ABPM Style Guide
2026

Grammar and Usage

A

abbreviations	(**additional information on abbreviations appears in Common Abbreviations and Acronyms, Units of Measure and DO NOT USE list)** Use of *a* versus *an* before abbreviation: follow usage before an abbreviation that would take an *an* if pronounced as the abbreviation. Avoid beginning sentence with an abbreviation or acronym, for example: "The ABPM has 6,000 members," not "ABPM has 6,000 members."
abnormal, normal; negative, positive	Avoid the use of *normal* and *abnormal* to describe a person's health status. Results of cultures and tests for microorganisms and specific responses to tests may be negative or positive. Other tests focus on a pattern of activity rather than a single feature; hence, a range of normal and abnormal results is possible. The latter tests include electroencephalograms (EEGs) and electrocardiograms (EKGs) and modes of imaging such as isotopic scans, radiographic studies, and tomography.
Achilles tendon	not "tendo-Achilles."
acronyms	**(see also List of Common Abbreviations and Acronyms and DO NOT USE list)** Always spell out the organization's entire name on first reference and follow the organization's name with its abbreviation or acronym in parentheses. Use the abbreviation or acronym for second and subsequent references. Do not use periods in acronyms. Avoid beginning a sentence with acronym (see entry on abbreviations, above). Do not invent acronyms. If an acronym does not exist, repeat the organization's name or use a generic terms such as *the association, the agency, the organization,* etc.
alcohol use	Specify type of alcohol, numeric amount of alcohol use, frequency and length of use or recovery status. Avoid using terms such as social, occasional or recreational use. Utilize the term "alcohol dependency" in place of "alcohol abuse".
a.m., p.m.	Lowercase, with periods.

B

bi-	In general, no hyphen.
by-	In general, no hyphen.

C

can, may, might	*Can* denotes ability; *may* denotes permission or possibility; *might* denotes possibility. *Deborah can fix the disk drive. You may go home now. Mom and Dad might visit us this summer.*
capitalization	Always capitalize medical terms or procedures that contain proper nouns, e.g., *Charcot-Marie-Tooth*, *Fahrenheit* and *Doppler*.
case, patient	These terms are not interchangeable. A *case* is an instance of an illness, disease, or injury. A *patient* is a person receiving medical care. Incorrect: *We treated six cases of food poisoning.* Correct*: We treated six patients for food poisoning.* Incorrect: *The number of tuberculosis patients decreased last year.* Correct: *The number of tuberculosis cases decreased last year.*
co-	In general, no hyphen. However, retain the hyphen when forming nouns, adjectives, and verbs that indicate occupation or status, e.g., co-author, co-defendant, co-worker.
collective nouns	Nouns that denote a unit take singular verbs and pronouns: class, committee, crowd, family, group, team. However, *data*, and *media* take plural verbs and pronouns.
compared to, compared with	Use *compared to* when the intent is to assert, without the need for elaboration, that two items are similar. Use *compared with* when juxtaposing two or more items to illustrate similarities and/or differences. (Same rule applies to *contrasted to* and *contrasted with*.)
comprise versus compose	The whole comprises the parts: *The book comprises five chapters.* Parts compose a whole: *This book is composed of three chapters.*
cross section (n.), cross-section (v.)	

D

dates — All dates should include a year, e.g., Sept. 7, 1986 or September 1986 (no comma between month and year).

degree, percent — Do not use ° or % symbols.

diabetes mellitus — When identifying a patient with diabetes, designate as Type 1 DM or Type 2 DM

diagnosed — People cannot be diagnosed, only conditions and diseases can.

diminished — Regarding vascular, neurologic sensory and motor exams do not use the word diminished when describing pulses, reflexes, or muscle strength.

disease, pathology, etiology — A *disease* is a lesion, abnormality, or illness; *pathology* is the description of a disease; and *etiology* is the study of the causes of a disease.

diseases — Do not use expressions such as: *The patient is battling cancer. The patient is a stroke victim. The patient is a diabetic patient.*
Correct terminology: *The patient has cancer. The patient had a stroke. The patient has diabetes.*

dosage, dose — A dose is the quantity to be administered at one time, or the total quantity administered during a specified period. Dosage implies a regimen; it is the regulated administration of individual doses and is usually express as a quantity.

drug names — Use generic name first, followed by brand name(s) in parentheses, e.g., *prednisone (Deltasone)*. (Consult *Physician's Desk Reference* for accuracy.)

Where the drug is universally known by a single name, it is acceptable to refer to that drug using that single name. Acceptable drugs referred to by one name:

Generic	**Brand**
acetaminophen	Tylenol
acetylsalicylic acid	Aspirin
adenosine	Adenocard
albuterol	Ventolin
amiodarone	Pacerone
amoxicillin	Amoxil
amoxicillin clavulanate	Augmentin
ampicillin and sulbactam	Unasyn
atropine	Atropen
Bleomycin	Bleo 5k
bupivacaine	Marcaine

calcium gluconate	Gluconate
cefazolin	Ancef
cefepime	Maxipime
cephalexin	Keflex
chlorohexidine gluconate	ChloraPrep
ciprofloxacin	Cipro
clindamycin	Cleocin
clopidogrel	Plavix
colchicine	Colcrys
dextrose	D5W
dopamine	Intropin
doxycycline	Doxycin
diphenhydramine	Benadryl
enoxaprin	Lovenox
epinephrine	Adrenalin
erythromycin	Erythrocin
fentanyl	Sublimaze
furosemide	Lasix
gabapentin	Neurontin
gentamycin	Garamycin
heparin	Heparin
hydrochlorothiazide	Microzide
hydrocodone/acetaminophen	*no generic*
hydrocortisone	Cortizone
ibuprofen	Advil
indomethacin	Indocin
insulin	Lantus
ketoconazole	Nizoral
Levofloxin	Levaquin
lidocaine	Xylocaine
magnesium sulfate injection	Magnesium Sulfate
metformin	Glucophage
methadone	Methadose
methotrexate	Trexall
morphine	Duramorph
nafcillin	Nallpen
naproxen	Naprosyn
naloxone	Narcan
nitroglycerin	Nitropaste
oxycodone	OxyContin
oxycodone/acetaminophen	Percocet
penicillin	Pfizerpen
Potassium	K-tab

povidone iodine	Betadine
prednisone	Deltasone
procainamide	Pronestyl
propranolol	Inderal
sodium bicarbonate	Neut
sodium chloride	Normal saline
sodium chloride, sodium lactate, potassium chloride, and calcium chloride	lactated Ringer's (LR)
sotalol	Betapace
sulfamethoxazole and trimethoprim	Bactrim
vancomycin	Vancocin
warfarin	Coumadin

E

e.g. — For example (from the Latin *exempli gratia*). Always use a comma after e.g.

elements — elements from the periodic table are acceptable abbreviations.

ensure, insure, assure — Use *ensure* to mean guarantee: *She took steps to ensure accuracy.* Use *insure* for references to insurance: *The policy insures his life.* Use *assure* to mean to make sure or give confidence: *She assured us the statement was accurate.*

etc. — And others or so forth (from the Latin *et cetera*). The abbreviation is always followed by single period.

F

follow up, follow-up — Use follow up as a verb; hyphenate when used as an adjective or a noun. *Researchers followed up 12 patients for a year. The mean follow-up time was 11 months.*

G

generic drug name — Follow with brand name in parentheses, e.g., vancomycin (Vancocin).

H

health care	Two words.
his, her	Do not use pronouns or assume gender in constructing a sentence, for example: *A reporter protects his sources.* Avoiding using constructions such as *his or her sources* or *his/her sources*. Frequently, the best choice is a slight revision of the sentence: *Reporters protect their sources.*
history	Avoid the redundant *past history.*
hyphen	Do not use a hyphen after an adverb ending with *–ly.* Examples: *a carefully planned project; a recently discovered virus.* Do not hyphenate words prefixed by *non, un, in, dis, co* (see exceptions, below), *anti, hyper, pre, re, post, out, bi, counter, de, semi, mis, mega, micro, inter, over,* and *under* (among others).pan Do not hyphenate *weight bearing* when used as a verb*.* Example: *The patient was noted to be weight bearing.* Use hyphens for weight-bearing and non-weight-bearing when used as an adjective, such as in describing gait. Example: *The patient was placed in a weight-bearing cast.* There is always a hyphen between non and weight in non-weight bearing. Use hyphens when needed for clarity, e.g., *re-sign* versus *resign*. *Two-thirds part* versus *two thirds* or *one half.* When two or more hyphenated compounds have a common base, omit the base in all but the last. In unhyphenated compounds written as one word, repeat the base: *first-, second-, and third-grade students, 10- and 15-year-old boys;* but: *anterolateral and posterolateral aspects.*

I

i.e.	That is (from the Latin id est). Punctuation before *i.e.* (comma versus semicolon) varies depending on the function of the material following *i.e.* in the sentence. If it is a noun or a phrase, use a comma: *We have used only data in which the difference is larger than 30 percent, i.e., only those more than 20.* If it is an independent clause, use a semicolon and change i.e. to "that is": *We have used only data in which the difference is larger than 30 percent; that is, we have used only data. . .*
Illicit drug use	Specify type of drug, route of administration, frequency and length of use or recovery status. Time last used if applicable. Avoid using terms such as social, occasional or recreational use. Utilize the term "drug dependency" in place of "drug abuse".
imply, infer	To *imply* is to suggest or to indicate or express indirectly. To *infer* is to conclude or to draw conclusions underlying the observed association.
in order to	*In order* often can be removed from the phrase *in order to* without changing its meaning.
italics	Do not use for emphasis.

J

jargon	Emergency room (preferred: *emergency department*); exam (preferred: *examination*); hyperglycemia of 250 mg/dL (preferred: *hyperglycemia* [*blood glucose level of 250 mg/dL*]); lab studies or labs (preferred: *laboratory studies*; status post (preferred: *after or following*). Other examples of jargon: toe, large toe, big toe (preferred: *digit,* and, for big toe, *hallux* or *mallet toe*; x-ray (preferred: *radiograph*); K-wire (preferred: *Kirschner wire* or *Kirschner-wire fixation*); and below-knee (preferred: *below-the-knee*).
joint	When identifying an articulation between two bones the proper terminology is, e.g*., metatarsophalangeal; metatarsocuneiform, talocalcaneal; tarsometatarsal; etc*.

L

laboratory values	Differential white blood cell *count*; pulse *rate*; total serum cholesterol *value* or *level* or *concentration*; platelet *count.*
Latin phrases	Do not italicize Latin phrases except genus and species: a priori, in situ, ad hoc. Do not hyphenate Latin expressions or non-English phrases used in an adjectival sense: *an a priori argument, in vivo specimens, café au lait spots* (italics used here for examples purposes)

M

male or female	Use as adjectives when describing a patient, e.g., *male patient.* Do not use the following terms to describe a patient in: *girl, woman; boy, man*.
manual muscle testing	When describing muscle strength utilize the grading system 0-5 where 0 = flaccid, 1 = palpable contraction without motion, 2 = motion without gravity, 3 = motion against gravity only, 4 = motion against moderate resistance, 5 = motion against full resistance. Manual muscle testing is to be placed within the Musculoskeletal exam.
modifiers (noun strings)	Although in English nouns can be used as modifiers, overuse of noun modifiers can lead to a lack of clarity, e.g., *diabetic patient* (correct: *patient with diabetes).* If there is a possibility of ambiguity, add hyphens for clarity, e.g., *large-vessel dissection.*

N

negative questions	Rephrase negative examination questions to use **not** (in **boldfaced, all capital** type and underlined): "Which tissue is **NOT** involved in histological bone healing?" At the end of such questions, include: (*note negative format*) (in *italics*). "All of the following tissues are involved in histological bone healing, **EXCEPT**: *(Note negative format)"*
non-weight bearing	Do not hyphenate *weight bearing* when used as a verb. Example: *The patient was noted to be weight bearing.* Use hyphens for weight-bearing and non-weight-bearing when used as an adjective, such as in describing gait. Example: *The patient was placed in a weight-bearing cast.* There is always a hyphen between non and weight in non-weight bearing.

number	*The number* is singular and *a number of* is plural: *The number that responded was surprising. A number of respondents were concerned about adverse effects.* The same is true for *the total* and *a total of.*
numerals	Spell out one through nine: The Yankees finished second. He had nine months to go. Use figures for 10 or above and whenever preceding a unit of measure or referring to ages of people, animals, events, or things. Measurements may use numerals example: 3cm Provide full ranges for pages or years, for example, change 801-6 to 801-806 and change 1979-80 to 1979-1980.

P

passive voice	In general, avoid using passive voice. If the subject of a sentence performs an action, the sentence is in active voice: *Physicians collected data from 5,000 patients.* If the subject of a sentence receives an action or is acted on, the sentence is in passive voice: *Data were collected from 5,000 patients by physicians.*

Q

quotation marks	Use double quotes, not single quotes. EXCEPTION: In rare cases in computer-based patient simulation questions where quotation marks appear, use single, rather than double, quotes and the case where a quote is within another quote, e.g., hearsay. Periods and commas go inside closing quotes; semicolons and colons go outside.

R

redundant words	Examples: *advance* planning, brief *in duration*, fewer *in number*, *future* plans, *general* rule, *major* breakthrough, *past* history, period *of time*, *time* period, *point in* time, etc.
reflexes	In describing reflexes utilize the following description for reflexes: absent, hypoactive, normal, hyperactive, hyperactive with clonus, sustained clonus.
routes of administration	Use the list of accepted abbreviations when describing routes of administration of medication.

S

semicolon

Use a semicolon to separate the independent clauses of a compound sentence. (An independent clause has its own subject and verb.) *Writing a good book review takes time; some reviewers like to read a book twice before writing their review.*

The semicolon also is used to separate the elements of a series that already contains commas: *Our new officers are Dan Barnes, president; Lisa Melton, vice president; and Cindy Owens, secretary.*

sensation

When describing the neurologic examination findings, *LOPS and loss of sensation* are used to describe the negative, while *intact sensation, no sensory deficits, intact protective threshold sensation* are used

state names

In conjunction with the name of a city, use postal code abbreviations:

AL	AK	AZ	AR	CA
CO	CT	DE	FL	GA
HI	ID	IA	IL	IN
KS	KY	LA	MD	MA
ME	MI	MN	MS	MO
MT	NE	NV	NH	NJ
NM	NY	NC	ND	OH
OK	OR	PA	RI	SC
SD	TN	TX	UT	VT
VA	WA	WV	WI	WY

STIR

Short T1 (tau) inversion recovery (MRI).

T

tables

When using a table, the cells should alternate shading, by row or column, for ease of visualizing the values. Tables should be shaded in Gainsboro **#dcdcdc**.

For example:

temperature

List temperature as the degrees Fahrenheit followed in parentheses by the equivalent degrees in Celsius, for example 101F (38.3C)

tendinitis

Do not spell as *tendonitis*.

that, which (pronouns)

Use *that* and *which* in referring to inanimate objects and to animals without a name. Use *that* for essential (restrictive) clauses important to the meaning of a sentence, and without commas: *I remember the day that we met.* Use *which* for nonessential (unrestrictive) clauses, where the pronoun is less necessary, and use commas: *The team, which finished last a year ago, is in first place.*

tobacco use

In the social history tobacco use is documented as “number of ppd x number of years”

U

use, utilize

Use is almost always preferable to *utilize*, which has the specific meaning “to find a profitable or practical use for,” suggesting the discovery of a new use for something. However, even where this meaning is intended, *use* would be acceptable. Exception*: Utilization review* and *utilization rate* are acceptable terminology.

V

Vascular

In describing pedal pulses use “palpable or nonpalpable” accompanied with a reproducible test, such as ABI, Doppler waveforms, TcpO2. If both pulses are the same, use the phrasing *pedal pulses are palpable or nonpalpable*. If they are different the name of the artery should be spelled out, i.e., *dorsalis pedis pulse is nonpalpable, posterior tibial pulse is palpable*.

verbs (split infinitive forms)

In general, avoid awkward constructions that split infinitive forms of a verb (to leave, to help, etc.) or compound forms (had left, are found out, etc.).

verbs (tense)

The present tense is used to express a general truth, a statement of fact, or something continuingly true. The present perfect tense illustrates actions completed in the past but connect with the present or those ongoing. The past tense refers to a completed action.

vital signs

Vital signs will be listed in uniform format oriented horizontal on the page. Table columns should be alternately shaded in Gainsboro **#dcdcdc** in a table as:

T: F (c)	BP:	HR:	RR:

W

who, that

Who refers to a person; that refers to an object or animal. Incorrect: *The woman that came in last week returned the book she borrowed.* Correct: *The woman who came in last week returned the book she borrowed.*

who, whom

Who acts; *whom* receives the action. *The man who rescued my cat was very kind. We congratulated the six people whom the board appointed.*

X,Y,Z

Common Abbreviations and Acronyms

The listed abbreviations/acronyms may not be expanded in the examination. Abbreviations not included in this list will be expanded upon first mention and may be abbreviated thereafter in the same item.

(Note: some abbreviations encompass more than one grammatical variant (e.g., noun, adjective) of a term. For example, EKG represents both electrocardiogram and electrocardiographic. It is unnecessary to redefine the abbreviation for each variation in usage within a body of work. Similarly, terms that have singular and plural forms (e.g., WBC and WBCs) are defined once, whichever form is mentioned first.

A

AAA	abdominal aortic aneurysm
ABG	arterial blood gases
ABI	ankle brachial index
ACE	angiotensin-converting enzyme
ADL	activities of daily living
AED	automated external defibrillator
ADHD	attention deficit/hyperactivity disorder
A-fib	atrial fibrillation
AFO	ankle foot orthosis
AIDS	acquired immunodeficiency syndrome
AKA	above-knee amputation
AKI	acute kidney injury
ALT	alanine aminotransferase
AMS	altered mental status
ANA	antinuclear antibody
AO	*Arbeitsgemeinschaft für Osteosynthesefragen* [from the German]/Association for the Study of Internal Fixation. An association founded in Germany to study and promote the use of internal fracture fixation. The AO has developed several types of orthopedic hardware, and they carry AO designations, e.g. an AO screw.

AP	anteroposterior radiograph view
ARDS	acute respiratory distress syndrome
ASA	American Society of Anesthesiologists
ASIS	anterior superior iliac spine
AST	aspartate aminotransferase
ATFL	anterior talofibular ligament
AVN	avascular necrosis

B

BKA	below-knee amputation
BLS	basic life support
BMI	body mass index
BMP	basic metabolic panel
BNP	B-type natriuretic peptide
BP	blood pressure
BUN	blood urea nitrogen

C

C spine	cervical spine
CABG	coronary artery bypass graft
CAD	coronary artery disease
CAM walker	CAM (*controlled ankle movement*) walker (do not expand)
CBC	complete blood *cell* count
CBC w/diff	complete blood cell count with differential
CBD	cannabidiol
CC	calcaneocuboid

CD4	T helper cells having CD4 glycoprotein
CFL	calcaneofibular ligament
CFT	capillary filling time
CHD	coronary heart disease
CHF	congestive heart failure
CK	Creatine kinase
CKD	chronic kidney disease
CK-MB	Creatine kinase-myocardial band
CMP	comprehensive metabolic panel
CMT	Charcot-Marie-Tooth disease
CN	calcaneonavicular
CNS	central nervous system
CORA	center of rotation of angulation
COPD	chronic obstructive pulmonary disease
COVID-19	SARS-CoV-2
CPK	creatinine phosphokinase
CPR	cardiopulmonary resuscitation
CREST	acronym for cardinal clinical features of calcinosis, Raynaud phenomenon, esophageal dysmotility, sclerodactyly, and telangiectasia
CROW	Charcot restraint orthotic walker
CRP	C-reactive protein
CRPS	complex regional pain syndrome
CSF	cerebrospinal fluid
CT	computerized tomographic, computerized tomography
CTA	computerized tomographic angiography
CVA	cerebrovascular accident
CXR	chest radiograph

C&S	culture and sensitivity

D

DEXA	dual-energy x-ray absorptiometry
DFU	diabetic foot ulcer
DIPJ	distal interphalangeal joint
DJD	degenerative joint disease
DNR	do not resuscitate
DTRs	deep tendon reflexes
DVT	deep vein thrombosis

E

EBM	evidence-based medicine
ED	Emergency Department
EDB	Extensor digitorum brevis
EDL	Extensor digitorum longus
EEG	electroencephalogram, electroencephalographic
EF	ejection fraction
e.g.	for example (From the Latin *exempli gratia*. Note use of periods; set off with comma following second period.)
EGD	esophagogastroduodenoscopy
EHB	Extensor hallucis brevis
EHL	Extensor hallucis longus
EKG	electrocardiogram
EMG	electromyogram, electromyographic

EMS	emergency medical services
ESBL	extended spectrum beta-lactamase
ESR	erythrocyte sedimentation rate
ESRD	end-stage renal disease
etc.	and others or so forth (from the Latin *et cetera*)
EVA	ethyl vinyl acetate

F

FDB	Flexor digitorum brevis
FDL	Flexor digitorum longus
FHL	Flexor hallucis longus
FHB	Flexor hallucis brevis
FPI	foot pressure index

G

G6PD	glucose-6-phoshpate dehydrogenase
GABA receptors	gamma-aminobutyric acid
GERD	gastroesophageal reflux disease
GFR	glomerular filtration rate
GI	gastrointestinal
GSW	gunshot wound

H

HAV	hallux abductovalgus
HbA1c (no subscript)	hemoglobin A1c (no subscript)
HBOT	hyperbaric oxygen therapy
hCG	human chorionic gonadotropin
Hct	hematocrit
HCTZ	hydrochlorothiaide
H&E Stain	Hematoxylin and Eosin
Hgb	hemoglobin
HIPAA	Health Insurance Portability and Accountability Act
HIT	heparin induced thrombocytopenia
HIV	human immunodeficiency virus
HPK	hyperkeratosis
HTN	hypertension

I

I&D	incision and drainage
IBS	irritable bowel syndrome
ICU	intensive care unit
i.e.	that is (From the Latin *id est*. Note use of periods; set off with comma after second period)
IgG	immunoglobulin G
IM	intramuscular, intramuscularly
IMA	intermetatarsal angle
INR	international normalized ratio
INR/PT	international normalized ratio/prothrombin time

IPJ	interphalangeal joint
IPK	intractable plantar keratosis
IRB	institutional review board
IV	intravenous, intravenously
IVC	inferior vena cava

J

K

KUB	referring to the radiograph view “kidneys, ureters, and bladder”

L

LAT	lateral radiograph view
LDL	low-density lipoprotein
LDL-C	low-density lipoprotein cholesterol
LFT	liver function test
LMWH	low molecular weight heparin
LO	lateral oblique radiograph view
LOC	loss of consciousness
LOPS	loss of protective sensation
LP	lumbar puncture
LR	lactated Ringer’s solution

M

MAC	monitored anesthesia care
MI	myocardial infarction
MO	medial oblique radiograph view
MRA	magnetic resonance angiography (or *angiogram*)
MRI	magnetic resonance imaging (or *image*)
MRSA	methicillin-resistant *Staphylococcus aureus*
MS	multiple sclerosis
MSSA	methicillin-sensitive *Staphylococcus aureus*
MTPJ (not MPJ)	metatarsophalangeal joint
MVC	motor vehicle collision

N

NCSP	neutral calcaneal stance position
NCV	nerve conduction velocity
NKDA	no known drug allergy
NPO	nothing by mouth (from the Latin *nil per os*)
NPWT	negative pressure wound therapy
NSAID	nonsteroidal anti-inflammatory drug
NS	normal saline
NSR	normal sinus rhythm
NSEMI	non-ST elevated myocardial infarction

O

OATS	osteochondral autogenous transport system

ORIF	open reduction internal fixation
OT	occupational therapy
OTC	over the counter

P

PAC	premature atrial contraction
PACU	post-anesthesia care unit
pCO2 (no subscript)	partial pressure of carbon dioxide, arterial
pO2 (no subscript)	partial pressure of oxygen arterial
PAD	peripheral artery disease
PASA	proximal articular set angle
PCN	penicillin
PCP	primary care physician
PE	pulmonary embolism
PER	pronation-external rotation (*injury*)
PET	positron emission tomographic, positron emission tomography
pH	unit of measure to specify acidity or alkalinity of an aqueous solution
PICC	peripherally inserted central catheter
PIPJ	proximal interphalangeal joint
PMNs	polymorphonuclear lymphocytes
PO	*per os*, by mouth
POC	point of care
PPO	preferred provider organization
PRAFO	Pressure reduction ankle foot orthotic
PRP	platelet rich plasma
prn	*pro re* nata, as needed
PTBO	patellar tendon bearing orthosis

PTSD	post traumatic stress disorder
PTT	partial thromboplastin time
PTTD	posterior tibial tendon dysfunction
PVC	premature ventricular contraction
PVNS	pigmented villonodular synovitis
PVR	peripheral vascular resistance

R

RA	Rheumatoid arthritis
RBC	red blood cell (but: RBC *count* when describing test result)
RCSP	relaxed calcaneal stance position
RF	Rheumatoid factor
RICE	rest, ice, compression, elevation
ROM	range of motion
ROS	review of system

S

SLC	short-leg cast
SLE	systemic lupus erythematosus
SNF	skilled nursing facility
SOB	shortness of breath
s/p	status post
SFA	superficial femoral artery
SPO2	saturation of peripheral oxygen

SQ	subcutaneous
STATT	split tibialis anterior tendon transfer
STD	sexually transmitted disease
STEMI	ST elevated myocardial infarction
STJ	subtalar joint
STM	soft-tissue mass
STSG	split-thickness skin graft
SWMF	Semmes-Weinstein monofilament

T

TAL	Achilles tendon lengthening
TAO	thromboangiitis obliterans
TAR	total ankle replacement
TBI	toe-brachial index
TBSA	total body surface area
TCC	total contact cast
TcPO2	transcutaneous partial pressure of oxygen
Tc-99m	technetium-99m (*scan*)
Td	tetanus and diphtheria, adult
TD	tetanus and diphtheria, pediatric
TDAP	tetanus, diphtheria, and acellular pertussis
TEE	transesophageal echocardiogram
TENS	transcutaneous electrical nerve stimulation
TEV	talipes equinovarus
TIA	transient ischemic attack
TIBC	total iron-binding capacity
TMA	transmetatarsal amputation

TMTJ	tarsometatarsal joint
TNJ	talonavicular joint

U

UCBL	University of California Berkley Laboratory (referring to the orthotic)
US	ultrasound
UTI	urinary tract infection

V

VDRL	Venereal Disease Research Laboratory test
V fib	ventricular fibrillation
VHDL	very high-density lipoprotein
VLDL	very low-density lipoprotein
VLU	venous leg ulcer
V tach	ventricular tachycardia
VQ	ventilation/perfusion scan

W

WB	weightbearing
WBAT	weightbearing as tolerated
WBC	white blood cell (but: WBC *count* when describing test result)

X,Y,Z

Units of Measure (see also AMA Manual of Style)

bpm	beats per minute
Celsius	C
centimeter	cm
cubic centimeter	cc (not cm^3)
cubic foot	cu ft
deciliter	dL
degree	do not abbreviate
Fahrenheit	F
foot	ft
gram	g
hour	hr (only in dosages; otherwise, spell out)
inch	do not abbreviate
kilogram	kg
liter	L
micro	µ
milligram	mg
milligrams per deciliter	mg/dL
milliliter	mL
millimeter	mm
millimeters of mercury	mmHg
millisecond	msec
minute	min
month	do not abbreviate

pound	lb
week	wk

Laboratory Values (reference ranges)

Disclaimer: The following values are based on a national standard. Please refer to your local laboratory reference range when treating patients.

Complete Blood Count with Differential and Platelet		
WBC	Male	3.8 - 11.0 K / mm3
	Female	3.8 - 11.0 K / mm3
	Child	5.0 - 10.0 K / mm3
RBC	Male	4.2 - 5.6 M/µL
	Female	3.8 - 5.1 M/µL
	Child	3.5 - 5.0 M/µL
Hgb	Male	14 - 18 g/dL
	Female	11 - 16 g/dL
	Child	10 - 14 g/dL
	Newborn	15 - 25 g/dL
Hct	Male	39 - 54%
	Female	34 - 47%
	Child	30 - 42%
MCV		78 - 98 fL
MCH		27 - 35 pg
MCHC		31 - 37%
RDW		11.5 – 14.5%
Platelets		140,000 - 450,000 /ml
Neutrophils		50 - 81%
Lymphocytes		14 - 44%
Monocytes		2 - 6%
Eosinophils		1 - 5%
Basophils		0 - 1%
Bands		1 - 5%
pH		7.35 – 7.45

Coagulation	
ACT	90 - 130 seconds
APTT	21 - 35 seconds
Plasminogen	62 - 130%
PT	10 - 14 seconds
PTT	32 - 45 seconds
FSP	Less than 10 µg/dL
fibrinogen	160 - 450 mg/dL
bleeding time	3 - 7 minutes
thrombin time	11 - 15 seconds
INR	0.8 – 1.2

Urinalysis	
Appearance	Yellow, clear
pH	4.8 - 8
Specific gravity	1.005 – 10.25
Glucose	≤ 130 mg/dL
Ketones	none
Bilirubin	negative
Protein	≤ 150 mg/dL
Leukocyte esterase	Negative
Nitrites	Negative
Blood	≤ 3 RBCs
RBC	≤ 2 cells/hpf
WBC	≤ 2 – 5 cells/hpf
Epithelial cells	≤ 15 - 20

Comprehensive Metabolic Panel		
Glucose		65 - 99 mg/dL
BUN		8 - 25 mg/dL
Creatinine, serum		0.6 - 1.5 mg/dL
eGFR		90 – 120 mL/min/1.73 m2
BUN/Creatinine Ratio		8 - 27
Sodium		135 - 148 mEq/L
Potassium		3.5 - 5.5 mEq/L
Chloride		96 - 112 mEq/L
Carbon Dioxide		21 - 34 mEq/L
Calcium		8 - 11 mg/dL
Protein, total		5 - 9 mg/dL
Albumin		3.5 - 5.0 g/dL
Globulin		2 – 3.5 g/dL
A/G Ratio		0.8 – 2.0
Bilirubin, total		0.2 - 1.4 mg/dL
Alkaline Phosphatase		32 - 110 U/L
AST (SGOT)	Male	7 - 21 U/L
	Female	6 - 18 U/L
ALT (SGPT)		8 - 32 U/L
ACTH		< 85 PG/mL

Rheumatoid Panel	
Rheumatoid factor (RF)	<1:10
Antinuclear antibody (ANA)	<1:40, no pattern
Anti-Cyclic Citrullinated Peptide antibody (anti-CCP)	<20 u/mL
Anti-U1 ribonucleoprotein	negative

HLA-B27		negative
Uric acid	male	3.5 - 7.7 mg/dL
	female	2.5 - 6.6 mg/dL

Miscellaneous labs		
Acetone		0.3 - 2.0 mg%
anion gap		5 - 16 mEq/L
Ammonia		11 - 35 µmol/L
Amylase		50 - 150 U/dL
creatine	Male	0.2 - 0.6 mg/dL
	Female	0.6 - 1.0 mg/dL
CPK		22 – 198 units/L
HbA1C		<5.7 percent
Iron		52 - 169 µg/dL
Magnesium		1.5 - 2.5 mg/dL
Phosphorus		2.2 - 4.8 mg/dL
PSA		<4 NG/mL
T3		80-180 ng/dL
T4		4.5 – 12 µg/dL
TIBC		240-450 µg/dL
TSH		Less than 9 µU/mL

Cardiac Enzymes	
CK-MB	0-3 µg /L
troponin I	<0.35 µg /L
troponin T	<0.2 µg /L
BNP	0-100 pg/ml

Inflammatory Markers		
Lactate		0.5 – 1.0 mMol/L
CRP		<1.0 mg/L
ESR	Female	<25 mm/hr
	Male	<20 mm/hr
	Child: newborn	<2 mm/hr
	Child: 1 year - puberty	3 – 13 mm/hr

Miscellaneous laboratory/test values	
ABI:	1.0 – 1.4

BMI:		18.5 – 25 kg/m2
D-dimer		<250ng/mL
Finger stick blood sugar:		fasting: 60-99 mg/dL
		random: 79-140 mg/dL
TcPO2		>55 mmHg
Vitamin B12		200-900 pg/mL
Vitamin D		≥ 50 nmol/L
Compartment pressure.		0 – 15 mm Hg
HIV labs:	CD4:	>350 cells/mm3
	Viral load:	nondetectable (copies/mL)
		in HIV: therapeutic level <50 copies/mL

Synovial Analysis	
Appearance	Clear
Clarity	Transparent
WBC	Less than 200 cells/μL
PMN	Less than 25 percent
Viscosity	High
Gram Stain	Negative
Culture	Negative
Crystals	None
Glucose level	Similar to patients serum glucose

Reference Range for Common Radiographic Measurements (Adult)		
Measurement/Angle	Abbreviation	Reference range
Hallux abductus interphalangeus	HAI	0-10 degrees
Hallux abductus	HA	0-15 degrees
Distal articular set	DASA	0-5 degrees
Proximal articular set	PASA	0-8 degrees
Tibial sesamoid position	TSP	1-3
First intermetatarsal	1st IMA	8-12 degrees
Metatarsus adductus	MA	10-15 degrees
Metatarsal protrusion distance	MPD	+/- 2mm
Talocalcaneal	TC	17-21 degrees
Talar declination		15-20 degrees
Calcaneal inclination		18-23 degrees
Fourth intermetatarsal	4th IMA	< 9 degrees
Lateral deviation (5th met head and neck bisection to the shaft bisection)	LDA	< 8 degrees
5th metatarsal declination		< 10 degrees
Bohler's		25-40 degrees
Critical angle (of Gissane)		130-145 degrees
Calcaneocuboid (transverse plane)	CC angle	<10 degrees
Lesser tarsus (long axis of calcaneus to bisection of the lesser tarsus)		10-15 degrees
Forefoot adductus (long axis of calcaneus to the 2nd met bisection)		8-14 degrees

Biomechanical Examination Reference Ranges (Adult)		
Measurement		Reference
Hip	Internal rotation (ext)	45 degrees
	External Rotation (ext)	45 degrees
	Neutral position (ext)	0 degrees
	Tibial position	Perpendicular
Femor	Q angle	12-20 degrees
Lower Leg	Malleolar position	15-20 degrees external
Ankle	DF knee extended	10 degrees
	DF knee flexed	>10 degrees
Foot	Heel inversion	20 degrees
	Heel eversion	10 degrees
	Subtalar joint neutral position	0 degrees
	Forefoot to rearfoot 1-5	Perpendicular
	Forefoot to rearfoot 2-5	Perpendicular
	First ray dorsiflexion	5mm
	First ray plantarflexion	5mm
	First ray neutral position	0 mm
	Hallux dorsiflexion	65 degrees
	Hallux plantarflexion	>30 degrees

Biomechanical Examination Reference Ranges (Pediatric)		
Measurement		Reference
Hip	Total t-plane motion	>100 degrees
	Internal rotation (ext)	undefined
	External Rotation (ext)	Twice the amount of internal rotation
	Achieve adult values	Age 5-6
Knee T-plane	Internal rotation	10 – 15 degrees
	External rotation	10 – 15 degrees
	Achieve adult value of 0 degrees	Age 3-4
Knee F-plane	Birth	Genu varum
	Age 2 - 4	0 degrees
	Age 4 - 6	Genu valgum
	Age 6 - 12	0 degrees
	Age 12 - 14	Genu valgum
	Achieves adult value	Age 14
Knee S-plane	Birth – age 5 years	Recurvatum 5 – 10 degrees
	Achieves adult value	Age 5
Tibial torsion	External torsion at birth	0 degrees
	External rotation	2 degrees/year
	Achieves adult value	Age 7 – 8
Tibia F-plane	Varum	0 – 5 degrees
	Achieves adult value	Age 10-13
Ankle	Dorsiflexion at birth	75 degrees
	Age 3	20 -25 degrees

	Age 10	15 degrees
	Age 15	10 degrees
STJ	Heel inversion	30 - 34 degrees
	Heel eversion	15 - 17 degrees
	Subtalar joint neutral position	0 degrees
	Achieves adult value	Age 12 -13 (adolescence)
	RCSP	6 – 7 degrees everted
	Achieve adult value	Age 7

Template for Item Writing:

History of Present Illness:

- XXXX

Past Medical History:

- XXXX

Medications:

- XXXX

Allergies:

- NKDA

Past Surgical History:

- XXXX

Past Social history:

- Tobacco: X ppd x XXX years
- ETOH: 4 glasses of wine/day
- Illicit drug use: Denies

Family History:

- XXXX

Review of Systems:

- XXXX

Physical Examination:

Vitals: shade every other box

T 97.9F (36.6C)	BP 128/82	HR:76	RR: 72	Wt. 181 lbs (82kg)	Ht: 66"	BMI 29

Laboratory studies:

- XXXX

If used, give study name and numeric value only (do not need units).
Arrange laboratory findings as they appear in style guide reference for easier candidate reference
Shade every other box

Vascular:

- Either palpable or nonpalpable
- CFT is < 3 sec to all digits
- No pedal edema

Neurological:

- Reflexes: absent, hypoactive, normal, hyperactive, hyperactive with clonus, sustained clonus
- Intact protective threshold sensation bilateral or intact sensation no sensory deficits or LOPS or loss of sensation

Musculoskeletal:

- XXXXXX

Muscle testing:

- Muscle groups +5/5 bilateral

Dermatologic:

- XXXXX

When constructing a didactic/case questions stem should be orderly: history, exam and labs

Sample stems for didactic/case questions

- Copy from other document to ensure they are the same