CHAPTER 23

Pancreatitis

James E. Everhart, M.D., M.P.H.

Pancreatitis is coded as acute or chronic, and the two are grouped together in this chapter, although acute pancreatitis has the greater burden of medical care and mortality. In 2004, there were 475,000 ambulatory care visits as first-listed diagnosis and 881,000 visits as all-listed diagnoses (Table 1). Rates of visits with pancreatitis as all-listed diagnoses increased moderately with age. Age-adjusted rates were 25 percent higher among blacks than whites and 52 percent higher among females than males. Pancreatitis was the seventh most commonly noted digestive disease diagnosis on hospitalization, just after peptic ulcer disease. Hospitalization rates increased with age and were 88 percent higher among blacks and 11 percent higher among males. Rates of both ambulatory care visits and hospitalizations with pancreatitis increased from the 1980s to 2004 (Figure 1). In particular, the rate of hospital discharges with a pancreatitis diagnosis increased 62 percent between 1988 and 2004.

In 2004, pancreatitis was the eleventh most common underlying cause of death from digestive diseases and the fifth most common nonmalignant cause, just after peptic ulcer disease. More than half of deaths occurred among persons age 65 years and older (Table 2).

Pancreatitis ranked eighth among all digestive diseases in YPLL prior to age 75, with about 43,000 years or 12.3 years per death. Death rates increased with age and were higher among blacks than whites and men than women. Mortality rates fell slightly from 1979 to 2004 (Figure 2), with the rate for underlying cause having fallen 15 percent over this 25-year period.

According to the Verispan database of retail pharmacy prescriptions (Appendix 2), in 2004, the total number of prescriptions for pancreatitis was approximately 766,000 at a retail cost of roughly \$88.6 million (Table 3). Pancreatic enzyme replacements constituted 60.3 percent of the prescriptions and 84.8 percent of the cost. All the other prescriptions were analgesics or antiemetic agents.

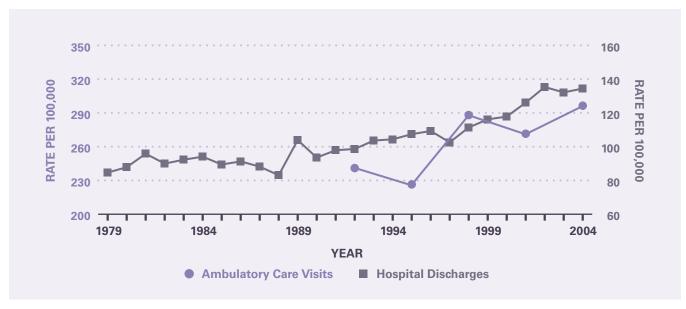
¹ Go VLW, Everhart JE. Pancreatitis. In: Everhart JE, editor. *Digestive diseases in the United States: epidemiology and impact*. US Department of Health and Human Services, Public Health Service, National Institutes of Health, National Institute of Diabetes and Digestive and Kidney Diseases. Washington, DC: US Government Printing Office, 1994; NIH Publication No. 94-1447 pp. 691–712.

Table 1. Pancreatitis: Number and Age-Adjusted Rates of Ambulatory Care Visits and Hospital Discharges With First-Listed and All-Listed Diagnoses by Age, Race, and Sex in the United States, 2004

		AMBULATORY CARE VISITS				HOSPITAL DISCHARGES			
DEMOGRAPHIC CHARACTERISTICS		First-Listed Diagnosis		All-Listed Diagnoses		First-Listed Diagnosis		All-Listed Diagnoses	
		Number in Thousands	Rate per 100,000						
AGE (Years)	Under 15		_	_	_	3	5	5	8
	15-44	153	121	304	241	99	78	152	120
	45-64	219	310	354	500	104	147	171	242
	65+	101	279	222	611	72	197	127	349
RACE	White	396	160	721	294	194	78	318	128
	Black	77	213	129	368	46	136	81	241
SEX	Female	306	199	545	355	136	87	228	145
	Male	169	116	336	234	140	100	226	161
TOTAL		475	162	881	300	277	94	454	155

SOURCE: National Ambulatory Medical Care Survey (NAMCS) and National Hospital Ambulatory Medical Care Survey (NHAMCS) (3-year average, 2003–2005), and Healthcare Cost and Utilization Project Nationwide Inpatient Sample (HCUP NIS)

Figure 1. Pancreatitis: Age-Adjusted Rates of Ambulatory Care Visits and Hospital Discharges With All-Listed Diagnoses in the United States, 1979–2004



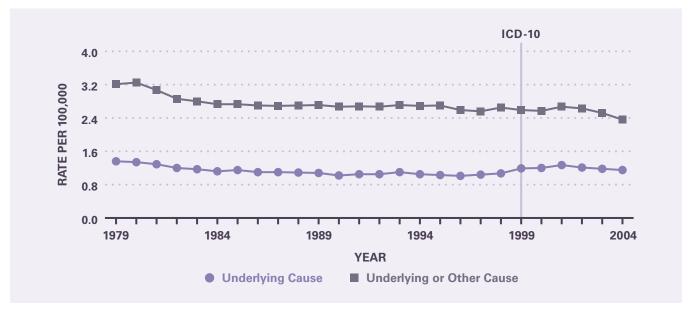
SOURCE: National Ambulatory Medical Care Survey (NAMCS) and National Hospital Ambulatory Medical Care Survey (NHAMCS) (averages 1992–1993, 1994–1996, 1997–1999, 2000–2002, 2003–2005), and National Hospital Discharge Survey (NHDS)

Table 2. Pancreatitis: Number and Age-Adjusted Rates of Deaths and Years of Potential Life Lost (to Age 75) by Age, Race, and Sex in the United States, 2004

		UNDE	RLYING CAUSE	UNDERLYING OR OTHER CAUSE		
DEMOGRAPHIC CHARACTERISTICS		Number of Deaths	Rate per 100,000	Years of Potential Life Lost in Thousands	Number of Deaths	Rate per 100,000
AGE (Years)	Under 15	15	0.0	1.0	26	0.0
	15-44	467	0.4	17.8	888	0.7
	45–64	1,044	1.5	21.0	2,222	3.1
	65+	1,953	5.4	3.0	4,005	11.0
RACE	White	2,838	1.1	31.7	5,739	2.2
	Black	557	1.8	9.7	1,210	4.0
SEX	Female	1,549	0.9	13.0	3,239	1.9
	Male	1,931	1.5	29.8	3,903	3.0
TOTAL		3,480	1.2	42.8	7,142	2.4

SOURCE: Vital Statistics of the United States

Figure 2. Pancreatitis: Age-Adjusted Rates of Death in the United States, 1979–2004



SOURCE: Vital Statistics of the United States

 Table 3. Pancreatitis: Costliest Prescriptions

DRUG	Prescription (#)	Prescription	Retail Cost	Cost
Amylase/Lipase/Protease	343,519	44.8%	\$54,085,858	61.1%
Pancrelipase	118,277	15.4	21,041,841	23.8
Hydrocodone/Acetaminophen	171,121	22.3	6,524,330	7.4
Oxycodone/Acetaminophen	76,199	9.9	3,970,182	4.5
Oxycodone	25,097	3.3	2,629,763	3.0
Promethazine	20,846	2.7	184,599	0.2
Codeine/Acetaminophen	8,808	1.1	89,625	0.1
Acetyl Salicylic Acid/Oxycodone	964	0.1	30,971	0.0
Meperidine	1,139	0.1	21,709	0.0
Prochlorperazine	394	0.0	3,834	0.0
TOTAL	766,364	100.0%	\$88,582,712	100.0%

SOURCE: Verispan