MERIT BADGE SERIES





STEM-Based

BOY SCOUTS OF AMERICA MERIT BADGE SERIES

MEDICINE



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Medicine

- 1. Discuss with your counselor the influence that EIGHT of the following people had on the history of health care:
 - (a) Hippocrates
 - (b) William Harvey
 - (c) Antonie van Leewenhoek
 - (d) Edward Jenner
 - (e) Florence Nightingale
 - (f) Louis Pasteur
 - (g) Gregor Mendel
 - (h) Joseph Lister
 - (i) Robert Koch
 - (j) Daniel Hale Williams
 - (k) Wilhelm Conrad Roentgen
 - (l) Marie and Pierre Curie
 - (m) Walter Reed
 - (n) Karl Landsteiner
 - (o) Alexander Fleming
 - (p) Charles Richard Drew
 - (q) Helen Taussig
 - (r) James Watson and Francis Crick
 - (s) Jonas Salk
- 2. Explain the Hippocratic Oath to your counselor, and compare the original version to a more modern one. Discuss to whom those subscribing to the original version of the oath owe the greatest allegiance.
- 3. Discuss the health-care provider–patient relationship with your counselor, and the importance of such a relationship in the delivery of quality care to the patient. Describe the role of confidentiality in this relationship.
- 4. Do the following:
 - (a) Describe the roles the following people play in the delivery of health care:
 - (1) Allopathic physician (M.D.) and osteopathic physician (D.O.)

- (2) Chiropractor (D.C.)
- (3) Emergency medical technician
- (4) Licensed practical/vocational nurse
- (5) Medical assistant
- (6) Medical laboratory technologist
- (7) Nurse-midwife
- (8) Nurse practitioner
- (9) Occupational therapist
- (10) Optometrist
- (11) Pharmacist
- (12) Physical therapist
- (13) Physician's assistant
- (14) Podiatrist
- (15) Psychologist
- (16) Radiologic technologist
- (17) Registered nurse
- (18) Respiratory therapist

(b) Describe the educational and licensing requirements to practice health care in your state for FIVE of the professions in requirement 4a. (Not all professions may exist in your state.)

5. (a) Tell what is meant by the term "primary care" with regard to a medical specialty.

(b) Briefly describe the types of work done by physicians in the following specialties:

- (1) Internal medicine*
- (2) Family practice*
- (3) Obstetrics/gynecology*
- (4) Pediatrics*
- (5) Psychiatry
- (6) Surgery
- (c) Describe the additional educational requirements for these specialties.
- 6. (a) Briefly describe the types of work performed by physicians in FIVE of the following specialties or subspecialties:
 - (1) Allergy/immunology
 - (2) Anesthesiology
 - (3) Cardiology
 - (4) Colorectal surgery
 - (5) Critical care medicine (intensive care medicine)
 - (6) Dermatology
 - (7) Emergency medicine
 - (8) Endocrinology

^{*&}quot;Primary care" specialties

- (9) Gastroenterology
- (10) Geriatric medicine
- (11) Hematology/oncology
- (12) Hospitalist
- (13) Infectious disease
- (14) Nephrology
- (15) Neurosurgery
- (16) Neurology
- (17) Nuclear medicine
- (18) Ophthalmology
- (19) Orthopedic surgery
- (20) Otolaryngology/head and neck surgery
- (21) Pathology
- (22) Physical medicine and rehabilitation
- (23) Plastic, reconstructive, and maxillofacial surgery
- (24) Preventive medicine
- (25) Pulmonology
- (26) Radiology
- (27) Rheumatology
- (28) Thoracic/cardiothoracic surgery
- (29) Urology
- (30) Vascular surgery

(b) Describe the additional educational requirements for the FIVE specialties or subspecialties you chose in 6a.

7. (a) Visit a physician's office*, preferably one who delivers "primary care." (This may be that of your counselor.) Discuss the components of a medical history and physical examination (an official BSA health form may be used to guide this discussion), and become familiar with the instruments used.

(b) Describe the characteristics of a good diagnostic test to screen for disease (e.g., routine blood pressure measurement). Explain briefly why diagnostic tests are not "perfect."

- (c) Show how to take a blood pressure and a pulse reading.
- 8. Do the following:

(a) Discuss the roles medical societies, employers, the insurance industry, and the government play in influencing the practice of medicine in the United States.

(b) Briefly tell how your state monitors the quality of health care within its borders, and how it provides care to those who do not have health insurance.

9. Compare and discuss with your counselor at least two types of health care delivery systems used throughout the world.

^{*}If this cannot be arranged, demonstrate to your counselor that you understand the components of a medical history and physical, and discuss the instruments involved.

10. Serve as a volunteer at a health-related event or facility in your community (e.g., blood drive, "health fair," blood pressure screening, etc.) approved by your counselor.

Resources

Scouting Literature

Animal Science, Dentistry, First Aid, Personal Fitness, Public Health, Veterinary Medicine, and Wilderness Survival merit badge pamphlets

Visit the Boy Scouts of America's official retail website at http://www.scoutstuff.org for a complete listing of all merit badge pamphlets and other helpful Scouting materials and supplies.

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- Alter, Judy. Surgery (21st Century Skills Innovation Library). Cherry Lake Publishing, 2008.
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—. Explaining Epidemics: And Other Studies in the History of Medicine. Cambridge University Press, 1992.

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Tilney, Nicholas L. *Invasion of the Body: Revolutions in Surgery.* Harvard University Press, 2011.

Townsend, John. *Bedpans, Blood, and Bandages: A History of Hospitals.* Raintree, 2007.

——. Pills, Powders, and Potions: A History of Medication. Raintree, 2007.

Pox, Pus, and Plague:
A History of Disease and Infection.
Raintree, 2006.

—. Scalpels, Stitches, and Scars: A History of Surgery. Raintree, 2006.

Organizations and Government Agencies

American Medical Association Toll-free telephone: 800-621-8335 Website: http://www.ama-assn.org

American Nurses Association

Website: http://www.ana.org

American Society of Radiologic Technologists

Toll-free telephone: 800-444-2778 Website: http://www.asrt.org/radcademy

Centers for Disease Control and Prevention

Toll-free telephone: 800-232-4636 Website: http://www.cdc.gov

familydoctor.org Website: http://www.familydoctor.org

HealthCare.gov Website: http://www.healthcare.gov

healthfinder.gov Website: http://www.healthfinder.gov

Mayo Clinic Website: http://www.mayoclinic.com

MedlinePlus[®] Website: http://www.medlineplus.gov

National Health Information Center

U.S. Department of Health and Human Services Referral Specialist P.O. Box 1133 Washington, DC 20013-1133 Telephone: 240-453-8280 Website: http://www.health.gov/nhic

National Institutes of Health

Telephone: 301-496-4000 Website: http://www.nih.gov

Superintendent of Documents

U.S. Government Printing Office Website: http://www.gpo.gov

Acknowledgments

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