

DAVI-ELLEN CHABNER

Medical Language

Instant
Translator

6TH EDITION



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DAVI-ELLEN CHABNER, BA, MAT

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Instant
Translator

6TH EDITION

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3251 Riverport Lane
St. Louis, Missouri 63043

MEDICAL LANGUAGE INSTANT
TRANSLATOR, SIXTH EDITION

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WELCOME

This *Medical Language Instant Translator* provides quick access to useful, medically related information for both laypersons and students entering health-related professions. Today we are increasingly exposed to medical terminology, whether it be at the doctor's office, on the Internet, or in the media. Analyzing and understanding these terms allow us to participate in important issues affecting our society, as well as to make better decisions about our own health.

Using this handy pocket-sized book, you will be able to do the following:

- Decipher complicated medical terms by recognizing and finding the meanings of individual word parts
- Distinguish between commonly misunderstood medical terms
- Recognize specialized terms used in medical records
- Access information on medical abbreviations, symbols, acronyms, and professional designations
- Understand the definitions of commonly used diagnostic tests and procedures
- Identify the top 100 prescription drugs and their uses
- Understand the significance of familiar complementary and alternative medical terms
- Interpret the significance of common blood tests
- Visualize the location of many organs and body structures with full-color illustrations

Although this *Instant Translator* dovetails with information in both of my books, *The Language of Medicine* and *Medical Terminology: A Short Course*, all students of medical language can benefit from it. Please let me know how the *Instant Translator* works for you. Have fun using it!



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PART I

The Language of Medicine

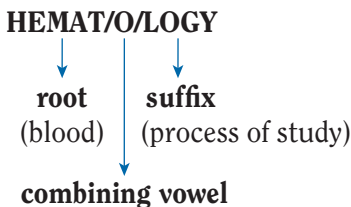
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HOW TO ANALYZE MEDICAL TERMS*

Studying medical terminology is very similar to learning a new language. At first, the words seem strange and complicated, although they may stand for commonly known disorders and terms. For example, **cephalgia** means “headache,” and an **ophthalmologist** is an “eye doctor.”

Your first job in learning the language of medicine is to understand how to divide words into their component parts. Logically, most terms, whether complex or simple, can be broken down into basic parts and then understood. For example, consider the following term, which is divided into three parts:



The **root** is the *foundation of the word*. All medical terms have one or more roots. For example, the root **hemat** means **blood**.

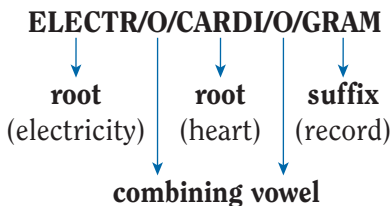
*From Chabner DE: *The Language of Medicine*, 11th ed. St Louis, Elsevier, 2017.

The **suffix** is the *word ending*. All medical terms have a suffix. The suffix **-logy** means **process of study**.

The **combining vowel**—usually **o**, as in this term—*links the root to the suffix or the root to another root*. A combining vowel has no meaning of its own; it joins one word part to another.

It is useful to read the meaning of medical terms *starting from the suffix and then going back to the beginning of the term*. Thus, the term **hematology** means **process of study of blood**.

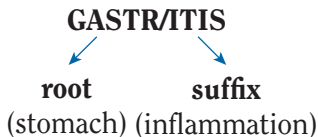
Here is another familiar medical term:



Electrocardiogram, reading from the suffix back to the beginning of the term, means **record of the electricity in the heart**.

Notice that there are two combining vowels—both **o**—in this term. The first **o** links the two roots **electr** and **cardi**; the second **o** links the root **cardi** and the suffix **-gram**.

Try another term:

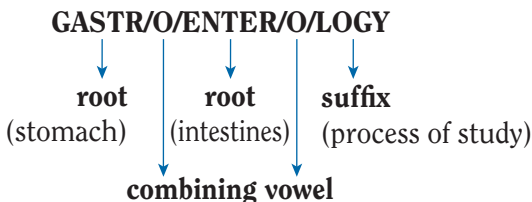


Gastritis, reading from the end of the term (suffix) to the beginning, means **inflammation of the stomach**.

Notice that the combining vowel, **o**, is missing in this term. This is because the suffix, **-itis**, begins with a vowel. The combining vowel is dropped before a suffix that begins with a vowel. It is retained, however,

between two roots, even if the second root begins with a vowel.

Consider the following term:



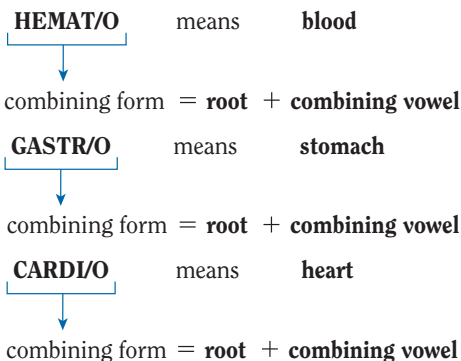
The entire term means **process of study of the stomach and intestines**.

Notice that the combining vowel is retained between **gastr** and **enter**, even though the second root, **enter**, begins with a vowel. When a term contains two or more roots related to parts of the body, anatomic position often determines which root goes before the other. For example, the stomach receives food first, before the small intestine—so the word is formed as **gastroenterology**, not “enterogastrology.”

In summary, remember **three general rules**:

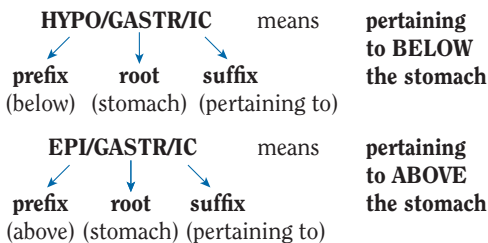
1. **READ** the meaning of medical terms from the suffix back to the beginning of the term and across.
2. **DROP** the combining vowel (usually o) before a suffix beginning with a vowel: **gastritis**, *not* “gastroitis.”
3. **KEEP** the combining vowel between two roots: **gastroenterology**, *not* “gastrenterology.”

In addition to the root, suffix, and combining vowel, two other word parts are commonly found in medical terms. These are the **combining form** and the **prefix**. The combining form is simply the root plus the combining vowel. For example, you already are familiar with the following combining forms and their meanings:



Combining forms are used with many different suffixes. Remembering the meaning of a combining form will help you understand unfamiliar medical terms.

The **prefix** is a small part attached to the *beginning of a term*. Not all medical terms contain prefixes, but the prefix can have an important influence on the meaning. Consider the following examples:



In summary, the **important elements of medical terms** are the following:

1. **ROOT:** foundation of the term
2. **SUFFIX:** word ending
3. **PREFIX:** word beginning
4. **COMBINING VOWEL:** vowel (usually o) that links the root to the suffix or the root to another root
5. **COMBINING FORM:** combination of the root and the combining vowel



GLOSSARY OF WORD PARTS USED IN MEDICAL TERMINOLOGY*

MEDICAL WORD PARTS—ENGLISH

COMBINING FORM, SUFFIX, OR PREFIX	MEANING
a-, an-	no; not; without
ab-	away from
abdomin/o	abdomen
-ac	pertaining to
acanth/o	spiny; thorny
acetabul/o	acetabulum (hip socket)
acus/o	hearing
acr/o	extremities; top; extreme point
acromi/o	acromion (extension of shoulder bone)
actin/o	light
acu/o	sharp; severe; sudden
-acusis	hearing
ad-	toward
-ad	toward
aden/o	gland
adenoid/o	adenoids
adip/o	fat
adren/o	adrenal gland

*From Chabner DE: *The Language of Medicine*, 11th ed. St Louis, Elsevier/Saunders, 2017.

MEDICAL WORD PARTS—ENGLISH

(Continued)

COMBINING FORM, SUFFIX, OR PREFIX	MEANING
adrenal/o	adrenal gland
aer/o	air
af-	toward
agglutin/o	clumping; sticking together
-agon	assemble, gather
agora-	marketplace
-agra	excessive pain
-al	pertaining to
alb/o	white
albin/o	white
albumin/o	albumin (protein)
algese/o	sensitivity to pain
-algnesia	sensitivity to pain
-algia	pain
all/o	other
alveol/o	alveolus; air sac; small sac
ambly/o	dim; dull
-amine	nitrogen compound
amni/o	amnion (sac surrounding the embryo)
amy/o	starch
an/o	anus
-an	pertaining to
ana-	up; apart; backward; again, anew
andr/o	male
aneurysm/o	aneurysm (widened blood vessel)
angi/o	vessel (blood)
anis/o	unequal
ankyl/o	stiff
ante-	before; forward
anter/o	front
anthrac/o	coal
anthr/o	antrum of the stomach

MEDICAL WORD PARTS—ENGLISH (Continued)

COMBINING FORM, SUFFIX, OR PREFIX	MEANING
anti-	against
anxi/o	uneasy; anxious
aort/o	aorta (largest artery)
-apheresis	removal
aphth/o	ulcer
apo-	off, away
aponeur/o	aponeurosis (type of tendon)
append/o	appendix
appendic/o	appendix
aque/o	water
-ar	pertaining to
-arche	beginning
arter/o	artery
arteri/o	artery
arteriol/o	arteriole (small artery)
arthr/o	joint
-arthria	articulate (speak distinctly)
articul/o	joint
-ary	pertaining to
asbest/o	asbestos
-ase	enzyme
-asthenia	lack of strength
atel/o	incomplete
ather/o	plaque (fatty substance)
-ation	process; condition
atri/o	atrium (upper heart chamber)
audi/o	hearing
audit/o	hearing
aur/o	ear
auricul/o	ear
aut/o	self, own
aut-, auto-	self, own
axill/o	armpit
azot/o	urea; nitrogen
bacill/o	bacilli (bacteria)

MEDICAL WORD PARTS—ENGLISH

(Continued)

COMBINING FORM, SUFFIX, OR PREFIX	MEANING
bacteri/o	bacteria
balan/o	glans penis
bar/o	pressure; weight
bartholin/o	Bartholin glands
bas/o	base; opposite of acid
bi-	two
bi/o	life
bil/i	bile; gall
bilirubin/o	bilirubin
-blast	embryonic; immature cell
-blastoma	immature tumor (cells)
blephar/o	eyelid
bol/o	cast; throw
brachi/o	arm
brachy-	short
brady-	slow
bronch/o	bronchial tube
bronchi/o	bronchial tube
bronchiol/o	bronchiole
bucc/o	cheek
bunion/o	bunion
burs/o	bursa (sac of fluid near joints)
byssin/o	cotton dust
cac/o	bad
calc/o	calcium
calcane/o	calcaneus (heel bone)
calci/o	calcium
cali/o, calic/o	calyx (cup shaped)
capillar/o	capillary (tiniest blood vessel)
capn/o	carbon dioxide
-capnia	carbon dioxide
carcin/o	cancerous; cancer
cardi/o	heart
carp/o	wrist bones (carpals)
cata-	down

MEDICAL WORD PARTS—ENGLISH

(Continued)

COMBINING FORM, SUFFIX, OR PREFIX	MEANING
caud/o	tail; lower part of body
caus/o	burn; burning
cauter/o	heat; burn
cec/o	cecum (first part of the colon)
-cele	hernia
celi/o	belly; abdomen
-centesis	surgical puncture to remove fluid
cephal/o	head
cerebell/o	cerebellum (posterior part of the brain)
cerebr/o	cerebrum (largest part of the brain)
cerumin/o	cerumen
cervic/o	neck; cervix (neck of uterus)
-chalasia	relaxation
-chhalasis	relaxation
cheil/o	lip
chem/o	drug; chemical
-chezia	defecation; elimination of wastes
chir/o	hand
chlor/o	green
chlorhydr/o	hydrochloric acid
chol/e	bile; gall
cholangi/o	bile vessel
cholecyst/o	gallbladder
choledoch/o	common bile duct
cholesterol/o	cholesterol
chondr/o	cartilage
chore/o	dance
chori/o	chorion (outermost membrane of the fetus)
chorion/o	chorion

MEDICAL WORD PARTS—ENGLISH

(Continued)

COMBINING FORM, SUFFIX, OR PREFIX	MEANING
choroid/o	choroid layer of eye
chrom/o	color
chron/o	time
chym/o	to pour
cib/o	meal
-cide	killing
-cidal	pertaining to killing
cine/o	movement
cirrh/o	orange-yellow
cis/o	to cut
-clasis	to break
-clast	to break
claustr/o	enclosed space
clavicul/o	clavicle (collar bone)
-clysis	irrigation; washing
coagul/o	coagulation (clotting)
-coccus (-cocci, <i>pl.</i>)	berry-shaped bacterium
coccyg/o	coccyx (tailbone)
cochle/o	cochlea (inner part of ear)
col/o	colon
coll/a	glue
colon/o	colon (large intestine)
colp/o	vagina
comat/o	deep sleep
comi/o	to care for
con-	together, with
coni/o	dust
conjunctiv/o	conjunctiva (lines the eyelids)
-constriction	narrowing
contra-	against; opposite
cor/o	pupil
core/o	pupil
corne/o	cornea
coron/o	heart (crown or circle)

MEDICAL WORD PARTS—ENGLISH (Continued)

COMBINING FORM, SUFFIX, OR PREFIX	MEANING
corpor/o	body
cortic/o	cortex, outer region
cost/o	rib
crani/o	skull
cras/o	mixture; temperament
crin/o	secrete
-crine	secrete; separate
-crit	separate
cry/o	cold
crypt/o	hidden
culd/o	cul-de-sac
-cusis	hearing
cutane/o	skin
cyan/o	blue
cycl/o	ciliary body of eye; cycle; circle
-cyesis	pregnancy
cyst/o	urinary bladder; cyst; sac of fluid
cyt/o	cell
-cyte	cell
-cytosis	condition of cells; slight increase in numbers
dacry/o	tear
dacryoaden/o	tear gland
dacryocyst/o	tear sac; lacrimal sac
dactyl/o	fingers; toes
de-	lack of; down; less; removal of
dem/o	people
dent/i	tooth; teeth
derm/o	skin
-derma	skin
dermat/o	skin
desicc/o	drying
-desis	bind, tie together

MEDICAL WORD PARTS—ENGLISH

(Continued)

COMBINING FORM, SUFFIX, OR PREFIX	MEANING
dia-	complete; through
diaphor/o	sweat
-dilation	widening; stretching; expanding
dipl/o	double
dips/o	thirst
dist/o	far; distant
dors/o	back (of body)
dorsi-	back
-dote	to give
-drome	to run
duct/o	to lead, carry
duoden/o	duodenum
dur/o	dura mater
-dynia	pain
dys-	bad; painful; difficult; abnormal
-eal	pertaining to
ec-	out; outside
echo-	reflected sound
-ectasia	dilation; dilatation; widening
-ectasis	dilation; dilatation; widening
ecto-	out; outside
-ectomy	removal; excision; resection
-edema	swelling
-elasma	flat plate
electr/o	electricity
em-	in
-ema	condition
-emesis	vomiting
-emia	blood condition
-emic	pertaining to blood condition
emmetr/o	in due measure
en-	in; within
encephal/o	brain

MEDICAL WORD PARTS—ENGLISH

(Continued)

COMBINING FORM, SUFFIX, OR PREFIX	MEANING
end-	in; within
endo-	in; within
enter/o	intestines (usually small intestine)
eosin/o	red; rosy; dawn-colored
epi-	above; upon; on
epididym/o	epididymis
epiglott/o	epiglottis
episi/o	vulva (external female genitalia)
epitheli/o	skin; epithelium
equin/o	horse
-er	one who
erg/o	work
erythem/o	flushed; redness
erythr/o	red
-esis	action; condition; state of
eso-	inward
esophag/o	esophagus
esthes/o	nervous sensation (feeling)
esthesi/o	nervous sensation (feeling)
-esthesia	nervous sensation (feeling)
estr/o	female
ethm/o	sieve
eti/o	cause
eu-	good; normal; true
-eurysm	widening
ex-	out; away from
exanthemat/o	rash
exo-	out; away from
extra-	outside
faci/o	face
fasci/o	fascia (membrane supporting muscles)
femor/o	femur (thigh bone)

MEDICAL WORD PARTS—ENGLISH

(Continued)

COMBINING FORM, SUFFIX, OR PREFIX	MEANING
-ferent	to carry
fibrin/o	fiber
fibr/o, fibromat/o	fiber
fibros/o	fibrous connective tissue
fibul/o	fibula
-fication	process of making
-fida	split
flex/o	bend
fluor/o	luminous
follicul/o	follicle; small sac
-form	resembling; in the shape of
fung/i	fungus; mushroom (lower organism lacking chlorophyll)
furc/o	forking; branching
-fusion	to pour; to come together
galact/o	milk
ganglion/o	ganglion; collection of nerve cell bodies
gastr/o	stomach
-gen	substance that produces
-genesis	producing; forming
-genic	produced by or in
ger/o	old age
geront/o	old age
gest/o	pregnancy
gester/o	pregnancy
gingiv/o	gum
glauc/o	gray
gli/o	glial cells; neuroglial cells (supportive tissue of nervous system)
-globin	protein
-globulin	protein
glomerul/o	glomerulus

MEDICAL WORD PARTS—ENGLISH

(Continued)

COMBINING FORM, SUFFIX, OR PREFIX	MEANING
gloss/o	tongue
gluc/o	glucose; sugar
glyc/o	glucose; sugar
glycogen/o	glycogen; animal starch
glycos/o	glucose; sugar
gnos/o	knowledge
gon/o	seed
gonad/o	sex glands
goni/o	angle
-grade	to go
-gram	record
granul/o	granule(s)
-graph	instrument for recording
-graphy	process of recording
gravid/o	pregnancy
-gravida	pregnant woman
gynec/o	woman; female
hallucin/o	hallucination
hem/o	blood
hemat/o	blood
hemi-	half
hemoglobin/o	hemoglobin
hepat/o	liver
herni/o	hernia
-hexia	state of
hidr/o	sweat
hist/o, histi/o	tissue
home/o	sameness; unchanging; constant
hormon/o	hormone
humer/o	humerus (upper arm bone)
hydr/o	water
hyper-	above; excessive
hypn/o	sleep

MEDICAL WORD PARTS—ENGLISH

(Continued)

COMBINING FORM, SUFFIX, OR PREFIX	MEANING
hypo-	deficient; below; under; less than normal
hypophys/o	pituitary gland
hyster/o	uterus; womb
-ia	condition
-iac	pertaining to
-iasis	abnormal condition
iatr/o	physician; treatment
-ic	pertaining to
-ical	pertaining to
ichthy/o	dry; scaly
-icle	small
idi/o	unknown; individual; distinct
-ile	pertaining to
ile/o	ileum
ili/o	ilium
immun/o	immune; protection; safe
in-	in; into; not
-in, -ine	substance
-ine	pertaining to
infra-	below; inferior to; beneath
inguin/o	groin
insulin/o	insulin (pancreatic hormone)
inter-	between
intra-	within; into
iod/o	iodine
ion/o	ion; to wander
-ion	process
-ior	pertaining to
ipsi-	same
ir-	in
ir/o	iris (colored portion of eye)
irid/o	iris (colored portion of eye)
is/o	same; equal
isch/o	hold back; back

MEDICAL WORD PARTS—ENGLISH

(Continued)

COMBINING FORM, SUFFIX, OR PREFIX	MEANING
ischi/o	ischium (part of hip bone)
-ism	process; condition
-ist	specialist
-itis	inflammation
-itus	condition
-ium	structure; tissue
jaund/o	yellow
jejun/o	jejunum
kal/i	potassium
kary/o	nucleus
kerat/o	cornea; hard, horny tissue
kern-	nucleus (collection of nerve cells in the brain)
ket/o	ketones; acetones
keton/o	ketones; acetones
kines/o	movement
kinesi/o	movement
-kinesia	movement
-kinesis	movement
klept/o	to steal
kyph/o	humpback
labi/o	lip
lacrim/o	tear; tear duct; lacrimal duct
lact/o	milk
lamin/o	lamina (part of vertebral arch)
lapar/o	abdominal wall; abdomen
-lapse	slide, fall, sag
laryng/o	larynx (voice box)
later/o	side
leiomy/o	smooth (visceral) muscle
-lemma	sheath, covering
-lepsy	seizure
lept/o	thin, slender

MEDICAL WORD PARTS—ENGLISH

(Continued)

COMBINING FORM, SUFFIX, OR PREFIX	MEANING
-leptic	pertaining to seizing, taking hold of
leth/o	death
leuk/o	white
lex/o	word; phrase
-lexia	word; phrase
ligament/o	ligament
lingu/o	tongue
lip/o	fat (a type of lipid)
lipid/o	lipid
-listhesis	slipping
lith/o	stone; calculus
-lithiasis	condition of stones
-lithotomy	incision (for removal) of a stone
lob/o	lobe
log/o	study
-logy	study (process of)
lord/o	curve; swayback
-lucent	to shine
lumb/o	lower back; loin
lute/o	yellow
lux/o	slide
lymph/o	lymph
lymphaden/o	lymph gland (node)
lymphangi/o	lymph vessel
-lysis	breakdown; separation; destruction; loosening
-lytic	reducing, destroying; separating; breakdown
macro-	large
mal-	bad
-malacia	softening
malleol/o	malleolus
mamm/o	breast

MEDICAL WORD PARTS—ENGLISH

(Continued)

COMBINING FORM, SUFFIX, OR PREFIX	MEANING
mandibul/o	mandible (lower jaw bone)
-mania	obsessive preoccupation
mast/o	breast
mastoid/o	mastoid process (behind the ear)
maxill/o	maxilla (upper jaw bone)
meat/o	meatus (opening)
medi/o	middle
mediastin/o	mediastinum
medull/o	medulla (inner section); middle; soft, marrow
mega-	large
-megaly	enlargement
melan/o	black
men/o	menses; menstruation
mening/o	meninges (membranes covering the spinal cord and brain)
meningi/o	meninges
ment/o	mind; chin
meso-	middle
meta-	change; beyond
metacarp/o	metacarpals (hand bones)
metatars/o	metatarsals (foot bones)
-meter	measure
metr/o	uterus (womb); measure
metri/o	uterus (womb)
mi/o	smaller; less
micro-	small
-mimetic	mimic; copy
-mission	send
mon/o	one; single
morph/o	shape; form
mort/o	death
-mortem	death

MEDICAL WORD PARTS—ENGLISH

(Continued)

COMBINING FORM, SUFFIX, OR PREFIX	MEANING
-motor	movement
muc/o	mucus
mucos/o	mucous membrane (mucosa)
multi-	many
mut/a	genetic change
mutagen/o	causing genetic change
my/o	muscle
myc/o	fungus
mydr/o	wide
myel/o	spinal cord; bone marrow
myocardi/o	myocardium (heart muscle)
myom/o	muscle tumor
mys/o	muscle
myring/o	tympanic membrane (eardrum)
myx/o	mucus
narc/o	numbness; stupor; sleep
nas/o	nose
nat/i	birth
natr/o	sodium
necr/o	death
nect/o	bind, tie, connect
neo-	new
nephr/o	kidney
neur/o	nerve
neutr/o	neither; neutral; neutrophil
nid/o	nest
noct/o	night
norm/o	rule; order
nos/o	disease
nucle/o	nucleus
nulli-	none
nyct/o	night

MEDICAL WORD PARTS—ENGLISH

(Continued)

COMBINING FORM, SUFFIX, OR PREFIX	MEANING
obstetr/o	pregnancy; childbirth
ocul/o	eye
odont/o	tooth
odyn/o	pain
-oid	resembling; originating from
-ole	little; small
olecran/o	olecranon (elbow)
olig/o	scanty
om/o	shoulder
-oma	tumor; mass; fluid collection
omphal/o	umbilicus (navel)
onc/o	tumor
-one	hormone
onych/o	nail (of fingers or toes)
o/o	egg
oophor/o	ovary
-opaque	obscure
ophthalm/o	eye
-opia	vision condition
-opsia	vision condition
-opsy	view of
opt/o	eye; vision
optic/o	eye; vision
-or	one who
or/o	mouth
orch/o	testis
orchi/o	testis
orchid/o	testis
-orexia	appetite
orth/o	straight
-ose	full of; pertaining to; sugar
-osis	condition, usually abnormal
-osmia	smell
ossicul/o	ossicle (small bone)
oste/o	bone

MEDICAL WORD PARTS—ENGLISH

(Continued)

COMBINING FORM, SUFFIX, OR PREFIX	MEANING
-ostosis	condition of bone
ot/o	ear
-otia	ear condition
-ous	pertaining to
ov/o	egg
ovari/o	ovary
ovul/o	egg
ox/o	oxygen
-oxia	oxygen
oxy-	rapid; sharp; acid
oxysm/o	sudden
pachy-	heavy; thick
palat/o	palate (roof of the mouth)
palpebr/o	eyelid
pan-	all
pancreat/o	pancreas
papill/o	nipple-like; optic disc (disk)
par-	other than; abnormal
para-	near; beside; abnormal; apart from; along the side of
-para	to bear, bring forth (live births)
-parous	to bear, bring forth
parathyroid/o	parathyroid glands
-paresis	weakness
-pareunia	sexual intercourse
-partum	birth; labor
patell/a	patella
patell/o	patella
path/o	disease
-pathy	disease; emotion
pector/o	chest
ped/o	child; foot
pelv/i	pelvis; hip region
pelv/o	pelvis; hip region

MEDICAL WORD PARTS—ENGLISH

(Continued)

COMBINING FORM, SUFFIX, OR PREFIX	MEANING
pend/o	hang
-penia	deficiency
pen/o	penis
-pepsia	digestion
per-	through
peri-	surrounding
perine/o	perineum
peritone/o	peritoneum
perone/o	fibula
-pexy	fixation; to put in place
phac/o	lens of eye
phag/o	eat; swallow
-phage	eat; swallow
-phagia	condition of eating; swallowing
phak/o	lens of eye
phalang/o	phalanges (of fingers and toes)
phall/o	penis
pharmac/o	drug
pharmaceut/o	drug
pharyng/o	throat (pharynx)
phas/o	speech
-phasia	speech
phe/o	dusky; dark
-pheresis	removal
phil/o	like; love; attraction to
-phil	attraction for
-philia	attraction for
phim/o	muzzle
phleb/o	vein
phob/o	fear
-phobia	fear
phon/o	voice; sound
-phonia	voice; sound
phor/o	to bear

MEDICAL WORD PARTS—ENGLISH

(Continued)

COMBINING FORM, SUFFIX, OR PREFIX	MEANING
-phoresis	carrying; transmission
-phoria	to bear, carry; feeling (mental state)
phot/o	light
phren/o	diaphragm; mind
-phthisis	wasting away
-phylaxis	protection
physi/o	nature; function
phys/o	growing
-physis	to grow
phyt/o	plant
-phyte	plant
pil/o	hair
pineal/o	pineal gland
pituitar/o	pituitary gland
-plakia	plaque
plant/o	sole of the foot
plas/o	development; formation; growth
-plasia	development; formation; growth
-plasm	formation; structure
-plastic	pertaining to formation
-plasty	surgical repair
ple/o	more; many; varied
-plegia	paralysis; palsy
-plegic	pertaining to paralysis; palsy
pleur/o	pleura
plex/o	plexus; network (of nerves)
-pnea	breathing
pneum/o	lung; air; gas
pneumon/o	lung; air; gas
pod/o	foot
-poiesis	formation
-poietin	substance that forms

MEDICAL WORD PARTS—ENGLISH

(Continued)

COMBINING FORM, SUFFIX, OR PREFIX	MEANING
poikil/o	varied; irregular
pol/o	extreme
polio-	gray matter (of brain or spinal cord)
poly-	many; much; increased
polyp/o	polyp; small growth
pont/o	pons (a part of the brain)
-porosis	condition of pores (spaces)
post-	after; behind
poster/o	back (of body); behind
-prandial	pertaining to eating or mealtime
-praxia	action
pre-	before; in front of
presby/o	old age
primi-	first
pro-	before; forward
proct/o	anus and rectum
pros-	before; forward
prostat/o	prostate gland
prot/o	first
prote/o	protein
proxim/o	near
prurit/o	itching
pseudo-	false
psych/o	mind
-ptosis	falling; drooping; prolapse
-ptysis	spitting
pub/o	pubis (anterior part of hip bone)
pulmon/o	lung
pupill/o	pupil (dark center of the eye)
purul/o	pus
py/o	pus
pyel/o	renal pelvis

MEDICAL WORD PARTS—ENGLISH

(Continued)

COMBINING FORM, SUFFIX, OR PREFIX	MEANING
pylor/o	pylorus; pyloric sphincter
pyr/o	fever; fire
pyret/o	fever
pyrex/o	fever
quadri-	four
rachi/o	spinal column; vertebrae
radi/o	x-rays; radioactivity; radius (lateral lower arm bone)
radicul/o	nerve root
re-	back; again; backward
rect/o	rectum
ren/o	kidney
reticul/o	network
retin/o	retina
retro-	behind; back; backward
rhabdomy/o	striated (skeletal) muscle
rheumat/o	watery flow
rhin/o	nose
rhytid/o	wrinkle
roentgen/o	x-rays
-rrhage	bursting forth (of blood)
-rrhagia	bursting forth (of blood)
-rrhaphy	suture
-rrhea	flow; discharge
-rrhexis	rupture
rrhythm/o	rhythm
sacr/o	sacrum
salping/o	fallopian tube; auditory (eustachian) tube
-salpinx	fallopian tube; oviduct
sarc/o	flesh (connective tissue)
scapul/o	scapula; shoulder blade
-schisis	split

MEDICAL WORD PARTS—ENGLISH

(Continued)

COMBINING FORM, SUFFIX, OR PREFIX	MEANING
schiz/o	split
scint/i	spark
scirrh/o	hard
scler/o	sclera (white of eye); hard
-sclerosis	hardening
scoli/o	crooked; bent
-scope	instrument for visual examination
-scopy	visual examination
scot/o	darkness
seb/o	sebum
sebaeo/o	sebum
sect/o	to cut
semi-	half
semin/i	semen; seed
seps/o	infection
sial/o	saliva; salivary
sialaden/o	salivary gland
sider/o	iron
sigmoid/o	sigmoid colon
silic/o	glass
sinus/o	sinus
-sis	state of; condition
-sol	solution
somat/o	body
-some	body
somn/o	sleep
-somnia	sleep
son/o	sound
-spadia	to tear, cut
-spasm	sudden contraction of muscles
sperm/o	spermatozoa; sperm cells
spermat/o	spermatozoa; sperm cells
sphen/o	wedge; sphenoid bone

MEDICAL WORD PARTS—ENGLISH

(Continued)

COMBINING FORM, SUFFIX, OR PREFIX	MEANING
spher/o	globe-shaped; round
sphygm/o	pulse
-sphyxia	pulse
splanchn/o	viscera (internal organs)
spin/o	spine (backbone)
spir/o	to breathe
splen/o	spleen
spondyl/o	vertebra (backbone)
squam/o	scale
-stalsis	contraction
staped/o	stapes (middle ear bone)
staphyl/o	clusters; uvula
-stasis	stopping; controlling; placing
-static	pertaining to stopping or controlling
steat/o	fat, sebum
sten/o	narrowing
-stenosis	tightening; stricture
ster/o	solid structure; steroid
stere/o	solid; three-dimensional
stern/o	sternum (breastbone)
steth/o	chest
-sthenia	strength
-stital	pertaining to standing or positioned
stomat/o	mouth
-stomia	condition of the mouth
-stomy	new opening (to form a mouth)
strept/o	twisted chains
styl/o	pole or stake
sub-	under; below
submaxill/o	mandible (lower jaw bone)
-suppression	stopping
supra-	above, upper

MEDICAL WORD PARTS—ENGLISH

(Continued)

COMBINING FORM, SUFFIX, OR PREFIX	MEANING
sym-	together; with
syn-	together; with
syncop/o	to cut off, cut short; faint
syndesm/o	ligament
synov/o	synovia; synovial membrane; sheath around a tendon
syring/o	tube
tachy-	fast
tars/o	tarsus; hindfoot or ankle (7 bones between the foot and the leg)
tax/o	order; coordination
tel/o	complete
tele/o	distant
ten/o	tendon
tendin/o	tendon
-tension	pressure
terat/o	monster; malformed fetus
test/o	testis (testicle)
tetra-	four
thalam/o	thalamus
thalass/o	sea
the/o	put; place
thec/o	sheath
thel/o, theli/o	nipple
therapeut/o	treatment
-therapy	treatment
therm/o	heat
thorac/o	chest
-thorax	chest; pleural cavity
thromb/o	clot
thym/o	thymus gland
-thymia	mind (condition of)
-thymic	pertaining to mind

MEDICAL WORD PARTS—ENGLISH

(Continued)

COMBINING FORM, SUFFIX, OR PREFIX	MEANING
thyr/o	thyroid gland; shield
thyroid/o	thyroid gland
tibi/o	tibia (shin bone)
-tic	pertaining to
toc/o	labor; birth
-tocia	labor; birth (condition of)
-tocin	labor; birth (a substance for)
tom/o	to cut
-tome	instrument to cut
-tomy	process of cutting
ton/o	tension
tone/o	to stretch
tonsill/o	tonsil
top/o	place; position; location
-tory	pertaining to
tox/o	poison
toxic/o	poison
trache/o	trachea (windpipe)
trans-	across; through
-tresia	opening
tri-	three
trich/o	hair
trigon/o	trigone (area within the bladder)
-tripsy	crushing
troph/o	nourishment; development
-trophy	nourishment; development (condition of)
-tropia	to turn
-tropic	pertaining to stimulating
-tropin	stimulate; act on
tympan/o	tympanic membrane (eardrum); middle ear
-type	classification; picture

MEDICAL WORD PARTS—ENGLISH

(Continued)

COMBINING FORM, SUFFIX, OR PREFIX	MEANING
-ule	little; small
uln/o	ulna (medial lower arm bone)
ultra-	beyond; excess
-um	structure; tissue; thing
umbilic/o	umbilicus (navel)
ungu/o	nail
uni-	one
ur/o	urine; urinary tract
ureter/o	ureter
urethr/o	urethra
-uria	urination; condition of urine
urin/o	urine
-us	structure; thing
uter/o	uterus (womb)
uve/o	uvea, vascular layer of eye (iris, choroid, ciliary body)
uvul/o	uvula
vag/o	vagus nerve
vagin/o	vagina
valv/o	valve
valvul/o	valve
varic/o	varicose veins
vas/o	vessel; duct; vas deferens
vascul/o	vessel (blood)
ven/o, ven/i	vein
vener/o	venereal (sexual contact)
ventr/o	belly side of body
ventricul/o	ventricle (of heart or brain)
venul/o	venule (small vein)
-verse	to turn
-version	turning (condition of)
vertebr/o	vertebra (backbone)
vesic/o	urinary bladder
vesicul/o	seminal vesicle
vestibul/o	vestibule of the inner ear

MEDICAL WORD PARTS—ENGLISH
(Continued)

COMBINING FORM, SUFFIX, OR PREFIX	MEANING
viscer/o	internal organs
vit/o	life
vitro/o	vitreous body (of the eye)
vitre/o	glass
viv/o	life
vol/o	to roll
vulv/o	vulva (female external genitalia)
xanth/o	yellow
xen/o	stranger
xer/o	dry
xiph/o	sword
-y	condition; process
zo/o	animal life

ENGLISH—MEDICAL WORD PARTS

MEANING	COMBINING FORM, SUFFIX, OR PREFIX
abdomen	abdomin/o (<i>use with</i> -al, -centesis) celi/o (<i>use with</i> -ac) lapar/o (<i>use with</i> -scope, -scopy, -tomy)
abdominal wall	lapar/o
abnormal	dys- par- para-
abnormal condition	-iasis -osis
above	epi- hyper- supra-
acetabulum	acetabul/o
acetones	ket/o keton/o
acid	oxy-
acromion	acromi/o
across	trans-
action	-praxia
action	-esis
act on	-tropin
adenoids	adenoid/o
adrenal glands	adren/o adrenal/o
after	post-
again	ana-, re-
against	anti- contra-
air	aer/o pneum/o pneumon/o
air sac	alveol/o
albumin	albumin/o

ENGLISH—MEDICAL WORD PARTS (Continued)

MEANING	COMBINING FORM, SUFFIX, OR PREFIX
all	pan-
along side of	para-
alveolus	alveol/o
anew	ana-
amnion	amni/o
aneurysm	aneurysm/o
angle	goni/o
animal life	zo/o
animal starch	glycogen/o
ankle	tars/o
antrum (of stomach)	anthr/o
anus	an/o
anus and rectum	proct/o
anxiety	anxi/o
aorta (largest artery)	aort/o
apart	ana-
apart from	para-
aponeurosis (type of tendon)	aponeur/o
appendix	append/o (<i>use with</i> -ectomy) appendic/o (<i>use with</i> -itis)
appetite	-orexia
arm	brachi/o
arm bone, lower lateral	radi/o
arm bone, lower medial	uln/o
arm bone, upper	humer/o
armpit	axill/o
arteriole (small artery)	arteriol/o
artery	arter/o arteri/o

ENGLISH—MEDICAL WORD PARTS (Continued)

MEANING	COMBINING FORM, SUFFIX, OR PREFIX
articulate (speak distinctly)	-arthria
asbestos	asbest/o
assemble	-agon
atrium (upper heart chamber)	atri/o
attraction for	-phil -philia
attraction to	phil/o
auditory tube	salping/o
away from	ab- apo- ex- exo-
bacilli (rod-shaped bacteria)	bacill/o
back	re- retro-
back, lower	lumb/o
back portion of body	dorsi- dors/o poster/o
backbone	spin/o (<i>use with -al</i>) spondyl/o (<i>use with -itis, -lithesis, -osis, -pathy</i>) vertebr/o (<i>use with -al</i>)
backward	ana- retro-
bacteria	bacteri/o
bacterium (berry-shaped)	-coccus (-cocci, <i>pl.</i>)
bad	cac/o dys- mal-

ENGLISH—MEDICAL WORD PARTS (Continued)

MEANING	COMBINING FORM, SUFFIX, OR PREFIX
barrier	claustr/o
base (not acidic)	bas/o
Bartholin glands	bartholin/o
bear, to	para- -parous -phobia phor/o
before	ante- pre- pro- pros-
beginning	-arche
behind	post- poster/o retro-
belly	celi/o
belly side of body	ventr/o
below, beneath	hypo- infra- sub- flex/o
bend, to	scoli/o
bent	para-
beside	inter-
between	hyper-
beyond	meta- ultra-
bile	bil/i chol/e
bile vessel	cholangi/o
bilirubin	bilirubin/o
bind	-desis nect/o

ENGLISH—MEDICAL WORD PARTS (Continued)

MEANING	COMBINING FORM, SUFFIX, OR PREFIX
birth	nat/i -partum toc/o -tocia
birth, substance for births, live	-tocin -para
black	anthrac/o melan/o
bladder (urinary)	cyst/o (<i>use with</i> -ic, -itis, -cele, -gram, -scopy, -stomy, -tomy) vesic/o (<i>use with</i> -al)
blood	hem/o (<i>use with</i> -dialysis, -globin, lysis, -philia, -ptysis, -rrhage, -stasis, -stat) hemat/o (<i>use with</i> -crit, -emesis, -logist, -logy, -oma, -poiesis, -uria)
blood condition	-emia -emic
blood vessel	angi/o (<i>use with</i> -ectomy, -genesis, -gram, -graphy, -oma, -plasty, -spasm) vas/o (<i>use with</i> -constriction, -dilation, -motor) vascul/o (<i>use with</i> -ar, -itis)
blue	cyan/o
body	corpor/o somat/o -some
bone	oste/o

ENGLISH—MEDICAL WORD PARTS (Continued)

MEANING	COMBINING FORM, SUFFIX, OR PREFIX
bone condition	-ostosis
bone marrow	myel/o
brain	encephal/o
branching	furc/o
break	-clasis -clast
breakdown	-lysis
breast	mamm/o (<i>use with</i> -ary, -gram, -graphy, -plasty) mast/o (<i>use with</i> -algia, -dynia, -ectomy, -itis)
breastbone	stern/o
breathe	spir/o
breathing	-pnea
bring forth	-para -parous
bronchial tube (bronchus)	bronch/o bronchi/o
bronchiole	bronchiol/o
bunion	bunion/o
burn	caus/o cauter/o
bursa (sac of fluid near joints)	burs/o
bursting forth	-rrhage -rrhagia
calcaneus (heel bone)	calcane/o
calcium	calc/o calci/o
calyx (cup shaped)	cali/o calic/o
cancerous	carcin/o

ENGLISH—MEDICAL WORD PARTS (Continued)

MEANING	COMBINING FORM, SUFFIX, OR PREFIX
capillary (tiniest blood vessel)	capillar/o
carbon dioxide	capn/o -capnia
care for, to carry	comi/o duct/o -phoresis -phoria
carrying	-ferent
cartilage	chondr/o
cast; throw	bol/o
cause	eti/o
causing genetic change	mutagen/o
cecum (first part of the colon)	cec/o
cell	cyt/o -cyte
cells, condition of	-cytosis
cerebellum (posterior part of the brain)	cerebell/o
cerebrum (largest part of the brain)	cerebr/o
cerumen	cerumin/o
cervix	cervic/o
change	meta-
cheek	bucc/o
chemical	chem/o
chest	pector/o steth/o thorac/o
child	ped/o
childbirth	obstetr/o
chin	ment/o
cholesterol	cholesterol/o

ENGLISH—MEDICAL WORD PARTS (Continued)

MEANING	COMBINING FORM, SUFFIX, OR PREFIX
chorion	chori/o chorion/o
choroid layer (of the eye)	choroid/o
ciliary body (of the eye)	cycl/o
circle or cycle	cycl/o
classification	-type
clavicle (collar bone)	clavicul/o
clot	thromb/o
clumping	agglutin/o
clusters	staphyl/o
coagulation (clotting)	coagul/o
coal dust	anthrac/o
coccyx (tailbone)	coccyg/o
cochlea (inner part of ear)	cochle/o
cold	cry/o
collar bone	clavicul/o
colon	col/o (<i>use with</i> -ectomy, -itis, -pexy, -stomy) colon/o (<i>use with</i> -ic, -pathy, -scope, scopy)
color	chrom/o
come together	-fusion
common bile duct	choledoch/o
complete	dia- tel/o
condition	-ation -ema -esis -ia -ism -itus -sis -y

ENGLISH—MEDICAL WORD PARTS (Continued)

MEANING	COMBINING FORM, SUFFIX, OR PREFIX
condition, abnormal	-iasis -osis
conjunctiva (lines the eyelids)	conjunctiv/o
connect	nect/o
connective tissue	sarc/o
constant	home/o
control	-stasis, -stat
contraction	-stalsis
contraction of muscles, sudden	-spasm
coordination	tax/o
copy	-mimetic
cornea (of the eye)	corne/o kerat/o
cortex	cortic/o
cotton dust	byssin/o
crooked	scoli/o
crushing	-tripsy
cul-de-sac	culd/o
curve	lord/o
cut	cis/o sect/o, -section tom/o
cut off	syncop/o
cutting, process of	-tomy
cycle	cycl/o
cyst (sac of fluid)	cyst/o
dance	chore/o
dark	phe/o
darkness	scot/o
dawn-colored	eosin/o
death	leth/o mort/o, -mortem necr/o

ENGLISH—MEDICAL WORD PARTS (Continued)

MEANING	COMBINING FORM, SUFFIX, OR PREFIX
deep sleep	comat/o
defecation (elimination of wastes)	-chezia
deficiency	-penia
deficient	hypo-
destroying	-lytic
destruction	-lysis
development	plas/o -plasia troph/o -trophy
diaphragm	phren/o
difficult	dys-
digestion	-pepsia
dilation	-ectasia -ectasis
dim	ambly/o
discharge	-rrhea
disease	nos/o path/o -pathy
distant	dist/o tele/o
distinct	idi/o
double	dipl/o
down	cata- de-
drooping	-ptosis
drug	chem/o pharmac/o pharmaceut/o
dry	ichthy/o xer/o
drying	desicc/o
duct	vas/o

ENGLISH—MEDICAL WORD PARTS (Continued)

MEANING	COMBINING FORM, SUFFIX, OR PREFIX
dull	ambly/o
duodenum	duoden/o
dura mater	dur/o
dusky	phe/o
dust	coni/o
ear	aur/o (<i>use with</i> -al, -icle) auricul/o (<i>use with</i> -ar) ot/o (<i>use with</i> -algia, -ic, -itis, -logy, -mycosis, -rrhea, -sclerosis, -scope, -scopy)
ear condition	-otia
eardrum	myring/o (<i>use with</i> -ectomy, -itis, -tomy) tympan/o (<i>use with</i> -ic, -metry, -plasty)
eat	phag/o -phage
eating	-phagia
egg cell	o/o ov/o ovul/o
elbow	olecran/o
electricity	electr/o
elimination of wastes	-chezia
embryonic	-blast
enclosed space	claustr/o
enlargement	-megaly
enzyme	-ase
epididymis	epididym/o
epiglottis	epiglott/o
equal	is/o
esophagus	esophag/o
eustachian tube	salping/o

ENGLISH—MEDICAL WORD PARTS (Continued)

MEANING	COMBINING FORM, SUFFIX, OR PREFIX
excess	-ultra
excessive	hyper-
excessive pain	-agra
excision	-ectomy
expansion	-ectasia -ectasis
extreme	pol/o
extreme point	acr/o
extremities	acr/o
eye	ocul/o (<i>use with</i> -ar, -facial, -motor) ophthalm/o (<i>use with</i> -ia, -ic, -logist, -logy, -pathy, -plasty, -plegia, -scope, -scopy) opt/o (<i>use with</i> -ic, -metrist) optic/o (<i>use with</i> -al, -ian)
eyelid	blephar/o (<i>use with</i> -chalasis, -itis, -plasty, -plegia, -ptosis, -tomy) palpebr/o (<i>use with</i> -al)
face	faci/o
faint	syncop/o
falling	-ptosis
fallopian tube	salping/o -salpinx
false	pseudo-
far	dist/o
fascia (membrane supporting muscles)	fasci/o
fast	tachy-

ENGLISH—MEDICAL WORD PARTS (Continued)

MEANING	COMBINING FORM, SUFFIX, OR PREFIX
fat	adip/o (<i>use with</i> -ose, -osis) lip/o (<i>use with</i> -ase, -cyte, -genesis, -oid, -oma) steat/o (<i>use with</i> -oma, -rrhea)
fear	phob/o -phobia
feeling	esthesi/o -phoria
female	estr/o (<i>use with</i> -gen, -genic) gyenc/o (<i>use with</i> -logist, -logy, -mastia)
femur (thigh bone)	femor/o
fever	pyr/o pyret/o pyrex/o
fiber	fibr/o, fibromat/o, fibrin/o
fibrous connective tissue	fibros/o
fibula	fibul/o (<i>use with</i> -ar) perone/o (<i>use with</i> -al)
finger and toe bones	phalang/o
fingers	dactyl/o
fire	pyr/o
first	primi- prot/o
fixation	-pexy
flat plate	-elasma
flesh (connective tissue)	sarc/o
flow	-rrhea

ENGLISH—MEDICAL WORD PARTS (Continued)

MEANING	COMBINING FORM, SUFFIX, OR PREFIX
fluid collection	-oma
flushed	erythem/o
follicle	follicul/o
foot	pod/o
foot bones	metatars/o
forking	furc/o
form	morph/o
formation	plas/o -plasia -plasm -poiesis
forming	-genesis
forward	ante-, pro-, pros-
four	quadri- tetra-
front	anter/o
full of	-ose
fungus	fung/i (<i>use with -cide, -oid, -ous, -stasis</i>) myc/o (<i>use with -logist, -logy, -osis, -tic</i>)
gall	bil/i (<i>use with -ary</i>) chol/e (<i>use with -ary</i>)
gallbladder	cholecyst/o
ganglion	gangli/o ganglion/o
gas	pneum/o pneumon/o
gather	-agon
genetic change	mut/a mutagen/o
give, to	-dote
given, what is	-dote
gland	aden/o

ENGLISH—MEDICAL WORD PARTS (Continued)

MEANING	COMBINING FORM, SUFFIX, OR PREFIX
glans penis	balan/o
glass	silic/o vitre/o
glial cells	gli/o
globe-shaped	spher/o
glomerulus	glomerul/o
glucose	gluc/o glyc/o glycos/o
glue	coll/a gli/o
glycogen	glycogen/o
go, to	-grade
good	eu-
granule(s)	granul/o
gray	glauc/o
gray matter (of brain or spinal cord)	polio-
green	chlor/o
groin	inguin/o
grow	-physis
growing	phys/o
growth	-plasia
gum	gingiv/o
habit	-hexia
hair	pil/o trich/o
half	hemi- semi-
hallucination	hallucin/o
hand	chir/o
hang	pend/o
hard	scirrh/o
hand bones	metacarp/o

ENGLISH—MEDICAL WORD PARTS (Continued)

MEANING	COMBINING FORM, SUFFIX, OR PREFIX
hang, to	pend/o
hard	kerat/o scirr/h/o
hardening	-sclerosis scler/o
head	cephal/o
hearing	acous/o audi/o audit/o -acusis -cuisis
heart	cardi/o (<i>use with -ac, -graphy, logy, logist, -megaly, -pathy, -vascular</i>) coron/o (<i>use with -ary</i>)
heart muscle	myocardi/o
heat	cauter/o therm/o
heavy	pachy-
heel bone	calcane/o
hemoglobin	hemoglobin/o
hernia	-cele herni/o
hidden	crypt/o
hip region	pelv/i, pelv/o
holding back	isch/o
hormone	hormon/o -one
horn-like	kerat/o
horse	equin/o
humerus (upper arm bone)	humer/o
humpback	kyph/o
hydrochloric acid	chlorhydr/o

ENGLISH—MEDICAL WORD PARTS (Continued)

MEANING	COMBINING FORM, SUFFIX, OR PREFIX
ileum	ile/o
ilium	ili/o
immature cells	-blast
immature tumor (cells)	-blastoma
immune	immun/o
in, into, within	em- en- endo- in-, intra- ir-
in due measure	emmetr/o
in front of	pre-
incomplete	atel/o
increased	poly-
increase in cell numbers (blood cells)	-cytosis
individual	idi/o
infection	seps/o
inferior to	infra-
inflammation	-itis
instrument for recording	-graph
instrument for visual examination	-scope
instrument to cut	-tome
insulin (pancreatic hormone)	insulin/o
internal organs	spanchn/o viscer/o
intestine, small	enter/o
inward	eso-
iodine	iod/o
ion	ion/o

ENGLISH—MEDICAL WORD PARTS (Continued)

MEANING	COMBINING FORM, SUFFIX, OR PREFIX
iris (colored portion of eye)	ir/o irid/o
iron	sider/o
irregular	poikil/o
irrigation	-clysis
ischium (part of hip bone)	ischi/o
itching	prurit/o
jaw, lower	mandibul/o submaxill/o
jaw, upper	maxill/o
jejunum	jejun/o
joint	arthr/o articul/o
ketones	ket/o keton/o
kidney	nephr/o (<i>use with</i> -algia, -ectomy, -ic, -itis, -lith, -megaly, -oma, -osis, -pathy, -ptosis, sclerosis, -stomy, -tomy) ren/o (<i>use with</i> -al, -gram, -vascular)
killing	-cidal -cide
knowledge	gnos/o, gno/o
labor	-partum toc/o -tocia
labor, substance for	-tocin
lack of	de-
lack of strength	-asthenia

ENGLISH—MEDICAL WORD PARTS (Continued)

MEANING	COMBINING FORM, SUFFIX, OR PREFIX
lacrimal duct	dacry/o lacrim/o
lacrimal sac	dacryocyst/o
lamina (part of vertebral arch)	lamin/o
large	macro- mega-
larynx (voice box)	laryng/o
lead	duct/o
lens of eye	phac/o phak/o
less	de- mi/o
less than normal life	hypo- bi/o vit/o viv/o
ligament	ligament/o syndesm/o
light	actin/o phot/o
like	phil/o
lip	cheil/o labi/o
lipid	lipid/o
little	-ole -ule
liver	hepat/o
lobe	lob/o
location	top/o
loin	lumb/o
loosening	-lysis
love	phil/o
luminous	fluor/o
lung	pulmon/o

ENGLISH—MEDICAL WORD PARTS (Continued)

MEANING	COMBINING FORM, SUFFIX, OR PREFIX
lung	pneum/o (<i>use with</i> -coccus, -coniosis, -thorax)
	pneumon/o (<i>use with</i> -ectomy, -ia, -ic, -itis, -lysis)
	pulmon/o (<i>use with</i> -ary)
lymph	lymph/o
lymph gland (node)	lymphaden/o
lymph vessel	lymphangi/o
make, to	-fication
male	andr/o
malformed fetus	terat/o
malleolus	malleol/o
mandible (lower jaw bone)	mandibul/o
	submaxill/o
many	multi- ple/o poly-
marketplace	agora-
marrow	medull/o
mass	-oma
mastoid process (behind the ear)	mastoid/o
maxilla (upper jaw bone)	maxill/o
meal	cib/o
	-prandial
measure	-meter
	metr/o
	meat/o
meatus (opening)	meat/o
mediastinum	mediastin/o
medulla oblongata	medull/o

ENGLISH—MEDICAL WORD PARTS (Continued)

MEANING	COMBINING FORM, SUFFIX, OR PREFIX
meninges	mening/o meningi/o
menstruation; menses	men/o
metacarpals (hand bones)	metacarp/o
metatarsals (foot bones)	metatars/o
middle	medi/o medull/o meso-
middle ear	tympan/o
milk	galact/o lact/o
mimic	-mimetic
mind	ment/o phren/o psych/o -thymia -thymic
mixture	cras/o
monster	terat/o
mood	-thymia -thymic
more	ple/o
mouth	or/o (<i>use with -al</i>) stomat/o (<i>use with -itis</i>) -stomia
movement	cine/o kines/o kinesi/o -kinesia -kinesis -motor
much	poly-

ENGLISH—MEDICAL WORD PARTS (Continued)

MEANING	COMBINING FORM, SUFFIX, OR PREFIX
mucous membrane (mucosa)	mucos/o
mucus	muc/o
muscle	myx/o muscul/o (<i>use with -ar, -skeletal</i>) my/o (<i>use with -algia, -ectomy, -oma, -neutral, -pathy, -rrhaphy, -therapy</i>) myos/o (<i>use with -in, -itis</i>)
muscle, smooth (visceral)	leiomy/o
muscle, striated (skeletal)	rhabdomy/o
muscle tumor	myom/o
muzzle	phim/o
myocardium (heart muscle)	myocardi/o
nail	onych/o ungu/o
narrowing	-constriction sten/o -stenosis
nature	physi/o
navel	omphal/o umbilic/o
near	para- proxim/o
neck	cervic/o
neither	neutr/o
nerve	neur/o
nerve root	radicul/o

ENGLISH—MEDICAL WORD PARTS (Continued)

MEANING	COMBINING FORM, SUFFIX, OR PREFIX
nervous sensation	esthes/o esthesi/o -esthesia
nest	nid/o
network	reticul/o
network of nerves	plex/o
neutral	neutr/o
neutrophil	neutr/o
new	neo-
night	noct/o nyct/o
nipple	thel/o, theli/o
nipple-like	papill/o
nitrogen	azot/o
nitrogen compound	-amine
no, not	a-, an-
none	nulli-
normal	eu-
nose	nas/o (<i>use with -al</i>) rhin/o (<i>use with -itis,</i> <i>-rrhea, -plasty</i>)
nourishment	troph/o -trophy
nucleus	kary/o nucle/o
nucleus (collection of nerve cells in the brain)	kern-
numbness	narc/o
obscure	-opaque
obsessive preoccupation	-mania
off	apo-

ENGLISH—MEDICAL WORD PARTS (Continued)

MEANING	COMBINING FORM, SUFFIX, OR PREFIX
old age	ger/o geront/o presby/o
olecranon (elbow)	olecran/o
on	epi-
one	mon/o mono-
one's own	uni- aut/o auto-
one who	-er -or
opening	-tresia
opening, new	-stomy
opposite	contra-
optic disc (disk)	papill/o
orange-yellow	cirrh/o
order	norm/o tax/o
organs, internal	viscer/o
originating from	-oid
ossicle (small bone)	ossicul/o
other	all/o
other than	par-
out, outside	ec- ex- exo- extra-
outer region	cortic/o
ovary	oophor/o (<i>use with</i> -itis, -ectomy, -pexy) ovari/o (<i>use with</i> -an)
own	aut-
oxygen	ox/o -oxia

ENGLISH—MEDICAL WORD PARTS (Continued)

MEANING	COMBINING FORM, SUFFIX, OR PREFIX
pain	-algia (<i>use with</i> arthr/o, cephal/o, gastr/o, mast/o, my/o, neur/o, ot/o) -dynia (<i>use with</i> coccyg/o, pleur/o) odyn/o
pain, excessive	-agra
pain, sensitivity to	-algesia algesi/o
painful	dys-
palate (roof of the mouth)	palat/o
palsy	-plegia -plegic
pancreas	pancreat/o
paralysis	-plegia -plegic
paralysis, slight	-paresis
parathyroid glands	parathyroid/o
patella	patell/a (<i>use with</i> -pexy) patell/o (<i>use with</i> -ar, -ectomy, -femoral)
pelvis	pelv/i pelv/o
penis	pen/o phall/o
people	dem/o
perineum	perine/o
peritoneum	peritone/o

ENGLISH—MEDICAL WORD PARTS (Continued)

MEANING	COMBINING FORM, SUFFIX, OR PREFIX
pertaining to	-ac (<i>as in</i> cardiac) -al (<i>as in</i> inguinal) -an (<i>as in</i> ovarian) -ar (<i>as in</i> palmar) -ary (<i>as in</i> papillary) -eal (<i>as in</i> pharyngeal) -iac (<i>as in</i> hypochondriac) -ic (<i>as in</i> nucleic) -ical (<i>as in</i> psychological) -ile (<i>as in</i> penile) -ine (<i>as in</i> equine) -ior (<i>as in</i> superior) -ose (<i>as in</i> adipose) -ous (<i>as in</i> mucous) -tic (<i>as in</i> necrotic) -tory (<i>as in</i> secretory)
phalanges (of fingers and toes)	phalang/o
pharynx (throat)	pharyng/o
phrase	-lexia
physician	iatr/o
pineal gland	pineal/o
pituitary gland	hypophys/o pitu/o pituitar/o
place	-stasis the/o top/o
plant	phyt/o -phyte
plaque	ather/o -plakia
pleura	pleur/o

ENGLISH—MEDICAL WORD PARTS (Continued)

MEANING	COMBINING FORM, SUFFIX, OR PREFIX
pleural cavity	-thorax
plexus	plex/o
poison	tox/o
	toxic/o
pole	styl/o
polyp	polyp/o
pons (a part of the brain)	pont/o
pores, condition of	-porosis
position	top/o
potassium	kal/i
pour	chyme/o
	-fusion
pregnancy	-cyesis
	gest/o
	gester/o
	gravid/o
	-gravida
	obstetr/o
pressure	bar/o
	-tension
process	-ation
	-ion
	-ism
	-y
produced by <i>or</i> in producing	-genic
	-gen
	-genesis
prolapse	-ptosis
prostate gland	prostat/o
protection	immun/o
	-phylaxis

ENGLISH—MEDICAL WORD PARTS (Continued)

MEANING	COMBINING FORM, SUFFIX, OR PREFIX
protein	albumin/o -globin -globulin prote/o pub/o
pubis (anterior part of hip bone)	
pulse	sphygm/o -sphyxia
puncture to remove fluid	-centesis
pupil	cor/o core/o pupi/o
pus	purul/o py/o
put	the/o
put in place	-pexy
pyloric sphincter, pylorus	pylor/o
radioactivity	radi/o
radius (lower arm bone)	radi/o
rapid	oxy-
rash	exanthemat/o
record	-gram
recording, process of	-graphy
rectum	rect/o
recurring	cycl/o
red	eosin/o erythr/o
redness	erythem/o erythemat/o
reduce	-lytic

ENGLISH—MEDICAL WORD PARTS (Continued)

MEANING	COMBINING FORM, SUFFIX, OR PREFIX
reflected sound	echo-
relaxation	-chalasia -chhalasis
removal	-apheresis -ectomy -pheresis
renal pelvis	pyel/o
repair	-plasty
resembling	-form -oid
retina	retin/o
rhythm	rrhythm/o
rib	cost/o
roll, to	vol/o
rosy	eosin/o
round	spher/o
rule	norm/o
run	-drome
rupture	-rrhexis
sac, small	alveol/o follicul/o
sac of fluid	cyst/o
sacrum	sacr/o
safe	immun/o
sag, to	-ptosis
saliva	sial/o
salivary gland	sialaden/o
same	ipsi- is/o
sameness; unchanging; constant	home/o
scaly	ichthy/o squam/o
scanty	olig/o

ENGLISH—MEDICAL WORD PARTS (Continued)

MEANING	COMBINING FORM, SUFFIX, OR PREFIX
scapula (shoulder blade)	scapul/o
sclera (white of eye)	scler/o
scrotum	scrot/o
sea	thalass/o
sebum	seb/o sebac/o steat/o
secrete	crin/o -crine
seed	gon/o semin/i
seizure	-lepsy
seizing, taking hold of (pertaining to)	-leptic
self	aut- auto-
semen	semin/i
seminal vesicle	vesicul/o
send, sending	-mission
sensation (nervous)	-esthesia
sensitivity to pain	alges/o -algesia
separate	-crine -crit -lytic
separation	-lysis
set, to	-stitial
severe	acu/o
sex glands	gonad/o
sexual intercourse	-pareunia
shape	-form morph/o
sharp	acu/o oxy-

ENGLISH—MEDICAL WORD PARTS (Continued)

MEANING	COMBINING FORM, SUFFIX, OR PREFIX
sheath	-lemma thec/o
shield	thyr/o
shin bone	tibi/o
shine	-lucent
short	brachy-
shoulder	om/o
side	later/o
sieve	ethm/o
sigmoid colon	sigmoid/o
single	mon/o
sinus	sinus/o
skin	cutane/o (<i>use with -ous</i>) derm/o (<i>use with -al</i>) -derma (<i>use with</i> erythr/o, leuk/o) dermat/o (<i>use with -itis,</i> -logist, -logy, -osis) epitheli/o (<i>use with -al,</i> -lysis, -oid, -oma, -um)
skull	crani/o
sleep	hypn/o somm/o -somnia
sleep, deep	comat/o
slender	lept/o
slide, to	lux/o
sliding, condition of	-lapse
slipping	-listhesis
slow	brady-
small	-icle micro- -ole -ule
small intestine	enter/o

ENGLISH—MEDICAL WORD PARTS (Continued)

MEANING	COMBINING FORM, SUFFIX, OR PREFIX
smaller	mi/o
smell	-osmia
smooth (visceral) muscle	leiomy/o
sodium	natr/o
soft	medull/o
softening	-malacia
sole (of the foot)	plant/o
solid	ster/o
	stere/o
solution	-sol
sound	echo- phon/o -phonia son/o
spark	scint/i
specialist	-ist
speech	phas/o -phasia
sperm cells (spermatozoa)	sperm/o spermat/o
spinal column (spine)	rachi/o spin/o vertebr/o
spinal cord	myel/o
spiny	acanth/o
spitting	-ptysis
spleen	splen/o
split	-fida -schisis schiz/o
stake (pole)	styl/o
stapes (middle ear bone)	staped/o
starch	amyl/o

ENGLISH—MEDICAL WORD PARTS (Continued)

MEANING	COMBINING FORM, SUFFIX, OR PREFIX
state of	-hexia
	-sis
steal	klept/o
sternum (breastbone)	stern/o
steroid	ster/o
sticking together	agglutin/o
stiff	ankyl/o
stimulate	-tropic
	-tropin
stomach	gastr/o
stone	lith/o
stones, condition of	-lithiasis
stop	-suppression
stopping	-stasis
	-static
straight	orth/o
stranger	xen/o
strength	-sthenia
stretch	tone/o
stretching	-ectasia
	-ectasis
striated (skeletal) muscle	rhabdomy/o
stricture	-stenosis
structure	-ium
	-plasm
	-um, -us
structure, solid	ster/o
study of	log/o
	-logy
stupor	narc/o
substance	-in, -ine
substance that forms	-poietin
substance that produces	-gen

ENGLISH—MEDICAL WORD PARTS (Continued)

MEANING	COMBINING FORM, SUFFIX, OR PREFIX
sudden	acu/o oxysm/o
sugar	gluc/o glyc/o glycos/o -ose
surgical repair	-plasty
surrounding	peri-
suture	-rrhaphy
swallow	phag/o
swallowing	-phagia
swayback	lord/o
sweat	diaphor/o (<i>use with</i> -esis) hidr/o (<i>use with</i> -osis)
swelling	-edema
sword	xiph/o
synovial (fluid)	synov/o
synovial membrane	synov/o
tail	caud/o
tailbone	coccyg/o
tarsus (ankle)	tars/o
tear	dacry/o (<i>use with</i> -genic, -rrhea) lacrim/o (<i>use with</i> -al, -ation)
tearing (cutting)	-spadia
tear gland	dacryoaden/o
tear sac	dacryocyst/o
temperament	cras/o
tendon	ten/o tend/o tendin/o
tension	ton/o

ENGLISH—MEDICAL WORD PARTS (Continued)

MEANING	COMBINING FORM, SUFFIX, OR PREFIX
testis	orch/o (<i>use with</i> -itis) orchi/o (<i>use with</i> -algia, -dynia, -ectomy, -pathy, -pexy, -tomy) orchid/o (<i>use with</i> -ectomy, -pexy, -plasty, -ptosis, -tomy) test/o (<i>use with</i> -sterone)
thick	pachy-
thigh bone	femor/o
thalamus	thalam/o
thin	lept/o
thing	-um -us
thing that produces	-gen
thirst	dips/o
thorny	acanth/o
three	tri-
throat (pharynx)	pharyng/o
through	dia- per- trans-
throw, to	bol/o
thymus gland	thym/o
thyroid gland	thyr/o thyroid/o
tibia (shin bone)	tibi/o
tie	nect/o
tie together	-desis
tightening	-stenosis
time	chron/o
tissue	hist/o histi/o -ium -um

ENGLISH—MEDICAL WORD PARTS (Continued)

MEANING	COMBINING FORM, SUFFIX, OR PREFIX
together	con- sym- syn-
tongue	gloss/o (<i>use with -al, -dynia, -plasty, plegia, -rrhaphy, -spasm, -tomy</i>)
tonsil	lingu/o (<i>use with -al</i>) tonsill/o
tooth	dent/i odont/o
top	acr/o
toward	ad- af- -ad
trachea (windpipe)	trache/o
transmission	-phoresis
treatment	iatr/o therapeut/o -therapy
trigone (area within the bladder)	trigon/o
true	eu-
tube	syring/o
tumor	-oma onc/o
turn	-tropia -verse -version
twisted chains	strept/o
two	bi-
tympanic membrane (eardrum)	myring/o tympan/o

ENGLISH—MEDICAL WORD PARTS (Continued)

MEANING	COMBINING FORM, SUFFIX, OR PREFIX
ulcer	apth/o
ulna (medial lower arm bone)	uln/o
umbilicus (navel)	omphal/o (<i>use with</i> -cele, -ectomy, -rrhagia, -rrhexis)
unchanging	umbilic/o (<i>use with</i> -al)
under	home/o
uneasy	hypo-
unequal	sub-
unknown	anxi/o
up	anis/o
upon	idi/o
urea	ana-
ureter	epi-
urethra	azot/o
urinary bladder	ureter/o
urinary tract	urethr/o
urination	cyst/o (<i>use with</i> -cele, -ectomy, -itis, -pexy, -plasty, -plegia, -scope, -scopy, -stomy, -tomy)
urine	vesic/o (<i>use with</i> -al)
uterus (womb)	ur/o
	-uria
	ur/o
	-uria
	urin/o
	hyster/o (<i>use with</i> -ectomy, -gram, -graphy, -tomy)
	metr/o (<i>use with</i> -rrhagia, -rrhea, -rrhexis)
	metri/o (<i>use with</i> -osis)
	uter/o (<i>use with</i> -ine)

ENGLISH—MEDICAL WORD PARTS

(Continued)

MEANING	COMBINING FORM, SUFFIX, OR PREFIX
uvea	uve/o
uvula	staphyl/o (<i>use with</i> -ectomy, -plasty, -tomy) uvul/o (<i>use with</i> -ar, -itis, -ptosis)
vas deferens	vas/o
vagina	colp/o (<i>use with</i> -pexy, -plasty, -scope, -scopy, -tomy) vagin/o (<i>use with</i> -al, -itis)
vagus nerve	vag/o
valve	valv/o valvul/o
varicose veins	varic/o
varied	ple/o poikil/o
vein	phleb/o (<i>use with</i> -ectomy, -itis, -tomy) ven/o (<i>use with</i> -ous, -gram) ven/i (<i>use with</i> -puncture)
vein, small	venul/o
venereal (sexual contact)	vener/o
ventricle	ventricul/o
vertebra (backbone)	rachi/o (<i>use with</i> -itis, -tomy) spondyl/o (<i>use with</i> -itis, -listhesis, -osis, -pathy) vertebr/o (<i>use with</i> -al)

ENGLISH—MEDICAL WORD PARTS (Continued)

MEANING	COMBINING FORM, SUFFIX, OR PREFIX
vessel (blood)	angi/o (<i>use with</i> -ectomy, genesis, -gram, -graphy, -oma, -plasty, -spasm) vas/o (<i>use with</i> -constriction, -dilation, -motor) vascul/o (<i>use with</i> -ar, -itis)
vestibule of the inner ear	vestibul/o
view of	-opsy
viscera (internal organs)	splanchn/o
vision condition	-opia -opsia opt/o optic/o
visual examination	-scopy
vitreous body	vitr/o
voice	phon/o -phonia
voice box (larynx)	laryng/o
vomiting	-emesis
vulva (external female genitalia)	episi/o (<i>use with</i> -tomy) vulv/o (<i>use with</i> -ar)
wander	ion/o
washing	-clysis
wasting away	-phthisis
water	aque/o hydr/o
watery flow	rheumat/o
weakness	-paresis
wedge	sphen/o

ENGLISH—MEDICAL WORD PARTS (Continued)

MEANING	COMBINING FORM, SUFFIX, OR PREFIX
weight	bar/o
white	alb/o albin/o leuk/o
wide	mydr/o
widening	-dilation -ectasia -ectasis -eurysm
windpipe (trachea)	trache/o
with	con- sym- syn-
within	en-, end- endo- intra-
woman	gynec/o
womb	hyster/o metr/o metri/o uter/o
word	lex/o -lexia
work	erg/o
wrinkle	rhytid/o
wrist bones (carpals)	carp/o
x-rays	radi/o roentgen/o
yellow	lute/o jaund/o xanth/o



ABBREVIATIONS*

Many of these abbreviations may appear with or without periods and with either a capital or a lowercase first letter. (Latin abbreviations are spelled out in *italics* in parentheses.)

A, B, AB, O	blood types; may have subscript numbers
A₂, A₂	aortic valve closure (a heart sound)
@	at
ā	before
AAA	abdominal aortic aneurysm
AAL	anterior axillary line
AB, ab	abortion
Ab	antibody
ABCDE	asymmetry (of shape), border (irregularity), color (variation with one lesion), diameter (greater than 6 mm), evolution (change)—characteristics associated with melanoma
abd	abdomen; abduction
ABGs	arterial blood gases
AC	acromioclavicular (joint)
ac, a.c.	before meals (<i>ante cibum</i>)
ACE	angiotensin-converting enzyme (ACE inhibitors treat hypertension.)

*From Chabner DE: *The Language of Medicine*, 11th ed. St Louis, Elsevier/Saunders, 2017.

ACh	acetylcholine (a neurotransmitter)
ACL	anterior cruciate ligament (of knee)
ACLS	advanced cardiac life support
ACS	acute coronary syndrome(s)
ACTH	adrenocorticotrophic hormone (secreted by the anterior pituitary gland)
AD	Alzheimer disease
AD	right ear (<i>auris dextra</i>); better to specify “right ear” rather than abbreviating
ad lib.	as desired (<i>ad libitum</i> , “freely”)
ADD	attention deficit disorder
add	adduction
ADH	antidiuretic hormone; vasopressin (secreted by posterior pituitary gland)
ADHD	attention-deficit hyperactivity disorder
ADL	activities of daily living
ADT	admission, discharge, transfer
AED	automated external defibrillator
AF	atrial fibrillation
AFB	acid-fast bacillus/bacilli—the TB organism
AFO	ankle-foot orthosis (device for stabilization)
AFP	alpha-fetoprotein
Ag	silver (<i>argentum</i>)
AGC	absolute granulocyte count; atypical glandular cells (Pap smear)
AHF	antihemophilic factor (same as coagulation factor XIII)
AICD	automated implantable cardioverter defibrillator
AIDS	acquired immunodeficiency syndrome
AIHA	autoimmune hemolytic anemia
AIS	adenocarcinoma in situ (precancerous cells seen on Pap smear)

AKA	above-knee amputation
alb	albumin (protein)
alk phos	alkaline phosphatase (elevated in liver disease)
ALL	acute lymphoid leukemia
ALS	amyotrophic lateral sclerosis (Lou Gehrig disease)
ALT	alanine aminotransferase (elevated in liver and heart disease); formerly called <i>serum glutamic-pyruvic transaminase</i> (SGPT)
ALT	argon laser trabeculoplasty
AM, a.m., AM	in the morning <i>or</i> before noon (<i>ante meridiem</i>)
AMA	against medical advice; American Medical Association
amb	ambulate, ambulatory (walking)
AMD	age-related macular degeneration
AMI	acute myocardial infarction
AML	acute myelocytic/myeloid leukemia
ANA	antinuclear antibody
ANC	absolute neutrophil count
AP, A/P	anteroposterior
A&P	auscultation and percussion
APAP	acetyl- <i>para</i> -aminophenol
APC	acetylsalicylic acid/aspirin, phenacetin, caffeine
aq.	water (<i>aqua</i>); aqueous
ARB	angiotension II receptor blocker
ARDS	acute respiratory distress syndrome
AROM	active range of motion
AS	aortic stenosis
AS	left ear (<i>auris sinistra</i>); better to specify "left ear," rather than abbreviating
ASA	acetylsalicylic acid (aspirin)
ASCUS	atypical squamous cells of undetermined significance (abnormal Pap smear finding that does not fully meet the criteria for a cancerous lesion)

ASD	atrial septal defect
ASHD	arteriosclerotic heart disease
AST	aspartate aminotransferase (elevated in liver and heart disease); formerly called <i>serum glutamic-oxaloacetic transaminase</i> (SGOT)
AU	both ears (<i>auris uterque</i>); better to specify “in each ear/for both ears,” rather than abbreviating
Au	gold (<i>aurum</i>)
AUB	abnormal uterine bleeding
AV	arteriovenous; atrioventricular
AVM	arteriovenous malformation
AVR	aortic valve replacement
AZT	azidothymidine
A&W	alive and well
B cells	lymphocytes produced in the bone marrow
Ba	barium
BAL	bronchoalveolar lavage
bands	immature white blood cells (granulocytes)
baso	basophils
BBB	bundle branch block
BC	bone conduction
bcr	breakpoint cluster region
BE	barium enema
bid, b.i.d.	twice a day (<i>bis in die</i>)
BKA	below-knee amputation
BM	bowel movement
BMD	bone mineral density
BMR	basal metabolic rate
BMT	bone marrow transplantation
BP, B/P	blood pressure
BPH	benign prostatic hyperplasia/hypertrophy
BPPV	benign paroxysmal positional vertigo
BRBPR	bright red blood per rectum (hematochezia)
BRCA1, BRCA2	breast cancer 1, breast cancer 2 (genetic markers for disease risk)

bs	blood sugar; breath sound(s)
BSE	breast self-examination
BSO	bilateral salpingo-oophorectomy
BSP	Bromsulphalein (bromosulphophthalein)—dye used in liver function testing; its retention is indicative of liver damage or disease
BT	bleeding time
BUN	blood urea nitrogen
bw, BW	birth weight
Bx, bx	biopsy
C	carbon; calorie
°C	degrees Celsius (on “metric” temperature scale); degrees centigrade
\bar{c}	with (<i>cum</i>)
C1, C2	first cervical vertebra, second cervical vertebra (and so on)
CA	cancer; carcinoma; cardiac arrest; chronologic age
Ca	calcium
CABG	coronary artery bypass graft/grafting (cardiovascular surgery)
CAD	coronary artery disease
CAO	chronic airway obstruction
cap	capsule
CAPD	continuous ambulatory peritoneal dialysis
Cath	catheter; catheterization
CBC	complete blood (cell) count
CBT	cognitive behavioral therapy
CC	chief complaint
cc	cubic centimeter (same as mL: 1/1000 of a liter)
CCr, CrCl	creatinine clearance
CCU	coronary care unit; critical care unit
CDC	Centers for Disease Control and Prevention
CDH	congenital dislocated hip
CEA	carcinoembryonic antigen
cf.	compare (<i>confer</i>)

CF	cystic fibrosis; complement fixation (test)
c.gl	with (<i>cum</i>) glasses
CGMS	continuous glucose monitoring system
cGy	centigray (1/100 of a gray; a rad)
CHD	coronary heart disease; chronic heart disease
chemo	chemotherapy
CHF	congestive heart failure
chol	cholesterol
chr	chronic
μCi	microcurie
CIN	cervical intraepithelial neoplasia
CIS	carcinoma in situ
CK	creatine kinase
CKD	chronic kidney disease
Cl	chlorine
CLD	chronic liver disease
CLL	chronic lymphocytic leukemia
cm	centimeter (1/100 of a meter)
CMA	certified medical assistant
CMC	carpometacarpal (joint)
CMG	cystometrogram
CML	chronic myelogenous leukemia
CMV	cytomegalovirus
CNS	central nervous system
CO	carbon monoxide; cardiac output
CO₂	carbon dioxide
Co	cobalt
c/o	complains of
COD	condition on discharge
COPD	chronic obstructive pulmonary disease
CP	cerebral palsy; chest pain
CPA	costophrenic angle
CPAP	continuous positive airway pressure
CPD	cephalopelvic disproportion
CPR	cardiopulmonary resuscitation
CR	complete response; cardiorespiratory

CRBSI	catheter-related bloodstream infection
CRF	chronic renal failure
C&S	culture and sensitivity (of sputum)
C-section	cesarean section
CSF	cerebrospinal fluid; colony-stimulating factor
C-spine	cervical spine (films)
CT	computed tomography (x-ray imaging in axial and other planes)
ct.	count
CTPA	CT pulmonary angiography
CTS	carpal tunnel syndrome
Cu	copper (<i>cuprum</i>)
CVA	cerebrovascular accident; costovertebral angle
CVP	central venous pressure
CVS	cardiovascular system; chorionic villus sampling
c/w	compare with; consistent with
CX, CXR	chest x-ray (film)
Cx	cervix
cysto	cystoscopy
D&C	dilatation/dilation and curettage
DCIS	ductal carcinoma in situ
DD	discharge diagnosis; differential diagnosis
Decub.	decubitus (lying down)
Derm.	dermatology
DES	diethylstilbestrol; diffuse esophageal spasm
DEXA or DXA	dual-energy x-ray absorptiometry (a test of bone mineral density)
DI	diabetes insipidus; diagnostic imaging
DIC	disseminated intravascular coagulation
DICOM	digital image communication in medicine

diff.	differential count (of kinds of white blood cells)
DIG	digoxin; digitalis
DKA	diabetic ketoacidosis
dL, dl	deciliter (1/10 of a liter)
DLco	diffusion capacity of the lung for carbon monoxide
DLE	discoid lupus erythematosus
DM	diabetes mellitus
DNA	deoxyribonucleic acid
DNR	do not resuscitate
D.O.	doctor of osteopathy
DOA	dead on arrival
DOB	date of birth
DOE	dyspnea on exertion
DPT	diphtheria-pertussis-tetanus (vaccine)
DRE	digital rectal examination
DRG	diagnosis-related group
DSA	digital subtraction angiography
DSM	<i>Diagnostic and Statistical Manual of Mental Disorders</i>
DT	delirium tremens (caused by alcohol withdrawal)
DTR	deep tendon reflex(es)
DUB	dysfunctional uterine bleeding
DVT	deep vein thrombosis
D/W	dextrose in water
Dx	diagnosis
EBV	Epstein-Barr virus (cause of mononucleosis)
ECC	endocervical curettage; extracorporeal circulation; emergency cardiac care
ECF	extended care facility
ECG	electrocardiogram
ECHO	echocardiography
ECMO	extracorporeal membrane oxygenation
ECT	electroconvulsive therapy

ED	erectile dysfunction; emergency department
EDC	estimated date of confinement
EEG	electroencephalogram
EENT	eyes, ears, nose, throat
EGD	esophagogastroduodenoscopy
EKG	electrocardiogram
ELISA	enzyme-linked immunosorbent assay
EM	electron microscope
EMB	endometrial biopsy
EMG	electromyogram
EMLA	eutectic mixture of local anesthetics
EMT	emergency medical technician
ENT	ear, nose, throat
EOM	extraocular movement; extraocular muscles
eos	eosinophils (type of white blood cell)
EPO	erythropoietin
ER	emergency room; estrogen receptor
ERCP	endoscopic retrograde cholangiopancreatography
ERT	estrogen replacement therapy
ESR (sed rate)	erythrocyte sedimentation rate (increase indicates inflammation)
ESRD	end-stage renal disease
ESWL	extracorporeal shock wave lithotripsy
ETOH	ethyl alcohol
ETT	exercise tolerance test
EUS	endoscopic ultrasonography
F, °F	Fahrenheit, degrees Fahrenheit
FB	fingerbreadth; foreign body
FBS	fasting blood sugar
FDA	U.S. Food and Drug Administration
FDG-PET	2-deoxy-2[F-18]fluoro-D-glucose positron emission tomography
Fe	iron (<i>Latin, ferrum</i>)
FEF	forced expiratory flow
FEV₁	forced expiratory volume in first second
FFR	fractional flow reserve

FH	family history
FHR	fetal heart rate
FPG	fasting plasma glucose
FROM	full range of movement/motion
FSH	follicle-stimulating hormone
F/U	follow-up
5-FU	5-fluorouracil (a chemotherapy drug)
FUO	fever of undetermined origin
Fx	fracture
G	
g, gm	gram
µg	microgram (one millionth of a gram)
g/dL	grams per deciliter
Ga	gallium
GABA	gamma-aminobutyric acid; also spelled γ -aminobutyric acid—a neurotransmitter
GB	
GBS	gallbladder series (an x-ray study)
GC	gonococcus
G-CSF	granulocyte colony-stimulating factor (promotes neutrophil production)
Gd	
GERD	gastroesophageal reflux disease
GFR	glomerular filtration rate
GH	growth hormone
GI	gastrointestinal
GIST	gastrointestinal stromal tumor
G6PD	glucose-6-phosphate dehydrogenase (enzyme missing in an inherited red blood cell disorder)
GP	
GM-CSF	granulocyte-macrophage colony-stimulating factor (promotes myeloid progenitor cells with differentiation to granulocytes)
grav. 1, 2, 3	<i>gravida</i> 1, 2, 3—first, second, third pregnancy
gt, gtt	drop (<i>gutta</i>), drops (<i>guttae</i>)
GTT	glucose tolerance test
GU	genitourinary

Gy	gray—unit of radiation absorption (exposure); equal to 100 rad
GYN, gyn	gynecology
H	hydrogen
h., hr	hour
H₂ blocker	histamine type 2 receptor antagonist (inhibitor of gastric acid secretion)
HAART	highly active antiretroviral therapy (for AIDS)
HAI	hemagglutination inhibition
Hb, hgb	hemoglobin
HbA_{1c}	glycosylated hemoglobin test (for diabetes)
HBV	hepatitis B virus
HCC	hepatocellular carcinoma
hCG, HCG	human chorionic gonadotropin
HCl	hydrochloric acid
HCO₃	bicarbonate
Hct, HCT	hematocrit
HCV	hepatitis C virus
HCVD	hypertensive cardiovascular disease
HD	hemodialysis (performed by artificial kidney machine)
HDL	high-density lipoprotein
He	helium
HEENT	head, eyes, ears, nose, throat
Hg	mercury (Latin hydrargyrum meaning “liquid silver”)
H&H	hematocrit and hemoglobin (measurement)—red blood cell tests
HIPAA	Health Insurance Portability and Accountability Act (of 1996)
HIV	human immunodeficiency virus
HLA	histocompatibility locus antigen (identifies cells as “self”)
HNP	herniated nucleus pulposus
h/o	history of
H₂O	water
H&P	history and physical (examination)
HPF; hpf	high-power field (in microscopy)

HPI	history of present illness
HPV	human papillomavirus
HRT	hormone replacement therapy
h.s.	at bedtime (<i>hora somni</i>)—write out so as not to confuse with hs (half-strength)
hsCRP	high sensitivity C-reactive protein
HSG	hysterosalpingography
HSV	herpes simplex virus
ht	height
HTN	hypertension (high blood pressure)
Hx	history
I	iodine
¹³¹I	a radioactive isotope of iodine
IBD	inflammatory bowel disease (Crohn disease and ulcerative colitis)
ICD	implantable cardioverter-defibrillator
ICP	intracranial pressure
ICSH	interstitial cell–stimulating hormone
ICU	intensive care unit
ID	infectious disease
ID	intellectual disability
I&D	incision and drainage
IgA, IgD, IgE, IgG, IgM	immunoglobulins (type of antibodies)
IGF	insulin-like growth factor
IHD	ischemic heart disease
IHSS	idiopathic hypertrophic subaortic stenosis
IL-1 to IL-15	interleukins
IM	intramuscular; infectious mononucleosis
inf.	infusion; inferior
INH	isoniazid (a drug used to treat tuberculosis)
inj.	injection
INR	international normalized ratio (measures the time that it takes for blood to clot and compares it to an average)

I&O	intake and output (measurement of patient's fluids)
IOL	intraocular lens (implant)
IOP	intraocular pressure
IPPB	intermittent positive-pressure breathing
IQ	intelligence quotient
ITP	idiopathic thrombocytic purpura
IUD	intrauterine device
IUP	intrauterine pregnancy
IV	intravenous
IVP	intravenous pyelogram
IVUS	intravascular ultrasound
J-tube	jejunostomy tube
K	potassium
kg	kilogram (equal to 1000 g)
KJ	knee jerk
KS	Kaposi sarcoma
KUB	kidneys, ureters, bladder (x-ray study)
L, l	liter; left; lower
μL	microliter (one millionth of a liter)
L1, L2	first lumbar vertebra, second lumbar vertebra (and so on)
LA	left atrium
LAD	left anterior descending (coronary artery); lymphadenopathy
LADA	latent autoimmune diabetes in adults
Laser	light amplifications by stimulated emission of radiation
lat	lateral
LB	large bowel
LBBB	left bundle branch block (a form of heart block)
LBW	low birth weight
LD	lethal dose
LDH	lactate dehydrogenase
LDL	low-density lipoprotein (high levels associated with heart disease)

L-dopa	levodopa (a drug used to treat Parkinson disease)
LE	lupus erythematosus
LEEP	loop electrocautery excision procedure
LES	lower esophageal sphincter
LFTs	liver function tests
LH	luteinizing hormone
LLL	left lower lobe (of lung)
LLQ	left lower quadrant (of abdomen)
LMP	last menstrual period
LMWH	low-molecular-weight heparin
LOC	loss of consciousness
LOS	length of (hospital) stay
LP	lumbar puncture
lpf	low-power field (in microscopy)
LPN	licensed practical nurse
LS	lumbosacral (spine)
LSD	lysergic acid diethylamide (a hallucinogen)
LSH	laparoscopic supracervical hysterectomy
LSK	liver, spleen, kidneys
LTB	laryngotracheal bronchitis (croup)
LTC	long-term care
LTH	luteotropic hormone (same as prolactin)
LUL	left upper lobe (of lung)
LUQ	left upper quadrant (of abdomen)
LV	left ventricle
LVAD	left ventricular assist device
L&W	living and well
lymphs	lymphocytes
lytes	electrolytes
MA	mental age
MAC	mycobacterium avium complex
MAC	monitored anesthesia care; <i>Mycobacterium avium</i> complex (a common cause of opportunistic pneumonia)
MAI	<i>Mycobacterium avium-intracellulare</i>

MAOI	monoamine oxidase inhibitor (a type of antidepressant)
MBD	minimal brain dysfunction
mcg	microgram—also abbreviated μg ; equal to one millionth of a gram
MCH	mean corpuscular hemoglobin (average amount in each red blood cell)
MCHC	mean corpuscular hemoglobin concentration (average concentration in a single red cell)
mCi	millicurie
μCi	microcurie
MCP	metacarpophalangeal (joint)
MCV	mean corpuscular volume (average size of a single red blood cell)
M.D., MD	doctor of medicine
MDI	multiple daily injections; metered-dose inhaler (used to deliver aerosolized medication to a patient)
MDR	minimum daily requirement
MDS	myelodysplastic syndrome (bone marrow disorder)
MED	minimum effective dose
mEq	milliequivalent
mEq/L	milliequivalent per liter (unit of measure for the concentration of a solution)
mets	metastases
MG	myasthenia gravis
Mg	magnesium
mg	milligram (1/1000 of a gram)
mg/cc³	milligram per cubic centimeter
mg/dL	milligram per deciliter
MH	marital history; mental health
MI	myocardial infarction; mitral insufficiency
mL, ml	milliliter (1/1000 of a liter)
mm	millimeter (1/1000 of a meter); 0.039 inch
mm Hg, mmHg	millimeters of mercury

MMPI	Minnesota Multiphasic Personality Inventory
MMR	measles-mumps-rubella (vaccine)
MMT	manual muscle testing
μm	micrometer (one millionth of a meter, or 1/1000 of a millimeter); sometimes seen in older sources as μ (for “micron,” an outdated term)
MoAb	monoclonal antibody
MODS	multiple organ dysfunction syndrome
monos	monocytes (type of white blood cells)
MR	mitral regurgitation; magnetic resonance
MRA	magnetic resonance angiography
MRI	magnetic resonance imaging
mRNA	messenger RNA
MRSA	methicillin-resistant <i>Staphylococcus aureus</i>
MS	multiple sclerosis; mitral stenosis; morphine sulfate
MSL	midsternal line
MTD	maximum tolerated dose
MTX	methotrexate
MUGA	multiple-gated acquisition scan (of heart)
multip	multipara; multiparous
MVP	mitral valve prolapse
myop	myopia (nearsightedness)
N	nitrogen
NA, N/A	not applicable; not available
Na	sodium (<i>natrium</i>)
NASH	non-alcoholic steatohepatitis
NB	newborn
NBS	normal bowel sounds; normal breath sounds
ND	normal delivery; normal development
NED	no evidence of disease
neg.	negative

NG tube	nasogastric tube
NHL	non-Hodgkin lymphoma
NICU	neonatal intensive care unit
NK cells	natural killer cells
NKA	no known allergies
NKDA	no known drug allergies
NOAC	novel anticoagulant drug
NOTES	natural orifice transluminal endoscopic surgery
NPO	nothing by mouth (<i>nil per os</i>)
NSAID	nonsteroidal anti-inflammatory drug (often prescribed to treat musculoskeletal disorders)
NSR	normal sinus rhythm (of heart)
NTP	normal temperature and pressure
NT-proBNP	N-terminal pro-peptide of BNP
O, O₂	oxygen
OA	osteoarthritis
OB/GYN	obstetrics and gynecology
OCPs	oral contraceptive pills
O.D.	doctor of optometry
OD	right eye (<i>oculus dexter</i>); better to specify “right eye,” rather than abbreviating
OD	overdose
OMT	osteopathic manipulative treatment
OR	operating room
ORIF	open reduction plus internal fixation
ORTH; Ortho.	orthopedics
OS	left eye (<i>oculus sinister</i>); better to specify “left eye,” rather than abbreviating
os	opening; bone
OT	occupational therapy (helps patients perform activities of daily living and function in work-related situations)
OU	both eyes (<i>oculus uterque</i>); better to specify “both eyes,” rather than abbreviating
oz	ounce

P	phosphorus; posterior; pressure; pulse; pupil
\bar{p}	after (post)
P2, P₂	pulmonary valve closure (a heart sound)
PA	pulmonary artery; posteroanterior
P-A	posteroanterior
P&A	percussion and auscultation
PAC	premature atrial contraction
PaCO₂	partial pressure of carbon dioxide in arterial blood
PACS	picture archival communications system
PAD	peripheral arterial disease
palp.	palpable; palpation
PALS	pediatric advanced life support
PaO₂	partial pressure of oxygen in blood
Pap smear	Papanicolaou smear (from cervix and vagina)
para 1, 2, 3	unipara, bipara, tripara (number of viable births)
pc, p.c.	after meals (<i>post cibum</i>)
PCA	patient-controlled anesthesia
PCI	percutaneous coronary intervention
Pco₂, pCO₂	partial pressure of carbon dioxide
PCP	<i>Pneumocystis</i> pneumonia; phencyclidine (a hallucinogen)
PCR	polymerase chain reaction (process that allows making copies of genes)
PD	peritoneal dialysis
PDA	patent ductus arteriosus
PDR	<i>Physicians' Desk Reference</i>
PE	physical examination; pulmonary embolus
PEEP	positive end-expiratory pressure
PEG	percutaneous endoscopic gastrostomy (feeding tube placed in stomach)
PEJ	percutaneous endoscopic jejunostomy (feeding tube placed in small intestine)

per os	by mouth
PERRLA	pupils equal, round, reactive to light and accommodation
PET	positron emission tomography
PE tube	ventilating tube for eardrum
PFT	pulmonary function test
PG	prostaglandin
PH	past history
pH	potential hydrogen (scale to indicate degree of acidity or alkalinity)
PI	present illness
PICC	peripherally inserted central catheter
PID	pelvic inflammatory disease
PIN	prostatic intraepithelial neoplasia
PIP	proximal interphalangeal (joint)
PKU	phenylketonuria
PM, p.m.	in the afternoon (post meridiem)
PMH	past medical history
PMN	polymorphonuclear leukocyte
PMS	premenstrual syndrome
PND	paroxysmal nocturnal dyspnea
PNS	peripheral nervous system
PO, p.o.	by mouth (per os)
p/o	postoperative
PO₂, pO₂	partial pressure of oxygen
poly	polymorphonuclear leukocyte
postop	postoperative (after surgery)
PPBS	postprandial blood sugar
PPD	purified protein derivative (used in test for tuberculosis)
preop	preoperative
prep	prepare for
PR	partial response
primip	primipara
PRL	prolactin
p.r.n.	as needed; as necessary (<i>pro re nata</i>)
procto	proctoscopy
prot.	protocol
Pro. time	prothrombin time (test of blood clotting)
PSA	prostate-specific antigen

PT	prothrombin time; physical therapy (helps patients regain use of muscles and joints after injury or surgery)
pt.	patient
PTA	prior to admission (to hospital)
PTC	percutaneous transhepatic cholangiography
PTCA	percutaneous transluminal coronary angioplasty
PTH	parathyroid hormone
PTHC	percutaneous transhepatic cholangiography
PTSD	posttraumatic stress disorder
PTT	partial thromboplastin time (a test of blood clotting)
PU	pregnancy urine
PUVA	psoralen ultraviolet A (a treatment for psoriasis)
PVC	premature ventricular contraction
PVD	peripheral vascular disease
PVT	paroxysmal ventricular tachycardia
PWB	partial weight-bearing
Px	prognosis
Q	blood volume; rate of blood flow (daily)
q	every (<i>quaque</i> , “each”)
qAM	every morning; better to specify than to abbreviate
qd, q.d.	every day (<i>quaque die</i>); better to specify “each/every day,” rather than confusing with qid or qod
qh	every hour (<i>quaque hora</i>); better to specify than to abbreviate
q2h	every 2 hours; better to specify than to abbreviate
qid, q.i.d.	four times daily (<i>quater in die</i>); better to specify than to abbreviate
q.n.s.	quantity not sufficient (<i>quantum non sufficit</i>)

qPM	every evening; better to specify than to abbreviate
QRS	a wave complex in an electrocardiographic study
q.s.	sufficient quantity (<i>quantum sufficit</i>)
qt	quart
R	respiration; right
RA	rheumatoid arthritis; right atrium
Ra	radium
rad	radiation absorbed dose
RAIU	radioactive iodine uptake test
RBBB	right bundle branch block
RBC, rbc	red blood count; red blood cell
RDDA	recommended daily dietary allowance
RDS	respiratory distress syndrome
REM	rapid eye movement
RF	rheumatoid factor
Rh (factor)	rhesus (monkey) factor in blood
RhoGAM	drug to prevent Rh factor reaction in Rh-negative women
RIA	radioimmunoassay (test for measuring minute quantities of a substance)
RL	right lower lobe/lung
RLQ	right lower quadrant (abdomen)
RML	right middle lobe
RNA	ribonucleic acid
R/O	rule out
ROM	range of motion
ROS	review of systems
RRR	regular rate and rhythm (of heart)
RT	right; radiation therapy
RUL	right upper lobe (of lung)
RUQ	right upper quadrant (of abdomen)
RV	right ventricle
Rx	treatment; therapy; prescription
\bar{s}	without (<i>sine</i>)
S1, S2	first sacral vertebra, second sacral vertebra (and so on)

S-A node	sinoatrial node (pacemaker of heart)
SAD	seasonal affective disorder
SARS	severe acute respiratory syndrome
SBE	subacute bacterial endocarditis
SBFT	small bowel follow-through (x-ray study of small intestine function)
segs	segmented, mature white blood cells (neutrophils)
SERM	selective estrogen receptor modulator
s.gl	without (<i>sine</i>) glasses
SGOT	see AST
SGPT	see ALT
SIADH	syndrome of inappropriate antidiuretic hormone
SIDS	sudden infant death syndrome
Sig.	directions—medication instructions (<i>signa</i> , “mark”)
SIRS	systemic inflammatory response syndrome (severe bacteremia)
SL	sublingual
SLE	systemic lupus erythematosus
SLT	selective laser trabeculoplasty
SMA-12	blood chemistry profile, including 12 different studies/assays
SMAC	sequential multiple analyzer computer (automated analytical device for testing blood)
SOAP	subjective, objective, assessment, plan (used for patient notes)
SOB	shortness of breath
s.o.s.	if necessary (<i>si opus sit</i> , “if there should be [such a] necessity”)
S/P	status post (previous disease, condition, or procedure)
sp. gr.	specific gravity
SPECT	single photon emission computed tomography
SQ	subcutaneous
S/S, Sx	signs and symptoms
SSCP	substernal chest pain

SSRI	selective serotonin reuptake inhibitor (a type of antidepressant)
Staph.	staphylococci (berry-shaped bacteria in clusters)
stat., stat	immediately (<i>statim</i>)
STD	sexually transmitted disease
STH	somatotropic hormone (somatotropin) (a growth hormone)
STI	sexually transmitted infection
Strep.	streptococci (berry-shaped bacteria in twisted chains)
subcu, subcut	subcutaneous
SQ	subcutaneous
subQ, sub-Q	subcutaneous
SVC	superior vena cava
SVD	spontaneous vaginal delivery
Sx	symptoms; signs and symptoms
Sz	seizure
T	temperature; time
T cells	lymphocytes produced in the thymus gland
T tube	tube placed in biliary tract for drainage
T1, T2	first thoracic vertebra, second thoracic vertebra (and so on)
T₃	triiodothyronine (test)
T₄	thyroxine (test)
TA	therapeutic abortion
T&A	tonsillectomy and adenoidectomy
TAB	therapeutic abortion
TAH	total abdominal hysterectomy
TAT	Thematic Apperception Test
TB	tuberculosis
Tc	technetium
TEE	transesophageal echocardiogram
TENS	transcutaneous electrical nerve stimulation
TFT	thyroid function test
THR	total hip replacement (an arthroplasty procedure)

TIA	transient ischemic attack
tid, t.i.d.	three times daily (<i>ter in die</i>)
TKR	total knee replacement (an arthroplasty procedure)
TLC	total lung capacity
TLE	temporal lobe epilepsy
TM	tympanic membrane
TMJ	temporomandibular joint
TNF	tumor necrosis factor
TNM	tumor-node-metastasis (cancer staging system)
tPA	tissue plasminogen activator
TPN	total parenteral nutrition
TPR	temperature, pulse, respirations
TRUS	transrectal ultrasound (examination) (test to access the prostate and guide precise placement of a biopsy needle)
TSH	thyroid-stimulating hormone
TSS	toxic shock syndrome
TUR, TURP	transurethral resection of the prostate
TVH	total vaginal hysterectomy
Tx	treatment
UA	unstable angina (chest pain at rest or of increasing frequency)
UAO	upper airway obstruction
UC	uterine contraction(s)
UE	upper extremity
UGI	upper gastrointestinal
umb.	navel (umbilicus)
U/O	urinary output
URI	upper respiratory infection
U/S	ultrasound; ultrasonography
UTI	urinary tract infection
UV	ultraviolet
VA	visual acuity
VATS	video-assisted thoracic surgery (a thoracoscopy procedure)

VC	vital capacity (of lungs)
VCUG	voiding cystourethrogram
VDRL	Venereal Disease Research Laboratory (test for syphilis)
VEGF	vascular endothelial growth factor
VF	visual field; ventricular fibrillation
V/Q scan	ventilation-perfusion scan (of lung)
V/S	vital signs; versus
VSD	ventricular septal defect
VT	ventricular tachycardia (an abnormal heart rhythm)
VTE	venous thromboembolism
WAIS	Wechsler Adult Intelligence Scale
WBC, wbc	white blood cell; white blood count
WDWN	well developed and well nourished
WISC	Wechsler Intelligence Scale for Children
WNL	within normal limits
wt	weight
XRT	radiation therapy
y/o, yr	year(s) old

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ACRONYMS*

An *acronym* is the name for an abbreviation that forms a pronounceable word.

ACE (“ace”)	a ngiotensin- c onverting e nzyme
AIDS (ādz)	a cquired i mmunode f iciency s ndrome
APGAR (ĀP-gahr)	a pppearance, p ulse, g rimace, a ctivity, r espiration
BUN (“bun” or bē-yū-ĒN)	b lood u rea n itrogen
CABG (“cabbage”)	c oronary a rtery b ypass g raft/ grafting
CAT (“cat”)	c omputerized a xial t omography (outdated term; use CT)
CPAP (“see”-pĀap)	c ontinuous p ositive a irway p ressure
DEXA (DECKS-Ā)	d ual e nergy x -ray a bsorptometry
ELISA (“eliza”)	e nzyme- l inked i mmunos o rbent a ssay
GERD (gěrd)	g astro e sophageal r eflux d isease
GIST (jĭst)	g astro i ntestinal s tromal t umor
HAART (“heart”)	h ighly a ctive a nti r etroviral t herapy
HIPAA (HĪP-ă)	H ealth I nsurance P ortability and A ccountability A ct of 1996

*From Chabner DE: *The Language of Medicine*, 11th ed. St Louis, Elsevier/Saunders, 2017.

LASER (LĀ-zěr)	light <u>l</u> amplification by <u>s</u> timulated <u>e</u> mission of <u>r</u> adiation
LASIK (LĀ-sĭk)	<u>l</u> aser in situ <u>k</u> eratomileusis
LEEP (“leap”)	<u>l</u> oop <u>e</u> lectrocautery <u>e</u> xcision <u>p</u> rocedure
MAC (măk)	<u>m</u> onitored <u>a</u> nesthesia <u>c</u> are; <u>M</u> ycobacterium <u>a</u> viu <u>m</u> complex
MERS (merz)	<u>M</u> iddle <u>E</u> ast <u>r</u> espiratory <u>s</u> yndrome
MICU (MĪK-yū)	<u>m</u> edical <u>i</u> ntensive <u>c</u> are <u>u</u> nit
MIS (“miss”)	<u>m</u> inimally <u>i</u> nvasive <u>s</u> urgery
MODS (mōdz)	<u>m</u> ultiple <u>o</u> rgan <u>d</u> ysfunction <u>s</u> yndrome
MUGA (mū-gă)	<u>m</u> ultiple- <u>g</u> ated <u>a</u> cquisition (scan)
NSAID (ĔN-sěd)	<u>n</u> onsteroidal <u>a</u> nti- <u>i</u> nflammatory <u>d</u> rug
NICU (NĪK-yū)	<u>n</u> eonatal <u>i</u> ntensive <u>c</u> are <u>u</u> nit
PACS (păks)	<u>p</u> icture <u>a</u> rchival <u>c</u> ommunications <u>s</u> ystem
PALS (pălz)	<u>p</u> ediatric <u>a</u> dvanced <u>l</u> ife <u>s</u> upport
PANDAS (PĀN-dăz)	<u>P</u> ediatric <u>A</u> utoimmune <u>N</u> europsychiatric <u>D</u> isorders <u>A</u> ssociated with <u>S</u> treptococcal <u>I</u> nfections
PEEP (“peep”)	<u>p</u> ositive <u>e</u> nd- <u>e</u> xpiratory <u>p</u> ressure
PEG (“peg”)	<u>p</u> ercutaneous <u>e</u> ndoscopic <u>g</u> astrostomy
PERRLA (PĔR-lă)	<u>p</u> upils <u>e</u> qual, <u>r</u> ound, <u>r</u> eactive to <u>l</u> ight and <u>a</u> ccommodation
PET (“pet”)	<u>p</u> ositron <u>e</u> mission <u>t</u> omography
PICU (PĪK-yū)	<u>p</u> ediatric <u>i</u> ntensive <u>c</u> are <u>u</u> nit
PIP (“pip”)	<u>p</u> roximal <u>i</u> nterphalangeal (joint)
PUVA (poo-vă)	<u>p</u> сорalen <u>u</u> ltraviolet <u>A</u>
REM (rěm)	<u>r</u> apid <u>e</u> ye <u>m</u> ovement
SAD (“sad”)	<u>s</u> easonal <u>a</u> ffective <u>d</u> isorder
SARS (sahrz)	<u>s</u> evere <u>a</u> cute <u>r</u> espiratory <u>s</u> yndrome
SERM (sěrm)	<u>s</u> elective <u>e</u> strogen <u>r</u> eceptor <u>m</u> odulator
SIDS (sidz)	<u>s</u> udden <u>i</u> nfant <u>d</u> eath <u>s</u> yndrome
SIRS (sěrz)	<u>s</u> ystemic <u>i</u> nflammatory <u>r</u> esponse <u>s</u> yndrome

SMAC (“smack”)	<u>s</u> equential <u>m</u> ultiple <u>a</u> nalyzer <u>c</u> omputer (blood testing)
SOAP (“soap”)	<u>s</u> ubjective, <u>o</u> bjective, <u>a</u> ssessment, <u>p</u> lan
SPECT (spěkt)	<u>s</u> ingle <u>p</u> hoton <u>e</u> mission <u>c</u> omputed <u>t</u> omography
TENS (těnz)	<u>t</u> ranscutaneous <u>e</u> lectrical <u>n</u> erve <u>s</u> timulation
TRUS (“truss”)	<u>t</u> rans <u>r</u> ectal <u>u</u> ltrasound
TURP (tüerp)	<u>t</u> rans <u>u</u> rethral <u>r</u> esection of the <u>p</u> rostate
VATS (vätz)	<u>v</u> ideo- <u>a</u> ssisted <u>t</u> horacic <u>s</u> urgery

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EPONYMS*

An *eponym* is a designation for a disorder, structure, or other medical entity derived from a person or place.

Achilles tendon
(Achilles, Greek
mythological hero)

This tendon connects the calf muscles to the heel. It lies at the only part of Achilles' body that was still vulnerable after his mother dipped him as an infant into the river Styx, when she held him by the heel.

Alzheimer disease
(Alois Alzheimer,
MD, German
neurologist,
1864–1915)

Progressive mental deterioration marked by confusion, memory failure, and disorientation.

Apgar score
(Virginia Apgar, MD,
American
anesthesiologist,
1909–1974)

Evaluation of an infant's physical condition, usually performed 1 minute and then 5 minutes after birth. Highest score is 10. An Apgar rating of 9/10 is a score of 9 at 1 minute and 10 at 5 minutes.

*From Chabner DE: *The Language of Medicine*, 11th ed. St Louis, Elsevier/Saunders, 2017.

Asperger syndrome (Hans Asperger, Austrian psychiatrist, 1906–1980)	A developmental disorder characterized by impairment of social interactions (resembling autism) but lacking in delays in language development and mental functioning.
Barrett esophagus (Norman Barrett, English physician, 1903–1979)	The lining of the esophagus is damaged by acid reflux and may be a precancerous condition.
Bell palsy (Charles Bell, Scottish surgeon, 1774–1842)	Unilateral (one-sided) paralysis of the facial nerve.
Burkitt lymphoma (Denis Burkitt, English surgeon in Africa, 1911–1993)	Malignant tumor of lymph nodes; chiefly seen in central Africa. The Epstein-Barr virus is associated with this lymphoma.
Cheyne-Stokes respiration (John Cheyne, Scottish physician, 1777–1836; William Stokes, Irish physician 1804–1878)	Abnormal pattern of respirations with alternating periods of stoppage of breathing and deep, rapid breathing.
Colles fracture (Abraham Colles, Irish surgeon, 1773–1843)	A break (fracture) of the radius (outer forearm bone) near the wrist.

Crohn disease (Burrill B. Crohn, American physician, 1884–1983)	Chronic inflammatory bowel disease of unknown origin; usually affecting the ileum (last part of the small intestine), colon, or any part of the gastrointestinal tract.
Cushing syndrome (Harvey W. Cushing, American surgeon, 1869–1939)	A disorder resulting from chronic, excessive production of cortisol from the adrenal cortex. It can also result from administration of glucocorticoids (cortisone) in large doses for long periods of time.
Duchenne muscular dystrophy (Guillaume Benjamin Amand Duchenne, French neurologist, 1806–1875)	Abnormal, inherited condition marked by progressive hardening of muscles in the legs and hips (pelvis) beginning in infancy.
Epstein-Barr virus (Michael A. Epstein, English pathologist, born 1921; Yvonne M. Barr, English virologist, born 1932)	The herpesvirus that causes infectious mononucleosis and is associated with malignant conditions such as nose and throat cancer, Burkitt lymphoma, and Hodgkin disease.
eustachian tube (Bartolomeo Eustachi, Italian anatomist, 1524–1574)	Anatomic passageway that joins the throat and the middle ear cavity.

Ewing sarcoma (James Ewing, American pathologist, 1866–1943)	Malignant tumor that develops from bone marrow, usually in long bones or the hip (pelvis).
fallopian tube (Gabriele Falloppio, Italian anatomist, 1523–1562)	One of a pair of tubes or ducts leading from the ovary to the upper portion of the uterus.
Foley catheter (Frederic Foley, American physician, 1891–1966)	Rubber tube that is placed in the urethra to provide drainage of urine.
<i>Giardia</i> (Alfred Giardia, French biologist, 1846–1908)	One-celled organism (protozoan) that causes gastrointestinal infection with diarrhea, abdominal cramps, and weight loss. Cause of infection is usually fecally contaminated water.
Hodgkin lymphoma (Thomas Hodgkin, English physician, 1798–1866)	Malignant tumor of the lymph nodes.
Huntington disease (George S. Huntington, American physician, 1851–1916)	Rare, hereditary condition marked by chronic, progressively worsening dance-like movements (chorea) and mental deterioration, resulting in dementia.

Kaposi sarcoma (Moritz Kaposi, Austrian dermatologist, 1837–1902)	Malignant neoplasm of cells that line blood and lymph vessels. Soft brownish or purple papules appear on the skin. The tumor can metastasize to lymph nodes and internal organs. It is often associated with AIDS.
Marfan syndrome (Bernard-Jean A. Marfan, French pediatrician, 1858–1942)	Hereditary condition that affects bones, muscles, the cardiovascular system (leading to aneurysms), and eyes (lens dislocation). Affected people have overlong extremities with “spider-like” fingers (arachnodactyly), underdeveloped muscles, and easily movable joints.
Meniere disease (Prosper Ménière, French physician, 1799–1862)	Chronic disease of the inner ear with recurrent episodes of dizziness (vertigo), hearing loss, and ringing in the ears (tinnitus).
<i>Neisseria gonorrhoeae</i> (Albert L. S. Neisser, Polish dermatologist, 1855–1916)	A type of bacterium that causes gonorrhea (a sexually transmitted disease).

Paget disease (James Paget, English surgeon, 1814–1899)	Disease of bone, often affecting middle-aged or elderly people; marked by bone destruction and poor bone repair.
Pap test (George Papanicolaou, Greek physician in the United States, 1883–1962)	Method of examining stained cells obtained from the cervix and vagina. It is a common way to detect cervical cancer.
Parkinson disease (James Parkinson, English physician, 1755–1824)	Slowly progressive degenerative neurologic disorder marked by tremors, mask-like facial appearance, shuffling gait (manner of walking), and muscle rigidity and weakness.
Raynaud phenomenon (Maurice Raynaud, French physician, 1834–1881)	Intermittent attacks of loss of blood flow (ischemia) of the extremities of the body (fingers, toes, ears, and nose). Episodes most often are caused by exposure to cold.
Reye syndrome (R. Douglas Reye, Austrian pathologist, 1912–1978)	Acute brain disease (encephalopathy) and disease of internal organs following an acute viral infection.
Rinne test (Heinrich A. Rinne, German otologist, 1819–1868)	Hearing test using a vibrating tuning fork placed against a bone behind the patient's ear (mastoid bone).

Rorschach test (Herman Rorschach, Swiss psychiatrist, 1884–1922)	Personality test based on a patient's interpretation of 10 standard ink blots.
<i>Salmonella</i> (Daniel E. Salmon, American pathologist, 1850–1914)	Type of bacteria (rod-shaped) that causes typhoid fever and types of gastroenteritis (inflammation of the stomach and intestines).
<i>Shigella</i> (Kiyoshi Shiga, Japanese bacteriologist, 1870–1957)	Type of bacteria that causes severe infectious gastroenteritis (inflammation of stomach and intestines) and dysentery (diarrhea, abdominal pain, and fever).
Sjögren syndrome (Heinrik S.C. Sjögren, Swedish ophthalmologist, 1899–1986)	Abnormal dryness of the mouth, eyes, and mucous membranes, caused by deficient fluid production. It is a disorder of the immune system.
Snellen test (Herman Snellen, Dutch ophthalmologist, 1834–1908)	Test of visual clarity (acuity) using a special chart. Letters, numbers, or symbols are arranged on the chart in decreasing size from top to bottom.

Tay-Sachs disease (Warren Tay, English ophthalmologist, 1843–1927; Bernard Sachs, American neurologist, 1858–1944)	Inherited disorder of nerve degeneration caused by deficiency of an enzyme. Most affected children die between the ages of 2 and 4 years.
Tourette syndrome (Georges Gilles de la Tourette, French neurologist, 1857–1927)	Condition marked by abnormal facial grimaces, inappropriate speech, and involuntary movements of eyes, arms, and shoulders (tics).
von Willebrand disease (Erick A. von Willebrand, Finnish physician, 1870–1949)	Inherited blood disorder marked by abnormally slow blood clotting; caused by deficiency in a blood clotting factor (factor VIII).
Weber tuning fork test (Hermann D. Weber, English physician, 1823–1918)	Test of hearing using a vibrating tuning fork with the stem placed in the center of the patient's forehead.
Whipple procedure (Allen O. Whipple, American surgeon, 1881–1963)	A surgical procedure to remove a portion of the pancreas and the stomach and the entire first part of the small intestine (duodenum). Used in the treatment of pancreatic cancer and other conditions.
Wilms tumor (Max Wilms, German surgeon, 1867–1918)	Malignant tumor of the kidney occurring in young children.



SYMBOLS*

=	equals
≠	does not equal
+	positive
-	negative
↑	above, increase
↓	below, decrease
♀	female
♂	male
→	to (in direction of)
>	is greater than; better to write out than to use symbol
<	is less than; better to write out than to use symbol
1°	primary to
2°	secondary to
℥	dram
℥	ounce

*From Chabner DE: *The Language of Medicine*, 11th ed. St Louis, Elsevier/Saunders, 2017.

%	percent
°	degree; hour
:	ratio; “is to”
±	plus or minus (either positive or negative)
′	foot
″	inch
∴	therefore
@	at, each
̄	with
̄	without
#	pound; number
≅	approximately equals, is about
Δ	change
p	short arm of a chromosome
q	long arm of a chromosome



PLURALS*

The rules commonly used to form plurals of medical terms are as follows:

1. For words ending in **a**, retain the **a** and add **e**.

Examples:

SINGULAR

bullā

bursā

vertebrā

PLURAL

bullae

bursae

vertebrae

2. For words ending in **is**, drop the **is** and add **es**.

Examples:

SINGULAR

anastomosis

epiphysis

metastasis

prosthesis

pubis

PLURAL

anastomoses

epiphyses

metastases

prostheses

pubes

3. For words ending in **ex** and **ix**, drop the **ex** or **ix** and add **ices**.

Examples:

SINGULAR

apex

varix

PLURAL

apices

varices

*From Chabner DE: *The Language of Medicine*, 11th ed. St Louis, Elsevier/Saunders, 2017.

4. For words ending in **on**, drop the **on** and add **a**.

Examples:

SINGULAR	PLURAL
ganglion	ganglia
spermatozoon	spermatozoa

5. For words ending in **um**, drop the **um** and add **a**.

Examples:

SINGULAR	PLURAL
bacterium	bacteria
diverticulum	diverticula
ovum	ova

6. For words ending in **us**, drop the **us** and add **i**.

Examples:

SINGULAR	PLURAL
bronchus	bronchi
calculus	calculi
nucleus	nuclei

Two exceptions to this rule are viruses and sinuses.

7. Additional rules are used to form plurals in other word families.

Examples:

SINGULAR	PLURAL
anomaly	anomal <u>ies</u>
biopsy	biops <u>ies</u>
fem <u>ur</u>	fem <u>ora</u>
foram <u>en</u>	foram <u>ina</u>
ir <u>is</u>	irid <u>es</u>
phalan <u>x</u>	phalang <u>es</u>
thorax	thorac <u>es</u>

Pronunciations for plural terms as well as other terms can be found on the Evolve website.



MEDICAL TERMS EASILY CONFUSED

Health care professionals who have difficulty with the English language may face particular challenges with terms commonly used in the health care setting. The unique application of words with very specific meanings may be a source of confusion.

The words and phrases in the following list have been identified as frequently causing problems because of similarities in pronunciation or spelling. Entries are presented in pairs or in groups of three or four terms, as appropriate, so that the reader may compare and contrast spellings and definitions of similar-sounding or similar-appearing words and phrases.

TERM	DEFINITION
abduction	moving away from (often dictated as “A-B-DUC-tion”)
adduction	moving toward (often dictated as “A-D-DUC-tion”)
absorption	taking up or in of a substance
adsorption	attracting and holding substances at the surface
acetic	sour (as vinegar or acetic acid)
acidic	pertaining to an acid; acid-forming

TERM	DEFINITION
afferent efferent	carrying toward a center carrying away from a center
alkalosis	increased alkalinity of blood and tissues
ankylosis	condition of joint stiffening or immobilization
amy/o my/o	starch muscle
an- an/o	no, not, without anus
ante- anti-	before; in front of against
anuresis	retention of urine in the bladder (“condition without urine”)
enuresis	involuntary discharge of urine; bed-wetting
aphagia aphakia	inability to swallow absence of the lens of the eye (as after extraction of a cataract)
aphasia	inability to speak or inability to comprehend spoken or written language
aplasia	lack of development of an organ or tissue
arteri/o arthr/o ather/o	artery joint plaque (fatty substance)
acidic	pertaining to an acid; acid forming
ascitic	pertaining to fluid accumulation in the abdomen (ascites)
asthenic	pertaining to a lack or loss of energy

TERM	DEFINITION
aura	sensation that precedes a seizure
aural	pertaining to the ear
oral	pertaining to the mouth
auxiliary	giving assistance or support
axillary	pertaining to the armpit
bisect	cut in half
resect	cut out (remove)
transect	cut across
dissect	cut apart or separate
blephar/o	eyelid
phleb/o	vein
bolus	single large mass or quantity of drug or medication that is administered orally or intravenously
bullous	pertaining to bullae (large blisters)
brachi/o	arm
bronch/o	bronchial tube
caliber	diameter of a canal or tube; diameter of a bullet
calipers	instrument used to measure thickness or diameter of a solid
callous	hard (as the nature of a callus)
callus	toughened, hard area of skin that has been exposed to friction; network of woven bone formed at the ends of a broken bone
canker sore	ulceration on the mucous membrane of the mouth
chancre	primary lesion of syphilis

TERM	DEFINITION
carotid	artery of the neck
parotid	salivary gland near the ear
cecal	pertaining to the cecum (first part of the colon)
fecal	pertaining to feces (solid wastes)
thecal	pertaining to a sheath or enclosing case
-centesis	surgical puncture to remove fluid
-cyesis	pregnancy
-genesis	producing or forming
cerebellum	posterior portion of the brain (responsible for balance)
cerebrum	largest part of the brain (responsible for thought, memory, sensations, speech, vision, movement)
chol/e	bile; gall
col/o	colon
cholic	pertaining to bile
colic	pertaining to acute pain
chron/o	time
coron/o	heart
cirrhal	pertaining to cirrhosis (liver disease)
serosal	pertaining to a serosa (thin membranous covering)
scirrhal	pertaining to hard mass or tumor
serous	pertaining to serum (clear portion of blood minus cells and clotting proteins)
cirrhosis	liver disease
xerosis	condition of dryness

TERM	DEFINITION
CNS C&S	central nervous system culture and sensitivity
coccyx -cocci	tailbone berry-shaped bacteria
creatine creatinine	high-energy phosphate compound present in muscle nitrogenous waste product excreted in urine
cyst/o cyt/o	urinary bladder cell
cytotoxin Cytosan	a poison (toxin) or an antibody with a toxic effect on cells drug used in chemotherapy
diverticulitis diverticulosis	inflammation of diverticula abnormal condition of presence of diverticula
diarrhea diuresis	abnormally frequent and loose bowel movements excretion of abnormally large quantity of urine
-dipsia -pepsia	thirst digestion
dysphagia dysphasia dysplasia	difficulty in swallowing difficulty in speaking abnormal formation (development)
-emia -penia -pnea	blood condition deficiency breathing

TERM	DEFINITION
endemic	indigenous to a geographic area or population
epidemic	affecting large numbers of people at the same time
pandemic	affecting the population of a country, a people, or the world
esotropia	inward turning of the eye; cross-eye
exotropia	outward turning of the eye; wall-eye
facial	pertaining to the face
fascial	pertaining to fascia (connective tissue)
faucial	pertaining to the passageway from the mouth to the pharynx
fovea	cup-shaped pit or depression (central section of the retina of the eye)
phobia	persistent, irrational, intense fear
glands	groups of cells specialized to function as secretory or excretory structures
glans	a small, rounded structure, as the glans penis (tip of the organ)
graft	tissue implanted from one place to another
graph	instrument to record data
hematoma	collection of blood (bruise)
hepatoma	malignant tumor of the liver

TERM	DEFINITION
hemodialysis	process by which an artificial kidney machine filters waste from blood
hemolysis	destruction of red blood cells
hemostasis homeostasis	stopping the flow of blood maintaining a constant environment
hyper- hypo-	too much too little
ileac iliac	ileus (intestinal obstruction) pertaining to the upper portion of the hip bone (ilium)
ileum ilium ileus	third part of small intestine superior portion of hip bone obstruction of the intestine
inter- infra- intra-	between below, beneath within
in vitro in vivo	within a test tube (“in glass”) within a living organism
labial labile	pertaining to a lip or lip-like structure unstable; gliding from point to point
larynx pharynx	voice box throat
lice lyse	parasites (singular is <i>louse</i>) to cause disintegration of a substance
mal- -malacia malaise	bad softening bodily discomfort

TERM	DEFINITION
malleolus	bony prominence on either side of the ankle joint
malleus	small bone in the middle portion of the ear
mammoplasty manoplasty	surgical repair of the breast plastic surgery of the hand
meiosis	type of cell division in which gametes or sex cells (egg and sperm) are formed
miosis	contraction of the pupil of the eye
mitosis	type of cell division resulting in the formation of identical daughter cells
mycosis	abnormal condition of fungi in the body (mold or yeast infection)
miotic	drug that causes contraction of the pupil of the eye
myopic	pertaining to being nearsighted (myopia)
menorrhagia	excessive uterine bleeding during menstruation
metrorrhagia	abnormal uterine bleeding not during menstruation
menometrorrhagia	excessive uterine bleeding both during menstruation and at other times
mucous	pertaining to or resembling mucus (adjective)
mucus	secretion from mucous membranes (noun)
myel/o pyel/o	bone marrow or spinal cord renal pelvis

TERM	DEFINITION
myeloma	malignant tumor of the bone marrow
myoma	benign tumor of muscle
my/o	muscle
myx/o	mucus
necr/o	death
nephr/o	kidney
odont/o	tooth
orth/o	straight
or/o	mouth
ox/o	oxygen
palmar	pertaining to the palm of the hand
plantar	pertaining to the sole of the foot
palpable	able to be felt with a hand
palpebral	pertaining to the eyelid
palpation	touching, feeling, or examination with hands and fingers
palpitation	rapid pulsation of the heart
-penia	deficiency
-pnea	breathing
per-	through
peri-	surrounding
perineal	pertaining to the perineum (genital area in female and male)
peritoneal	pertaining to the peritoneum (membrane surrounding the abdominal organs)
peroneal	pertaining to the fibula (smaller of two lower leg bones)

TERM	DEFINITION
-pheresis	removal of blood from a donor with a portion separated and retained and the remainder reinfused into the donor; apheresis
-phoresis	indicating transmission (as in <i>electrophoresis</i> —transmission of electricity to separate substances)
pleural	pertaining to pleura (membrane surrounding lungs)
plural	more than one
pleuritis	inflammation of the pleura
pruritus	itching
prostate	gland at the base of the urinary bladder in males
prostrate	in a horizontal position; lying down
prostatic	pertaining to the prostate gland
prosthetic	pertaining to an artificial device or prosthesis (replacement of a body part)
-ptosis	droop, sag, prolapse
-ptysis	spitting
py/o	pus
pylor/o	pylorus (distal end of the stomach)
pyel/o	renal pelvis
sacr/o	sacrum
sarc/o	flesh tissue
-sclerosis	hardening
-stenosis	narrowing

TERM	DEFINITION
symphysis synthesis	fusion between two bones combining two parts to make something new
trache/o thorac/o	windpipe; trachea chest
ureter	one of two tubes, each leading from a kidney to the urinary bladder
urethra	tube leading from the urinary bladder to the outside of the body
uvula	small grape-like structure hanging from soft palate
vulva	external female genitalia
valvul/o volvulus	valve abnormal twisting of the intestine
vesical	pertaining to the urinary bladder
vesicle	a small blister

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SPECIALIZED TERMS USED IN MEDICAL RECORDS*

The American Health Information Management Association has identified a group of terms used to compile statistical health care data and has defined them in an attempt at standardization. Some of these terms are presented in the following list, to highlight the importance of using standardized terms for research initiatives and the reporting of statistical data. The definitions are essentially those used by the American Health Information Management Association (some of the terms have multiple meanings, not provided here). *A Glossary of Health Care Terms*, a complete list of terms and definitions used in medical records, is available from the American Health Information Management Association, 919 N. Michigan Ave., Suite 1400, Chicago, IL, 60611.

ADJUNCT DIAGNOSTIC or THERAPEUTIC UNIT (ANCILLARY UNIT): An organized unit of a hospital, other than the operating room, delivery room, or medical care unit, with facilities and personnel to aid physicians in the diagnosis and treatment of patients through the performance of diagnostic or therapeutic procedures.

*From *Miller-Keane Encyclopedia and Dictionary of Medicine, Nursing, and Allied Health*, 7th ed., revised reprint. Philadelphia: Saunders; 2005.

CLINICAL (MEDICAL) HISTORY: An account of all medical events and problems a person has experienced.

COMPLICATION: An additional diagnosis that describes a condition arising after the beginning of hospital observation and treatment and modifying the course of the patient's illness or the medical care required.

DELIVERY ROOM: A special operating room for obstetric delivery and infant resuscitation.

DIAGNOSIS: A word or phrase used by a physician to identify a disease that affects an individual patient or a condition for which a patient needs, seeks, or receives medical care.

DISCHARGE DIAGNOSIS: Any one of the diagnoses recorded after all data accumulated in the course of a patient's hospitalization or other circumscribed episode of medical care have been studied.

DISCHARGE DIAGNOSES (LIST OF DISCHARGE DIAGNOSES): The complete set or list of discharge diagnoses applicable to a single patient experience, such as inpatient hospitalization.

ELECTRONIC HEALTH RECORD (EHR): A collection of patient and population electronically-stored health information. These records are shared across different health care settings. Also known as an electronic medical record (EMR).

FACILITY: Those objects, including plant, equipment, or supplies, necessary for implementation of services by personnel.

HOSPITAL: Health care institution with an organized and professional staff and with inpatient beds available around the clock; with the primary function of providing inpatient medical, nursing, and other health-related services to patients for both surgical and nonsurgical conditions; and that usually provides some outpatient services, particularly emergency care. For licensure purposes, each state has its own definition of *hospital*.

HOSPITAL BOARDER: An individual who receives lodging in the hospital but is not a hospital inpatient.

HOSPITAL INPATIENT: A hospital patient who is provided with room, board, and continuous general nursing service in an area of the hospital where patients generally stay at least overnight.

HOSPITAL INPATIENT BEDS: Accommodations with supporting services (such as food, laundry, and housekeeping) for hospital inpatients, excluding those for the newborn nursery.

HOSPITAL NEWBORN BASSINETS: Accommodations with supporting services (such as food, laundry, and housekeeping) for hospital newborn inpatients. These include bassinets, incubators, and Isolettes in the newborn nursery.

HOSPITAL NEWBORN INPATIENT: A hospital patient who was born in the hospital at the beginning of his or her current inpatient hospitalization.

HOSPITAL PATIENT: An individual receiving, in person, hospital-based or hospital-coordinated medical services for which the hospital is responsible.

MEDICAL CARE UNIT: An assemblage of inpatient beds (or newborn bassinets) and related facilities and assigned personnel in which medical services are provided to a defined and limited class of patients according to their particular medical care needs.

MEDICAL SERVICES: The activities related to medical care performed by physicians, nurses, and other professional and technical personnel under the direction of a physician.

MEDICAL STAFF UNIT: One of the departments, divisions, or specialties into which the organized medical staff of a hospital is divided to fulfill medical staff responsibility.

MOST SIGNIFICANT DIAGNOSIS: The one diagnosis, often but not necessarily the principal diagnosis, that describes the most important or significant condition of a patient in terms of its implications for his or her health, medical care, and use of the hospital.

OPERATING ROOM: An area of a hospital equipped and staffed to provide facilities and personnel services for the performance of surgical procedures.


OTHER DIAGNOSIS: A diagnosis, other than the principal diagnosis, that describes a condition for which a patient receives treatment or for which the physician considers of sufficient significance to warrant inclusion for investigative medical studies.

PATHOLOGIC DIAGNOSIS: Determination of disease, sometimes postmortem, made from an anatomic or histologic study of the abnormal tissues present.

PRINCIPAL DIAGNOSIS: The diagnosis of the condition established after study, chiefly responsible for occasioning the admission of the patient to the hospital for care.

SPECIAL CARE UNIT: A medical care unit in which there is appropriate equipment and a concentration of physicians, nurses, and others who have special skills and experience to provide optimal medical care for critically ill patients, or continuous care of patients in special diagnostic categories.

UNIT: An organizational entity of a hospital. Hospitals are organized both physically and functionally into units.



DEFINITIONS OF DIAGNOSTIC TESTS AND PROCEDURES*

RADIOLOGY, ULTRASOUND, AND OTHER IMAGING PROCEDURES

In many of the following procedures, a *contrast* substance (sometimes referred to as a *dye*) is introduced into the bloodstream, the gastrointestinal tract, or spinal cord so that a body part can be viewed while x-ray pictures are taken. The contrast substance (often containing barium or iodine) blocks the transmission of the x-ray and appears dense on the x-ray image. It outlines the body part that it fills.

The suffix -GRAPHY, meaning process of recording, is used in many terms describing imaging procedures. The suffix -GRAM, meaning a record, also is used and describes the actual image that is produced by this procedure.

Pronunciation of each term is given with its meaning. The syllable that gets the accent is in CAPITAL LETTERS. *Italicized* terms indicate important additional terminology, and terms in SMALL CAPITAL LETTERS are defined elsewhere in this appendix.

ANGIOGRAPHY (an-je-OG-rah-fe) or ANGIOGRAM (AN-je-o-gram): X-ray imaging of blood vessels. A

*From Chabner DE: *Medical Terminology: A Short Course*, 7th ed. St Louis, Elsevier, 2015.

contrast substance is injected into a blood vessel (vein or artery), and x-ray images are taken of the vessel. In *cerebral angiography*, x-ray images show blood vessels in the brain. In *coronary angiography*, x-rays detect abnormalities in vessels that bring blood to the heart. Angiograms can detect blockage by clots, cholesterol plaques, or tumors or aneurysms (ballooning or dilating of the vessel wall). Angiography is performed frequently to view arteries and is often used interchangeably with *arteriography*. It is also used to view veins (*venography*), to detect blood clots or pulmonary emboli.

ARTERIOGRAPHY (ar-teer-e-OG-rah-fe) or ARTERIOGRAM (ar-TEER-e-oh-gram): X-ray recording of an artery and its branches after injection of a contrast substance into an artery. *Coronary arteriography* is the visualization of arteries that travel across the outer surface of the heart and bring blood to the heart muscle.

ARTHROGRAPHY (arth-ROG-rah-fe): X-ray examination of the inside of a joint with a contrast medium.

BARIUM ENEMA: See LOWER GASTROINTESTINAL EXAMINATION and BARIUM TESTS.

BARIUM SWALLOW: See ESOPHAGOGRAPHY, BARIUM TESTS, and UPPER GASTROINTESTINAL EXAMINATION.

BARIUM TESTS (BAH-re-um tests): X-ray examinations with a liquid barium mixture that is swallowed or given by enema to outline the surface of the gastrointestinal tract. These studies may locate disorders in the esophagus (*esophagogram*), duodenum, small intestine (*small bowel follow-through*), or colon (*barium enema*). Taken before or during the examination, barium causes the intestinal tract to stand out in silhouette when viewed through a *fluoroscope* (see FLUOROSCOPY) or seen on an x-ray film. The *barium swallow* is used to examine the upper gastrointestinal tract, and the *barium enema* is for examination of the lower gastrointestinal tract. These tests are complemented by ENDOSCOPY.

BONE DENSITY SCAN (bone DEN-sih-te scan): Low-energy x-rays are used for this study, which measures

bone thickness and reveals areas of bone deficiency (*osteopenia*) and *osteoporosis* (bones become thinner, more fragile, and likely to break). This study is most often performed on the lower spine or hips. Also called *bone densitometry* or *DEXA* (dual-energy x-ray absorptiometry).

CARDIAC CATHETERIZATION (KAR-de-ak kath-eh-ter-ih-ZA-shun): Procedure in which a catheter (tube) is passed via vein or artery into the chambers of the heart to measure the blood flow out of the heart and the pressures and oxygen content in the heart chambers. Contrast material is also introduced into heart chambers, and x-ray pictures are taken to show heart and heart valve structure.

CEREBRAL ANGIOGRAPHY: See ANGIOGRAPHY.

CHEST X-RAY: An x-ray image of the chest wall, lungs, and heart. It may show infection (as in pneumonia or tuberculosis), emphysema, damage due to occupational exposure (asbestosis), lung tumors, fluid accumulation (PLEURAL EFFUSION), or heart enlargement. Also called *chest film* (or *chest x-ray film*) and *chest radiograph*.

CHOLANGIOGRAPHY (ko-lan-je-OG-rah-fe) or Cholangiogram (ko-LAN-je-o-gram): X-ray recording or record of bile ducts. Contrast material is given by intravenous injection (*IV cholangiogram*) and collects in the gallbladder and bile ducts. Also, contrast can be introduced (through the skin) using a percutaneously placed needle inserted into an intrahepatic duct (*percutaneous transhepatic cholangiography*). X-ray images of bile ducts are obtained to identify obstructions caused by tumors or stones. This procedure has largely been replaced by COMPUTED TOMOGRAPHY and MAGNETIC RESONANCE IMAGING, and by ULTRASONOGRAPHY for stones.

COMPUTED TOMOGRAPHY (kom-PU-ted to-MOG-rah-fe) or CT AND CT SCAN: X-ray examination that shows images of the body in cross-section. Contrast material may be used (injected into the bloodstream) to highlight structures such as the liver, brain, or blood vessels, and barium can be

swallowed to outline gastrointestinal organs. X-ray images, obtained as the x-ray tube rotates (helical CT) around the body, are processed by a computer to show “slices” of body tissues, most often within the head, chest, and abdomen.

CORONARY ARTERIOGRAPHY: See ARTERIOGRAPHY.

CYSTOGRAPHY (sis-TOG-rah-fe) or CYSTOGRAM (SIS-to-gram): X-ray recording of the urinary bladder with a contrast medium so that the outline of the urinary bladder can be seen clearly. A contrast substance is injected via catheter into the urethra and urinary bladder, and x-ray images are made. A *voiding cystourethrogram* is an x-ray image of the urinary tract made while the patient is urinating.

DIGITAL SUBTRACTION ANGIOGRAPHY (DIJ-ih-tal sub-TRAK-shun an-je-OG-rah-fe): A unique x-ray technique for viewing blood vessels by taking two images and subtracting one from the other. Images are first obtained without contrast material and then again after contrast is injected into blood vessels. The first image is then subtracted from the second so that the final image (sharp and precise) shows only contrast-filled blood vessels and not the surrounding tissue.

DOPPLER ULTRASOUND (DOP-ler UL-trah-sound): Technique that focuses sound waves on blood vessels and measures blood flow as echoes bounce off of red blood cells. Arteries or veins in the arms, neck, legs, or abdomen are examined to detect vessels that are occluded (blocked) by clots or atherosclerosis.

ECHOCARDIOGRAPHY (eh-ko-kar-de-OG-rah-fe) or ECHOCARDIOGRAM (eh-ko-KAR-de-o-gram): Imaging of the heart by introducing high-frequency sound waves through the chest into the heart. The sound waves are reflected back from the heart, and echoes showing heart structure are displayed on a recording machine. It is a highly useful diagnostic tool in the evaluation of diseases of the valves that separate the heart chambers and diseases of the heart muscle.

ENDOSCOPIC RETROGRADE CHOLANGIOPANCREATOGRAPHY or ERCP (en-do-SKOP-ik REH-tro-grayd kol-an-je-o-pan-kre-ah-TOG-rah-fe): X-ray recording of the bile ducts, pancreas, and pancreatic duct using radiopaque contrast injected through an endoscope, passed through the mouth, esophagus, and duodenum into the bile and pancreatic ducts, and x-ray images are then obtained.

ENDOSCOPIC ULTRASONOGRAPHY or E-US (en-do-SKOP-ik ul-trah-so-NOG-rah-fe): Sound waves are generated from a tube inserted through the mouth and into the esophagus. The sound waves bounce off of internal structures and are detected by surface coils. This study can detect enlarged cancerous lymph nodes and tumors in the chest and upper abdomen. This procedure is used for *staging* (evaluation of size and spread) of gastric and esophageal tumors.

ESOPHAGOGRAPHY (eh-sof-ah-GOG-rah-fe) or ESOPHAGOGRAM (eh-SOF-ah-go-gram): X-ray recording or record of the esophagus performed after barium sulfate is swallowed. This test is part of a BARIUM SWALLOW and UPPER GASTROINTESTINAL EXAMINATION.

FLUOROSCOPY (flur-OS-ko-pe): An x-ray examination that uses a fluorescent screen rather than a photographic plate to show images of the body in motion. X-rays that have passed through the body strike a screen covered with a fluorescent substance that emits yellow-green light. Internal organs are seen directly (still images are stored either on film or on a computer as digital images) and in motion. Fluoroscopy is used to guide the insertion of catheters and to direct organ biopsy and may be enhanced with barium ingestion. CT-guided biopsy is used most often now.

GALLBLADDER ULTRASOUND (GAWL-blah-der UL-trah-sownd): Sound waves are used to visualize gallstones. This procedure has replaced the x-ray test, known as *cholecystography*.

HYSTEOSALPINGOGRAPHY (**his-ter-o-sal-ping-OG-rah-fe**) or **HYSTEOSALPINGOGRAM** (**his-ter-o-sal-PING-o-gram**): X-ray recording or record of the uterus and fallopian tubes. Contrast material is inserted through the vagina into the uterus and fallopian tubes, and x-ray images are obtained to detect blockage or tumor.

INTRAVENOUS PYELOGRAPHY: See UROGRAPHY.

KIDNEYS, URETERS, BLADDER (**KID-nee-z, UR-eh-terz, BLAH-der**) or **KUB:** X-ray images of the kidney, ureters, and urinary bladder, made without contrast material.

LOWER GASTROINTESTINAL EXAMINATION (**LO-wer gas-tro-in-TES-tin-al ek-zam-ih-NA-shun**): X-ray pictures of the colon taken after a liquid contrast substance, called *barium sulfate*, is inserted through a plastic tube (enema) into the rectum and large intestine (colon). If a tumor is present in the colon, it may appear as an obstruction or irregularity. Also known as a **BARIUM ENEMA**.

MAGNETIC RESONANCE IMAGING or MRI (**mag-NET-ik REZ-o-nans IM-ah-jing**): A powerful magnetic field is created surrounding the whole patient, or only the head, and water molecules are aligned and then relaxed, generating electromagnetic currents that provide a detailed picture of organs and blood vessels. A computer produces images of body structures at successive depths (as with CT slices). This procedure is particularly useful for imaging tumors of the brain and spinal cord and abnormalities of the lungs and abdominal and pelvic organs. No x-rays are used, and the study may be performed with intravenous contrast material (gadolinium), depending on the purpose of the evaluation. In *magnetic resonance angiography* (*MRA* or *MR angiography*), blood vessels are examined in key areas of the body such as the brain, kidneys, pelvis, legs, lungs, and heart.

MAMMOGRAPHY (**mah-MOG-rah-fe**) or **MAMMOGRAM** (**MAM-o-gram**): X-ray recording or record of the breast. X-rays of low voltage are beamed at

the breast, and images are produced. Mammography detects abnormalities in breast tissue, such as breast cancer. In *stereotactic breast biopsy*, a hollow needle is passed through the skin into a suspicious lesion with the help of mammographic imaging. A specialized mammography machine uses intersecting coordinates to pinpoint an area of tissue (lesion) to be biopsied.

MYELOGRAPHY (mi-eh-LOG-rah-fe) or MYELOGRAM (MI-eh-lo-gram): X-ray recording of the spinal cord after injection of contrast. This procedure has been largely replaced by MRI for detecting tumors or ruptured “slipped” disks between vertebrae (backbones).

PULMONARY ANGIOGRAPHY (PUL-mo-nair-e an-je-OG-rah-fe): X-ray images of blood vessels of the lung are obtained after injection of contrast. This procedure has been largely replaced by COMPUTED TOMOGRAPHY.

PYELOGRAPHY or PYELOGRAM: See UROGRAPHY.

SMALL BOWEL FOLLOW-THROUGH: See BARIUM TESTS and UPPER GASTROINTESTINAL EXAMINATION.

SONOGRAPHY: See ULTRASONOGRAPHY.

TOMOGRAPHY (to-MOG-rah-fe) or TOMOGRAM (TO-mo-gram): X-ray recording or record that shows an organ in depth. Several pictures (“slices”) are taken of an organ by moving the x-ray tube and film in sequence to blur out certain regions and bring others into sharper focus. Tomograms of the kidney and lung are examples.

ULTRASONOGRAPHY (ul-trah-so-NOG-rah-fe) or ULTRASOUND IMAGING (UL-trah-sownd IM-a-jing): Images are produced by beaming high-frequency sound waves (not x-rays) into the body and capturing the echoes that bounce off of organs. These echoes are then processed to produce an image showing the difference between fluid and solid masses and the general position of organs. Because ultrasound images are captured in real time, they can show structure and movement of internal organs, as well as

blood flowing through blood vessels. Ultrasonography is particularly useful for detecting gallstones, fibroid tumors of the uterus and ovarian tumors and cysts (*pelvic ultrasonography*), enlargement of the heart or defects in heart valves (*echocardiography*), blood flow through major arteries and veins (*Doppler ultrasound*), and enlargement of lymph nodes in the abdomen and chest. Also called *sonography*.

UPPER GASTROINTESTINAL EXAMINATION

(UP-er gas-tro-in-TES-tin-al ek-zam-ih-NA-shun): X-ray pictures are taken of the esophagus (BARIUM SWALLOW), duodenum, and small intestine after a liquid contrast substance (barium sulfate) is swallowed. In a *small bowel follow-through*, pictures are taken at increasing time intervals to follow the progress of barium through the small intestine. Identification of obstructions or ulcers is possible.

UROGRAPHY (u-ROG-rah-fe) or UROGRAM (U-ro-

gram): X-ray recording of the kidney and urinary tract. If x-ray pictures are taken after contrast material is injected intravenously, the procedure is called *intravenous urography* (*descending* or *excretion urography*) or *intravenous pyelography* (IVP). If x-ray pictures are taken after introduction of contrast directly into the bladder through the urethra, the study is called a *cystogram*. If contrast flows up the ureters into the kidneys, the procedure is called *retrograde urography* or *retrograde pyelography*. Pyel/o means renal pelvis (the collecting chamber of the kidney).

NUCLEAR MEDICINE: RADIONUCLIDE SCANS

In the following diagnostic tests, radioactive material (*radionuclide* or *radioisotope*) is injected intravenously or inhaled and then detected with a scanning device in the organ in which it accumulates. X-rays, ultrasound waves, or magnetic waves are not used.

BONE SCAN: A radioactive substance (usually a TECHNETIUM isotope) is injected intravenously, and its uptake in bones is detected with a scanning device. Tumors in bone can be detected by increased uptake of the radioactive material in the areas of the lesions.

BRAIN SCAN: A radioactive substance is injected intravenously. It collects in any lesion that disturbs the natural barrier that exists between blood vessels and normal brain tissue (blood-brain barrier), allowing the radioactive substance to enter the brain tissue. A scanning device detects the presence of the radioactive substance and thus can identify an area of tumor, abscess, or hematoma. This procedure has largely been replaced by COMPUTED TOMOGRAPHY or MAGNETIC RESONANCE IMAGING.

GALLIUM SCAN (GAL-e-um scan): Radioactive gallium (gallium citrate) is injected into the bloodstream and is detected in the body with a scanning device that produces an image of the areas where gallium collects. Gallium accumulates in sites where cells are dividing, such as certain tumors and areas of inflammation.

MUGA SCAN (MUH-gah scan): Test that uses radioactive technetium to measure the rate of cardiac output of blood by a *multiple-gated acquisition* (MUGA) technique. Also called *technetium-99m ventriculography*.

POSITRON EMISSION TOMOGRAPHY or PET SCAN (POZ-ih-tron e-MISH-un to-MOG-rah-fe scan): A radioactive substance (usually an isotope incorporated into a sugar-like molecule) that releases radioactive particles called *positrons* is injected and travels to specialized areas of the body. Because of the way in which the positrons are released, cross-sectional color pictures can be made showing the location of the radioactive substance. The most common use for PET scans is to detect cancer and examine the effects of cancer therapy by showing biochemical changes in tumors. Tumors pick up the radioactive substance (isotope) and appear as “hot

spots” (areas of high glucose uptake) on the film. Also, PET scans can be performed on the heart to assess blood flow to heart muscle and to evaluate patients for coronary artery disease. PET scans of the brain are used to evaluate patients with memory disorders, seizure disorders, and brain tumors. Metabolically active parts of the brain appear as hot spots. *PET-CT* scans combine PET and CT imaging technology to aid localization of “hot” areas.

PULMONARY PERFUSION SCAN (PUL-mo-nair-e per-FU-shun scan): Radioactive particles are injected intravenously and travel rapidly to areas of the lung that are adequately filled with blood. Regions of obstructed blood flow caused by tumor, blood clot, swelling, and inflammation can be seen as nonradioactive areas on the scan.

PULMONARY VENTILATION SCAN (PUL-mo-nair-e ven-tih-LA-shun scan): Radioactive gas is inhaled, and a special camera detects its presence in the lungs. The scan is used to detect lung segments that fail to fill with the radioactive gas. Lack of filling is usually due to diseases that obstruct the bronchial tubes and air sacs. This scan is also used in the evaluation of lung function before surgery.

PULMONARY VENTILATION-PERFUSION SCAN or V/Q SCAN: Ventilation and perfusion scans are performed together. If ventilation is occurring in a segment that is not perfused, the mismatch implies a pulmonary embolism. When the scans match, abnormalities may reflect pneumonia or other lung disease.

TECHNETIUM TC-99M SESTAMIBI SCAN (tek-NE-she-um Tc-99m ses-tah-MIH-be scan): Sestamibi, tagged with technetium-99, is injected, and the radioactivity is not taken up in areas of decreased blood flow (ischemia). This procedure can be used with an *exercise tolerance test (ETT-MIBI)* to help define areas of poor blood flow to the heart muscle.

THALLIUM-201 SCINTIGRAPHY (THAL-e-um-201 sin-TIH-grah-fe): Thallium-201 is injected into

a vein, and images of blood flow through heart muscle are recorded. Cold spots correlate with areas of myocardial infarction. *Sestamibi scans* also are used to assess the status of blood flow through heart muscle during an *exercise tolerance test (ETT-MIBI)*. It also is useful in localizing disease of the parathyroid glands.

THYROID SCAN AND UPTAKE (THI-royd scan and UP-take): In a thyroid scan, radioactive iodine (the radiotracer) is injected intravenously or swallowed and then collects in the thyroid gland. A scanning device (probe) detects the radiotracer in the gland tissue, producing an image that shows the size, shape, and position of the thyroid. The thyroid uptake test, or radioactive iodine uptake (RAIU) test, evaluates the function of the thyroid. Radioactive iodine is swallowed, and a probe is placed over the thyroid gland to detect increased or decreased activity, as shown by the thyroid's ability to absorb the radiotracer. This test also can be used to detect areas of poor uptake (cold nodules), which may be cancerous.

CLINICAL PROCEDURES

The following procedures are performed on patients to establish a correct diagnosis of an abnormal condition. In some instances, the procedure also may be used to treat the condition.

ABDOMINOCENTESIS (ab-dom-in-o-sen-TE-sis):

See PARACENTESIS.

ALLERGY TEST (AL-er-je test): A small quantity of suspected allergic substance is applied to the skin or injected under the skin, and any reaction is noted.

AMNIOCENTESIS (am-ne-o-sen-TE-sis): Surgical puncture to remove fluid from the sac (amnion) that surrounds the fetus in the uterus. The fluid contains cells from the fetus that can be examined with a microscope for chromosomal analysis. Levels

of chemicals in amniotic fluid also can detect defects in the fetus.

ARTHROCENTESIS (ar-thro-sen-TE-sis): Puncture to remove fluid from a joint. This usually is done through the skin with a *percutaneous* needle.

ASPIRATION (as-pih-RA-shun): Withdrawal of fluid by suction through a needle or tube. The term *aspiration pneumonia* refers to an infection caused by inhalation of food or an object into the lungs.

AUDIOMETRY (aw-de-OM-eh-tre): Test using sound waves of various frequencies (e.g., 500 Hz), up to 8000 Hz, to quantify the extent and type of hearing loss. An *audiogram* is the record produced by this test.

AUSCULTATION (aw-skul-TA-shun): Process of listening for sounds produced within the body. This is most often performed with the aid of a stethoscope to determine the condition of the heart and lungs and blood vessels or to detect the fetal heartbeat.

BIOPSY (BI-op-se): Removal of a piece of tissue from the body for subsequent examination under a microscope. The procedure is performed with a surgical knife or by needle aspiration, or *core biopsy*, or via an endoscopic approach (using a special forceps-like instrument inserted through a hollow flexible tube.) *Excisional biopsy* means that the entire tissue to be examined is removed. An *incisional biopsy* is the removal of only a small amount of tissue, and a *needle* or *core biopsy* indicates that tissue is pierced with a hollow needle and fluid and/or cells are withdrawn by aspiration for microscopic examination.

BONE MARROW BIOPSY (bone MAH-ro BI-op-se): Removal of a small amount of bone marrow via a needle biopsy. The cells are then examined with a microscope. The liquid content of the marrow cavity is withdrawn by *aspiration* and examined separately from the rest of the biopsy sample. Often the hip bone (iliac crest) is used, and the biopsy is helpful in determining the number and type of blood cells in the bone marrow.

BRONCHOSCOPY (brong-KOS-ko-pe): Visual examination of the bronchial passages through a flexible tube (endoscope) inserted into the airway. The lining of the bronchial tubes can be seen, and tissue may be removed for biopsy. The tube is usually inserted through the mouth or nose but can also be directly inserted into the airway during mediastinoscopy. Sedation is required for this procedure.

CATHETERIZATION (kath-eh-ter-ih-ZA-shun): Introduction of a hollow, flexible tube into a vessel or cavity of the body to withdraw or instill fluids. Catheterization also is used to measure pressure in vessels and to inject contrast material for outlining vessels or heart chambers. Male and female *Foley catheters* are used for urinary catheterization. *Cardiac catheterization* involves insertion of a catheter into a large vein or artery; from there, it is threaded through the circulation system to the heart. Contrast can be administered to visualize blood vessels for diagnosis and treatment procedures.

CHORIONIC VILLUS SAMPLING (kor-e-ON-ik VIL-us SAM-pling): Removal of a small piece of placental tissue for microscopic or genetic analysis to detect fetal abnormalities.

COLONOSCOPY (ko-lon-OS-ko-pe): Visual examination of the colon using a flexible tube (endoscope) inserted through the rectum and passed into the large bowel. Biopsy samples may be taken and benign growths, such as polyps, removed through the endoscope. The removal of a polyp is a *polypectomy* (pol-ih-PEK-to-me).

COLPOSCOPY (kol-POS-ko-pe): Inspection of the vagina and cervix through a special microscope inserted into the vagina. The vaginal walls are held apart with a speculum so that all tissues can be viewed.

CONIZATION (ko-nih-ZA-shun): Removal of a cone-shaped sample of uterine cervix tissue. This sample is then examined with a microscope for evidence

of cancerous growth. The special shape of the tissue sample allows the pathologist to examine the transitional zone of the cervix, where cancers are most likely to develop.

CULDOCENTESIS (kul-do-sen-TE-sis): Surgical puncture to remove fluid from the cul-de-sac (the space between the rectum and the uterus) through a thin, hollow needle inserted through the vagina into this space. The fluid is then analyzed for evidence of cancerous cells, infection, or blood cells.

CYSTOSCOPY (sis-TOS-ko-pe): Visual examination of the urinary bladder through a thin tube or cystoscope (endoscope) inserted into the urethra and then passed into the bladder. This procedure is used to visualize inflammation and tumors of the bladder, to remove stones, and to perform a biopsy of suspicious areas.

DIGITAL RECTAL EXAMINATION or DRE (DIJ-ih-tal REK-tal eks-am-ih-NA-shun): The physician inserts a gloved finger into the patient's rectum to detect rectal cancer and as a primary method to detect prostate cancer. Stool on the removed glove is tested for occult blood, a possible sign of disease.

DILATION AND CURETTAGE or D&C (di-LA-shun and kur-eh-TAJ): A series of probes of increasing size are systematically inserted through the vagina into the opening of the cervix. The cervix is thus dilated (widened) so that a curette (spoon-shaped instrument) can be inserted to remove tissue from the lining of the uterus. The tissue is then examined with a microscope.

ELECTROCARDIOGRAPHY or ECG/EKG (e-lek-tro-kar-de-OG-rah-fe): Connection of electrodes (wires or "leads") to the body to record electrical impulses from the heart. The *electrocardiogram* is the actual record produced. This test is useful in discovering abnormalities in heart rhythms and for diagnosing heart disorders.

ELECTROENCEPHALOGRAPHY or EEG (e-lek-tro-en-sef-ah-LOG-rah-fe): Connection of electrodes (wires or "leads") to the scalp to record

electricity coming from within the brain. The *electroencephalogram* is the actual record produced. This test is useful in the diagnosis and monitoring of epilepsy and in the investigation of neurologic disorders. It also is used to evaluate patients in coma (brain inactivity) and in the study of sleep disorders.

ELECTROMYOGRAPHY or EMG (e-lek-tro-mi-OG-rah-fe): Insertion of needle electrodes into muscle to record electrical activity. This procedure detects injuries and diseases that affect muscles and nerves.

ENDOSCOPY (en-DOS-ko-pe): Inspection of an organ or body cavity through a narrow, tube-like instrument (endoscope) inserted into the organ or cavity. The endoscope is placed through a natural opening (the mouth or anus) or into a surgical incision, such as through the abdominal wall. Endoscopes contain bundles of glass fibers that carry light (fiberoptic); some instruments are equipped with a small forceps-like device that withdraws a sample of tissue for microscopic study (biopsy). Examples of endoscopy are bronchoscopy, colonoscopy, esophagoscopy, gastroscopy, and laparoscopy.

ESOPHAGOGASTRODUODENOSCOPY or EGD (eh-SOF-ah-go-GAS-tro-du-o-den-NOS-ko-pe): Visual examination of the esophagus, stomach, and first part of the small intestine using an endoscope inserted through the mouth and down the throat.

ESOPHAGOSCOPY (eh-sof-ah-GOS-ko-pe): Visual examination of the esophagus performed through an endoscope inserted into the mouth and down the throat. This procedure allows detection of ulcers, tumors, or other lesions.

EXCISIONAL BIOPSY (ek-SIH-zhin-al BI-op-se): See BIOPSY.

EXOPHTHALMOMETRY (eks-of-thal-MOM-eh-tre): Measurement of the extent of protrusion of the eyeball in *exophthalmos*. Exophthalmos may be caused by tumors behind the eye, or by an overactive thyroid gland.

FROZEN SECTION (fro-zen SEK-shun): Technique for (or method of) rapid preparation of a biopsy sample for examination during an actual surgical procedure. Tissue is taken from the operating room to the pathology laboratory and frozen. It is then thinly sliced, stained, and immediately examined with a microscope to determine whether the sample is benign or malignant and to determine the status of margins around a tumor.

GASTROSCOPY (gas-TROS-ko-pe): Visual examination of the stomach through an endoscope inserted down through the esophagus, for either diagnostic inspection or biopsy. When the upper portion of the small intestine is also visualized, the procedure is called *esophagogastroduodenoscopy (EGD)*.

HOLTER MONITORING (HOL-ter MON-ih-ter-ing): Electrocardiographic recording of heart activity over an extended period of time. The Holter monitor device is worn by the patient as normal daily activities are performed. It detects heart rhythm abnormalities. Also called *ambulatory electrocardiography*.

HYSTEROSCOPY (his-ter-OS-ko-pe): Visual examination of the uterus using an endoscope passed through the uterine neck or cervix into the uterus.

INCISIONAL BIOPSY (in-SIZH-un-al BI-op-se): See BIOPSY.

LAPAROSCOPY (lap-ah-ROS-ko-pe): Examination of the abdominal cavity through an endoscope inserted into the abdomen. After the patient receives a local anesthetic, a laparoscope is placed through an incision in the abdominal wall. This procedure gives the physician a view of the abdominal cavity, the surface of the liver and spleen, and the pelvic region. Laparoscopy can be used to remove some organs (such as the gallbladder, appendix, and ovary) and tumors and for fallopian tube ligation to prevent pregnancy.

LARYNGOSCOPY (lah-rin-GOS-ko-pe): Visual examination of the voice box (larynx) through an endoscope inserted down the trachea (airway). The

laryngoscope transmits a magnified image of the larynx through a system of lenses and mirrors. The procedure can reveal tumors and explain changes in the voice. Sputum samples and tissue biopsy specimens are obtained by using brushes or forceps attached to the laryngoscope.

LUMBAR PUNCTURE or LP (LUM-bar PUNK-shur): Introduction of a hollow needle into a space surrounding the spinal cord to withdraw fluid for analysis. Contrast material may be injected for imaging. Medicines may be introduced for treating disease involving the central nervous system.

MEDIASTINOSCOPY (me-de-ah-stih-NOS-ko-pe): Procedure for viewing structures in the mediastinum through an endoscope inserted into this space (in the chest between the lungs and in front of the heart). A *mediastinoscope* is introduced through a small incision in the neck while the patient is under anesthesia. This procedure is used to biopsy lymph nodes and suspected tumors within the mediastinum.

MUSCLE BIOPSY (MUH-sl BI-op-se): A sample of muscle tissue is removed and analyzed microscopically.

NASOGASTRIC INTUBATION (na-zo-GAS-trik in-tu-BA-shun): Insertion of a tube through the nose into the stomach to withdraw fluid for analysis or to give nutrition directly into the stomach.

NEEDLE BIOPSY (NE-dl BI-op-se): See BIOPSY.

OPHTHALMOSCOPY (of-thal-MOS-ko-pe): A physician uses an *ophthalmoscope* to look directly into the eye, evaluating the optic nerve, retina, and blood vessels in the back of the eye and the lens in the front of the eye for cataracts. In *fluorescein angiography*, a contrast substance is injected intravenously, and movement of the dye through blood vessels in the back of the eye is observed with ophthalmoscopy.

OTOSCOPY (o-TOS-ko-pe): A physician uses an *otoscope* inserted into the ear canal to check for obstructions (e.g., wax), infection, fluid, and eardrum perforation or scarring.

PALPATION (pal-PA-shun): Examination by touch.

This is a technique of manual physical examination by which a doctor feels underlying tissues and organs through the skin.

PAP SMEAR (pap smear): Insertion of a cotton swab or wooden spatula into the vagina to obtain a sample of cells from the outer surface of the cervix (neck of the uterus). The cells are then smeared on a glass slide, preserved, and sent to the laboratory for microscopic examination. This test for cervical cancer was developed by and named after the late Dr. George Papanicolaou. Results are graded and reported as negative (no abnormalities) or ranging from mildly abnormal (presence of ASC or abnormal squamous cells) to high-grade squamous intraepithelial lesion (HSIL).

PARACENTESIS (pah-rah-sen-TE-sis): Surgical puncture of the membrane surrounding the abdomen (peritoneum) to remove fluid from the abdominal cavity. Fluid is drained for analysis and to prevent its accumulation in the abdomen. Also known as *abdominocentesis*.

PELVIC EXAM (PEL-vik ek-ZAM): Physician inserts fingers into the vagina while keeping the other hand over the abdomen to palpate the uterus and ovaries. This examination checks the uterus and ovaries for enlargement, cysts, tumors, or abnormal bleeding. It is also known as an *internal exam*, or a *bimanual exam*.

PERCUSSION (per-KUSH-un): The technique of striking a part of the body with short, sharp taps of the fingers to determine the size, density, and position of the underlying parts by the sound obtained. Percussion is commonly used over the lungs to detect fluid, atelectasis, and infection, and on the abdomen to examine the liver.

PHLEBOTOMY (fleh-BOT-o-me): Puncture of a vein to remove samples of blood for analysis. Also called *venipuncture*.

PROCTOSIGMOIDOSCOPY (prok-to-sig-moy-DOS-ko-pe): Examination of the first 10 to 12 inches of the rectum and colon using an endoscope inserted through the anus. When the sigmoid colon is visualized with a longer (20-inch) flexible endoscope, the procedure is called *sigmoidoscopy*. The procedure detects polyps, malignant tumors, and sources of bleeding.

PULMONARY FUNCTION TEST (PUL-mo-nair-e FUNG-shun test): Measurement of the volume and flow rate of air taken into and exhaled from the lungs by means of an instrument called a *spirometer*. Test results may be abnormal in patients with asthma, chronic bronchitis, emphysema, or occupational exposures to asbestos, chemicals, and dusts.

SIGMOIDOSCOPY (sig-moy-DOS-ko-pe): See PROCTOSIGMOIDOSCOPY.

SKIN TESTS: Tests in which substances are applied to the skin or injected under the skin and the reaction of immune cells in the skin is observed. These tests detect the patient's sensitivity to substances such as dust or pollen. They also can indicate whether the person has been exposed to the bacteria that cause tuberculosis or diphtheria.

SLIT-LAMP MICROSCOPY (slit-lamp mi-KROS-ko-pe): Examination of the anterior eye structures (such as the cornea) using an instrument that projects intense light through a narrow opening for optimal visualization.

STOOL CULTURE (stool KUL-chur): Stool (feces) is placed in a growth medium (culture) and analyzed microscopically for evidence of microorganisms (bacteria).

STRESS TEST: Electrocardiography performed during exercise. With intense exercise, the ECG may become abnormal as a result of poor blood flow through blocked arteries. This study may reveal hidden heart disease or confirm the cause of cardiac signs and symptoms.

THORACENTESIS (thor-ah-sen-TE-sis): Insertion of a needle into the chest to remove fluid from the space surrounding the lungs (pleural cavity). After injection of a local anesthetic, a hollow needle is placed through the skin and muscles of the back and into the space between the lungs and chest wall. Fluid is then withdrawn by applying suction. Excess fluid (*pleural effusion*) may be a sign of infection, heart failure, or malignant disease. This procedure is used to diagnose conditions, to drain a pleural effusion, or to reexpand a collapsed lung (*atelectasis*).

THORACOSCOPY (thor-ah-KOS-ko-pe): Visual examination of the surface of the lungs using an endoscope inserted through an incision in the chest. *VATS* is *video-assisted thoracoscopy*.

TUNING FORK TESTS (TOO-ning fork tests): Tests of hearing using a vibrating tuning fork of known frequency as a source of sound.

VENOGRAPHY (ve-NOG-rah-fe): X-ray examination of veins performed after contrast material is injected into veins. It is used to detect *deep vein thrombosis*, *pulmonary emboli*, or *venous insufficiency*.

LABORATORY TESTS

The following laboratory tests are performed on samples of a patient's blood, *plasma* (fluid portion of the blood), *serum* (plasma minus clotting proteins and produced after blood has clotted), urine, feces, *sputum* (mucus coughed up from the lungs), *cerebrospinal fluid* (fluid within the spaces around the spinal cord and brain), and skin.

ACID PHOSPHATASE (AH-sid FOS-fah-tas): Measurement of the amount of an enzyme called *acid phosphatase* in serum. Enzyme levels are elevated in metastatic prostate cancer. Moderate elevations occur in bone disease and metastatic breast cancer.

ALBUMIN (al-BU-min): Measurement of the amount of albumin (a large protein found in blood and tissues)

in both serum and urine. A decreased albumin level in serum indicates malnutrition or liver disease or may occur with extensive loss of protein in the urine or intestines, or from the skin, as in a burn. The presence of albumin in the urine (*albuminuria*) indicates malfunction of the kidney.

ALKALINE PHOSPHATASE (AL-kah-lin FOS-fah-tase): Measurement of the amount of *alkaline phosphatase* (an enzyme found in cells) in serum. Levels are elevated in liver diseases (such as hepatitis and hepatoma) and in bone disease and cancer metastatic to bone or liver. On laboratory reports, usually abbreviated *alk phos* or *ALK PHOS*.

ALPHA-FETOPROTEIN (al-fah-fe-to-PRO-teen): Determination of the presence of a protein called alpha-fetoprotein in serum. The protein normally is present in the serum of the fetus, infant, and pregnant woman. In fetuses with abnormalities of the brain and spinal cord, the protein leaks into the amniotic fluid surrounding the fetus, so it is an indicator of a spinal tube defect (spina bifida) or anencephaly (lack of brain development). High levels are found in patients with cancer of the liver and other malignant diseases (testicular and ovarian cancers). Serum levels monitor the effectiveness of cancer treatment. Elevated levels are also seen in benign liver disease such as cirrhosis and viral hepatitis. On laboratory reports, usually abbreviated *AFP*.

ALT: Measurement of the amount of the enzyme called *alanine transaminase* in serum. The enzyme is normally present in blood but accumulates in blood with damage to liver cells. Formerly called *SGPT*.

ANA: See ANTINUCLEAR ANTIBODY TEST.

ANTINUCLEAR ANTIBODY TEST (an-tih-NU-kle-ar AN-tih-bod-e test): A sample of plasma is tested for the presence of antibodies that are found in patients with systemic lupus erythematosus. On laboratory reports, usually abbreviated *ANA*.

AST: Measurement of the enzyme *aspartate transaminase* in serum. The enzyme normally is

present in blood but accumulates when there is damage to the heart or to liver cells. Formerly called *SGOT*.

BACTERIAL AND FUNGAL TESTS (bak-TER-e-al and FUNG-al tests): Samples from skin lesions or other sites (e.g., blood, bone marrow, sputum) are cultured in a laboratory or analyzed microscopically to diagnose bacterial or fungal conditions.

BENCE JONES PROTEIN (bens jonz PRO-teen): Measurement of the Bence Jones protein in serum or urine. Bence Jones protein is a fragment of a normal serum protein, an immunoglobulin, produced in greatly excessive amounts by cancerous bone marrow cells (myeloma cells). Normally, it is not found in either blood or urine, but, in *multiple myeloma* (a malignant condition of bone marrow), high levels of Bence Jones protein may be detected in urine.

BILIRUBIN (bil-ih-RU-bin): Measurement of the amount of bilirubin, an orange-brown pigment, in serum and urine. Bilirubin is derived from breakdown of hemoglobin, the oxygen-carrying protein in red blood cells. Its presence in high concentration in serum and urine causes *jaundice* (yellow coloration of the skin) and may indicate disease of the liver, obstruction of bile ducts, or a type of anemia due to excessive destruction of red blood cells.

BLOOD CHEMISTRY PROFILE: A comprehensive blood test that is a biochemical examination of various substances in the blood using a computerized laboratory analyzer. Tests include measurements of albumin (liver and kidney), alkaline phosphatase (liver and bone), AST (liver and heart muscle) and ALT (liver), bilirubin (liver), calcium (bones), creatinine (kidney), electrolytes (acid-base balance), globulin (liver and immune disorders), lipids (such as cholesterol and triglycerides), phosphorus (bones), and urea (kidney). Also called *sequential multiple analysis* (SMA). SMA-6, SMA-12, and SMA-18 indicate the number of blood tests performed.

BLOOD CULTURE (blud KUL-chur): Test to determine whether infection is present in the bloodstream. A sample of blood is added to a special medium (food) that promotes the growth of microorganisms. The medium is then examined by a medical technologist for evidence of bacteria or other microbes.

BLOOD UREA NITROGEN (blud u-RE-ah NI-tro-zen): Measurement of the amount of urea (nitrogen-containing waste material) in serum. A high level of serum urea indicates poor kidney function because it is the kidney's job to remove urea from the bloodstream and filter it into urine. On laboratory reports, usually abbreviated *BUN*. Urea is a product of the breakdown of proteins.

CA-125: Protein released into the bloodstream by ovarian cancer cells. Measurement of CA-125 determines response to treatment.

CALCIUM (KAL-se-um): Measurement of the amount of calcium in serum, plasma, or whole blood. Low blood levels cause abnormal functioning of nerves and muscles, and high blood levels may be due to loss of calcium from bones, excessive intake of calcium, disease of the parathyroid glands, or cancer. On laboratory reports, usually given as the symbol *Ca*.

CARBON DIOXIDE (KAR-bon di-OK-side): Blood test that measures all forms of carbon dioxide (gas produced by cells and eliminated by the lungs) in blood. On laboratory reports, abbreviated CO_2 .

CARCINOEMBRYONIC ANTIGEN (kar-sih-no-em-bree-ON-ik AN-ti-jen): A plasma test for a protein normally found in the blood of human fetuses and produced in healthy adults in only a very small amount. High levels of this antigen may be a sign of one of a variety of cancers, especially colon or pancreatic cancer. This test monitors the response of patients to cancer treatment. On laboratory reports, usually abbreviated *CEA*.

CARDIAC ENZYME TESTS (CAR-dee-ak EN-zym tests): Measurements of enzymes released into

the bloodstream after a heart attack. Examples are creatine kinase (CK) and troponin I and troponin T.

CEREBROSPINAL FLUID (seh-re-bro-SPI-nal FLU-id): Measurement of cerebrospinal fluid for pressure, protein and sugar content, blood cells, and malignant cells. The fluid also is cultured to detect microorganisms. Chemical tests are performed on specimens of the fluid removed by *lumbar puncture*. Abnormal conditions such as meningitis, tumor involving the spinal canal, and encephalitis are detected by analysis of the spinal fluid. On laboratory reports, usually abbreviated *CSF*.

CHOLESTEROL (ko-LES-ter-ol): Measurement of the amount of cholesterol (substance found in animal fats and oils, egg yolks, and milk and produced by the liver) in serum. Normal values for adults are 120 to 200 mg/dL. Levels above 200 mg/dL indicate a need for further testing and efforts to reduce cholesterol level, because high levels are associated with blockage of arteries and heart disease. Blood also is tested for the presence of a lipoprotein substance that is a combination of cholesterol and protein. High levels (optimal level is 60 to 100 mg/dL) of high-density lipoprotein (*HDL*) cholesterol in the blood are beneficial because HDL cholesterol promotes the removal and excretion of excess cholesterol from the blood serum, whereas high levels of low-density lipoprotein (*LDL*) are associated with the development of atherosclerosis (optimal level is 100 mg/dL or less). The ratio of HDL to LDL is most important.

COMPLETE BLOOD COUNT (CBC): Determination of the numbers of leukocytes (white blood cells), erythrocytes (red blood cells), and platelets (clotting cells). The CBC is useful in the diagnosis of anemia, infection, and blood cell disorders, such as leukemia.

CREATINE KINASE (KRE-ah-tin KI-nas): Measurement of levels of creatine kinase, a blood enzyme. Creatine kinase is normally found in heart muscle, brain tissue, and skeletal muscle. The

presence of one form (*isoenzyme*) of creatine kinase (either CK-MB or CK2) in the blood is strongly indicative of recent myocardial infarction (heart attack) because the enzyme is released from heart muscle when the muscle is damaged or dying.

CREATININE (kre-AT-tih-neen): Measurement of the amount of creatinine, a nitrogen-containing waste material, in serum or plasma. It is the most commonly used test for kidney function. Because creatinine normally is produced as a protein breakdown product in muscle and is excreted by the kidney in urine, an elevation in the creatinine level in the blood indicates an abnormality of kidney function. Elevations also are seen in patients on high-protein diets and with dehydration.

CREATININE CLEARANCE (kre-AT-tih-neen KLEER-ans): Measurement of the rate at which creatinine is cleared (filtered) by the kidneys from the blood. A low creatinine clearance indicates that the kidneys are not functioning effectively to clear creatinine from the bloodstream and filter it into urine.

CULTURE (KUL-chur): Test in which a sample of body fluids (such as urine, blood, sputum) is mixed with or applied to a sterile growth medium, and if present, bacteria, fungi, or viruses are allowed to grow for several days. Microorganisms that grow out are then identified. In *sensitivity* testing, culture plates containing a specific microorganism are prepared and antibiotic-containing disks are applied to the culture surface. After overnight incubation, the area surrounding the disk (where growth was inhibited) is measured to determine whether the antibiotic is effective against the specific organism. Stool samples may also be cultured.

DIFFERENTIAL (dih-fer-EN-shul): See WHITE BLOOD CELL (WBC) COUNT.

ELECTROLYTES (e-LEK-tro-lytz): Determination of the concentrations of *electrolytes* (chemical substances capable of conducting an electric current) in serum or whole blood. When dissolved in water,

salts, such as sodium chloride, break apart into charged particles (*ions*). The common positively charged electrolytes are *sodium* (Na^+), *potassium* (K^+), *calcium* (Ca^{2+}), and *magnesium* (Mg^{2+}). The common negatively charged electrolytes are *chloride* (Cl^-) and *bicarbonate* (HCO_3^-). These charged particles should be present at all times for proper functioning of cells. An electrolyte imbalance occurs when serum concentration is either too high or too low. Calcium imbalance can affect the bones, kidneys, gastrointestinal tract, and neuromuscular activity, and sodium imbalance will affect blood pressure, nerve functioning, and fluid levels surrounding cells. Potassium ion imbalance impairs heart and muscular activity.

ELECTROPHORESIS: See SERUM PROTEIN ELECTROPHORESIS.

ELISA (eh-LI-zah): A laboratory assay (test) for the presence of antibodies to abnormal proteins such as tumor antigens or viruses, such as HIV. ELISA is an acronym for *enzyme-linked immunosorbent assay*. It also is known as *EIA* or *enzyme immunoassay*.

ERYTHROCYTE SEDIMENTATION RATE (eh-RITH-ro-site sed-ih-men-TA-shun rate): Measurement of the rate at which red blood cells (erythrocytes) in well-mixed venous blood settle to the bottom (sediment) of a test tube. If the rate of sedimentation is markedly rapid (elevated rate), it may indicate inflammatory conditions, such as rheumatoid arthritis, or conditions that produce excessive proteins in the blood. On laboratory reports, usually abbreviated *ESR* or *sed rate*.

ESTRADIOL ASSAY (es-trah-DI-ol AS-a): Test for the concentration of estradiol, which is the predominant form of estrogen (female hormone) in serum, plasma, or urine.

ESTROGEN RECEPTOR ASSAY (ES-tro-jen re-SEP-tor AS-a): Test performed on a breast biopsy specimen to determine whether a sample of tumor contains an estrogen receptor protein. If the protein is present

(positive result) on breast cancer cells, this indicates that estrogens can stimulate growth of the tumor. Then treatment with an antiestrogen drug would retard tumor growth. If the assay result is negative (the protein is not present), then the tumor cells would not be killed by antiestrogen drug treatment.

GLUCOSE (GLU-kos): Measurement of the amount of glucose (sugar) in serum and plasma. High levels of glucose (*hyperglycemia*) indicate the presence of diabetes mellitus. Glucose also is measured in urine, where its presence also usually indicates diabetes mellitus. The *fasting blood sugar test* is measurement of blood sugar after a patient has fasted.

GLUCOSE TOLERANCE TEST (GLU-kos TOL-er-ans test): Test to determine how the body responds to glucose. In the first part of this test, blood and urine samples are taken after the patient has fasted. Then a solution of 100 grams of glucose is given by mouth. Additional blood and urine samples are obtained a half hour after the glucose is taken and again at intervals of up to 2 hours to determine the rate of rise in and then the fall of glucose in the blood. This test will diagnose diabetes mellitus.

HEMATOCRIT (he-MAT-o-krit): Measurement of the percentage blood volume occupied by red blood cells. The normal range is 40% to 50% in males and 37% to 47% in females. A low hematocrit indicates anemia. On laboratory reports, usually abbreviated *Hct* or *HCT*.

HEMOCCULT TEST (he-mo-KULT test): Examination of small sample of stool for otherwise inapparent occult (hidden) traces of blood. The sample is placed on the surface of a collection kit and reacts with a chemical (e.g., guaiac). A positive result may indicate bleeding from polyps, ulcers, or malignant tumors. This is an important screening test for colon cancer. Also called a STOOL GUAIAIC TEST.

HEMOGLOBIN ASSAY (HE-mo-glo-bin AS-a): Measurement of the concentration of hemoglobin (protein that carries oxygen in red blood cells) in

blood. The normal blood hemoglobin ranges are 13.0 to 17.0 g/dL in adult males and 12.0 to 15.0 g/dL in adult females. On laboratory reports, usually abbreviated *Hb* (or *hgb* or *Hgb*).

HUMAN CHORIONIC GONADOTROPIN ASSAY (HU-man kor-e-ON-ik go-nad-o-TRO-pin AS-a): Measurement of the concentration of human chorionic gonadotropin (a hormone secreted by cells of the fetal placenta) in urine. It is detected in urine within days after fertilization of egg and sperm cells and provides the basis of the most commonly used pregnancy test. It also is elevated in patients with certain tumors. On laboratory reports, usually abbreviated *HCG* or *hCG*.

IMMUNOASSAY (im-u-no-AS-a): A method of testing blood and urine for the concentration of various chemicals, such as hormones, drugs, or proteins. The technique makes use of the immunological reaction between antigens and antibodies. An *assay* is a determination of the amount of any particular substance in fluid or tissue.

IMMUNOGLOBULIN (im-u-no-GLOB-u-lin): Measurement (in serum) of proteins (antibodies) that bind to and destroy foreign substances (antigens). Immunoglobulins are made by cells of the immune system.

IMMUNOHISTOCHEMISTRY (im-u-no-his-to-KEM-is-tre): An antibody tagged with a fluorescent label or dye is spread over a tissue biopsy specimen and used to detect the presence of a particular antigen produced by the tissue or a tumor or infection.

LIPID TESTS (LIP-id tests): Lipids are fatty substances such as cholesterol and triglycerides. See CHOLESTEROL and TRIGLYCERIDE.

LIPOPROTEIN TESTS (li-po-PRO-teen tests): See CHOLESTEROL.

LIVER FUNCTION TESTS (LIV-er FUNG-shun tests): See ALKALINE PHOSPHATASE, BILIRUBIN, ALT, and AST.

OCCULT BLOOD TEST: See HEMOCCULT TEST.

PCR TEST: Blood test to find and analyze DNA and RNA in viruses, diagnose genetic diseases, and do DNA fingerprinting. Multiple copies of DNA or RNA are made. PCR stands for *polymerase chain reaction* and can detect very small amounts of RNA or DNA.

PKU TEST: Test that determines whether the urine of a newborn baby contains substances called *phenylketones*. If these ketones are present, the baby is diagnosed with a condition called *phenylketonuria* (PKU). PKU affects infants who lack a specific enzyme. When the enzyme is missing, high levels of *phenylalanine* (an amino acid) accumulate in the blood, affecting the infant's brain and causing mental retardation. This situation is prevented by placing the infant on a special diet that prevents accumulation of phenylalanine in the bloodstream.

PLATELET COUNT (PLAYT-let kownt): Determination of the number of clotting cells (platelets) in a sample of blood.

POTASSIUM (po-TAS-e-um): Measurement of the concentration of potassium in serum. Potassium is an important chemical for regulating electrical currents and maintaining the cell membrane charge. Muscle and nerve function depends on movement of potassium and other electrolytes across the cell membrane. On laboratory reports, usually given as the symbol K^+ . See also ELECTROLYTES.

PREGNANCYTEST (PREG-nan-se test): Measurement in blood or urine of *human chorionic gonadotropin*, or hCG, a hormone secreted by the placenta early in pregnancy.

PROGESTERONE RECEPTOR ASSAY (pro-JES-teh-rone re-SEP-tor AS-a): Test to determine whether a sample of tumor contains a progesterone receptor protein. A positive test result identifies that a breast cancer tumor would be responsive to antihormone therapy.

PROSTATE-SPECIFIC ANTIGEN (PROS-tat speh-SIH-fic AN-tih-jen): Blood test that measures the amount of an antigen elevated in patients with

prostatic cancer and in some with an inflamed prostate gland. On laboratory reports, usually abbreviated *PSA*.

PROTEIN ELECTROPHORESIS: See SERUM PROTEIN ELECTROPHORESIS.

PROTHROMBIN TIME (pro-THROM-bin time): Measurement of the activity of factors in the blood that participate in clotting. Deficiency of any of these factors can lead to a prolonged prothrombin time and difficulty in blood clotting. The test is important as a monitor for patients taking anticoagulants, substances that block the activity of blood clotting factors but increase the risk of bleeding.

PSA: See PROSTATE-SPECIFIC ANTIGEN.

RED BLOOD CELL (RBC) COUNT: Test in which the number of erythrocytes in a sample of blood is counted. A low RBC count may indicate anemia. A high count can indicate *polycythemia vera*.

RHEUMATOID FACTOR ASSAY (ROO-mah-toyd FAK-tor AS-a): Detection of the abnormal protein *rheumatoid factor* in the serum. This factor is found in patients with rheumatoid arthritis and some other autoimmune diseases.

SEMEN ANALYSIS (SE-men ah-NAL-ih-sis): Microscopic examination of sperm cells to detect number, viability, and motility of sperm cells.

SERUM ENZYME tests (SE-rum EN-zym tests): see CARDIAC ENZYME TESTS.

SERUM PROTEIN ELECTROPHORESIS (SE-rum PRO-teen e-lek-tro-for-E-sis): A procedure that separates proteins through their migration in an electric current. The material tested, such as serum, containing various proteins, is placed on gel or in liquid, and, under the influence of an electric current, the proteins separate (-phoresis means separation) so that they can be identified and measured. The procedure is also known as *protein electrophoresis*.

SGOT: See AST.

SGPT: See ALT.

SMA: See BLOOD CHEMISTRY PROFILE.

SODIUM LEVEL: Measurement of the concentration of sodium (Na^+) in serum. Sodium is one of the most important elements in the body. It is the chief *electrolyte* in fluid outside cells, and it exchanges with potassium within cells during muscle contraction or nerve conduction. Excess sodium is excreted by the kidneys, and sodium is thus involved in water (fluid) balance and acid-base chemical balance during muscle contraction or nerve conduction.

SPUTUM TEST (SPU-tum test): Examination of mucus coughed up from the patient's lungs to detect tumor or infection. The sputum is examined microscopically, analyzed chemically, and cultured for the presence of microorganisms.

STOOL GUA IAC TEST (stool GWI-ak test): See HEMOCULT TEST.

THYROID FUNCTION TESTS (THI-royd FUNG-shun tests): Tests that measure the levels of thyroid hormones, such as *thyroxine* (T_4) and *triiodothyronine* (T_3), in serum. *Thyroid-stimulating hormone* (TSH), which is produced by the pituitary gland and stimulates the release of T_4 and T_3 from the thyroid gland, is also measured in serum. These tests diagnose hypothyroidism and hyperthyroidism and are helpful in monitoring response to thyroid treatment.

TRIGLYCERIDES (tri-GLIS-er-ides): Determination of the amount of triglycerides (fatty substances) in the serum. Elevated triglyceride levels (normal is 150 to 200 mg/dL) are considered to be an important risk factor for the development of heart disease.

TROPONIN (tro-PO-nin): Measurement of levels of proteins troponin I and troponin T in blood is used to indicate the presence and degree of myocardial injury, as from a heart attack.

URIC ACID (UR-ik AS-id): Measurement of the amount of uric acid (a nitrogen-containing waste material from breakdown of DNA and RNA) in the

serum. High serum levels are associated with a type of arthritis called *gout*. In gout, uric acid accumulates as crystals in joints and in tissues. High levels of uric acid may also cause kidney stones.

URINALYSIS (u-rih-NAL-ih-sis): Examination of urine as an aid in the diagnosis of disease. Routine urinalysis involves the observation of unusual color or odor; determination of specific gravity (amount of materials dissolved in urine); chemical tests (for protein, sugar, acetone); and microscopic examination for bacteria, blood cells, and sediment. Urinalysis is used to detect abnormal functioning of the kidneys and bladder, infections, and diabetes mellitus. On laboratory reports, usually abbreviated *UA*.

WESTERN BLOT (WES-tern blot): Test used to detect infection by *HIV* (the AIDS virus). It is more specific than the ELISA. A patient's serum is mixed with purified proteins from HIV, and the reaction is examined. If the patient has made antibodies to HIV, those antibodies react with the purified HIV proteins, and the test result is positive.

WHITE BLOOD CELL (WBC) COUNT: Determination of the number of leukocytes in the blood. Higher-than-normal counts can indicate the presence of infection or leukemia. A *differential* (differential count) is the percentages of different types of white blood cells (neutrophils, eosinophils, basophils, lymphocytes, and monocytes) in a sample of blood. It gives more specific information about leukocytes and aids in the diagnosis of infection, allergic diseases, disorders of the immune system, and various forms of leukemia.


VIRAL LOAD TEST FOR HIV: Measures the number of viral particles in the blood. It is used to determine the effectiveness of antiviral treatment.



PART 2

Useful Information

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ABBREVIATIONS FOR SELECTED HEALTH CARE ORGANIZATIONS, ASSOCIATIONS, AND AGENCIES*

AAAA	American Academy of Anesthesiologist Assistants
AAAAI	American Academy of Allergy, Asthma, and Immunology
AAB	American Association of Bioanalysts
AABB	American Association of Blood Banks
AACA	American Association of Clinical Anatomists
AACAHPO	American Association of Certified Allied Health Personnel in Ophthalmology
AACC	American Association for Clinical Chemistry
AACN	American Association of Critical Care Nurses; American Association of Colleges of Nursing

*Modified from *Miller-Keane Encyclopedia and Dictionary of Medicine, Nursing, and Allied Health*, 7th ed., revised reprint. Philadelphia: Saunders; 2005.

AACP	American Academy of Clinical Psychiatrists; American Association of Colleges of Pharmacy
AADS	American Association of Dental Schools
AAFP	American Academy of Family Physicians
AAHA	American Academy of Health Administration
AAHC	Association of Academic Health Centers
AAHE	Association for the Advancement of Health Education
AAHP	American Association of Health Plans
AAHPER	American Association for Health, Physical Education, and Recreation
AAMA	American Association of Medical Assistants
AAMC	Association of American Medical Colleges
AAMI	Association for the Advancement of Medical Instrumentation
AAMT	American Association for Music Therapy
AAN	American Academy of Neurology;
	American Academy of Nursing
AANA	American Association of Nurse Anesthetists
AAO	American Association of Ophthalmology; American Association of Orthodontists
AAOHN	American Association of Occupational Health Nurses
AAP	American Academy of Pediatrics
AAPA	American Academy of Physician Assistants
AAPC	Association of Professional Coders
AAPMR	American Academy of Physical Medicine and Rehabilitation
AARC	American Association for Respiratory Care

AART	American Association for Rehabilitation Therapy
AATA	American Art Therapy Association
AATS	American Association for Thoracic Surgery
ABCP	American Board of Cardiovascular Perfusion
ABNF	Association of Black Nursing Faculty in Higher Education
ACAAI	American College of Allergy, Asthma, and Immunology
ACC	American College of Cardiology
ACCP	American College of Chest Physicians
ACEN	Academy of Canadian Executive Nurses
ACEP	American College of Emergency Physicians
ACHA	American College of Hospital Administrators
ACNM	American College of Nurse-Midwives
ACP	American College of Physicians
ACR	American College of Radiology
ACS	American College of Surgeons
ACTA	American Cardiovascular Technologists Association
ADA	American Dental Association
ADAA	American Dental Assistants Association
ADHA	American Dental Hygienists' Association
ADTA	American Dance Therapy Association
AES	American Electroencephalographic Society
AHA	American Hospital Association
AHCPR	Agency for Health Care Policy and Research (now AHRQ)
AHDI	Association for Healthcare Documentation Integrity
AHIMA	American Health Information Management Association
AHPA	American Health Planning Association

AHRQ	Agency for Healthcare Research and Quality
AIBS	American Institute of Biological Sciences
AIHA	American Industrial Hygiene Association
AIUM	American Institute of Ultrasound in Medicine
AMA	American Medical Association
AMEA	American Medical Electroencephalographic Association
AMI	Association of Medical Illustrators
AMIA	American Medical Informatics Association
AmSECT	American Society of Extracorporeal Technology
AMSN	Academy of Medical-Surgical Nurses
AMT	American Medical Technologists
ANA	American Nurses Association
ANCC	American Nurses Credentialing Center
ANF	American Nurses Foundation
ANHA	American Nursing Homes Association
ANNA	American Nephrology Nurses' Association
ANRC	American National Red Cross
AOA	American Optometric Association; American Osteopathic Association
AONE	American Organization of Nurse Executives
AORN	Association of Operating Room Nurses
AOTA	American Occupational Therapy Association
APA	American Podiatry Association; American Psychiatric Association; American Psychological Association
APAP	Association of Physician Assistants Programs
APHA	American Public Health Association
APIC	Association of Practitioners in Infection Control

APTA	American Physical Therapy Association
ARCA	American Rehabilitation Counseling Association
ARN	Association of Rehabilitation Nurses
ASA	American Society of Anesthesiologists
ASAHP	American Society of Allied Health Professionals
ASC	American Society of Cytotechnology
ASCP	American Society of Clinical Pathologists
ASE	American Society of Echocardiography
ASET	American Society of Electroencephalographic Technologists
ASHA	American Speech-Language-Hearing Association
ASIA	American Spinal Injury Association
ASIM	American Society of Internal Medicine
ASM	American Society of Microbiology
ASMT	American Society for Medical Technology
ASNSA	American Society of Nursing Service Administrators
ASPAN	American Association of PeriAnesthesia Nurses
ASPH	Association of Schools of Public Health
ASRT	American Society of Radiologic Technologists
AST	Association of Surgical Technologists
ASUTS	American Society of Ultrasound Technical Specialists
ATS	American Thoracic Society
AUPHA	Association of University Programs in Health Administration
AVA	American Vocational Association
AVMA	American Veterinary Medical Association
CAAHEP	Committee on Accreditation of Allied Health Education Programs

CAN	Canadian Nurses Association
CAP	College of American Pathologists
CCHFA	Canadian Council of Health Facilities Accreditation
CCHSE	Canadian Council of Health Service Executives
CCNE	Commission on Collegiate Nursing Education
CDC	Centers for Disease Control and Prevention
CGFNS	Commission on Graduates of Foreign Nursing Schools
CGNA	Canadian Gerontological Nursing Association
CME (AMA)	Council on Medical Education of the American Medical Association
COEAMRA	Council on Education of the American Medical Record Association
DHHS	Department of Health and Human Services
ENA	Emergency Nurses Association
FDA	Food and Drug Administration
HCFA	Health Care Financing Administration
HRA	Health Resources Administration
HSCA	Health Sciences Communications Association
HSRA	Health Services and Resources Administration
IAET	International Association for Enterostomal Therapy
IOM	Institute of Medicine of the National Academy of Sciences
ISCVS	International Society for Cardiovascular Surgery

JCAHO	Joint Commission on the Accreditation of Healthcare Organizations
JCAHPO	Joint Commission on Allied Health Personnel in Ophthalmology
MLA	Medical Library Association
NAACLS	National Accrediting Agency for Clinical Laboratory Science
NAACOG	Nurses Association of the American Association of Obstetrics and Gynecology
NACA	National Advisory Council on Aging (Canada)
NACCHO	National Association of County and City Health Officials
NACT	National Alliance of Cardiovascular Technologists
NADONA/ LTC	National Association of Directors of Nursing Administration in Long Term Care
NAEMT	National Association of Emergency Medical Technicians
NAHC	National Association of Home Care
NAHSR	National Association of Human Services Technologists
NAMT	National Association for Music Therapy
NANDA	North American Nursing Diagnosis Association
NANT	National Association of Nephrology Technologists
NAPNES	National Association for Practical Nurse Education and Services
NARF	National Association of Rehabilitation Facilities
NASMD	National Association of State Medical Directors
NASW	National Association of Social Workers
NATTS	National Association of Trade and Technical Schools

NBNA	National Black Nurses Association
NCEHPHP	National Council on the Education of Health Professionals in Health Promotion
NCHS	National Center for Health Statistics
NCRE	National Council on Rehabilitation Education
NEHA	National Environmental Health Education
NFLPN	National Federation of Licensed Practical Nurses
NHC	National Health Council
NHSC	National Health Services Corps
NIH	National Institutes of Health
NIOSH	National Institute of Occupational Safety and Health
NKF	National Kidney Foundation
NLN	National League for Nursing
NNBA	National Nurses in Business Association
NOLF	Nursing Organization Liaison Forum
NONPF	National Organization of Nurse Practitioner Faculties
NPWH	National Association of Nurse Practitioners in Women's Health
NRCA	National Rehabilitation Counseling Association
NREMT	National Registry of Emergency Medical Technicians
NSCPT	National Society for Cardiopulmonary Technology
NSH	National Society for Histotechnology
NSNA	National Student Nurses Association
NTRS	National Therapeutic Recreation Society
NTSAD	National Tay-Sachs and Allied Diseases Association
OAA	Opticians Association of America
ONS	Oncology Nurses Association

PNAA	Philippine Nurses Association of America
RWJF	The Robert Wood Johnson Foundation
SDMS	Society of Diagnostic Medical Sonographers
SNIVT	Society of Non-Invasive Vascular Technology
SNM	Society of Nuclear Medicine
SNMTS	Society of Nuclear Medicine Technologist Section
SOPHE	Society for Public Health Education
STS	Society of Thoracic Surgeons
STTI	Sigma Theta Tau International
SVS	Society for Vascular Surgery
SVU	Society for Vascular Ultrasound
TAANA	The American Association of Nurse Attorneys
USPHS	United States Public Health Service
VA	Veterans Affairs
WHO	World Health Organization

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PROFESSIONAL DESIGNATIONS FOR HEALTH CARE PROVIDERS*

Degrees, certifications, and memberships and other affiliations denoted by initials that precede or follow the names of health care providers often provide helpful information regarding their area of expertise and level of practice. The following list includes commonly used designations in English-speaking countries.

AAPC	American Academy of Professional Coders (see page 187)
AIRC	Associate, Insurance Regulatory Compliance
AN	Associate Nurse
ANP	Adult Nurse Practitioner
APRN, BC	Advanced Practice Registered Nurse, Board Certified
ARNP	Advanced Registered Nurse Practitioner
ARRT	American Registry of Radiologic Technologists
ACSW	Academy of Certified Social Workers

*Modified from *Miller-Keane Encyclopedia and Dictionary of Medicine, Nursing, and Allied Health*, 7th ed., revised reprint. Philadelphia: Saunders; 2005.

BA	Bachelor of Arts
BB(ASCP)	Technologist in Blood Banking certified by the American Society for Clinical Pathology
BDentSci	Bachelor of Dental Science
BDS	Bachelor of Dental Surgery
BDSc	Bachelor of Dental Science
BHS	Bachelor of Health Science
BHyg	Bachelor of Hygiene
BM	Bachelor of Medicine
BMed	Bachelor of Medicine
BMedBiol	Bachelor of Medical Biology
BMedSci	Bachelor of Medical Science
BMic	Bachelor of Microbiology
BMS	Bachelor of Medical Science
BMT	Bachelor of Medical Technology
BO	Bachelor of Osteopathy
BP	Bachelor of Pharmacy
BPH	Bachelor of Public Health
BPharm	Bachelor of Pharmacy
BPHEng	Bachelor of Public Health Engineering
BPHN	Bachelor of Public Health Nursing
BPsTh	Bachelor of Psychotherapy
BS	Bachelor of Science
BSM	Bachelor of Science in Medicine
BSN	Bachelor of Science in Nursing
BSPH	Bachelor of Science in Pharmacy
BSS	Bachelor of Sanitary Science
BVMS	Bachelor of Veterinary Medicine and Science
BVSc	Bachelor of Veterinary Science
CAC	Certified Alcohol Counselor
CALN	Clinical Administrative Liaison Nurse
CANP	Certified Adult Nurse Practitioner
C(ASCP)	Technologist in Chemistry certified by the American Society for Clinical Pathology
CB	Bachelor of Surgery
CCRN	Critical Care Registered Nurse
CCT	Certified Cardiographic Technician
CDA	Certified Dental Assistant

CDC	Certified Drug Counselor
CEN	Certificate for Emergency Nursing
CEO	Chief Executive Officer
CFNP	Certified Family Nurse Practitioner
ChB	Bachelor of Surgery
ChD	Doctor of Surgery
CHES	Certified Health Education Specialist
CHISP	Certified Health Informatics Systems Professional
ChM	Master of Surgery
CIC	Certified in Infection Control
CIH	Certificate in Industrial Health
CLA	Certified Laboratory Assistant
CLS	Clinical Laboratory Scientist
CLS(NCA)	Clinical Laboratory Scientist certified by the National Credentialing Agency for Medical Laboratory Personnel
CLT	Certified Laboratory Technician; Clinical Laboratory Technician
CLT(NCA)	Laboratory Technician certified by the National Credentialing Agency for Medical Laboratory Personnel
CM	Master of Surgery
CMA	Certified Medical Assistant
CMCA	Certified Medical Chart Auditor
CMO	Chief Medical Officer
CMT	Chief Medical Transcriptionist
CNA	Certified Nursing Assistant
CNM	Certified Nurse-Midwife
CNMT	Certified Nuclear Medicine Technologist
CNOR	Certified Nurse, Operating Room
CNP	Community Nurse Practitioner
CNS	Clinical Nurse Specialist
CORN	Certified Operating Room Nurse
CORT	Certified Operating Room Technician
COTA	Certified Occupational Therapy Assistant
CPAN	Certified Perianesthesia Nurse
CPC	Certified Professional Coder
CPH	Certified in Public Health

CPNP	Certified Pediatric Nurse Practitioner
CPTA	Certified Physical Therapy Assistant
CRNA	Certified Registered Nurse Anesthetist
CRNP	Certified Registered Nurse Practitioner
CRRN	Certified Registered Rehabilitation Nurse
CRRT	Certified Registered Respiratory Therapist
CRTT	Certified Respiratory Therapy Technician
CSN	Certified School Nurse
CT(ASCP)	Cytotechnologist certified by the American Society for Clinical Pathology
CURN	Certified Urological Registered Nurse
CVO	Chief Veterinary Officer
DA	Dental Assistant; Diploma in Anesthetics
DC	Doctor of Chiropractic
DCH	Diplomate in Child Health
DCh	Doctor of Surgery
DChO	Doctor of Ophthalmic Surgery
DCM	Doctor of Comparative Medicine
DCP	Diplomate in Clinical Pathology; Diplomate in Clinical Psychology
DDH	Diplomate in Dental Health
DDM	Doctor of Dental Medicine; Diplomate in Dermatologic Medicine
DDO	Diplomate in Dental Orthopaedics
DDR	Diplomate in Dental Radiology
DDS	Doctor of Dental Surgery
DDSc	Doctor of Dental Science
DFHom	Diplomate in the Faculty of Homeopathy
DHg	Doctor of Hygiene
DHy	Doctor of Hygiene
DHyg	Doctor of Hygiene
DipBact	Diplomate in Bacteriology
DipChem	Diplomate in Chemistry
DipClinPath	Diplomate in Clinical Pathology
Dipl	Diplomate

DipMicrobiol	Diplomate in Microbiology
DipSocMed	Diplomate in Social Medicine
DLM(ASCP)	Diplomate in Laboratory Management of the American Society of Clinical Pathology
DMD	Doctor of Dental Medicine
DMT	Doctor of Medical Technology
DN	Doctor of Nursing
DNE	Doctor of Nursing Education
DNS	Doctor of Nursing Science
DNSc	Doctor of Nursing Science
DO	Doctor of Ophthalmology; Doctor of Optometry; Doctor of Osteopathy
DOS	Doctor of Ocular Science; Doctor of Optical Science
DP	Doctor of Podiatry
DPH	Doctor of Public Health; Doctor of Public Hygiene
DPhC	Doctor of Pharmaceutical Chemistry
DPHN	Doctor of Public Health Nursing
DPhys	Diplomate in Physiotherapy
DPM	Doctor of Physical Medicine; Doctor of Podiatric Medicine; Doctor of Preventive Medicine; Doctor of Psychiatric Medicine
Dr.	Doctor
DrHyg	Doctor of Hygiene
DrMed	Doctor of Medicine
DrPH	Doctor of Public Health; Doctor of Public Hygiene
DSc	Doctor of Science
DSE	Doctor of Sanitary Engineering
DSIM	Doctor of Science in Industrial Medicine
DSSc	Diplomate in Sanitary Science
DVM	Doctor of Veterinary Medicine
DVMS	Doctor of Veterinary Medicine and Surgery
DVR	Doctor of Veterinary Radiology
DVS	Doctor of Veterinary Science; Doctor of Veterinary Surgery

DVSc	Doctor of Veterinary Science
EdD	Doctor of Education
EMT	Emergency Medical Technician
EMT-P	Emergency Medical Technician-Paramedic
ET	Enterostomal Therapist
FAAN	Fellow of the American Academy of Nursing
FACA	Fellow of the American College of Anesthetists; Fellow of the American College of Angiology; Fellow of the American College of Apothecaries
FACAAI	Fellow of the American College of Allergy, Asthma, and Immunology
FACC	Fellow of the American College of Cardiology
FACCP	Fellow of the American College of Chest Physicians
FACD	Fellow of the American College of Dentists
FACFP	Fellow of the American College of Family Physicians
FACG	Fellow of the American College of Gastroenterology
FACHA	Fellow of the American College of Health Administrators
FACOG	Fellow of the American College of Obstetricians and Gynecologists
FACP	Fellow of the American College of Physicians
FACPM	Fellow of the American College of Preventive Medicine
FACS	Fellow of the American College of Surgeons
FACSM	Fellow of the American College of Sports Medicine
FAMA	Fellow of the American Medical Association
FAOTA	Fellow of the American Occupational Therapy Association

FAPA	Fellow of the American Psychiatric Association
FAPHA	Fellow of the American Public Health Association
FBPsS	Fellow of the British Psychological Society
FCAP	Fellow of the College of American Pathologists
FCO	Fellow of the College of Osteopathy
FCPS	Fellow of the College of Physicians and Surgeons
FCSP	Fellow of the Chartered Society of Physiotherapy
FCST	Fellow of the College of Speech Therapists
FDS	Fellow in Dental Surgery
FFA	Fellow of the Faculty of Anesthetists
FFCM	Fellow of the Faculty of Community Medicine
FFD	Fellow of the Faculty of Dentistry
FFOM	Fellow of the Faculty of Occupational Medicine
FFR	Fellow of the Faculty of Radiologists
FIB	Fellow of the Institute of Biology
FICD	Fellow of the Institute of Canadian Dentists; Fellow of the International College of Dentists
FIMLT	Fellow of the Institute of Medical Laboratory Technology
FNP	Family Nurse Practitioner
GNP	Gerontological Nurse Practitioner
H(ASCP)	Technologist in Hematology certified by the American Society for Clinical Pathology
HT(ASCP)	Histologic Technician certified by the American Society for Clinical Pathology
HTL(ASCP)	Histotechnologist certified by the American Society for Clinical Pathology

I(ASCP)	Technologist in Immunology certified by the American Society for Clinical Pathology
LCSW	Licensed Clinical Social Worker
LMCC	Licentiate of the Medical Council of Canada
LMRCP	Licentiate in Midwifery of the Royal College of Physicians
LOT	Licensed Occupational Therapist
LPN	Licensed Practical Nurse
LPT	Licensed Physical Therapist
LVN	Licensed Vocational Nurse
MA	Master of Arts
M(ASCP)	Technologist in Microbiology certified by the American Society for Clinical Pathology
MAT	Masters of Arts in Teaching
MB	Bachelor of Medicine
MC	Master of Surgery
MCIS	Master of Computer and Information Science; Master of Computer Information Systems
MCPS	Member of the College of Physicians and Surgeons
MD	Doctor of Medicine
MDentSc	Master of Dental Science
MDS	Master of Dental Surgery
MHC	Mental Health Counselor
MLT	Medical Laboratory Technician
MLT(ASCP)	Medical Laboratory Technician certified by the American Society for Clinical Pathology
MMID	Master of Midwifery
MMS	Master of Medical Science
MPH	Master of Public Health
MPharm	Master of Pharmacy
MRad	Master of Radiology
MRL	Medical Records Librarian
MS	Master of Science; Master of Surgery
MSB	Master of Science in Bacteriology
MSc	Master of Science

MScD	Master of Dental Science
MScN	Master of Science in Nursing
MSN	Master of Science in Nursing
MSPH	Master of Science in Public Health
MSPhar	Master of Science in Pharmacy
MSSc	Master of Sanitary Science
MSW	Master of Social Work; Medical Social Worker
MT	Medical Technologist
MT(ASCP)	Medical Technologist certified by the American Society for Clinical Pathology
NA	Nursing Aide
ND	Doctor of Nursing
NHA	Nursing Home Administrator
NM(ASCP)	Technologist in Nuclear Medicine certified by the American Society for Clinical Pathology
NMT	Nuclear Medicine Technologist
NNP	Neonatal Nurse Practitioner
NP	Nurse Practitioner
OD	Doctor of Optometry
ONC	Orthopedic Nursing Certificate
ORT	Operating Room Technician
OT	Occupational Therapist
OTL	Occupational Therapist, Licensed
OTR	Occupational Therapist, Registered
OTReg	Occupational Therapist, Registered
PA	Physician Assistant
PA-C	Physician Assistant-Certified
PBT(ASCP)	Phlebotomy Technician certified by the American Society for Clinical Pathology
PCP	Primary Care Physician
PD	Doctor of Pharmacy
PharmD	Doctor of Pharmacy
PhD	Doctor of Philosophy; Doctor of Pharmacy
PHN	Public Health Nurse
PNP	Pediatric Nurse Practitioner
PT	Physical Therapist

PTA	Physical Therapy Assistant
RD	Registered Dietician
RDA	Registered Dental Assistant
RDMS	Registered Diagnostic Medical Sonographer
REEGT	Registered Electroencephalographic Technologist
Reg	Registered
RHIA	Registered Health Information Administrator
RHIT	Registered Health Information Technician
RMA	Registered Medical Assistant
RN	Registered Nurse
RNA	Registered Nurse Anesthetist
RN, BC	Registered Nurse, Board Certified
RN, C	Registered Nurse, Certified
RN, CNA	Registered Nurse, Certified in Nursing Administration
RN, CNAA	Registered Nurse, Certified in Nursing Administration, Advanced
RN, CNA, BC	Registered Nurse, Certified in Nursing Administration, Board Certified
RN, CS	Registered Nurse, Certified Specialist
RPh	Registered Pharmacist
RPT	Registered Physical Therapist
RPTA	Registered Physical Therapist Assistant
RRL	Registered Record Librarian
RRT	Registered Respiratory Therapist
RT	Radiologic Technologist; Respiratory Therapist
RT(N)	Nuclear Medicine Technologist
RT(R)	Technologist in Diagnostic Radiology
RTR	Registered Recreational Therapist
RT(T)	Radiation Therapy Technologist
SBB(ASCP)	Specialist in Blood Banking certified by the American Society for Clinical Pathology
ScD	Doctor of Science
SCT(ASCP)	Specialist in Cytotechnology certified by the American Society for Clinical Pathology

SLP	Speech-Language Pathologist
SNP	School Nurse Practitioner
ST	Speech Therapist; Surgical Technologist
SW	Social Worker

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MEDICAL CODING CERTIFICATIONS*

CPC-CERTIFIED PROFESSIONAL CODER

The CPC's abilities include:

- Expertise in reviewing and assigning accurate medical codes for diagnoses, procedures, and services performed by physicians and other qualified health care providers
- Proficiency across a wide range of services, including evaluation and management, anesthesia, surgical services, radiology, pathology, and medicine
- A sound knowledge of medical coding rules and regulations, including compliance and reimbursement, allowing a CPC to better handle issues such as medical necessity, claims denials, bundling issues, and charge capture
- Knowing how to integrate medical coding and reimbursement rule changes into a practice's reimbursement processes
- Knowledge of anatomy, physiology, and medical terminology necessary to correctly code provider diagnosis and services

*Offered by the American Association of Professional Coders.

CPC-H CPH HOSPITAL/FACILITY CODING

The CPC-H's abilities in regard to hospital inpatient/facility services include:

- Proficiency in assigning accurate medical codes for diagnoses, procedures, and services performed in the outpatient setting (emergency department visits, outpatient clinic visits, same-day surgeries, diagnostic testing [radiology and laboratory]) and outpatient therapies (physical therapy, occupational therapy, speech therapy, and chemotherapy).
- Proficiency across a wide range of services, which include evaluation and management, anesthesia, surgical services, radiology, pathology, and medicine.
- Knowledge of coding rules and regulations along with keeping current on issues regarding medical coding, compliance, and reimbursement under outpatient grouping systems. A trained coding professional can better handle issues such as medical necessity, claims denials, bundling issues, and charge capture.
- Ability to integrate coding and reimbursement rule changes in a timely manner to include updating the charge description master (CDM), fee updates, and the field locators (FL) on the UB04.
- Correctly completing a CMS 1500 for ASC services and UB04 for outpatient services, including the appropriate application of modifiers.
- Knowledge of anatomy, physiology, and medical terminology commensurate with the ability to correctly code provider services and diagnoses.
- A working knowledge in the assignment of ICD-10-CM codes from Volumes 1 and 2.

Note: ICD-10-CM Vol 3 and DRG code assignment (inpatient coding) are not tested during the CPC-H exam.

CPC-P CPC-PAYER

More private and public payers (health plans) are recognizing the value of employing certified coders to process and analyze medical claims for payment. The CPC-P® credential meets the growing demand for certified coders in a payer environment.

The CPC-P® demonstrates a coder's aptitude, proficiency, and knowledge of coding guidelines and reimbursement methodologies for all types of services from the payer's perspective. Contributing developers include Marc Lieb, M.D., J.D.; Susan Goldsmith, CPC; as well as a number of other well-known CPC-Ps in the payer community. Claims reviewers, utilization management, auditors, benefits administrators, billing service, provider relations, contracting, and customer service staff can each benefit their practice with the CPC-P® credential.

CPPM-CERTIFIED PHYSICIAN PRACTICE MANAGER

The broad responsibilities and detailed requirements of managing the revenue cycle, compliance regulations, human resources, health information, and general business processes make practice management a challenging yet rewarding profession. The Certified Physician Practice Manager (CPPM®) credential is a logical next step for those with strong experience in other areas of health care and who are ready to advance their careers in physician practice management.

Current practice managers will also benefit from this certification with increased knowledge and then validating their knowledge and experience in this skilled profession. CPPMs have a good understanding of:

- Health care business process, workflow, and reform
- Fraud, abuse, and corporate compliance
- Quality in health care
- Medical office accounting, physician reimbursement, and revenue cycle management
- Human resource management

- Marketing and business relationships
- HIPAA and data security
- Health IT, electronic medical records (EMRs), and health information exchange

CPCO-CERTIFIED PROFESSIONAL COMPLIANCE OFFICER

CPCOs will have demonstrated knowledge of:

- The OIG Compliance Guidance for Individual and Small Group Physician Practices, Clinical Laboratories, and Third Party Billing Companies
- Compliance program effectiveness
- Key health care fraud and abuse laws, including the False Claims Act, Stark Laws, and Anti-kickback Statute, including the associated penalties
- How the PPACA will affect medical practices
- Other laws and regulations including HIPAA, EMTALA, and CLIA
- Handling investigations, including self-disclosure protocols
- Requirements under Corporate Integrity Agreements (CIAs) and Certificate of Compliance Agreements (CCAs)
- Current investigative activities (RACs, ZPICs, MFCUs)
- Various risk areas, including items such as gifts/gratuities, conflicts of interest, use of Advance Beneficiary Notices, teaching physicians guidelines, and incident to services

CMCA-CERTIFIED MEDICAL CHART AUDITOR

CMCAs have a good understanding of:

- Knowledge of medical documentation, fraud, abuse, and penalties for documentation and coding violations based on governmental guidelines
- Coding concepts
- Scope and statistical sampling methodologies

- Medical record auditing skills and abstraction ability
- Quality assurance and coding risk analysis
- Communication of results and findings
- Medical record

CHISP-CERTIFIED HEALTH INFORMATICS SYSTEMS PROFESSIONAL

The Certified Health Informatics Systems Professional (CHISP®) health IT certification exam and credential designates a qualified professional capable to meet the needs of hospitals and physicians as they move to adopt electronic health care systems (EMRs and electronic health records).

Professionals with the CHISP® health IT certification have demonstrated skills and knowledge in technology and the health care industry, including the unique requirements formed where these two trades meet. CHISP® tells the hiring manager that a professional understands health IT and both the health care and IT industries. CHISP® professionals have certified skills that make them more secure and marketable. They “stand out” with employers and encompass a wide range of job positions that require expertise in the highly specialized health IT setting.

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SURGICAL TERMINOLOGY AND TECHNOLOGY*

The following terms are commonly used in surgery and anesthesia. They include terms related to surgical and anesthetic instrumentation and procedures.

TERM	DEFINITION
ablation	Removal by erosion or vaporization, usually as a result of intense heat.
abscess	Localized area of pus in the body.
absorbable suture	Any suture that can be digested by body tissue.
ampule	Small glass container that holds medication that has been sterilized.
analgesia	Absence of pain.
anastomosis	Surgical formation of a passageway between two spaces, hollow organs, or lumens.
anesthetic	Agent that produces analgesia.

*Modified from Fuller JK: Surgical Technology: Principles and Practice, 6th ed. Philadelphia, Saunders, 2013.

TERM	DEFINITION
appose	To bring two structures together.
approximate	To bring body parts or tissues together by suturing or other means.
armboard	Detachable extension on the operating table that supports the patient's arm.
aspirate	To withdraw fluids or gases by means of suction, as when removing fluid from the body with a syringe; also refers to the material thus obtained.
atraumatic	Referring to a suture-needle combination in which the suture is swaged into the end of the needle shaft, rather than threaded through a needle eye, with its typical bulge; the needle thus passes more readily through tissue.
autoclave	Steam sterilizer.
autotransfusion	Transfusion using the patient's own blood.
Bankart procedure	Operation on the shoulder girdle to treat recurrent shoulder dislocation.
bifurcated	Y-shaped; divided into two branches.
biopsy	Removal of a small piece of tissue from a living body for microscopic examination.
bipolar	Refers to a type of electrosurgical unit in which the electrical current is localized at the tip of the electrocautery probe and does not pass through the patient.

TERM	DEFINITION
bipolar coagulation	Electrosurgery in which forceps rather than an electro-surgical pencil are used.
bleeder	Severed blood vessel.
blunt dissection	Separation of tissues or tissue planes with an instrument that has no cutting ability.
bolster	Tubing through which retention sutures are threaded to prevent them from cutting into the patient's skin.
bone wax	Medical-grade beeswax used on bone tissue to control bleeding.
Bovie cleaner	Small, rough-surfaced pad used to clean the electrocautery tip during surgery.
box lock	Ratchet closure mechanism of many surgical instruments.
Brown and Sharpe (B&S) wire gauge	Sizing standard used to measure steel sutures.
bur	Round instrument with sharp cutting edges used for drilling holes in bone.
caliper	Orthopedic device for measuring the width of a ball joint head in preparation for a prosthetic implant.
capillary action	Physical mechanism by which liquids are absorbed along the length of a suture.
case assignments	Written schedule of each surgical team member's assigned cases for the day.
caudal	Toward the feet.

TERM	DEFINITION
caudal anesthetic	Anesthetic agent introduced into the caudal canal to induce a type of epidural anesthesia.
chromic salts	Chemicals used to treat surgical gut suture so that it resists digestion by body tissues.
circulator	Surgical team member who does not perform a surgical hand scrub or don sterile attire and thus does not work within the sterile field.
clamp	Instrument designed to hold tissue, objects (such as surgical needles), or fabric (such as a towel).
cleaning	Process that removes organic or inorganic debris.
closed anesthesia system	In general anesthesia, the recirculation of anesthetic gases through the gas machine and back to the patient, which prevents exposure of personnel to the gases.
closed gloving	Method of donning sterile gloves when a surgical gown is worn.
closed reduction	Process in which bone fragments are reduced manually, without surgical intervention.
coagulation communicate	Clotting of blood. To connect; used to describe the relationship between two structures or organs that connect.

TERM	DEFINITION
curette	Spoon-shaped instrument used to scrape tissue from a surface.
cutting instrument	Any instrument with a sharp edge.
dead space	Area lying between tissue layers or opposing them that the surgeon has not approximated; dead space within a wound can lead to infection.
débridement	Process of removing dead skin, debris, or foreign bodies from a wound.
defibrillator	Piece of equipment used to generate electrical impulses to the heart during cardiac arrest in an attempt to restart the heartbeat.
deflect	To peel or retract back and away but not detach.
dehiscence	Splitting apart of a surgical wound after surgery.
dermabrasion	Physical sanding of the skin to remove pockmarks and other scars.
desiccation	Drying up of a substance.
dilators	Graduated, rod-like instruments used to enlarge the diameter of a channel or duct.
dissector	Tiny sponge mounted on a clamp and used to perform blunt dissection.
divide	To cut or sever.
dorsal recumbent	Position of the patient lying on his or her back; synonymous with <i>supine</i> .

TERM	DEFINITION
drill bit	In orthopedics, an instrument used in a drill to create a hole in bone to accommodate a screw.
emergence	Arousal from general anesthesia after cessation of the anesthetic agent.
endotracheal tube	Tube that is inserted into the patient's trachea for the administration of anesthetic gas.
endotracheal tube fire	Fire that occurs within the patient's endotracheal tube during laser surgery, which causes immediate and severe trauma to the lungs.
epidural anesthetic	Type of anesthetic agent that is introduced into the epidural space of the spine.
Esmarch bandage	Rolled rubber bandage that is wrapped around the limb to force blood away from the surgical site before the application of a tourniquet.
ethylene oxide gas	Highly flammable, toxic gas that is capable of sterilizing an object.
evisceration	In surgery, the splitting open of an abdominal surgical wound and subsequent spillage of its contents.
excise excitement	To remove by cutting out. Second stage of general anesthesia in which the patient is sensitive to external stimuli.
exposure	Anatomic area that the surgeon can see and thus operate on.

TERM	DEFINITION
extractor	In orthopedics, an instrument used to remove a metal implant from bone.
fiberoptic	Refers to a flexible material that carries light along its length, composed of fibers of glass or plastic that are bundled together to form the cables used for endoscopic examination.
first intention	Process by which a clean surgical wound heals directly, without granulation.
fistula	Abnormal passageway from a normal cavity to the outside of the body or another cavity.
fixation	In orthopedics, to hold bone fragments in place after a fracture; in <i>external</i> fixation, the fragments are held in alignment by an external device, such as a plaster cast; in <i>internal</i> fixation, fragments are held in alignment with an appliance such as a rod, nail, or screw.
flaking	Tendency of some suture materials to release tiny particles of the suture in the wound.
flash autoclave	Autoclave used in surgery to sterilize equipment quickly by steam under pressure.
footboard	Section of the operating table at the foot end that can be removed or angled up or down.

TERM	DEFINITION
four-by-four (4 × 4)	Type of surgical sponge, 4 inches square, consisting of loosely woven gauze.
Fowler position fracture	Sitting position. Breaking of a part of the body, especially bone; different types of fractures include (1) comminuted—the bone is splintered into many small fragments; (2) compound—the fracture penetrates adjacent soft tissue and skin (also called an <i>open fracture</i>); (3) greenstick—the fracture extends only partially through the bone; incomplete; (4) impacted—a portion of the bone is traumatically driven into another bone or fragment; (5) pathologic—caused by disease rather than injury; (6) spiral—forms a spiral pattern; bone has been twisted apart; (7) transverse—the fracture line lies perpendicular to the long axis of the bone.
free tie	Term used by the surgeon in requesting a length of suture for ligation.
French-eye	Delicate needle whose eye contains a spring.
friable	Refers to any tissue that is easily torn.
frozen section	Fine slice of frozen biopsy tissue; submitted for microscopic examination for the presence of disease.

TERM	DEFINITION
full length	Refers to the length of a suture strand; full length is 54 or 60 inches.
gas	Matter in its least dense state; air at room temperature is a gas.
gauge	In orthopedics, an instrument used to measure the depth of a hole made by a drill bit.
Gelfoam	Medical-grade gelatin foam that is used to control capillary bleeding.
general anesthetic	Type of anesthetic agent that causes unconsciousness.
glutaraldehyde	Chemical capable of rendering objects sterile.
gouge	In orthopedic surgery, an instrument used to create a grooved surface on bone.
gravity displacement sterilizer	Type of sterilizer that removes air by gravity.
grounding cable	During electrosurgery, the cable connecting the control unit to the inactive electrode.
grounding pad	Gel-covered pad that grounds the patient during electrosurgery; inactive electrode.
gurney	Type of wheeled stretcher used for patient transport to or within a clinical facility.
headboard	Removable section of the operating table at the head end that can be angled up or down.
hemostasis	The control of hemorrhage during surgery.

TERM	DEFINITION
hemostat	Instrument used to clamp a blood vessel.
hemostatic agent	Drug that promotes blood coagulation.
high-vacuum sterilizer	Type of steam sterilizer that removes air in the chamber by vacuum.
impactor	In orthopedics, an instrument used to drive an implant into bone; also may be called a <i>driver</i> .
incise	To cut or sever with a cutting instrument.
induction	First stage of general anesthesia during which the patient's physiologic status is unstable.
inflammation	Localized, protective reaction of tissue to injury or disease.
infusion pump	Containment and monitoring equipment used when the patient receives intravenous solutions, including anesthetics.
intentional hypotension	During surgery, the intentional lowering of a patient's blood pressure to control hemorrhage.
intentional hypothermia	During surgery, the intentional lowering of a patient's core temperature to control hemorrhage.
Javid shunt	Commercially prepared length of plastic tubing used to bypass the carotid artery temporarily during carotid endarterectomy.

TERM	DEFINITION
jaws	Working end of a clasping or gripping type of surgical instrument.
Kerlix bandage	Rolled bandage made of soft, woven material.
Kraske position	Operative position used for procedures on the perianal area; the patient lies in prone position, with the table broken at its midsection so that the head and feet are lower than the midsection; also called <i>jackknife position</i> or <i>knee-chest position</i> .
laminectomy position	Operative position used for spinal surgery; a form of the prone position.
laparotomy tape	Largest surgical sponge available, used during major surgery; also called a <i>lap tape</i> .
laser	Acronym for <i>light amplification by stimulated emission of radiation</i> ; a device that generates a beam of extremely bright light of a single color.
lateral	Refers to a side; for example, the little toe lies on the lateral aspect of the foot.
lavage	Irrigation of body cavities; during malignant hyperthermia, cold saline lavage is used to lower the patient's temperature.
ligate	To tie a length of suture around a vessel or duct and secure it with knots.

TERM	DEFINITION
ligation clips	Small V-shaped clips that are applied around blood vessels or ducts in place of a ligature; sometimes referred to as <i>silver clips</i> .
local anesthetic	Type of anesthetic agent that causes loss of sensation or feeling in a localized area.
local infiltration	Procedure in which the anesthetic is injected directly into the operative tissue.
lumen	Hollow tube.
malignant hyperthermia	Anesthetic-related phenomenon that causes the patient's temperature to rise suddenly and become critically high; emergency procedures are initiated during this crisis.
memory	Suture's ability to "remember" its manufactured configuration after removal from packaging (e.g., coiled or twisted).
microfibrillar collagen hemostat	Substance derived from collagen and used as a hemostatic agent.
monitored anesthesia care	Procedure in which the patient receives an intravenous sedative anesthetic, which may be given in conjunction with a local anesthetic or by itself.
monofilament suture	Suture composed of a single, nonfibrous strand of material.

TERM	DEFINITION
monopolar	Refers to a type of electrosurgical unit in which the electrical current passes through the patient and back to the control unit.
multifilament suture	Suture composed of many fine strands of fiber that are twisted or braided together.
nail	Orthopedic device used to fasten together pieces of bone; examples are Neufeld nail, Jewett nail, Ken sliding nail, and Smith-Petersen nail.
necrotic nerve block	Referring to dead tissue. Anesthesia of a large single nerve or nerves.
neuromuscular blocking agent	Pharmaceutical agent that causes paralysis and is used for this purpose during general anesthesia.
nonabsorbable suture	Suture that is never digested by tissue but becomes encapsulated by it.
open gloving	Method of donning sterile surgical gloves when a gown is not worn.
open reduction	Realignment of bone fragments with surgical instruments.
orthopedic cutdown instruments	Instruments used to gain access to fractures or to operate on soft tissue injuries; examples are scalpel handles, tissue forceps, Metzenbaum scissors, Mayo scissors, needle holders, mosquito clamps, Allis clamps, Kelly clamps, Kocher clamps, and Mayo clamps.

TERM	DEFINITION
orthopedic cutting instruments	Instruments used to cut bone; examples are rasps (used to smooth the surface of a bone or remove the medullary cavity so a stemmed prosthesis can be inserted), reamers (used to form hollow area in the bone), knives (used to cut away heavy connective tissue such as cartilage), elevators (used to lift the periosteum from the surface of the bone or to perform fine dissection during tendon and ligament repair), rongeurs (used to cut bone), saws (power-driven and used to cut through fine bone), osteotomes (used to create slivers of bone used in a graft), curettes (used to spoon out bits of bone from a curved area), gouges (used to create a grooved surface on the bone), and drills (used in conjunction with a drill bit to drill a hole).
orthopedic internal fixation devices	Surgical steel or alloy appliances used to stabilize a fracture during healing; examples are pins and bolts, nails, plates, staples, and screws.

TERM	DEFINITION
orthopedic measuring devices	Instruments used in implant procedures; examples are calipers (used to measure the width of a ball joint head in preparation for a prosthetic implant) and depth gauges (used to measure the depth of the hole made by a drill to determine what length of screw is needed).
osteotome	Chisel-like instrument used with a mallet to cut bone.
oxidized cellulose	Medical-grade cellulose manufactured into mesh squares and used as a hemostatic agent.
PACU	Acronym for <i>postanesthesia care unit</i> .
patty	Type of sponge used during neurosurgery.
peracetic acid	Chemical capable of rendering objects sterile.
pin	Device used in orthopedics to fasten together pieces of bone; pins are inserted with a drill or driver; examples are Steinmann pin and Knowles pin; also used as a verb, meaning to secure and immobilize fragments of bone.
plate	Orthopedic flat internal fixation device held in place with screws; examples are adjustable McLaughlin plate, Moe intertrochanteric plate, and Bagby compression plate.
points	Tips of a surgical instrument.

TERM	DEFINITION
precut	Lengths of suture material that are cut to a standard length by the manufacturer.
probe	Instrument placed within a lumen to determine its length and direction.
prosthesis	Any artificial organ or body part.
pursestring	Technique of suturing; a continuous strand is passed in and out around the circumference of a hollow structure and then is pulled tight like a drawstring.
ratchets	Interlocking clasps that hold a finger ring instrument closed.
reamer	Instrument used in orthopedic surgery to create a hollow area in bone.
reduce	In orthopedics, to bring two bone fragments in alignment after a fracture.
reel	Continuous strand of suture mounted on a spool; used for ligation of many blood vessels in rapid succession.
relaxation	During general anesthesia, the operative phase.
resect	To cut out and remove a section of tissue.
retention suture	Heavy, nonabsorbable suture placed behind the skin sutures and underneath all tissue layers to give added strength to the closure.
retract	To pull tissues back or away to expose a structure or other tissue.

TERM	DEFINITION
reverse Trendelenburg position	Operative position in which the patient lies supine and the operating table is tilted so that the head is higher than the feet.
running suture	Method of suturing that uses one continuous suture that is passed over and under the tissue edges.
self-tapping shank	In orthopedics, a screw that creates its own hole in bone as it is being inserted.
shank	Area of a surgical instrument between the box lock and the finger ring.
sharp dissection	Use of a scalpel or other sharp instrument for the separation of tissues.
shelf life	Amount of time a wrapped object will remain sterile after it has been subjected to a sterilization process.
Sims position	Position in which the patient lies on the side with the upper leg drawn up; also called <i>lateral position</i> .
sizer	Dummy or model of a prosthesis used during an operation to determine the correct size of prosthesis needed.
specimen	Any tissue, foreign body, prosthesis, or fluid that is removed from the patient.
speculum	Instrument used for exposure of a body cavity, such as the nasal passages.
sponge stick	Folded four-by-four mounted on a sponge clamp.

TERM	DEFINITION
steam sterilizer	Sterilizer that exposes objects to high-pressure steam.
sterile	Completely free of living microorganisms.
sterile field	Area that encompasses draped equipment, scrubbed personnel, and the draped patient.
stick tie	Name given to suture ligation—a suture-needle combination that is passed through a vessel or duct before ligation to prevent it from slipping off of the edge of the structure.
surgeon's preference card	File card that contains information pertaining to suture materials, equipment, or special instruments used by a particular surgeon.
surgical drape	Sterile cloth or nonwoven material placed around the surgical site to create a sterile field.
surgical scrub	Precise method by which all team members who will be working in sterile attire scrub their hands and arms before performing an operation.
surgically clean	As clean as possible without being sterile.
suture	Material used to bring tissues together by sewing; also can refer to a suture-needle combination.

TERM	DEFINITION
suture ligature	Needle-suture combination used to tie a bleeding vessel and attach it to nearby tissue simultaneously, thus preventing the tie from slipping off of the end of the vessel.
table breaks	Hinged sections of the operating table that can be folded up or down to create different postures.
tenaculum	Instrument used to grasp tissue.
tensile strength	Amount of stress a suture will withstand before breaking.
terminal disinfection	Process in which an area or object is rendered disinfected after contamination has occurred.
tie-on passer	Strand of suture material whose end is secured to the end of a long clamp; used to ligate deep vessels when exposure is limited.
topical anesthetic	Drug used on the surface of tissue, such as the eye.
topical thrombin	Drug used in conjunction with gelatin sponges to halt capillary bleeding.
torsion	Twisting of an organ or structure on itself, which often causes diminished blood supply to the affected area.
tourniquet	Device that prevents the flow of blood to the surgical wound.
transect	To cut across an organ or section of tissue.

TERM	DEFINITION
Trendelenburg position	Operative position in which the patient lies in supine position with the operating table tilted so that the head is lower than the feet.
trocar	Spear-shaped instrument or needle.
ultrasonic cleaner	Equipment that cleans instruments through cavitation.
washer-sterilizer	Equipment that washes and sterilizes instruments after an operative procedure.
Webril	Soft, rolled cotton material used to pad a limb before the application of a plaster cast.



COMPLEMENTARY AND ALTERNATIVE MEDICINE TERMS*

The following is a listing of common complementary and alternative medicine (CAM) terms. A comprehensive listing of CAM terms, as well as more detailed information on some of the terms listed here, can be found in *Mosby's Dictionary of Complementary and Alternative Medicine*.

Note: The practice of any complementary or alternative medicine techniques and the use of any herbal remedies should be approached with caution and care, or under the supervision of a CAM professional or your physician.

acupoints	Particular locations on the body that allow the practitioner to balance the client's qi (life force) to effect therapeutic changes using acupuncture or acupressure.
acupressure	Technique used to release blocked qi by applying finger pressure to points on meridians.

*Excerpts from Jonas WB: *Mosby's Dictionary of Complementary and Alternative Medicine*. St. Louis, Mosby, 2005; and from <http://nccam.nih.gov/health/providers/camterms.htm>, on the website of the National Center for Complementary and Alternative Medicine of the National Institutes of Health.

- acupuncture** Practice in Chinese medicine (developed more than 2000 years ago) in which the skin, at various points along meridians, is punctured with needles to remove energy blockages and to stimulate the flow of qi.
- aloe** This plant's leaves are used to treat minor burns, wounds, skin and GI disorders, menstrual cramps, premenstrual syndrome, and other ailments.
- antioxidants** Substances that may protect cells from damage caused by unstable molecules known as free radicals. Examples of antioxidants are beta-carotene and vitamins C, E, and A.
- apiotherapy** Use of products produced by honeybees, including pollen and venom, for therapeutic and pharmacologic purposes.
- applied kinesiology** Physical therapy model that draws on various therapeutic schools of thought. The aim of this therapy is the recovery of muscles that are functionally inhibited with respect to normal range of motion and strength (possibly as a result of disturbances in the nervous or neuromuscular system).
- aromatherapy** Use of essential oils (extracts and essences) from flowers, herbs, and trees applied topically or inhaled to promote and maintain overall health.

- ayurvedic medicine** Also known as *ayurveda*—meaning the science (*veda*) of life (*ayu*). It is an ancient Indian health system that works to reestablish the balance between the body and the mind (uses diet, herbal remedies, meditation, massage, and other modalities).
- bilberry** This berry is used to treat myopia, retinal problems, inflammation of the mouth and pharynx, GI disorders, varicose veins, and other ailments.
- biofeedback** Process in which equipment sensors provide measurements of body functions (such as heart rate or neural activity), and those signals are displayed to the patient, to permit conscious control of the measured function.
- black cohosh** This plant's roots are used to treat menopause, menstrual cramps, diarrhea, and other ailments.
- chamomile** This plant's dried buds are used to treat inflammatory disease of the GI and upper respiratory tracts and inflammation of the skin and mucous membranes; to promote healing of wounds, rashes, and ulcers (applied topically); and to relieve motion sickness, GI spasms, restlessness, nervousness or insomnia, and other ailments.

- chelation therapy** Medical treatment in which heavy metals are flushed from the bloodstream by means of a chelator that binds metal ions; used in cases of mercury or lead poisoning.
- chi** In Tibetan medicine, awareness, one of the three functions of the mind, providing the direction for actions.
- chiropractic therapy** A health discipline focusing on the relationship between body structure (primarily of the spine) and function. Chiropractors use manipulative therapy to treat the client's back, neck, and limbs.
- chondroitin** Naturally occurring substance responsible for cartilage repair and taken as a dietary supplement. Used with glucosamine for knee osteoarthritis.
- circadian rhythm** The biologic patterns (of a specific person) within a 24-hour cycle, over the course of a day.
- coenzyme Q10** A compound, made naturally in the body, that is used for cell growth and to protect cells from damage. The dietary supplement is used to help the immune system work better, especially during the treatment of cancer and heart failure.

- complementary and alternative medicine (CAM)** A group of diverse medical and health care systems, practices, and products that at present are not considered part of conventional or mainstream medicine. Complementary medicine is used together with conventional medicine (e.g., aromatherapy to lessen patient discomfort after surgery). Alternative medicine is used in place of conventional medicine (e.g., patient may choose to follow a special diet to address ADHD symptoms, rather than drug therapy).
- dehydroepiandrosterone (DHEA)** A hormone precursor that exists naturally in yams. Used to slow the effects of aging, to support or improve memory, and to treat erectile dysfunction, depression, osteoporosis, and atherosclerosis.
- echinacea** This plant's roots, flowers, and leaves are used to treat upper respiratory and urinary tract infections, allergic rhinitis, and other ailments, and to promote wound healing.
- electromagnetic fields (EMFs)** Invisible lines of force that surround all electrical devices. Bioelectromagnetic-based therapies involve unconventional use of electromagnets, such as pulsed fields and magnetic currents, to treat chronic disease or to manage pain, especially migraine headaches.

- ergonomics** Applied study of psychology, anatomy, and physiology relating to people and work environments.
- folate** A water-soluble B vitamin that occurs naturally in food. Folic acid is the synthetic form of folate that is found in supplements and added to fortified foods. Folate helps produce and maintain new cells. This is especially important during periods of rapid cell division and growth, such as infancy and pregnancy.
- garlic** This plant's bulbs are used to manage and treat hypercholesterolemia (elevated cholesterol levels), atherosclerosis, hypertension, upper respiratory tract infections, and other conditions.
- ginger** This plant's roots are used to manage and treat nausea and vomiting, motion sickness, and other conditions.
- ginkgo (*Ginkgo biloba*)** This plant's leaves are used to manage and treat Alzheimer disease, dementia, depression, asthma, retinal disease, heart disease, peripheral arterial occlusive disease, varicose veins, premenstrual syndrome, tinnitus, and other conditions.
- ginseng** This plant's roots are used to manage and treat fatigue, stress, mild depression, decreased libido, and other conditions and ailments.

- glucosamine** An amino sugar that the body produces and distributes in cartilage and other connective tissue. Glucosamine is used alone and in conjunction with chondroitin sulfate to treat knee osteoarthritis.
- guided imagery** Directed relaxation and visualization, as well as exercises in self-relaxation and other beneficial practices, to support changes in health.
- herbalism** Study and practice of using plants to treat illnesses and promote health; also called *botanical medicine* or *phytotherapy*.
- homeopathy** System of treating disease based on the administration of highly diluted substances that aim to trigger the body's immune response.
- hydrotherapy** A therapeutic modality that uses water, such as whirlpools or sitz baths.
- integrative medicine** Combines mainstream medical therapies and CAM therapies for which there is some evidence for safety and effectiveness.
- kava** This plant's rhizomes and roots are used to treat anxiety, restlessness, fibromyalgia, tension headaches, insomnia, alcohol dependence, and other ailments.
- kinesiology** Study of the body's structure and processes as they relate to movement.
- lymphatic drainage** A specific type of massage that supports and assists circulation in the lymphatic system.

- macrobiotic diet** Designed to bring yin/yang energies into balance, the macrobiotic diet, developed by Michio Kushi, is part of a larger lifestyle/philosophy and whole-body regimen.
- manipulation** In massage therapy, osteopathic medicine, chiropractic, and traditional Chinese medicine, the use of various manual techniques to adjust the joints and spinal column, improve the range of motion of the joints, relax and stretch connective tissue and muscles, and promote overall relaxation.
- massage therapy** The application of diverse manual techniques of touch and stroking to muscles and soft tissue to achieve relaxation and to improve sense of well-being.
- meditation** Directing one's attention toward a symbol, sound, thought, or breath to alter the state of consciousness, to attain a state of relaxation and stress relief; used for spiritual growth, healing, deepening concentration, and unlocking creativity.
- melatonin** Hormone secreted from the pineal gland and thought to regulate circadian rhythms; also used in supplement form as a sleep aid.
- meridians** In acupuncture, a system of pathways or channels running through the body that connect vital organs and carry qi.

- milk thistle** This plant's seeds are used to make a tea to treat liver and gallbladder disease, hepatitis, and dyspepsia, and to support the liver during transplantation recovery.
- mistletoe** Leafy shoots and berries of mistletoe are used to make extracts that can be taken by mouth. Mistletoe has been used for centuries to treat seizures, headaches, and other conditions. Clinical trials are ongoing for possible effects on cancer treatment.
- naturopathy** Therapeutic system that relies on using natural agents such as light, natural foods, warmth, massage, and fresh air. Naturopaths believe in the power of the body's natural processes to heal illnesses.
- omega-3 fatty acids** A group of polyunsaturated fatty acids that come from food sources such as fish, fish oil, some vegetable oils (primarily canola and soybean), walnuts, wheat germ, and certain dietary supplements. Clinical trials are ongoing to test the effects of omega-3 fatty acids on various conditions and for enhancement of general well-being.
- osteopathy** A form of medicine that uses joint manipulation, physical therapy, and postural reeducation to restore the structural balance of the musculoskeletal system.

- qi** The body's life force. In Chinese philosophy, qi is the force that flows through channels in the body and enlivens all living beings; an imbalance in qi is believed to cause illness.
- qi gong** Cultivation of qi. *Qi gong* (chē-GÜNG) is the general term for all Chinese techniques of breathing, visualization, and movement, the purpose of which is the promotion of balanced qi flow (vital energy) for enhanced immune function and blood flow.
- reflexology** A natural healing system based on the principle that reflexes in the hands and feet correspond to various organs and body systems; stimulating such reflexes by applying pressure on hands and feet improves circulation, thereby optimizing body functions.
- Reiki** A system of spiritual healing/energy medicine developed by Japanese physician Dr. Mikao Usui. Reiki (RĀ-kē) is a Japanese word representing universal life energy. It is based on the belief that when spiritual energy is channeled through a Reiki practitioner, the patient's spirit is healed, which then heals the physical body.
- Rolfing** A 10-session manual therapy developed to optimize the body's movement and alignment and coordination with the forces of gravity, for relief of muscular and emotional tension.

- selenium** A trace mineral that is essential to good health but required in small amounts only. Selenium is incorporated into proteins to make selenoproteins, which are important antioxidant enzymes. The antioxidant effects of selenoproteins help prevent cellular damage from free radicals. Free radicals are natural byproducts of oxygen metabolism that may contribute to the development of chronic diseases such as cancer and heart disease.
- shiatsu** A type of massage developed in Japan; it consists of the application of pressure to specific points on the human body with the palms and thumbs.
- soy** Soybeans ingested in various forms may support healthy body tissues by neutralizing free radicals. Soy may offer a diversity of antioxidant mechanisms.
- St. John's wort** This plant's flowers may be used to treat mild to moderate depression, anxiety, sleep disorders, and other ailments.

- tai chi** In traditional Chinese medicine, a family of health-promoting exercises that provide benefits for the body, mind, and soul by maintaining balance between the yin and yang components; these exercises comprise flowing movements that imitate the motions and forms of animals, all of which share fundamental elements rooted in qi gong.
- valerian** This plant's rhizomes and roots are used to treat sleeping disorders, nervousness, anxiety, restlessness, irritable bowel syndrome, and other ailments.
- yin and yang** Governing theory behind traditional Chinese medicine: the idea that life is filled with opposite yet complementary characteristics and qualities on the spiritual and physical levels and on the macro and micro levels. The concept is that each entity can be essentially itself and its opposite; additionally, yang's "seed" is believed to be contained within yin; a balance of yin and yang is considered essential for good health, whereas an imbalance can manifest as disease.
- yoga** A family of mind-body disciplines that share the goals of the integrated body and mind or the union of the self with the divine. All yogic systems are aimed at nurturing the body through breath and posture and cultivating the mind through meditation.

zinc

An essential mineral, found in almost every cell, that stimulates the activity of approximately 100 enzymes, which are substances that promote the body's biochemical reactions. Zinc supports a healthy immune system, is needed for wound healing, helps maintain sense of taste and smell, and is needed for DNA synthesis. Zinc also supports normal growth and development during pregnancy, childhood, and adolescence.

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COMMON DRUGS AND THEIR USES*

The following is an alphabetized list of the drugs referred to in Chapter 21 (tables), with brand name(s) in parentheses and explanation of use, including drug category and/or class. This Appendix, along with drugs listed alphabetically by brand name, appears on the Evolve website.

GENERIC NAME (BRAND NAME)	EXPLANATION OF USE
abiraterone (Zytiga)	Endocrine/ antiandrogen
acarbose (Precose)	Antidiabetic (type 2 diabetes)/alpha- glucosidase inhibitor
acetaminophen (Tylenol)	Analgesic/mild
acyclovir (Zovirax)	Antiviral
adalimumab (Humira)	Gastrointestinal/ anti-TNF
albuterol (Proventil, Ventolin)	Bronchodilator
alendronate (Fosamax)	Anti-osteoporosis/ bisphosphonate
alprazolam (Xanax)	Tranquilizer/minor/ benzodiazepine

*From Chabner DE: *The Language of Medicine*, 11th ed. St. Louis, Elsevier/Saunders, 2017.

GENERIC NAME (BRAND NAME)	EXPLANATION OF USE
aluminum antacid (Rolaids)	GI/antacid
aluminum + magnesium antacid (Gaviscon)	GI/antacid
amiodarone (Cordarone)	Cardiovascular/ antiarrhythmic
amlodipine (Norvasc)	Cardiovascular/calcium antagonist
amoxicillin trihydrate (Amoxil, Trimox)	Antibiotic/penicillin
amoxicillin + clavulanate (Augmentin)	Antibiotic/penicillin
anastrozole (Arimidex)	Endocrine/aromatase inhibitor
apixaban (Eliquis)	Anticoagulant
aripiprazole (Abilify)	Tranquilizer/major
aspirin (Anacin, Ascription, Excedrin)	Analgesic/NSAID
atenolol (Tenormin)	Cardiovascular/ beta-blocker
atorvastatin (Lipitor)	Cardiovascular/ cholesterol-lowering statin
azithromycin (Zithromax)	Antibiotic/macrolide
budesonide (Pulmicort)	Respiratory/steroid inhaler
bumetanide (Bumex)	Cardiovascular/diuretic
buspirone (BuSpar)	Tranquilizer/minor
caffeine	Stimulant
calcitonin (Cibacalcin)	Endocrine/thyroid
carbamazepine (Tegretol)	Anticonvulsant
cefprozil (Cefzil)	Antibiotic/ cephalosporin

GENERIC NAME (BRAND NAME)	EXPLANATION OF USE
ceftazidime (Fortaz)	Antibiotic/ cephalosporin
cefuroxime axetil (Ceftin)	Antibiotic/ cephalosporin
celecoxib (Celebrex)	Analgesic/NSAID
cephalexin (Keflex)	Antibiotic/ cephalosporin
certolizumab pegol (Cimzia)	Gastrointestinal/ anti-TNF
cetirizine (Zyrtec)	Antihistamine
chlorpheniramine maleate (Chlor-Trimeton)	Antihistamine
chlorpromazine (Thorazine)	Tranquilizer, major/ phenothiazine
cholestyramine (Questran)	Cardiovascular/ cholesterol-binding
cimetidine (Tagamet)	GI/antiulcer/anti-GERD
ciprofloxacin (Cipro)	Antibiotic/quinolone
clarithromycin (Biaxin)	Antibiotic/macrolide
clopidogrel (Plavix)	Antiplatelet
clotrimazole (Lotrimin, Mycelex)	Antifungal
codeine	Analgesic/narcotic
colestipol (Colestid)	Cardiovascular/ cholesterol-binding
dabigatran (Pradaxa)	Anticoagulant
dalteparin (Fragmin)	Anticoagulant
denosumab (Prolia)	Anti-osteoporosis
dexamethasone (Decadron)	Respiratory/steroid, intravenous or oral
dextroamphetamine and amphetamine (Adderall)	Stimulant
dextroamphetamine sulfate (Dexedrine)	Stimulant
diazepam (Valium)	Tranquilizer/minor/ benzodiazepine

GENERIC NAME (BRAND NAME)	EXPLANATION OF USE
diclofenac sodium (Voltaren)	Analgesic/NSAID
digoxin (Lanoxin)	Cardiovascular/ anti-CHF
diltiazem (Cardizem CD)	Cardiovascular/calcium antagonist
diphenhydramine (Benadryl)	Antihistamine
diphenoxylate + atropine (Lomotil)	GI/antidiarrheal
donepezil (Aricept)	Anti-Alzheimer disease
doxycycline	Antibiotic/tetracycline
duloxetine (Cymbalta)	Antidepressant
econazole, topical (Spectazole)	Antifungal
efavirenz + tenofovir + emtricitabine (Atripla)	Antiviral Anti-HIV all in one combination
efavirenz (Sustiva)	Anti-HIV
enalapril maleate (Vasotec)	Cardiovascular/ACE inhibitor
enoxaparin sodium (Lovenox)	Anticoagulant
enzalutamide (XTANDI)	Endocrine/ antiandrogen
epinephrine	Bronchodilator
erythromycin (Ery-Tab)	Antibiotic/macrolide
escitalopram (Lexapro)	Antidepressant
estrogen (Premarin, Prempro, Estradiol)	Endocrine/estrogen
etanercept (Enbrel)	Gastrointestinal/ anti-TNF
ethambutol (Myambutol)	Antitubercular
ether	Anesthetic/general
famotidine (Pepcid)	GI/antiulcer/anti-GERD
felbamate (Felbatol)	Anticonvulsant
fentanyl patch (Duragesic)	Analgesic/narcotic

GENERIC NAME (BRAND NAME)	EXPLANATION OF USE
fexofenadine (Allegra)	Antihistamine
fluconazole (Diflucan)	Antifungal
flunisolide (AeroBid)	Respiratory/steroid inhaler
flouxymesterone (Halotestin)	Endocrine/androgen
flutamide (Eulexin)	Endocrine/ antiandrogen
fluticasone propionate (Flovent)	Respiratory/steroid inhaler
formoterol (Foradil)	Bronchodilator
formoterol + budesonide (Symbicort)	Bronchodilator
fulvestrant (Faslodex)	Endocrine/aromatase inhibitor
furosemide (Lasix)	Cardiovascular/diuretic
gabapentin (Neurontin)	Anticonvulsant
glipizide (Glucotrol XL)	Antidiabetic (type 2 diabetes)/sulfonylurea
glyburide (Diabeta, Micronase)	Antidiabetic (type 2 diabetes)/sulfonylurea
golimumab (Simponi)	Anti-TNF
goserelin (Zoladex)	Endocrine/ antiandrogen
haloperidol (Haldol)	Tranquilizer/major
halothane (Fluothane)	Anesthetic/general
hydrochlorothiazide (HydroDIURIL)	Cardiovascular/diuretic
hydrocodone w/APAP (Lortab, Vicodin)	Analgesic/narcotic
hydrocortisone	Glucocorticoid
hydromorphone (Dilaudid)	Analgesic/narcotic
ibuprofen (Motrin, Advil)	Analgesic/NSAID
ibutilide (Corvert)	Antiarrhythmic

GENERIC NAME (BRAND NAME)	EXPLANATION OF USE
indinavir (Crixivan)	Antiviral/protease inhibitor/anti-HIV
infliximab (Remicade)	Gastrointestinal/anti-TNF
insulin aspart (NovoLog)	Antidiabetic (type 1 diabetes)
insulin detemir (Levemir)	Antidiabetic (type 1 diabetes)
insulin glargine (Lantus)	Antidiabetic (type 1 diabetes)
insulin glulisine (Apidra)	Antidiabetic (type 1 diabetes)
insulin lispro (Humalog)	Antidiabetic (type 1 diabetes)
insulin NPH (Humulin N)	Antidiabetic (type 1 diabetes)
insulin regular (Humulin R)	Antidiabetic (type 1 diabetes)
insulin zinc suspension (Ultralente)	Antidiabetic (type 1 diabetes)
interferon alfa-n1 (Wellferon)	Antiviral/anti-cancer drug
ipratropium bromide + albuterol (Combivent)	Bronchodilator
irbesartan (Avapro)	Cardiovascular/angiotensin II receptor blockers
isoniazid or INH (Nydrazid)	Antitubercular
itraconazole (Sporanox)	Antifungal
ketamine (Ketalar) ketorolac (Toradol)	Anesthetic/general Analgesic/NSAID
lamivudine (Epivir)	Antiviral/reverse transcriptase inhibitor/anti-HIV
lansoprazole (Prevacid) lepirudin (Refludan)	GI/antiulcer/anti-GERD Anticoagulant

GENERIC NAME (BRAND NAME)	EXPLANATION OF USE
letrozole (Femara)	Endocrine/aromatase inhibitor
leuprolide (Lupron)	Endocrine/ antiandrogen
levalbuterol (Xopenex)	Bronchodilator
levetiracetam (Keppra)	Anticonvulsant
levofloxacin (Levaquin)	Antibiotic
levothyroxine (Levothroid, Synthroid)	Endocrine/thyroid hormone
lidocaine (Xylocaine)	Anesthetic/local
lidocaine + prilocaine (EMLA)	Anesthetic/local
liothyronine (Cytomel)	Endocrine/thyroid hormone
lisdexamfetamine (Vyvanse)	Stimulant
lisinopril (Prinivil, Zestril)	Cardiovascular/ACE inhibitor
lithium carbonate (Eskalith)	Tranquilizer/major
loperamide (Imodium)	GI/antidiarrheal
loratadine (Claritin)	Antihistamine
lorazepam (Ativan)	Tranquilizer/minor/ benzodiazepine
losartan (Cozaar)	Cardiovascular/ angiotensin II receptor blockers
lovastatin (Mevacor)	Cardiovascular/ cholesterol-lowering statin
magnesium antacid (milk of magnesia)	GI/antacid
meclizine (Antivert)	Antihistamine
medroxyprogesterone acetate (Cycrin, Provera)	Endocrine/progestin
megestrol (Megace)	Endocrine/progestin


GENERIC NAME (BRAND NAME)	EXPLANATION OF USE
memantine (Namenda)	Anti-Alzheimer disease
meperidine (Demerol)	Analgesic/narcotic
metaproterenol (Alupent)	Bronchodilator
metformin (Glucophage)	Antidiabetic (type 2 diabetes)/biguanide
methaqualone (Quaalude)	Sedative-hypnotic
methylphenidate (Ritalin)	Stimulant
methylprednisolone (Medrol)	Respiratory/steroid, intravenous or oral
methyltestosterone (Virilon)	Endocrine/androgen
metoclopramide (Reglan)	GI/antinauseant
metoprolol (Lopressor, Toprol-XL)	Cardiovascular/ beta-blocker
miconazole (Monistat)	Antifungal
midazolam (Versed)	Sedative-hypnotic
modafinil (Provigil)	Stimulant/sleep antagonist
mometasone (Asmanex)	Respiratory/inhaler
montelukast sodium (Singulair)	Respiratory/leukotriene modifier
naftillin (Unipen)	Antibiotic/penicillin
naproxen (Aleve)	Analgesic/NSAID
nifedipine (Adalat CC, Procardia)	Cardiovascular/calcium antagonist
nilutamide (Casodex)	Endocrine/ antiandrogen
nitroglycerin	Cardiovascular/ antianginal
nitrous oxide	Anesthetic/general
nystatin (Nilstat)	Antifungal
octreotide (Sandostatin)	Endocrine/growth

GENERIC NAME (BRAND NAME)	EXPLANATION OF USE
ofloxacin (Floxin) olanzapine (Zyprexa)	Antibiotic/quinolone Tranquilizer/major/ antipsychotic
omeprazole (Prilosec)	GI/antiulcer/anti-GERD
ondansetron (Zofran)	GI/antinauseant
oxacillin (Bactocill)	Antibiotic/penicillin
oxycodone (OxyContin, Roxicodone)	Analgesic/narcotic
oxycodone with APAP (Roxicet, Endocet, Percocet)	Analgesic/narcotic
pamidronate disodium (Aredia)	Anti-osteoporosis/ bisphosphonate
p-aminosalicylic acid granules (PASER)	Antitubercular
paregoric	GI/antidiarrheal
phenytoin sodium (Dilantin)	Anticonvulsant
pioglitazone (Actos)	Antidiabetic (type 2 diabetes)
pirbuterol (Maxair)	Bronchodilator
prasugrel (Effient)	Antiplatelet
pravastatin (Pravachol)	Cardiovascular/ cholesterol-lowering statin
prednisone	Respiratory/steroid, intravenous or oral
pregabalin (Lyrica)	Anticonvulsant
promethazine (Phenergan)	Antihistamine
procaine (Novocain)	Anesthetic/local
prochlorperazine maleate (Compazine)	GI/antinauseant
propofol (Diprivan)	Anesthetic/general
propranolol (Inderal)	Cardiovascular/ beta-blocker
quinapril (Accupril)	Cardiovascular/ACE inhibitor

GENERIC NAME (BRAND NAME)	EXPLANATION OF USE
raloxifene (Evista)	Endocrine/SERM/ anti-osteoporosis
ramipril (Altace)	Cardiovascular/ACE inhibitor
ranitidine (Zantac)	GI/antiulcer/anti-GERD
repaglinide (Prandin)	Antidiabetic (type 2 diabetes)/meglitinide
ribavirin (Copegus, Rebetol)	Antiviral
rifampin (Rifadin)	Antitubercular
risperidone (Risperdal)	Tranquilizer/major
rivaroxaban (Xarelto)	Anticoagulant
rosiglitazone (Avandia)	Antidiabetic (type 2 diabetes)
rosuvastatin (Crestor)	Cardiovascular/ cholesterol-lowering statin
salmeterol (Serevent) salmeterol + fluticasone (Advair Diskus)	Bronchodilator Corticosteroid anti- inflammatory— bronchodilator combination
Simeprevir (Olysio)	Antiviral
simvastatin (Zocor)	Cardiovascular/ cholesterol-lowering statin
sofosbuvir (Sovaldi)	Antiviral
sotalol (Betapace)	Cardiovascular/ beta-blocker
spironolactone (Aldactone)	Cardiovascular/diuretic
sulfamethoxazole + trimethoprim (Bactrim)	Antibiotic/ sulfonamide— antibacterial combination
sulfisoxazole (Gantrisin)	Antibiotic/sulfonamide
tamoxifen (Nolvadex)	Endocrine/SERM

GENERIC NAME (BRAND NAME)	EXPLANATION OF USE
temazepam (Restoril)	Sedative-hypnotic/ benzodiazepine
terbinafine (Lamisil)	Antifungal
teriparatide (Forteo)	Anti-osteoporosis
teriparatide (Forteo)	Endocrine/parathyroid
tetracycline (Sumycin, Terramycin)	Antibiotic/tetracycline
theophylline (Theo-Dur)	Bronchodilator
thiopental (Pentothal)	Anesthetic/general
thioridazine (Mellaril)	Tranquilizer/major/ phenothiazine
ticagrelor (Brilinta)	Antiplatelet
tiotropium (Spiriva)	Bronchodilator
tissue plasminogen activator <i>or</i> tPA	Anticoagulant
tramadol (Ultram)	Analgesic/narcotic
triamcinolone (Aristocort)	Glucocorticoid
triamcinolone (Azmacort)	Respiratory/steroid inhaler
triamterene (Dyazide)	Cardiovascular/diuretic
triazolam (Halcion)	Sedative-hypnotic/ benzodiazepine
trifluoperazine (Stelazine)	Tranquilizer/major/ phenothiazine
valdecoxib (Bextra)	Analgesic/NSAID
valproic acid (Depakote)	Anticonvulsant
valsartan (Diovan)	Cardiovascular/ angiotensin II receptor blockers
valsartan/sacubitril (LCZ696)	Cardiovascular/ angiotensin II receptor blockers
warfarin (Coumadin)	Anticoagulant
zafirlukast (Accolate)	Respiratory/leukotriene modifier

GENERIC NAME (BRAND NAME)	EXPLANATION OF USE
zidovudine <i>or</i> AZT (Retrovir)	Antiviral/reverse transcriptase inhibitor/anti-HIV
zidovudine + lamivudine (Combivir)	Anti-HIV
zileuton (Zyflo)	Respiratory/leukotriene modifier
zoledronic acid (Zometa)	Anti-osteoporosis/ bisphosphonate
zolpidem tartrate (Ambien)	Sedative-hypnotic



MAJOR DIAGNOSTIC CATEGORIES AND DIAGNOSIS-RELATED GROUPS*

There are 25 major diagnostic categories into which diagnoses are grouped. They are separated according to body system or medical specialty. These categories are one component of the diagnostic-related groups (DRGs) that are used in medical coding.

MAJOR DIAGNOSTIC CATEGORIES (MDCS)

DIAGNOSTIC	CATEGORY
1	Diseases and disorders of the nervous system
2	Diseases and disorders of the eye
3	Diseases and disorders of the ear, nose, mouth, and throat
4	Diseases and disorders of the respiratory system
5	Diseases and disorders of the circulatory system

*Excerpted from *Medicare Severity Diagnosis Related Groups (MS-DRGs) Definitions Manual*, Version 30.0. Wallingford, CT: 3M Health Information Systems; 2012.

MAJOR DIAGNOSTIC CATEGORIES (MDCS) (Continued)

DIAGNOSTIC	CATEGORY
6	Diseases and disorders of the digestive system
7	Diseases and disorders of the hepatobiliary system and pancreas
8	Diseases and disorders of the musculoskeletal system and connective tissue
9	Diseases and disorders of the skin, subcutaneous tissue, and breast
10	Endocrine, nutritional, and metabolic diseases and disorders
11	Diseases and disorders of the kidney and urinary tract
12	Diseases and disorders of the male reproductive system
13	Diseases and disorders of the female reproductive system
14	Pregnancy, childbirth, and the puerperium
15	Newborns and other neonates with conditions originating in the perinatal period
16	Diseases and disorders of the blood and blood-forming organs and immunological disorders
17	Myeloproliferative diseases and disorders, poorly differentiated neoplasm
18	Infectious and parasitic diseases (systemic or unspecified sites)
19	Mental diseases and disorders
20	Alcohol/drug use and alcohol/drug induced organic mental disorders
21	Injuries, poisonings, and toxic effects of drugs
22	Burns
23	Factors influencing health status and other contacts with health services
24	Multiple significant trauma
25	Human immunodeficiency virus infections

DIAGNOSIS-RELATED GROUPS (DRGS)*

Note the following abbreviations used in this section: AICD, automated implantable cardioverter-defibrillator; AMA, against medical advice; AMI, acute myocardial infarction; CC, comorbidity/complications; CDE, complete diagnostic evaluation; D&C, dilatation and curettage; DIS, disease; Fx, fracture; GI, gastrointestinal; GNR, generator procedure; HRT, heart; IM, implant; OR, operating room; PTCA, percutaneous transluminal coronary angioplasty; SHK, shock; TIA, transient ischemic attack; URI, upper respiratory infection.

DRG	MDC	TYPE	DESCRIPTION
001		SURGICAL	HEART TRANSPLANT OR IMPLANT OF HEART ASSIST SYSTEM W MCC
002		SURGICAL	HEART TRANSPLANT OR IMPLANT OF HEART ASSIST SYSTEM W/O MCC
003		SURGICAL	ECMO OR TRACH W MV 96+ HRS OR PDX EXC FACE, MOUTH & NECK W MAJ O.R.
004		SURGICAL	TRACH W MV 96+ HRS OR PDX EXC FACE , MOUTH & NECK W/O MAJ O.R.
005		SURGICAL	LIVER TRANSPLANT W MCC OR INTESTINAL TRANSPLANT
006		SURGICAL	LIVER TRANSPLANT W/O MCC

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
007		SURGICAL	LUNG TRANSPLANT
008		SURGICAL	SIMULTANEOUS PANCREAS/KIDNEY TRANSPLANT
010		SURGICAL	PANCREAS TRANSPLANT
011		SURGICAL	TRACHEOSTOMY FOR FACE, MOUTH, & NECK DIAGNOSES W MCC
012		SURGICAL	TRACHEOSTOMY FOR FACE, MOUTH, & NECK DIAGNOSES W CC
013		SURGICAL	TRACHEOSTOMY FOR FACE, MOUTH, & NECK DIAGNOSES W/O CC/MCC
014		SURGICAL	ALLOGENEIC BONE MARROW TRANSPLANT
016	00	SURGICAL	AUTOLOGOUS BONE MARROW TRANSPLANT W CC/MCC
017	00	SURGICAL	AUTOLOGOUS BONE MARROW TRANSPLANT W/O CC/MCC
020	01	SURGICAL	INTRACRANIAL VASCULAR PROCEDURES W PDX HEMORRHAGE W MCC
021	01	SURGICAL	INTRACRANIAL VASCULAR PROCEDURES W PDX HEMORRHAGE W CC
022	01	SURGICAL	INTRACRANIAL VASCULAR PROCEDURES W PDX HEMORRHAGE W/O CC/MCC
023	01	SURGICAL	CRANIO W MAJOR DEV IMPL/ACUTE COMPLEX CNS PDX W MCC OR CHEMO IMPLANT
024	01	SURGICAL	CRANIO W MAJOR DEV IMPL/ACUTE COMPLEX CNS PDX W/O MCC
025	01	SURGICAL	CRANIOTOMY & ENDOVASCULAR INTRACRANIAL PROCEDURES W MCC
026	01	SURGICAL	CRANIOTOMY & ENDOVASCULAR INTRACRANIAL PROCEDURES W CC

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
027	01	SURGICAL	CRANIOTOMY & ENDOVASCULAR INTRACRANIAL PROCEDURES W/O CC/MCC
028	01	SURGICAL	SPINAL PROCEDURES W MCC
029	01	SURGICAL	SPINAL PROCEDURES W CC OR SPINAL NEUROSTIMULATORS
030	01	SURGICAL	SPINAL PROCEDURES W/O CC/MCC
031	01	SURGICAL	VENTRICULAR SHUNT PROCEDURES W MCC
032	01	SURGICAL	VENTRICULAR SHUNT PROCEDURES W CC
033	01	SURGICAL	VENTRICULAR SHUNT PROCEDURES W/O CC/MCC
034	01	SURGICAL	CAROTID ARTERY STENT PROCEDURE W MCC
035	01	SURGICAL	CAROTID ARTERY STENT PROCEDURE W CC
036	01	SURGICAL	CAROTID ARTERY STENT PROCEDURE W/O CC/MCC
037	01	SURGICAL	EXTRACRANIAL PROCEDURES W MCC
038	01	SURGICAL	EXTRACRANIAL PROCEDURES W CC
039	01	SURGICAL	EXTRACRANIAL PROCEDURES W/O CC/MCC
040	01	SURGICAL	PERIPH/CRANIAL NERVE & OTHER NERVSYST PROC W MCC
041	01	SURGICAL	PERIPH/CRANIAL NERVE & OTHER NERV SYST PROC W CC OR PERIPH NEUROSTIM
042	01	SURGICAL	PERIPH/CRANIAL NERVE & OTHER NERV SYST PROC W/O CC/MCC

DIAGNOSIS-RELATED GROUPS (DRGs) (Continued)

DRG	MDC	TYPE	DESCRIPTION
052	01	MEDICAL	SPINAL DISORDERS & INJURIES W CC/MCC
053	01	MEDICAL	SPINAL DISORDERS & INJURIES W/O CC/MCC
054	01	MEDICAL	NERVOUS SYSTEM NEOPLASMS W MCC
055	01	MEDICAL	NERVOUS SYSTEM NEOPLASMS W/O MCC
056	01	MEDICAL	DEGENERATIVE NERVOUS SYSTEM DISORDERS W MCC
057	01	MEDICAL	DEGENERATIVE NERVOUS SYSTEM DISORDERS W/O MCC
058	01	MEDICAL	MULTIPLE SCLEROSIS & CEREBELLAR ATAXIA W MCC
059	01	MEDICAL	MULTIPLE SCLEROSIS & CEREBELLAR ATAXIA W CC
060	01	MEDICAL	MULTIPLE SCLEROSIS & CEREBELLAR ATAXIA W/O CC/MCC
061	01	MEDICAL	ACUTE ISCHEMIC STROKE W USE OF THROMBOLYTIC AGENT W MCC
062	01	MEDICAL	ACUTE ISCHEMIC STROKE W USE OF THROMBOLYTIC AGENT W CC
063	01	MEDICAL	ACUTE ISCHEMIC STROKE W USE OF THROMBOLYTIC AGENT W/O CC/MCC
064	01	MEDICAL	INTRACRANIAL HEMORRHAGE OR CEREBRAL INFARCTION W MCC
065	01	MEDICAL	INTRACRANIAL HEMORRHAGE OR CEREBRAL INFARCTION W CC
066	01	MEDICAL	INTRACRANIAL HEMORRHAGE OR CEREBRAL INFARCTION W/O CC/MCC
067	01	MEDICAL	NONSPECIFIC CVA & PRECEREBRAL OCCLUSION W/O INFARCT W MCC

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
068	01	MEDICAL	NONSPECIFIC CVA & PRECEREBRAL OCCLUSION W/O INFARCT W/O MCC
069	01	MEDICAL	TRANSIENT ISCHEMIA
070	01	MEDICAL	NONSPECIFIC CEREBROVASCULAR DISORDERS W MCC
071	01	MEDICAL	NONSPECIFIC CEREBROVASCULAR DISORDERS W CC
072	01	MEDICAL	NONSPECIFIC CEREBROVASCULAR DISORDERS W/O CC/MCC
073	01	MEDICAL	CRANIAL & PERIPHERAL NERVE DISORDERS W MCC
074	01	MEDICAL	CRANIAL & PERIPHERAL NERVE DISORDERS W/O MCC
075	01	MEDICAL	VIRAL MENINGITIS W CC/MCC
076	01	MEDICAL	VIRAL MENINGITIS W/O CC/MCC
077	01	MEDICAL	HYPERTENSIVE ENCEPHALOPATHY W MCC
078	01	MEDICAL	HYPERTENSIVE ENCEPHALOPATHY W CC
079	01	MEDICAL	HYPERTENSIVE ENCEPHALOPATHY W/O CC/MCC
080	01	MEDICAL	NONTRAUMATIC STUPOR & COMA W MCC
081	01	MEDICAL	NONTRAUMATIC STUPOR & COMA W/O MCC
082	01	MEDICAL	TRAUMATIC STUPOR & COMA, COMA >1 HR W MCC
083	01	MEDICAL	TRAUMATIC STUPOR & COMA, COMA >1 HR W CC

DIAGNOSIS-RELATED GROUPS (DRGs) (Continued)

DRG	MDC	TYPE	DESCRIPTION
084	01	MEDICAL	TRAUMATIC STUPOR & COMA, COMA >1 HR W/O CC/MCC
085	01	MEDICAL	TRAUMATIC STUPOR & COMA, COMA <1 HR W MCC
086	01	MEDICAL	TRAUMATIC STUPOR & COMA, COMA <1 HR W CC
087	01	MEDICAL	TRAUMATIC STUPOR & COMA, COMA <1 HR W/O CC/MCC
088	01	MEDICAL	CONCUSSION W MCC
089	01	MEDICAL	CONCUSSION W CC
090	01	MEDICAL	CONCUSSION W/O CC/MCC
091	01	MEDICAL	OTHER DISORDERS OF NERVOUS SYSTEM W MCC
092	01	MEDICAL	OTHER DISORDERS OF NERVOUS SYSTEM W CC
093	01	MEDICAL	OTHER DISORDERS OF NERVOUS SYSTEM W/O CC/MCC
094	01	MEDICAL	BACTERIAL & TUBERCULOUS INFECTIONS OF NERVOUS SYSTEM W MCC
095	01	MEDICAL	BACTERIAL & TUBERCULOUS INFECTIONS OF NERVOUS SYSTEM W CC
096	01	MEDICAL	BACTERIAL & TUBERCULOUS INFECTIONS OF NERVOUS SYSTEM W/O CC/ MCC
097	01	MEDICAL	NON-BACTERIAL INFECT OF NERVOUS SYS EXC VIRAL MENINGITIS W MCC
098	01	MEDICAL	NON-BACTERIAL INFECT OF NERVOUS SYS EXC VIRAL MENINGITIS W CC

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
099	01	MEDICAL	NON-BACTERIAL INFECT OF NERVOUS SYS EXC VIRAL MENINGITIS W/O CC/ MCC
100	01	MEDICAL	SEIZURES W MCC
101	01	MEDICAL	SEIZURES W/O MCC
102	01	MEDICAL	HEADACHES W MCC
103	01	MEDICAL	HEADACHES W/O MCC
113	02	SURGICAL	ORBITAL PROCEDURES W CC/MCC
114	02	SURGICAL	ORBITAL PROCEDURES W/O CC/MCC
115	02	SURGICAL	EXTRAOCULAR PROCEDURES EXCEPT ORBIT
116	02	SURGICAL	INTRAOCULAR PROCEDURES W CC/MCC
117	02	SURGICAL	INTRAOCULAR PROCEDURES W/O CC/MCC
121	02	MEDICAL	ACUTE MAJOR EYE INFECTIONS W CC/MCC
122	02	MEDICAL	ACUTE MAJOR EYE INFECTIONS W/O CC/MCC
123	02	MEDICAL	NEUROLOGICAL EYE DISORDERS
124	02	MEDICAL	OTHER DISORDERS OF THE EYE W MCC
125	02	MEDICAL	OTHER DISORDERS OF THE EYE W/O MCC

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
129	03	SURGICAL	MAJOR HEAD & NECK PROCEDURES W CC/MCC OR MAJOR DEVICE
130	03	SURGICAL	MAJOR HEAD & NECK PROCEDURES W/O CC/MCC
131	03	SURGICAL	CRANIAL/FACIAL PROCEDURES W CC/MCC
132	03	SURGICAL	CRANIAL/FACIAL PROCEDURES W/O CC/MCC
133	03	SURGICAL	OTHER EAR, NOSE, MOUTH, & THROAT O.R. PROCEDURES W CC/MCC
134	03	SURGICAL	OTHER EAR, NOSE, MOUTH, & THROAT O.R. PROCEDURES W/O CC/MCC
135	03	SURGICAL	SINUS & MASTOID PROCEDURES W CC/MCC
136	03	SURGICAL	SINUS & MASTOID PROCEDURES W/O CC/MCC
137	03	SURGICAL	MOUTH PROCEDURES W CC/MCC
138	03	SURGICAL	MOUTH PROCEDURES W/O CC/MCC
139	03	SURGICAL	SALIVARY GLAND PROCEDURES
146	03	MEDICAL	EAR, NOSE, MOUTH, & THROAT MALIGNANCY W MCC
147	03	MEDICAL	EAR, NOSE, MOUTH, & THROAT MALIGNANCY W CC
148	03	MEDICAL	EAR, NOSE, MOUTH, & THROAT MALIGNANCY W/O CC/MCC
149	03	MEDICAL	DYSEQUILIBRIUM
150	03	MEDICAL	EPISTAXIS W MCC

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
151	03	MEDICAL	EPISTAXIS W/O MCC
152	03	MEDICAL	OTITIS MEDIA & URI W MCC
153	03	MEDICAL	OTITIS MEDIA & URI W/O MCC
154	03	MEDICAL	OTHER EAR, NOSE, MOUTH, & THROAT DIAGNOSES W MCC
155	03	MEDICAL	OTHER EAR, NOSE, MOUTH, & THROAT DIAGNOSES W CC
156	03	MEDICAL	OTHER EAR, NOSE, MOUTH, & THROAT DIAGNOSES W/O CC/MCC
157	03	MEDICAL	DENTAL & ORAL DISEASES W MCC
158	03	MEDICAL	DENTAL & ORAL DISEASES W CC
159	03	MEDICAL	DENTAL & ORAL DISEASES W/O CC/MCC
163	04	SURGICAL	MAJOR CHEST PROCEDURES W MCC
164	04	SURGICAL	MAJOR CHEST PROCEDURES W CC
165	04	SURGICAL	MAJOR CHEST PROCEDURES W/O CC/MCC
166	04	SURGICAL	OTHER RESP SYSTEM O.R. PROCEDURES W MCC
167	04	SURGICAL	OTHER RESP SYSTEM O.R. PROCEDURES W CC
168	04	SURGICAL	OTHER RESP SYSTEM O.R. PROCEDURES W/O CC/MCC
175	04	MEDICAL	PULMONARY EMBOLISM W MCC

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
176	04	MEDICAL	PULMONARY EMBOLISM W/O MCC
177	04	MEDICAL	RESPIRATORY INFECTIONS & INFLAMMATIONS W MCC
178	04	MEDICAL	RESPIRATORY INFECTIONS & INFLAMMATIONS W CC
179	04	MEDICAL	RESPIRATORY INFECTIONS & INFLAMMATIONS W/O CC/MCC
180	04	MEDICAL	RESPIRATORY NEOPLASMS W MCC
181	04	MEDICAL	RESPIRATORY NEOPLASMS W CC
182	04	MEDICAL	RESPIRATORY NEOPLASMS W/O CC/MCC
183	04	MEDICAL	MAJOR CHEST TRAUMA W MCC
184	04	MEDICAL	MAJOR CHEST TRAUMA W CC
185	04	MEDICAL	MAJOR CHEST TRAUMA W/O CC/MCC
186	04	MEDICAL	PLEURAL EFFUSION W MCC
187	04	MEDICAL	PLEURAL EFFUSION W CC
188	04	MEDICAL	PLEURAL EFFUSION W/O CC/MCC
189	04	MEDICAL	PULMONARY EDEMA & RESPIRATORY FAILURE
190	04	MEDICAL	CHRONIC OBSTRUCTIVE PULMONARY DISEASE W MCC
191	04	MEDICAL	CHRONIC OBSTRUCTIVE PULMONARY DISEASE W CC

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
192	04	MEDICAL	CHRONIC OBSTRUCTIVE PULMONARY DISEASE W/O CC/MCC
193	04	MEDICAL	SIMPLE PNEUMONIA & PLEURISY W MCC
194	04	MEDICAL	SIMPLE PNEUMONIA & PLEURISY W CC
195	04	MEDICAL	SIMPLE PNEUMONIA & PLEURISY W/O CC/MCC
196	04	MEDICAL	INTERSTITIAL LUNG DISEASE W MCC
197	04	MEDICAL	INTERSTITIAL LUNG DISEASE W CC
198	04	MEDICAL	INTERSTITIAL LUNG DISEASE W/O CC/MCC
199	04	MEDICAL	PNEUMOTHORAX W MCC
200	04	MEDICAL	PNEUMOTHORAX W CC
201	04	MEDICAL	PNEUMOTHORAX W/O CC/MCC
202	04	MEDICAL	BRONCHITIS & ASTHMA W CC/MCC
203	04	MEDICAL	BRONCHITIS & ASTHMA W/O CC/MCC
204	04	MEDICAL	RESPIRATORY SIGNS & SYMPTOMS
205	04	MEDICAL	OTHER RESPIRATORY SYSTEM DIAGNOSES W MCC
206	04	MEDICAL	OTHER RESPIRATORY SYSTEM DIAGNOSES W/O MCC
207	04	MEDICAL	RESPIRATORY SYSTEM DIAGNOSIS W VENTILATOR SUPPORT 96+ HOURS

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
208	04	MEDICAL	RESPIRATORY SYSTEM DIAGNOSIS W VENTILATOR SUPPORT <96 HOURS
215	05	SURGICAL	OTHER HEART ASSIST SYSTEM IMPLANT
216	05	SURGICAL	CARDIAC VALVE & OTHER MAJ CARDIOTHORACIC PROC W CARD CATH W MCC
217	05	SURGICAL	CARDIAC VALVE & OTHER MAJ CARDIOTHORACIC PROC W CARD CATH W CC
218	05	SURGICAL	CARDIAC VALVE & OTHER MAJ CARDIOTHORACIC PROC W CARD CATH W/O CC/MCC
219	05	SURGICAL	CARDIAC VALVE & OTHER MAJ CARDIOTHORACIC PROC W/O CARD CATH W MCC
220	05	SURGICAL	CARDIAC VALVE & OTHER MAJ CARDIOTHORACIC PROC W/O CARD CATH W CC
221	05	SURGICAL	CARDIAC VALVE & OTHER MAJ CARDIOTHORACIC PROC W/O CARD CATH W/O CC/MCC
222	05	SURGICAL	CARDIAC DEFIB IMPLANT W CARDIAC CATH W AMI/HF/SHOCK W MCC
223	05	SURGICAL	CARDIAC DEFIB IMPLANT W CARDIAC CATH W AMI/HF/SHOCK W/O MCC
224	05	SURGICAL	CARDIAC DEFIB IMPLANT W CARDIAC CATH W/O AMI/HF/SHOCK W MCC

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
225	05	SURGICAL	CARDIAC DEFIB IMPLANT W CARDIAC CATH W/O AMI/HF/SHOCK W/O MCC
226	05	SURGICAL	CARDIAC DEFIBRILLATOR IMPLANT W/O CARDIAC CATH W MCC
227	05	SURGICAL	CARDIAC DEFIBRILLATOR IMPLANT W/O CARDIAC CATH W/O MCC
228	05	SURGICAL	OTHER CARDIOTHORACIC PROCEDURES W MCC
229	05	SURGICAL	OTHER CARDIOTHORACIC PROCEDURES W CC
230	05	SURGICAL	OTHER CARDIOTHORACIC PROCEDURES W/O CC/MCC
231	05	SURGICAL	CORONARY BYPASS W PTCA W MCC
232	05	SURGICAL	CORONARY BYPASS W PTCA W/O MCC
233	05	SURGICAL	CORONARY BYPASS W CARDIAC CATH W MCC
234	05	SURGICAL	CORONARY BYPASS W CARDIAC CATH W/O MCC
235	05	SURGICAL	CORONARY BYPASS W/O CARDIAC CATH W MCC
236	05	SURGICAL	CORONARY BYPASS W/O CARDIAC CATH W/O MCC
237	05	SURGICAL	MAJOR CARDIOVASC PROCEDURES W MCC
238	05	SURGICAL	MAJOR CARDIOVASC PROCEDURES W/O MCC
239	05	SURGICAL	AMPUTATION FOR CIRC SYS DISORDERS EXC UPPER LIMB & TOE W MCC
240	05	SURGICAL	AMPUTATION FOR CIRC SYS DISORDERS EXC UPPER LIMB & TOE W CC

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
241	05	SURGICAL	AMPUTATION FOR CIRC SYS DISORDERS EXC UPPER LIMB & TOE W/O CC/ MCC
242	05	SURGICAL	PERMANENT CARDIAC PACEMAKER IMPLANT W MCC
243	05	SURGICAL	PERMANENT CARDIAC PACEMAKER IMPLANT W CC
244	05	SURGICAL	PERMANENT CARDIAC PACEMAKER IMPLANT W/O CC/MCC
245	05	SURGICAL	AICD GENERATOR PROCEDURES
246	05	SURGICAL	PERC CARDIOVASC PROC W DRUG-ELUTING STENT W MCC OR 4+ VESSELS/ STENTS
247	05	SURGICAL	PERC CARDIOVASC PROC W DRUG-ELUTING STENT W/O MCC
248	05	SURGICAL	PERC CARDIOVASC PROC W NON-DRUG-ELUTING STENT W MCC OR 4+ VES/ STENTS
249	05	SURGICAL	PERC CARDIOVASC PROC W NON-DRUG-ELUTING STENT W/O MCC
250	05	SURGICAL	PERC CARDIOVASC PROC W/O CORONARY ARTERY STENT W MCC
251	05	SURGICAL	PERC CARDIOVASC PROC W/O CORONARY ARTERY STENT W/O MCC
252	05	SURGICAL	OTHER VASCULAR PROCEDURES W MCC
253	05	SURGICAL	OTHER VASCULAR PROCEDURES W CC

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
254	05	SURGICAL	OTHER VASCULAR PROCEDURES W/O CC/MCC
255	05	SURGICAL	UPPER LIMB & TOE AMPUTATION FOR CIRC SYSTEM DISORDERS W MCC
256	05	SURGICAL	UPPER LIMB & TOE AMPUTATION FOR CIRC SYSTEM DISORDERS W CC
257	05	SURGICAL	UPPER LIMB & TOE AMPUTATION FOR CIRC SYSTEM DISORDERS W/O CC/ MCC
258	05	SURGICAL	CARDIAC PACEMAKER DEVICE REPLACEMENT W MCC
259	05	SURGICAL	CARDIAC PACEMAKER DEVICE REPLACEMENT W/O MCC
260	05	SURGICAL	CARDIAC PACEMAKER REVISION EXCEPT DEVICE REPLACEMENT W MCC
261	05	SURGICAL	CARDIAC PACEMAKER REVISION EXCEPT DEVICE REPLACEMENT W CC
262	05	SURGICAL	CARDIAC PACEMAKER REVISION EXCEPT DEVICE REPLACEMENT W/O CC/ MCC
263	05	SURGICAL	VEIN LIGATION & STRIPPING
264	05	SURGICAL	OTHER CIRCULATORY SYSTEM O.R. PROCEDURES
265	05	SURGICAL	AICD LEAD PROCEDURES
280	05	MEDICAL	ACUTE MYOCARDIAL INFARCTION, DISCHARGED ALIVE W MCC
281	05	MEDICAL	ACUTE MYOCARDIAL INFARCTION, DISCHARGED ALIVE W CC

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
282	05	MEDICAL	ACUTE MYOCARDIAL INFARCTION, DISCHARGED ALIVE W/O CC/MCC
283	05	MEDICAL	ACUTE MYOCARDIAL INFARCTION, EXPIRED W MCC
284	05	MEDICAL	ACUTE MYOCARDIAL INFARCTION, EXPIRED W CC
285	05	MEDICAL	ACUTE MYOCARDIAL INFARCTION, EXPIRED W/O CC/MCC
286	05	MEDICAL	CIRCULATORY DISORDERS EXCEPT AMI, W CARD CATH W MCC
287	05	MEDICAL	CIRCULATORY DISORDERS EXCEPT AMI, W CARD CATH W/O MCC
288	05	MEDICAL	ACUTE & SUBACUTE ENDOCARDITIS W MCC
289	05	MEDICAL	ACUTE & SUBACUTE ENDOCARDITIS W CC
290	05	MEDICAL	ACUTE & SUBACUTE ENDOCARDITIS W/O CC/MCC
291	05	MEDICAL	HEART FAILURE & SHOCK W MCC
292	05	MEDICAL	HEART FAILURE & SHOCK W CC
293	05	MEDICAL	HEART FAILURE & SHOCK W/O CC/MCC
294	05	MEDICAL	DEEP VEIN THROMBOPHLEBITIS W CC/MCC
295	05	MEDICAL	DEEP VEIN THROMBOPHLEBITIS W/O CC/MCC
296	05	MEDICAL	CARDIAC ARREST, UNEXPLAINED W MCC
297	05	MEDICAL	CARDIAC ARREST, UNEXPLAINED W CC

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
298	05	MEDICAL	CARDIAC ARREST, UNEXPLAINED W/O CC/MCC
299	05	MEDICAL	PERIPHERAL VASCULAR DISORDERS W MCC
300	05	MEDICAL	PERIPHERAL VASCULAR DISORDERS W CC
301	05	MEDICAL	PERIPHERAL VASCULAR DISORDERS W/O CC/MCC
302	05	MEDICAL	ATHEROSCLEROSIS W MCC
303	05	MEDICAL	ATHEROSCLEROSIS W/O MCC
304	05	MEDICAL	HYPERTENSION W MCC
305	05	MEDICAL	HYPERTENSION W/O MCC
306	05	MEDICAL	CARDIAC CONGENITAL & VALVULAR DISORDERS W MCC
307	05	MEDICAL	CARDIAC CONGENITAL & VALVULAR DISORDERS W/O MCC
308	05	MEDICAL	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS W MCC
309	05	MEDICAL	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS W CC
310	05	MEDICAL	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS W/O CC/MCC
311	05	MEDICAL	ANGINA PECTORIS
312	05	MEDICAL	SYNCOPE & COLLAPSE
313	05	MEDICAL	CHEST PAIN

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
314	05	MEDICAL	OTHER CIRCULATORY SYSTEM DIAGNOSES W MCC
315	05	MEDICAL	OTHER CIRCULATORY SYSTEM DIAGNOSES W CC
316	05	MEDICAL	OTHER CIRCULATORY SYSTEM DIAGNOSES W/O CC/MCC
326	06	SURGICAL	STOMACH, ESOPHAGEAL, & DUODENAL PROC W MCC
327	06	SURGICAL	STOMACH, ESOPHAGEAL, & DUODENAL PROC W CC
328	06	SURGICAL	STOMACH, ESOPHAGEAL, & DUODENAL PROC W/O CC/MCC
329	06	SURGICAL	MAJOR SMALL & LARGE BOWEL PROCEDURES W MCC
330	06	SURGICAL	MAJOR SMALL & LARGE BOWEL PROCEDURES W CC
331	06	SURGICAL	MAJOR SMALL & LARGE BOWEL PROCEDURES W/O CC/MCC
332	06	SURGICAL	RECTAL RESECTION W MCC
333	06	SURGICAL	RECTAL RESECTION W CC
334	06	SURGICAL	RECTAL RESECTION W/O CC/MCC
335	06	SURGICAL	PERITONEAL ADHESIOLYSIS W MCC
336	06	SURGICAL	PERITONEAL ADHESIOLYSIS W CC
337	06	SURGICAL	PERITONEAL ADHESIOLYSIS W/O CC/MCC
338	06	SURGICAL	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG W MCC

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
339	06	SURGICAL	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG W CC
340	06	SURGICAL	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG W/O CC/MCC
341	06	SURGICAL	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG W MCC
342	06	SURGICAL	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG W CC
343	06	SURGICAL	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG W/O CC/MCC
344	06	SURGICAL	MINOR SMALL & LARGE BOWEL PROCEDURES W MCC
345	06	SURGICAL	MINOR SMALL & LARGE BOWEL PROCEDURES W CC
346	06	SURGICAL	MINOR SMALL & LARGE BOWEL PROCEDURES W/O CC/MCC
347	06	SURGICAL	ANAL & STOMAL PROCEDURES W MCC
348	06	SURGICAL	ANAL & STOMAL PROCEDURES W CC
349	06	SURGICAL	ANAL & STOMAL PROCEDURES W/O CC/MCC
350	06	SURGICAL	INGUINAL & FEMORAL HERNIA PROCEDURES W MCC
351	06	SURGICAL	INGUINAL & FEMORAL HERNIA PROCEDURES W CC
352	06	SURGICAL	INGUINAL & FEMORAL HERNIA PROCEDURES W/O CC/MCC
353	06	SURGICAL	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL W MCC
354	06	SURGICAL	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL W CC

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
355	06	SURGICAL	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL W/O CC/MCC
356	06	SURGICAL	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES W MCC
357	06	SURGICAL	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES W CC
358	06	SURGICAL	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES W/O CC/MCC
368	06	MEDICAL	MAJOR ESOPHAGEAL DISORDERS W MCC
369	06	MEDICAL	MAJOR ESOPHAGEAL DISORDERS W CC
370	06	MEDICAL	MAJOR ESOPHAGEAL DISORDERS W/O CC/MCC
371	06	MEDICAL	MAJOR GASTROINTESTINAL DISORDERS & PERITONEAL INFECTIONS W MCC
372	06	MEDICAL	MAJOR GASTROINTESTINAL DISORDERS & PERITONEAL INFECTIONS W CC
373	06	MEDICAL	MAJOR GASTROINTESTINAL DISORDERS & PERITONEAL INFECTIONS W/O CC/MCC
374	06	MEDICAL	DIGESTIVE MALIGNANCY W MCC
375	06	MEDICAL	DIGESTIVE MALIGNANCY W CC
376	06	MEDICAL	DIGESTIVE MALIGNANCY W/O CC/MCC
377	06	MEDICAL	GI HEMORRHAGE W MCC
378	06	MEDICAL	GI HEMORRHAGE W CC

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
379	06	MEDICAL	GI HEMORRHAGE W/O CC/MCC
380	06	MEDICAL	COMPLICATED PEPTIC ULCER W MCC
381	06	MEDICAL	COMPLICATED PEPTIC ULCER W CC
382	06	MEDICAL	COMPLICATED PEPTIC ULCER W/O CC/MCC
383	06	MEDICAL	UNCOMPLICATED PEPTIC ULCER W MCC
384	06	MEDICAL	UNCOMPLICATED PEPTIC ULCER W/O MCC
385	06	MEDICAL	INFLAMMATORY BOWEL DISEASE W MCC
386	06	MEDICAL	INFLAMMATORY BOWEL DISEASE W CC
387	06	MEDICAL	INFLAMMATORY BOWEL DISEASE W/O CC/MCC
388	06	MEDICAL	GI OBSTRUCTION W MCC
389	06	MEDICAL	GI OBSTRUCTION W CC
390	06	MEDICAL	GI OBSTRUCTION W/O CC/MCC
391	06	MEDICAL	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS W MCC
392	06	MEDICAL	ESOPHAGITIS, GASTROENT, & MISC DIGEST DISORDERS W/O MCC
393	06	MEDICAL	OTHER DIGESTIVE SYSTEM DIAGNOSES W MCC
394	06	MEDICAL	OTHER DIGESTIVE SYSTEM DIAGNOSES W CC

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
395	06	MEDICAL	OTHER DIGESTIVE SYSTEM DIAGNOSES W/O CC/MCC
405	07	SURGICAL	PANCREAS, LIVER, & SHUNT PROCEDURES W MCC
406	07	SURGICAL	PANCREAS, LIVER, & SHUNT PROCEDURES W CC
407	07	SURGICAL	PANCREAS, LIVER,, & SHUNT PROCEDURES W/O CC/MCC
408	07	SURGICAL	BILIARY TRACT PROC EXCEPT ONLY CHOLECYST W OR W/O C.D.E. W MCC
409	07	SURGICAL	BILIARY TRACT PROC EXCEPT ONLY CHOLECYST W OR W/O C.D.E. W CC
410	07	SURGICAL	BILIARY TRACT PROC EXCEPT ONLY CHOLECYST W OR W/O C.D.E. W/O CC/ MCC
411	07	SURGICAL	CHOLECYSTECTOMY W C.D.E. W MCC
412	07	SURGICAL	CHOLECYSTECTOMY W C.D.E. W CC
413	07	SURGICAL	CHOLECYSTECTOMY W C.D.E. W/O CC/MCC
414	07	SURGICAL	CHOLECYSTECTOMY EXCEPT BY LAPAROSCOPE W/O C.D.E. W MCC
415	07	SURGICAL	CHOLECYSTECTOMY EXCEPT BY LAPAROSCOPE W/O C.D.E. W CC
416	07	SURGICAL	CHOLECYSTECTOMY EXCEPT BY LAPAROSCOPE W/O C.D.E. W/O CC/MCC
417	07	SURGICAL	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E. W MCC
418	07	SURGICAL	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E. W CC

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
419	07	SURGICAL	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E. W/O CC/MCC
420	07	SURGICAL	HEPATOBIILIARY DIAGNOSTIC PROCEDURES W MCC
421	07	SURGICAL	HEPATOBIILIARY DIAGNOSTIC PROCEDURES W CC
422	07	SURGICAL	HEPATOBIILIARY DIAGNOSTIC PROCEDURES W/O CC/MCC
423	07	SURGICAL	OTHER HEPATOBIILIARY OR PANCREAS O.R. PROCEDURES W MCC
424	07	SURGICAL	OTHER HEPATOBIILIARY OR PANCREAS O.R. PROCEDURES W CC
425	07	SURGICAL	OTHER HEPATOBIILIARY OR PANCREAS O.R. PROCEDURES W/O CC/MCC
432	07	MEDICAL	CIRRHOSIS & ALCOHOLIC HEPATITIS W MCC
433	07	MEDICAL	CIRRHOSIS & ALCOHOLIC HEPATITIS W CC
434	07	MEDICAL	CIRRHOSIS & ALCOHOLIC HEPATITIS W/O CC/MCC
435	07	MEDICAL	MALIGNANCY OF HEPATOBIILIARY SYSTEM OR PANCREAS W MCC
436	07	MEDICAL	MALIGNANCY OF HEPATOBIILIARY SYSTEM OR PANCREAS W CC
437	07	MEDICAL	MALIGNANCY OF HEPATOBIILIARY SYSTEM OR PANCREAS W/O CC/MCC
438	07	MEDICAL	DISORDERS OF PANCREAS EXCEPT MALIGNANCY W MCC
439	07	MEDICAL	DISORDERS OF PANCREAS EXCEPT MALIGNANCY W CC
440	07	MEDICAL	DISORDERS OF PANCREAS EXCEPT MALIGNANCY W/O CC/MCC

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
441	07	MEDICAL	DISORDERS OF LIVER EXCEPT MALIG, CIRRH, ALC HEPA W MCC
442	07	MEDICAL	DISORDERS OF LIVER EXCEPT MALIG, CIRRH, ALC HEPA W CC
443	07	MEDICAL	DISORDERS OF LIVER EXCEPT MALIG, CIRRH, ALC HEPA W/O CC/MCC
444	07	MEDICAL	DISORDERS OF THE BILIARY TRACT W MCC
445	07	MEDICAL	DISORDERS OF THE BILIARY TRACT W CC
446	07	MEDICAL	DISORDERS OF THE BILIARY TRACT W/O CC/MCC
453	08	SURGICAL	COMBINED ANTERIOR/POSTERIOR SPINAL FUSION W MCC
454	08	SURGICAL	COMBINED ANTERIOR/POSTERIOR SPINAL FUSION W CC
455	08	SURGICAL	COMBINED ANTERIOR/POSTERIOR SPINAL FUSION W/O CC/MCC
456	08	SURGICAL	SPINAL FUS EXC CERV W SPINAL CURV/MALIG/INFEC OR 9+ FUS W MCC
457	08	SURGICAL	SPINAL FUS EXC CERV W SPINAL CURV/MALIG/INFEC OR 9+ FUS W CC
458	08	SURGICAL	SPINAL FUS EXC CERV W SPINAL CURV/MALIG/INFEC OR 9+ FUS W/O CC/ MCC
459	08	SURGICAL	SPINAL FUSION EXCEPT CERVICAL W MCC
460	08	SURGICAL	SPINAL FUSION EXCEPT CERVICAL W/O MCC
461	08	SURGICAL	BILATERAL OR MULTIPLE MAJOR JOINT PROCS OF LOWER EXTREMITY W MCC

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
462	08	SURGICAL	BILATERAL OR MULTIPLE MAJOR JOINT PROCS OF LOWER EXTREMITY W/O MCC
463	08	SURGICAL	WND DEBRID & SKN GRFT EXC HAND, FOR MUSCULO-CONN TISS DIS W MCC
464	08	SURGICAL	WND DEBRID & SKN GRFT EXC HAND, FOR MUSCULO-CONN TISS DIS W CC
465	08	SURGICAL	WND DEBRID & SKN GRFT EXC HAND, FOR MUSCULO-CONN TISS DIS W/O CC/MCC
466	08	SURGICAL	REVISION OF HIP OR KNEE REPLACEMENT W MCC
467	08	SURGICAL	REVISION OF HIP OR KNEE REPLACEMENT W CC
468	08	SURGICAL	REVISION OF HIP OR KNEE REPLACEMENT W/O CC/MCC
469	08	SURGICAL	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY W MCC
470	08	SURGICAL	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY W/O MCC
471	08	SURGICAL	CERVICAL SPINAL FUSION W MCC
472	08	SURGICAL	CERVICAL SPINAL FUSION W CC

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
473	08	SURGICAL	CERVICAL SPINAL FUSION W/O CC/MCC
474	08	SURGICAL	AMPUTATION FOR MUSCULOSKELETAL SYS & CONN TISSUE DIS W MCC
475	08	SURGICAL	AMPUTATION FOR MUSCULOSKELETAL SYS & CONN TISSUE DIS W CC
476	08	SURGICAL	AMPUTATION FOR MUSCULOSKELETAL SYS & CONN TISSUE DIS W/O CC/ MCC
477	08	SURGICAL	BIOPSIES OF MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE W MCC
478	08	SURGICAL	BIOPSIES OF MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE W CC
479	08	SURGICAL	BIOPSIES OF MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE W/O CC/ MCC
480	08	SURGICAL	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT W MCC
481	08	SURGICAL	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT W CC
482	08	SURGICAL	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT W/O CC/MCC
483	08	SURGICAL	MAJOR JOINT & LIMB REATTACHMENT PROC OF UPPER EXTREMITY W CC/ MCC
484	08	SURGICAL	MAJOR JOINT & LIMB REATTACHMENT PROC OF UPPER EXTREMITY W/O CC/ MCC

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
485	08	SURGICAL	KNEE PROCEDURES W PDX OF INFECTION W MCC
486	08	SURGICAL	KNEE PROCEDURES W PDX OF INFECTION W CC
487	08	SURGICAL	KNEE PROCEDURES W PDX OF INFECTION W/O CC/MCC
488	08	SURGICAL	KNEE PROCEDURES W/O PDX OF INFECTION W CC/MCC
489	08	SURGICAL	KNEE PROCEDURES W/O PDX OF INFECTION W/O CC/MCC
490	08	SURGICAL	BACK & NECK PROC EXC SPINAL FUSION W CC/MCC OR DISC DEVICE/ NEUROSTIM
491	08	SURGICAL	BACK & NECK PROC EXC SPINAL FUSION W/O CC/MCC
492	08	SURGICAL	LOWER EXTREM & HUMER PROC EXCEPT HIP, FOOT, FEMUR W MCC
493	08	SURGICAL	LOWER EXTREM & HUMER PROC EXCEPT HIP, FOOT, FEMUR W CC
494	08	SURGICAL	LOWER EXTREM & HUMER PROC EXCEPT HIP, FOOT, FEMUR W/O CC/MCC
495	08	SURGICAL	LOCAL EXCISION & REMOVAL INT FIX DEVICES EXC HIP & FEMUR W MCC
496	08	SURGICAL	LOCAL EXCISION & REMOVAL INT FIX DEVICES EXC HIP & FEMUR W CC
497	08	SURGICAL	LOCAL EXCISION & REMOVAL INT FIX DEVICES EXC HIP & FEMUR W/O CC/ MCC
498	08	SURGICAL	LOCAL EXCISION & REMOVAL INT FIX DEVICES OF HIP & FEMUR W CC/MCC

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
499	08	SURGICAL	LOCAL EXCISION & REMOVAL INT FIX DEVICES OF HIP & FEMUR W/O CC/ MCC
500	08	SURGICAL	SOFT TISSUE PROCEDURES W MCC
501	08	SURGICAL	SOFT TISSUE PROCEDURES W CC
502	08	SURGICAL	SOFT TISSUE PROCEDURES W/O CC/MCC
503	08	SURGICAL	FOOT PROCEDURES W MCC
504	08	SURGICAL	FOOT PROCEDURES W CC
505	08	SURGICAL	FOOT PROCEDURES W/O CC/MCC
506	08	SURGICAL	MAJOR THUMB OR JOINT PROCEDURES
507	08	SURGICAL	MAJOR SHOULDER OR ELBOW JOINT PROCEDURES W CC/MCC
508	08	SURGICAL	MAJOR SHOULDER OR ELBOW JOINT PROCEDURES W/O CC/MCC
509	08	SURGICAL	ARTHROSCOPY
510	08	SURGICAL	SHOULDER, ELBOW OR FOREARM PROC, EXC MAJOR JOINT PROC W MCC
511	08	SURGICAL	SHOULDER, ELBOW OR FOREARM PROC, EXC MAJOR JOINT PROC W CC
512	08	SURGICAL	SHOULDER, ELBOW OR FOREARM PROC, EXC MAJOR JOINT PROC W/O CC/ MCC
513	08	SURGICAL	HAND OR WRIST PROC, EXCEPT MAJOR THUMB OR JOINT PROC W CC/MCC

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
514	08	SURGICAL	HAND OR WRIST PROC, EXCEPT MAJOR THUMB OR JOINT PROC W/O CC/MCC
515	08	SURGICAL	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC W MCC
516	08	SURGICAL	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC W CC
517	08	SURGICAL	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC W/O CC/MCC
533	08	MEDICAL	FRACTURES OF FEMUR W MCC
534	08	MEDICAL	FRACTURES OF FEMUR W/O MCC
535	08	MEDICAL	FRACTURES OF HIP & PELVIS W MCC
536	08	MEDICAL	FRACTURES OF HIP & PELVIS W/O MCC
537	08	MEDICAL	SPRAINS, STRAINS, & DISLOCATIONS OF HIP, PELVIS, & THIGH W CC/MCC
538	08	MEDICAL	SPRAINS, STRAINS, & DISLOCATIONS OF HIP, PELVIS, & THIGH W/O CC/MCC
539	08	MEDICAL	OSTEOMYELITIS W MCC
540	08	MEDICAL	OSTEOMYELITIS W CC
541	08	MEDICAL	OSTEOMYELITIS W/O CC/MCC
542	08	MEDICAL	PATHOLOGICAL FRACTURES & MUSCULOSKELET & CONN TISS MALIG W MCC
543	08	MEDICAL	PATHOLOGICAL FRACTURES & MUSCULOSKELET & CONN TISS MALIG W CC

DIAGNOSIS-RELATED GROUPS (DRGs) (Continued)

DRG	MDC	TYPE	DESCRIPTION
544	08	MEDICAL	PATHOLOGICAL FRACTURES & MUSCULOSKELET & CONN TISS MALIG W/O CC/MCC
545	08	MEDICAL	CONNECTIVE TISSUE DISORDERS W MCC
546	08	MEDICAL	CONNECTIVE TISSUE DISORDERS W CC
547	08	MEDICAL	CONNECTIVE TISSUE DISORDERS W/O CC/MCC
548	08	MEDICAL	SEPTIC ARTHRITIS W MCC
549	08	MEDICAL	SEPTIC ARTHRITIS W CC
550	08	MEDICAL	SEPTIC ARTHRITIS W/O CC/MCC
551	08	MEDICAL	MEDICAL BACK PROBLEMS W MCC
552	08	MEDICAL	MEDICAL BACK PROBLEMS W/O MCC
553	08	MEDICAL	BONE DISEASES & ARTHROPATHIES W MCC
554	08	MEDICAL	BONE DISEASES & ARTHROPATHIES W/O MCC
555	08	MEDICAL	SIGNS & SYMPTOMS OF MUSCULOSKELETAL SYSTEM & CONN TISSUE W MCC
556	08	MEDICAL	SIGNS & SYMPTOMS OF MUSCULOSKELETAL SYSTEM & CONN TISSUE W/O MCC

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
557	08	MEDICAL	TENDONITIS, MYOSITIS, & BURSITIS W MCC
558	08	MEDICAL	TENDONITIS, MYOSITIS, & BURSITIS W/O MCC
559	08	MEDICAL	AFTERCARE, MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE W MCC
560	08	MEDICAL	AFTERCARE, MUSCULOSKELETAL SYSTEM, & CONNECTIVE TISSUE W CC
561	08	MEDICAL	AFTERCARE, MUSCULOSKELETAL SYSTEM, & CONNECTIVE TISSUE W/O CC/ MCC
562	08	MEDICAL	FX, SPRN, STRN & DISL EXCEPT FEMUR, HIP, PELVIS & THIGH W MCC
563	08	MEDICAL	FX, SPRN, STRN & DISL EXCEPT FEMUR, HIP, PELVIS & THIGH W/O MCC
564	08	MEDICAL	OTHER MUSCULOSKELETAL SYS & CONNECTIVE TISSUE DIAGNOSES W MCC
565	08	MEDICAL	OTHER MUSCULOSKELETAL SYS & CONNECTIVE TISSUE DIAGNOSES W CC
566	08	MEDICAL	OTHER MUSCULOSKELETAL SYS & CONNECTIVE TISSUE DIAGNOSES W/O CC/MCC
570	09	SURGICAL	SKIN DEBRIDEMENT W MCC
571	09	SURGICAL	SKIN DEBRIDEMENT W CC
572	09	SURGICAL	SKIN DEBRIDEMENT W/O CC/MCC
573	09	SURGICAL	SKIN GRAFT FOR SKIN ULCER OR CELLULITIS W MCC

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
574	09	SURGICAL	SKIN GRAFT FOR SKIN ULCER OR CELLULITIS W CC
575	09	SURGICAL	SKIN GRAFT FOR SKIN ULCER OR CELLULITIS W/O CC/MCC
576	09	SURGICAL	SKIN GRAFT EXC FOR SKIN ULCER OR CELLULITIS W MCC
577	09	SURGICAL	SKIN GRAFT EXC FOR SKIN ULCER OR CELLULITIS W CC
578	09	SURGICAL	SKIN GRAFT EXC FOR SKIN ULCER OR CELLULITIS W/O CC/MCC
579	09	SURGICAL	OTHER SKIN, SUBCUT TISS, & BREAST PROC W MCC
580	09	SURGICAL	OTHER SKIN, SUBCUT TISS, & BREAST PROC W CC
581	09	SURGICAL	OTHER SKIN, SUBCUT TISS, & BREAST PROC W/O CC/MCC
582	09	SURGICAL	MASTECTOMY FOR MALIGNANCY W CC/MCC
583	09	SURGICAL	MASTECTOMY FOR MALIGNANCY W/O CC/MCC
584	09	SURGICAL	BREAST BIOPSY, LOCAL EXCISION, & OTHER BREAST PROCEDURES W CC/ MCC
585	09	SURGICAL	BREAST BIOPSY, LOCAL EXCISION, & OTHER BREAST PROCEDURES W/O CC/ MCC
592	09	MEDICAL	SKIN ULCERS W MCC
593	09	MEDICAL	SKIN ULCERS W CC

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
594	09	MEDICAL	SKIN ULCERS W/O CC/MCC
595	09	MEDICAL	MAJOR SKIN DISORDERS W MCC
596	09	MEDICAL	MAJOR SKIN DISORDERS W/O MCC
597	09	MEDICAL	MALIGNANT BREAST DISORDERS W MCC
598	09	MEDICAL	MALIGNANT BREAST DISORDERS W CC
599	09	MEDICAL	MALIGNANT BREAST DISORDERS W/O CC/MCC
600	09	MEDICAL	NON-MALIGNANT BREAST DISORDERS W CC/MCC
601	09	MEDICAL	NON-MALIGNANT BREAST DISORDERS W/O CC/MCC
602	09	MEDICAL	CELLULITIS W MCC
603	09	MEDICAL	CELLULITIS W/O MCC
604	09	MEDICAL	TRAUMA TO THE SKIN, SUBCUT TISS, & BREAST W MCC
605	09	MEDICAL	TRAUMA TO THE SKIN, SUBCUT TISS, & BREAST W/O MCC
606	09	MEDICAL	MINOR SKIN DISORDERS W MCC
607	09	MEDICAL	MINOR SKIN DISORDERS W/O MCC
614	10	SURGICAL	ADRENAL & PITUITARY PROCEDURES W CC/MCC
615	10	SURGICAL	ADRENAL & PITUITARY PROCEDURES W/O CC/MCC

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
616	10	SURGICAL	AMPUTAT OF LOWER LIMB FOR ENDOCRINE, NUTRIT, & METABOL DIS W MCC
617	10	SURGICAL	AMPUTAT OF LOWER LIMB FOR ENDOCRINE, NUTRIT, & METABOL DIS W CC
618	10	SURGICAL	AMPUTAT OF LOWER LIMB FOR ENDOCRINE, NUTRIT, & METABOL DIS W/O CC/MCC
619	10	SURGICAL	O.R. PROCEDURES FOR OBESITY W MCC
620	10	SURGICAL	O.R. PROCEDURES FOR OBESITY W CC
621	10	SURGICAL	O.R. PROCEDURES FOR OBESITY W/O CC/MCC
622	10	SURGICAL	SKIN GRAFTS & WOUND DEBRID FOR ENDOC, NUTRIT, & METAB DIS W MCC
623	10	SURGICAL	SKIN GRAFTS & WOUND DEBRID FOR ENDOC, NUTRIT, & METAB DIS W CC
624	10	SURGICAL	SKIN GRAFTS & WOUND DEBRID FOR ENDOC, NUTRIT, & METAB DIS W/O CC/MCC
625	10	SURGICAL	THYROID, PARATHYROID, & THYROGLOSSAL PROCEDURES W MCC
626	10	SURGICAL	THYROID, PARATHYROID, & THYROGLOSSAL PROCEDURES W CC
627	10	SURGICAL	THYROID, PARATHYROID, & THYROGLOSSAL PROCEDURES W/O CC/MCC
628	10	SURGICAL	OTHER ENDOCRINE, NUTRIT, & METAB O.R. PROC W MCC

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
629	10	SURGICAL	OTHER ENDOCRINE, NUTRIT, & METAB O.R. PROC W CC
630	10	SURGICAL	OTHER ENDOCRINE, NUTRIT, & METAB O.R. PROC W/O CC/MCC
637	10	MEDICAL	DIABETES W MCC
638	10	MEDICAL	DIABETES W CC
639	10	MEDICAL	DIABETES W/O CC/MCC
640	10	MEDICAL	MISC DISORDERS OF NUTRITION, METABOLISM, FLUIDS/ELECTROLYTES W MCC
641	10	MEDICAL	MISC DISORDERS OF NUTRITION, METABOLISM, FLUIDS/ELECTROLYTES W/O MCC
642	10	MEDICAL	INBORN AND OTHER DISORDERS OF METABOLISM
643	10	MEDICAL	ENDOCRINE DISORDERS W MCC
644	10	MEDICAL	ENDOCRINE DISORDERS W CC
645	10	MEDICAL	ENDOCRINE DISORDERS W/O CC/MCC
652	11	SURGICAL	KIDNEY TRANSPLANT
653	11	SURGICAL	MAJOR BLADDER PROCEDURES W MCC
654	11	SURGICAL	MAJOR BLADDER PROCEDURES W CC

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
655	11	SURGICAL	MAJOR BLADDER PROCEDURES W/O CC/MCC
656	11	SURGICAL	KIDNEY & URETER PROCEDURES FOR NEOPLASM W MCC
657	11	SURGICAL	KIDNEY & URETER PROCEDURES FOR NEOPLASM W CC
658	11	SURGICAL	KIDNEY & URETER PROCEDURES FOR NEOPLASM W/O CC/MCC
659	11	SURGICAL	KIDNEY & URETER PROCEDURES FOR NON-NEOPLASM W MCC
660	11	SURGICAL	KIDNEY & URETER PROCEDURES FOR NON-NEOPLASM W CC
661	11	SURGICAL	KIDNEY & URETER PROCEDURES FOR NON-NEOPLASM W/O CC/MCC
662	11	SURGICAL	MINOR BLADDER PROCEDURES W MCC
663	11	SURGICAL	MINOR BLADDER PROCEDURES W CC
664	11	SURGICAL	MINOR BLADDER PROCEDURES W/O CC/MCC
665	11	SURGICAL	PROSTATECTOMY W MCC
666	11	SURGICAL	PROSTATECTOMY W CC
667	11	SURGICAL	PROSTATECTOMY W/O CC/MCC
668	11	SURGICAL	TRANSURETHRAL PROCEDURES W MCC
669	11	SURGICAL	TRANSURETHRAL PROCEDURES W CC
670	11	SURGICAL	TRANSURETHRAL PROCEDURES W/O CC/MCC
671	11	SURGICAL	URETHRAL PROCEDURES W CC/MCC

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
672	11	SURGICAL	URETHRAL PROCEDURES W/O CC/MCC
673	11	SURGICAL	OTHER KIDNEY & URINARY TRACT PROCEDURES W MCC
674	11	SURGICAL	OTHER KIDNEY & URINARY TRACT PROCEDURES W CC
675	11	SURGICAL	OTHER KIDNEY & URINARY TRACT PROCEDURES W/O CC/MCC
682	11	MEDICAL	RENAL FAILURE W MCC
683	11	MEDICAL	RENAL FAILURE W CC
684	11	MEDICAL	RENAL FAILURE W/O CC/MCC
685	11	MEDICAL	ADMIT FOR RENAL DIALYSIS
686	11	MEDICAL	KIDNEY & URINARY TRACT NEOPLASMS W MCC
687	11	MEDICAL	KIDNEY & URINARY TRACT NEOPLASMS W CC
688	11	MEDICAL	KIDNEY & URINARY TRACT NEOPLASMS W/O CC/MCC
689	11	MEDICAL	KIDNEY & URINARY TRACT INFECTIONS W MCC
690	11	MEDICAL	KIDNEY & URINARY TRACT INFECTIONS W/O MCC
691	11	MEDICAL	URINARY STONES W ESW LITHOTRIPSY W CC/MCC
692	11	MEDICAL	URINARY STONES W ESW LITHOTRIPSY W/O CC/MCC
693	11	MEDICAL	URINARY STONES W/O ESW LITHOTRIPSY W MCC

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
694	11	MEDICAL	URINARY STONES W/O ESW LITHOTRIPSY W/O MCC
695	11	MEDICAL	KIDNEY & URINARY TRACT SIGNS & SYMPTOMS W MCC
696	11	MEDICAL	KIDNEY & URINARY TRACT SIGNS & SYMPTOMS W/O MCC
697	11	MEDICAL	URETHRAL STRICTURE
698	11	MEDICAL	OTHER KIDNEY & URINARY TRACT DIAGNOSES W MCC
699	11	MEDICAL	OTHER KIDNEY & URINARY TRACT DIAGNOSES W CC
700	11	MEDICAL	OTHER KIDNEY & URINARY TRACT DIAGNOSES W/O CC/MCC
707	12	SURGICAL	MAJOR MALE PELVIC PROCEDURES W CC/MCC
708	12	SURGICAL	MAJOR MALE PELVIC PROCEDURES W/O CC/MCC
709	12	SURGICAL	PENIS PROCEDURES W CC/MCC
710	12	SURGICAL	PENIS PROCEDURES W/O CC/MCC
711	12	SURGICAL	TESTES PROCEDURES W CC/MCC
712	12	SURGICAL	TESTES PROCEDURES W/O CC/MCC
713	12	SURGICAL	TRANSURETHRAL PROSTATECTOMY W CC/MCC
714	12	SURGICAL	TRANSURETHRAL PROSTATECTOMY W/O CC/MCC
715	12	SURGICAL	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROC FOR MALIGNANCY W CC/ MCC

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
716	12	SURGICAL	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROC FOR MALIGNANCY W/O CC/ MCC
717	12	SURGICAL	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROC EXC MALIGNANCY W CC/ MCC
718	12	SURGICAL	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROC EXC MALIGNANCY W/O CC/ MCC
722	12	MEDICAL	MALIGNANCY, MALE REPRODUCTIVE SYSTEM W MCC
723	12	MEDICAL	MALIGNANCY, MALE REPRODUCTIVE SYSTEM W CC
724	12	MEDICAL	MALIGNANCY, MALE REPRODUCTIVE SYSTEM W/O CC/MCC
725	12	MEDICAL	BENIGN PROSTATIC HYPERTROPHY W MCC
726	12	MEDICAL	BENIGN PROSTATIC HYPERTROPHY W/O MCC
727	12	MEDICAL	INFLAMMATION OF THE MALE REPRODUCTIVE SYSTEM W MCC
728	12	MEDICAL	INFLAMMATION OF THE MALE REPRODUCTIVE SYSTEM W/O MCC
729	12	MEDICAL	OTHER MALE REPRODUCTIVE SYSTEM DIAGNOSES W CC/MCC
730	12	MEDICAL	OTHER MALE REPRODUCTIVE SYSTEM DIAGNOSES W/O CC/MCC

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
734	13	SURGICAL	PELVIC EVISCERATION, RAD HYSTERECTOMY, & RAD VULVECTOMY W CC/ MCC
735	13	SURGICAL	PELVIC EVISCERATION, RAD HYSTERECTOMY, & RAD VULVECTOMY W/O CC/ MCC
736	13	SURGICAL	UTERINE & ADNEXA PROC FOR OVARIAN OR ADNEXAL, MALIGNANCY W MCC
737	13	SURGICAL	UTERINE & ADNEXA PROC FOR OVARIAN OR ADNEXAL, MALIGNANCY W CC
738	13	SURGICAL	UTERINE & ADNEXA PROC FOR OVARIAN OR ADNEXAL, MALIGNANCY W/O CC/MCC
739	13	SURGICAL	UTERINE, ADNEXA PROC FOR NON-OVARIAN/ADNEXAL, MALIG W MCC
740	13	SURGICAL	UTERINE, ADNEXA PROC FOR NON-OVARIAN/ADNEXAL, MALIG W CC
741	13	SURGICAL	UTERINE, ADNEXA PROC FOR NON-OVARIAN/ADNEXAL, MALIG W/O CC/MCC
742	13	SURGICAL	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY W CC/MCC
743	13	SURGICAL	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY W/O CC/MCC
744	13	SURGICAL	D&C, CONIZATION, LAPAROSCOPY, & TUBAL INTERRUPTION W CC/MCC
745	13	SURGICAL	D&C, CONIZATION, LAPAROSCOPY, & TUBAL INTERRUPTION W/O CC/MCC
746	13	SURGICAL	VAGINA, CERVIX, & VULVA PROCEDURES W CC/MCC

DIAGNOSIS-RELATED GROUPS (DRGs) (Continued)

DRG	MDC	TYPE	DESCRIPTION
747	13	SURGICAL	VAGINA, CERVIX, & VULVA PROCEDURES W/O CC/MCC
748	13	SURGICAL	FEMALE REPRODUCTIVE SYSTEM RECONSTRUCTIVE PROCEDURES
749	13	SURGICAL	OTHER FEMALE REPRODUCTIVE SYSTEM O.R. PROCEDURES W CC/MCC
750	13	SURGICAL	OTHER FEMALE REPRODUCTIVE SYSTEM O.R. PROCEDURES W/O CC/MCC
754	13	MEDICAL	MALIGNANCY, FEMALE REPRODUCTIVE SYSTEM W MCC
755	13	MEDICAL	MALIGNANCY, FEMALE REPRODUCTIVE SYSTEM W CC
756	13	MEDICAL	MALIGNANCY, FEMALE REPRODUCTIVE SYSTEM W/O CC/MCC
757	13	MEDICAL	INFECTIONS, FEMALE REPRODUCTIVE SYSTEM W MCC
758	13	MEDICAL	INFECTIONS, FEMALE REPRODUCTIVE SYSTEM W CC
759	13	MEDICAL	INFECTIONS, FEMALE REPRODUCTIVE SYSTEM W/O CC/MCC
760	13	MEDICAL	MENSTRUAL & OTHER FEMALE REPRODUCTIVE SYSTEM DISORDERS W CC/ MCC
761	13	MEDICAL	MENSTRUAL & OTHER FEMALE REPRODUCTIVE SYSTEM DISORDERS W/O CC/MCC
765	14	SURGICAL	CESAREAN SECTION W CC/MCC
766	14	SURGICAL	CESAREAN SECTION W/O CC/MCC

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
767	14	SURGICAL	VAGINAL DELIVERY W STERILIZATION &/OR D&C
768	14	SURGICAL	VAGINAL DELIVERY W O.R. PROC EXCEPT STERIL &/OR D&C
769	14	SURGICAL	POSTPARTUM & POST ABORTION DIAGNOSES W O.R. PROCEDURE
770	14	SURGICAL	ABORTION W D&C, ASPIRATION CURETTAGE, OR HYSTEROTOMY
774	14	MEDICAL	VAGINAL DELIVERY W COMPLICATING DIAGNOSES
775	14	MEDICAL	VAGINAL DELIVERY W/O COMPLICATING DIAGNOSES
776	14	MEDICAL	POSTPARTUM & POST ABORTION DIAGNOSES W/O O.R. PROCEDURE
777	14	MEDICAL	ECTOPIC PREGNANCY
778	14	MEDICAL	THREATENED ABORTION
779	14	MEDICAL	ABORTION W/O D&C
780	14	MEDICAL	FALSE LABOR
781	14	MEDICAL	OTHER ANTEPARTUM DIAGNOSES W MEDICAL COMPLICATIONS
782	14	MEDICAL	OTHER ANTEPARTUM DIAGNOSES W/O MEDICAL COMPLICATIONS
789	15	MEDICAL	NEONATES, DIED OR TRANSFERRED TO ANOTHER ACUTE CARE FACILITY
790	15	MEDICAL	EXTREME IMMATUREITY OR RESPIRATORY DISTRESS SYNDROME, NEONATE
791	15	MEDICAL	PREMATURITY W MAJOR PROBLEMS

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
792	15	MEDICAL	PREMATURITY W/O MAJOR PROBLEMS
793	15	MEDICAL	FULL-TERM NEONATE W MAJOR PROBLEMS
794	15	MEDICAL	NEONATE W OTHER SIGNIFICANT PROBLEMS
795	15	MEDICAL	NORMAL NEWBORN
799	16	SURGICAL	SPLENECTOMY W MCC
800	16	SURGICAL	SPLENECTOMY W CC
801	16	SURGICAL	SPLENECTOMY W/O CC/MCC
802	16	SURGICAL	OTHER O.R. PROC OF THE BLOOD & BLOOD FORMING ORGANS W MCC
803	16	SURGICAL	OTHER O.R. PROC OF THE BLOOD & BLOOD FORMING ORGANS W CC
804	16	SURGICAL	OTHER O.R. PROC OF THE BLOOD & BLOOD FORMING ORGANS W/O CC/MCC
808	16	MEDICAL	MAJOR HEMATOL/IMMUN DIAG EXC SICKLE CELL CRISIS & COAGUL W MCC
809	16	MEDICAL	MAJOR HEMATOL/IMMUN DIAG EXC SICKLE CELL CRISIS & COAGUL W CC
810	16	MEDICAL	MAJOR HEMATOL/IMMUN DIAG EXC SICKLE CELL CRISIS & COAGUL W/O CC/ MCC
811	16	MEDICAL	RED BLOOD CELL DISORDERS W MCC
812	16	MEDICAL	RED BLOOD CELL DISORDERS W/O MCC

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
813	16	MEDICAL	COAGULATION DISORDERS
814	16	MEDICAL	RETICULOENDOTHELIAL & IMMUNITY DISORDERS W MCC
815	16	MEDICAL	RETICULOENDOTHELIAL & IMMUNITY DISORDERS W CC
816	16	MEDICAL	RETICULOENDOTHELIAL & IMMUNITY DISORDERS W/O CC/MCC
820	17	SURGICAL	LYMPHOMA & LEUKEMIA W MAJOR O.R. PROCEDURE W MCC
821	17	SURGICAL	LYMPHOMA & LEUKEMIA W MAJOR O.R. PROCEDURE W CC
822	17	SURGICAL	LYMPHOMA & LEUKEMIA W MAJOR O.R. PROCEDURE W/O CC/MCC
823	17	SURGICAL	LYMPHOMA & NON-ACUTE LEUKEMIA W OTHER O.R. PROC W MCC
824	17	SURGICAL	LYMPHOMA & NON-ACUTE LEUKEMIA W OTHER O.R. PROC W CC
825	17	SURGICAL	LYMPHOMA & NON-ACUTE LEUKEMIA W OTHER O.R. PROC W/O CC/MCC
826	17	SURGICAL	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W MAJ O.R. PROC W MCC
827	17	SURGICAL	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W MAJ O.R. PROC W CC
828	17	SURGICAL	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W MAJ O.R. PROC W/O CC/ MCC
829	17	SURGICAL	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W OTHER O.R. PROC W CC/ MCC

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
830	17	SURGICAL	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W OTHER O.R. PROC W/O CC/MCC
834	17	MEDICAL	ACUTE LEUKEMIA W/O MAJOR O.R. PROCEDURE W MCC
835	17	MEDICAL	ACUTE LEUKEMIA W/O MAJOR O.R. PROCEDURE W CC
836	17	MEDICAL	ACUTE LEUKEMIA W/O MAJOR O.R. PROCEDURE W/O CC/MCC
837	17	MEDICAL	CHEMO W ACUTE LEUKEMIA AS SDX OR W HIGH DOSE CHEMO AGENT W MCC
838	17	MEDICAL	CHEMO W ACUTE LEUKEMIA AS SDX W CC OR HIGH DOSE CHEMO AGENT
839	17	MEDICAL	CHEMO W ACUTE LEUKEMIA AS SDX W/O CC/MCC
840	17	MEDICAL	LYMPHOMA & NON-ACUTE LEUKEMIA W MCC
841	17	MEDICAL	LYMPHOMA & NON-ACUTE LEUKEMIA W CC
842	17	MEDICAL	LYMPHOMA & NON-ACUTE LEUKEMIA W/O CC/MCC
843	17	MEDICAL	OTHER MYELOPROLIF DIS OR POORLY DIFF NEOPL DIAG W MCC
844	17	MEDICAL	OTHER MYELOPROLIF DIS OR POORLY DIFF NEOPL DIAG W CC
845	17	MEDICAL	OTHER MYELOPROLIF DIS OR POORLY DIFF NEOPL DIAG W/O CC/MCC
846	17	MEDICAL	CHEMOTHERAPY W/O ACUTE LEUKEMIA AS SECONDARY DIAGNOSIS W MCC

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
847	17	MEDICAL	CHEMOTHERAPY W/O ACUTE LEUKEMIA AS SECONDARY DIAGNOSIS W CC
848	17	MEDICAL	CHEMOTHERAPY W/O ACUTE LEUKEMIA AS SECONDARY DIAGNOSIS W/O CC/MCC
849	17	MEDICAL	RADIOOTHERAPY
853	18	SURGICAL	INFECTIOUS & PARASITIC DISEASES W O.R. PROCEDURE W MCC
854	18	SURGICAL	INFECTIOUS & PARASITIC DISEASES W O.R. PROCEDURE W CC
855	18	SURGICAL	INFECTIOUS & PARASITIC DISEASES W O.R. PROCEDURE W/O CC/MCC
856	18	SURGICAL	POSTOPERATIVE OR POSTTRAUMATIC INFECTIONS W O.R. PROC W MCC
857	18	SURGICAL	POSTOPERATIVE OR POSTTRAUMATIC INFECTIONS W O.R. PROC W CC
858	18	SURGICAL	POSTOPERATIVE OR POSTTRAUMATIC INFECTIONS W O.R. PROC W/O CC/MCC
862	18	MEDICAL	POSTOPERATIVE & POSTTRAUMATIC INFECTIONS W MCC
863	18	MEDICAL	POSTOPERATIVE & POSTTRAUMATIC INFECTIONS W/O MCC
864	18	MEDICAL	FEVER
865	18	MEDICAL	VIRAL ILLNESS W MCC
866	18	MEDICAL	VIRAL ILLNESS W/O MCC

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
867	18	MEDICAL	OTHER INFECTIOUS & PARASITIC DISEASES DIAGNOSES W MCC
868	18	MEDICAL	OTHER INFECTIOUS & PARASITIC DISEASES DIAGNOSES W CC
869	18	MEDICAL	OTHER INFECTIOUS & PARASITIC DISEASES DIAGNOSES W/O CC/MCC
870	18	MEDICAL	SEPTICEMIA OR SEVERE SEPSIS W MV 96+ HOURS
871	18	MEDICAL	SEPTICEMIA OR SEVERE SEPSIS W/O MV 96+ HOURS W MCC
872	18	MEDICAL	SEPTICEMIA OR SEVERE SEPSIS W/O MV 96+ HOURS W/O MCC
876	19	SURGICAL	O.R. PROCEDURE W PRINCIPAL DIAGNOSES OF MENTAL ILLNESS
880	19	MEDICAL	ACUTE ADJUSTMENT REACTION & PSYCHOSOCIAL DYSFUNCTION
881	19	MEDICAL	DEPRESSIVE NEUROSES
882	19	MEDICAL	NEUROSES EXCEPT DEPRESSIVE
883	19	MEDICAL	DISORDERS OF PERSONALITY & IMPULSE CONTROL
884	19	MEDICAL	ORGANIC DISTURBANCES & MENTAL RETARDATION
885	19	MEDICAL	PSYCHOSES
886	19	MEDICAL	BEHAVIORAL & DEVELOPMENTAL DISORDERS
887	19	MEDICAL	OTHER MENTAL DISORDER DIAGNOSES
894	20	MEDICAL	ALCOHOL/DRUG ABUSE OR DEPENDENCE, LEFT AMA

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
895	20	MEDICAL	ALCOHOL/DRUG ABUSE OR DEPENDENCE W REHABILITATION THERAPY
896	20	MEDICAL	ALCOHOL/DRUG ABUSE OR DEPENDENCE W/O REHABILITATION THERAPY W MCC
897	20	MEDICAL	ALCOHOL/DRUG ABUSE OR DEPENDENCE W/O REHABILITATION THERAPY W/O MCC
901	21	SURGICAL	WOUND DEBRIDEMENTS FOR INJURIES W MCC
902	21	SURGICAL	WOUND DEBRIDEMENTS FOR INJURIES W CC
903	21	SURGICAL	WOUND DEBRIDEMENTS FOR INJURIES W/O CC/MCC
904	21	SURGICAL	SKIN GRAFTS FOR INJURIES W CC/MCC
905	21	SURGICAL	SKIN GRAFTS FOR INJURIES W/O CC/MCC
906	21	SURGICAL	HAND PROCEDURES FOR INJURIES
907	21	SURGICAL	OTHER O.R. PROCEDURES FOR INJURIES W MCC
908	21	SURGICAL	OTHER O.R. PROCEDURES FOR INJURIES W CC
909	21	SURGICAL	OTHER O.R. PROCEDURES FOR INJURIES W/O CC/MCC
913	21	MEDICAL	TRAUMATIC INJURY W MCC
914	21	MEDICAL	TRAUMATIC INJURY W/O MCC

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
915	21	MEDICAL	ALLERGIC REACTIONS W MCC
916	21	MEDICAL	ALLERGIC REACTIONS W/O MCC
917	21	MEDICAL	POISONING & TOXIC EFFECTS OF DRUGS W MCC
918	21	MEDICAL	POISONING & TOXIC EFFECTS OF DRUGS W/O MCC
919	21	MEDICAL	COMPLICATIONS OF TREATMENT W MCC
920	21	MEDICAL	COMPLICATIONS OF TREATMENT W CC
921	21	MEDICAL	COMPLICATIONS OF TREATMENT W/O CC/MCC
922	21	MEDICAL	OTHER INJURY, POISONING, & TOXIC EFFECT DIAG W MCC
923	21	MEDICAL	OTHER INJURY, POISONING, & TOXIC EFFECT DIAG W/O MCC
927	22	SURGICAL	EXTENSIVE BURNS OR FULL THICKNESS BURNS W MV 96+ HRS W SKIN GRAFT
928	22	SURGICAL	FULL THICKNESS BURN W SKIN GRAFT OR INHAL INJ W CC/MCC
929	22	SURGICAL	FULL THICKNESS BURN W SKIN GRAFT OR INHAL INJ W/O CC/MCC
933	22	MEDICAL	EXTENSIVE BURNS OR FULL THICKNESS BURNS W MV 96+ HRS W/O SKIN GRAFT
934	22	MEDICAL	FULL THICKNESS BURN W/O SKIN GRFT OR INHAL INJ

DIAGNOSIS-RELATED GROUPS (DRGs) (Continued)


DRG	MDC	TYPE	DESCRIPTION
935	22	MEDICAL	NON-EXTENSIVE BURNS
939	23	SURGICAL	O.R. PROC W DIAGNOSES OF OTHER CONTACT W HEALTH SERVICES W MCC
940	23	SURGICAL	O.R. PROC W DIAGNOSES OF OTHER CONTACT W HEALTH SERVICES W CC
941	23	SURGICAL	O.R. PROC W DIAGNOSES OF OTHER CONTACT W HEALTH SERVICES W/O CC/MCC
945	23	MEDICAL	REHABILITATION W CC/MCC
946	23	MEDICAL	REHABILITATION W/O CC/MCC
947	23	MEDICAL	SIGNS & SYMPTOMS W MCC
948	23	MEDICAL	SIGNS & SYMPTOMS W/O MCC
949	23	MEDICAL	AFTERCARE W CC/MCC
950	23	MEDICAL	AFTERCARE W/O CC/MCC
951	23	MEDICAL	OTHER FACTORS INFLUENCING HEALTH STATUS
955	24	SURGICAL	CRANIOTOMY FOR MULTIPLE SIGNIFICANT TRAUMA
956	24	SURGICAL	LIMB REATTACHMENT, HIP, & FEMUR PROC FOR MULTIPLE SIGNIFICANT TRAUMA
957	24	SURGICAL	OTHER O.R. PROCEDURES FOR MULTIPLE SIGNIFICANT TRAUMA W MCC

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
958	24	SURGICAL	OTHER O.R. PROCEDURES FOR MULTIPLE SIGNIFICANT TRAUMA W CC
959	24	SURGICAL	OTHER O.R. PROCEDURES FOR MULTIPLE SIGNIFICANT TRAUMA W/O CC/ MCC
963	24	MEDICAL	OTHER MULTIPLE SIGNIFICANT TRAUMA W MCC
964	24	MEDICAL	OTHER MULTIPLE SIGNIFICANT TRAUMA W CC
965	24	MEDICAL	OTHER MULTIPLE SIGNIFICANT TRAUMA W/O CC/MCC
969	25	SURGICAL	HIV W EXTENSIVE O.R. PROCEDURE W MCC
970	25	SURGICAL	HIV W EXTENSIVE O.R. PROCEDURE W/O MCC
974	25	MEDICAL	HIV W MAJOR RELATED CONDITION W MCC
975	25	MEDICAL	HIV W MAJOR RELATED CONDITION W CC
976	25	MEDICAL	HIV W MAJOR RELATED CONDITION W/O CC/MCC
977	25	MEDICAL	HIV W OR W/O OTHER RELATED CONDITION
981		SURGICAL	EXTENSIVE O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS W MCC
982		SURGICAL	EXTENSIVE O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS W CC
983		SURGICAL	EXTENSIVE O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS W/O CC/MCC

DIAGNOSIS-RELATED GROUPS (DRGS) (Continued)

DRG	MDC	TYPE	DESCRIPTION
984		SURGICAL	PROSTATIC O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS W MCC
985		SURGICAL	PROSTATIC O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS W CC
986		SURGICAL	PROSTATIC O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS W/O CC/MCC
987		SURGICAL	NON-EXTENSIVE O.R. PROC UNRELATED TO PRINCIPAL DIAGNOSIS W MCC
988		SURGICAL	NON-EXTENSIVE O.R. PROC UNRELATED TO PRINCIPAL DIAGNOSIS W CC
989		SURGICAL	NON-EXTENSIVE O.R. PROC UNRELATED TO PRINCIPAL DIAGNOSIS W/O CC/MCC
998			PRINCIPAL DIAGNOSIS INVALID AS DISCHARGE DIAGNOSIS
999			UNGROUPABLE



NORMAL HEMATOLOGIC REFERENCE VALUES AND IMPLICATIONS OF ABNORMAL RESULTS*

The implications of abnormal results are major ones in each category. SI units are those used in the International System of Units, which generally are accepted for all scientific and technical uses. All laboratory values should be interpreted with caution because normal values differ widely among clinical laboratories.

cu mm = cubic millimeter (mm^3)

dL = deciliter (1/10 of a liter *or* 100 mL)

g = gram

L = liter

mg = milligram (1/1000 of a gram)

mL = milliliter

mEq = milliequivalent

mm = millimeter (1/1000 of a meter)

mmol = millimole

U = unit

mL = microliter

mmol = micromole (one millionth of a mole)

*From Chabner DE: *The Language of Medicine*, 11th ed. St Louis, Elsevier, 2017.

BLOOD CELL COUNTS

CELL CATEGORY	CONVENTIONAL UNITS	SI UNITS	IMPLICATIONS		
Erythrocytes (RBCs)	Females	4.0–5.5 million/mm ³ or μL	4.0–5.5 $\times 10^{12}/\text{L}$	<i>High</i>	<ul style="list-style-type: none"> • Polycythemia • Dehydration
	Males	4.5–6.0 million/mm ³ or μL	4.5–6.0 $\times 10^{12}/\text{L}$	<i>Low</i>	<ul style="list-style-type: none"> • Iron deficiency anemia • Blood loss
Leukocytes (WBCs)	Total	5000–10,000/mm ³ or μL	5.0–10.0 $\times 10^9/\text{L}$	<i>High</i>	<ul style="list-style-type: none"> • Bacterial infection • Leukemia • Eosinophils high in allergy

BLOOD CELL COUNTS (Continued)

CELL CATEGORY	CONVENTIONAL UNITS	SI UNITS	IMPLICATIONS
Differential (%)			
Neutrophils	54–62		
Lymphocytes	20–40		<i>Low</i>
Monocytes	3–7		<ul style="list-style-type: none"> • Viral infection • Aplastic anemia • Chemotherapy
Eosinophils	1–3		
Basophils	0–1		
Platelets	150,000–350,000/mm ³ or μL	200–400 × 10 ⁹ /L	<p><i>High</i></p> <ul style="list-style-type: none"> • Hemorrhage • Infections • Malignancy • Splenectomy <p><i>Low</i></p> <ul style="list-style-type: none"> • Aplastic anemia • Chemotherapy • Hypersplenism

COAGULATION TESTS

TEST	CONVENTIONAL UNITS	SI UNITS	IMPLICATIONS
Bleeding time (template method)	2.75–8.0 min	2.7–8.0 min	<ul style="list-style-type: none"> • Aspirin ingestion • Low platelet count
Coagulation time	5–15 min	5–15 min	• Heparin therapy
Prothrombin time (PT)*	11–12.5 sec	11–12.5 sec	<ul style="list-style-type: none"> • Vitamin K deficiency • Hepatic disease • Oral anticoagulant therapy (warfarin)
Partial thromboplastin time (PTT)	25–34 sec	25–37 sec	• Intravenous heparin therapy

*The international normalized ratio (INR) is a standard tool for monitoring the effects of an anticoagulant, warfarin; the normal INR value is <1.5.

RED BLOOD CELL TESTS

TEST	CONVENTIONAL UNITS	SI UNITS	IMPLICATIONS
Hematocrit (Hct)			
Females	37%–47%	0.37–0.47	<i>High</i>
Males	40%–54%	0.40–0.54	<i>Low</i>
Hemoglobin (Hb, Hgb)			
Females	12.0–14.0 g/dL or 120–140 g/L	1.86–2.48 mmol/L	<i>High</i>
Males	14.0–16.0 g/dL	2.17–2.79 mmol/L	<i>Low</i>

- Polycythemia
- Dehydration
- Loss of blood
- Anemia

- Polycythemia
- Dehydration
- Anemia
- Blood loss

SERUM TESTS

TEST	CONVENTIONAL UNITS	SI UNITS	IMPLICATIONS
Alanine aminotransferase (ALT; SGPT)	5–30 U/L	5–30 U/L	<i>High</i> <ul style="list-style-type: none"> • Hepatitis
Albumin	3.5–5.5 g/dL	35–55 g/L	<i>Low</i> <ul style="list-style-type: none"> • Hepatic disease • Malnutrition • Nephritis and nephrosis
Alkaline phosphatase (ALP)	20–90 U/L	20–90 U/L	<i>High</i> <ul style="list-style-type: none"> • Bone disease • Hepatitis or tumor infiltration of liver • Biliary obstruction
Aspartate aminotransferase (AST; SGOT)	10–30 U/L	10–30 U/L	<i>High</i> <ul style="list-style-type: none"> • Hepatitis • Cardiac and muscle injury

SERUM TESTS (Continued)

TEST	CONVENTIONAL UNITS	SI UNITS	IMPLICATIONS
Bilirubin Total Neonates	0.3–1.0 mg/dL 1–12 mg/dL	5.1–17 μ mol/L 17–205 μ mol/L	<i>High</i> <ul style="list-style-type: none"> • Hemolysis • Neonatal hepatic immaturity • Cirrhosis • Biliary tract obstruction
Blood urea nitrogen (BUN)	10–20 mg/dL	3.6–7.1 mmol/L	<i>High</i> <ul style="list-style-type: none"> • Renal disease • Reduced renal blood flow • Urinary tract obstruction <p><i>Low</i></p> <ul style="list-style-type: none"> • Hepatic damage • Malnutrition
Calcium	9.0–10.5 mg/dL	2.2–2.6 mmol/L	<i>High</i> <ul style="list-style-type: none"> • Hyperparathyroidism • Multiple myeloma • Metastatic cancer <p><i>Low</i></p> <ul style="list-style-type: none"> • Hypoparathyroidism • Total parathyroidectomy

SERUM TESTS (Continued)

TEST	CONVENTIONAL UNITS	SI UNITS	IMPLICATIONS
Cholesterol (desirable range)			
Total	<200 mg/dL	<5.2 mmol/L	<i>High</i>
LDL cholesterol	<130 mg/dL	<3.36 mmol/L	<ul style="list-style-type: none"> • High-fat diet • Inherited hypercholesterolemia
HDL cholesterol	>60 mg/dL	>1.55 mmol/L	<i>Low</i>
Creatine kinase (CK)			
Females	30–135 U/L	30–135 U/L	<i>High</i>
Males	55–170 U/L	55–170 U/L	<ul style="list-style-type: none"> • Myocardial infarction • Muscle disease
Creatinine	<1.5 mg/dL	<133 μ mol/L	<i>High</i>
Glucose (fasting)	75–115 mg/dL	4.2–6.4 mmol/L	<i>High</i>
			<i>Low</i>
			<ul style="list-style-type: none"> • Diabetes mellitus • Hyperinsulinism • Fasting • Hypothyroidism • Addison disease • Pituitary insufficiency

SERUM TESTS (Continued)

TEST	CONVENTIONAL UNITS	SI UNITS	IMPLICATIONS
Iron (Fe) Females Males	30-160 µg/dL 45-160 µg/dL	5.4-31.3 µmol/L 8.1-31.3 µmol/L	<i>High</i> <i>Low</i> <ul style="list-style-type: none"> • Hemochromatosis • Transfusions • Anemia • Bleeding
Lactate dehydrogenase (LDH)	100-190 U/L	100-190 U/L	<i>High</i> <ul style="list-style-type: none"> • Tissue necrosis • Lymphomas • Muscle disease
Phosphate (PO ₄ ⁻)	3.0-4.5 mg/dL	1.0-1.5 mmol/L	<i>High</i> <i>Low</i> <ul style="list-style-type: none"> • Renal failure • Bone metastases • Hypoparathyroidism • Malnutrition • Malabsorption • Hyperparathyroidism

SERUM TESTS (Continued)

TEST	CONVENTIONAL UNITS	SI UNITS	IMPLICATIONS
Potassium (K^+)	3.5–5.0 mEq/L	3.5–5.0 mmol/L	<p><i>High</i></p> <ul style="list-style-type: none"> • Burn injury • Renal failure • Diabetic ketoacidosis • Cushing syndrome • Loss of body fluids <p><i>Low</i></p>
Sodium (Na^+)	136–145 mEq/L	136–145 mmol/L	<p><i>High</i></p> <ul style="list-style-type: none"> • Inadequate water intake • Water loss in excess of sodium • Adrenal insufficiency • Inadequate sodium intake • Excessive sodium loss <p><i>Low</i></p>
Thyroxine (T4)	5–12 μ g/dL	64–154 nmol/L	<p><i>High</i></p> <ul style="list-style-type: none"> • Graves disease (hyperthyroidism) <p><i>Low</i></p> <ul style="list-style-type: none"> • Hypothyroidism
Uric acid			
Females	2.5–8.0 mg/dL	150–480 μ mol/L	<i>High</i>
Males	1.5–6.0 mg/dL	90–360 μ mol/L	<ul style="list-style-type: none"> • Gout • Leukemia



INTERNET RESOURCES*

Patient education is a serious responsibility for health care professionals. Many health care facilities develop their own patient teaching materials. There also are groups, associations, businesses, and agencies that develop patient education materials for dissemination to the public. There are many tools that can be used to improve an individual's knowledge about a particular health care problem or issue. These include, but are not limited to, pamphlets, movies, videotapes, audiotapes, newsletters, and computerized instruction products. Information also can be supplied to the health care professional to develop materials. The names and addresses identified in the following listing are potential sources of information that have provided information for the *Miller-Keane Encyclopedia and Dictionary of Medicine, Nursing, and Allied Health*. Local chapters of national organizations also may be found in the telephone directory or online and may serve as valuable resources for patient education material. Encyclopedias and directories of health-related associations constitute an additional source of information or contacts.

Alcoholics Anonymous

Website: www.aa.org

Alcoholics Anonymous (AA) is a fellowship of alcoholics who support one another to achieve and maintain sobriety. It is an unaffiliated, self-supporting

*Modified from *Miller-Keane Encyclopedia and Dictionary of Medicine, Nursing, and Allied Health*. 7th ed., revised reprint. Philadelphia: Saunders; 2005.

group that collects no dues or fees and receives no outside funds. Its primary purpose is to carry the AA message to alcoholics who still suffer.

Alzheimer's Disease Education and Referral (ADEAR) Center

Phone: 800-438-4380

E-mail: adear@nia.nih.gov

Website: www.nia.nih.gov/alzheimers

The ADEAR Center provides information about Alzheimer disease, its symptoms, and diagnosis, and Alzheimer disease research is supported by the National Institute on Aging. It offers a newsletter to health care professionals and other free publications to the public. Information specialists are available to answer questions about Alzheimer disease by e-mail.

Alzheimer Society of Canada

20 Eglinton Avenue W, Suite 1200

Toronto, ON M4R 1K8

Phone: 416-488-8772

Toll-free (from Canada only): 800-616-8816

Fax: 416-322-6656

E-mail: info@alzheimer.ca

Website: www.alzheimer.ca

The Alzheimer Society of Canada is a national voluntary organization whose goals are to provide information and support to those affected by Alzheimer disease and their families, to increase public awareness of Alzheimer disease, and to search for a cause and a cure.

American Association for Homecare

1707 L Street NW

Washington, DC 20036

Phone: 202-372-0107

Fax: 202-835-8306

E-mail: info@aahomecare.org

Website: www.aahomecare.org

The American Association for Homecare (AAHomecare) is the unified voice that represents all of the elements of home care under one roof—from home

medical equipment and respiratory therapy to home health services and from rehabilitation technology to infusion therapy. AAHomecare is dedicated to the advancement of the value and practice of high-quality health care services at home.

American Council of the Blind

2200 Wilson Boulevard, Suite 650

Arlington, VA 22201-3354

Phone: 202-467-5081

Toll-free: 800-424-8666

Fax: 703-465-5085

E-mail: info@acb.org

Website: www.acb.org

The American Council of the Blind is a national membership organization established to promote the independence, dignity, and well-being of blind and visually impaired people. Services include a monthly magazine, the Braille Forum, subscriptions to which are available free of charge to individuals in the United States in Braille, in large print, on cassettes, and on CDs.

American Dietetic Association

120 South Riverside Plaza, Suite 2000

Chicago, IL 60606-6995

Phone: 312-899-0040

Toll-free: 800-877-1600

E-mail: knowledge@eatright.org

Website: www.eatright.org

The American Dietetic Association (ADA) promotes the optimal health, nutrition, and well-being of the public. The National Center for Nutrition and Dietetics maintains a consumer nutrition hotline that provides information and referrals to registered dietitians throughout the country.

Amyotrophic Lateral Sclerosis (ALS) Association

ALS Association National Office

27001 Agoura Road, Suite 250

Calabasas Hills, CA 91301-5104

Information and Referral Service: 800-782-4747

All other services: 818-880-9007

E-mail: alsinfo@alsa-national.org

Website: www.alsa.org

The mission of the ALS Association is to discover the cause and cure for amyotrophic lateral sclerosis (Lou Gehrig disease) through dedicated research while providing patient support, information, and education for health care professionals and the general public, and advocacy for ALS research and health care concerns.

Association of Community Cancer Centers

11600 Nebel Street, Suite 201

Rockville, MD 20852

Phone: 301-984-9496

Fax: 301-770-1949

Website: www.accc-cancer.org

The mission of this center is to promote the continuum of high-quality cancer care (research, prevention, screening, early detection, diagnosis, treatment, psychosocial services, rehabilitation, and hospice) for patients with cancer and the community.

Asthma and Allergy Foundation of America (AAFA)

8201 Corporate Drive, Suite 1000

Landover, MD 20785

Phone: 1-800-727-8462

E-mail: Info@aafa.org

Website: www.aafa.org

AAFA has been in existence for over 40 years and is a registered not-for-profit patient education organization dedicated to finding a cure for and controlling asthma and allergic diseases.

Bulimia Anorexia Nervosa Association (BANA)

1500 Ouelette Avenue, Suite 100

Windsor, ON N8X 1K7

Phone: 519-969-2112

Fax: 519-969-0227

E-mail: info@bana.ca

Website: www.bana.ca

The objectives of BANA are to eradicate eating disorders; to promote healthy eating and acceptance of diverse body shapes; and to provide clinical, preventive, and advocacy services for people affected by eating disorders.

Canada Safety Council

1020 Thomas Spratt Place

Ottawa, ON K1G 5L5

Phone: 613-739-1535

Fax: 613-739-1566

E-mail: csc@safety-council.org

Website: <http://canadasafetycouncil.org>

The Canada Safety Council is Canada's national not-for-profit safety organization. Its mission is to be a leader in the effort to reduce preventable deaths, injuries, and economic loss in traffic, work, home, community, and leisure environments.

Canadian Cystic Fibrosis Foundation

2221 Yonge Street, Suite 800

Toronto, ON M4P 2C9

Phone: 416-485-9149

Toll-free (from Canada only): 800-378-2233

Fax: 416-485-0960

E-mail: info@cysticfibrosis.ca

Website: www.cysticfibrosis.ca

The purpose and objectives of the Canadian Cystic Fibrosis Foundation are to aid those with cystic fibrosis, to conduct research in improved care and treatment and seek a cure or control for cystic fibrosis, to promote public awareness through the dissemination of information using all forms of communication, and to raise funds and allocate them for the foregoing purposes.

Canadian Hard of Hearing Association (CHHA)

2415 Holly Lane, Suite 205

Ottawa, ON K1V 7P2

Voice phone: 613-526-1584

TTY: 613-526-2692

Toll-free (from Canada only): 800-263-8068

Fax: 613-526-4718

E-mail: info@chhancr.com

Website: www.chha.ca

The Canadian Hard of Hearing Association is the “voice” of the hard of hearing in Canada. CHHA is the only Canadian national nonprofit consumer organization run by and for hard-of-hearing people. CHHA exists to help the hard-of-hearing achieve independent, productive, and fulfilling lives.

Canadian Mental Health Association (CMHA)

1110-151 Slater Street

Ottawa, ON K1P 5H3

Fax: 613-745-5522

Website: www.cmha.ca

CMHA is a national volunteer association that exists to promote mental health. CMHA's mission is operationalized through education, advocacy, research, service provision, and facilitation.

Canadian National Institute for the Blind (CNIB)

1929 Bayview Avenue

Toronto, ON M4G 3E8

Phone: 800-563-2642

E-mail: info@cnib.ca

Website: www.cnib.ca

CNIB is the world's largest provider of services to people with visual impairments and a global leader in adaptive and assistive technologies.

Cancer Care, Inc.

275 7th Avenue

New York, NY 10001

Phone: 800-813-HOPE (4673)

E-mail: info@cancercare.org

Website: www.cancercare.org

Cancer Care offers information, referral, individual and group counseling, and patient education free of charge.

Centers for Disease Control and Prevention (CDC)

1600 Clifton Road NE

Atlanta, GA 30333

Phone: 800-232-4636

TTY: 888-232-6348

Website: www.cdc.gov

The CDC provides information on diseases, health risks, prevention guidelines, and strategies. A wide variety of services can be accessed through the CDC.

Child Welfare Information Gateway

Children's Bureau/ACYF

1250 Maryland Avenue SW

Eighth Floor

Washington, DC 20024

Phone: 800-394-3366

E-mail: info@childwelfare.gov**Website:** www.childwelfare.gov

Formerly the National Clearinghouse on Child Abuse and Neglect Information Web, this organization collects, catalogues, stores, organizes, and disseminates information on all aspects of child maltreatment.

Crohn's and Colitis Foundation of Canada (CCFC)

60 St. Clair Avenue East, Suite 600

Toronto, ON M4T 1N5

Phone: 416-920-5035

Toll-free (from Canada only): 800-387-1479

Fax: 416-929-0364

E-mail: support@crohnsandcolitis.ca**Website:** www.cfc.ca

The CCFC is a national not-for-profit volunteer foundation dedicated to finding a cure for Crohn disease and ulcerative colitis. To realize this, the CCFC is committed to raising increasing funds for research. The CCFC also believes that it is important to make all persons with inflammatory bowel disease aware of the foundation, and to educate these individuals, their families, health care professionals, and the general public.

Cystic Fibrosis Foundation

6931 Arlington Road, 2nd floor

Bethesda, MD 20814

Phone: 301-951-4422

Toll-free: 800-344-4823

Fax: 301-951-6378

E-mail: info@cff.org

Website: www.cff.org

The Cystic Fibrosis Foundation was established in 1955 to raise money to fund research to find a cure for cystic fibrosis and to improve quality of life for the 30,000 children and adults with the disease.

Endometriosis Association

International Headquarters

8585 N 76th Place

Milwaukee, WI 53223

Phone: 414-355-2200

Fax: 414-355-6065

E-mail: endo@endometriosisassn.org

Website: www.endometriosisassn.org

The Endometriosis Association is a self-help organization dedicated to offering support and information to women with endometriosis, educating the public and medical community about the disease, and promoting and conducting research related to endometriosis.

Epilepsy Foundation

8301 Professional Place East, Suite 200

Landover, MD 20785-7223

Phone: 800-332-1000

E-mail: ContactUs@efa.org

Website: www.epilepsyfoundation.org

The Epilepsy Foundation is the national organization that works for people affected by seizures through research, education, advocacy, and service.

International Federation on Ageing (IFA)

351 Christie Street

Toronto, ON, M6G 3C3

Phone: 416-342-1655

Fax: 416-392-4157
E-mail: gshaw@ifa-fiv.org
Website: www.ifa-fiv.org

IFA serves as an advocate for the well-being of older persons around the world. IFA is committed to providing a worldwide forum on aging issues and concerns and to fostering the development of associations and agencies that serve or represent older persons.

La Leche League Canada

PO Box 700
Winchester, ON K0C 2K0
Phone: 613-774-4900
Fax: 613-774-2798
E-mail: adc@llc.ca
Website: www.llc.ca

La Leche League Canada promotes a better understanding of breastfeeding as an important element in the healthy development of the baby, and through education, information, encouragement, and mother-to-mother support helps mothers nationwide to breastfeed. The main objective of La Leche League Canada is to help mothers breastfeed their babies.

Learning Ally

20 Roszel Road
Princeton, NJ 08540
Phone: 866-732-3585
E-mail: Custserv@LearningAlly.org
Website: www.learningally.org

Learning Ally, formerly Recording for the Blind and Dyslexic (RFB&D), maintains the world's largest collection of professional resources and textbooks on audiotope for all academic levels. It serves people who cannot read standard print because of a visual, perceptual, or other physical disability.

Learning Disabilities Association of America (LDA)

4156 Library Road
Pittsburgh, PA 15234

Phone: 412-341-1515
Fax: 412-344-0224
Email: info@LDAAmerica.org
Website: www.ldanatl.org

The LDA is an information and referral organization. The association provides any and all information regarding learning disabilities in both children and adults. There are 500 chapters across the country. Persons who make contact with the LDA receive a free packet of material from the association, which then refers them to one of its chapters. Membership also is offered.

National Association for Visually Handicapped

111 E 59th Street
New York NY 10022-1202
Phone: 800-284-4422
E-mail: info@lighthouseguild.org
Website: www.lighthouseguild.org

The association's primary goal is to promote hope, dignity, and productivity for those with uncorrectable visual impairments by encouraging the full use of residual vision through large print, visual aids, emotional support, educational outreach, advocacy, and referral services.

National Asian Pacific Center on Aging (NAPCA)

1511 Third Avenue, Suite 914
Seattle, WA 98101
Phone: 206-624-1221
Toll-free: 800-336-2722
Fax: 206-624-1023
Website: www.napca.org

NAPCA is the leading advocacy organization committed to the well-being of elderly Asians and Pacific Islanders in the United States. NAPCA develops and administers programs to enhance the dignity and quality of life of its constituents. NAPCA provides a fax-on-demand service called FAX-IT that provides more than 300 pamphlets, brochures, fact sheets, and

so on, in 15 languages on topics related to health, wellness, and social services. FAX-IT can be reached by dialing 206-624-0185 from any fax machine (telephone handset).

National Autism Association

One Park Avenue, Suite 1

Portsmouth, RI 02871

Phone: 877-622-2884

Fax: 401-293-5342

E-mail: naa@nationalautism.org

Website: www.nationalautismassociation.org

National Autism Association provides education and resources to keep our loved ones with autism safe from wandering, elopement, bullying, and abuse and to help everyone living with autism reach his or her full potential.

National Committee for the Prevention of Elder Abuse

1730 Rhode Island Avenue, NW

Suite 1200, Washington, DC 20036

Phone: 202-464-9481

Fax: 202-872-0057

E-mail: info@preventelderabuse.org

Website: www.preventelderabuse.org

The National Committee for the Prevention of Elder Abuse was established to promote greater awareness and understanding of elder abuse and the development of services to protect older persons and disabled adults and reduce the likelihood of their being abused, neglected, and exploited.

National Council on Alcoholism and Drug Dependence (NCADD)

217 Broadway, Suite 712

New York, NY 10007

Phone: 212-269-7797

Fax: 212-269-7510

E-mail: national@ncadd.org

Website: www.ncadd.org

NCADD provides education, information, help, and hope in the fight against the chronic and often fatal disease of alcoholism and other drug addictions. Founded in 1944, NCADD, with its nationwide network of affiliates, advocates a threefold approach of prevention, intervention, and treatment and is committed to ridding the disease of its stigma and its sufferers of their denial and shame.

National Health Council

1730 M Street NW, Suite 500

Washington, DC 20036

Phone: 202-785-3910

Fax: 202-785-5923

E-mail: info@nhcouncil.org**Website:** www.nationalhealthcouncil.org

The National Health Council is a private, nonprofit association of national organizations that was founded in 1920 as a clearinghouse and cooperative effort for voluntary health agencies (VHAs).

National Institutes of Health

9000 Rockville Pike

Bethesda, MD 20892

Phone: 301-496-4000

TTY: 301-402-9612

E-mail: NIHinfo@od.nih.gov**Website:** www.nih.gov

The National Institutes of Health (NIH), a part of the U.S. Department of Health and Human Services, is the nation's medical research agency—making important discoveries that improve health and save lives.

National Wellness Institute

1300 College Court

PO Box 827

Stevens Point, WI 54481-0827

Phone: 715-342-2969

Fax: 715-342-2979

E-mail: nwi@nationalwellness.org**Website:** www.nationalwellness.org

The National Wellness Institute has served professionals interested in wellness and health promotion since 1977. It focuses on professional education programs; resources and information dissemination through its professional association, the National Wellness Association; and the development and distribution of lifestyle inventories and health risk appraisals.

The Nemours Foundation

1600 Rockland Road
Wilmington, DE 19803
Phone: 302-651-4046
E-mail: info@KidsHealth.org
Website: www.kidshealth.org

The Nemours Foundation maintains a very informative website known as KidsHealth.

Osteoporosis Society of Canada

Osteoporosis Canada
1090 Don Mills Road, Suite 301
Toronto, ON M3C 3R6
Phone: 416-696-2663
Fax: 416-696-2673
Toll-free (from Canada only): 800-463-6842
E-mail: info@osteoporosis.ca
Website: www.osteoporosis.ca

The society educates and empowers individuals and communities in the prevention and treatment of osteoporosis. As a resource for patients, health care professionals, the media, and the general public, it provides medically accurate information on the causes, prevention, and treatment of osteoporosis.

SHARE Pregnancy & Infant Loss Support

National Share Office
402 Jackson Street
Saint Charles, MO 63301-3468
Phone: 800-821-6819
E-mail: info@nationalshare.org
Website: www.nationalshare.org

SHARE offers support to families and caregivers whose lives have been touched by the tragic death of a baby through miscarriage or stillbirth or in the newborn period by providing information, education, and a network of support groups across the country.

SIECUS (Sexuality Information and Education Council of the United States)

1012 14th Street, NW, Suite 1108

Washington, DC, 20005

Phone: 202-265-2405

Fax: 202-462-2340

Website: www.sadd.com

SIECUS affirms that sexuality is a natural and healthy part of living. SIECUS develops, collects, and disseminates information, promotes comprehensive education about sexuality, and advocates the right of individuals to make responsible sexual choices.

Students Against Destructive Decisions (SADD)

255 Main Street

Marlborough, MA 01752

Phone: 877-SADD-INC

Fax: 508-481-5759

E-mail: info@sadd.org

Website: www.saddonline.com

Founded as Students Against Driving Drunk, this organization provides young people with the tools to address the problems of underage drinking, impaired driving, and drug use and their consequences.

Substance Abuse and Mental Health Services Administration (SAMHSA)

SAMHSA's Health Information Network

PO Box 2345

1 Choke Cherry Road

Rockville, MD 20847-2345

Phone: 1-877-726-4727

TTY: 1-800-487-4889

Fax: 240-221-4292

E-mail: SAMHSAInfo@samhsa.hhs.gov

Website: www.samhsa.gov

An agency of the U.S. Center for Substance Abuse Prevention, SAMHSA collects and distributes information about alcohol, tobacco, and other drugs to all interested persons. This clearinghouse provides a wide variety of free printed materials, as well as videotapes and disk-based products for a small cost-recovery fee.

United Network for Organ Sharing (UNOS)

PO Box 2484

Richmond, VA 23218 23219

Phone: 804-782-4800

Fax: 804-782-4817

Website: www.unos.org

UNOS, under contract with the U.S. Department of Health and Human Services, is a nonprofit organization that administers the National Organ Procurement and Transplantation Network (OPTN) and the U.S. Scientific Registry of Organ Transplant Recipients mandated by Congress. It operates and maintains the national list of patients waiting for solid organ transplants. In addition, it maintains a computer-assisted system for allocating organs to people on the waiting list. The primary goal of the UNOS organization is to increase the number of donated organs. Through a number of strategies, including public and professional education, UNOS endeavors to bridge the gap between the number of persons waiting for transplants and the number of organs donated.

Information about organ donation and transplantation is available from UNOS 24 hours a day, 365 days a year.

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PART 3

Body Systems Illustrations*

*Illustrations modified from Chabner DE: *The Language of Medicine*, 11th ed. St. Louis, Elsevier/Saunders, 2017; and from Miller-Keane: *Encyclopedia & Dictionary of Medicine, Nursing, & Allied Health*, 7th ed., revised reprint. Philadelphia, Saunders, 2005.

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This is an index of all of the important labels in the illustrations of the body systems. You can use it to locate the relevant illustration for a particular anatomic term you may have in mind.

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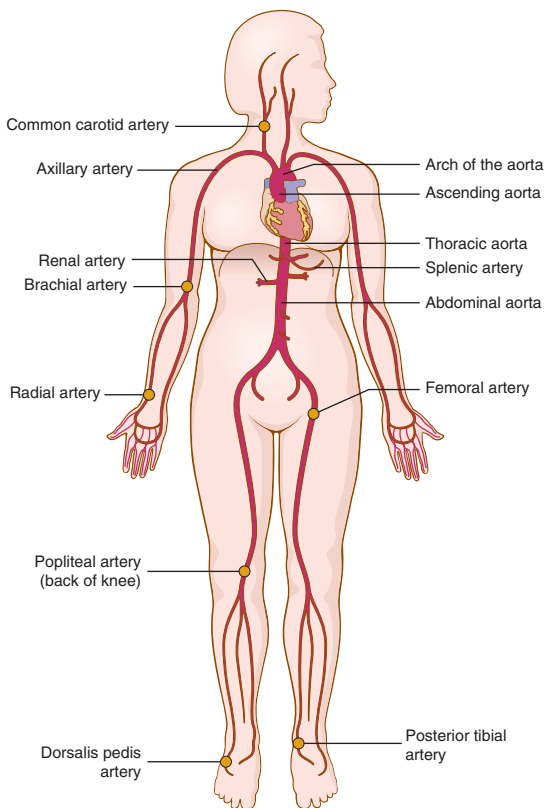
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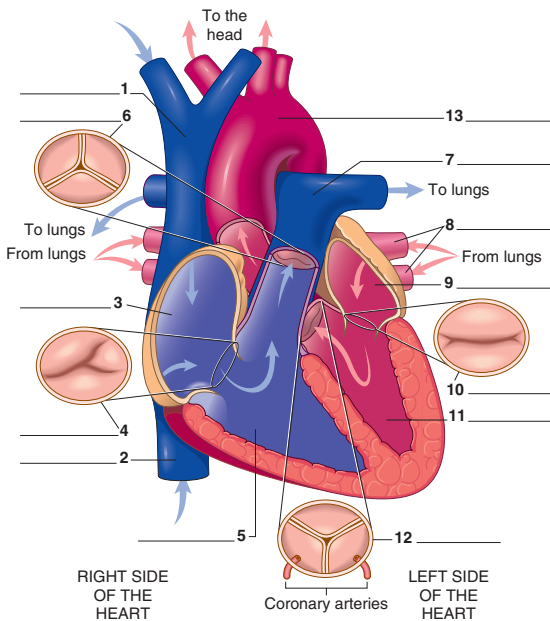
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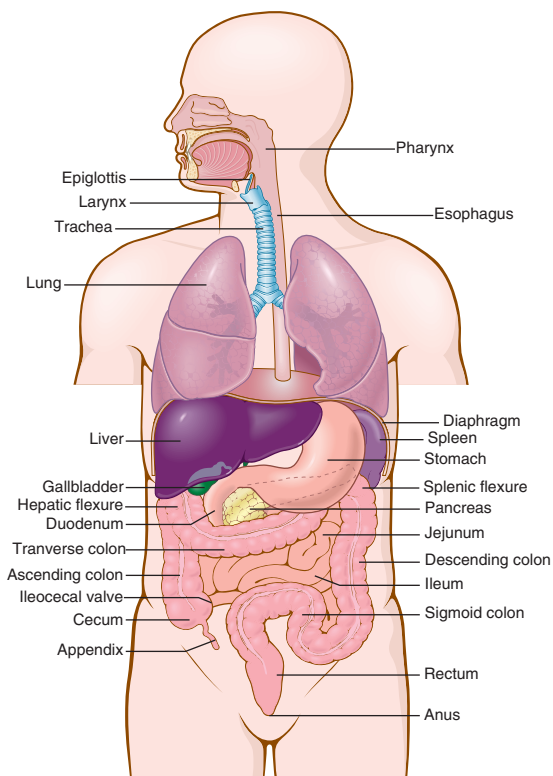
CARDIOVASCULAR SYSTEM (AORTA AND MAJOR ARTERIES)



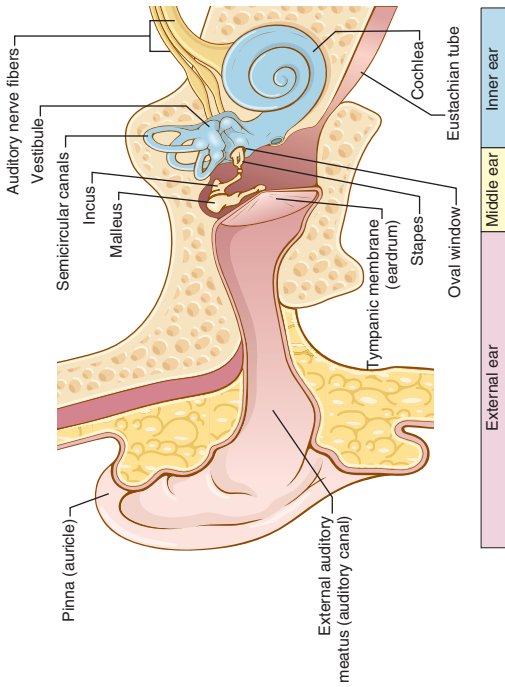
CARDIOVASCULAR SYSTEM (HEART)



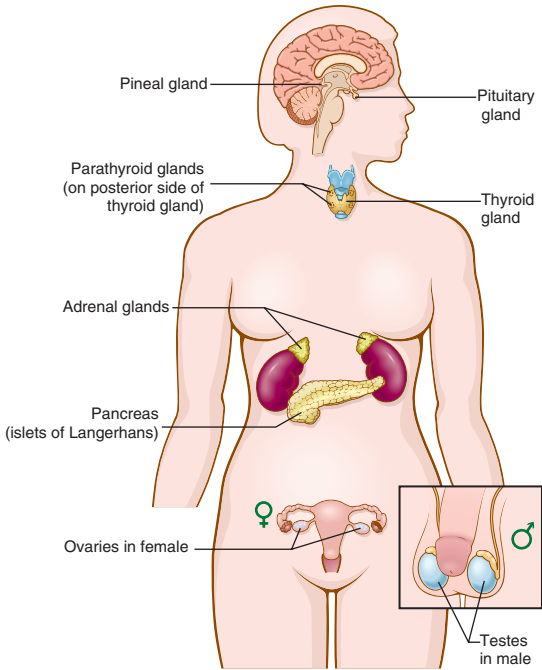
DIGESTIVE SYSTEM



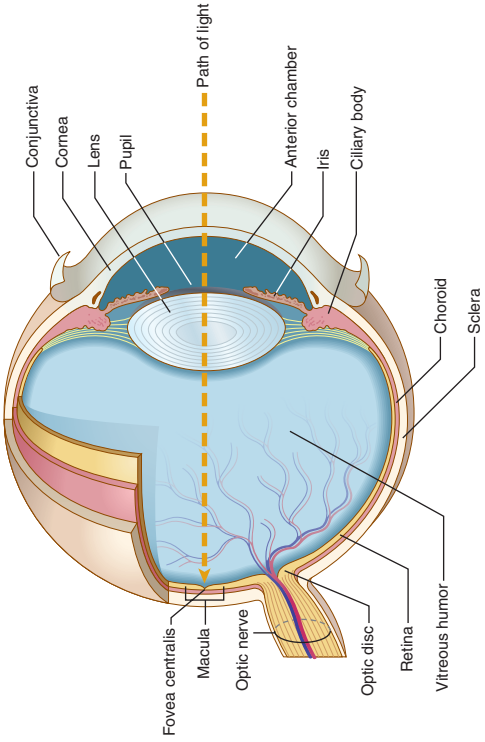
EAR



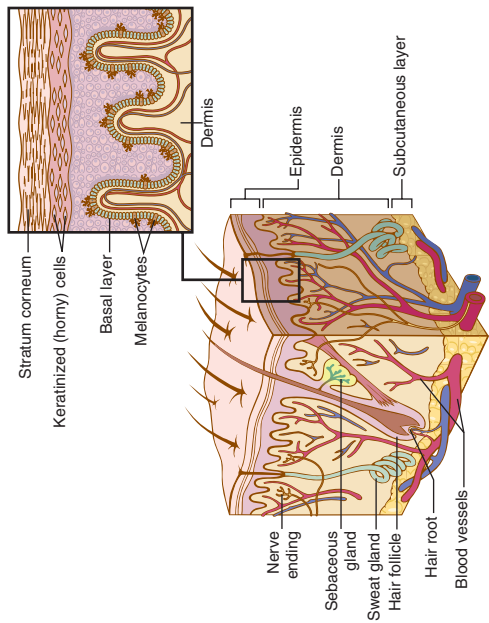
ENDOCRINE SYSTEM



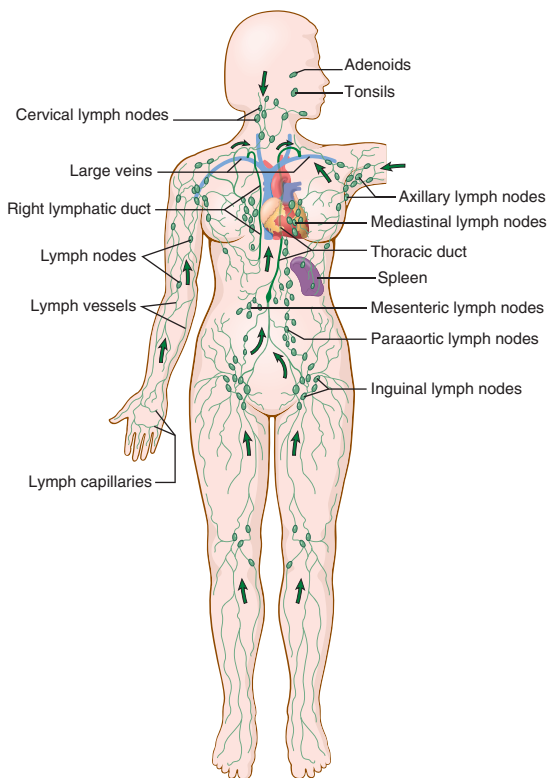
EYE



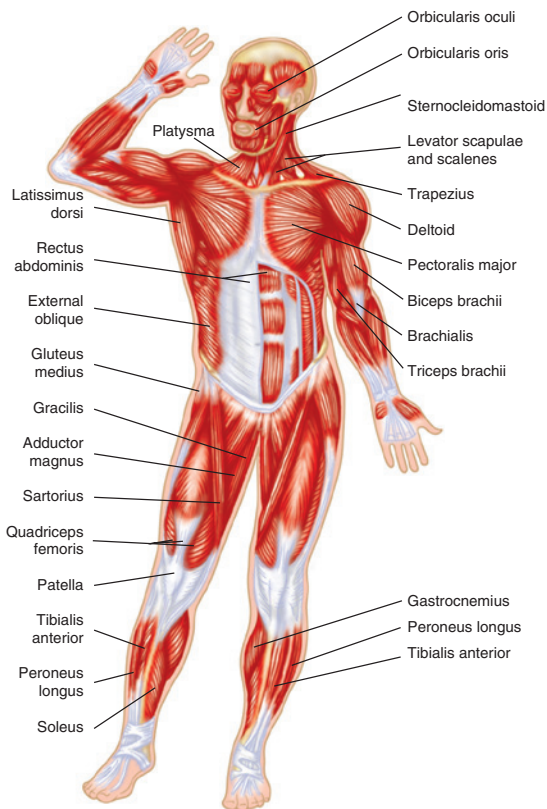
INTEGUMENTARY SYSTEM (SKIN)



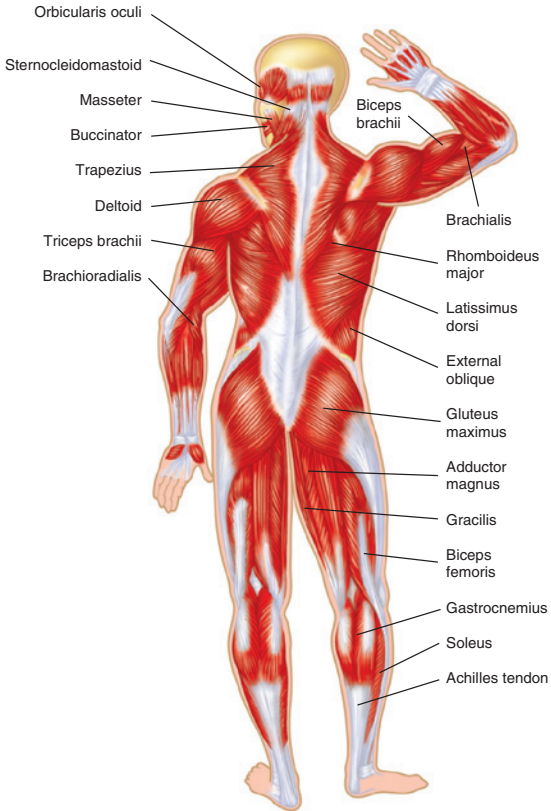
LYMPHATIC SYSTEM



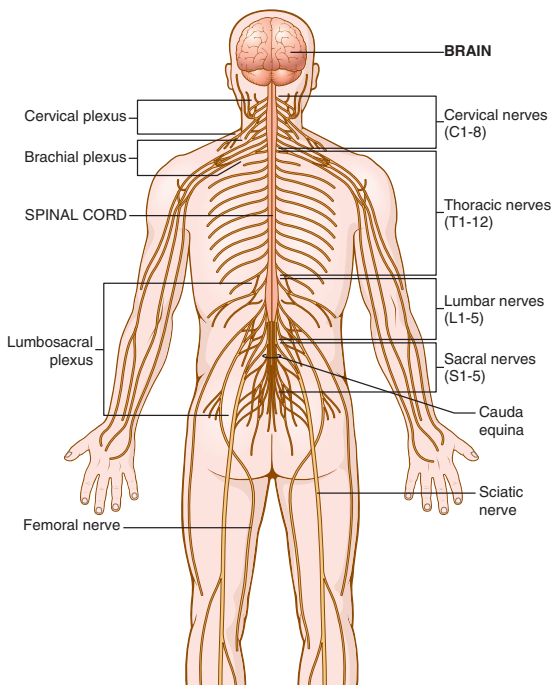
MUSCLES (ANTERIOR SUPERFICIAL)



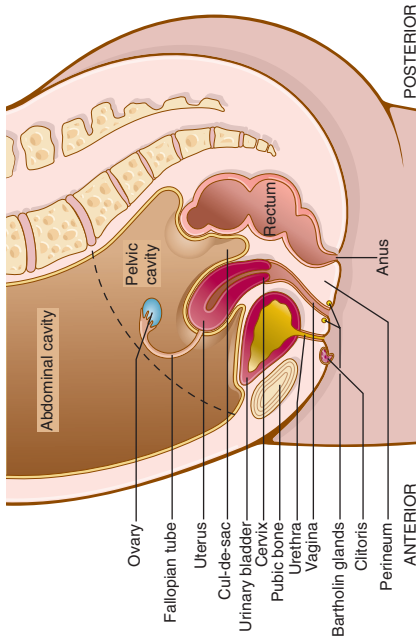
MUSCLES (POSTERIOR SUPERFICIAL)



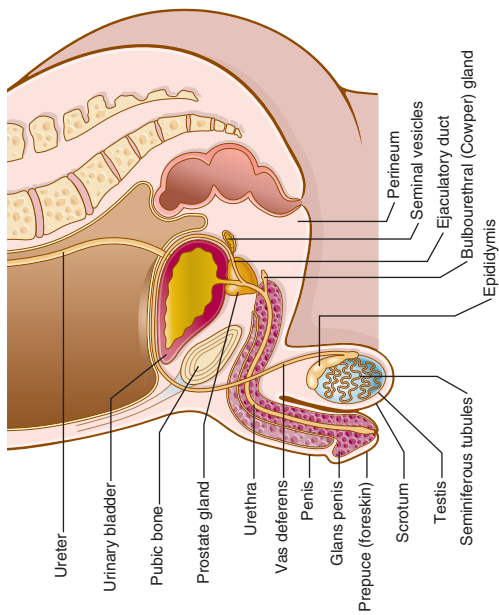
NERVOUS SYSTEM



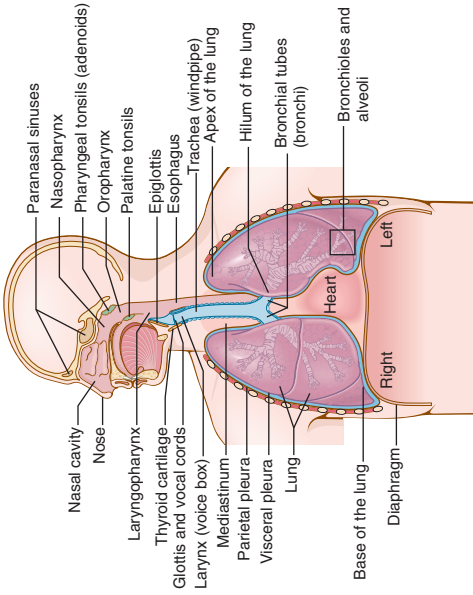
FEMALE REPRODUCTIVE SYSTEM



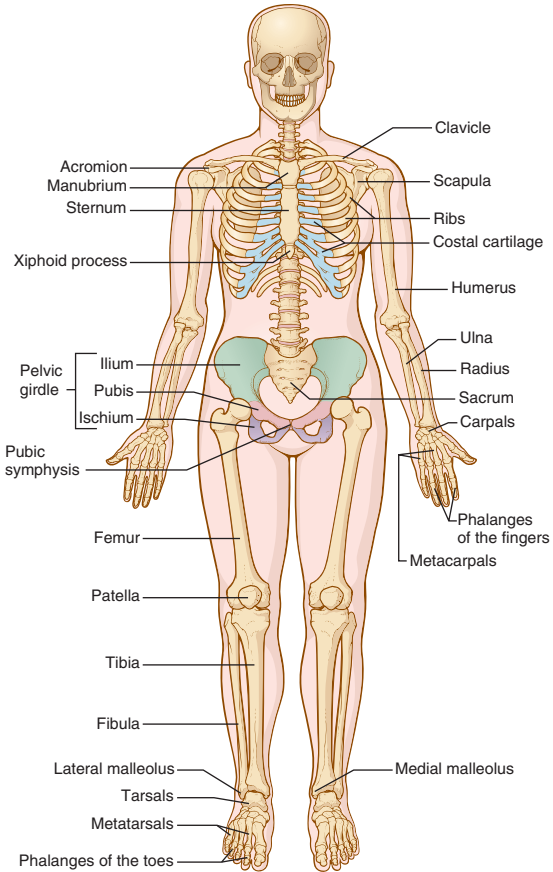
MALE REPRODUCTIVE SYSTEM



RESPIRATORY SYSTEM



SKELETAL SYSTEM



URINARY SYSTEM (MALE)

