## Digestive Diseases

Summary of Methods and Data for Estimate of Costs of Illness

1. Estimated Total Economic Cost
\$ 56.2 billion
Estimated Direct Cost
$\$ 41.5$ billion
Estimated Indirect Cost
Reference Year
\$ 14.7 billion
IC Providing the Estimate NIDDK
Direct Costs Include: Other related nonhealth costs No
Indirect Costs Include:
Mortality costs Yes
Morbidity costs: Lost workdays of the patient Yes
Morbidity costs: Reduced productivity of the patient No
Lost earnings of unpaid care givers No
Other related nonhealth costs No
Interest Rate Used to Discount Out-Year Costs $4 \%$
2. Category code(s) from the International Classification of Diseases, 9th Revision, Clinical Modification,(ICD-9-CM) for all diseases whose costs are included in this estimate: See extended list of codes for digestive diseases in item 20 below).
3. Estimate Includes Costs:

Of related conditions beyond primary, strictly coded ICD-9-CM category Yes
Attributable to the subject disease as a secondary diagnosis Yes, but only partly Of conditions for which the subject disease is an underlying cause No
4. Population Base for Cost Estimate (Total U.S. pop or other)
5. Annual (prevalence model) or Lifetime (incidence model) Cost:

Total U.S. pop.
Annual
6. Perspective of Cost Estimate (Total society, Federal budget, or Other) Total Society
7. Approach to Estimation of Indirect Costs Human Capital
8. Source of Cost Estimate: (Reference published or unpublished report, or address and telephone of person/office responsible for estimate)

Broun, D.M. and Everhart, J.E., "Cost of Digestive Diseases in the United States". In Everhart J.E., ed. Digestive Diseases in the United States: Epidemiology and Impact. DHHS, PHS, NIH, Washington, D.C. U.S. GPO, 1994. NIH Publication No. 94-1447.

## 9. Other Indicators of Burden of Disease

Digestive diseases are the second most costly group of diseases, accounting for about 11 percent of health care expenditures in 1985. Table 1, page X of the summary in the reference above (see attached) summarizes the burden of disease.

## 10. Commentary:

The most reliable data were derived from hospital statistics for the costs of hospital stays. Physician charges in the hospital and for office care were less reliable and less inclusive, as were
the costs of prescription and non-prescription medications. Direct costs extrapolated to 1992 were $\$ 88$ billion. A "bottom-up" approach was taken in which the individual components of each digestive disease were estimated. Thus there are estimates for the cost of each disease and the area of health care in which these diseases have the greatest impact.

Extended List of ICD-9-CM Codes for Digestive Diseases:

## Diagnosis

Gastrointestinal Infections 01-09
Hepatitis
Esophageal Cancer
Gastric Cancer
Colorectal Cancer
Hepatic Cancer
Pancreatic Cancer
Other Malignancy
Benign Neoplasms
Hemorrhoids
Esophageal varices
Restrictively Coded Digestive Diseases
Digestive Symptoms

070
ICD-9-CM Code 150 151
153-154
155
157
152, 156, 158, 159
211
455
456.0-456.2

530-579
787, 789

