

## **AN ECONOMIC VIEW UPON THE DETERMINANTS OF HEALTH**

**R. Leidl**

*Ludwig Maximilians-University, Munich and GSF-National Research Center for Environment and Health, Institute for Health Economics and Health Care Management, Germany*

**Keywords:** efficiency, equity, sustainability, health promotion, healthcare systems, cost-effectiveness, health management

### **Contents**

- 1. Introduction
- 2. General Health Determinants
  - 2.1. Framework Conditions
  - 2.2. Individual Health Determinants
- 3. Health Interventions
  - 3.1. The Health Care System
  - 3.2. Measures and Programs in the Process of Health and Disease
  - 3.3. Health Management
- 4. Outlook
- Glossary
- Bibliography
- Biographical Sketch

### **Summary**

The promotion of health requires the input of scarce resources. This paper presents an overview on economic issues in (1) general health determinants as well as in (2) health interventions.

(1) A key framework condition of health is the general economic development of a country. Successful economic growth policy is very likely to have significant positive impacts on health; so do improvements in the level of education, in working conditions and reductions of unemployment. Demographic change influences both need for health care and its financing. In growing but poor societies the ability to contribute to collective funds is restricted by employment opportunities; in aging societies this ability is restricted by the decreasing share of population in working age. A number of other health determinants may also be economically relevant but require further investigation. This is especially true for intersectoral issues where policies outside the health sector have health impacts and vice versa -- for example, tobacco subsidy policy. As individual determinants, life styles -- such as smoking and drinking, calorie intake and sexual behavior -- may significantly affect health. The cost of health damages as well as cost-effective strategies to reduce these damages is a key health policy issue.

(2) Health care systems consist of a "market" for health care and a "market" in which the financial risks of illness are being covered, for example by health insurance. Three

ways of organizing these markets are social insurance systems, national health services and market-oriented systems. Health systems may perform differently with respect to their major goals; they are efficiency, equity and sustainability. No system can achieve all goals at the same time. Problems such as high level consumption by insured persons are found in many systems. To overcome current problems, solutions such as managed care approaches and risk adjustment schemes have emerged. Furthermore, information is needed on the cost-effectiveness of medical and health interventions. Economic evaluation provides the tools for this need. Respective studies have been conducted all over the morbidity spectrum. Together with other decision criteria, economic information can be used by various decision makers in the health care system. Finally, management skills and techniques must be used when promoting health. This is especially true in international and global health issues. Economics and management provide support to set goals, plan, coordinate, implement and evaluate health-promoting strategies. Many economic issues remain to be solved when tackling the global health challenge.

## 1. Introduction

In those few parts of the globe where comprehensive health insurance is available for everybody, some people tend to think that when they fall ill their health care needs should be fully covered, and no economic argument should be led about this. In those parts of the globe where people lack the comprehensive coverage of social security, most of them badly know how important economic issues are when it comes to covering their health care needs. In fact, all over the world, there is no way to health without resources. The pursuit of health promotion, of health care and of other health supporting strategies, measures and conditions requires the input of resources. As resources are scarce, the best way towards better health will always require that resources should be used economically. Using resources to improve health can be understood as a kind of production process. In this process, economics deals not just with the cost side, but also with the effect side -- that is, with health. Simply put, economics deals with the issues of:

- whether the level of resources devoted to health and the type of health services provided correspond to the preferences in a society;
- whether resources to produce health are used in a cost-effective manner; and
- which organizational or other conditions can be set up in order optimally to solve the first two issues.

Beyond economics, business administration, health policy and management describe fields of skills and knowledge which are required to achieve health targets in an effective and efficient way. These skills and knowledge must be taken into account when working towards health development.

This paper provides a brief overview on major economic issues in health and health care. It also intends to point towards links between economic analysis and health policy making. Economic issues in health and health care feature quite complex problems. In a simplified approach, these issues are described in a flow-chart. This chart links health determinants, the process of health and disease, and the health care system (figure 1).

The three core elements are supplemented by a framework module representing the general economic development as well as other policies relevant to health which are called intersectoral policies. In a systems perspective, the chart describes the most important elements and relationships which have to be considered when investigating the economic aspects. The chart represents a basic reference for the following discussions.

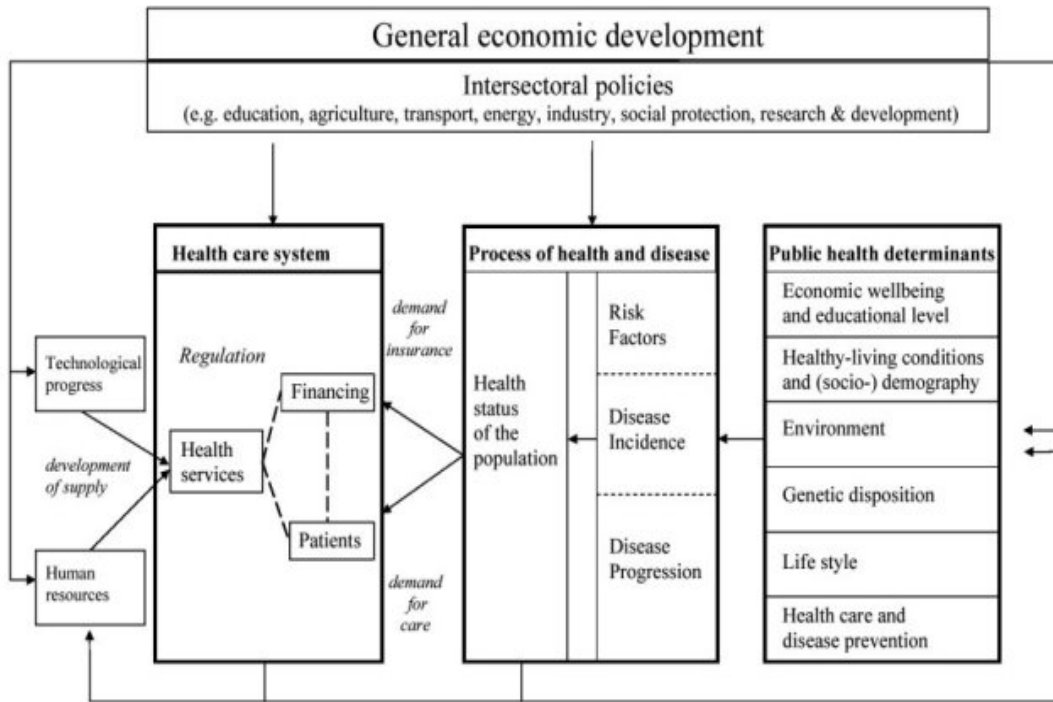


Figure 1: A simplified economic chart of the determinants of health

From an economic point of view, issues in health and health care are surveyed in two sections:

- Section one is directed at general health determinants, including framework conditions at the national level and determinants primarily related to the individual level. Framework conditions may influence health in general and comprise determinants such as the level of national income, education, environmental aspects and demographic development. As individual health determinants, genetic disposition and, especially important, health-affecting life styles such as smoking behavior are discussed.
- Section two covers health interventions. Three perspectives on the influences on health determinants and on the process of health and disease are dealt with. In the first perspective, the health care system is looked at in general, especially in terms of its organization, and is investigated for its contributions to health. The second perspective focuses on individual measures that intend to improve health such as a specific medical service or a prevention campaign. The third perspective refers to selected health policy and management tasks which are directed at developing,

implementing and monitoring comprehensive health-promoting strategies.

-  
-  
-

TO ACCESS ALL THE 15 PAGES OF THIS CHAPTER,  
Visit: <http://www.eolss.net/Eolss-sampleAllChapter.aspx>

### Bibliography

Banta H.D, Luce B.R. (1993) *Health technology and its assessment: An international perspective*. Oxford: Oxford University Press [Overview on technology assessment from different disciplinary perspectives].

Baris E, McLeod K. (2000) Globalization and international trade in the twenty-first century: opportunities for and threats to the health sector in the South. *International Journal of Health Services*, **30**(1):187-210 [Overview on new perspectives on the health impact of globalization].

Bartecchi C.E, MacKenzie T.D, Schrier RW. (1994) The human costs of tobacco use (1). *New England Journal of Medicine*, Mar 31; 330(13): 907-12 [Basic article on health impact of smoking].

Callahan D, ter Meulen R.H.J, Topinkova E. (eds.) (1995) *A world growing old: the coming health care challenges*. Hastings Center Studies in Ethics. Washington D.C: Georgetown University Press [Overview reader covering different discipline's view on ageing issues].

Doorslaer E, Wagstaff A, Rutten F. (eds.) (1993) *Equity in the financing and delivery of health care. An international perspective*. Oxford: Oxford University Press [Basic concepts and empirical measurement for Europe and the United States].

Dréze JP (1999) *The Economics of Famine*. Cheltenham, UK: Edward Elgar [theoretical and empirical overview reader].

Folland S, Goodman A.C, Stano M. (2006) *The economics of health and health care*, (5th edition) Englewood Cliffs: Prentise Hall [Comprehensive basic textbook in health economics].

Gold M.R, Siegel J.E, Russel L.B, Weinstein M.C. (1996) *Cost-Effectiveness in Health and Medicine*. Oxford: Oxford University Press [Basic textbook in economic evaluation, contains guidelines for economic evaluation studies].

Hoffmeyer U.K, McCarthy T.R. (1994) *Financing Health Care*. Volumes I and II. Dordrecht: Kluwer [Standardized comparison of the health systems of numerous countries].

Jack W. (1999) *Principles of health economics for developing countries*. Washington: World Bank Institute [Textbook]

Kongstvedt P.R (ed.) (2001) *The Managed Health Care Handbook*, (4th edition) Gaithersburg: Aspen [Comprehensive overview reader, U.S. context].

Leidl R (ed.) (1998) Health care and its financing in the Single European Market. *Biomedical and Health Research Series* Vol. 18, Amsterdam: IOS-Press [Overview on comparison, cooperation and coordination of European health systems].

Saltman R.B, Figueras J (eds.) (1997) *European health care reform: Analysis of current strategies*. Copenhagen: World Health Organization, Regional Office for Europe [Health policy oriented reader on reform issues in transformation countries].

Swayne LE, Duncan WJ, Ginter PM (2005) *Strategic Management of Health Care Organizations*, (5th ed.) Malden: Blackwell [Basic management textbook, U.S. context]

World Bank. (1999) *Curbing the Epidemic: Governments and the Economics of Tobacco Control*. Washington D.C. [Globally designed review of the economics of smoking]

World Bank. (1993) *World Development Report 1993. Investing in health*. Oxford: Oxford University Press [Global overview on health systems with emphasis on key health issues in developing countries].

World Health Organization (2001) *Macroeconomics and Health: Investing in Health for Economic Development*. Report of the Commission on Macroeconomics and Health, Geneva, 20. December [Study of how better health can support economic development].

### **Biographical Sketch**

**Reiner Leidl** is Professor of Health Economics and Healthcare Management at the Munich School of Management, Ludwig-Maximilians-University ([www.health.bwl.uni-muenchen.de](http://www.health.bwl.uni-muenchen.de)), and Director of the Institute for Health Economics and Healthcare Management, GSF - National Research Center for Environment and Health (Helmholtz-Association), Munich, Germany; since 2003. In 1980, Reiner Leidl graduated in economics from the University of Munich where he later also earned his PhD degree. After a stay at the University of the German Armed Forces he joined the Institute of Medical Informatics and Health Systems Research at the GSF-National Research Center in Neuherberg. Following staff positions there he headed the Department of Health Systems Analysis. Returning to university, he for several years held chairs in health economics at the University of Limburg in Maastricht, the Netherlands, and at the University of Ulm, Germany before returning to Munich. In research, Reiner Leidl has covered various fields in health economics, including economic evaluation, trial-based and model-based studies in a number of disease areas and technologies, as well as empirical studies of health care systems, health policy and management. He has authored and edited several books and a range of national and international journal publications. He also has served on various advisory boards, and has acted as a consultant for the World Health Organization, the European Commission, the Council of Europe, the Organization for Economic Co-operation and Development, the German development aid organization, as well as for physician and hospital associations in Germany, and for industry worldwide.