# Health Care Professions Merit Badge



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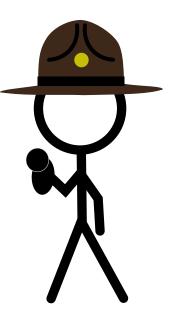
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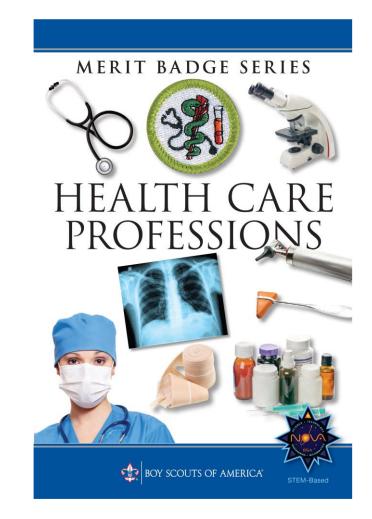


## Merit Badge Requirements



### Requirements

Merit Badge requirements are taken from:
 2021 Scouts BSA™ Merit Badge Pamphlet

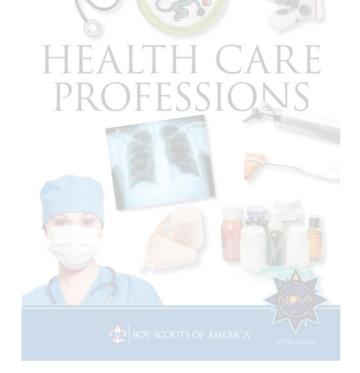


### Requirements

- 1. Select three of the professions from Group 1 listed below which interest you, then complete the following:
  - a. Briefly describe to your counselor the roles these professionals play in the delivery of health care. Es
  - b. Describe to your counselor the educational and licensing requirements for the professionals you selected.

#### **Group 1:**

- (1) Allopathic physician (MD) all specialties
- (2) Osteopathic physician (DO) all specialties
- (3) Podiatrist (DPM)
- (4) Chiropractor (DC)
- (5) Nurse Practitioner (NP)
- (6) Psychologist (PhD or PsyD)
- (7) Optometrist (OD)
- (8) Audiologist (AudD)

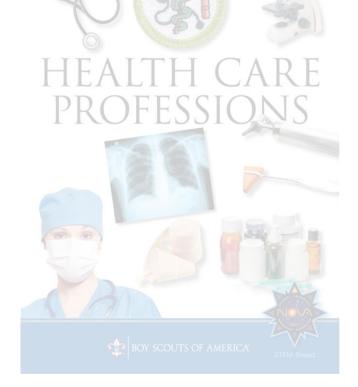


## Requirements

- 2. Select three of the professions from Group 2 listed below which interest you, then complete the following:
  - a. Briefly describe to your counselor the roles these professionals play in the delivery of health care. Es
  - b. Describe to your counselor the educational and licensing requirements for the professionals you selected.

#### Group 2:

- (1) Physician Assistant (PA)
- (2) Registered Nurse (RN)
- (3) Certified Nurse Midwife (CNM)
- (4) Certified Nurse Assistant (CNA)
- (5) Licensed Practical Nurse (LPN/LVN)
- (6) Nurse Anesthetist (CRNA)
- (7) Pharmacist (PharmD)
- (8) Pharmacy Technician
- (9) Emergency Medical Technician (EMT)/Paramedic

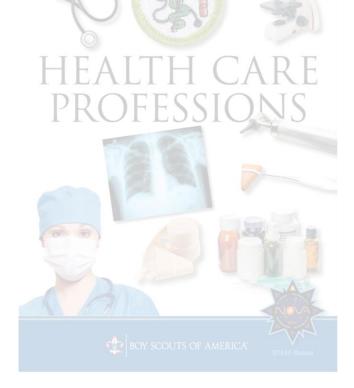


## Requirements

- 3. Select three of the professions from Group 2 listed below which interest you, then complete the following:
  - a. Briefly describe to your counselor the roles these professionals play in the delivery of health care. Es
  - b. Describe to your counselor the educational and licensing requirements for the professionals you selected.

#### Group 3:

- (1) Physical Therapist (DPT)
- (2) Occupational Therapist (OT)
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- (5) Respiratory Therapist (RT)
- (6) Medical Assistant
- (7) Dietitian (RD)
- (8) Speech-Language Pathologist (Speech Therapist) (SLP)

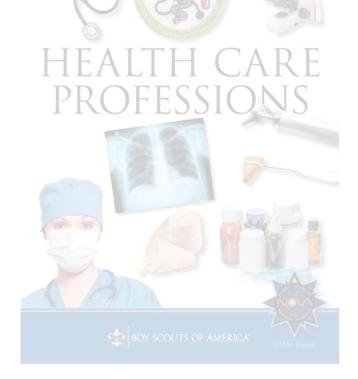


## Requirements

- 4. Select three of the professions from Group 2 listed below which interest you, then complete the following:
  - a. Briefly describe to your counselor the roles these professionals play in the delivery of health care. Es
  - b. Describe to your counselor the educational and licensing requirements for the professionals you selected.

#### Group 4:

- (1) Biomedical Engineer (BME)
- (2) Medical Technologist
- (3) Phlebotomist
- (4) Radiology Technologist
- (5) Sonographer
- (6) Medical Records Specialist
- (7) Cytopathologist
- (8) Histotechnologist



## Requirements

5. Select one career from any of the lists in Requirements 1, 2, 3, or 4 and arrange to visit that

professional at their

workplace. Discuss with your counselor the following:

- a. Why did they choose their particular career?
- b. What do they most like about their job?
- c. What are their biggest challenges in doing their job?
- d. Identify the tools/instruments that may be used in their jobs.
- e. What has been the most surprising aspect of their career?
- f. What continuing education requirements are required to maintain certification



## Requirements

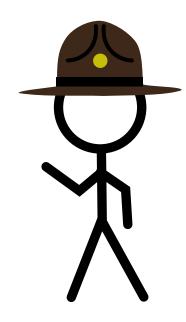
- 6. Discuss with your counselor your understanding of the meaning of the Physician's Oath.
- 7. Describe the role of confidentiality between a patient and the health care provider. What is HIPAA? RIES
- 8. Identify a medical advancement or discovery that has been in the news recently. Discuss with your counselor how this can affect patient care.
- 9. With approval of your counselor and parents/guardian, serve as a volunteer at a health related event or facility in your community (e.g. blood drive, health fair, blood pressure screening event). Report to your counselor what you did and learned from the experience.





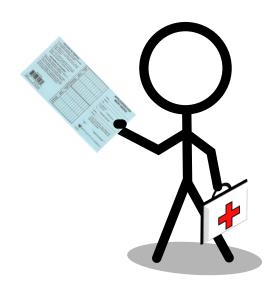


#### **Instructor Introduction**



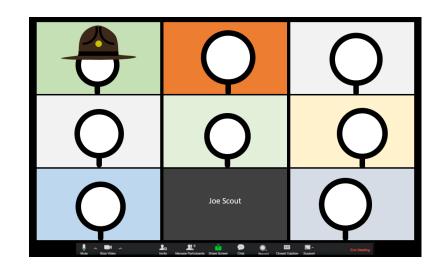
#### **Needed for Course**

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



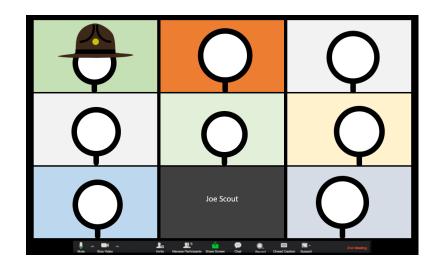
## **Virtual Meetings**

- 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!



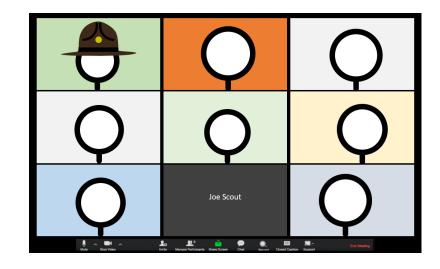
## **Virtual Meetings**

- 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



## **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 Requirement Checklist**

- ☐ Complete <u>worksheet</u>
- ☐ Req 5 Visit with a Health Care Professional
- ☐ Req 8 Medical advancement or discovery in the news
- ☐ **Req 9** Volunteer work



☐ Turn in complete worksheet — contact me if this is a problem

Who/what are Health Care Professionals?





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- Important People in I
- 7. Of History 8. Fit 9. Re
  - 8. Final Thoughts
    9. Resources
    10.Instructor's Corn





## **Requirement 1**

Select **three** of the professions from Group 1 listed below which interest you, then complete the following:

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- (7) Optometrist (OD)
- (8) Audiologist (AudD)



## Requirement 1 – Group 1 – 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

- Licensing requirement options:
  - Washington State License Requirements

## Requirement 1 – Group 1 – Physicians

- What's the difference?
- Per the <u>AOA</u>:

Osteopathic medicine is a distinct branch of medical practice in the United States.

The osteopathic philosophy of medicine sees an interrelated unity in all systems of the body, with each working with the other to heal in times of illness.

## Requirement 1 – Group 1 – Physicians

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

- Educational Requirements M.D. and D.O.
  - 4 Year postgraduate from accredited or approved medical school
    - Allopathic Medical Schools Doctor of Medicine
    - Osteopathic Medical Schools Doctor of Osteopathic Medicine

## Requirement 1 – Group 1 – Physicians

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

- Educational Requirements D.O.
  - Osteopathic medical school -
    - Specific training on osteopathic manipulative treatment (OMT)
    - "set of hands-on techniques used by osteopathic physicians (DOs) to diagnose, treat, and prevent illness or injury"
    - Around 200 extra hours of training

### Requirement 1 – Group 1 – DPM

#### **Podiatrist**

- Prevention, diagnosis and treatment of foot disorders
- Perform surgery, administer medications and prescribe physical therapy

- Educational and Licensing Requirements
  - Doctor of Podiatric Medicine Degree 4 years
  - Washington State License Requirements

#### Requirement 1 – Group 1 – 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
  - 3.5-4 years of training
  - National Board of Chiropractic Examiners Test Parts I, II, III, and IV
- Educational and Licensing Requirements
  - Washington State License Requirements

#### Requirement 1 – Group 1 – NP

**Nurse Practitioner** 

- Diagnose and treat patients
- Help prevent disease and manage patient health
- Prescribe medications, including controlled substances

- Educational and Licensing Requirements
  - Generally a 2-year program
  - Washington State License Requirements

## Requirement 1 – Group 1 – 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

### Requirement 1 – Group 1 – 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
  - 7-8 years
  - Washington State License Requirements

### Requirement 1 – Group 1 – AudD

#### Audiologist

- Independent primary health care professionals for the ear
  - Diagnosing and treating hearing loss, tinnitus and balance disorders
  - Providing comprehensive hearing tests
  - Dispensing hearing aids
  - Designing and implementing auditory rehabilitation and related communication programs
  - Assisting in the monitoring of cochlear implants and bone-anchored hearing systems
- Educational and Licensing Requirements
  - 4 years
  - Washington State License Requirements

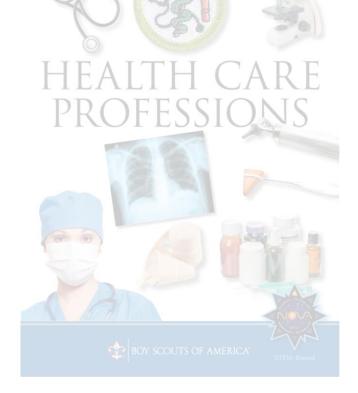
## **Requirement 2**

Select **three** of the professions from Group 2 listed below which interest you, then complete the following:

- a. Briefly describe to your counselor the roles these professionals play in the delivery of health care. Es
- b. Describe to your counselor the educational and licensing requirements for the professionals you selected.

#### Group 2:

- (1) Physician Assistant (PA)
- (2) Registered Nurse (RN)
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- (5) Licensed Practical Nurse (LPN/LVN)
- (6) Nurse Anesthetist (CRNA)
- (7) Pharmacist (PharmD)
- (8) Pharmacy Technician
- (9) Emergency Medical Technician (EMT)/Paramedic



### Requirement 2 – Group 2 – 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

#### Requirement 2 – Group 2 – 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

### Requirement 4 – Group 2 – CNM

Nurse-Midwife

- Assisting with births
- Pre-conception through the post-partum care
- Gynecological services

- Educational and Licensing Requirements
  - Washington State License Requirements

### Requirement 2 – Group 2 – CNA

Certified Nurse Assistant Care

- Nursing assistants provide assistance with
  - Dressing
  - Bathing and skin care
  - Feeding
  - Mouth and hair care
  - Making beds
  - Toileting assistance and catheter care
- Educational and Licensing Requirements
  - 4-12 weeks
  - Washington State License Requirements

### Requirement 2 – Group 2 – 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
  - O Washington State License Requirements 12+ month Suplorehealthcareers.org licensed-practical-nurse

#### Requirement 2 – Group 2 – CRNA

**Nurse Anesthetist** 

- Preparing for anesthetic management
- Administering anesthesia to keep the patient pain free
- Maintaining anesthesia intraoperatively
- Overseeing recovery from anesthesia

- Educational and Licensing Requirements
  - Washington State License Requirements
  - 6-7 years + 1 year of acute care clinical experience

#### Requirement 2 – Group 2 – 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

### Requirement 2 – Group 2 –

Pharmacy Technician

- Work under the direct supervision of a licensed pharmacist
- Assembling, stocking and distributing medications
- Recording and filing the prescriptions and orders
- Sorting, stocking and labeling medications and monitoring inventory
- Responding to the requests of patients and healthcare providers,

- Educational and Licensing Requirements
  - Washington State License Requirements
  - 2 years

### Requirement 2 – Group 2 – 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

### **Requirement 3**

Select **three** of the professions from Group 3 listed below which interest you, then complete the following:

- a. Briefly describe to your counselor the roles these professionals play in the delivery of health care. Es
- b. Describe to your counselor the educational and licensing requirements for the professionals you selected.

#### Group 3:

- (1) Physical Therapist (DPT)
- (2) Occupational Therapist (OT)
- (3) Orthotist/Prosthetist
- (4) Medical Appliance Technician
- (5) Respiratory Therapist (RT)
- (6) Medical Assistant
- (7) Dietitian (RD)
- (8) Speech-Language Pathologist (Speech Therapist) (SLP)



### Requirement 3 – Group 3 – 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

### Requirement 3 – Group 3 – 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

#### Requirement 3 – Group 3

Orthotist/Prosthetist

Work with prosthetic or orthotic devices

- Educational and Licensing Requirements
  - Washington State License Requirements

### Requirement 3 – Group 3

Medical Appliance Technician

- Fabrication of medical support devices
  - Braces
  - Joints
  - Supports
  - Artificial limbs
- May use
  - Hand and power tools
  - Drill or weld parts together
  - Computer-Aided Design (CAD) software
- Educational and Licensing Requirements
  - Washington State License Requirements

#### Requirement 3 – Group 3 – RT

**Respiratory Therapist** 

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

#### Requirement 3 – Group 3 - 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

#### Requirement 3 – Group 3 – RD

#### Dietitian

- Plan and conduct food service or nutritional programs
- Develop core meal plan for general patients, for special requests or for critical needs
- Maintain documentation from aides and management as daily routine
- Track what has or hasn't worked for a patient

- Educational and Licensing Requirements
  - Washington State License Requirements

#### Requirement 3 – Group 3 – SLP

Speech-Language Pathologist (Speech Therapist)

- Language intervention activities
- Articulation therapy
- Oral-motor/feeding and swallowing therapy

- Educational and Licensing Requirements
  - Washington State License Requirements

### Requirement 4

Select three of the professions from Group 2 listed below which interest you, then complete the

following:

- a. Briefly describe to your counselor the roles these professionals play in the delivery of health care. Es
- b. Describe to your counselor the educational and licensing requirements for the professionals you selected.

#### Group 4:

- (1) Biomedical Engineer (BME)
- (2) Medical Technologist
- (3) Phlebotomist
- (4) Radiology Technologist
- (5) Sonographer
- (6) Medical Records Specialist
- (7) Cytopathologist
- (8) Histotechnologist



### Requirement 4 – Group 4 – BME

**Biomedical Engineer** 

Develop new diagnostic tools, medical equipment, and software

Educational and Licensing Requirements

### Requirement 4 – Group 4

Medical Technologist

- Tests and analyzes blood, other body fluids, and tissue samples
- 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 treatments

- Educational and Licensing Requirements
  - Washington State License Requirements

### Requirement 4 – Group 4

**Phlebotomist** 

Collect blood for donation or for testing

- Educational and Licensing Requirements
  - Washington State License Requirements

### Requirement 4 – Group 4 – 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

### Requirement 4 – Group 4

Sonographer

Use ultrasound to image parts of body

- Educational and Licensing Requirements
  - o <u>www.sdms.org</u>

#### Requirement 4 – Group 4

**Medical Records Specialist** 

Maintain data files for patients

- Educational and Licensing Requirements
  - Washington State License Requirements

### Requirement 4 – Group 4

#### Cytopathologist

- Anatomic pathologist study of cells
- Examines cells from various body sites
  - Body secretions and fluids, by scraping, washing, or sponging
  - Aspiration of a tumor mass or body organ with a fine needle
  - Papanicolaou-stained smears of cells "Pap" test from women

- Educational and Licensing Requirements
  - Medical doctors who have completed a 4-year pathology residency
  - Washington State License Requirements

#### Requirement 4 – Group 4

Histotechnologist

Prepare very thin slices of tissue for microscopic examination

- Educational and Licensing Requirements
  - National Society for Histotechnology

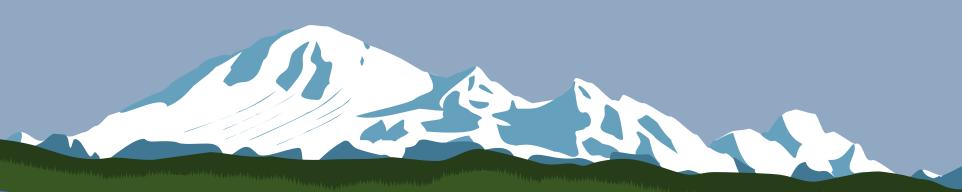
#### Resources

**Career Explorer** 



- it Badge Requirements
- Important People in I
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  8. Final Thought
  9. Resources





## Requirements

### **Requirement 6**

Discuss with your counselor your understanding of the meaning of the

Physician's Oath.



### Requirement 6 - Hippocratic Oath

- An oath of ethics historically taken by physicians
  - Written in the 4<sup>th</sup> or 5<sup>th</sup> BC
  - "First do no harm"

Who Was Hippocrates?
Wiki - Hippocratic Oath

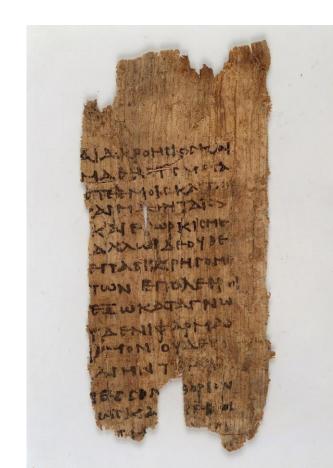






### Requirement 6 - Hippocratic Oath

 Many of the following sides we used for the Retired Medicine Merit Badge which required a more in depth look at the oath over time





#### Requirement 6 - Hippocratic Oath - Classical

I swear by Apollo Physician and Asclepius and Hygieia and Panaceia 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.



#### Requirement 6 - Hippocratic Oath - Classical

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

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

One swears to the gods



### Requirement 6 - Hippocratic Oath - Classical

ἢν χρηίζωσι μανθάνειν, ἄνευ μισθοῦ καὶ συγγραφῆς, παραγγελίης τε καὶ ἀκροήσιος καὶ τῆς λοίπης ἀπάσης μαθήσιος μετάδοσιν ποιήσεσθαι υἱοῖς τε ἐμοῖς καὶ τοῖς τοῦ ἐμὲ διδάξαντος, καὶ μαθητῆσι συγγεγραμμένοις τε καὶ ὡρκισμένοις νόμῳ ἰητρικῷ, 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



### Requirement 6 - Hippocratic Oath - Classical

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

To not perform euthanasia (lethal poisoning)



### Requirement 6 - Hippocratic Oath - Classical

όμοίως δὲ οὐδὲ γυναικὶ πεσσὸν φθόριον δώσω.

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

To not perform abortions



#### Requirement 6 - Hippocratic Oath - Classical

ού τεμέω δὲ οὐδὲ μὴν λιθιῶντας, ἐκχωρήσω δὲ ἐργάτῃσιν ἀνδράσι πρήξιος τῆσδε.

...not use the knife

To not perform surgery



#### Requirement 6 - Hippocratic Oath - Classical

ές οἰκίας δὲ ὁκόσας ἂν ἐσίω, ἐσελεύσομαι ἐπ' ὠφελείῃ καμνόντων, ἐκτὸς ἐὼν πάσης ἀδικίης ἑκουσίης καὶ φθορίης,

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

To help and respect your patient



#### Requirement 6 - Hippocratic Oath - Classical

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



#### Requirement 6 - 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



#### Requirement 6 - 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.



#### Requirement 6 - 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"



#### Requirement 6 - 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.



- 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



#### Requirement 6 - 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 protect the environment which sustains us, in the knowledge that the continuing health of ourselves and our societies is dependent on a healthy planet.

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.



- 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



- 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



- 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

#### Requirement 6 - Hippocratic Oath - 1964

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.

#### Requirement 6 - 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.

You are joining the brotherhood/sisterhood of medicine

#### Requirement 6 - Hippocratic Oath - Modern

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

To treat only as needed

#### Requirement 6 - Hippocratic Oath - Modern

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.

Sympathy and your human connection is sometimes the most important treatment you can offer

#### Requirement 6 - Hippocratic Oath - Modern

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.

Know your limitations

#### Requirement 6 - Hippocratic Oath - Modern

I will respect the privacy of my patients, for their problems are not disclosed to me that the world may know.

Respect patient privacy

#### Requirement 6 - Hippocratic Oath - Modern

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.

To Respect the sanctity of Life and Death

#### Requirement 6 - Hippocratic Oath - Modern

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.

To treat the patient as a whole patient

#### Requirement 6 - Hippocratic Oath - Modern

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

Prevention is better than treatment

#### Requirement 6 - Hippocratic Oath - Modern

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.

To care for ALL people

#### Requirement 6 - Hippocratic Oath - Modern

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.

Do your best



#### Requirement 6 - 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"





# Confidentiality



## Requirements

#### **Requirement 7**

Describe the role of confidentiality between a patient and the health care

provider. What is HIPAA?



### **Basics**

#### Requirement 7 – 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 7 – HIPPA

#### Health Insurance Portability and Accountability Act of 1996 (HIPAA)

- The Health Insurance Portability and Accountability Act of 1996 (HIPAA)
  is a federal law that required the creation of national standards to
  protect sensitive patient health information from being disclosed
  without the patient's consent or knowledge.
- The US Department of Health and Human Services (HHS) issued the HIPAA Privacy Rule to implement the requirements of HIPAA.
- The HIPAA Security Rule protects a subset of information covered by the Privacy Rule.

## **Basics**

#### **Requirement 7 – HIPPA - Covered Entities**

- Healthcare providers
- Health plans
- Healthcare clearinghouses
- Business associates





## Homework



## Requirements

#### Requirement 5 – Visit with Medical Professional

Select one career from any of the lists in Requirements 1, 2, 3, or 4 and arrange to visit that professional at their workplace. Discuss with your counselor the following:

- a. Why did they choose their particular career?
- b. What do they most like about their job?
- c. What are their biggest challenges in doing their job?
- d. Identify the tools/instruments that may be used in their jobs.
- e. What has been the most surprising aspect of their career?
- f. What continuing education requirements are required to maintain certification

#### Requirement 5 – Visit with Medical Professional

Tools commonly used at by a medical provider during a basic exam

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

#### Requirement 5 – Visit with Medical Professional

#### 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



#### Requirement 5 – Visit with Medical Professional

#### 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



#### Requirement 5 – Visit with Medical Professional

#### 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



#### Requirement 5 – Visit with Medical Professional

#### 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 5 – Visit with Medical Professional

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 5 – Visit with Medical Professional

**Reflex Hammer** 

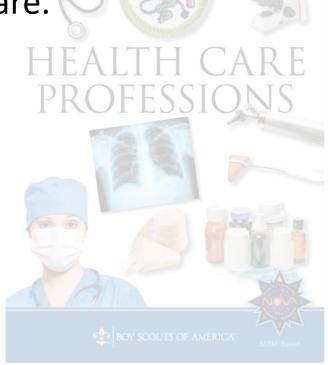
- Check deep tendon reflexes
- Important for a complete neurological examination



## Requirement 8 – Medical Advancement

Identify a medical advancement or discovery that has been in the news recently.

Discuss with your counselor how this can affect patient care.



# Requirement 8 – Medical Advancement

Google is your friend



## Requirement 9 – Volunteer Work

With approval of your counselor and parents/guardian, serve as a volunteer at a health related event or facility in your community (e.g. blood drive, health fair, blood pressure screening event).

Report to your counselor what you did and learned from the experience.

## Requirement 9 – Volunteer Work

Must be Health Related

Must be approved by your Counselor

Must be approved by your Parents/Guardian

Questions? - Talk to your Counselor





# Final Thoughts



# Final Thoughts

### **Merit Badge Requirement Checklist**

- ☐ complete <u>worksheet</u>
- ☐ Req 5 Visit with a Health Care Professional
- ☐ Req 8 Medical advancement or discovery in the news
- ☐ Req 9 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

- o Interested in Medicine?
- Learn about different schools, professions and a little about the culture.
- Make contacts and shadow someone in the health profession

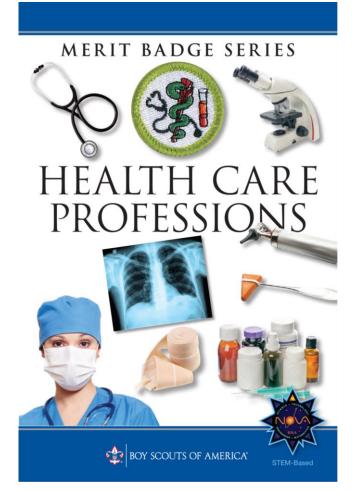






#### Resources

The BSA has a merit badge pamphlet covering this material



#### **Resources – Websites**

- American Association of Men in **Nursing** 
  - www.aamn.org
- **American Association of Pharmacy Technicians** www.pharmacytechnician.com
- **American Association of Physician Assistants** 
  - www.aapa.org
- **American Association of Women** in Medicine
- www.amwa-doc.org

- **American Dietetic Association** www.eatright.org
- **American Medical Association** www.ama-assn.org
- American Nurses' Association www.nursingworld.org
- **American Physical Therapy Association**

www.apta.org/PTCareers/Roleofa

**American Psychology Association** www.apa.org/index

#### **Resources – Websites**

- American Society of Radiologic Technologists
  - www.asrt.org/main/careers/caree rs-inradiologic-technology
- American Speech-Language-Hearing Association
  - www.asha.org
- Bureau of Labor Statistics

   (information about jobs, job
   forecasts and more)
   www.bls.gov/ooh/healthcare/home.htm

- American Society of Cytopathology
  - cytopathology.org/page/careercyt
    otechnology
- ExploreHealthCareers.org
   explorehealthcareers.org
- Hearing and Speech Careers
   hearingandspeechcareers.org
- MedAssistantedu.org
   www.medassistantedu.org

#### **Resources – Websites**

- National Association of Emergency Medical Technicians www.naemt.org
- Johnson & Johnson Nursing <u>nursing.jnj.com</u>
- Pharmacists Advancing Health
   Care

www.ashp.org/Pharmacy-

**Technician** 

About-Pharmacy-

Technicians/PharmacyTechnician-

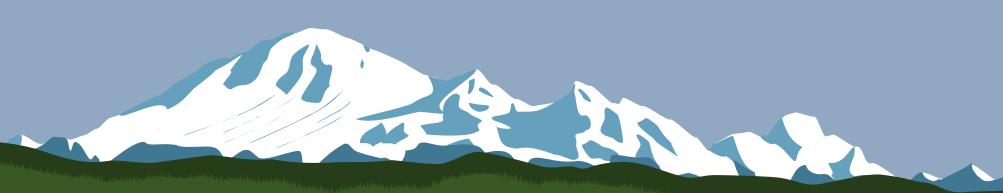
Career-Overview

- Top Medical Career topmedicalcareers.net
- National Phlebotomy Association www.nationalphlebotomy.org
- Ultrasound Technician and Sonographer

www.ultrasoundschoolsinfo.com/ultrasound-technician







#### **Instructor's Corner**

Thank you for teaching or considering teaching this merit badge 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.

#### **Instructor's Corner**

Under ideal circumstances:

- Class can be delivered in around 2 to 2.5 hours
- If you need to reduce class time you can skip over some of the professions

### **Instructor's Corner – Scout Challenges**

Some requirements are particularly challenging for Scouts to Complete

- Requirement 5 requires a visit with a professional at their Workplace
- Requirement 9 requires Heath related volunteer work

### **Requirement 5 - Visit with Health Care Professional**

This may be impossible based on Scouts location and access to Medical Professionals

#### You can consider:

- Videoing yourself at work
- Running the course from your workplace

#### Scouts can also Consider:

- Bring up these questions when they visit their primary care provider
- Talking to School Nurse
- Finding someone in the medical field that works from home and interview them via videoconference

### **Requirement 9 - Volunteer Work**

This one is up to you.

These are ideas accepted/considered by other counselors during the Covid Pandemic:

- Work done prior to your class
- Work done later health fair or blood donation
- Virtual Troop Health Fair with Blood Donation Drive
- Work with school nurse
- 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

## Making it fun

You likely have a lot of fun stores 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.

#### **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 way 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.