the medical care system remains inefficient; the marginal benefit of additional medical care expenditures is low.

### EXHIBIT 3.1 Effect of Increased Medical Expenditures on Health



### EXHIBIT 3.2 Neonatal Mortality Rates by Race, 1950–2018



Source: Data from Centers for Disease Control and Prevention (2017, table 2; 2020, table 1).

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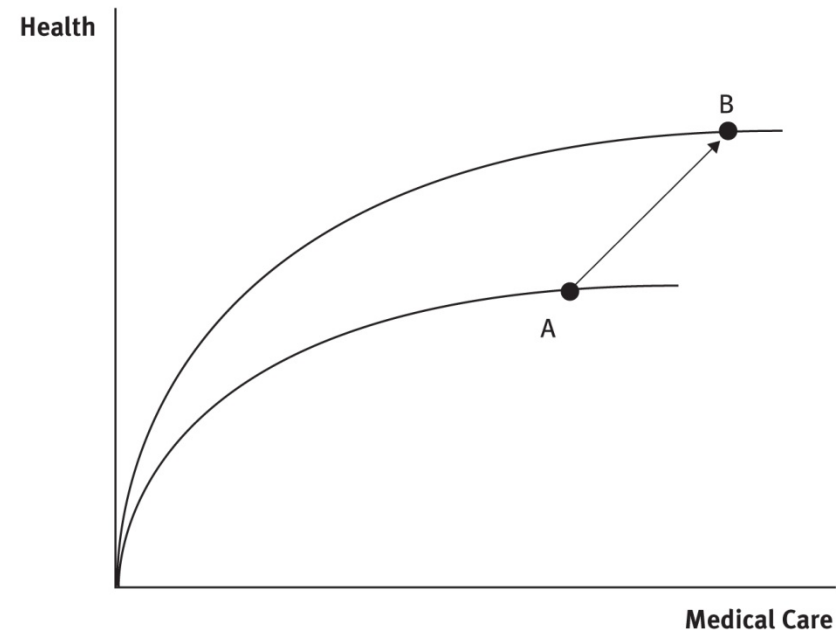
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