Table 1.1. Annual Health Spending: 1929–60

Year	*Total health spending ($billion)*	*Per capita spending*	*Real per capita spending (today's dollars)*	*Annual inflation in real per capita spending*	*Health spending as percent of GDP*
1929	$3.6	$29	$340	N/A	3.5%
1935	2.9	23	330	–0.5%	4.1
1940	4.0	30	420	4.9	4.0
1950	12.7	82	670	4.8	4.4
1960	26.9	146	960	3.7	5.3

Source: Cathy Tallon at OA/CMS and CMS current reports.

Table 1.2. Growth of Government Healthcare Spending after 1965

Year	*Total Health Spending (in $billions)*	*Government (all sources)*	*Government as percentage of total*
1965	$35.9	7.9	22.1%
1970	65.4	22.4	34.3
1975	117.1	46.3	39.5

Source: Health Insurance Association of America, *Source Book of Health Insurance Data 1989*, Washington, DC: HIAA.

Table 2.1. Private Health Insurance Coverage: 1950–65

Year	*Number with Hospital Coverage*	*Percent with Hospital Coverage*	*Number with Physician Coverage*	*Percent with Physician Coverage*
1940	12.3 million	9.3%	3.0 million	2.3%
1950	76.6	50.6	21.6	14.3
1960	130.0	72.5	86.9	48.5
1965	153.1	80.6	111.7	58.8

Source: Health Insurance Association of America, *Sourcebook of Health Insurance Data*, various years. These data are drawn from insurance company reports of enrollment and may not accurately adjust for individuals who are covered under more than one plan.

Table 3.1. Annual Health Spending: 1960–80

Year	*Total health spending ($billion)*	*Per capita spending*	*Real per capita spending (today's dollars)*	*Annual inflation in real per capita spending*	*Health spending as percent of GDP*
1960	$27.6	$146	$960	3.7%	5.2%
1970	75.1	357	1800	6.5	7.2
1980	254.9	1110	2640	3.9	9.1

Source: CMS current reports. Note that there is a change in the way the data is computed starting in 1970. This causes a slight discrepancy between older and newer data.

Table 4.1. HMO Enrollment Data

Year	*HMO Enrollment*	*Healthcare $$ as Percent of GDP*
1970	2.9	7.2
1975	5.7	8.3
1980	9.1	9.1
1985	18.9	10.5

Source: Interstudy Edge, various years. Note that HMO enrollment data is notoriously difficult to validate, due in part to the lack of a consistent definition of an HMO. The Interstudy data are largely derived from insurance company filings with state regulatory agencies.

Table 4.2. Annual Health Spending: 1980–2000

Year	*Total health spending ($billion)*	*Per capita health spending*	*Real per capita health spending (today's dollars)*	*Annual inflation in real per capita health spending*	*Health spending as percent of GDP*
1980	$255	$1,110	$2,640	3.9%	9.1%
1990	720	2,820	4,220	4.8	12.4
1993	910	3,470	4,700	3.7	13.7
1997	1,130	4,100	5,000	1.6	13.6
2000	1,350	4,790	5,440	2.9	13.8

Source: CMS.

Table 4.3. How Well Are Industries Serving Their Customers?

	Percent saying industry doing a "good job"	
Industry	*1997*	*2000*
Banks	75	73
Car Manufacturers	70	67
Drugs	79	59
Managed Care	51	29
Tobacco	34	28

Table 4.4. Enrollments in MCOs

Year	*Percent of Workers Enrolled in Indemnity Insurance*	*Percent of Workers Enrolled in HMO*	*Percent of Workers Enrolled in PPO or POS*
1988	73	16	11
1990	62	18	25
1993	46	21	47
1996	27	31	59
1998	14	27	62

Source: KFF and author's interpolation for 1990. KFF obtains their data from surveys of employers. Like other survey-derived managed care enrollment data, these are rough estimates at best, in part because respondents do not always know whether their plan is an HMO.

Table 4.5. Annual Health Spending: 2000–5

Year	*Total health spending ($billion)*	*Per capita spending*	*Real percapita spending (2005 dollars)*	*Annual inflation in real per capita spending*	*Health spending as percent of GDP*
2000	1350	$4790	$5440	2.9	13.8
2003	1730	5950	6320	5.1	15.8
2005	1990	6700	6700	3.0	16.0

Source: Catlin, A. et al. 2007. "National Health Spending in 2005: The Slowdown Continues" *Health Affairs* 26, 1: 142–53.

Table 4.6. Health Spending 2000 and 2005, by Category

Category	*Spending 2000 ($billions)*	*% of 2000 spending*	*Spending 2005 ($billions)*	*% of 2004 spending*
Hospitals	$417	30.9%	$612	30.8%
MD/clinic	289	21.4	421	21.2
Long-term care	126	9.3	169	8.5
Drugs/supplies[1]	170	12.6	259	13.0
Admin/health insurance	81	6.0	143	7.2
Other	267	19.8	386	19.4
Total	1,350	100%	1990	100%

Source: Catlin, A. et al. 2007.

[1] Does not include drugs and supplies dispensed in hospitals or other institutions and included as part of their costs.

Table 4.7. Change in Health Spending 2000–5, by Category

Category	*Change 2000–5 (billions)*	*Change 2000–5 (percent)*	*Percent of overall spending change 2000–5*
Hospitals	$195	46.8%	30.5%
MD/clinic	132	40.9	20.6
Long-term care	43	25.4	6.7
Drugs/supplies	89	52.3	13.9
Admin/health insurance	62	69.1	9.7
Other	119	44.6	18.6
Total	$640	47.4%	100%

Source: Catlin, A. et al. 2007. The percentages in the second column of data are computed by dividing the first column of data in table 4.7 by the first column of data in table 4.6. The percentages in the third column are computed by dividing the first column by $649 (the total change in spending).

Table 6.1. Heart Attack Report Card for Lake County

Heart Attack Care Quality Measures—Higher Percentages Are Better				
Quality Measure *Click on a measure name to compare all hospitals in a graph*	*Percentage for Advocate Good Shepherd Hospital*	*Percentage for Condell Medical Center*	*Percentage for Lake Forest Hospital*	*Percentage for Waukegan Illinois Hospital Company LLC*
Percent of Heart Attack Patients Given ACE Inhibitor or ARB for Left Ventricular Systolic Dysfunction (LVSD) if appropriate*	86% of 37 patients	56% of 63 patients	50% of 4 patients[1]	100% of 1 patients[1,3]
Percent of Heart Attack Patients Given Aspirin at Arrival if appropriate*	95% of 166 patients	88% of 205 patients	100% of 32 patients	94% of 17 patients[1,3]
Percent of Heart Attack Patients Given Aspirin at Discharge if appropriate*	96% of 166 patients	90% of 259 patients	100% of 7 patients[1]	100% of 2 patients[1,3]
Percent of Heart Attack Patients Given Beta Blocker at Arrival if appropriate*	98% of 117 patients	77% of 200 patients	87% of 30 patients	81% of 16 patients[1,3]
Percent of Heart Attack Patients Given Beta Blocker at Discharge if appropriate*	97% of 196 patients	88% of 259 patients	89% of 9 patients[1]	100% of 3 patients[1,3]
Percent of Heart Attack Patients Given PCI Within 120 Minutes Of Arrival if appropriate*	86% of 21 patients[1]	52% of 61 patients	0 patients[†]	0 patients[3,†]
Percent of Heart Attack Patients Given Smoking Cessation Advice/ Counseling if appropriate*	82% of 56 patients	67% of 84 patients	0 patients[†]	0 patients[3,†]
Percent of Heart Attack Patients Given Thrombolytic Medication Within 30 Minutes Of Arrival if appropriate*	0 patients[†]	0 patients[†]	0 patients[†]	100% of 1 patients[1,3]

Figure 6.1. Leapfrog Hospital Survey

Click to Compare	Hospital Name	Leap1	Leap2	Leap3								Leap4	Survey Results Submitted
				High Risk Treatments									
		CPOE	ICU	CABG	PCT	AAA	Esoph.	Panc.	Bariatric	Aortic Valves	NICU	Safe Practices Score	
☐	GLENBROOK HOSPITAL	◯	◯	NA	○	○	○	○	○	NA	NA	◯	6/14/2007
☐	HIGHLAND PARK HOSPITAL	◯	◯	◑	◑	○	○	○	○	◑	NA	◯	6/15/2007
☐	LAKE FOREST HOSPITAL	◔	◔	NA	NA	NA	NA	NA	NA	NA	◑	◔	6/08/2007

✚ APPENDIX ✚

An Alphabet Soup of Healthcare Acronyms

AMA: American Medical Association. Industry trade group that long opposed national health reform and managed care. It has softened its stand on health reform.

CCHP: Consumer Choice Health Plan. A proposal for national health insurance based on market principles. Developed by Alain Enthoven.

CCMC: Committee on the Costs of Medical Care. Published in 1932 a series of prescient reports on U.S. healthcare system.

CDHP: Consumer Directed Health Plan. An insurance plan that features a high deductible and a tax-advantaged Health Savings Account.

CHP: Comprehensive Health Planning Act of 1964. Encouraged states to engage in facilities planning.

CMS: Center for Medicare and Medicaid Services. Federal agency that administers Medicare and coordinates administration of Medicaid with the states.

COBRA: Comprehensive Omnibus Budget Reconciliation Act of 1983. Made it easier for workers to keep insurance after changing jobs.

CON: Certificate of Need. Requirement that hospitals obtain planning approval before expanding or building a new facility.

COSE: Council of Small Enterprises. Successful small business health insurance purchasing pool started in Cleveland in the 1970s.

CPOE: Computerized physician order entry. Computer system for tracking drug prescription and use in the hospital. Expensive but effective tool for reducing medication errors.

DRG: Diagnosis Related Group. Classification method introduced by HCFA in 1983 as part of the PPS. Used to set hospital reimbursements based on patient's condition and medical needs.

EMR: Electronic Medical Records. Long a dream of policy makers and may soon be a reality.

ERISA: Employee Retirement Income Security Act of 1974. Exempted self-funded employer-sponsored insurance plans from state insurance laws, including benefits mandates.

FMLA: Family and Medical Leave Act of 1993. Guarantees that workers can keep their health insurance coverage for up to twelve weeks if they leave work for illness, birth, or adoption of a child, or to care for a seriously ill family member.

FPL: Federal Poverty Level: Currently the FPL annual income is approximately $10,000 for an individual and $20,000 for a family of four.

GHC: Group Health Cooperative of Puget Sound. An early HMO.

HIP: Health Insurance Plan of New York. Another early HMO.

HCFA: Health Care Financing Organization. The old name for CMS.

HCTC: The Health Coverage Tax Credit program. Created in 2002, it provides tax credits worth up to 65 percent of the cost of insurance to workers who lose their jobs or take early retirement in industries deemed to have been displaced by foreign trade.

HIE: Health Insurance Experiment. The randomized study of how copayments affect health spending and outcomes conducted by the RAND Corporation.

HIPAA: Health Insurance Portability and Accountability Act of 1996. Made it easier for displaced workers to continue insurance coverage.

HIPC: Health Insurance Plan of California. An unsuccessful small business health insurance purchasing pool. Started in California in 1992; shut down in 2006.

HMO: Health Maintenance Organization. A form of managed care that relies on reversing provider incentives to reduce unnecessary care. Critics claim that HMOs go too far and limit access to necessary care.

HSA (prior to 1990): Health Systems Agency. Local planning board responsible for administering CON laws.

HSA (after 2000): Health Savings Account. An account that an individual may draw from to pay for medical bills. Unused moneys roll

over to the next year and, after age sixty-five, may be used for non-healthcare spending. Basically a rechristened MSA.

IDS: Integrated Delivery System. A system in which several hospitals own physician practices, other provider organizations, and offer their own capitated health plans.

IOM: Institutes of Medicine. Their two reports on healthcare quality spawned the current report card and pay for performance movements.

MSA: Medical Savings Account. An account that an individual may draw from to pay for medical bills. Unused moneys roll over to the next year and, after age sixty-five, may be used for nonhealthcare spending.

NHI: National Health Insurance. Still a pipedream.

OAA: Old Age Assistance program. Created in 1935, the earliest precursor to Medicare.

PCP: Primary care physician, i.e., Dr. Welby.

PHO: Physician Hospital Organization. A vertically integrated organization designed to accept capitated payments from insurers in exchange for comprehensive physician and hospital services.

PPO: Preferred Provider Organization. A form of managed care that relies on selective contracting to contain spending.

PPS: Prospective Payment System. Introduced by Medicare in 1983. Pays hospitals a flat fee per admission with the fee adjusted according to the patient's DRG.

PRO: Peer Review Organizations. Established to monitor compliance with the rules of the Medicare PPS.

PSRO: Professional Standards Review Organization. Part of the 1970s planning process. Precursors to PROs and utilization reviews.

QALY: Quality Adjusted Life Year. Scale used to measure overall health of an individual or entire population.

QOF: Quality and Outcomes Framework. Pay for performance program in the United Kingdom.

SCHIP: State Children's Health Insurance Program. A federally mandated/state-administered program to expand health insurance to low-income children.

TANF: Temporary Assistance for Needy Families. Created as part of the Welfare Reform Law of 1996. TANF assured Medicaid eligibility

for pregnant women and their children while developing a plan for self-sufficiency.

UR: Utilization review. Third-party oversight of medical decision making, including preadmission screening and second surgical opinion programs.

✚ NOTES ✚

Introduction

1. Source: Third Bush-Kerry debate, in Tempe, AZ, October 13, 2004.
2. Clinton 2004.
3. Ginzberg 1977.
4. Stevens and Stevens 1974.

Chapter One

An Accidental Healthcare System

1. Source: Woolley and Peters 2007.
2. Temin 1988.
3. Stevens and Stevens 1974.
4. Starr 1982.
5. Burrow 1977.
6. Ibid., 151 and 152.
7. Committee on the Costs of Medical Care 1972, 19. (Hereafter referred to as CCMC 1972.)
8. Temin 1988.
9. The average $239 cost in 1928 would amount to about $2,700 today. Per capita income has increased six-fold during this time. Hence the $239 bill would represent the same percentage of income in 1928 as would a $16,200 medical bill today.
10. CCMC 1972, 21.
11. We do not always avoid risk, of course, but taking risks by playing poker or buying a lottery ticket involves an element of fun and fantasy that does not apply to medical spending.
12. CCMC 1972, 24.
13. Ibid., 109.
14. http://www.ssa.gov/history/ces.html.

15. Social Security Administration, "Report of the Committee on Economic Security." Issued January 1935 and obtained from the Social Security Administration Web site: http://www.ssa.gov/history/reports/ces.html.

16. Friedberg 1998.

17. Myers 1970.

18. Stevens and Stevens 1972.

19. Some economists argue that nonprofits may provide higher levels of "hard to measure" attributes such as training of personnel. The evidence on whether nonprofits really behave this way is mixed, with some studies suggesting that many nonprofits behave like "for profits in disguise."

20. Stevens and Stevens report that in 1960, the average elderly New Yorker receiving old-age income assistance had an annual medical bill of $700.

21. Health Insurance Association of America 1962.

22. Beito 1994.

23. Temin 1988.

24. Falk, Rorem, and Ring 1933.

25. Anderson 1975, 36.

26. Ibid.

27. Aetna actually offered its first health insurance product in 1899. It was offered only to individuals who already had life or accident coverage and was intended mainly as a marketing tool. Source: Aetna's corporate Web page: http://www.aetna.com/about/aetna/aag/history.html.

28. Source: Health Insurance Association of America 1959.

29. For more discussion, especially of the legal barriers to the creation of the Blues, see Cunningham and Cunningham 1997.

30. Pauly 1997.

31. The health benefits offered by many employers did not take the form of insurance as defined by the IRS, which complicated the IRS effort to rule on tax treatment (Thomasson 2003, 1374–75). See also, Comment 1954, 222–47.

32. Selden and Gray 2006, 1568–79.

33. Blendon and Benson 2001, 33–46.

Chapter Two

Paging Doctor Welby

1. Enthoven 1978, 650–58.

2. According to one survey, 70 percent of Americans had a "great deal" of confidence in those running the healthcare system. By the 1990s, that figure hovered near 30 percent (Blendon and Benson 2001, 33–46).

3. Fuchs 1974.

4. Roemer 1961, 36–42.

5. This is a variant of an economic concept known as Say's Law, namely that supply creates its own demand. Roemer actually found that hospitals only filled about half the new beds, so the law should be "A bed built is a bed half filled."

6. Arrow 1963, 941–73.

7. Ideally free markets promote efficient production and competitive pricing. Goods are produced at the lowest possible cost and sold to consumers at marginal costs. In turn, consumers purchase only those goods that are valued at more than their cost. This assures that an economy gets the most out of its available resources.

8. Though one could give up happiness to insure against health, for example by cutting back on dessert.

9. Arrow also noted the crucial role of nonprofit hospitals, stating "The very word profit is a signal that denies the trust relations." (1963, 208).

10. Evans 1974, 162–73.

11. Though not very relevant when Evans did his research, it is also true that physicians paid a fixed salary have an incentive to under prescribe.

12. Satterthwaite 1982.

13. It is also possible that patients in shortage areas were undertreated, though inducement theorists do not push this interpretation. Inducement could also be considered a response to malpractice, but the theory and much of the evidence predates such concerns.

14. Several papers give this line of argument. For example: Pauly and Satterthwaite 1981, 488–506 and Dranove and Wehner 1994, 61–73. One study that seems to confirm the inducement hypothesis is by Gruber and Owings, who show that the rate of caesarian sections increases with the supply of obstetricians. The magnitude of this effect is very small, however (Gruber and Owings 1996, 99–123).

15. For example, see, Barro and Beaulieu 2003 and Gaynor et al. 2004, 915–31.

16. Examples of such studies include Office of Inspector General, 1989 and Hillman et al. 1990.

17. Hemenway et al. 1990, 1059–63.

18. For a review of the older literature on hospital economies of scale, see Long 1985, 25–44.

19. For a summary, see Luft et al. 1990.

20. Pauly 1968, 531–37.

21. For example roughly two-thirds of physicians surveyed in 1955 acknowledged that health insurance increased the willingness of their patients to be hospitalized and undergo surgery. See Freidson and Feldman 1958.

22. As Nixon's plan became more expansive, responsibility for the research was transferred to the Department of Health, Education and Welfare (now the Department of Health and Human Services).

23. A partial list of RAND HIE participants (with subsequent academic positions) includes Robert Brook (UCLA), Emmett Keeler (UCLA), Arlene Leibowitz (UCLA), Willard Manning (University of Chicago), and Charles Phelps (University of Rochester). Newhouse is a professor at Harvard University and has also advised numerous federal healthcare agencies.

24. The enrollees lived in one of six locales including big cities, suburbs, and small cities.

25. Some participants in Seattle were enrolled in the Group Health Cooperative of Puget Sound, a large Health Maintenance Organization.

26. A thorough review can be found in Newhouse et al. 1993.

27. The picky reader will point out that one can never "get to" infinity through finite price increases. The less picky reader will understand the point my colleague was making.

28. By this time, the lines between Blue Cross and Blue Shield had blurred, as many Blue Cross plans sold medical coverage and many Blue Shield plans sold hospital coverage.

29. Robinson and Luft 1985, 333–56.

30. Weisbrod 1991, 523–52.

31. Mullan 2004.

32. Ibid.

33. Rothschild and Stiglitz 1976, 629–50. Both Rothschild and Stiglitz have had illustrious careers in academia. Rothschild is a chaired professor at Princeton and a fellow of the American Academy of Arts and Sciences (AAAS). Stiglitz is a chaired professor at Columbia University, a fellow of the AAAS, and served as the chairman of the Council of Economic Advisors under President Clinton.

34. These numbers are drawn from two large federally sponsored surveys, the Survey of Income and Program Participation (SIPP) and Medical Expenditure Panel Survey (MEPS). The latest figures may be slightly higher than what is reported here.

35. Source for Medicare and Medicaid enrollments: Health Insurance Association of America 1989.

36. Medicaid also provides aid to the indigent blind.

37. Source: Kaiser Family Foundation and Health Research and Education Trust 2005.

38. Medical underwriting involves predicting the medical expenditures for an individual or group and setting premiums accordingly.

39. Bundorf and Pauly 2006, 650–73.

40. Although it has proven difficult to produce a reliable estimate of the effect of insurance on bankruptcy rates, there is little doubt that the former is a major predictor of the latter.

41. Institutes of Medicine of the National Academies 2003.

42. This provision was a response to employer mandates that had been enacted by Hawaii. The law granted an exemption for Hawaii, which proved essential to Hawaii's subsequent enactment of an employer pay-or-play requirement.

43. For example, the conservative National Center for Policy Analysis cites a Milliman and Robertson analysis of just twelve mandates and concludes that they could increase insurance costs by 15 to 30 percent. The NCPA does not say that this would occur only if the benefits would not otherwise be offered. See NCPA 1997.

44. Jensen and Morrisey 1999.

45. Public finance economists Jonathan Gruber and Brigitte Madrian provide an excellent overview of this literature, from which I draw the results cited herein. See Gruber and Madrian 2002.

Chapter Three

Therapy for an Ailing Health Economy

1. Tunney 1971, 3.

2. Most insurers will not reimburse hospitals unless they are accredited by the nongovernmental Joint Commission on Accreditation of Healthcare Organizations.

3. "An Interview with Paul Ellwood" 1997.

4. Williams 1991.

5. Crowley 1996, 139.

6. HMOs have no greater incentive to keep their patients healthy than do standard indemnity plans. Both prosper when medical costs are low.

7. Crowley 1996.

8. Cutting 1971, 20.

9. Williams 1971, 17.

10. Williams 1971.

11. Economist Katherine Ho offers data suggesting that negative perceptions of quality remain an important obstacle to entry by Kaiser and the GHC outside of their traditional West Coast bases. See Ho 2006.

12. Coggeshall 1965, 26.

13. Somers and Somers 1977, 251.

14. The most widely cited study is Salkever and Bice 1976, 185–214.

15. Morrisey 1999.

16. Conover and Sloan 1998.

17. This example appears in Demlo 1983.

18. The program also covered patients in a separate Maternal and Child Health program.

19. Reischaver 1979.

20. Dranove and Cone 1985.

21. Assaf et al. 1993.

22. Golden and Kurkjian 1994; Thomas 1994.

23. Lipman 1995.

24. Morrisey, Sloan, and Valvona 1988.

25. See Staiger and Gaumer 1992, Cutler 1995, and Shen 2003a.

26. Sussman and Langa 1993.

27. For example, see Angelleli, Grabowski, and Gruber 2006 for evidence that quality in nursing homes is a public good.

28. Dranove and White 1998.

29. Schwartz, Colby, and Reisinger 1991.

30. Source: State Health Access Data Assistance Center 2006.

31. Estimates of crowd out range as high as 60 percent. The seminal paper on crowd out is Cutler and Gruber 1996. For more recent evidence see Lo Sasso and Buchmueller 2004 and Gruber and Simon 2007.

32. This result is cited in Madrian 1998.

33. Gruber and Madrian 1996.

34. Gruber and Madrian 1997.

35. Gruber and Madrian 2002.

36. Kaiser Family Foundation and Health Research and Education Trust 2007.

37. For a review of this literature, see Chollet 2004.

Chapter Four

The Managed Care Prescription

1. Both quotes from Hall and Findlay 1997.

2. Berg 1983; Barron 1984.

3. Quoted in Rosenbaum 1984.

4. Newhouse et al. 1993.

5. Newhouse 2006.

6. To my knowledge, there is no systematic evidence on the impact of these cost-sharing provisions on total medical spending. The impact could not have been profound; spending continued to increase.

7. Source: U.S. Department of Health and Human Services 2003 and author's own calculations.

8. Luft 1978.

9. Ibid.

10. Ginsburg 2000.

11. See Chassin 1996 for further discussion of physician skepticism about quality improvement.

12. Miller and Luft 1994.

13. See, for example, Cutler and Sheiner 1997.

14. Dranove and White 1998.

15. Barro and Beaulieu 2003.

16. Gaynor, Rebitzer, and Taylor 2001.

17. Wickizer, Wheeler, and Feldstein 1989.

18. Cutler, McClellan, and Newhouse 2000. This is a high-powered research team. Cutler was an advisor to the Clinton healthcare task force and is currently dean of the Harvard University College of Arts and Sciences; McClellan is a Stanford professor who took time out to run the FDA and CMS under President George W. Bush; Newhouse, a Harvard professor considered by many to be the "dean" of health economists, led the RAND study and has headed the panel that advises Medicare.

19. See Flood et al. 1998.

20. I was Enthoven's doctoral student between 1979 and 1983. Most of this discussion is based on personal communications with Enthoven.

21. Unlike the Rothschild-Stiglitz model, enrollees would still pay the same amount regardless of their own health needs.

22. Source of quote: Personal communication with Alain Enthoven.

23. Source: At this conference on health reform that I attended, Enthoven debated Clinton advisor Paul Starr. Enthoven was clearly disappointed at the ways in which his ideas had morphed into such a highly regulated scheme.

24. The first article in a major newspaper commenting about a backlash to HMOs or managed care appears to have appeared in the February 12 edition of the *St. Petersburg Times*. On May 19, the *New York Times* ran a front page article by noted healthcare writer Milt Freudenheim entitled "HMOs Cope with a Backlash on Cost Cutting."

25. Ad hoc Committee to Defend Health Care 1997.

26. Pham 1997.

27. Source: Harris Polls, cited in Blendon and Benson 2001.

28. Source: Ibid. This survey question had been asked since 1978.

29. Gawande et al. 1998.

30. Hellinger 1996.

31. Miller and Luft 1997.

32. Miller and Luft 2002.

33. Reschevsky, Hargraves, and Smith 2002.

34. Chernew, Scanlon, and Hayward 1998; O'Neill 2002.

35. Dranove and Satterthwaite 1992.

36. Long after Patient Bill of Rights legislation died, Americans continued to support government standards to "protect the rights of patients in HMOs." See Pew Research Center 2001.

37. "Aetna" 2001.

38. In 2002 Rowe replaced Donaldson as CEO.

39. Hawkins 2000.

40. Ho 2005.

41. Source: Current Population Survey, various years.

42. For a summary of this research, see Town and Vogt 2006.

43. American Medical Association 2006.

44. This also assumes that the insurance industry would have survived intact at the near zero profit levels it was achieving back in 2000.

45. Source: U.S. Department of Health and Human Services. The increase for nurses between 2000 and 2004 was 23.5 percent, with the trend forecast to hold through 2005.

46. Claxton et al. 2005.

47. Gruber and Washington 2003.

48. Gruber 2007.

49. Institutes of Medicine 1999; Institutes of Medicine 2000.

Chapter Five
Self-Help

1. Goodman 2004.

2. The term "Health Savings Account" was coined by Edward Shapiro in 1980. For a fuller account of the history of HSAs, see Bowen 2005.

3. Worthington 1978.

4. Hixson 1980.

5. Goodman and Musgrave 1992. The book was reissued in 1994 with a different subtitle: *Patient Power: The Free-enterprise Alternative to Clinton's Health Plan.*

6. Christmas Clubs used to be a major savings vehicle. Individuals would deposit a little bit of money into their Christmas Club account every month and then withdraw the accumulated total in December to purchase presents.

7. Nowadays that individual would be guaranteed by law the right to continued coverage. I will have more to say about this in chapter 7.

8. These are due for an increase in 2007.

9. For a description of the frustrations many enrollees are experiencing, see Fuhrmans 2007.

10. For a summary of this literature, see Buntin et al. 2006.

11. Hall and Havighurst 2005.

12. Sullivan and Sharon 2006.

13. AHIP Center for Policy and Research 2006.

14. Fronstin and Collins 2006.

15. A well-known problem with surveys of this kind is that individuals often do not know what kind of plan they are enrolled in (for years this has plagued efforts to measure enrollments in HMOs versus PPOs.) For example, my employer Northwestern University began offering a new "Value Plan" this year, complete with high deductibles and an MSA. While Northwestern has held countless educational sessions about the new offering, some of my colleagues who have signed up for the Value Plan did not realize that it is a CDHP or even that it has an HSA. And these are business economists!

16. Kaiser Family Foundation and Health Research and Education Trust 2007.

17. U.S. Government Accountability Office 2006.

18. Sullivan and Sharon 2006.

19. Buntin et al. 2006.

20. United Health Group Press Release, July 12, 2006.

21. Buntin et al. 2006, w523.

22. While these studies control for characteristics of enrollees that are observable to the researcher (e.g., age), they do not control for unobservable enrollee characteristics that might affect both the decision to enroll in a CDHP and costs. (For example, the enrollee would know about a recent change in health status but the researcher would not have this information.) This implies that the results of these studies may suffer from "selection bias" and are therefore unreliable.

23. Berenson 2005.

24. I will ignore the very real possibility that individuals equate higher prices with higher quality, which would mitigate any incentive to shop for the lowest price provider.

25. There are few if any hamburger "outliers"; customers who use fifty packets of ketchup or find some other way to dramatically drive up the cost of the hamburger.

26. Shleifer 1985.

Chapter Six

The Quality Revolution

1. Brook 1998.

2. The field of quality evaluation is evolving rapidly. Rather than try to provide a comprehensive, up to the minute review of all the latest research, this chapter introduces the essential theoretical concepts and highlight some of the key research findings. I hope that the framework I present in this chapter will allow the reader to synthesize new research as it emerges.

3. Brook et al. 1983.

4. Source: IOM Press release, http://www.iom.edu/CMS/28312/5010/30506.aspx. Searched 6/14/2007.

5. Brook 1998.

6. Institutes of Medicine 1999.

7. Institutes of Medicine 2000.

8. Source: http://www.healthgrades.com/AboutUs/. Searched 2/22/2007.

9. The Web sites are www.hospitalcompare.hhs.gov and http://www.medicare.gov/NHCompare/Home.asp.

10. Shearer and Cronin 2005.

11. Weiler et al. 1993.

12. Donabedian 1980.

13. The seminal paper is Luft, Bunker, and Enthoven 1979. A follow-up study partially resolves some issues of causality. See Luft, Hunt, and Maerki 1987.

14. More recent studies suggest that there is substantial learning for heart surgery; it remains to be seen whether learning is equally important for other procedures. See Huckman and Pisano 2006 and Ramanarayanan 2007.

15. Schneider and Epstein 1996.

16. Quoted in Burton 1999.

17. Dranove and Satterthwaite 1992.

18. For example, "Cardiac Surgery Outcomes Improve in New York Hospitals," Press Release from Healthcare Association of New York, October 31, 2005.

19. Dranove, Kessler, McClellan, and Satterthwaite 2003.

20. Werner 2005. A version of this paper appears as Werner, Asch, and Polsky 2005.

21. Both race and prior hospitalization are indirect indicators of medical need; the New York statisticians restrict their risk adjusters to direct indicators such as blood pressure that are drawn from medical records.

22. Brennan et al. 1991.

23. Geraci et al. 1999.

24. Werner and Bradlow 2006.

25. Accessed 7/16/2007.

26. Mennemeyer, Morrisey, and Howard 1997.

27. Mukamel et al. 2004–5; Dranove and Sfekas 2007. There is also recent evidence that enrollees respond to managed care report cards. For example, see Scanlon et al. 2002.

28. This view is explicitly incorporated into the 1970 legislation creating the French health insurance system, the "Carte Sanitaire."

29. Merritt 2006.

30. I am indebted to Professor Joel Shalowitz, who teaches Kellogg's course on international health systems, for this example.

31. An oft-cited article on multitasking published in a management journal casts the problem in a very similar way. The title of the article: "On the Folly of Rewarding A, while Hoping for B" (Kerr 1995).

32. Holmstrom's first paper on agency is mandatory reading for every economics Ph.D. student and he has written many influential papers on agency since then. See Holmstrom 1979. Milgrom's book on the economics of organizations, coauthored by my former advisor John Roberts (another Nobel candidate) inspired the academic field of the economics of strategy. See Milgrom and Roberts 1992. Milgrom is also known for his research on auctions and on game theory.

33. Holmstrom and Milgrom 1991.

34. Poon et al. 2004.

35. Klasco 2003.

36. Needleman et al. 2002. Twenty-five nurses working eight-hour weekday shifts would add approximately two hundred nursing hours per day. A typical hospital has about 150 inpatients on a given weekday; thus, the added staffing represents an additional 1.33 hours per patient, enough to make a measurable impact on quality according to Needleman's findings.

37. For evidence of the kind of gaming that occurs, and a broader review of this literature, see Figlio and Getzler 2002 and Cullen and Reback 2006.

38. Petersen et al. 2006.

39. Shen 2003b.

40. Hagland 2006.

41. Lindenauer 2007.

42. For a detailed discussion of this program and its results, see Galvin 2006.

43. Mullen, Frank, and Rosenthal 2006.

44. Lu 2007.

Chapter Seven

Mending the Safety Net

1. "Statement from Risa Lavizzo-Mourey, M.D., MBA, RWJF President and CEO, Regarding Release of Federal Estimates of Number of Uninsured Americans," News release from Robert Wood Johnson Foundation, Princeton, NJ, 8/29/2006.

2. The vast majority of seniors have enrolled and most reported the process to be easy or fairly easy. See Weir 2007.

3. For a nice discussion of AHP features, see Kofman et al. 2006.

4. Source: Kaiser Family Foundation and Health Research and Educational Trust 2006.

5. Gruber and Lettau 2004.

6. Simple comparisons of premiums paid by small and large employers often show no difference, but these comparisons do not adjust for benefits or differences in risk.

7. There were fifty-one licensed small group carriers in Illinois in 2004. Not all of these do business in the Chicago area and many will not offer a PPO product analogous to that obtained by Northwestern University. Even so, the market has many competitors and market forces are at play. Source: Letter from the U.S. Government Accountability Office to Senator Olympia Snowe, subject "Private Health Insurance: Number and Market Share of Carriers in the Small Group Health Insurance Market in 2004." Letter dated 10/13/2005. The letter reports that there are over two dozen small group carriers in the median state.

8. Jack Meyer and Lise Rybowski provide an in-depth look at these purchaser cooperatives (Meyer and Rybowski 2001).

9. Yegian et al. 2000.

10. For an example of the death spiral in the private sector, see Cutler and Zeckhauser 1997.

11. Source: Personal conversation between Steve Millard and my research assistant, Christa Van der Eb.

12. National Economic Council 2006.

13. Source: Web site www.statehealthfacts.org, sponsored by the Henry J. Kaiser Family Foundation.

14. Minnesota would still have the smallest percentage of uninsured even without the risk pool.

15. Infectious diseases are an obvious exception but account for small percentage of total health spending.

16. Source: www.statehealtfacts.org.

17. Pauly has written extensively on the topic. For example, see Patel and Pauly 2002.

18. Herring and Pauly 2006.

19. For an excellent discussion of the politics of state health reform, see Brown and Sparer 2001.

20. Kaye 2005.

21. Source: United States Small Business Administration, 2006, *Small Business Profiles for the States and Territories.*

22. ERISA permits Hawaii to regulate self-insured firms. It is the only state that has this exemption. In fact, the Hawaii employer mandate prompted the ERISA legislation.

23. Ostram 1994.

24. Dirigo is Latin for "I direct."

25. "Health Care For All? Not Quite" 2007.

26. Cited in Bragdon 2006.

27. There have been occasional complaints that Anthem Blue Cross, the state's Dirigo carrier, is either actively or passively discouraging enrollments. For example, see Langley 2006.

28. Anyone who claims that premiums have nothing to do with costs or competition would have to explain why insurers do not charge twice their current rates or even higher. Even monopolists pass along portions of cost increases and decreases to their customers.

29. Quoted in Belluck 2006.

30. Moffit and Owcharenko 2006.

31. Woolhandler and Himmelstein 2006.

32. The Robert Wood Johnson Foundation keeps an up-to-date compilation of state coverage initiatives. See http://www.statecoverage.net.

33. Source: Speech given by Secretary of Health and Human Services Michael Leavitt at American Enterprise Institute, Washington, DC, 4/24/2007.

34. Hill and Wolfe 1998.

35. Abramowitz 1992.

Chapter Eight

Reviving the American Healthcare System

1. Committee on the Costs of Medical Care 1972, x.

2. See Pope et al. 2004 and Ash, Ellis, and Kramer 2001 for examples of ongoing research and applications of risk adjustment.

3. There is a range of estimates of the cost of EMR. These figures are drawn from Miller et al. 2005.

4. Walker et al. 2005.

5. Kleinke 2005.

6. Source: ANSI Web site searched 1/31/2007: http://www.ansi.org/standards_activities/standards_boards_panels/hisb/hitsp.aspx?menuid=3#News.

7. Quoted in "Standards Panel Delivers Interoperability Specifications to Support Nationwide Health Information Network," PR Newswire, November 1, 2006.

8. Most private insurers use some variant of Medicare's billing system. Both DRGs and the Resource-based Relative Value Scale started with Medicare before moving to the private sector. Utilization review service agencies got their start as Medicare Professional Review Organizations.

9. Miller and Tucker 2007.

10. I am not wedded to these exact figures and I am confident that plans will experiment to find the range that works best.

11. The RAND study was never designed to capture this effect, but it is likely to be huge.

12. Renowned policy expert Jeff Goldsmith offers similar hope and concern about episode-of-illness payments, but does not acknowledge the role of information technology (Goldsmith 2007).

13. The state also needs to do a better job of generating statistics showing how it is doing. Their current methods suffer from inherent statistical biases due to the failure to account for potential gaming. The state has been hostile to such criticism, bordering on defensiveness. The state should not confuse a discussion about valid statistical measures with a rejection of their program.

14. Ware and Sherbourne 1992.

15. The list of CMS/HCFA administrators reads like a Who's Who in health services research, including Carolyn Davis, Gail Wilensky, Bruce Vladeck, and Mark McClellan. The list of advisors is equally impressive.

16. U.S. Government Accountability Office 2003.

17. Nivola 2005.

18. Speech given by Secretary of Health and Human Services Michael Leavitt at American Enterprise Institute, Washington, DC, 4/24/2007 and personal communication with Secretary Leavitt.

19. Weisbrod 1991.

20. Cutler 2005.

21. This is not out of line with valuations used in Canada, Australia, and England when health agencies consider whether to pay for new technology.

22. There is considerable research to back this up. For example, see Finkelstein 2004 and Acemoglu and Linn 2004. Unfortunately the research is not refined enough to tell us the kinds of research projects that would be most affected by a cutback in industry profits.

23. Other nations "free ride" on technology developed for the potential profits of the U.S. market. The same might occur under the federalist approach, where a state with tight budget controls gains access to drugs developed for the potential profits in other states.

24. Industry critics such as Marcia Angell, former editor-in-chief of the *New England Journal of Medicine*, correctly point out that drug companies earn rates of return well above the norms for other industries and spend as much money marketing their innovations as they spend on R&D (Angell 2004). Moreover a lot of R&D leads to "me-too" drugs that only marginally expand treatment opportunities. But it is difficult to envision a way to restrain industry profits without restraining incentives to innovate. Other nations have rules that pay companies higher prices for truly innovative products (as judged by the regulators). Even so, these innovative products command lower prices elsewhere than they do in the United States.

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