What is Medical Terminology?

[EXPLANATIONS + HELPFUL RESOURCES]

University
of San Diego ®

PROFESSIONAL AND
CONTINUING EDUCATION

CONTENTS

MEDICAL TERMINOLOGY 101
Definitions, Applications & Helpful Resources

Understanding medical terminology can make all the difference in critical health situations. And while understanding medical language is serious business for care providers, learning medical terminology can actually be a thought-provoking, interesting crash course in the history and development of language and parts of speech.

For those who are new to, or are looking to enter the medical field, having a firm grasp on medical verbiage, roots and meanings can give you a leg up as you continue your studies and progress in your career. To get you started, here is our introductory guide to medical terminology, which will serve as a solid foundation as you work to diversify and enhance your medical language skills.

WHAT IS MEDICAL TERMINOLOGY?

Medical terminology refers to the words and language used specifically in the medical and health fields. The proper definition describes medical terminology as language used to describe anatomical structures, procedures, conditions, processes and treatments in the medical field.

While memorizing terms across that many disciplines might seem impossible, medical language can be simplified when you understand that nearly all medical terms can be broken down into three parts: the prefix, the root and the suffix.

PREFIX

Appears at the beginning of a term and indicates a location, direction, type, quality or quantity.

ROOT

Can appear at the beginning of the word if prefix is absent, but the root indicates the primary meaning of the medical term.

SUFFIX

Appears at the end of the word and indicates a specialty, test, procedure, function, disorder or status.

WHY IS MEDICAL TERMINOLOGY IMPORTANT IN THE MEDICAL FIELD?

Medical terminology is the linguistic foundation on which the entire healthcare system is built. Because physicians are trained at varying universities and complete their training across different hospitals and disciplines and geographies, having a singular medical terminology system ensures that effective care is delivered while reducing the potential for miscommunication.

- **More specifically, medical terminology is important for a few reasons, both for medical professionals and the field itself. Medical terminology courses or certificates are usually a prerequisite for most graduate degree or certificate programs in the healthcare field.**

- **For those already working in the medical field — such as medical records specialists, radiology techs and even physicians — a refresher on traditional and new medical terminology can be helpful and may even be required for license renewal.**

WHY IS STANDARDIZATION OF MEDICAL TERMINOLOGY IMPORTANT?

Studies show that a standardized medical terminology system can improve overall hospital operations — both in terms of data and clinical applications of such data. A second report found that medical terminology and the usage of structured reporting can improve the usage of medical information in secondary activities, such as research, public health and case studies. This not only will help make research efforts more efficient, it will likely result in better outcomes for patients and medical innovation.

Additional benefits of standardized medical terminology include:

- **Ensures consistent documentation of clinical information**

- **Creates a streamlined system for data entry and retrieval across electronic medical records for billing and insurance purposes**

- **Ensures a consistent understanding of language across the continuum of care**

- **Ensures that all relevant parties are educated across a universal standard Improves patient care and safety, research and evidence-based medicine**

- **Helps promote efficient communication**

- **Helps create a seamless patient experience**

Medical Terminology
EXAMPLES OF PREFIXES

OpenMd

SIZE	
large	macro-, mega(lo)-
small	micro-

NUMBER	
half	semi-
half (one side)	hemi-
one	mono-, uni-
two	three	four	bi-	tri-	qua(dr/r/t)-
equal	equi-
many	poly-
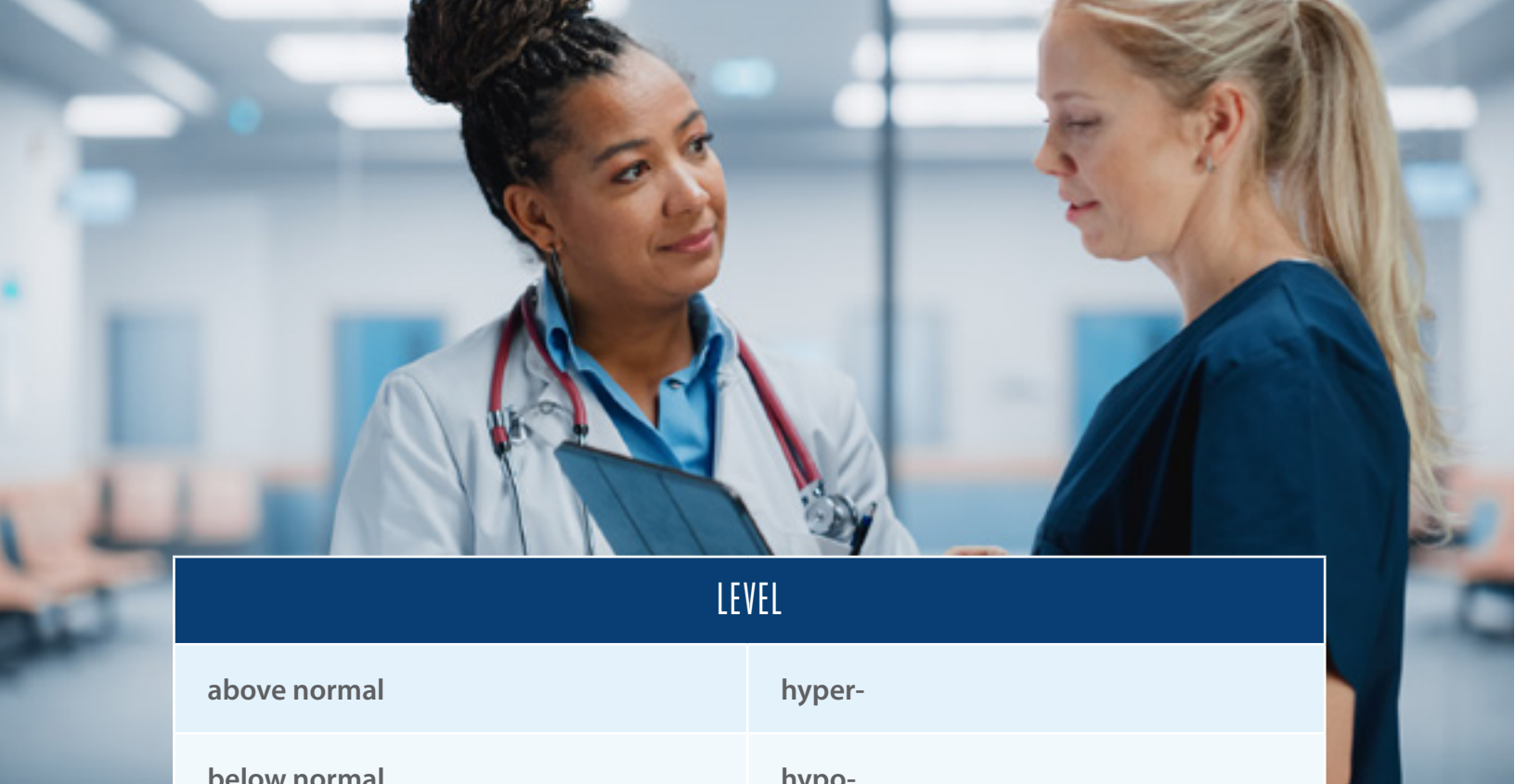
LEVEL

above normal	hyper-
below normal	hypo-
normal/good	eu-

TIME OR SPEED

after	post-
again	re-
back/backward	retro-
before	pro-, pre-, ante-
fast	tachy-
new	neo-
time, long time	chron-
slow	brady-

LOCATION OR RELATIONSHIP

away from	ab-
above	supra-
around	peri-
across	trans-
between	inter-
out of, outside	ex-, ec(t)-
self	auto-
through, completely	dia-
together	con-
toward	ad-
within, inside	end(o)-

FUNCTION OR QUALITY

against	anti-, contra-
bad	mal-
cause	eti-
self	auto-
without	a-, de-
not working correctly	dys-

Medical Terminology
EXAMPLES OF ROOT WORDS

A lot of medical terms get their roots from Latin and ancient Greek language, much like many words in the English and romance languages. Here are some of the most common medical root words healthcare providers must know.

HEAD	
brain	enceph
ear	ot, aur
eardrum	tympan, myring
eye	aphthalm, ocul
face	faci
nose	rhin
skull	crani
tongue	lingu
tooth	odont, dent
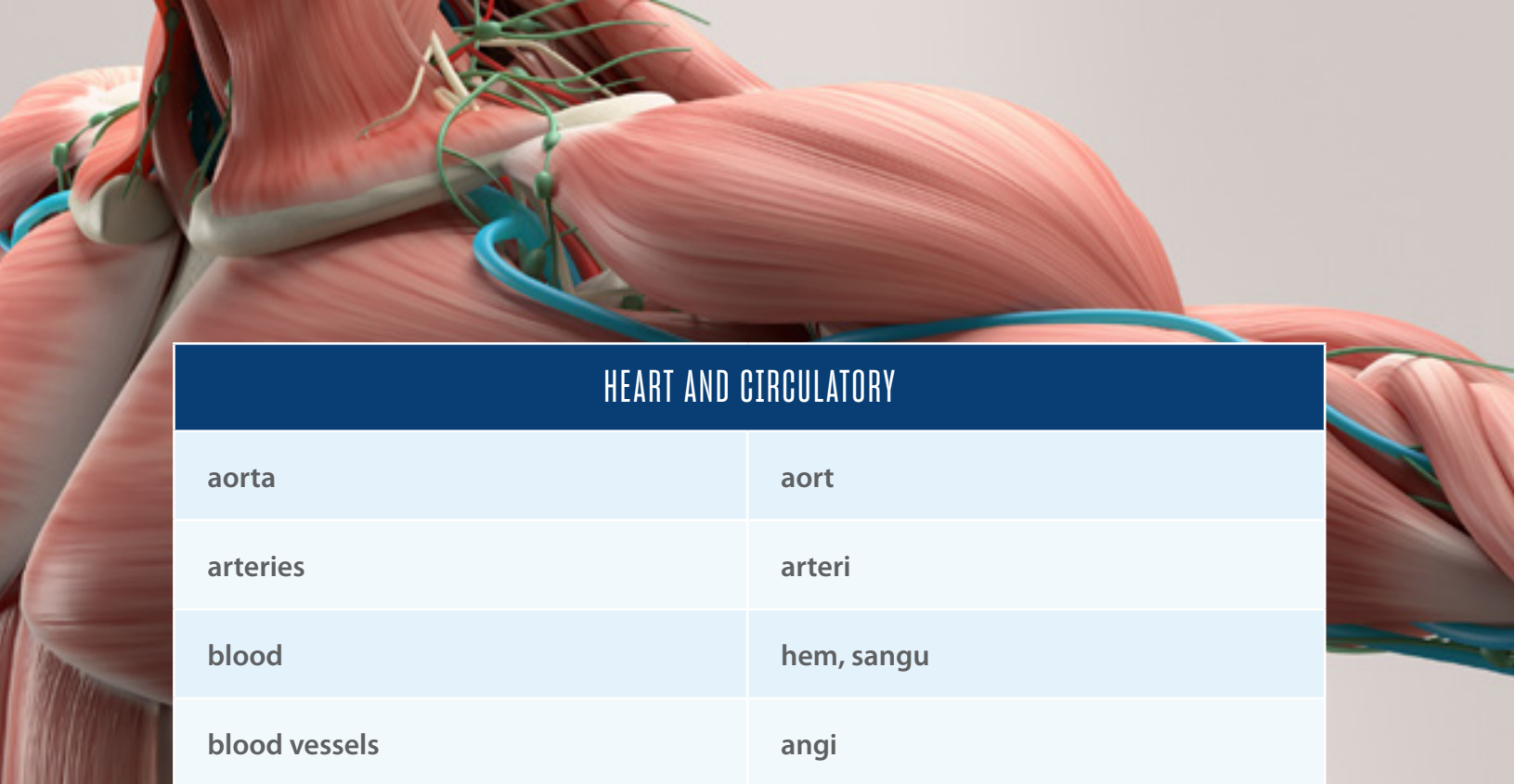
HEART AND CIRCULATORY

aorta	aort
arteries	arteri
blood	hem, sangu
blood vessels	angi
heart	cardi
veins	ven, phleb

BONES AND MUSCLES

arm	brachi
back	dorsa
bones	oste
foot	pod, ped
muscles	myo
rib	cost
shoulder	scapul
wrist	carp

DIGESTIVE SYSTEM

appendix	append
colon	col
esophagus	esophag
intestine (usually small)	inter
kidney	ren, neph
liver	hepat
stomach	gastr

OTHER COMMON ROOTS

cancer	carci
drug	chem
electric	electr
heat	therm
knowledge	gnos
life	bi
pressure	bar
returned sound	echo

Medical Terminology
EXAMPLES OF SUFFIXES

The last ingredient in a medical term is likely the suffix, which provides more specifics about the term's application. Here are just a few of the most important medical suffixes to know.

BASIC NOUN AND ADJECTIVE SUFFIXES	
(noun form)	-a, -e, -um, -is
causing	-genic
condition	-ia, -ism, -sis, -y
specialty	-iatry, -iatrics, -ics
specialist	-ian, -ist
structure	-um, -us
study of	-logy
pertaining to	-ac, -ar(y), -(e/i)al, -ic(al), -ior, -ory, -ous, -tic

TESTS AND PROCEDURES

removal of	-ectomy
image/record/td>	-gram
making a picture	-graph(y)
cut in	-otomy
viewing	-scopy
opening	-stomy

PATHOLOGY OR FUNCTION

blood (condition of)	-emia
breathing	-pnea
inflammation	-itis
condition or disease	-osis
deficiency	-penia
disease	-pathy
excessive flow	-rrhag(e/ia)
mass/tumor	–oma

MEDICAL TERMINOLOGY RESOURCES LIST

Just as you would with any new skill, expanding your vocabulary and learning medical terminology takes practice, practice, practice. To assist you during your studies, we've rounded up some helpful resources and study tools focused on medical terminology.

- **University of San Diego Medical Terminology online course**

- **Merck Medical Terminology Manual**

- **Merriam-Webster Medical Dictionary**

- **OpenMD.com Medical Terminology Dictionary**

- **Understanding Medical Words: A Tutorial from the National Library of Medicine**

- **CMA (AAMA) Practice Exam: Medical Terminology**

- **Free Online Medical Terminology Course**

- **Medical Terminology Flashcard Sets and Study Tools**

No matter what resource you turn to, we recommend starting with the Medical Terminology course from the University of San Diego. This online, self-paced course allows you to immerse yourself in the world of medical language in a way that works for you and your schedule. Participants in this course gain a deep understanding of important medical, diagnostic and laboratory abbreviations and terms they will need throughout their medical careers. To learn more about this course or any of our healthcare programs, please contact us.

COMMON QUESTIONS

About the USD Medical Terminology Course

How long will this course take me to complete?

This course has a maximum of six (6) months from the date of enrollment to complete the course. Students are recommended to allocate a minimum of two weeks (14 calendar days) per semester unit to complete a course; this time frame allows for instructor interaction and feedback between assignments.

How is this course accessed?

This course is taught in an online Learning Management System. Students will be provided access information upon registration.

When can I order transcripts?

Once all course work is submitted, a final grade is submitted by the instructor. The grade is then approved by the office and posted. Once a final grade is posted, official transcripts can be requested — learn more about transcript requests here.

What materials do I need to purchase?

The textbook set for this course should be purchased directly from the publisher.

University of San Diego ®

PROFESSIONAL AND CONTINUING EDUCATION

ENHANCE YOUR HEALTHCARE CAREER

Improve your medical terminology, mental health, and more with 100% online courses.

LEARN MORE