

Endnotes



CHAPTER ONE

1. Alliance for Aging Research, Medical Never-Never Land: 10 reasons why America is not ready for the coming age boom, 2002. Last accessed March 1, 2006 at www.agingresearch.org/advocacy/geriatrics/02016_aar_geriatrics_text.pdf.
2. See the report at the link in the endnote above. According to this report, there are 76 million aging Baby Boomers in America today. Thirty years from now, those 65 years and older will represent one-fifth of the United States' population. The elderly account for a large share of the patient load of physicians. People 85 and older—the “old, old”—are the heaviest consumers of health-care. They see a physician about 15 times a year, compared to about 11 visits for those over the age of 65, and 7 visits for those between 45 and 65.

As of right now, only 9,000 of the 650,000 licensed physicians practicing in the U.S.—fewer than two%—are certified in geriatrics. Worse, this number is shrinking as physicians retire or choose not to be re-certified. The problem is that Medicare payments fall woefully short as adequate compensation for the time it takes a doctor to assess and treat an elderly patient. Imagine—the usual elderly patient may have two, three, or more diseases or conditions. Medicare will pay a small amount for an appointment. That sum might be barely adequate compensation for a 10-minute visit. But most elderly patients should be seen for 45 minutes to an hour in order for a doctor to get a real handle on the changes in their condition and how their medications are or are not working for them. No wonder doctors are retiring from this field, and no wonder medical students aren't interested in pursuing geriatrics. There are other reasons why medical students can't and don't get trained in geriatrics. A major reason is that only three of the nation's 144 medical schools have a full department of geriatrics, and only 14 of these medical schools include geriatrics in their required courses.

While 86 medical schools offer an elective in geriatrics, only 3% of medical students choose to register for these courses. Let's face it: it's just not very appealing to consider treating the elderly patient. Many of them are sick or at death's door. Other areas of medicine are more satisfying and don't include

Endnotes

getting involved on an intimate personal basis with a patient who's going to die fairly soon anyway.

The lack of doctors trained in geriatrics is only a small part of the problem. Only 720 of the nearly 200,000 pharmacists in the U.S. have geriatric certifications. This fact is shocking in light of the fact that the elderly are by far the largest users of pharmaceutical products. Fewer than 1% of registered nurses are certified in geriatrics, and less than 3% of advance care nurses specialize in the care of the elderly. Health providers in nursing homes—nurses, therapists such as physical and speech therapists, and aides—all lack training in geriatrics.

CHAPTER TWO

1. I have changed the name of the nursing home Mom was in for the simple reason that I don't want to be sued by the facility because it may disagree with my interpretation of its medical records and/or of conclusions I have reached in reliance upon studies and investigations in medical journals. For the same reason, I will use a generic term such as "antipsychotic" or the generic name of a drug rather than the brand name of drugs, except where several brand names of commonly used medications are given as examples.
2. Espino DV, Jules-Bradley AC, Johnston CL, Mouton CP. Diagnostic approach to the confused elderly patient. *Am Fam Physician*. 1998 Mar 15;57(6):1358–66. www.aafp.org/afp/980315ap/espino.html. When you see a statement like this that says, for example, "between 15 to 26%," it means that the statistics were derived from several studies. The lowest percent in any study was 15% and the highest in any study was 26%.
3. Tzepacz PT. Delirium. *Psychiatric Clinics of North America*. 1996;19(3): 429–448.
4. Id.
5. Espino DV, et al., supra.
6. Espino DV, et al., supra.
7. *Merck Manual*, section 6, chapter 76. www.merck.com/pubs/mmanual_home.
8. Espino DV, et al., supra; Jacobson S, Schreiberman B. Behavioral and pharmacologic treatment of delirium. *Am Fam Physician*. 1997 Nov 15;56(8): 2005–2020. Lavizzo-Mourey R, Johnson J, and Stolley P. Risk factors for dehydration among elderly nursing home residents. *J Am Geriatr Soc*. 1988;36(2): 213–218.
9. Drug-induced delirium produces behavior that is often altered in different ways, depending on the drug. If sleeping pills are causing delirium, for example, the person may be withdrawn. Amphetamines, by contrast, may produce behaviors that are aggressive and/or hyperactive. Mom was taking several drugs that have delirium as a side effect.

Endnotes

10. Jacobson S, et al., supra; Bross MH, Tatum NO. Delirium in the elderly patient. *Am Fam Physician*. 1994 Nov 1; 50(6):1325–32.
11. Tueth MJ, Cheong JA. Delirium: Diagnosis and treatment in the older patient. *Geriatrics*. 1993;48(3):75–80; Jacobson S, et al., supra; Espino DV, et al., supra.
12. Espino DV, et al., supra.
13. Gurvich T, Cunningham JA. Appropriate use of psychotropic drugs in nursing homes. *Am Fam Physician*. 2000 Mar 1;61(5):437–46. www.aafp.org/afp/20000301/1437.html; Kidder SW, supra; Siegler EL, Capezuti E, Maislin G, Baumgarten M, Evans L, Strumpf N. Effects of a restraint reduction intervention and OBRA '87 regulations on psychoactive drug use in nursing homes. *J Am Geriatr Soc*. 1997; 45:791–6.
14. Espino DV, et al., supra.
15. Dr. Mark Beers notes in the *Merck Manual* that an antipsychotic drug may be prescribed for a delirious patient who is aggressively paranoid or extremely fearful or to those who cannot be calmed with benzodiazepines such as Valium, but only as a means of resolving an acute problem on a short-term basis. Beers notes that antipsychotics must be used with extreme caution with elderly patients lest the drugs cause more agitation or confusion and/or mask an underlying problem. *Merck Manual*, Section 14, Chapter 171. www.merck.com/pubs/manual/section14/chapter171/171b.htm Last accessed March 1, 2006.
16. Snader T. Appropriate use of antipsychotic agents in the treatment of behavioral symptoms of dementia. *HCFA Psychoactive Drugs*. Summer 1998, Vol. VI, No. 2. www.hcfa.gov/publications/newsletters/restraint/1998/rfspr98.htm. Last accessed March 1, 2006.
17. J. Consult Pharm, 1998 Feb; “Health Trends: Nursing Facility Top Ten Medications.” There are no statistics available for later years. www.ascp.com/public/pubs/tcp/1998/feb/healthtrends.shtml on Last accessed March 1, 2006.
18. Irizarry MC, Ghaemi SN, Lee-Cherry AR, Gomez-Isla T, Binetti G, Hyman BT, Growden JH. Risperidone treatment of behavioral disturbances in outpatients with dementia. *J Neuropsychiatry Clin Neurosci*. 1999 Summer;11(3): 336–342.
19. Id.
20. Tueth MJ, supra.
21. Espino DV, et al., supra.
22. Jacobson S, et al., supra.

CHAPTER THREE

1. Antipsychotics, along with antidepressants, antianxiety medications, and sedatives/hypnotics, belong to the larger category known as psychotropic drugs. These are the drugs most often implicated in adverse drug reactions, resulting in harm to the elderly. Gurwitz JH, Field TS, Avorn J, McCormick D, Jain S,

Endnotes

Eckler M, Benser M, Edmondson AC, Bates DW. Incidence and preventability of adverse drug events in nursing homes. *Am J Med.* 2000 Aug 1;109(2):87–94. Often, as with Mom, nursing home residents and their families are completely unaware of the dangers these drugs pose.

In spite of this, psychotropic drugs, which have limited use in the elderly, maximum potency in the elderly, and are dangerous to the elderly, are frequently prescribed in nursing homes today.

Khan M, Farver D. Recognition, assessment and management of neuroleptic malignant syndrome. *S D J Med.* 2000 Sep;53(9):395–400; Scott BL. Evaluation and treatment of dystonia. *South Med J.* 2000 Aug;93(8):746-51.

2. Beers M., supra (1997); Gurvich T, et al., supra; Khan M, Farver D, supra; McDonough CM, Swift G, Managan B, Sheehan JD. Neuroleptic malignant syndrome: A diagnosis easily missed. *Ir Med J.* 2000 Jul–Aug;93(5):152–4. See also, Bajjoka I, Patel T, O’Sullivan T. Risperidone-induced neuroleptic malignant syndrome. *Ann Emerg Med.* 1997 Nov;30(5): 698–700; McDonough CM, Swift G, Managan B, Sheehan JD: Neuroleptic malignant syndrome: a diagnosis easily missed. *Ir Med J* 2000 Jul–Aug;93(5):152–4; Gleason PP, Conigliaro RL. Neuroleptic malignant syndrome with risperidone. *Pharmacotherapy.* 1997 May–Jun;17(3):617–21; Colón-Emeric C, White H. Case report: Catatonia and neuroleptic malignant syndrome in the nursing home. *Annals of Long-Term Care.* 1999;7(1):28–30; Bair BD. Presentation and recognition of common psychiatric disorders in the elderly. *Clin Geriatr Med.* 1994;10(2): 239–394. 2001 Aug. 9 (9).
3. Our request for withdrawal was not based upon any knowledge of the drug’s dangers to Mom but rather on the belief that she was “not crazy” and that an antipsychotic was inappropriate. Here is a case where some education on the part of our family could have made a difference. It was only when Alpine Manor learned I would be transferring Mom to another facility that they finally—cold turkey—discontinued the medication.
4. Besdine RW, Beers MH, et al., supra; Gurwitz JH, Field TS, Avorn J, supra (2000).
5. The Institute for Safe Medication Practices (ISMP), a nonprofit organization, is dedicated to the safe use of medications through improvements in drug distribution, naming, packaging, labeling, and delivery system design. The ISMP works closely with healthcare practitioners and institutions, regulatory agencies, professional organizations, and the pharmaceutical industry to provide education about adverse drug events and their prevention. The Institute also partners with the FDA in MEDWATCH, an alert system for reporting of medication errors and adverse reactions, and regularly communicates with the FDA to help to prevent medication errors.
6. Besdine RW, Beers MH, et al., supra, citing Hepler CD, Strand LM. Opportunities and responsibilities in pharmaceutical care. *Am J Hosp Pharm.* 1990; 47:533–43.

Endnotes

7. Besdine RW, Beers MH, et al., supra.
8. Nananda C, Fanale JE, Kronholm P. The role of medication noncompliance and adverse drug reactions in hospitalizations of the elderly. *Arch Intern Med.* 1990;150(4):841–46.

CHAPTER FOUR

1. Holland EG, Degruy FV. Drug-induced disorders. *Am Fam Physician.* 1997 Nov 1;56(7):1781–8, 1791–2.
2. This definition is a combination of the definitions of the World Health Organization (WHO) and the American Society of Health-System Pharmacists (ASHP). “Requirements for adverse drug reaction reporting.” Geneva: World Health Organization, 1975; American Society of Hospital Pharmacy. ASHP guidelines on adverse drug reaction monitoring and reporting. *Am J Health Syst Pharm.* 1995; 52:417–9.
3. Besdine RW, Beers MH, et al., supra; General Accounting Office (1996). Prescription drugs and the elderly: Many still receive potentially harmful drugs despite recent improvements. Washington, DC.
4. The “extrapyramidal” system refers to an area in the brain that is important in planning movements, but not in directly carrying them out, and includes the structures deep in the brain called “the basal ganglia.” Problems with the extrapyramidal system are involved in movement disorders such as Parkinson’s disease and Huntington’s disease.
5. Irizarry MC, et al., supra.
6. Kidder, SW, supra.
7. Id.
8. Id.
9. Id.
10. Harris MJ, Panton D, Caligiuri MP, Krull AJ, Tran-Johnson TK, Jeste DV. High incidence of tardive dyskinesia in older outpatients on low doses of neuroleptics. *Psychopharmacol Bull.* 1992;28:87–92; Saltz BL, Kane JM, Woerner MG, Lieberman JA, Alvir JM, Blank K, Kahaner K, Foley C. Prospective study of tardive dyskinesia in the elderly. *Psychopharmacol Bull.* 1989;25:52–56.
11. Kidder SW, supra.
12. Id.
13. Casey DE. Tardive dyskinesia. In: Meltzer HY, ed. *Psychopharmacology: The Third Generation of Progress.* New York, NY: Raven; 1987:1411–1419; Jeste DV, Wyatt RJ. *Understanding and Treating Tardive Dyskinesia.* New York, NY: Guilford; 1982.
14. Holland EG, Degruy FV, supra.
15. Cooper JW. Adverse drug reaction-related hospitalizations of nursing facility patients: a four-year study. *South Med J.* 1999 May;92(5):485–90.

Endnotes

16. Id.
17. Forster AJ, Murff HJ, Peterson JF, Gandhi TK, Bates DW. The incidence and severity of adverse events affecting patients after discharge from the hospital. *Annals of Intern Med.* 2003 Feb 4;138(3):161–7.
18. Id.
19. Id.
20. Gurwitz JH, Field TS, Avorn J, et al. (2000).
21. Id.
22. Id.
23. The words “psychoactive” and “psychotropic” are used interchangeably
24. Gurwitz JH, Rochon P. (2002).
25. Gurwitz JH, Field TS, et al. (2003).
26. Dr. Mark H. Beers is the editor-in-chief of the *Merck Manual* and the *Merck Geriatric Manual* and a leader in the area of advocacy for the elderly, particularly as related to responsible medication use.
27. Beers MH, et al. (1991).
28. Beers M. (1997); Inappropriate prescribing for elderly Americans in a large outpatient populations, Curtis, Beers, et al., *Arch Intern Med.* 2004; 164:1621–1625.
29. Gurwitz, JH, Rochon, P. Improving the quality of medication use in elderly patients a not-so-simple prescription. *Arch Int Med.* 2002 August 12;162(15).
30. The URL for the website with package inserts for the top 200 prescription medications is www.mosbysdrugconsult.com/DrugConsult/Top_200/Drugs/e1916.html.

CHAPTER FIVE

1. Evans R. Trauma and falls. In: Sanders AB, ed. *Emergency care of the elder person*. St. Louis: Beverly Cracom Publications, 1996:153.
2. Siegler EL, Capezuti E, Maislin G, Baumgarten M, Evans L, Strumpf N. Effects of a restraint reduction intervention and OBRA '87 regulations on psychoactive drug use in nursing homes. *J Am Geriatr Soc.* 1997;45:791–6.
3. Kenzora JE, McCarthy RE, Lowell JD, Sledge CB. Hip fracture mortality: Relation to age, treatment, preoperative illness, time of surgery, and complications. *Clin Orthop.* 1984;186:45–56.
4. Thapa PB, Gideon P, Fought RL, Ray WA. Psychotropic drugs and risk of recurrent falls in ambulatory nursing home residents. *Am J Epidemiol.* 1995 Jul 15;142:202–11.
5. Id.
6. Id.
7. Steinweg KK. The changing approach to falls in the elderly. *Am Fam Physician.* 1997Nov 1;56(7):1815–1821.

Endnotes

8. Id.; Siegler EL, et al., supra.
9. Thapa PB, et al., supra.
10. Id.
11. The GOOGLE search “urinary incontinence” pads “home delivery” yielded 1,140 hits on March 1, 2006. (Contrast with 290 hits on Nov. 8, 2004.)

CHAPTER SIX

1. Federal law requires nursing homes to make sure residents’ hydration needs are met. Specifically:
 - Each resident must be assessed as to the adequacy of her nutrient and fluid intake.
 - Each resident must have a care plan, updated whenever there is a change in status, to address any specific nutritional or fluid deficiencies.
 - The nutritional and fluid status of each resident must be supervised by sufficient nursing staff.
 - The dietary needs of each resident are to be supervised by the resident’s physician.
 - The resident must be provided with care and services required to maintain nutritional status. In other words, if necessary, assistance in eating and drinking must be given.
 - Each resident has the right to be free from physical and chemical restraints, which are known to decrease appetite and impede eating and fluid intake. Each resident is entitled to maintenance of her quality of life. This means facilities must ensure that each resident maintains “acceptable parameters of nutritional status, such as body weight and protein levels, unless the clinical condition demonstrates that this is not possible.” Similarly, hydration must be maintained.
 - Residents with nutritional problems must be provided therapeutic diets. This is because a large portion of fluid intake occurs through food intake.
2. General Accounting Office 1996, supra.
3. Wick JY. Prevention and management of dehydration. *Consult Pharm.* 1999 Aug;14(8). www.ascp.com/public/pubs/tcp/1999/aug/prevention.shtml.
4. Burger and her associates have written a long article about their view of the “silent epidemic,” focusing primarily on the dehydration, malnutrition, and significant understaffing perils endemic in U.S. nursing homes. Burger SJ, Kayser-Jones J, Prince J. Malnutrition and dehydration in nursing homes: Key issues in prevention and treatment. Commonwealth Fund. 2000 July; Pub No 386 www.nccnhr.org/pdf/burger_mal_386.pdf.
5. Lavizzo-Mourey R, et al., supra; Burger SJ, et al., supra (2000).
6. Wick JY, supra.
7. Id.

Endnotes

8. Kayser-Jones J, Schell E, Porter C, Paul S. Reliability of %age figures used to record the dietary intake of nursing home residents. *Nursing Home Medicine*. 1997;5(3):69–76.
9. Burger SJ, et al., supra (2000); Wick JY, supra.
10. Burger SJ, et al., supra (2000).
11. Id.; OBRA 1987 and OBRA 1990.
12. Burger SJ, et al., supra (2000); General Accounting Office 1996; Kidder SW, supra.
13. Electrolyte imbalance is an acute sodium and potassium imbalance that may cause cardiac arrest, kidney problems, or muscle spasms. Oral electrolytes are a simple solution of water, minerals, salts, and carbohydrates. They balance the body's need for sodium, chloride, and potassium salts. These and other minerals change in the body into electrically charged particles called ions.
14. I was able to use Mom's lab test results from her medical records and also the Internet calculator to determine her osmolality, which made it crystal clear that dehydration occurred, could and should have been detected by the staff at Alpine Manor, and most definitely should have been treated. I calculated Mom's osmolality at the beginning of her stay at Alpine Manor, finding that at 292, it was essentially normal. (Normal osmolality is 285 to 295.) Her osmolality calculated on October 10, about the time we noticed that Mom was again becoming delirious, was above normal (311), and the medical director noted in her records that Mom had an electrolyte imbalance. There was no evidence that this imbalance was treated. Another lab test was done on October 13 and the results (306) were still abnormal. But there was no lab work done to monitor her condition between October 13 and November 6, the day of her transfer.

On November 6, Alpine Manor again did lab tests, but inexplicably, they never gave them to me and they did not provide them to Mom's new doctor or nursing home. I obtained them many months after her death when I ordered copies of her medical records. Mom's osmolality on November 6 was 361, far above normal and a solid indicator of dehydration.

I also used the osmolality calculator on Mom's lab values for the date of November 13, when Mom was admitted to the hospital in multi-system failure. At 435 on that date, her osmolality was shocking. Later, on the Internet in a Continuing Medical Education segment for nurses, I found this statement:

Panic values for serum osmolality are values of less than 240 mOsm or greater than 321 mOsm. A serum of osmolality of 384 mOsm produces stupor. If the serum osmolality rises over 400 mOsm, the patient may have grand mal seizures. Values greater than 420 mOsm are fatal. [My emphasis]

This material can be found on the Rnceus Interactive web site at www.rnceus.com/renal/renalosmo.html, Last accessed March 1, 2006.

Endnotes

15. The formula is:
(2 x (Na + K)) + (BUN / 2.8) + (glucose / 18) for men.
(2 x (Na + K)) + (BUN / 2.8) + (glucose / 18) X 85 for women.
16. Kamel HK, Thomas DR, Morley JE. Nutritional deficiencies in long-term care: Part II Management of protein energy malnutrition and dehydration. *Annals of Long-Term Care Online*. 1998 July;6(7):250.
17. Creatinine is a waste substance easily filtered by the kidneys and eliminated in the urine of healthy people. Kidneys filter creatinine from the blood at a given rate. Thus, the level of creatinine equals the glomerular filtration rate (GFR), or the rate at which the kidneys process blood through the glomerular system. If the kidneys are not working well, creatinine will accumulate in the blood. Thus, the level of creatinine in the blood as indicated in lab test values is an indicator of how well the kidneys are functioning.
18. Normal GFR is 85-125 mL/min. But, as we've discussed, there is a definite decrease in renal function as the body ages. According to Joel Shuster, PharmD., normal for Mom would have been "around 50-55 to 70-75 mL/min" [Email August 6, 2002].
19. Kamel HK, Thomas DR, Morley JE, supra.

CHAPTER SEVEN

1. Morley JE, Thomas DR, Kamel H, supra.
2. Burger SJ, et al., supra (2000).
3. Id.
4. Remember when you see a statement like this that it means it encompasses all studies from the ones finding the lowest percentage to those finding the highest percentage of malnourished residents.
5. Fiatarone MA, O'Neill EF, Ryan ND, Clements KM, Solares GR, Nelson ME, Roberts SB, Kehayias JJ, Lipsitz LA, Evans WJ. Exercise training and nutritional supplementation for physical frailty in very elderly people. *N Engl J Med*. 1994 Jun 23;330(25):1769-75; Burger SJ, et al., supra (2000).
6. Id.
7. Demling RH, DeSanti I, supra. Technically, this is called destructive metabolism, or catabolism.
8. Id.
9. Id.
10. Morley JE, Silver AJ, supra (1995).
11. Cole C, Bigando K, DeSutter S. Is altered nutritional status the root cause of your clients' negative outcomes? *J Nurs Care Qual*. 2000 Jan;14(2):41-56.
12. Gunning K, Saffel-Shrier S, Shane-McWhorter L. Medication use and nutritional status in elderly patients receiving home care. *Consult Pharm*. 1998; 8:897-911. www.ascp.com/public/pubs/tcp/1998/aug/rr.shtml.

Endnotes

13. The term “nutrients” is intended to include both food and fluids, as dehydration and malnutrition are interrelated.
14. Pinchofsky-Devin GD, Kaminski MV. Incidence of protein calorie malnutrition in the nursing home population. *J Am Coll of Nutr.* 1987 Apr;6(2): 109–112.
15. Burger SJ, et al., *supra* (2000).
16. *Id.*
17. Cole C, et al., *supra*; Demling RH, DeSanti L (a), *supra*.
18. Demling RH, DeSanti L (b). Protein-Energy Malnutrition, and the Nonhealing Cutaneous Wound. *Nursing Clinical Management Vol. 3.* www.medscape.com/Medscape/Nurses/ClinicalMgmt/CM.v03/public/index-CM.v03.html Last accessed March 1, 2006.
19. From the Level 1 Screen of the Nutrition Screening Initiative, a joint project of the American Academy of Family Physicians, the American Dietetic Association, and the National Council on Aging. Publications of the project include the *Nutrition Screening Manual for Professionals Caring for Older Americans*. The Nutrition Screening Initiative, 1010 Wisconsin Avenue NW, Suite 800, Washington DC 20007, (202) 625–1662.
20. Body mass index = Weight (kg)/(Height [in meters])². For example, someone who weighs 60 kg and is 160 cm tall has a body mass index of $(60/1.6^2) = 23$.
21. Demling RH, DeSanti L (b), *supra*.
22. Health Care Financing Administration, “Development and Validation of Measures and Indicators of Quality and Appropriateness of Services Rendered in Post Acute and Long-Term Care Settings: Statement of Work,” 1998.
23. Health Care Financing Administration, “Evaluating the Use of Quality Indicators in the Long-Term Care Survey Process; Statement of Work.”
24. Evans WJ. Aging and Malnutrition: Treatment guidelines. *Nursing Clinical Management Vol 3.* Accessed at Medscape <http://www.medscape.com/Medscape/Nurses/ClinicalMgmt/CM.v03/public/index-CM.v03.html> Last accessed March 1, 2006.
25. The conjunctiva is a membrane that lines the inside of the eyelids and extends over the front of the white part of the eye. It lubricates the eyeball.
26. Fiatarone MA, O’Neill EF, Ryan ND, Clements KM, Solares GR, Nelson ME, Roberts SB, Kehayias JJ, Lipsitz LA, Evans WJ. Exercise training and nutritional supplementation for physical frailty in very elderly people. *N Engl J Med.* 1994 Jun 23;330(25):1769–75.
27. Morley JE, Kraenzle D. Causes of weight loss in a community nursing home. *J Am Geriatr Soc.* 1994 Jun;42(6):583–5.
28. Kamel HK, Thomas DR, Morley JE, *supra*.
29. Kamel HK, Thomas DR, Morley JE, *supra*.
30. Rollins Carol J. Enteral nutrition, p. 202. *Pharmacotherapy Self-Assessment Program. 4th Ed.*, American College of Clinical Pharmacy (2001) online at www.accp.com/p4b8samplemod2.pdf.

Endnotes

31. Id.
32. Id.

CHAPTER EIGHT

1. Report to Congress: Appropriateness of Minimum Nurse Staffing Ratios in Nursing Homes Phase II Final Report.
2. Institute of Medicine (IOM), Wunderlich GS, Kohler P, Eds. 2001. Improving the quality of long-term care. Washington, DC: National Academy of Sciences, IOM.
3. HCFA. Executive Report to Congress, 1998. "Appropriateness of minimum nurse staffing ratios in nursing homes."
4. Kayser-Jones J, Schell E, Porter C, *supra* (1997).
5. Harrington et al. 2000a
6. Kayser-Jones J, Schell, E, Porter C, Barbaraccia JC, Shaw H. Factors contributing to dehydration in nursing homes: Inadequate staffing and lack of professional supervision. *J Am Geriatr Soc.* 1999 Oct;47(10):1187–1194.
7. National Association of State Units on Aging. *Memo to the State Nutrition Contacts.* Washington, D.C., March 24, 1995.
8. Kayser-Jones J, Schell E, Porter C, *supra* (1999).
9. Id.
10. Id.
11. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, Administration on Aging. *Informal Caregiving: Compassion in Action* (June 1998). <http://aspe.hhs.gov/daltcp/reports/carebro2.pdf> Last accessed March 1, 2006.
12. Id.
13. IOM, 2001.
14. <http://www.hcfa.gov/medicare>. This Medicare website contains a free guide to choosing a nursing home, an interactive site where you can compare nursing homes in your area, a checklist for you to use when touring nursing homes, and information on alternatives to nursing home care. See also Appendix A available free of charge online at www.takingcharge-goodmedicalcarfortheelderly.com.
15. Nutrition Screening Initiative. *Screening Older American's Nutritional Health.* Washington, D.C. 1993.

CHAPTER NINE

1. A plebotomist is a specialist who deals with medical issues such as veinous punctures, insertions of IVs in troublesome veins, and so on.

Endnotes

2. Council on Scientific Affairs and Council on Ethical and Judicial Affairs. Persistent vegetative state and the decision to withdraw or withhold life support. *JAMA*. 1990;263:426–430; American College of Physicians Ethics Manual. 3rd ed. *Ann Intern Med*. 1992;117:947–960.
3. Nutrition and Hydration: Moral and Pastoral Reflections (Issued by the Committee for Pro-Life Activities of the National Conference of Catholic Bishops on April 1992) jmahoney.com/nutrition_and_hydration.htm#5.%20What%20role%20should%20.
4. Roig-Franzia, Manuel. “Catholic Stance on Tube-Feeding Is Evolving.” *Washington Post*, March 27, 2005, final edition, via www.washingtonpost.com.
5. *Brophy v New Engl Sinai Hosp Inc*, 398 Mass. 417, 497 N.E. 2d 626 (1986).

EPILOGUE

1. A Zone-aire ® is a special bed constructed with an air mattress with many baffles. It is used primarily for patients who are completely bed-ridden. The capacity to change the amount of air pressure in various sections of the bed is valuable for the purpose of preventing pressure sores.