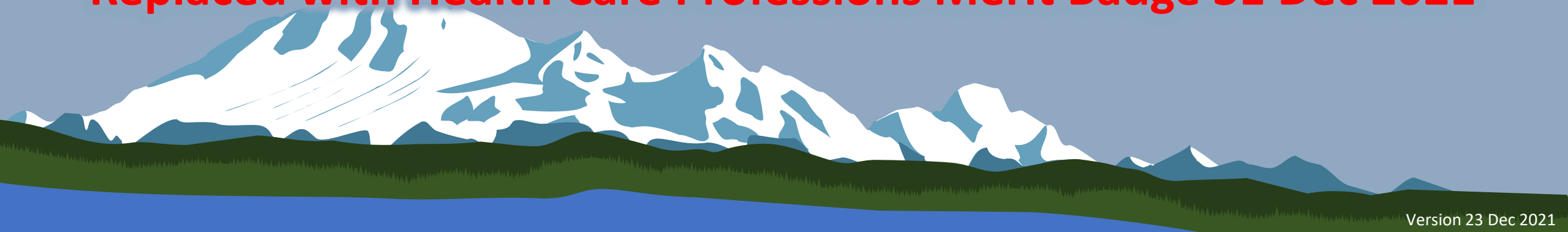


Medicine Merit Badge

RETIRED

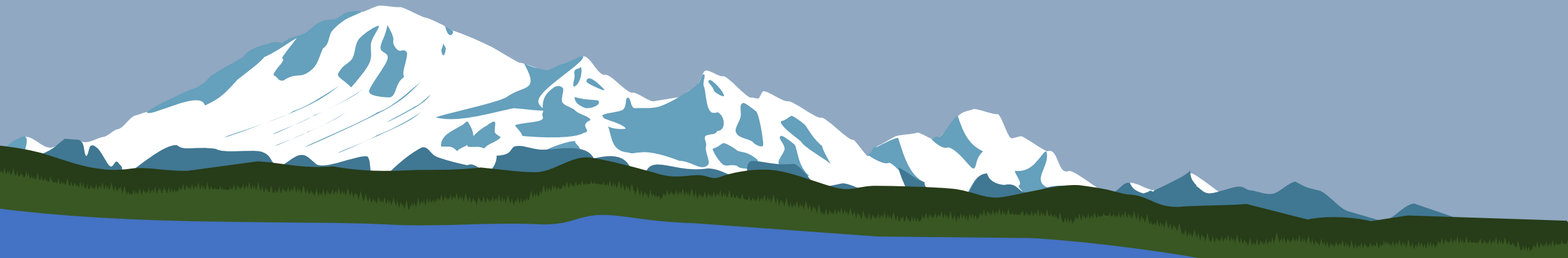


Replaced with Health Care Professions Merit Badge 31 Dec 2021



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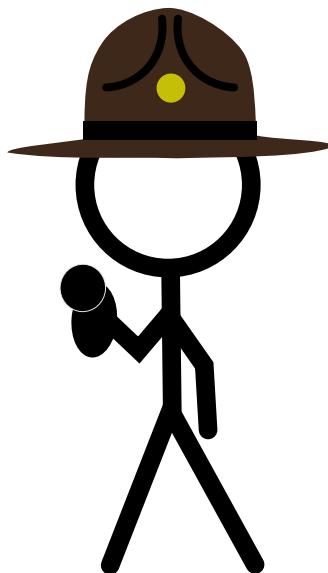
1. [Merit Badge Requirements](#)
2. [Merit Badge Intro](#)
3. [Important People in History](#)
4. [Types of Providers](#)
5. [Primary Care](#)
6. [Specialty Care](#)
7. [Office Visit](#)
8. [Final Thoughts](#)
9. [Resources](#)
10. [Instructor's Corner](#)



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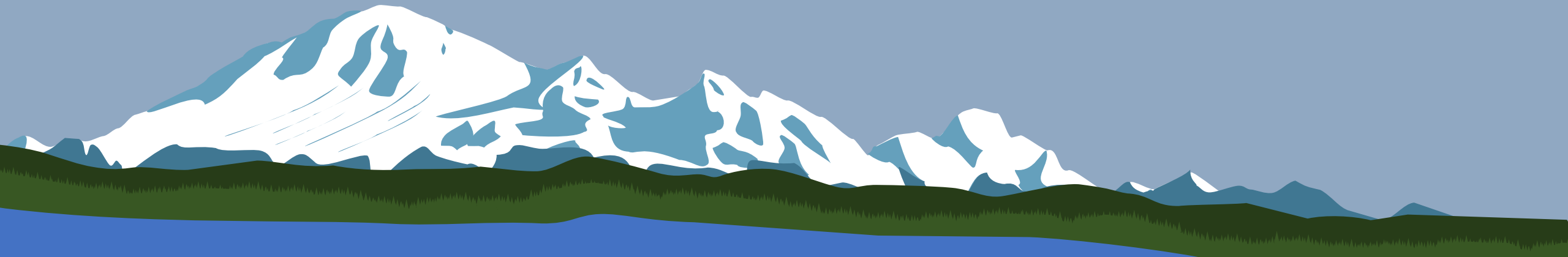
This PowerPoint slideshow was designed to be used to prepare scouts for the Medicine Merit Badge and nothing more.

**This slideshow is NOT intended to be used as
an independent medical reference.**

Proceed at your own risk and may god have mercy on your soul.



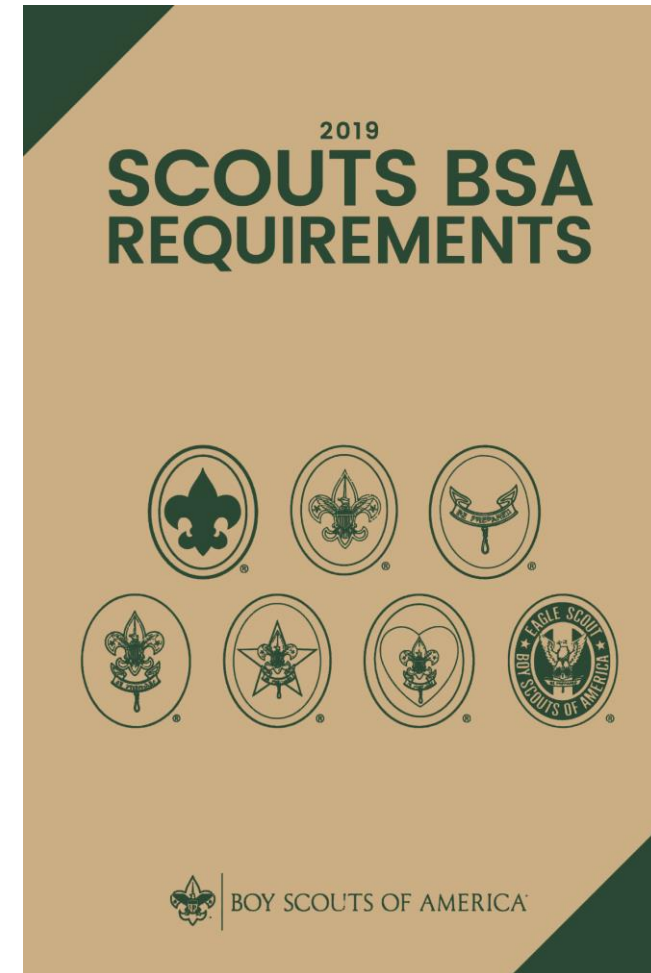
Merit Badge Requirements



Requirements

Requirements

- Medicine Merit Badge requirements are taken from:
2019 Scouts BSA™ Requirements Book



Requirements

Requirements

1. Discuss with your counselor the influence that EIGHT of the following people had on the history of health care:

- | | |
|----------------------------|------------------------------------|
| (a) Hippocrates | (k) Wilhelm Conrad Roentgen |
| (b) William Harvey | (l) Marie and Pierre Curie |
| (c) Antonie van Leewenhoek | (m) Walter Reed |
| (d) Edward Jenner | (n) Karl Landsteiner |
| (e) Florence Nightingale | (o) Alexander Fleming |
| (f) Louis Pasteur | (p) Charles Richard Drew |
| (g) Gregor Mendel | (q) Helen Taussig |
| (h) Joseph Lister | (r) James Watson and Francis Crick |
| (i) Robert Koch | (s) Jonas Salk |
| (j) Daniel Hale Williams | |



Requirements

Requirements

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.



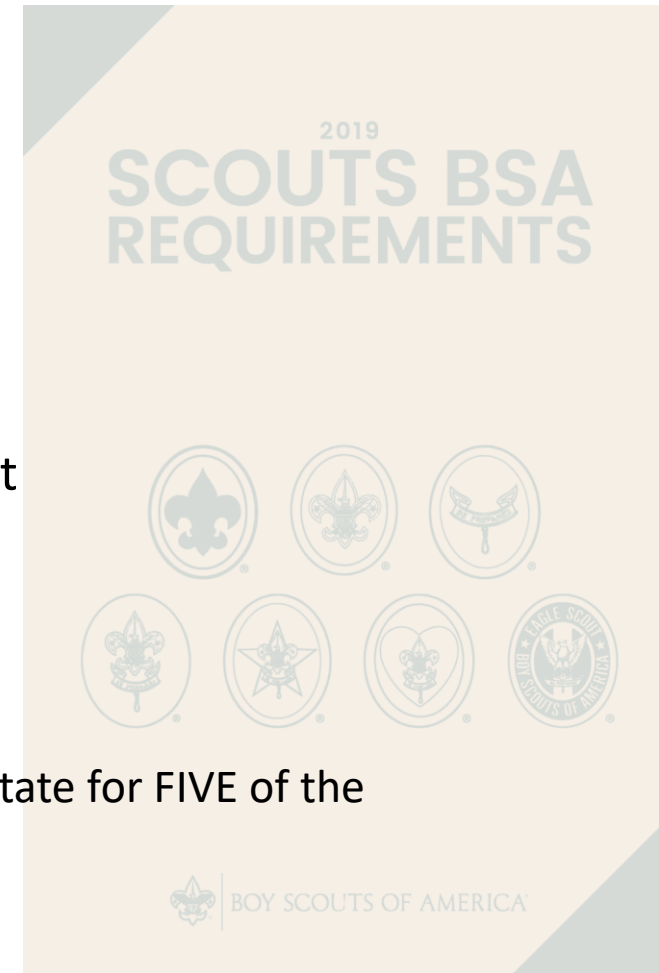
Requirements

Requirements

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



Requirements

Requirements

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 (a "primary care" specialty)
 2. Family practice (a "primary care" specialty)
 3. Obstetrics/gynecology (a "primary care" specialty)
 4. Pediatrics (a "primary care" specialty)
 5. Psychiatry
 6. Surgery
 - c. Describe the additional educational requirements for those specialties.



Requirements

Requirements

6. (a) Briefly describe the types of work performed by physicians in FIVE of the following specialties or subspecialties:

- | | |
|---|--|
| 1. Allergy/immunology | 16. Neurology |
| 2. Anesthesiology | 17. Nuclear medicine |
| 3. Cardiology | 18. Ophthalmology |
| 4. Colorectal surgery | 19. Orthopedic surgery |
| 5. Critical care medicine (intensive care medicine) | 20. Otolaryngology/head and neck surgery |
| 6. Dermatology | 21. Pathology |
| 7. Emergency medicine | 22. Physical medicine and rehabilitation/sports medicine |
| 8. Endocrinology | 23. Plastic, reconstructive, and maxillofacial surgery |
| 9. Gastroenterology | 24. Preventive medicine |
| 10. Geriatric medicine | 25. Pulmonology |
| 11. Hematology/oncology | 26. Radiology |
| 12. Hospitalist | 27. Rheumatology |
| 13. Infectious disease | 28. Thoracic/cardiothoracic surgery |
| 14. Nephrology | 29. Urology |
| 15. Neuro surgery | 30. Vascular surgery |

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

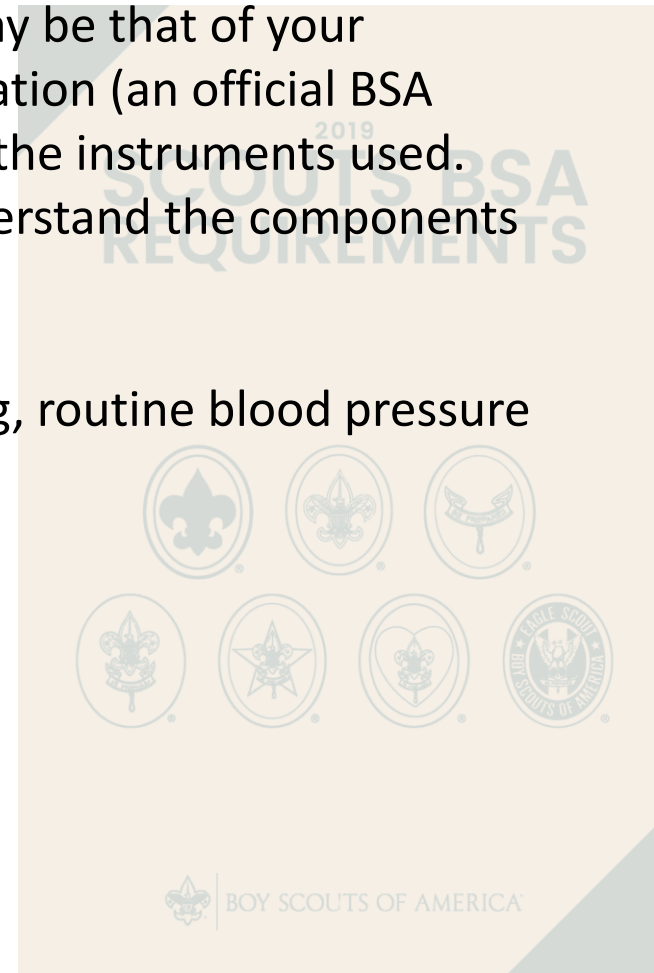


Requirements

Requirements

7.

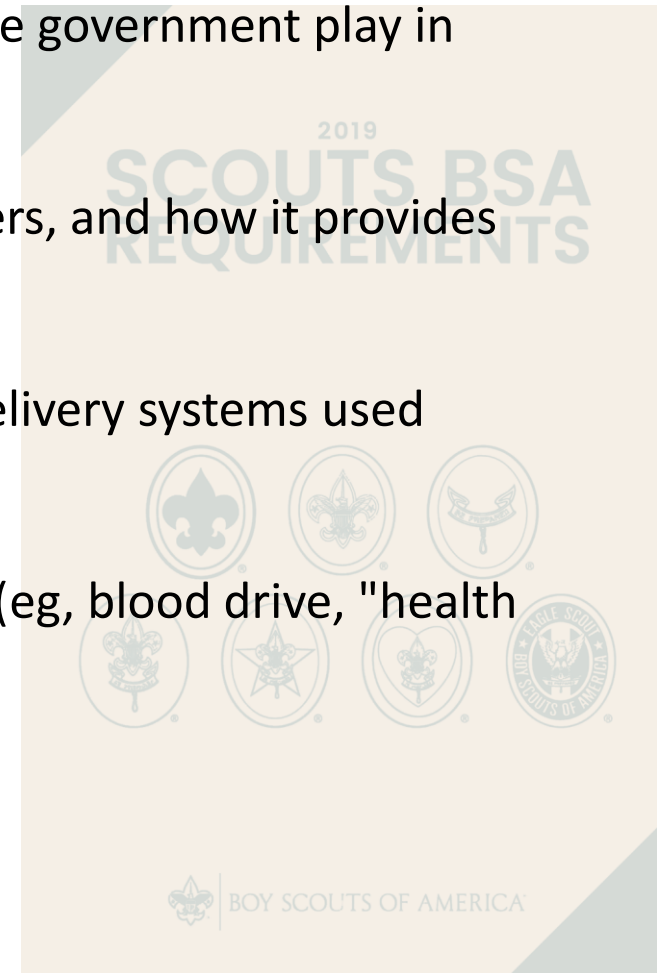
- a. Visit a physician's office, preferably one who delivers "primary care." (This may be that of your counselor.) Discuss the components of a medical history and physical examination (an official BSA health form may be used to guide this discussion), and become familiar with the instruments used.
 - 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.
- b. Describe the characteristics of a good diagnostic test to screen for disease (eg, routine blood pressure measurement). Explain briefly why diagnostic tests are not perfect.
- c. Show how to take a blood pressure reading and a pulse reading.



Requirements

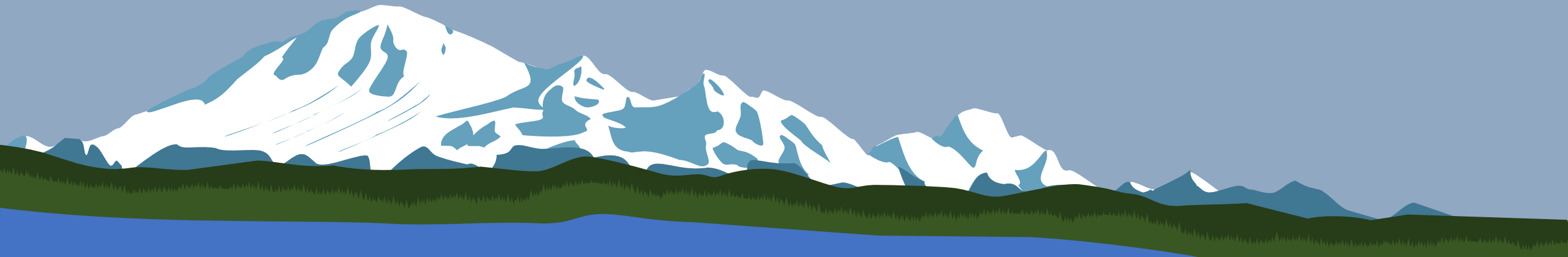
Requirements

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



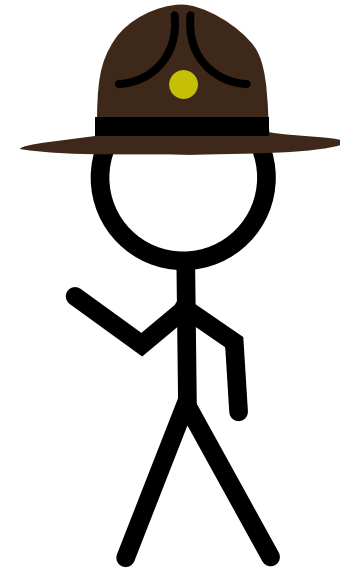


Medicine Merit Badge Intro



Merit Badge Intro

Instructor Introduction



Merit Badge Intro

Needed for Course

- Merit Badge Blue Card filled out and signed by your Scoutmaster
 - or other virtual agreement
- Medicine Merit Badge Pamphlet
- Scout Uniform
- A positive Scouting focus and attitude

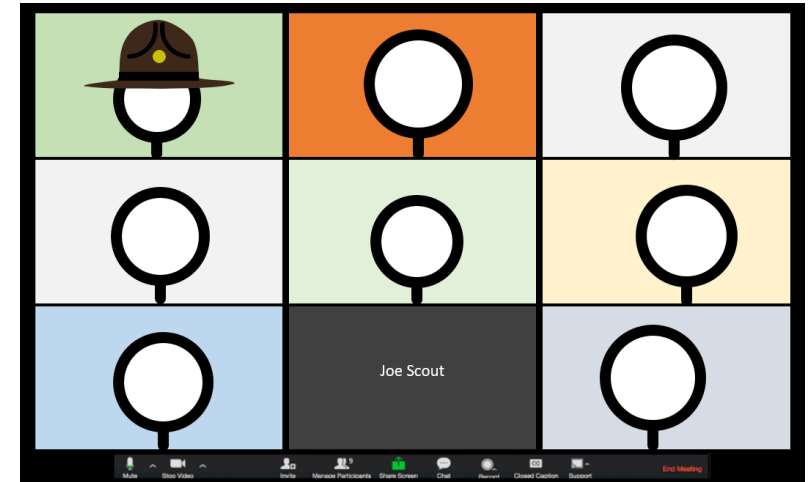


Merit Badge Intro

Virtual Meetings

- Use your **REAL Name** and **Troop Number** if you want credit
This is how we take attendance

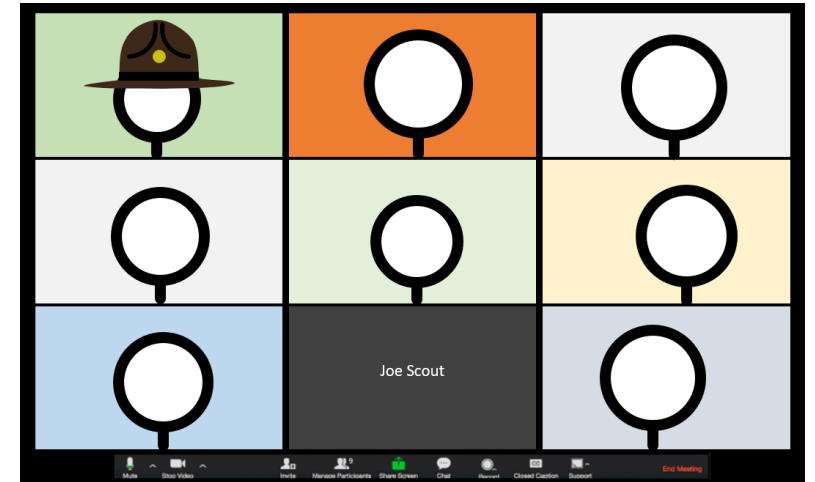
- MUTE yourself unless speaking to the group
- Please turn your video on so we can see you
- No Chat SPAMMING
- If you need to go pee, go
- If something isn't working, please let us know!



Merit Badge Intro

Virtual Meetings

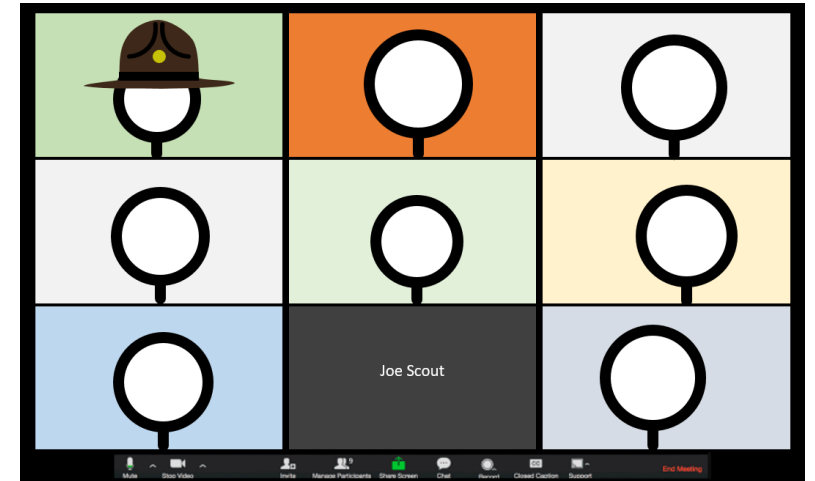
- There is a good amount of homework and writing for this merit badge
- If you are interested in medicine, you will need to get comfortable with both homework and writing



Merit Badge Intro

Virtual Meetings

- We can't do ALL the requirements virtually in a reasonable amount of time
- Please send completed homework **AFTER** the final class
- Tell us who we should CC about completion



Merit Badge Intro

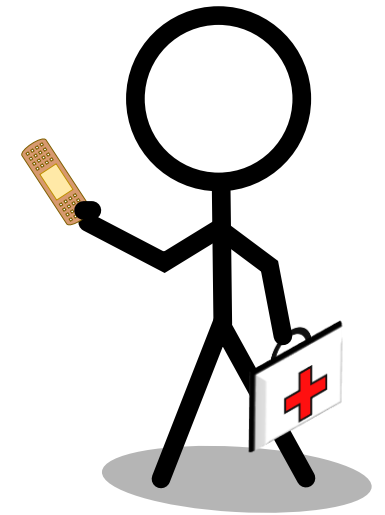
Merit Badge Requirement Checklist

- ☐ **Req 1** – 8 People in history Hippocratic Oath
 - ☐ **Req 2** – Hippocratic Oath
 - ☐ **Req 3** – Health-care provider–patient relationship
 - ☐ **Req 4** – Provider roles plus educational and licensing
 - ☐ **Req 5** – “Primary care”
 - ☐ **Req 6** – 5 specialties or subspecialties
 - ☐ **Req 7** – Office Visit
 - ☐ **Req 8** – Medical care influencers
 - ☐ **Req 9** – Health care delivery systems
 - ☐ **Req 10** – Volunteer work
-
- ☐ **Turn in complete [worksheet](#)** – contact me if this is a problem



Merit Badge Intro

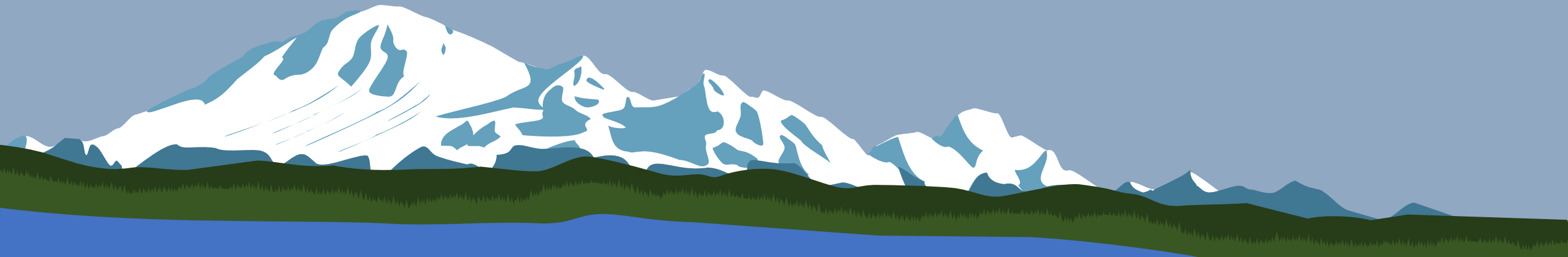
What is Medicine?





Medicine Merit Badge

Important People in History



Important People in History

Requirement 1 – Historical Figures in Medicine

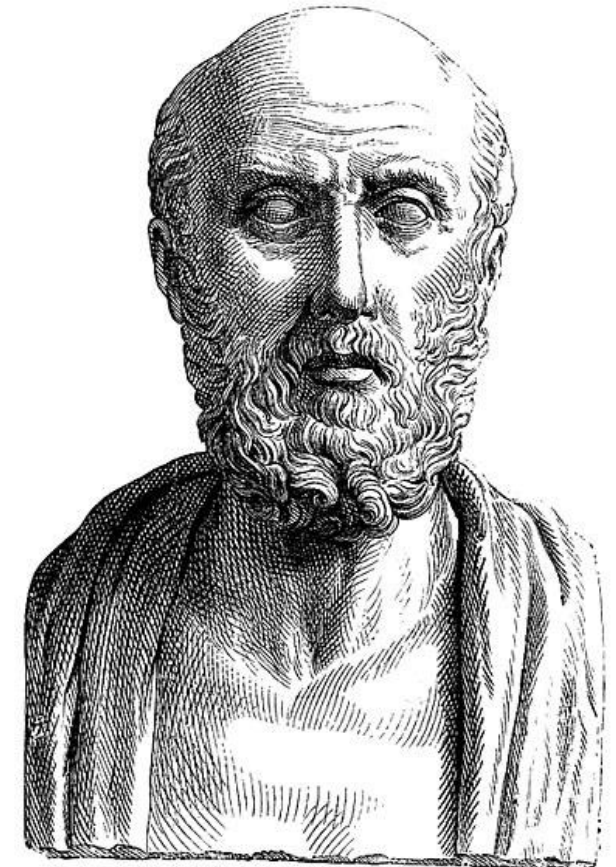
1. Discuss with your counselor the influence that EIGHT of the following people had on the history of health care:

- | | |
|--|--|
| a) <u>Hippocrates</u> | k) <u>Wilhelm Conrad Roentgen</u> |
| b) <u>William Harvey</u> | l) <u>Marie and Pierre Curie</u> |
| c) <u>Antonie van Leewenhoek</u> | m) <u>Walter Reed</u> |
| d) <u>Edward Jenner</u> | n) <u>Karl Landsteiner</u> |
| e) <u>Florence Nightingale</u> | o) <u>Alexander Fleming</u> |
| f) <u>Louis Pasteur</u> | p) <u>Charles Richard Drew</u> |
| g) <u>Gregor Mendel</u> | q) <u>Helen Taussig</u> |
| h) <u>Joseph Lister</u> | r) <u>James Watson and Francis Crick</u> |
| i) <u>Robert Koch</u> | s) <u>Jonas Salk</u> |
| j) <u>Daniel Hale Williams</u> | |

Important People in History

Hippocrates

- Greek physician of the Age of Pericles (Classical Greece) 460-370 BC
- "Father of Medicine"
 - Hippocratic School of Medicine
 - Revolutionized Ancient Greek medicine
 - Established medicine as a profession
- Credited with coining the Hippocratic Oath
- [Hippocrates: Father Of Medicine](#) YouTube
- [HIPPOCRATES - Father of Medicine](#)



Important People in History

William Harvey

- English physician 1578-1657
- Influential contributions in anatomy and physiology
- 1st describe completely systemic circulation and properties of blood
 - Blood pumped to the brain and the rest of the body by the heart
 - in 1628 published:

Exercitatio anatomica de motu cordis et sanguinis in animalibus
(On the Motion of the Heart and Blood in Animals)

- [This Doctor Upended Everything We Knew About the Human Heart](#)



[Back to List](#)

Important People in History

Antonie Philips van Leeuwenhoek

- Dutch businessman and scientist 1632-1723
- Golden Age of Dutch science and technology
- "the Father of Microbiology"
- one of the first microscopists and microbiologists
- Used single-lensed microscopes of his own design
- First to experiment with microbes

- [Lens On Leeuwenhoek - YouTube](#)
- [Leeuwenhoek and Microscopic Life](#)



[Back to List](#)

Important People in History

Edward Jenner

- English physician and ornithologist
- Pioneer of immunization – prior to germ theory
- Popularized vaccination
- Milkmaids generally immune to smallpox
- Inoculated gardener's son with cowpox
 - Fevers
- Inoculated with smallpox
 - Didn't get sick
- [History of Smallpox](#)
- [The Origin of Vaccines](#)



Important People in History

Florence Nightingale

- 1820-1910
- English social reformer, statistician, and the founder of modern nursing
- Manager and trainer of nurses during the Crimean War
- Victorian culture icon – "The Lady with the Lamp"
- Established St Thomas' Hospital Nursing School
First in secular nursing school in the world
- Prior to Nightingale –
 - Sick people often went to churches for care
- [Florence Nightingale Biography](#)



[Back to List](#)

Important People in History

Louis Pasteur

- 1822-1895
- French biologist, microbiologist and chemist
- “Father of Microbiology”
- Disproved Spontaneous Generation
- Discovered principles of:
 - Microbial fermentation
 - Pasteurization
 - Vaccination with weakened pathogens
- [Louis Pasteur](#)
- [Louis Pasteur - Scientist | Mini Bio | BIO](#)



[Back to List](#)

Important People in History

Gregor Mendel

- Austrian monk and botanist 1822-1884
- He founded genetics by his work cross-breeding pea plants.
- Discovered dominant and recessive characters (genes)

- [Gregor Mendel - YouTube](#)
- [Gregor Mendel Biography](#)
- [The Friar and the Pea](#)



[Back to List](#)

Important People in History

Joseph Lister

- British surgeon 1827-1912
- Pioneer of antiseptic surgery
- Used of carbolic acid as an antiseptic

- [Joseph Lister Biography](#)



[Back to List](#)

Important People in History

Robert Koch

- German doctor 1843-1910
- Nobel Prize in Physiology or Medicine, for studying tuberculosis
- Development of Petri dish
- Bacterial Staining
- Koch's postulates
 1. Microorganism in all organisms with the disease
 2. Microorganism isolated from a diseased organism
 3. Microorganism causes disease in healthy organism
 4. Microorganism taken from the inoculated host
- [Robert Koch - From Academic Kids](#)
- [Koch's postulates](#) YouTube



[Back to List](#)

Important People in History

Daniel Hale Williams

- African-American general surgeon 1856-1931
- Opened Provident Hospital and Training School for Nurses in 1891
 - First hospital with an interracial staff
 - Following year, he became chief surgeon at Freedmen's Hospital
 - In 1893, become one of first surgeons to successfully repair a heart wound

- [Daniel Hale Williams Biography](#)
- [Daniel Hale Williams](#)



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Important People in History

Wilhelm Conrad Röntgen

- German physicist 1845-1923
- Discovered X-rays
- First person to win the Nobel Prize in Physics
- [Featured History: Wilhelm Röntgen](#)
- [Wilhelm Conrad Röntgen](#) YouTube

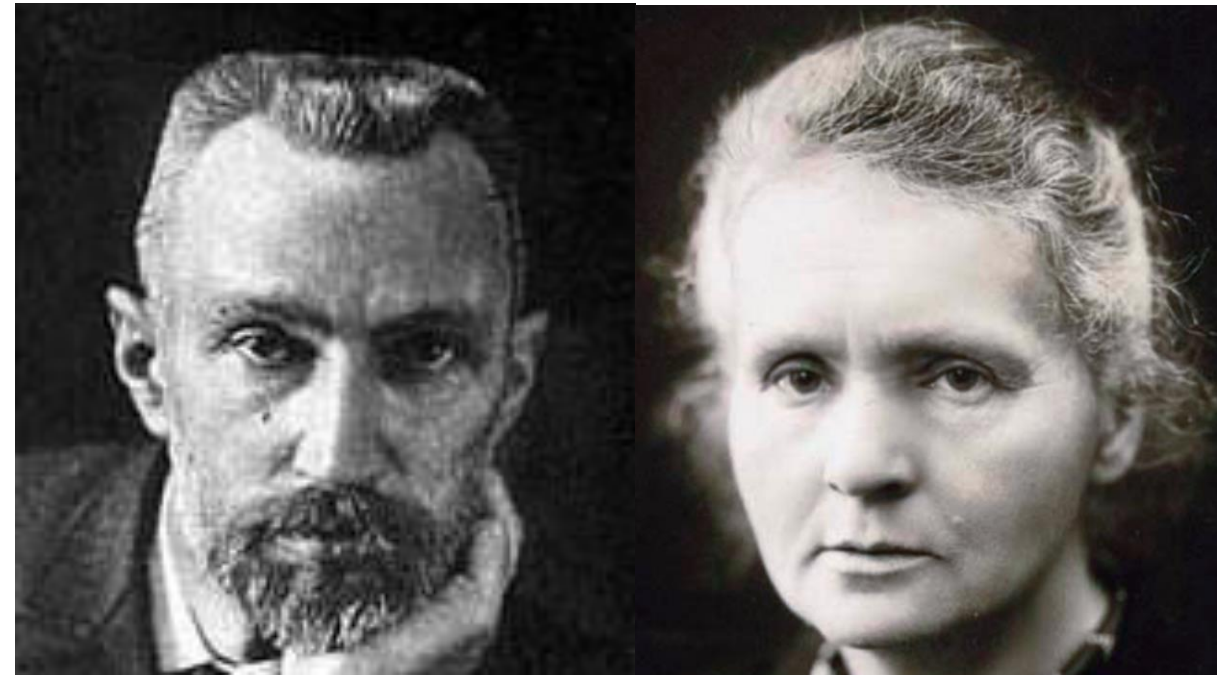


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Important People in History

Marie and Pierre Curie

- Pierre - French physicist 1859-1906
- Marie - Polish physicist, chemist and feminist 1867-1934
 - First person to win two Nobel Prizes – Only for 2 different Sciences
- Radioactivity
 - Physics Nobel Prize
- Discovered radium
 - Chemistry Nobel Prize
 - Was used to kill cancer cells
- Died of anemia caused by radiation
- [Featured History:](#)
[Marie Skłodowska Curie](#)



[Back to List](#)

Important People in History

Walter Reed

- Major in U.S. Army Medical Corps 1851-1902
- Spanish-American War of 1898 -combat epidemics of typhoid fever
 - Flies spread disease
- Cuba in 1900 to study and prevent yellow fever
 - It was mosquitos
 - Aggressive mosquito-eradication procedures
- Panama (1904–1914)
 - Enabled building of Panama Canal
- [Walter Reed - legend and hospital namesake](#)

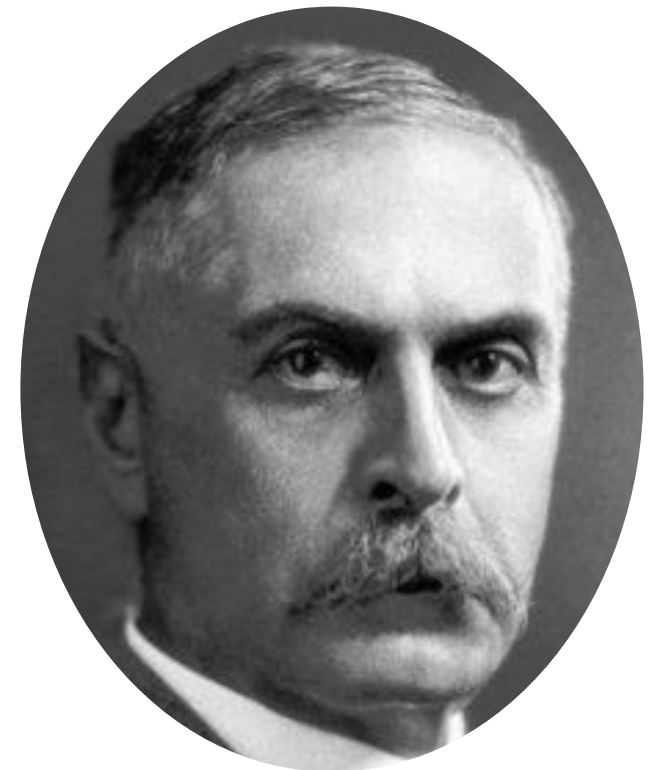


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Important People in History

Karl Landsteiner

- Austrian biologist, physician, and immunologist 1868-1943
- Developed the modern system blood types
 - Allows for blood transfusions
 - Father of transfusion medicine
- Discovered the polio virus in 1909
- Nobel Prize in Physiology or Medicine
- [Karl Landsteiner](#)
- [BLOOD GROUP /\(Karl Landsteiner\)](#) YouTube



[Back to List](#)

Important People in History

Alexander Fleming

- Scottish physician and microbiologist 1881-1955
- Discovered
 - Enzyme lysozyme in 1923
 - Benzylpenicillin (Penicillin G) from mould
 - First broadly effective antibiotic

- [Alexander Fleming](#)



[Back to List](#)

Important People in History

Charles Richard Drew

- American surgeon and medical researcher 1904-1950
- Developed improved techniques for blood storage
 - Developed large-scale blood banks early in World War II
- Most prominent African American in the field
- Protested the practice of racial segregation in the donation of blood
- American Red Cross continued policy until 1950
- [Meet Dr. Charles Drew](#) YouTube
- [Charles Richard Drew](#)



[Back to List](#)

Important People in History

Helen Taussig

- American cardiologist 1898-1986
- Founded the field of pediatric cardiology
- Developed concept for treating Tetralogy of Fallot
 - Most common cause of blue baby syndrome
 - Procedure known as the Blalock-Taussig shunt
 - Redirected subclavian artery to pulmonary artery
- Early Drug Safety advocate
- Did it all with Dyslexia
- [WOMEN IN SCIENCE: HELEN TAUSSIG \(1898-1986\)](#)

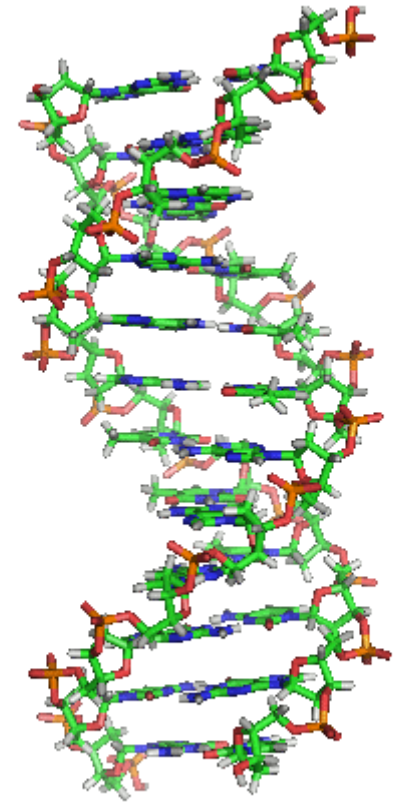


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Important People in History

James Watson and Francis Crick

- Crick 1916-2004
 - British molecular biologist, biophysicist, and neuroscientist
 - Watson 1928
 - American molecular biologist, geneticist and zoologist
 - Proposed the double helix structure of the DNA molecule
 - Nobel Prize in Physiology or Medicine
-
- [Discovery of the structure of DNA](#)



Important People in History

Jonas Salk

- American physician, medical researcher and virologist 1914-1995
- Developed one of the first successful polio vaccines
 - Polio considered one of the most frightening public health problems
 - According to a 2009 [PBS documentary](#),
"Apart from the atomic bomb, America's greatest fear was polio."

- [Jonas Salk](#)



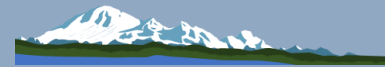
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Important People in History

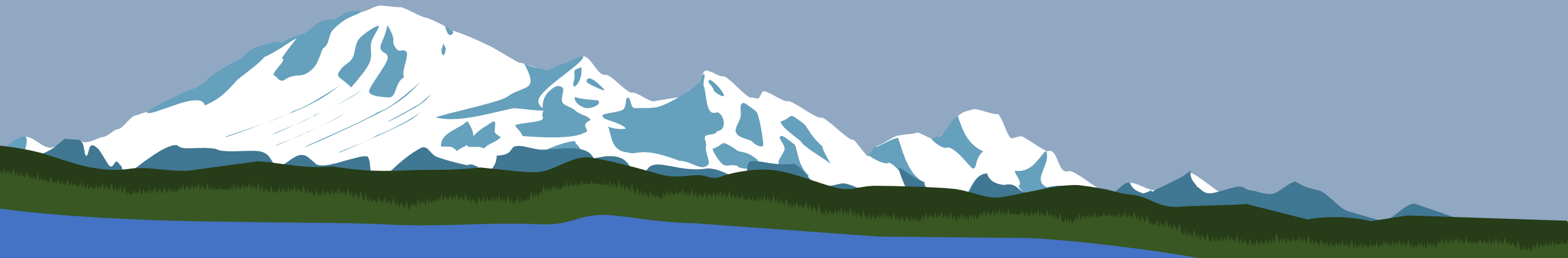
Evolution of Medicine

- Thru hard work, occasional accidents and luck, medicine has evolved
- What will be the next Breakthrough in Medicine?
- Who will make the next Breakthrough?
- Will it be you?

[Diagnostic Tests](#)



Basics



Basics

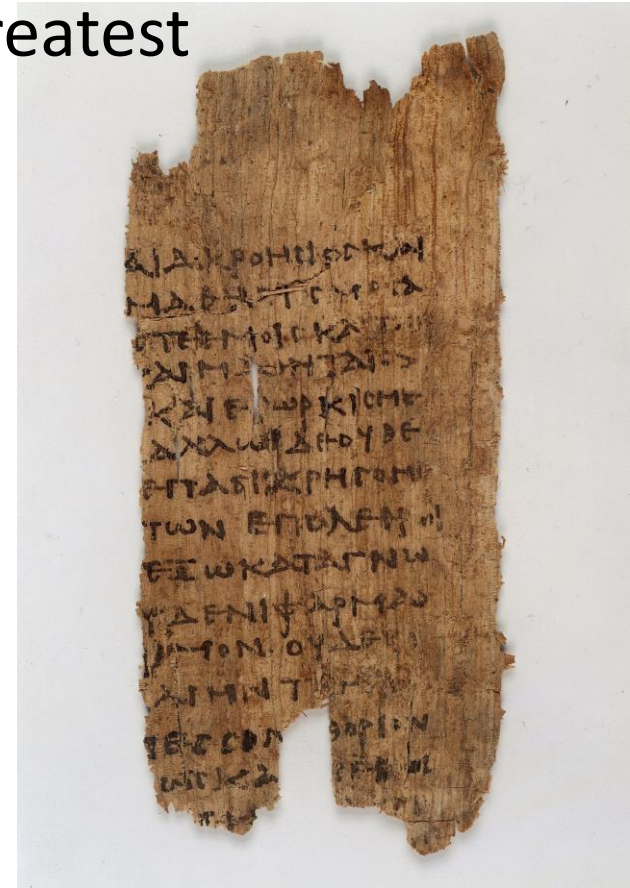
Requirement 2 - Hippocratic Oath

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.

- An oath of ethics historically taken by physicians
 - "First do no harm"

[Who Was Hippocrates?](#)

[Wiki - Hippocratic Oath](#)



Basics

Requirement 2 - Hippocratic Oath - Classical

I swear by **Apollo Physician and Asclepius and Hygieia and Panacea and all the gods and goddesses**, making them my witnesses, that I will fulfill according to my ability and judgment this oath and this covenant:

To hold him who has taught me this art as equal to my parents and to live my life in partnership with him, and if he is in need of money to give him a share of mine, and to regard his offspring as equal to my brothers in male lineage and to teach them this art—if they desire to learn it—without fee and covenant; **to give a share of precepts and oral instruction and all the other learning to my sons and to the sons of him who has instructed me and to pupils who have signed the covenant and have taken an oath according to the medical law, but no one else.**

I will apply dietetic measures for the benefit of the sick according to my ability and judgment; I will keep them from harm and injustice.

I will **neither give a deadly drug** to anybody who asked for it, nor will I make a suggestion to this effect. Similarly I will **not give to a woman an abortive remedy**. In purity and holiness I will guard my life and my art.

I will **not use the knife**, not even on sufferers from stone, but will withdraw in favor of such men as are engaged in this work.

Whatever houses I may visit, I will come **for the benefit of the sick, remaining free of all intentional injustice, of all mischief** and in particular of sexual relations with both female and male persons, be they free or slaves.

What I may see or hear in the course of the treatment or even outside of the treatment in regard to the life of men, which on no account one must spread abroad, I will keep to myself, holding such things shameful to be spoken about.

If I fulfill this oath and do not violate it, may it be granted to me to enjoy life and art, being honored with fame among all men for all time to come; if I transgress it and swear falsely, may the opposite of all this be my lot.

Basics

Requirement 2 - Hippocratic Oath - Classical

ὄμνυμι Ἀπόλλωνα ἰητρὸν καὶ Ἀσκληπιὸν καὶ Ὑγείαν καὶ Πανάκειαν καὶ
θεοὺς πάντας τε καὶ πάσας,

I swear by Apollo Physician and Asclepius and Hygieia and Panacea and all
the gods and goddesses

- One swears to the gods

Basics

Requirement 2 - Hippocratic Oath - Classical

ἥν χρηίζωσι μανθάνειν, ἄνευ μισθοῦ καὶ συγγραφῆς, παραγγελίης τε καὶ ἀκροήσιος καὶ τῆς λοιπῆς ἀπάσης μαθήσιος μετάδοσιν ποιήσεσθαι υἱοῖς τε ἐμοῖς καὶ τοῖς τοῦ ἐμὲ διδάξαντος, καὶ μαθητῆσι συγγεγραμμένοις τε καὶ ὠρκισμένοις νόμῳ ἱητρικῷ, ἄλλῳ δὲ οὐδενί.

...to give a share of precepts and oral instruction and all the other learning to my sons and to the sons of him who has instructed me and to pupils who have signed the covenant and have taken an oath according to the medical law, but no one else.

- To teach others who have sworn the Hippocratic Oath

Basics

Requirement 2 - Hippocratic Oath - Classical

οὐ δώσω δὲ οὐδὲ φάρμακον οὐδενὶ αἰτηθεὶς θανάσιμον,
...neither give a deadly drug

- To not perform euthanasia (lethal poisoning)

Basics

Requirement 2 - Hippocratic Oath - Classical

ὁμοίως δὲ οὐδὲ γυναικὶ πεσσὸν φθόριον δώσω.

...will not give to a woman an abortive remedy

- To not perform abortions

Basics

Requirement 2 - Hippocratic Oath - Classical

οὐ τεμέω δὲ οὐδὲ μὴν λιθιῶντας, ἐκχωρήσω δὲ ἐργάτησιν ἀνδράσι
πρήξιος τῆσδε.

...not use the knife

- To not perform surgery

Basics

Requirement 2 - Hippocratic Oath - Classical

ἐς οἰκίας δὲ ὀκόσας ἂν ἐσίω, ἐσελεύσομαι ἐπ' ὠφελείῃ καμνόντων, ἐκτὸς
ἐὼν πάσης ἀδικίης ἐκουσίης καὶ φθορίας,

...for the benefit of the sick, remaining free of all intentional injustice, of all mischief

- To help and respect your patient

Basics

Requirement 2 - Hippocratic Oath - Classical

Merit Badge Requirement 2:

Discuss to whom those subscribing to the original version of the oath owe the greatest allegiance.

- One swears to the gods and goddesses
- One swears to medical practitioners, particularly your teacher
- One swears to protect and care for patients
- An argument can be made for any of these

Basics

Requirement 2 - Hippocratic Oath - Oath of Maimonides

- Oath of Maimonides
- Published in 1783 by German-Jewish physician Markus Herz
- Traditional oath for pharmacists and physicians
- Attributed to Maimonides
 - Torah scholar of the Middle Ages
 - Rabbi, Philosopher, Physician

Basics

Requirement 2 - Hippocratic Oath - Oath of Maimonides

The eternal providence has appointed me to watch over the life and health of Thy creatures. May the love for my art actuate me at all times; may neither avarice nor miserliness, nor thirst for glory or for a great reputation engage my mind; for the enemies of truth and philanthropy could easily deceive me and make me forgetful of my lofty aim of doing good to Thy children.

May I never see in the patient anything but a fellow creature in pain.

Grant me the strength, time and opportunity always to correct what I have acquired, always to extend its domain; for knowledge is immense and the spirit of man can extend indefinitely to enrich itself daily with new requirements. Today he can discover his errors of yesterday and tomorrow he can obtain a new light on what he thinks himself sure of today.

Oh, God, Thou has appointed me to watch over the life and death of Thy creatures; here am I ready for my vocation and now I turn unto my calling.

Basics

Requirement 2 - Hippocratic Oath - Declaration Geneva

- World Medical Association founded post World War II in 1947
- Concern over the state of medical ethics in general and globally
- Took responsibility for setting ethical guidelines for all physicians
- **The Declaration of Geneva** was adopted by the General Assembly of the World Medical Association in 1948
 - “I WILL MAINTAIN the utmost respect for human life”
 - “I WILL NOT USE my medical knowledge to violate human rights and civil liberties, even under threat”

Basics

Requirement 2 - Hippocratic Oath - Declaration Geneva

AS A MEMBER OF THE MEDICAL PROFESSION:

- I SOLEMNLY PLEDGE to dedicate my life to the service of humanity;
- THE HEALTH AND WELL-BEING OF MY PATIENT will be my first consideration;
- I WILL RESPECT the autonomy and dignity of my patient;
- **I WILL MAINTAIN the utmost respect for human life;**
- **I WILL NOT PERMIT considerations of age, disease or disability, creed, ethnic origin, gender, nationality, political affiliation, race, sexual orientation, social standing or any other factor to intervene between my duty and my patient;**
- I WILL RESPECT the secrets that are confided in me, even after the patient has died;
- I WILL PRACTICE my profession with conscience and dignity and in accordance with good medical practice;
- I WILL FOSTER the honour and noble traditions of the medical profession;
- I WILL GIVE to my teachers, colleagues, and students the respect and gratitude that is their due;
- I WILL SHARE my medical knowledge for the benefit of the patient and the advancement of healthcare;
- I WILL ATTEND TO my own health, well-being, and abilities in order to provide care of the highest standard;
- **I WILL NOT USE my medical knowledge to violate human rights and civil liberties, even under threat;**
- I MAKE THESE PROMISES solemnly, freely and upon my honour.

Basics

Requirement 2 - Hippocratic Oath - Modern

- Louis Lasagna rewrote it in 1964
 - This version has been widely accepted and is still in use today by many US medical schools
 - Prayer was omitted
 - Taken before only other people
 - Instead of being taken in the presence of God or any gods
 - More secular obligation
 - Also removed mention of
 - Abortion
 - Euthanasia
 - Surgery

Basics

Requirement 2 - Hippocratic Oath - Modern

I swear to fulfill, to the best of my ability and judgment, this covenant:

I will respect the hard-won scientific gains of those physicians in whose steps I walk, and gladly share such knowledge as is mine with those who are to follow.

I will apply, for the benefit of the sick, all measures [that] are required, avoiding those twin traps of overtreatment and therapeutic nihilism.

I will remember that there is art to medicine as well as science, and that warmth, sympathy, and understanding may outweigh the surgeon's knife or the chemist's drug.

I will not be ashamed to say "I know not," nor will I fail to call in my colleagues when the skills of another are needed for a patient's recovery.

I will respect the privacy of my patients, for their problems are not disclosed to me that the world may know. Most especially must I tread with care in matters of life and death. If it is given me to save a life, all thanks. But it may also be within my power to take a life; this awesome responsibility must be faced with great humbleness and awareness of my own frailty. Above all, I must not play at God.

I will remember that I do not treat a fever chart, a cancerous growth, but a sick human being, whose illness may affect the person's family and economic stability. My responsibility includes these related problems, if I am to care adequately for the sick.

I will prevent disease whenever I can, for prevention is preferable to cure.

I will remember that I remain a member of society, with special obligations to all my fellow human beings, those sound of mind and body as well as the infirm.

If I do not violate this oath, may I enjoy life and art, respected while I live and remembered with affection thereafter. May I always act so as to preserve the finest traditions of my calling and may I long experience the joy of healing those who seek my help.

Basics

Requirement 2 - Hippocratic Oath - Modern

- 1989 survey of 126 US medical schools
 - Three reported use of the original oath
 - Thirty-three used the Declaration of Geneva
 - Sixty-seven used a modified Hippocratic Oath
 - Four used the Oath of Maimonides
 - One used a covenant
 - Eight used another oath
 - One used an unknown oath
 - Two did not use any kind of oath
 - Seven medical schools did not reply to the survey

Basics

Requirement 2 - Hippocratic Oath - Modern

- 1993 *NEJM* article reports many evolutions in the oath over time
 - “use the knife, not even on sufferers from the stone”
 - Interpreted to ban all surgeries (including for kidney stones)
 - Removed from modern oaths
 - 11% of US and Canadian school oaths invoked a deity
 - 14% of US medical school oaths prohibited euthanasia
 - 8 % of US medical school prohibited abortion
 - Anti-discrimination pledges added to some oaths
 - Others include assurances of the physician’s accountability

Basics

Requirement 2 - Hippocratic Oath - Modern

- 2000 survey in *Academic Medicine*
 - Sixty-two of 122 used the Hippocratic Oath, or a modified version
 - Sixty schools used
 - Declaration of Geneva, original or modified
 - Oath of Maimonides
 - or an oath authored by students and or faculty
 - All nineteen osteopathic schools used the Osteopathic Oath

Basics

Requirement 2 - Hippocratic Oath

- Antiquated tradition?
 - Maybe
- Reminder
 - Horrors our profession is capable of
 - Tuskegee Syphilis Study
 - US Eugenics Movement
 - Japan's Unit 731
 - Guatemala syphilis study
 - Nazi medical experiments
 - New Zealand “Unfortunate Experiment”

Basics

Requirement 3 – Provider-Patient Relationship

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.

[Physician-Patient Relationship | Medical Video Essay](#)
[The Patient Doctor Tango | Sarah Krüg | TEDxBrussels](#)
[Patient-Physician Relationships - AMA](#)

Basics

Requirement 3 – Provider-Patient Relationship

- The relationship between a patient and a physician is based on trust
- Physicians have ethical responsibility to:
 - Place patients' welfare above the physician's own self-interest
 - Place patients' welfare above obligations to others
 - Use sound medical judgment on patients' behalf
 - Advocate for their patients' welfare.
- The relationship involves mutual consent between physician and patient (or surrogate)

Basics

Requirement 3 – Provider-Patient Relationship

- Limited patient-physician relationship may be created:
 - Physician provides emergency care
 - Consent is implied
 - Medical care appropriate for a prisoner under court order
 - Keeping with ethics guidance on court-initiated treatment
 - Physician performs independent medical examination
 - A limited patient-physician relationship exists

Basics

Requirement 3 – Provider-Patient Confidentiality

- **Doctor-patient confidentiality**
 - Patient shouldn't be worried about seeking medical treatment for fear that his or her condition will be disclosed to others
 - Patients can share information
 - Helps physician make correct diagnosis and provide treatment
- **Physician-patient privilege** is a legal concept
 - Protects communications between a patient and their doctor from being used against the patient in court

Basics

Requirement 8a – Health Care Influencers

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.

- [Quality improvement model](#)
- [How medical societies can save American medicine](#)

Basics

Requirement 8a – Medical Societies Influencers

- Made up of physician members of a specialty or common interest
- Can have a significant influence over the way their specialty is practiced
- May influence certification, licensure for practice in designated field
- Can be very effective in protecting the interests of the society through
 - Political action groups
 - Accelerate the sharing of best practices across the field
 - Organizing influence for
 - Ongoing education
 - Specialization
 - Training

Basics

Requirement 8a – Employers Influencers

- More than one-third of U.S. health care dollars financed by employers
- Largest single provider and purchaser of health insurance in the US

Basics

Requirement 8a – Insurance Industry Influencers

- Insurance Industry is primary means health care services are paid for
- Often set the prices
 - Determine if a medical expense meets their criteria for payment
 - Significantly influence practice patterns through reimbursement
- Often in adversarial relationship with medical providers and patients

Basics

Requirement 8a – Government Influencers

- Government pays for ~45% of all health care expenses
- Significant ability to influence
 - How medicine is practiced
 - The way that it is paid for
 - How the delivery of health care is legislated
- Governing, regulating and funding entities
 - Food and Drug Administration (FDA)
 - National Institutes of Health (NIH)

Basics

Requirement 8b – Health Care Influencers

8. Do the following:

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.

- [Quality improvement model](#)
- [Resources for Uninsured](#)

Tamara Fulwyler
Tribal Relations Director

Janna Bardi
Chief of Public Health Practice

John Wiesman
Secretary of Health

Terry Bergener
Executive Assistant

Maria Courogen
Special Assistant

SYSTEMS TRANSFORMATION

Laura Blaske
Strategic Engagement & Planning Director

Kathy Lofy
State Health Officer/Chief Science Officer

STATE HEALTH OFFICER

Scott Lindquist
Communicable Diseases State Epidemiologist
Deputy Health Officer

Cathy Wasserman
Non-Infectious Conditions State Epidemiologist

Bryant Karras
Chief Informatics Officer

Chris Baumgartner
Senior Data Exchange Manager

Jacquée McNerney
Data@Health Program Manager

Jessica Todorovich
Chief of Staff

LEADERSHIP TEAM

Jerrold Davis
Assistant Secretary
Disease Control & Health Statistics

Lauren Jenks
Assistant Secretary
Environmental Public Health

Kristin Peterson
Assistant Secretary
Health Systems Quality Assurance

Lacy Fehrenbach
Assistant Secretary
Prevention & Community Health

Clark Halvorson
Assistant Secretary
Emergency Preparedness & Response

Shawn Murinko
Chief
Center for Facilities, Risk, & Adjudication

Amy Ferris
Chief Financial Officer

Jennifer McNamara
Chief Information Officer

Jeff Canaan
Chief of People & Performance

David Bayne
Director

CENTER FOR PUBLIC AFFAIRS

Amber Erdahl
Deputy Director

Amy Reynolds
Communications Director

Danielle Kenneweg
Health Promotion & Education Director

Paj Nandi
Community Relations & Equity Director

Kelly Cooper
Director

POLICY & LEGISLATIVE RELATIONS

Ryan Black
Deputy Director

Michael Ellsworth
Federal Liaison & Senior Counsel

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[Environmental Public Health](#)
[Health Systems Quality Assurance](#)
[Health Systems Transformation and Innovation](#)
[Office of the State Health Officer](#)
[Prevention and Community Health](#)

Basics

Requirement 8b – State Monitor

Washington State Department of Health

- 28 boards, commissions and advisory committees
- Health Systems Quality Assurance (HSQA) regulates and supports:
 - More than 463,000 health professionals in 83 health professions
 - 11,000 health groups and programs
 - Maintains and strengthens the state's health systems
 - Processes 400 health professionals new applications each day
 - Inspects and regulates medical and community facilities
 - Investigates and prosecutes complaints against healthcare providers and facilities

Health Systems Quality Assurance

Basics

Requirement 8b – Uninsured

- Washington State Health Care Authority (HCA)
 - Purchases health care for more than 2.5 million Washington residents through
 - Apple Health (Medicaid)
 - Public Employees Benefits Board (PEBB) Program
 - School Employees Benefits Board (SEBB) Program
 - COFA Islander Health Care Program
- [Quality improvement model](#)
- [Resources for Uninsured](#)

Basics

Requirement 9 – Health Care Globally

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

- [4 Types of Healthcare Systems](#)
- [The Health Care Delivery System: The US and Worldwide](#)

Basics

Requirement 9 – Health Care Globally - Beveridge Model

Beveridge Model (UK)

- National single-payer health care system
- Majority of the hospitals and doctors work for the government
- Private practices and physicians exist
- Health care paid by government through taxes
- Government regulates pharmaceutical and doctor costs/fees
 - Saves enormous amounts of money
- Long wait times

- [4 Types of Healthcare Systems](#)
- [The Health Care Delivery System: The US and Worldwide](#)

Basics

Requirement 9 – Health Care Globally - Bismarck Model

Bismarck Model (Germany)

- National single-payer health care system
- Health care is provided through insurance companies
 - Paid by employer and employee payroll deductions
- Everyone must be covered
- Hospitals and doctors may not operate for profit
 - Lower costs
 - Doctors earn less
- [4 Types of Healthcare Systems](#)
- [The Health Care Delivery System: The US and Worldwide](#)

Basics

Requirement 9 – Health Care Globally - NHIM

National Health Insurance Model (Japan)

- Health care is paid through higher taxation
- Patients are free to choose any doctor or hospital they wish
- No profit incentive
 - Heavy emphasis on preventative care

- [4 Types of Healthcare Systems](#)
- [The Health Care Delivery System: The US and Worldwide](#)

Basics

Requirement 9 – Health Care Globally - Private Insurance

Private Insurance System (US)

- Individuals are either covered
 - Employers
 - Private policy
 - Government sponsored policy
 - Many are not covered
- Argument for this system
 - Doctors and hospital have incentive to work
 - Higher quality providers
- Argument against system
 - High costs
 - Many go without medical care

Basics

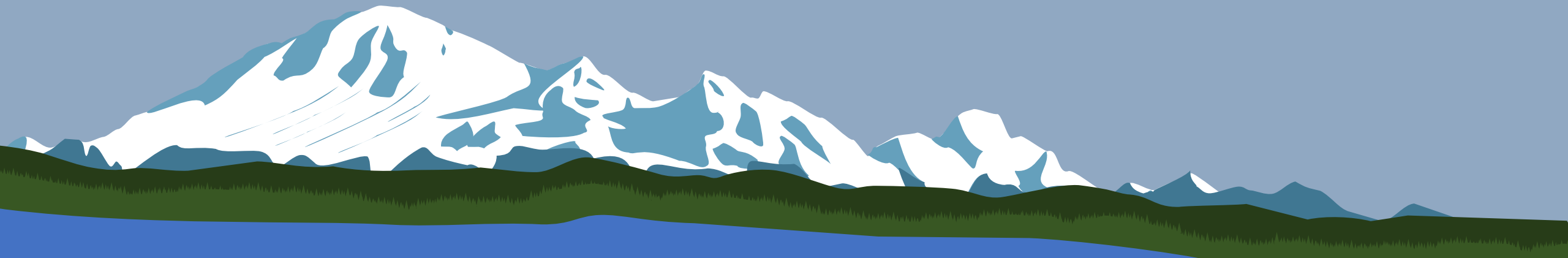
Requirement 10 – Service

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

- Must be **Health-Related**
- [Wiki - List of health-related charity fundraisers](#)
- [100 Million Mask Challenge](#)
- [American Red Cross - Be a Volunteer](#)



Types of Providers



Types of Providers

Requirement 4 – Type of Providers

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

Types of Providers

Requirement 4 – Type of Providers – Physicians

Allopathic Physician (M.D.) and Osteopathic Physician (D.O.)

- M.D. and D.O. works as physicians
 - Examine patients
 - Order and interpret diagnostic tests
 - Prescribe and administer treatments
- Educational Requirements
 - 4 Year postgraduate from accredited or approved medical school
 - Osteopathic medical school -
 - Specific training on osteopathic manipulative treatment (OMT)
- Licensing requirement options:
 - [Washington State License Requirements](#)

Types of Providers

Requirement 4 – Type of Providers - DC

Chiropractor (D.C.)

- Emphasizes the inherent power of the body to heal itself without the use of drugs or surgery
- Well known for the hands-on technique they practice to adjust imbalances in the patient's skeletal system, particularly the spine
- [Educational Requirements](#)
 - National Board of Chiropractic Examiners Test Parts I, II, III, and IV
- Educational and Licensing Requirements
 - [Washington State License Requirements](#)

Types of Providers

Requirement 4 – Type of Providers - EMT

Emergency Medical Technician

- Respond to emergencies
 - Heart attack in her home
 - Multi-vehicle accidents on highway
- Provide first-line medical or emergency care
- [Educational Requirements](#)
 - Successful completion of department approved advanced emergency medical technician (AEMT) course
 - Applicant must possess a high school diploma or GED
- Educational and Licensing Requirements
 - [Washington State License Requirements](#)

Types of Providers

Requirement 4 – Type of Providers - LPN

Licensed Practical/Vocational Nurse

- Care for the sick, injured, convalescent and disabled
- Care under the supervision of registered nurses (RNs) or physicians
- Most LPNs provide basic bedside care
 - Vital signs
 - Treat bedsores
 - Prepare and give injections and enemas
 - Apply dressings
 - Give alcohol rubs and massages
- Educational and Licensing Requirements
 - [Washington State License Requirements](https://www.explorehealthcareers.org/licensed-practical-nurse)

Types of Providers

Requirement 4 – Type of Providers - MA

Medical Assistant

- Perform routine administrative and clinical tasks
 - Answer the telephone
 - Greet patients
 - Fill out medical records and update them as needed
 - Schedule appointments
 - Handle correspondence and billing
- Educational and Licensing Requirements
 - [Washington State License Requirements](https://www.explorehealthcareers.org/medical-assistant)

Types of Providers

Requirement 4 – Type of Providers - Lab Tech

Medical Laboratory Technologist

- Examine and analyze body fluids, tissues and cells
- Identify infective microorganisms
- Analyze the chemical constituents of body fluids
- Identify blood-clotting abnormalities
- Cross-match donor blood for transfusions
- Test blood for drug levels to measure the efficacy of particular treatments
- Educational and Licensing Requirements
 - [Washington State License Requirements](https://www.explorehealthcareers.org/clinical-laboratory-scientist-technician)

Types of Providers

Requirement 4 – Type of Providers - Midwife

Nurse-Midwife

- Assisting with births
- Pre-conception through the post-partum care
- Gynecological services
- Educational and Licensing Requirements
 - [Washington State License Requirements](#)

Types of Providers

Requirement 4 – Type of Providers - NP

Nurse Practitioner

- Diagnose and treat patients
- Help prevent disease and manage patient health
- Prescribe medications, including controlled substances
- Educational and Licensing Requirements
 - [Washington State License Requirements](#)

Types of Providers

Requirement 4 – Type of Providers - OT

Occupational Therapist

- Help people of all ages to fully engage in their daily lives
 - Getting dressed
 - Cooking
 - Eating
 - Driving
- Educational and Licensing Requirements
 - [Washington State License Requirements](#)

Types of Providers

Requirement 4 – Type of Providers - OD

Optometrist

- Independent primary health care professionals for the eye
 - Examine
 - Diagnose
 - Treat
 - Manage diseases, injuries, and disorders of the visual system
- Educational and Licensing Requirements
 - [Washington State License Requirements](#)

Types of Providers

Requirement 4 – Type of Providers - PharmD

Pharmacist

- Prepare and dispense prescriptions
- Ensure medicines and doses are correct
- Prevent harmful drug interactions
- Counsel patients on the safe and appropriate use of their medications
- Educational and Licensing Requirements
 - [Washington State License Requirements](#)

Types of Providers

Requirement 4 – Type of Providers - PT

Physical Therapist

- Provides treatment that
 - Improves mobility and relieves pain
 - Reduces the need for surgery and prescription drugs
 - Allows patients to participate in a recovery plan designed for their specific needs

- Educational and Licensing Requirements
 - [Washington State License Requirements](#)

Types of Providers

Requirement 4 – Type of Providers - PA

Physician Assistant

- Medical providers
- Licensed to diagnose and treat illness and disease
- Prescribe medication for patients
- Work in collaboration with a licensed physician
- Educational Requirements
 - Graduation from an accredited and approved physician assistant program
- Educational and Licensing Requirements
 - [Washington State License Requirements](https://www.explorehealthcareers.org/physician-assistant/washington-state-license-requirements)

Types of Providers

Requirement 4 – Type of Providers - DPM

Podiatrist

- Prevention, diagnosis and treatment of foot disorders
- Perform surgery, administer medications and prescribe physical therapy
- Educational and Licensing Requirements
 - [Washington State License Requirements](#)

Types of Providers

Requirement 4 – Type of Providers - PhD and PsyD

Psychologist

- Psychology is the study of the mind and behavior
 - Functions of the brain
 - Actions of nations
 - Child development
 - Care for the aged
- Educational Requirements - 6 – 8 years
 - Doctoral degree from a regionally accredited institution
- Educational and Licensing Requirements
 - [Washington State License Requirements](https://www.explorehealthcareers.org/psychologist)

Types of Providers

Requirement 4 – Type of Providers – Rad Tech

Radiologic Technologist

- Perform diagnostic imaging procedures
 - X-ray examinations
 - Magnetic resonance imaging (MRI) scans
 - Computed tomography (CT) scans
- Educational and Licensing Requirements
 - [Washington State License Requirements](#)

Types of Providers

Requirement 4 – Type of Providers - RN

Registered Nurse

- Work in collaboration with physicians and other providers
 - Observe, assess and record symptoms, reactions and progress
 - Direct patient care
 - Roles range from direct patient care and case management to
 - Establishing nursing practice standards
 - Developing quality assurance procedures
 - Directing complex nursing care systems
 - Conducting clinical research and teaching in nursing programs
- Educational and Licensing Requirements
 - [Washington State License Requirements](https://www.explorehealthcareers.org/registered-nurse)

Types of Providers

Requirement 4 – Type of Providers - RT

Respiratory Therapist

- Help people who suffer from chronic respiratory diseases like
 - Asthma
 - Bronchitis
 - Emphysema
- Educational and Licensing Requirements
 - [Washington State License Requirements](#)

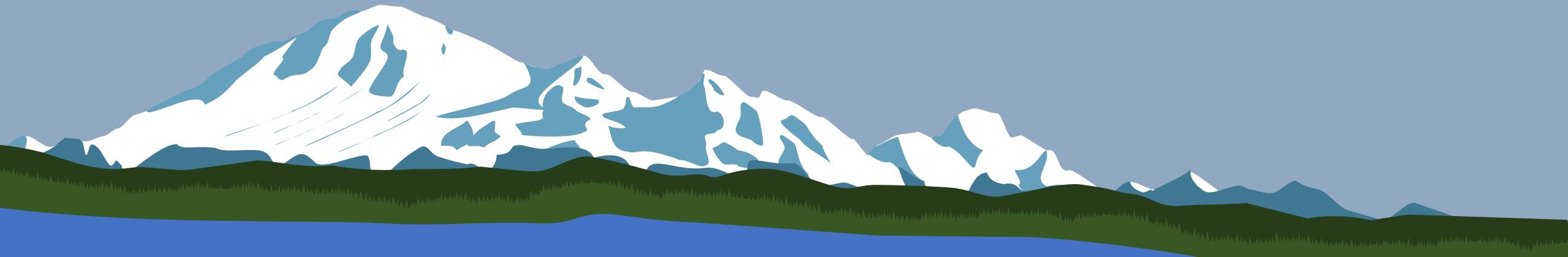
Types of Providers

Resources

[Career Explorer](#)



Primary Care And Core Specialties



Primary Care

Requirement 5 – Primary Care and Core Specialties

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 (a "primary care" specialty)
 2. Family practice (a "primary care" specialty)
 3. Obstetrics/gynecology (a "primary care" specialty)
 4. Pediatrics (a "primary care" specialty)
 5. Psychiatry
 6. Surgery
 - c. Describe the additional educational requirements for those specialties.

Types of Providers

Requirement 5a – Primary Care

Primary care is

- Delivered by Primary Care specialists
- Care for the "undifferentiated" patient
 - Comprehensive First Contact and Continuing Care
 - Undiagnosed sign, symptom, or health concern
 - Not limited by
 - Problem origin (biological, behavioral, or social)
 - Organ system
 - Diagnosis

Types of Providers

Requirement 5a – Primary Care

Primary care includes

- Health promotion
- Disease prevention
- Health maintenance
- Counseling
- Patient education
- Diagnosis and treatment of acute and chronic illnesses

Types of Providers

Requirement 5a – Primary Care

Primary care has four different areas

- Internal Medicine
- Family Medicine
- Obstetrics and Gynecology (OB/GYN)
- Pediatrics

Types of Providers

Requirement 5b – Internal Medicine

Internal Medicine (Primary Care)

- aka Internist
- Provides primary care to adults
- Emphasis on
 - Treatment with medication rather than surgery
 - Coordination of care
 - Referral out to specialists as needed
- Has MANY subspecialties
- Additional educational requirements
 - 3-year residency
 - Subspecialty fellowships available

Types of Providers

Requirement 5b – Family Practice

Family Practice (Primary Care)

- Cares for your whole family
 - Newborns to the elderly, of any age or gender
- Emphasis is placed on
 - Treatment of all problems
 - Coordination of care
 - Referrals to other specialists as needed
- Additional educational requirements
 - 3-year residency
 - Subspecialty fellowships available

Types of Providers

Requirement 5b – Obstetrics/Gynecology

Obstetrics/Gynecology (Primary Care)

- Cares for women's reproductive health
 - Pregnancy care
 - Labor
 - Delivery
 - Post pregnancy
- Female reproductive health
- Additional educational requirements
 - 4-year residency
 - Subspecialty fellowships available

Types of Providers

Requirement 5b – Pediatrics

Pediatrics (Primary Care)

- Provides primary care to infants, children, and adolescents
 - Concerned with growth and development
 - Diagnosis, treatment, and prevention of childhood diseases
 - Advice on the care of children
 - Provide vaccinations
 - Conduct periodic well-baby/well-child exams
 - Assess general health and detect problems
- Additional educational requirements
 - 3-year residency
 - Subspecialty fellowships available

Types of Providers

Requirement 5b – Psychiatry

Psychiatry

- Study, prevention and treatment of
 - Mental illness
 - Emotional and behavioral problems
 - Psychological, social, physical and pharmacological approaches
- Additional educational requirements
 - 4-year residency
 - Subspecialty fellowships available

Types of Providers

Requirement 5b – Surgery

Surgery

- Management of disorders treated with operative surgery
 - General surgeons
 - Orthopedic surgeons
 - Many subspecialties
- Additional educational requirements
 - 5-6-year residencies
 - Subspecialty residencies and fellowships available

Primary Care

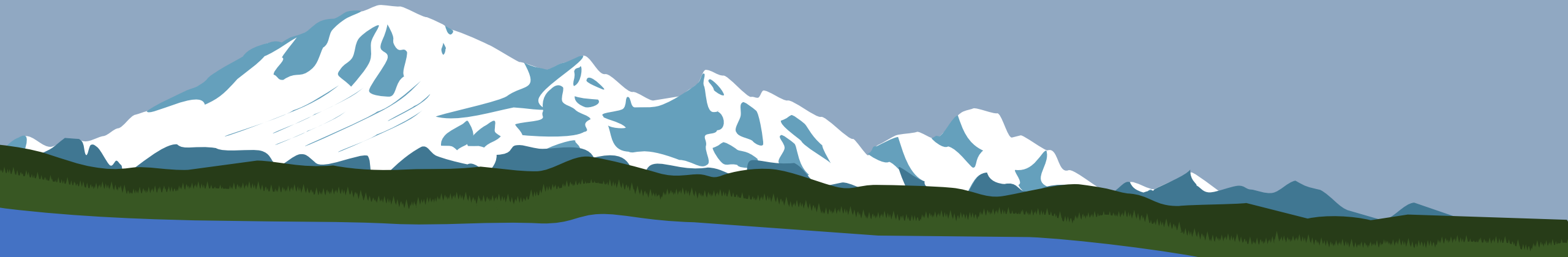
Resources

[What Do Primary Care Physicians Treat?](#)

[WHAT IS PRIMARY CARE?](#)



Specialty Care



Specialty Care

Requirement 6 - 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](#)
9. [Gastroenterology](#)
10. [Geriatric medicine](#)
11. [Hematology/oncology](#)
12. [Hospitalist](#)
13. [Infectious disease](#)
14. [Nephrology](#)
15. [Neuro surgery](#)
16. [Neurology](#)
17. [Nuclear medicine](#)
18. [Ophthalmology](#)
19. [Orthopedic surgery](#)
20. [Otolaryngology/head and neck surgery](#)
21. [Pathology](#)
22. [Physical medicine and rehabilitation/sports medicine](#)
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.

[Back to List](#)

Specialty Care

Requirement 6 – Specialties - Allergy/Immunology

Allergy/immunology

- Allergies and diseases of the respiratory tract or immune system
 - Asthma
 - Food and drug allergies
 - Immune deficiencies
 - Diseases of the lung
- Can pursue opportunities in research, education, or clinical practice

Additional educational requirements

- 3-year Internal Medicine Residency
- +2-year Allergy and Immunology Fellowship

[Back to List](#)

Specialty Care

Requirement 6 – Specialties - Anesthesiology

Anesthesiology

- Dedicated to pain relief for patients before, during, and after surgery
- Includes following subspecialties:
 - Critical care medicine
 - Hospice and palliative care
 - Pain medicine
 - Pediatric anesthesiology
 - Sleep medicine

Additional educational requirements

- 4-year Anesthesiology Residency

[Back to List](#)

Specialty Care

Requirement 6 – Specialties - Cardiology

Cardiology

- Disorders of the heart as well as some parts of the circulatory system
- Medical diagnosis and treatment of
 - Congenital heart defects
 - Coronary artery disease
 - Heart failure
 - Valvular heart disease
 - Electrophysiology

Additional educational requirements

- 3-year Internal Medicine Residency
- +1-year Interventional Cardiology Fellowship

[Back to List](#)

Specialty Care

Requirement 6 – Specialties - Colorectal Surgery

Colorectal Surgery

- Disorders of the rectum, anus, and colon
- Also known as proctology (old school)
 - Varicosities or swelling (hemorrhoids)
 - Unnatural cracks or tears in the anus (anal fissures)
 - Abnormal connections or passageways (fistulas)
 - Severe constipation conditions
 - Other colorectal pathology

Additional educational requirements

- 5-year Surgery Residency
- +1-year Colon and Rectal Surgery Fellowship

[Back to List](#)

Specialty Care

Requirement 6 – Specialties - Critical Care Medicine

Critical Care Medicine (intensive care medicine)

- Deals with critically ill patients
- Treat potentially life-threatening conditions
 - Providing life support
 - Invasive monitoring techniques
 - Resuscitation
 - End-of-life care

Additional educational requirements

- 4-year Anesthesiology Residency
- +1-year Critical Care Medicine Fellowship

[Back to List](#)

Specialty Care

Requirement 6 – Specialties - Dermatology

Dermatology

- Treat disorders of the skin, hair, nails, and adjacent mucous membranes
- Diagnose everything from skin cancer, tumors, inflammatory diseases of the skin, and infectious diseases.
- Perform skin biopsies and dermatological surgical procedures

Additional educational requirements

- 4-year Dermatology Residency

[Back to List](#)

Specialty Care

Requirement 6 – Specialties - Emergency Medicine

Emergency Medicine

- Care for adult and pediatric patients in emergency
- Provide immediate decision making and action to save lives and prevent further injury
- Guide pre-hospital care by directing emergency medical technicians

Additional educational requirements

- 3-4-year Emergency Medicine Residency

[Back to List](#)

Specialty Care

Requirement 6 – Specialties - Endocrinology

Endocrinology

- Deals with the endocrine system and hormones
 - Diabetes
 - Metabolic disorders
 - Osteoporosis
 - Menopause
 - Thyroid problems
 - Cancers of the endocrine glands

Additional educational requirements

- 3-year Internal Medicine Residency
- +2-year Endocrinology, Diabetes, and Metabolism Fellowship

[Back to List](#)

Specialty Care

Requirement 6 – Specialties - Gastroenterology

Gastroenterology

- Focused on the digestive system and its disorders
 - Crohn's disease or ulcerative colitis
 - Irritable bowel syndrome (IBS)
 - Celiac disease
 - Liver disease and Gallbladder conditions
 - Some cancers of the gut
 - Heartburn

Additional educational requirements

- 3-year Internal Medicine Residency
- +3-year Gastroenterology Fellowship

[Back to List](#)

Specialty Care

Requirement 6 – Specialties - Geriatric Medicine

Geriatric Medicine

- Focuses on health care of elderly people
- Aims to promote health by preventing and treating diseases and disabilities in older adults
 - Falls
 - Delirium and Dementia
 - Incontinence
 - Polypharmacy

Additional educational requirements

- 3-year Internal Medicine Residency
- +1-year Geriatric Medicine Fellowship

[Back to List](#)

Specialty Care

Requirement 6 – Specialties - Hematology/Oncology

Hematology/Oncology

- Diseases related to blood
 - Hemophilia
 - Blood clots (thrombus)
 - other bleeding disorders
 - Blood cancers such as leukemia, multiple myeloma, and lymphoma

Additional educational requirements

- 3-year Internal Medicine Residency
- +2-year Hematology Fellowship or
- +3-year Hematology and Oncology Fellowship

[Back to List](#)

Specialty Care

Requirement 6 – Specialties - Hospitalist

Hospitalist

- Care for hospitalized patients only while they are in the hospital

Additional educational requirements

- Hospitalists are not necessarily required to have separate board certification in hospital medicine

[Back to List](#)

Specialty Care

Requirement 6 – Specialties - Infectious Disease

Infectious Disease

- Treatment of diseases caused by microorganisms
 - Bacteria
 - Viruses (such as HIV and hepatitis)
 - Fungi
 - Parasites

Additional educational requirements

- 3-year Internal Medicine Residency
- +2-year Infectious Disease Fellowship

[Back to List](#)

Specialty Care

Requirement 6 – Specialties - Nephrology

Nephrology

- Focuses on the kidneys
 - Maintaining normal kidney function
 - Treatment of kidney disease
 - Chronic kidney disease
 - Kidney Stones
 - Glomerulonephritis
 - Urinary tract infections

Additional educational requirements

- 3-year Internal Medicine Residency
- +2-year Nephrology Fellowship

[Back to List](#)

Specialty Care

Requirement 6 – Specialties - Neurosurgery

Neurosurgery

- Surgical specialty that deals with problems with the nervous systems
 - Brain surgery
 - Clot removal
 - Tumor repair
 - Deep brain stimulation
 - Spine surgery
 - Endovascular procedures such as carotid endarterectomy
 - Peripheral nerve surgery

Additional educational requirements

- 7-year Neurological Surgery Residency

[Back to List](#)

Specialty Care

Requirement 6 – Specialties - Neurology

Neurology

- Medical treatment of the nervous system
 - Strokes
 - Alzheimer's disease
 - Seizure disorders
 - Spinal cord disorders

Additional educational requirements

- 4-year Neurology Residency

[Back to List](#)

Specialty Care

Requirement 6 – Specialties - Nuclear Medicine

Nuclear Medicine

- Nuclear radiologists or nuclear medicine radiologists
- Use radioactive materials to diagnose and treat diseases
 - Bone scans
 - Treat certain disease
 - Hyperthyroidism and thyroid cancer
 - Tumors and bone cancer

Additional educational requirements

- 4-year Nuclear Medicine Residency*

*Nuclear training is 2 years after completing a residency in another discipline or 1 year after a diagnostic radiology program

[Back to List](#)

Specialty Care

Requirement 6 – Specialties - Ophthalmology

Ophthalmology

- Comprehensive medical and surgical care of the eyes
- Diagnose and treat vision problems
 - Strabismus (cross eyed)
 - Diabetic retinopathy
 - Surgeries on cataracts or corneal transplantation

Additional educational requirements

- 4-year Ophthalmology Residency

[Back to List](#)

Specialty Care

Requirement 6 – Specialties - Orthopedic Surgery

Orthopedic Surgery

- Focuses on the musculoskeletal system
- Treatment including surgery for
 - Musculoskeletal trauma
 - Spine diseases
 - Sports injuries
 - Degenerative diseases
 - Infections
 - Tumors and congenital disorders

Additional educational requirements

- 5-year Orthopaedic Surgery Residency

[Back to List](#)

Specialty Care

Requirement 6 – Specialties - ENT

Otolaryngology/Head and Neck surgery

- Surgical and medical management of conditions of the head and neck
 - Commonly include functional diseases that affect
 - Eating
 - Drinking
 - Speaking
 - Breathing
 - Swallowing
 - Hearing

Additional educational requirements

- 5-year Otolaryngology Residency

[Back to List](#)

Specialty Care

Requirement 6 – Specialties - Pathology

Pathology

- Studies the causes and nature of diseases
- Use microscopic examination and clinical lab tests
 - Tissues
 - Cells
 - Body fluids
- May determine whether an organ transplant is needed
- Examine blood of a pregnant woman to ensure the health of the fetus

Additional educational requirements

- 4-year Pathology—Anatomic and Clinical Residency

[Back to List](#)

Specialty Care

Requirement 6 – Specialties - Physical Medicine

Physical Medicine and Rehabilitation

- Help patients with disabilities of
 - Brain
 - Spinal cord
 - Nerves
 - Bones, joints, ligaments, muscles, and tendons
- Work to improve patient quality of life, rather than seek medical cures

Additional educational requirements

- 4-year Physical Medicine and Rehab Residency

[Back to List](#)

Specialty Care

Requirement 6 – Specialties - Plastics

Plastic, Reconstructive, and Maxillofacial Surgery

- Surgical specialty involving the restoration, reconstruction, or alteration of the human body
- **Reconstructive surgery**
 - Craniofacial surgery, hand surgery, microsurgery, and burns
- **Cosmetic surgery**
 - Improving the appearance of the body

Additional educational requirements

- 6-year Plastic Surgery Residency

[Back to List](#)

Specialty Care

Requirement 6 – Specialties - Preventive Medicine

Preventive Medicine

- Promoting patient health and well-being
 - Preventative practices in clinical medicine
 - Biostatistics, epidemiology, environmental and occupational medicine, and even the evaluation and management of health services and healthcare organizations
- Combines interdisciplinary elements of medical, social, economic, and behavioral sciences to understand the causes of disease and injury in population groups

Additional educational requirements

- 3-year Preventive Medicine Residency

[Back to List](#)

Specialty Care

Requirement 6 – Specialties - Pulmonology

Pulmonology

- Branch of internal medicine and related to intensive care medicine
- Often involves managing patients who need life support and ventilation
- Treat:
 - Pneumonia, asthma, tuberculosis, emphysema, and complicated chest infections

Additional educational requirements

- 3-year Internal Medicine Residency
- +3-year Pulmonary Disease and Critical Care Medicine Fellowship

[Back to List](#)

Specialty Care

Requirement 6 – Specialties - Radiology

Radiology

- Uses medical imaging to diagnose and treat diseases
 - X-ray radiography
 - Ultrasound
 - Computed tomography (CT)
 - Nuclear medicine including positron emission tomography (PET)
 - Magnetic resonance imaging (MRI)

Additional educational requirements

- 5-year Radiology-Diagnostic Residency

[Back to List](#)

Specialty Care

Requirement 6 – Specialties - Rheumatology

Rheumatology

- Devoted to the diagnosis and therapy of rheumatic diseases
 - Rheumatoid arthritis
 - Spondyloarthropathies
 - Crystal arthropathies: gout, pseudogout
 - Lupus
 - Ehlers-Danlos syndrome
 - Sjögren's syndrome

Additional educational requirements

- 3-year Internal Medicine Residency
- +2-year Rheumatology Fellowship

[Back to List](#)

Specialty Care

Requirement 6 – Specialties - Thoracic/CT Surgery

Thoracic/Cardiothoracic Surgery

- Surgical treatment of organs inside the thorax (the chest)
 - Generally the lungs and heart

Additional educational requirements

- 5-year Surgery
- +2-year Thoracic Surgery Fellowship
or
- 6-year Thoracic Surgery Integrated Residency

[Back to List](#)

Specialty Care

Requirement 6 – Specialties - Urology

Urology

- Focus on male and female urinary tract
 - Kidneys
 - Ureters
 - Bladder
 - Urethra
 - Male sex organs

Additional educational requirements

- 5-year Urology Residency

[Back to List](#)

Specialty Care

Requirement 6 – Specialties - Vascular Surgery

Vascular Surgery

- Surgical subspecialty in which diseases of the vascular system
 - Arteries, veins and lymphatic circulation
 - Managed
 - Medical therapy
 - Minimally-invasive catheter procedures
 - Surgical reconstruction

Additional educational requirements

- 5-7-years Vascular Surgery Integrated Residency

Specialty Care

Resources

[YouTube Playlist for Specialists](#)

[The Ultimate List of Medical Specialties and Subspecialties](#)

[Subspecialties of Internal Medicine](#)

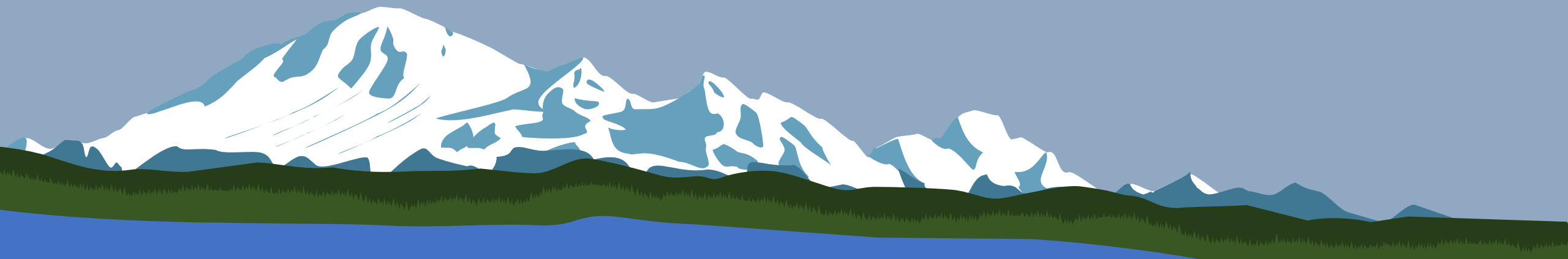
[List of Medical Specialties](#)

[ABMS GUIDE TO MEDICAL SPECIALTIES](#)

[CAREERS IN PATHOLOGY](#)



Office Visit



Office Visit

Requirement 7a – Doctor's Office

- 7a. 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.
- 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.

[BSA 680-001 ABC.pdf](#)

[Medical Risk Factors for Your Participation in Scouting](#)

Office Visit

Requirement 7a – Doctor's Office

[BSA 680-001 ABC](#)

- Part A: Informed Consent, Release Agreement, and Authorization
- Part B: General Information/Health History
 - Allergies/Medication
 - Immunization
- Part C: Pre-Participation Physical
 - Examiner's Certification

[BSA 680-001 ABC.pdf](#)

[Medical Risk Factors for Your Participation in Scouting](#)

Part B1: General Information/Health History

B1

Full name:

Date of birth:

High-adventure base participants:

Expedition/crew No.:

or staff position:

Age:

Gender:

Height (inches):

Weight (lbs.):

Address:

City:

State:

ZIP code:

Phone:

Unit leader:

Unit leader's mobile #:

Council Name/No.:

Unit No.:

Health/Accident Insurance Company:

Policy No.:



Please attach a photocopy of both sides of the insurance card. If you do not have medical insurance, enter "none" above.

In case of emergency, notify the person below:

Name:

Relationship:

Address:

Home phone:

Other phone:

Alternate contact name:

Alternate's phone:

Health History

Do you currently have or have you ever been treated for any of the following?

Yes	No	Condition	Explain
<input type="checkbox"/>	<input type="checkbox"/>	Diabetes	Last HbA1c percentage and date: <input type="text"/> Insulin pump: Yes <input type="checkbox"/> No <input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Hypertension (high blood pressure)	
<input type="checkbox"/>	<input type="checkbox"/>	Adult or congenital heart disease/heart attack/chest pain (angina)/heart murmur/coronary artery disease. Any heart surgery or procedure. Explain all "yes" answers.	
<input type="checkbox"/>	<input type="checkbox"/>	Family history of heart disease or any sudden heart-related death of a family member before age 50.	
<input type="checkbox"/>	<input type="checkbox"/>	Stroke/TIA	
<input type="checkbox"/>	<input type="checkbox"/>	Asthma/reactive airway disease	Last attack date: <input type="text"/>
<input type="checkbox"/>	<input type="checkbox"/>	Lung/respiratory disease	
<input type="checkbox"/>	<input type="checkbox"/>	COPD	
<input type="checkbox"/>	<input type="checkbox"/>	Ear/eyes/nose/sinus problems	
<input type="checkbox"/>	<input type="checkbox"/>	Muscular/skeletal condition/muscle or bone issues	
<input type="checkbox"/>	<input type="checkbox"/>	Head injury/concussion/TBI	
<input type="checkbox"/>	<input type="checkbox"/>	Allergic sickness	
<input type="checkbox"/>	<input type="checkbox"/>	Psychiatric/psychological or emotional difficulties	
<input type="checkbox"/>	<input type="checkbox"/>	Neurological/behavioral disorders	
<input type="checkbox"/>	<input type="checkbox"/>	Blood disorders/sickle cell disease	
<input type="checkbox"/>	<input type="checkbox"/>	Fainting spells and dizziness	
<input type="checkbox"/>	<input type="checkbox"/>	Kidney disease	
<input type="checkbox"/>	<input type="checkbox"/>	Seizures or epilepsy	Last seizure date: <input type="text"/>
<input type="checkbox"/>	<input type="checkbox"/>	Abdominal/stomach/digestive problems	
<input type="checkbox"/>	<input type="checkbox"/>	Thyroid disease	
<input type="checkbox"/>	<input type="checkbox"/>	Skin issues	
<input type="checkbox"/>	<input type="checkbox"/>	Obstructive sleep apnea/sleep disorders	CPAP: Yes <input type="checkbox"/> No <input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	List all surgeries and hospitalizations	Last surgery date: <input type="text"/>
<input type="checkbox"/>	<input type="checkbox"/>	List any other medical conditions not covered above	



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Part B2: General Information/Health History

B2

Full name:

Date of birth:

High-adventure base participants:

Expedition/crew No.:

or staff position:

Allergies/Medications

DO YOU USE AN EPINEPHRINE

☐ YES ☐ NOAUTOMJECTOR? Exp. date (if yes)

DO YOU USE AN ASTHMA RESCUE

☐ YES ☐ NOINHALER? Exp. date (if yes)

Are you allergic to or do you have any adverse reaction to any of the following?

Yes	No	Allergies or Reactions	Explain
<input type="checkbox"/>	<input type="checkbox"/>	Medication	
<input type="checkbox"/>	<input type="checkbox"/>	Food	
<input type="checkbox"/>	<input type="checkbox"/>	Plants	
<input type="checkbox"/>	<input type="checkbox"/>	Insect bites/stings	

List all medications currently used, including any over-the-counter medications.

☐ Check here if no medications are routinely taken.☐ If additional space is needed, please list on a separate sheet and attach.

Medication	Dose	Frequency	Reason

☐ YES ☐ NONon-prescription medication administration is authorized with these exceptions:

Administration of the above medications is approved for youth by:

Signature

Parent/guardian signature

Signature

MD/DO, NP, or PA signature (if your state requires signature)



Bring enough medications in sufficient quantities and in the original containers. Make sure that they are NOT expired, including inhalers and EpiPens. You SHOULD NOT STOP taking any maintenance medication unless instructed to do so by your doctor.

Immunization

The following immunizations are recommended. Tetanus immunization is required and must have been received within the last 10 years. If you had the disease, check the disease column and list the date. If immunized, check yes and provide the year received.

Yes	No	Had Disease	Immunization	Date(s)
<input type="checkbox"/>	<input type="checkbox"/>		Tetanus	
<input type="checkbox"/>	<input type="checkbox"/>		Pertussis	
<input type="checkbox"/>	<input type="checkbox"/>		Diphtheria	
<input type="checkbox"/>	<input type="checkbox"/>		Measles/mumps/rubella	
<input type="checkbox"/>	<input type="checkbox"/>		Polio	
<input type="checkbox"/>	<input type="checkbox"/>		Chicken Pox	
<input type="checkbox"/>	<input type="checkbox"/>		Hepatitis A	
<input type="checkbox"/>	<input type="checkbox"/>		Hepatitis B	
<input type="checkbox"/>	<input type="checkbox"/>		Meningitis	
<input type="checkbox"/>	<input type="checkbox"/>		Influenza	
<input type="checkbox"/>	<input type="checkbox"/>		Other (i.e., Hib)	
<input type="checkbox"/>	<input type="checkbox"/>		Exemption to immunizations (form required)	

Please list any additional information about your medical history:

DO NOT WRITE IN THIS BOX.

Review for camp or special activity.

Reviewed by: Date: Further approval required: ☐ Yes ☐ NoReason: Approved by: Date: 

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Part C: Pre-Participation Physical

This part must be completed by certified and licensed physicians (MD, DO), nurse practitioners, or physician assistants.

Full name: _____

Date of birth: _____

High-adventure base participants:

Expedition/crew No.: _____
or staff position: _____



You are being asked to certify that this individual has no contraindication for participation in a Scouting experience. For individuals who will be attending a high-adventure program, including one of the national high-adventure bases, please refer to the supplemental information on the following pages or the form provided by your patient. You can also visit www.scouting.org/health-and-safety/ahmr to view this information online.

Please fill in the following information:

Yes	No	Explain
<input type="checkbox"/>	<input type="checkbox"/>	Medical restrictions to participate

Yes	No	Allergies or Reactions	Explain
<input type="checkbox"/>	<input type="checkbox"/>	Medication	
<input type="checkbox"/>	<input type="checkbox"/>	Food	

Height (inches)	Weight (lbs.)	BMI	Blood Pressure	Pulse
			/	

	Normal	Abnormal	Explain Abnormalities
Eyes	<input type="checkbox"/>	<input type="checkbox"/>	
Ears/nose/throat	<input type="checkbox"/>	<input type="checkbox"/>	
Lungs	<input type="checkbox"/>	<input type="checkbox"/>	
Heart	<input type="checkbox"/>	<input type="checkbox"/>	
Abdomen	<input type="checkbox"/>	<input type="checkbox"/>	
Genitalia/hernia	<input type="checkbox"/>	<input type="checkbox"/>	
Musculoskeletal	<input type="checkbox"/>	<input type="checkbox"/>	
Neurological	<input type="checkbox"/>	<input type="checkbox"/>	
Skin Issues	<input type="checkbox"/>	<input type="checkbox"/>	
Other	<input type="checkbox"/>	<input type="checkbox"/>	

Examiner's Certification

I certify that I have reviewed the health history and examined this person and find no contraindications for participation in a Scouting experience. This participant (with noted restrictions):

True	False	Explain
<input type="checkbox"/>	<input type="checkbox"/>	Meets height/weight requirements.
<input type="checkbox"/>	<input type="checkbox"/>	Has no uncontrolled heart disease, lung disease, or hypertension.
<input type="checkbox"/>	<input type="checkbox"/>	Has not had an orthopedic injury, musculoskeletal problems, or orthopedic surgery in the last six months or possesses a letter of clearance from his or her orthopedic surgeon or treating physician.
<input type="checkbox"/>	<input type="checkbox"/>	Has no uncontrolled psychiatric disorders.
<input type="checkbox"/>	<input type="checkbox"/>	Has had no seizures in the last year.
<input type="checkbox"/>	<input type="checkbox"/>	Does not have poorly controlled diabetes.
<input type="checkbox"/>	<input type="checkbox"/>	If planning to scuba dive, does not have diabetes, asthma, or seizures.

Examiner's signature: _____ Date: _____

Examiner's printed name: _____

Address: _____

City: _____ State: _____ ZIP code: _____

Office phone: _____

Height/Weight Restrictions

If you exceed the maximum weight for height as explained in the following chart and your planned high-adventure activity will take you more than 30 minutes away from an emergency vehicle/accessible roadway, you may not be allowed to participate.

Maximum weight for height:

Height (inches)	Max. Weight	Height (inches)	Max. Weight	Height (inches)	Max. Weight	Height (inches)	Max. Weight
60	166	65	195	70	226	75	260
61	172	66	201	71	233	76	267
62	178	67	207	72	239	77	274
63	183	68	214	73	246	78	281
64	189	69	220	74	252	79 and over	295



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Office Visit

Requirement 7a – Doctor's Office

Medical History

- Chief complaint
- History of present illness (HPI)
- Review of systems (ROS)
- Past, family, and/or social history (PFSH)

[BSA 680-001 ABC.pdf](#)

[Medical Risk Factors for Your Participation in Scouting](#)

Office Visit

Requirement 7a – Doctor's Office

Physical Examination

- Vital signs
- Head and neck
- Thorax and lungs
- Cardiovascular including heart sounds
- Integumentary (skin)
- Peripheral vascular system
- Abdomen
- Musculoskeletal
- Neurological
- Breast and Axilla
- Genitalia, rectum and anus

Office Visit

Requirement 7a – Doctor's Office

What am medical examiner looking for?

- Excessive Body Weight (Obesity)
- Cardiac or Cardiovascular Disease and (High Blood Pressure)
- Diabetes (Insulin-Dependent Diabetes Mellitus)
- Seizures (Epilepsy)
- Asthma
- Allergies or Anaphylaxis
- Sleep Apnea
- Ingrown Toenails, Recent Musculoskeletal Injuries or Surgery
- Psychiatric/Psychological and Emotional Difficulties
- Other Risk Factors - Sickle-cell anemia, hemophilia, leukemia ...

[Medical Risk Factors for Your Participation in Scouting](#)

Office Visit

Requirement 7a – Doctor's Office - Instruments

There are a few tools commonly used at a Doctor's Office during an exam

- Stethoscope
- Penlight
- Ophthalmoscope
- Otoscope
- Sphygmomanometer (aka BP Cuff)
- Reflex hammer
- Tongue Depressor

Office Visit

Requirement 7a – Doctor's Office - Instruments

Penlight

- Basically a really nice flashlight
- Eyes
 - Assessing pupil response
- Mouth and throat
 - Swollen tonsils
 - Gum/teeth health
 - Signs of infection
- Transillumination
 - Test if mass if filled with liquid or solid
- Adding light to wound inspections



Office Visit

Requirement 7a – Doctor's Office - Instruments

Stethoscope

- Used to hear sounds
- Heart
 - Rate and rhythm of heart beats
 - Abnormal sounds like murmurs and bruits
- Lungs
 - Breath Sounds – can be absent or bad
- Abdomen
 - Should have normal bowel sounds
 - Some sounds are bad
 - No sounds can be bad
- Use with BP cuff to assess blood pressure



Office Visit

Requirement 7a – Doctor's Office - Instruments

Ophthalmoscope

- Basically a light with magnifying glasses
- Outside of eye – look for
 - Foreign bodies in the cornea
 - Distortions of the pupil
- Inside of eye
 - Assess health of inside of eye
 - Retina
 - Optic disc
 - Vitreous humor



Office Visit

Requirement 7a – Doctor's Office - Instruments

Otoscope

- Used to Examine the ear canal and eardrum
- Ear Canal – look for
 - Obstruction – like a bean
 - Occlusion with ear wax that affects hearing
 - Signs of infection
- Eardrum – look for
 - Signs of infection
 - Ruptured ear drum
 - Mobility – inability to “clear ears”



Office Visit

Requirement 7a – Doctor's Office - Instruments

Sphygmomanometer (aka BP Cuff)

- Use to measure blood pressure
- Other possible uses
 - Used in emergency to slow bleeding
 - Used in emergency to pressurize IV flow
 - Water wings (that's a joke)

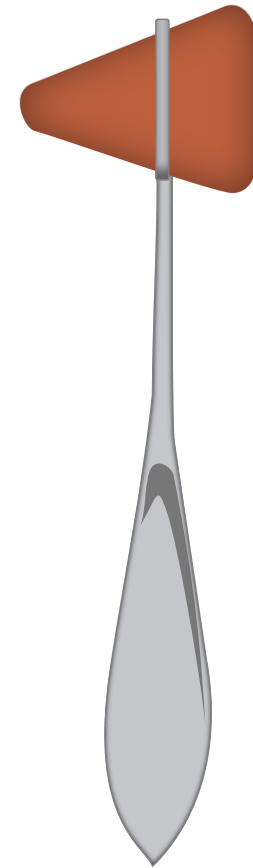


Office Visit

Requirement 7a – Doctor's Office - Instruments

Reflex Hammer

- Check deep tendon reflexes
- Important for a complete neurological examination



Office Visit

Requirement – Doctor's Office

7b. 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.

- [Understanding medical tests: sensitivity, specificity, and positive predictive value](#)
- [The tradeoff between sensitivity and specificity - YouTube](#)
- [Sensitivity and Specificity Explained Clearly \(Biostatistics\) - YouTube](#)
- [Sensitivity vs Specificity](#)

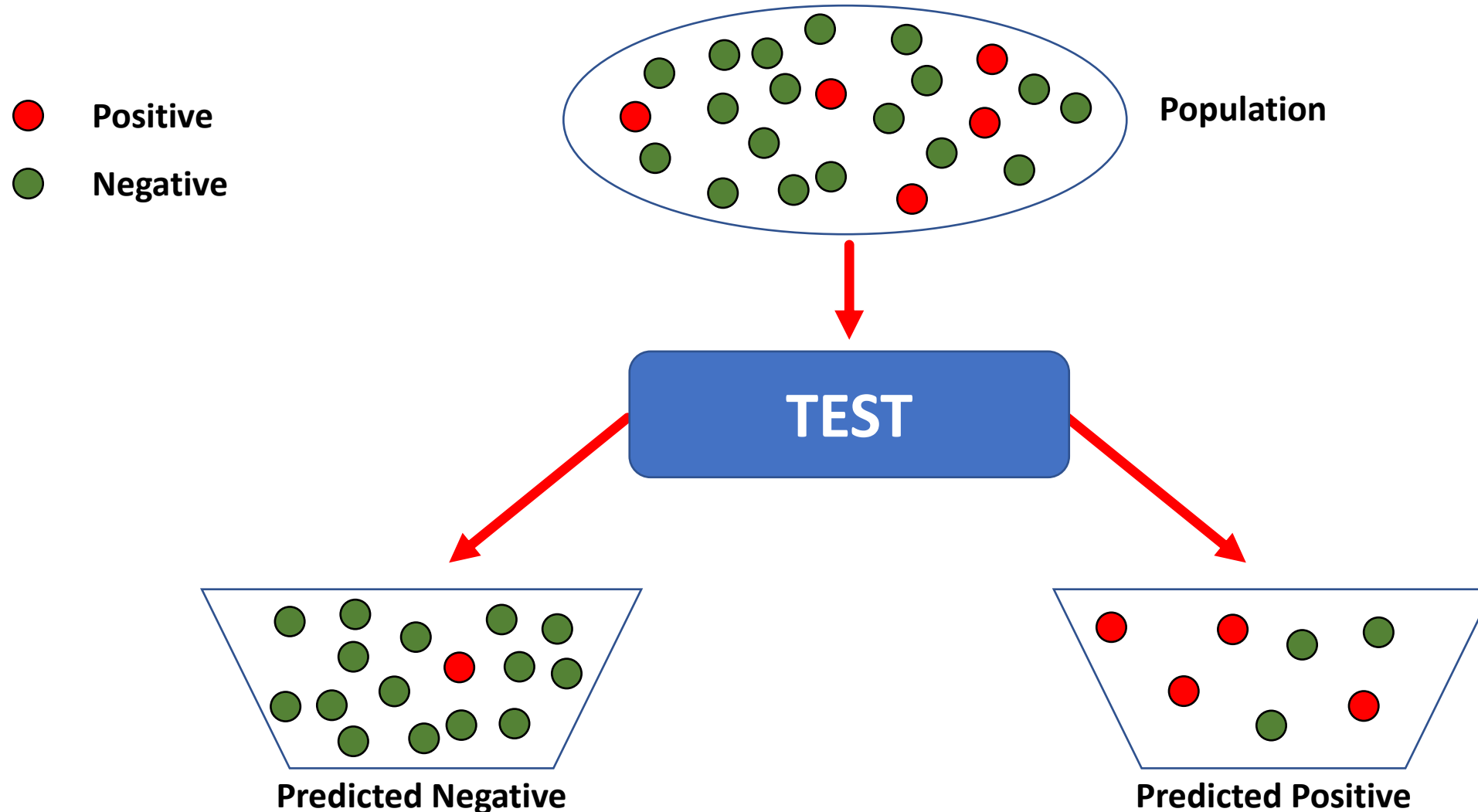
Office Visit

Requirement 7b – Doctor's Office - Good Diagnostic Test

- Many diagnostic tests are available to medical providers
- Can help confirm or refine a diagnosis
- Testing isn't free
 - Financial cost
 - No free test
 - Some are insanely expensive!
 - Pain
 - Blood draws and bone biopsies hurt!
 - False positives
 - False negatives
 - Results can complicate treatment
 - They don't always produce useful information

Office Visit

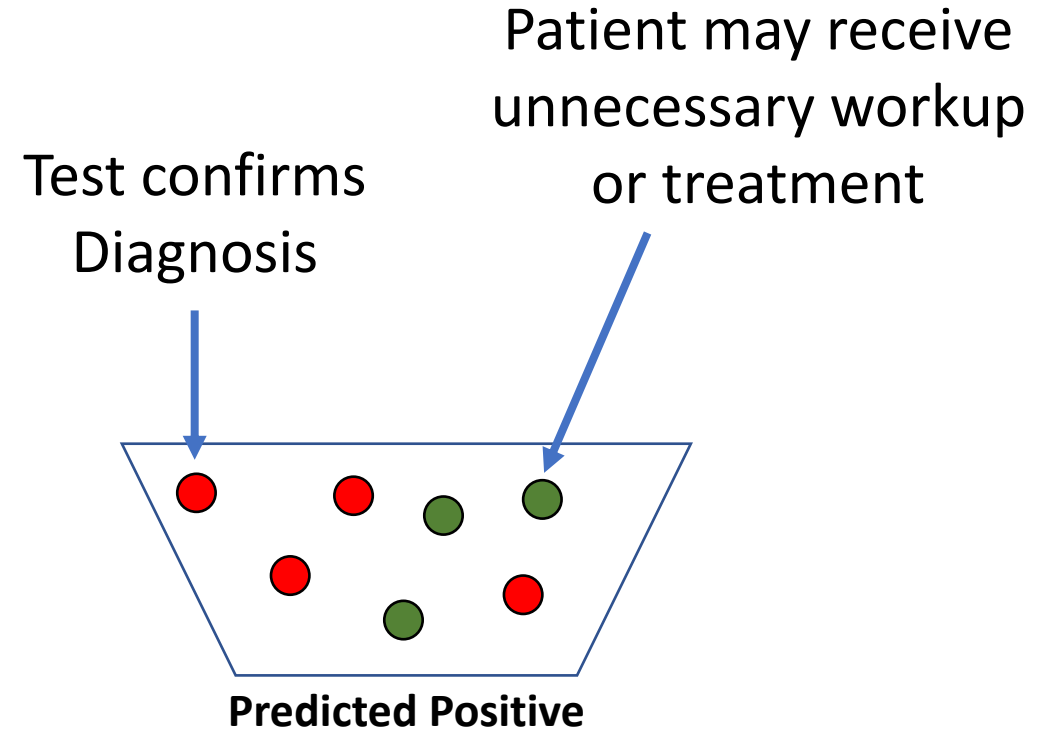
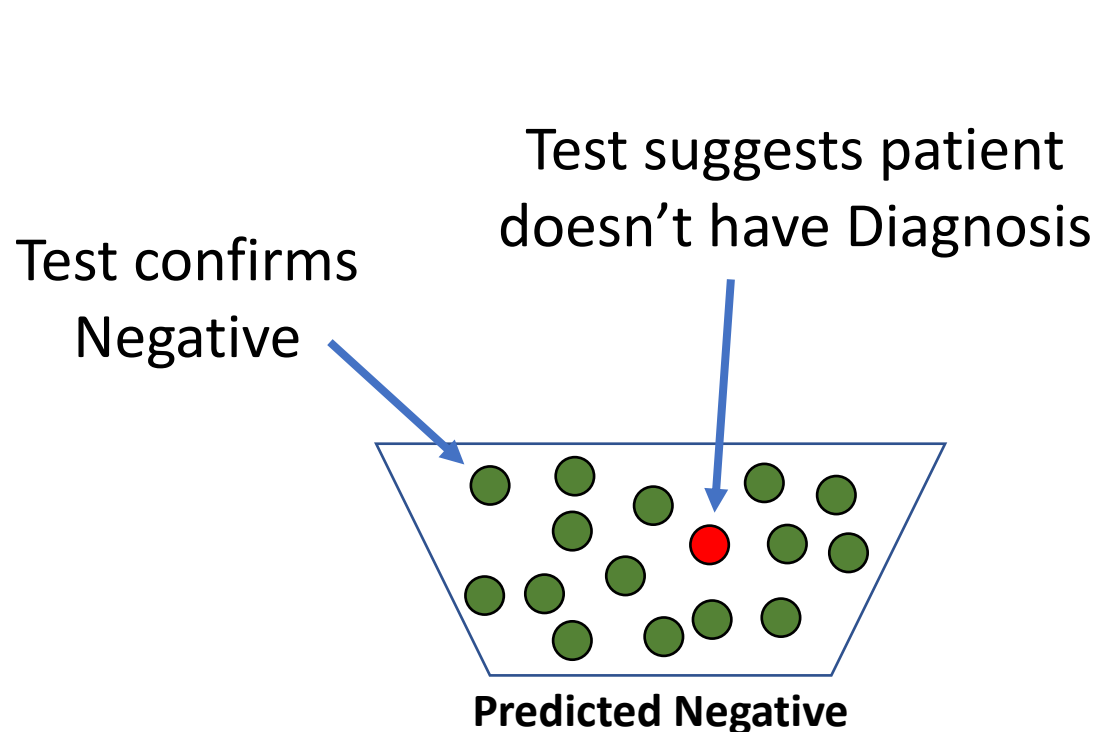
Requirement 7b – Doctor's Office - Good Diagnostic Test



Office Visit

Requirement 7b – Doctor's Office - Good Diagnostic Test

- Positive
- Negative



Office Visit

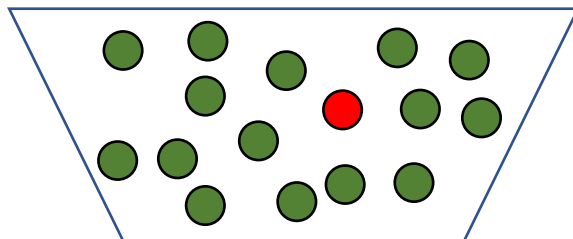
Requirement 7b – Doctor's Office - Good Diagnostic Test

● Positive

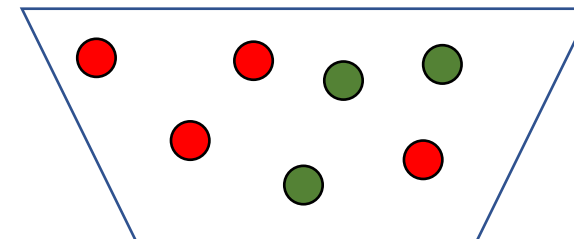
● Negative

Sensitivity. It does not miss patients. Low false negatives.

Specificity. It does not give a lot of false positives.



Predicted Negative



Predicted Positive

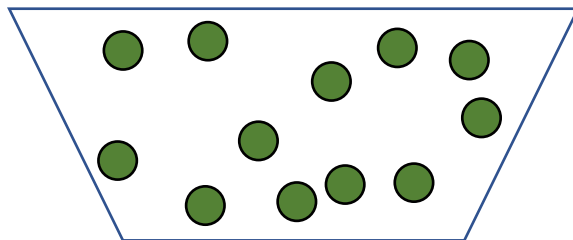
Office Visit

Requirement 7b – Doctor's Office - Good Diagnostic Test

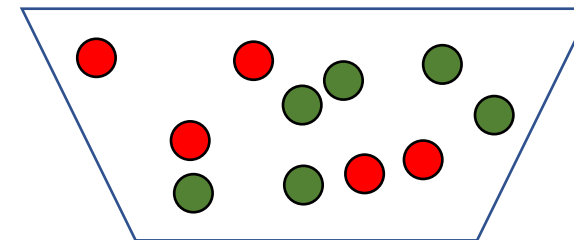
● Positive

● Negative

Sensitivity. It does not miss patients. Low false negatives.



Predicted Negative



Predicted Positive

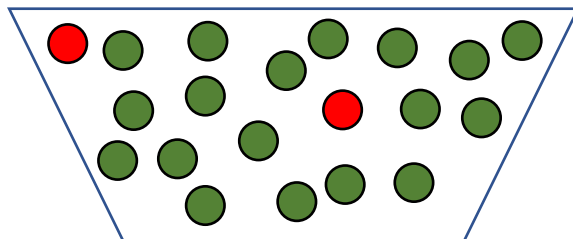
Office Visit

Requirement 7b – Doctor's Office - Good Diagnostic Test

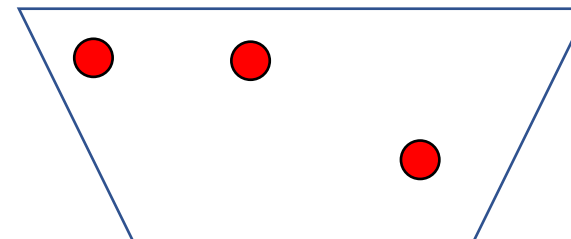
● Positive

● Negative

Specificity. It does not give a lot of false positives.



Predicted Negative



Predicted Positive

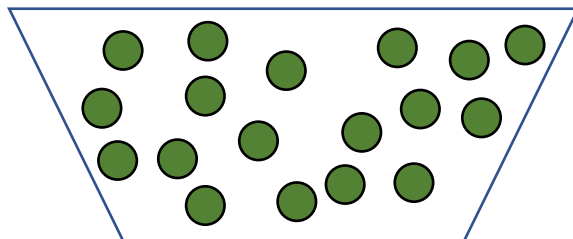
Office Visit

Requirement 7b – Doctor's Office - Good Diagnostic Test

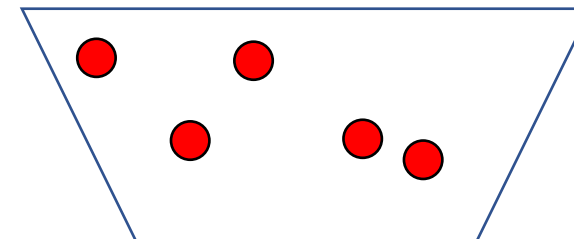
● Positive

● Negative

Although some come close, there are NO perfect tests.



Predicted Negative



Predicted Positive

Office Visit

Requirement – Doctor's Office

7c. Show how to take a blood pressure reading and a pulse reading.

[Vital Signs Nursing](#) – Nurse Sarah give great demos

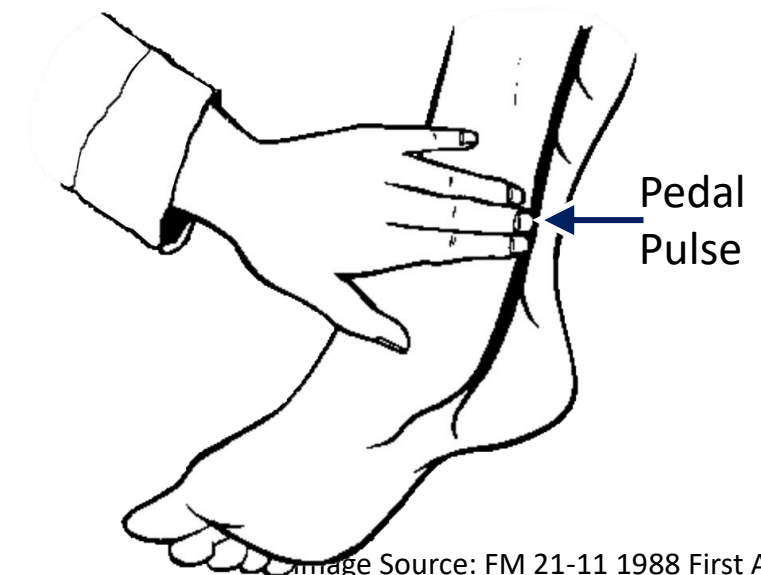
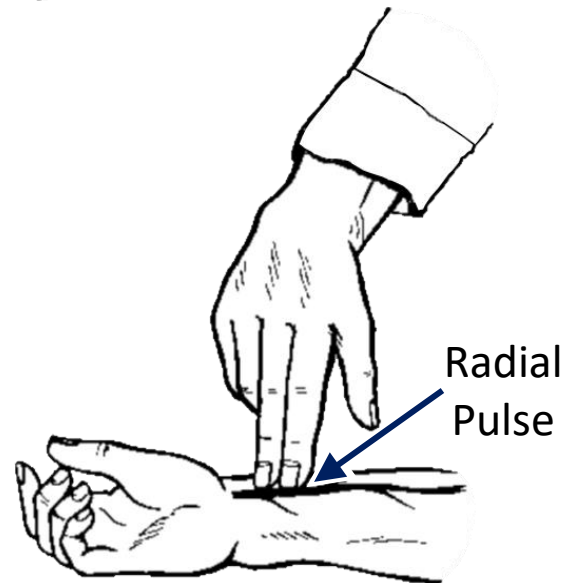
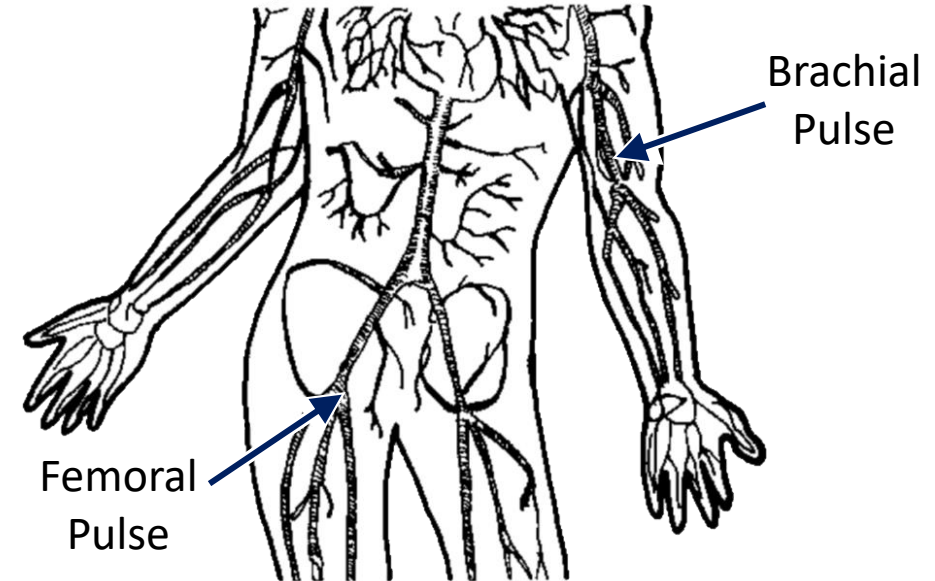
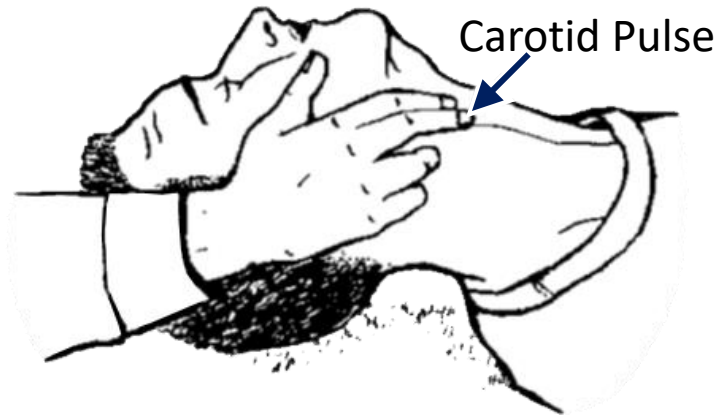
[Blood Pressure Measurement: How to Check Blood Pressure Manually](#)

[Blood Pressure Measurement – OSCE Guide](#)

[How to Check Your Pulse | Finding the Radial Pulse](#)

Office Visit

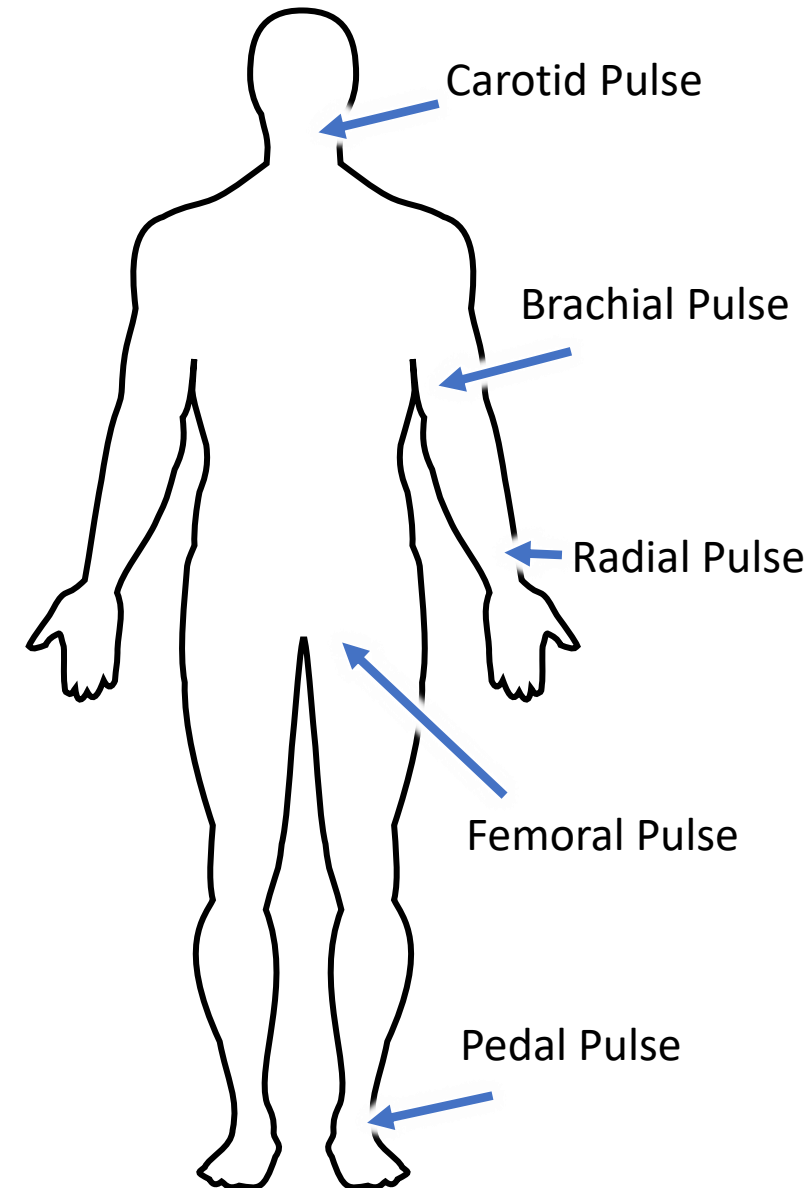
Vital Signs - Pulse



Office Visit

Vital Signs - Heart Rate

- Count Heart Beats per minute
 - Count entire minute
 - Count 30 seconds and multiply by 2
 - Count 15 seconds and multiply by 4 for a very rough count
- Normal Range: 60-100 beat per minute (bpm)
- Rhythm
 - Regular vs irregular
- Quality
 - Thready vs weak vs strong





Office Visit

Vital Signs - Blood Pressure

- Blood pressure is the force of blood pushing against the artery walls
- It is generally measured with a blood pressure cuff and stethoscope
- Low blood pressure (hypotension) is often seen in uncompensated Shock
- Uncontrolled high blood pressure increases your risk of serious health problems, including heart attack and stroke



Office Visit

Vital Signs - Blood Pressure Range

Normal blood pressures

Victim	Systolic (mm Hg)	Diastolic (mm Hg)
Adult Male	100 + age up to 40	60-85
Adult female	90 + age up to 40	60-85
Adolescent	90 and above	2/3 systolic
Child (1-10 yrs.)	80 + (2 x age) +/- 10	2/3 systolic
Infant (1-12 mo.)	70 and above	2/3 systolic

Blood Pressure is dependent on sex, age and other factors.

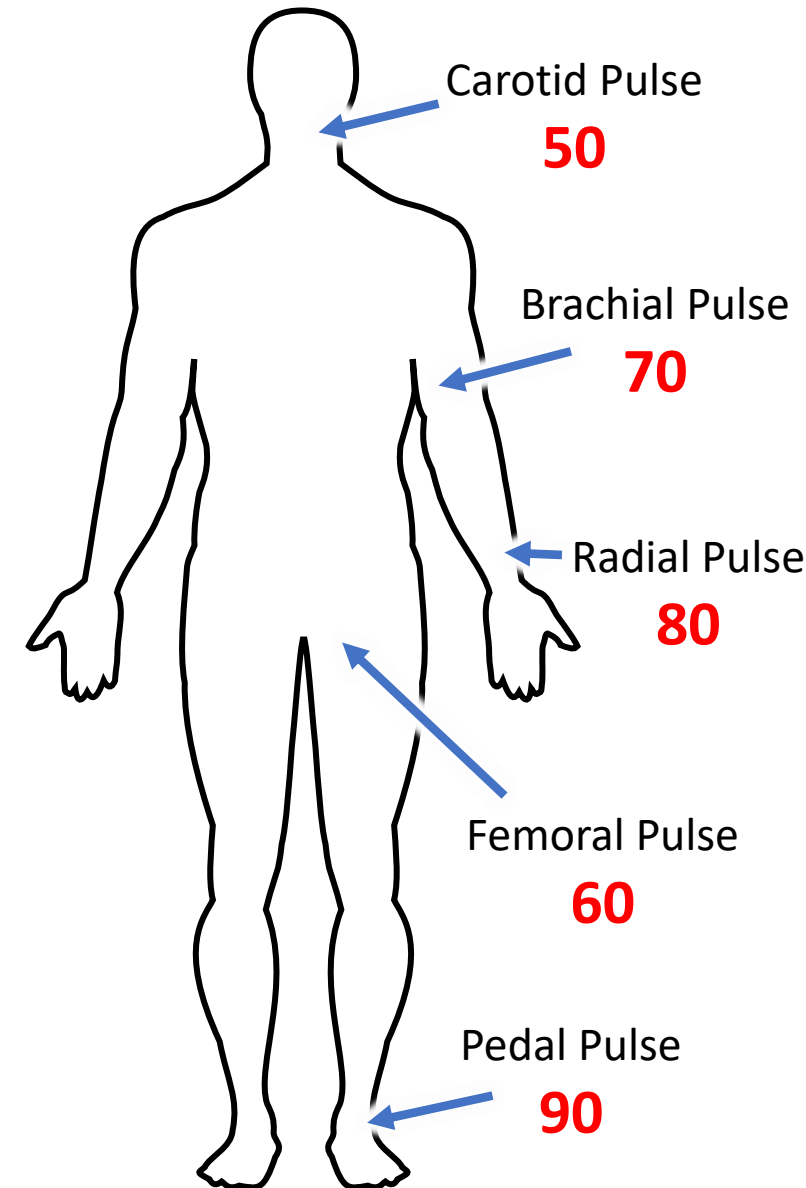
“Normal” Adult BP is around 112/64

Office Visit

Vital Signs - Blood Pressure Range

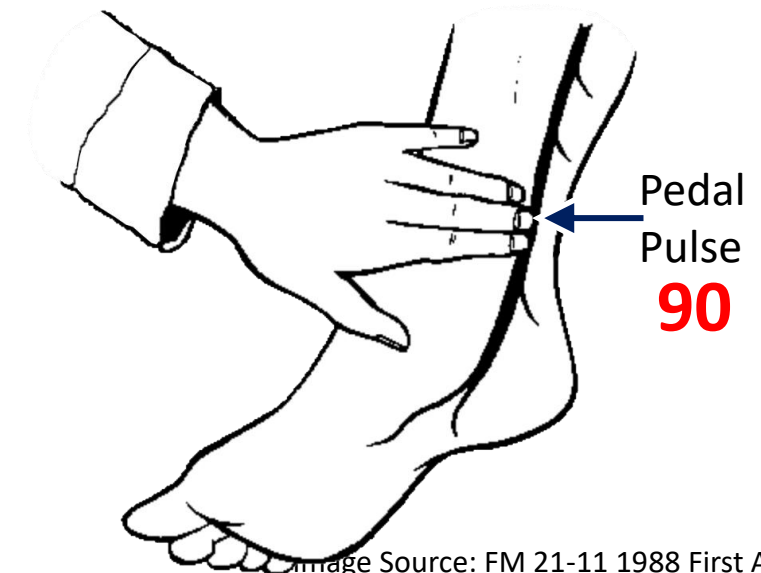
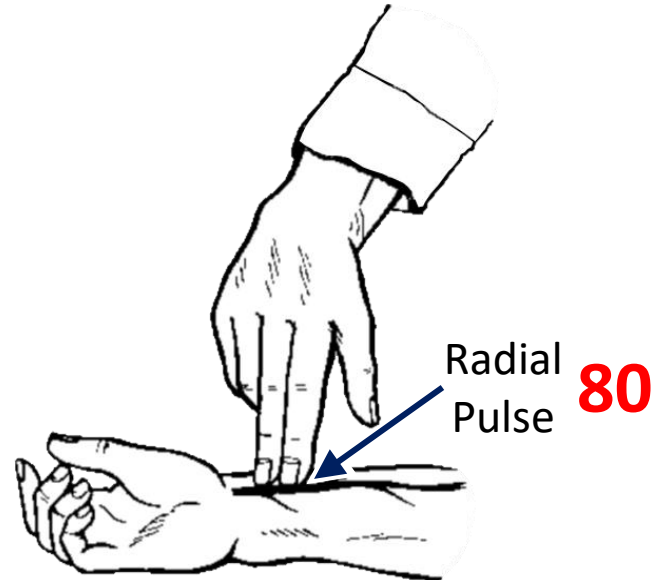
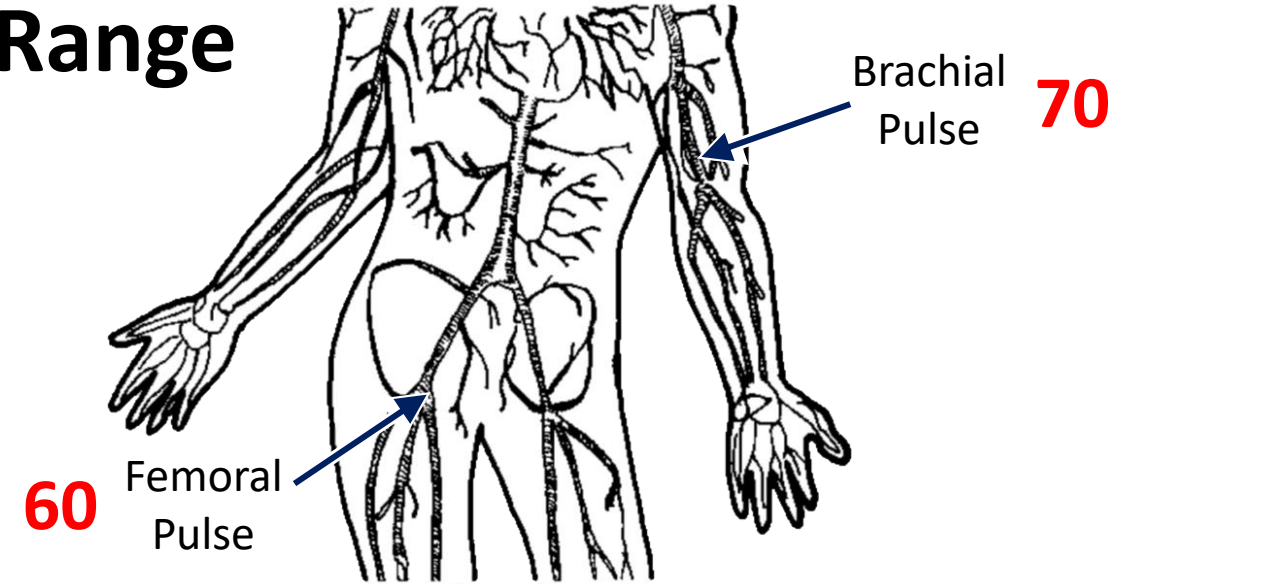
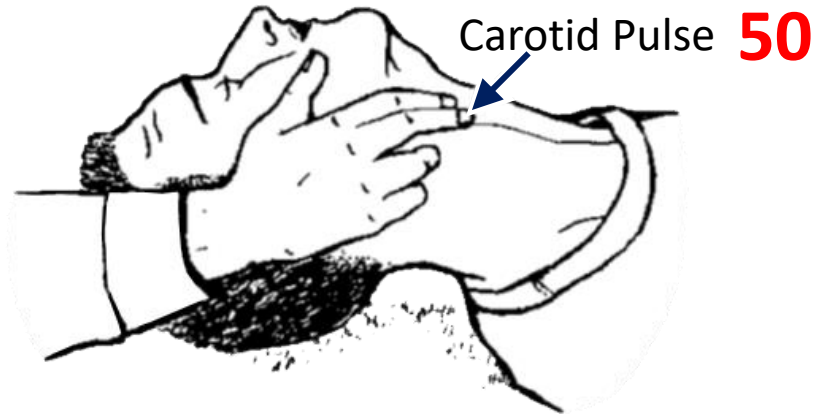
Pulse	Body Part	Systolic BP (mm Hg)
Carotid	Neck	50mmhg
Femoral	Groin	60mmhg
Brachial	Arm	70mmhg
Radial	Wrist	80mmhg
Pedal	Foot	90mmhg

- Hypotension means low blood pressure
- Systolic BP < 90 mm Hg = Hypotension
- Weak or lack of radial pulse = Shock



Office Visit

Vital Signs - Blood Pressure Range



Office Visit

Resources

[BSA 680-001 ABC.pdf](#)

[Medical Risk Factors for Your Participation in Scouting](#)

[Eyes, Ears, Nose, Throat, and Mouth Assessment](#)

[Blood Pressure Measurement: How to Check Blood Pressure Manually](#)

[Direct Ophthalmoscopy Tutorial](#)

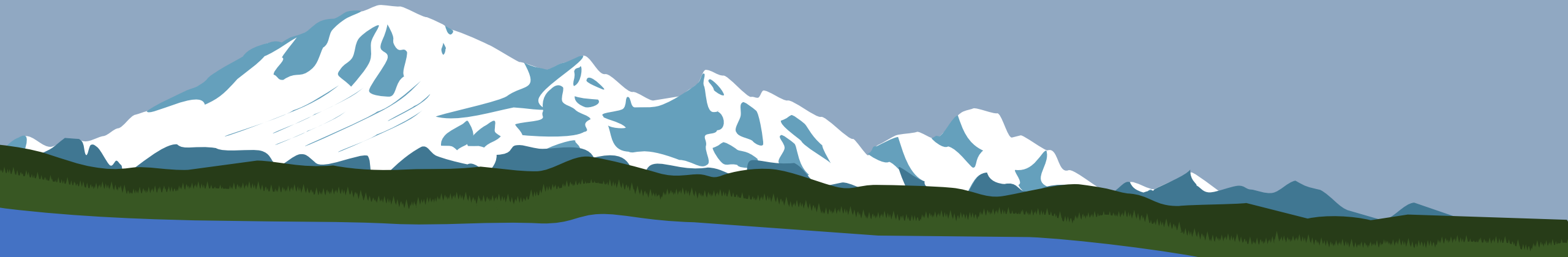
[Acute Otitis Media: Otoscopic Findings](#)

[Deep Tendon Reflexes \(Stanford Medicine 25\)](#)

[Cardiovascular Examination - Explanation](#)



Final Thoughts

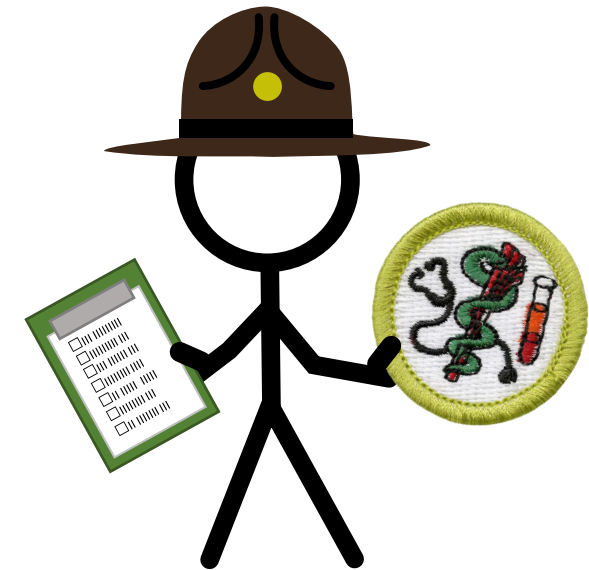


Final Thoughts

Merit Badge Requirement Checklist

- ☐ Req 1 – 8 People in history Hippocratic Oath
- ☐ Req 2 – Hippocratic Oath
- ☐ Req 3 – Health-care provider–patient relationship
- ☐ Req 4 – Provider roles plus educational and licensing
- ☐ Req 5 – “Primary care”
- ☐ Req 6 – 5 specialties or subspecialties
- ☐ Req 7 – Office Visit
- ☐ Req 8 – Medical care influencers
- ☐ Req 9 – Health care delivery systems
- ☐ Req 10 – Volunteer work

- ☐ Turn in complete [worksheet](#)



Final Thoughts

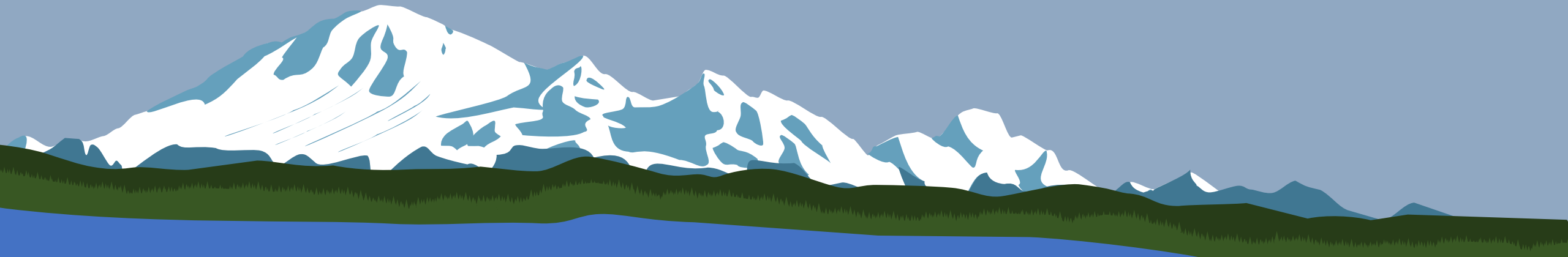
Looking for More?

- **BSA's Wilderness First-Aid Course**
 - Taught by medical professionals with wilderness and combat experience
 - 16 Hours of training and practical exercises
 - Advanced care guidelines in wilderness setting
- **Health Professions Fair**
 - Interested in Medicine?
 - Learn about different schools, professions and a little about the culture.
 - Make contacts and shadow someone in the health profession





Resources



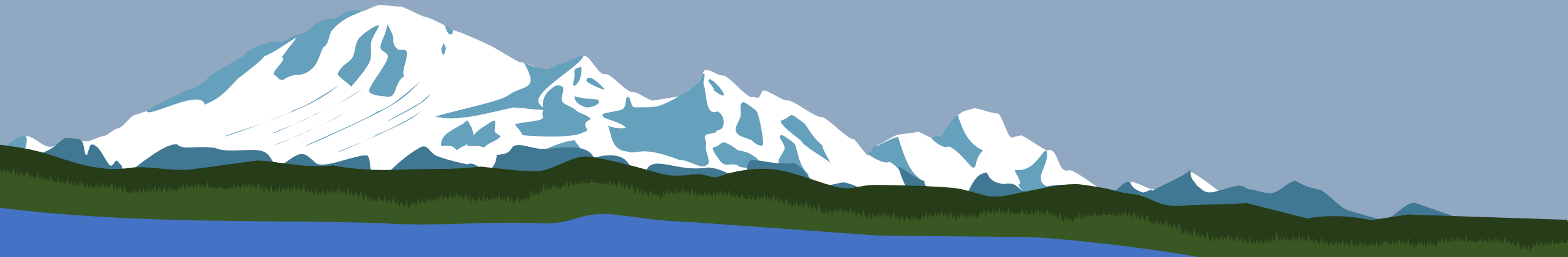
Resources

Resources

- The BSA has a merit badge pamphlet covering this material



Instructor's Corner



Instructor's Corner

Retired Merit Badge

As of 31 December 2021, this merit badge has been retired.

Scouts that started this merit badge prior to 2022 are able to continue working on this merit badge and completed it after the retirement date.

Instructor's Corner

Instructor's Corner

Thank you for teaching or considering teaching this course to scouts. It is a popular class with certain scouts and parents and one that isn't covered as frequently as many of the others out there.

If you offer this course virtually, expect it to fill up quickly.

This course covers a LOT of material. There are many approaches to teaching, and the goal should be making it fun.

Instructor's Corner

Making it fun

You likely have a lot of fun stories that relate to many or even all of the slides here. Consider sharing some of the craziness in medicine with your audience.

For jobs, there are so many exciting aspects for each field. Consider describing what it's like for an EMT to show up on a scene of an accident, or a flight nurse responding to a call, or the miracle of life as a baby is delivered, or satisfaction of reducing a fracture or excising a tumor. Why not a butt pus story? It's up to you and remember - it's all in the delivery.

Instructor's Corner

Videos

There is a lot of material out there to choose from to make this course more interesting, informative and fun.

If you have a large group, you may wish to shut down everyone's video, audio and chat. This reduces the occurrence of the dreaded 'Lag'.

Have a backup plan. There are a number of reasons that videos can fail during a presentation. If you have tech issues, replace them with some dynamic instruction.

Instructor's Corner

Scheduling Class – 3 Session Class

Depending on how you do it, it takes about 5-6 hours to deliver this material.

Session 1 – Intro, Famous People, Basics

Session 2 – Types of Providers, Primary Care, Specialty Care

Session 3 – Office Visit with exam and Final Thoughts

If you choose to make students present information or play a lot of videos, schedule for more time.

Instructor's Corner

Scheduling Class – 2 Session Class

It is possible to replace the office visit with a video that can be watched at home and then cut the class into a 2 2-hour sessions.

Session 1 – Intro, Famous People, Labs, Basics

Session 2 – Types of Providers, Primary and Specialty Care, Final Thoughts

If you give a video of the office visit, it is recommended that you record your own. It will cover the material better and is more personal.

Instructor's Corner

Volunteer Work

This one is up to you. These are ideas accepted/considered by other counselors:

- Work done prior to your class
- Work done later – health fair or blood donation
- Virtual Troop Health Fair with Blood Donation Drive
- Making masks and face-shields
- Mental health and providing emotional support
 - Consider groups such as elderly, kids in hospitals, veterans, etc.
 - Virtual meetings or games
 - Sending out Cards and other Scouty stuff to bring some cheer
- Others have allowed for food drives – but that's a stretch
 - Accepted if scout can articulate how this related to health