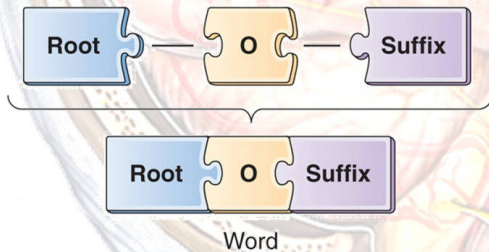


MEDEGALSM



MEDICAL
ENGLISH

Sample Use Only

Hepatocyte
Cell Membrane

CLINICAL TERMINOLOGY

First edition

Derek "Davis" Hooker, NREMT, TESOL, GradCert-ForensicCSI, B.Ed., B.Eng (OSH)

Sovaprevir

Preface

This book is intended for medical students, doctors, nurses, translators / interpreters, medical technology companies, those preparing for the U.S.M.L.E. or anyone involved in healthcare who wishes to learn proper written and spoken Medical English and Clinical Terminology. It is also a useful tool for teachers of Medical English who need simple, easy to understand modules. It includes an overview of everyday, useful medical and clinical terminology, case studies, and medical records - all with an emphasis on proper pronunciation. After completion of all modules in this book, students should be proficient in Medical English and clinical terminology. Its aim is to be a useful tool for learning and improving essential Medical English skills. There are three parts: 1) Basic Medical English for Healthcare with limited Chinese translation 2) Medical Terminology 3) Clinical Terminology, which focuses primarily on abbreviations most commonly used in a clinical setting. The three parts are further broken down into modules (lessons), and include quizzes, practice exercises, case studies and patient medical records as practical training, including basic conversations commonly encountered in a clinical setting. A few helpful images are included where necessary to supplement the learning process. This book is intended for intermediate and advanced learners of English, but with some study and using the limited Chinese translation in the Basic Medical English for Healthcare, any English learner can grasp the concepts. A list of prefixes, root words, and suffixes (PRS List) is included in Appendix A for easy access as a reference. The modules should be completed in order. An answer key to all practice exercises and quizzes can be found in Appendix B.

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-- Derek "Davis" Hooker, March 2014

References: clinicalterminology.org for many of the clinical term definitions; The University of Pittsburgh, School of Nursing for the photographs of actors portraying patients in the case studies. All other images and photographs are from the author's personal collection or from public domain clip art. Book cover designed by Derek Davis Hooker.

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Part 1

Basic Medical English for Healthcare

Sample Use Only

with limited Chinese translation

Basic Medical English for Healthcare

适用于医疗保健工作者的基础英语

Module 1: Human Body (人体)

One of the first things you need to know when working in Medical English is the parts of the body. *(Patients will often describe their pain or symptoms in basic English terms, not in complex medical terms.)* You will need to learn the names of the internal (inside the body) and external body parts. You will also need to learn the words for the functions of each of these body parts. Here are the basics to get you started. (see images of Human Body below)

Head (头)

Inside the head is the **brain** (脑), which is responsible for thinking. The top of a person's **scalp** (头皮) is covered with **hair** (头发). Beneath the hairline at the front of the **face** (面孔) is the **forehead** (额). Underneath the forehead are the **eyes** (眼睛) for seeing, the **nose** (鼻子) for smelling, and the **mouth** (口) for eating. On the outside of the mouth are the **lips** (嘴唇), and on the inside of the mouth are the **teeth** (牙齿) for biting and the **tongue** (舌头) for tasting. Food is swallowed down the **throat** (喉咙). At the sides of the face are the **cheeks** (脸颊) and at the sides of the head are the **ears** (耳) for hearing. At the bottom of a person's face is the **chin** (下巴). The **jaw** (颌) is located on the inside of the cheeks and chin. The **neck** (颈) is what attaches the head to the **upper body** (上身).

Upper Body (上身)

At the top and front of the upper body, just below the neck is the **collar bone** (锁骨). On the front side of the upper body is the **chest** (胸腔), which in women includes the **breasts** (乳房). Babies suck on the **nipples** (乳房乳头) of their mother's breasts. Beneath the **ribcage** (肋骨) are the **stomach** (胃) and the **waist** (腰身). The **navel** (肚脐), more commonly referred to as the **belly button** (肚脐眼), is located here as well. On the inside of the upper body are the **heart** (心脏) for pumping **blood** (血) and the **lungs** (肺) for breathing. The rear side of the upper body is called the **back** (背), inside which the **spine** (脊柱) connects the upper body to the lower body.

Upper Limbs (arms) (上肢)

The **arms** (胳膊) are attached to the **shoulders** (肩). Beneath this area is called the **armpit** (腋窝) or **underarm** (腋下). The upper arms have the **muscles** (肌肉) known as **triceps** (三头肌) and **biceps** (二头肌). The joint halfway down the arm is called the **elbow** (肘). Between the elbow and the next joint, the **wrist** (手腕), is the **forearm** (前臂). Below the wrist is the **hand** (手) with four **fingers** (手指) and one **thumb** (大拇指). Beside the thumb is the **index** finger

(食指). Beside the index finger is the **middle** finger (中指), followed by the **ring** finger (无名指) and the **little** finger (小指). At the ends of the fingers are **fingernails** (指甲).

Lower Body (下身)

Below the waist, on left and right, are the **hips** (臀部). Between the hips are the reproductive organs, the **penis** (阴茎) (male) or the **vagina** (阴道) (female). At the back of the lower body are the **buttocks** (屁股) for sitting on. They are also commonly referred to as the **rear end** (臀部, 后部) or the **bum** (屁股) (especially with children). The internal organs in the lower body include the **intestines** (肠) for digesting food, the **bladder** (膀胱) for holding liquid waste, as well as the **liver** (肝脏) and the **kidneys** (肾). This area also contains the woman's **uterus** (子宫), which holds a baby when a woman is pregnant.

Lower Limbs (legs) (腿)

The top of the leg is called the **thigh** (大腿), and the joint in the middle of the leg is the **knee** (膝). The front of the lower leg is the **shin** (胫) and the back of the lower leg is the **calf** (腓/小腿). The **ankle** (踝) connects the **foot** (脚) to the leg. On the back of the foot is the **heel** (脚后跟). Each foot has five **toes** (脚趾头). The smallest toe is often called the **little toe** (小脚趾) while the large one is called the **big toe** (大脚趾). At the ends of the toes are **toenails** (脚趾甲).

Sample Use Only



body



face



ear



hair



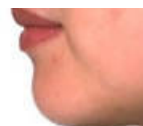
mouth



lips



nose



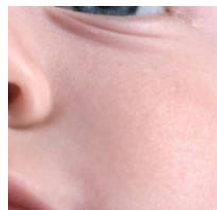
chin



tooth (singular)



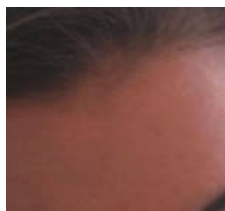
teeth (plural)



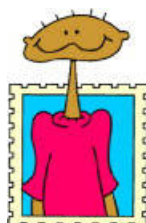
cheek



tongue



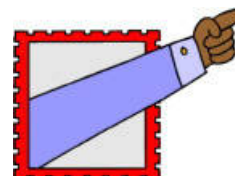
forehead



neck



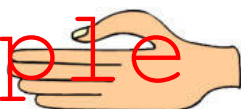
shoulder



arm



back



hand



wrist



palm



finger




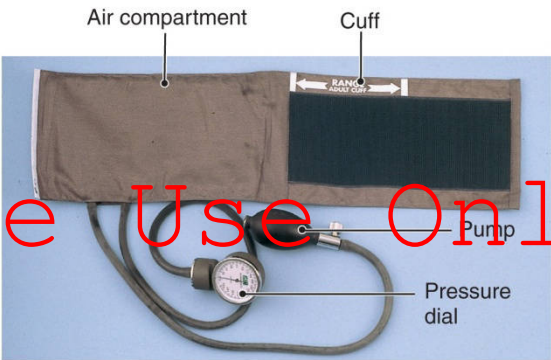

index finger




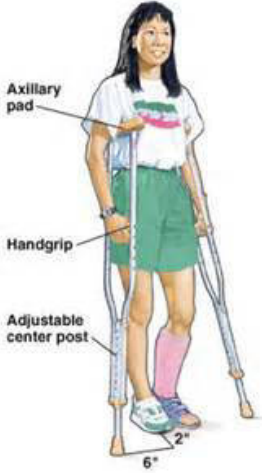
thumb



ring finger

<p>Blood donor 献血者</p> <p><i>noun</i></p>	<p>a person who gives blood to a blood bank or other person</p> 	<p>Blood donors have to answer questions about their medical history.</p>
<p>Blood pressure 血压</p> <p><i>noun</i></p>	<p>the rate at which blood flows through the body (high/low)</p>  <p>Blood pressure cuff (sphygmomanometer). Shown are the cuff, the bulb for inflating the cuff, and the manometer for measuring pressure.</p>	<p>High blood pressure puts you at risk of having a heart attack.</p>
<p>Brace</p> <p>支架或保护人体某个部位的护套</p> <p><i>noun</i></p>	<p>a device that holds injured body parts in place</p>  <p>A brace</p>	<p>You will probably always have to wear a brace on your ankle when you jog.</p>

Breech 臀位，胎位颠倒 <i>adj</i>	position of an unborn baby in which the feet are down and the head is up	We thought it was going to be a breech birth, but the baby turned himself around.
Broken 骨折，断开 <i>adj</i>	a bone that is divided in two or more pieces as a result of an injury	We thought it was just a sprain, but it turned out his leg was broken .
Bruise 青肿 <i>noun</i> Bruised <i>adj</i>	injured body tissue that is visible underneath the skin  A bruise (contusion)	The woman was badly bruised when she came into the emergency room.
Caesarean section, C-section 剖腹产术 <i>noun</i>	procedure that involves removing a baby from its mother through an incision in the woman's lower abdomen	The baby was so large that we had to perform a Caesarean section .
Cancer 癌 <i>noun</i>	disease caused by the uncontrollable growth of cells	There are many different options when it comes to treating cancer .
Cardiopulmonary resuscitation (CPR) 心脏复苏术 <i>noun</i>	restoring a person's breath and circulation	You saved your brother's life by performing CPR .

<p>Cast 硬质敷料 (石膏)</p> <p><i>noun</i></p>	<p>a hard bandage that is wrapped around a broken bone to keep it in place</p>  <p>Leg in a cast</p>	<p>My leg was in a cast for graduation.</p>
<p>Chapel, Chaplain 教堂, 礼拜间</p> <p><i>noun</i></p>	<p>a place where loved ones can go to pray for a patient's recovery; a priest who visits patients in the hospital</p>	<p>If you want a place to pray, the chapel is on the third floor.</p>
<p>Chemotherapy 化疗</p> <p><i>noun</i></p>	<p>type of treatment used on cancer patients</p>	<p>My mother has already had three rounds of chemotherapy.</p>
<p>Chickenpox 水痘</p> <p><i>noun</i></p>	<p>a virus commonly contracted by children, characterized by itchy (发痒症) spots all over the body</p>	<p>It is best to get chickenpox as a child so that you don't get it worse as an adult.</p>
<p>Coroner 验尸官</p> <p><i>noun</i></p>	<p>a person who determines the cause of death after a person dies</p>	<p>We only call the coroner if we think a death is suspicious.</p>
<p>Critical condition 危急情况</p> <p><i>noun</i></p>	<p>requiring immediate and constant medical attention</p>	<p>You can't see her right now; she's in critical</p>

Gauze 纱布	<p>thin, netted material used for covering wounds</p>  <p>gauze</p>
Hypodermic needle 皮下注射器针头	<p>sharp pointed metal piece that pricks the skin (attached to a syringe 注射器), used for taking blood or administering medicine</p>
IV bag 注射袋	<p>the pouch that contains liquids to be pumped into a patient's body</p>
Medicine cup 药杯	<p>small plastic measuring cup</p>
Microscope 显微镜	<p>equipment that makes small things appear larger than they are</p>
Otoscope 耳镜	<p>a device used for looking into a patient's ears (Ot/o; ear)</p>  <p>otoscope</p>
Oxygen mask 氧气罩	<p>equipment that fits over the nose and mouth and supplies oxygen</p>
Privacy screen 防窥屏	<p>an object that is used to separate the doctor and patient from others in an open room</p>
Scales 称	<p>a device that measures a person's weight</p>
Stethoscope 听诊器	<p>equipment for listening to a person's heart and lungs</p>

Module 5 - Conversation: Doctor's Diagnosis

Physician may say:

- Your test results have come in.
- I'm afraid the prognosis isn't good.
- You have a long road to recovery.
- We have several options to discuss.
- The blood test came back negative.
- The transfusion was a success.
- It looks like you're ready to go home.
- I'd like to keep you here over night.
- We'll know more in a few days.
- You're not in the clear yet.
- We've ruled out diabetes.
- I'm hoping to get to the bottom of this soon.

Patient may say:

- I don't understand what this means.
- Am I going to need surgery?
- Is it good news or bad?
- When will the tests results come in?
- How long do I have to stay in the hospital?
- What is the success rate?
- Are they going to run more tests?
- Is this a common problem for people my age?
- I'd like to discuss other options.
- I'm going to get a second opinion.

Sample Use Only

The Conversation

Doctor: *Hi Jessica. How are you feeling today?*

Patient: *A bit better.*

Doctor: *That's good to hear. Are you still feeling nauseous?*

Patient: *No, I haven't felt sick to my stomach since you switched my medication.*

Doctor: *Great. Say, your test results came in this morning.*

Patient: *It's about time. Is it good news or bad?*

Doctor: *I guess it's a bit of both. Which do you want first?*

Patient: *Let's get the bad news over with.*

Doctor: *Okay. It looks like you're going to need surgery to remove the tumor from your leg. After the operation you're going to have to stay off your feet for at least three weeks. That means no soccer.*

Patient: *I was afraid you were going to say that.*

Doctor: *Now for the good news. The biopsy shows that the tumor is benign (良性的), which means it's not cancerous. We're going to take it out anyway just to be on the safe side.*

Patient: *Wow, that's a load off my mind. Thanks Doctor.*

Doctor: *Don't get too excited. We still need to get to the bottom of all of this weight loss.*

Patient: *I've probably just been so worried about this stupid lump.*

Doctor: *These things often are stress related, but we're still going to do a few blood tests just to rule a few things out.*

Patient: *Things like what? Cancer?*

Doctor: *Actually, I'm thinking more along the lines of a food allergy.*

Check your understanding

- 1 Why did the woman have to switch medication? a) It gave her a lump b) She was allergic to it c) It was upsetting her stomach d) It was too expensive
- 2 What bad news does the doctor give the patient? a) She has cancer b) She needs an operation c) She has a food allergy d) She needs a leg amputation.
- 3 What medical procedure did the patient already undergo? a) An allergy test b) Major surgery c) A blood transfusion d) A biopsy

Module 1

Basics

There are three basic parts to medical terms: a word root (usually the middle of the word and its central meaning), a prefix (comes at the beginning and usually identifies some subdivision or part of the central meaning), and a suffix (comes at the end and modifies the central meaning as to what or who is interacting with it or what is happening to it).

Word root

therm = heat

hypothermia (less heat), thermometer (measuring heat)

Myocarditis

(prefix)

myo = muscle

(root)

cardi = heart

(suffix)

itis = inflammation

Sample Use Only

Prefix change:

<u>myo</u> carditis	= muscle layer of heart inflamed
<u>peri</u> carditis	= outer layer of heart inflamed
<u>endo</u> carditis	= inner layer of heart inflamed

Suffix change:

cardi <u>ologist</u>	= a physician specializing in the heart
cardi <u>omyopathy</u>	= damage to heart muscle layer
cardi <u>omegaly</u>	= enlargement of the heart

Useful prefixes and suffixes

-itis	= inflammation	tonsillitis, appendicitis
-------	----------------	---------------------------

-osis	= abnormal condition	cyanosis (of blueness, due to cold or low oxygen)
-ectomy	= to cut out (remove)	appendectomy, tonsillectomy
-otomy	= to cut into	tracheotomy (to cut into the windpipe, temporary opening)
-ostomy	= to make a "mouth"	colostomy (to make a permanent opening in colon)
a/an	= without, none	anemia (literally no blood but means few red cells)
micro	= small	microstomia (abnormally small mouth, see "stomy" in colostomy above)
macro	= large	macrostomia (abnormally large mouth)
mega/ -megaly	= enlarged	megacolon (abnormally large colon = large intestine)
-scopy/ -scopic	= to look, observe	colonoscopy (look into colon)
-graphy/ -graph	= recording an image	mammography (imaging the breasts)
-gram	= the image (X-ray)	mammogram

Whenever you see these endings, **-graphy, -graph, -gram**, they relate to recording an image such as an X-ray, CT or MRI scan or a written recording with pen and moving paper.

Mammography is the process of recording, i.e. the machine and procedure. Mammogram is the image itself, the X-ray. A recording of heart activity is called an electrocardiogram (ECG or EKG) using an electrocardiograph. A recording of brain activity is an electroencephalogram (EEG) and the medical procedure and machine is called electroencephalography.

-ology/ -ologist = study, specialize in cardiologist, nephrologist (study the heart, the kidneys)

To see a lung specialist, you would visit a pulmonologist. To see a specialist in nerve and brain disease, make an appointment with a neurologist. If you have a bad eye infection, you may be referred to an ophthalmologist. If your rheumatism is having problems, you would want to find a physician specializing in rheumatology.

Word roots for organs

Stomato	= mouth	stomatitis
Dento	= teeth	dentist
Glosso/linguo	= tongue	glossitis, lingual nerve
Gingivo	= gums	gingivitis
Encephalo	= brain	encephalitis

Gastro	= stomach	gastritis
Entero	= intestine	gastroenteritis
Colo	= large intestine	colitis, megacolon
Procto	= anus/rectum	proctitis, proctologist
Hepato	= liver	hepatitis, hepatomegaly
Nephro/rene	= kidney	nephrosis, renal artery
Orchido	= testis	orchiditis, orchidectomy
Oophoro	= ovary	oophorectomy
Hystero/metro	=uterus	hysterectomy, endometritis
Salpingo	= uterine tubes	hysterosalpingogram
Dermo	= skin	dermatitis
Masto/mammo	= breast	mammography, mastectomy
Osteo	= bones	osteoporosis
Cardio	= heart	electrocardiogram (ECG / EKG)
Cysto	= bladder	cystitis
Rhino	= nose	rhinitis (runny nose caused by allergens)
Phlebo/veno	= veins	phlebitis, phlebotomy
Pneumo/pulmo	= lung	pneumonitis, pulmonologist
Hemo/emia	= blood	hematologist, anemia

Sample Use Only

Note that some organs have more than one word root. Example: “masto” and “mammo”. Typically, one is derived from the Greek and one from Latin. But, you need to know both roots because you may see either of them used.

The word ending “-itis” is going to be used repeatedly. It means inflammation. An infected cut is an inflammation. “Pink eye” is also an inflammation. However, **four things must be present to define inflammation: pain, redness, heat and swelling.**

Conversely, inflammation of an internal organ such as the stomach or kidney must be defined by a physician relying on signs and symptoms, and, possibly, the need for a biopsy (tissue sample) to examine under a microscope by a specialist in identifying the causes of diseased tissues, a pathologist.

Other Terms

Color

Leuk/o	= white	leukemia (overabundance of white blood cells)
melan/o	= black	melanoma (black tumor of the skin)
cyan/o	= blue	cyanosis (blueness may be due to cold or not enough oxygen in blood)
xanth/o	= yellow	xanthoma (yellow tumor)

Tumor related

Adding – **oma (a swelling)** to organ and tissue word roots names tumors. Not all tumors are **malignant (cancerous)**. Many are **benign (not life-threatening)**.

Aden/o	= gland	adenoma
Lip/o	= fat	lipoma
My/o	= muscle	myoma
Lymph/o	= lymph tissue	lymphoma
Carcin/o	= malignant	carcinoma
Osteo/o	= bone	osteoma

Directions

Endo	= within, inside of	endoscopy (to inspect the inside of an organ or space with a lighted instrument)
Peri	= around	perianal (around the anus)
Circum	= around	circumcise (cut around)
Retro	= behind	retrosternal (behind the breastbone)
Epi	= upon, on top	epidermis (the top or outermost layer of skin)
Trans	= through	transurethral (through the urinary exit duct)
Intra	= within	intravenous (inside the veins, e.g. IV fluids)
Sub	= below	subclavian (below the clavicle = collar bone)

Module 8 Quiz

1. Hematosalpinx is a term describing

- a) inflammation of the uterus
- b) blood in a uterine tube
- c) a tear in the wall of the vagina
- d) blood in the uterus
- e) blood in the abdomen

2. Surgical reconstruction of the vagina would be termed

- a) oophoropexy
- b) balanoplasty
- c) colpoplasty
- d) orchidopexy
- e) colposcopy

3. Dyspareunia is the term for painful, difficult or abnormal

- a) intercourse
- b) menstruation
- c) childbirth (delivery)
- d) labor
- e) lactation (milk production)

4. A hysterosalpingo-oophorectomy is the term for surgical removal of the

- a) uterus
- b) uterus and uterine tubes
- c) uterus, uterine tubes and ovaries
- d) uterus, uterine tubes and vagina
- e) ovaries

5. A woman who has two children, but had four pregnancies would be noted on her chart as

- a) gravida 2, para 4
- b) gravida 4, para 2

Sample Use Only

- c) gravida 4, para 4
- d) gravida 4, para 0

6. Mammoplasty refers to

- a) removal of a breast
- b) an X-ray of a breast
- c) an abnormally large breast
- d) inflammation of a breast
- e) surgical reconstruction of a breast

7. Oligomenorrhea refers to

- a) painful menstruation
- b) cessation of regular menstrual periods
- c) a 'missed' period
- d) scanty, less than normal menstrual flow
- e) abnormally heavy menstrual flow

8. Difficult, complicated, labor and delivery is termed

- a) dyspnea
- b) dyspareunia
- c) dyspepsia
- d) dysuria
- e) dystocia

9. A patient requires surgery to restore and reattach the uterus back in its normal anatomical position because of uterine prolapse into the vagina. This procedure is termed

- a) colpopexy
- b) colpoplasty
- c) hysteropexy
- d) hysterocleisis
- e) hysterocolpectomy

10. CHALLENGE QUESTION! The following question requires you to draw upon word elements in the current module and word elements from previous modules to identify a term never

presented. A herniation or prolapse of the urinary bladder into the vagina would be termed

- a) colpitis
- b) colpismus
- c) colpocystitis
- d) colpocystoplasty
- e) colpocystocele

Sample Use Only

Automated external defibrillator

A portable electronic device that automatically diagnoses a life threatening heart rhythm (such as ventricular tachycardia or fibrillation) and can then treat the arrhythmia by defibrillation.

Abbreviation = AED

IMPORTANT

A fully automatic AED is found in all ambulances, federal buildings and many public places throughout the United States. Training for use requires about 2 hours. Modern hospital units now use an AED that has the automatic features plus a manual override so that the health care provider can defibrillate as needed.

The old defibrillator with paddles is rarely seen in modern U.S. hospitals; the electric current is delivered using gel containing pads in contact with the skin.

5. Any healthcare provider needs to recognize what a/an_____is.

ADE

AID

AED

AEE

Sample Use Only

Endotracheal Intubation

Insertion of a plastic tube into the trachea in order to provide an open airway.

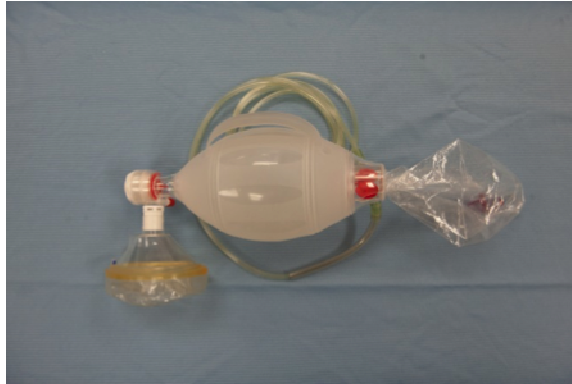
“intubate” = common term used **verbally** meaning to insert an endotracheal tube

“Endo tube” = common abbreviation for endotracheal tube

Bag Valve Mask

A facemask provides a seal over the nose and mouth, the bag or balloon is collapsed by squeezing with the hand and oxygen or room air is pressed into the lungs. The BVM can also be

attached to an adaptor for an endotracheal tube. Although the abbreviation BVM is becoming more common, you are most likely to hear the term “Ambu bag,” a proprietary name for the BVM. Squeezing the bag is called “bagging.”



BVM

6. Why do we use an Ambu bag?

To assist with ambulation.

To establish the flow of oxygen to the lungs.

To allow the patient to breathe while walking.

To free up the nurse's time.

Sample Use Only

Crash Cart

A set of trays and drawers on wheels, often red in color. The cart holds equipment and medications for emergency use.



crash cart

TIMING OF MEDICATIONS

Abbreviations related to timing of medication.

Note: The word “hour” is always used in conversation. All others use either each letter pronounced separately, for example “O”-”D” or the worded statement (“once a day”). Abbreviations are used in most written communication.

There are some charts included in this section. The next several questions refer to the abbreviations in those charts. These terms are related to timing of medication.

Abbreviation	Definition
q	Every
h, hr, or hrs The word “hour” is always used in conversation. All others use either each letter pronounced separately, for example “B-I-D “ or the worded statement (“twice a day”). Abbreviations are used in most written communication	Hour or hours
BID	Two times a day
TID	Three times a day
QID	Four times a day
AC	Before meals
PC	After meals
PRN	Whenever necessary
Hs	Bedtime or hour of sleep

7. The doctor wrote her order as: Ibuprofen 400mg TID PC

This means that the doctor wants you to administer ibuprofen_____.

400 mgs three times a day, post concussion

As needed up to 400 mg twice a day

4 tablets percutaneously for three days.

Three times a day after eating

8. A segment of another doctor's order reads as follows: "If the TID dosage does not calm pts anxiety, increase to QID."

This means that if the medication is not effective_____.

given two times a day, increase it to as needed.

twice a day, increase it to four times a day.

given three times a day, increase it to as needed.

given three times a day, increase it to four times a day.

9. Take Mrs. Smith's vitals every 2 hours would be abbreviated as: _____

ROUTE OF ADMINISTRATION

Abbreviations related to the route of administration

Sample Use Only

The route of administration refers to how patients receive medications: by mouth, injection, or intravenously. First, we learn about abbreviations by mouth and by injection. Then we focus on intravenous infusions.

Abbreviation	Definition
PO	By mouth
NPO	Nothing by mouth
IM	Intra-muscular; Injection into the muscle
Sub-Q or SQ	Subcutaneous injection - Injection into the subcutaneous tissues
PCA	Patient controlled analgesia - An electronically controlled infusion pump provides pain medication at preset times and allows the patient to push a button and (within limits of the prescribed dosage) self-administer medication for pain.

10. The nurse read the chart: NPO 8 hrs

This means that the patient should have_____.

the nasogastric tube replaced every 8 hours

no liquids for 8 hours

no increase in pain medication for 8 hours

nothing by mouth for 8 hours

Intravenous Fluids

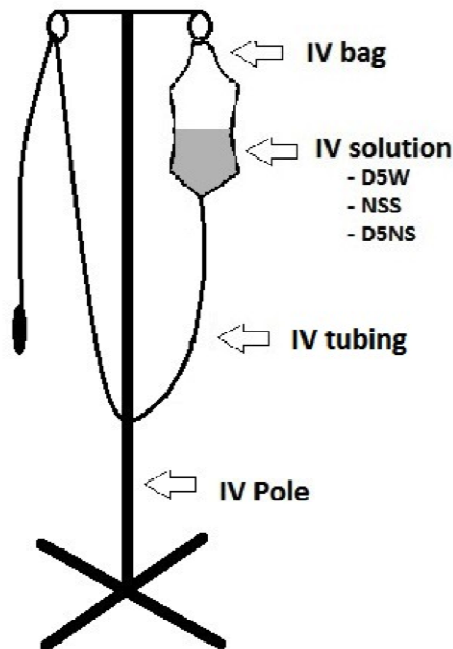
This part of abbreviations is associated with the administration of intravenous fluids.

There are a number of charts included in this section. The next set of several questions refer to the abbreviations presented in all charts.

Abbreviation	Definition
IV	Intravenous - infusion of liquid substances into a vein using either a hollow needle or plastic tubing
IV Needle	Hollow needle used for IV administration
IV Pole	Metal pole having hooked ends used for hanging IV solution bags.
IV bag	Disposable container of IV solution, usually one liter.
D5W or D5 in water	5% Dextrose in water - Common solution used for IV infusion. Contains dextrose and water
NSS	Normal saline solution – commonly used for infusion or rinsing IV lines.
D5NS	Dextrose in normal saline (0.9%) or dextrose in half normal saline (0.45%) - used for IV solution. Contains normal saline or half normal saline
IVP	Intravenous push - when medication is injected into the IV tubing or line. Medications administered directly into an intravenous line may be given slowly over a specific amount of time or they may be given at one time. Drugs or fluid given at one time rapidly is called an IV bolus.

Basic Components: Intravenous Administration of Fluids:

Notice how the components fit together for the flow of intravenous fluid.



Sample Use Only

PVC	Peripheral Venous Catheter - plastic catheter placed in the vein or arm or hand to give fluids and withdraw blood. Also called IV catheter (abbreviation: IVC).
Hep lock -or- Saline lock	Saline Lock or Heparin Lock - A catheter much like the PVC is inserted in a vein and connected to a short plastic tube. This tube has a port via which drugs can be injected and the tube can be flushed with saline. At one time heparin was used in these, although this is no longer the procedure the historical name shortened to hep lock is common.
IVPB	Intravenous piggy back - Using a previous IV solution administration set up, a container of medication is placed higher than the basic IV infusion (piggy-backed) and gravity causes the dose of medication to be infused instead of larger container of fluid hanging below the piggyback.
IV Pump	A device that controls the flow of IV solution into the patient. The IV infusion pump can be calibrated or set to deliver a specific amount of fluid over a specific amount of time. An alarm sounds if the flow is interrupted.

Advanced Components:

Intravenous Administration of Fluids

Part 3

Module 1: Practice exercises

1. 98.4 – 88 – 22 147/94
2. vital signs
3. vitals
4. vs every 15 min.
5. t 100.3
6. Febrile
7. Hyperthermia
8. Hyperthermia
9. Hypothermia
10. Apical
11. Thready
12. Bounding
13. rr
14. His vitals are temp 98 point 7, pulse 80, respirations 20, AND BP 113 over 60.
15. Dyspnea
16. apnea when the pulse ox reading went down to 92%.
17. Pulse ox
18. hypertensive; hypertensive
19. Orthostatic hypotension; hypertension

Sample Use Only

Module 1 Quiz

1. vs normal
2. t 100.5
3. False
4. The chest
5. t 98.7, p 80, rr 20 and BP 113 / 60
6. sphygmomanometer
7. the pressure of blood flow on the walls of the arteries

Module 2: Practice exercises

- 1.

Registered Nurse	R.N.
Certified Registered Nurse Practitioner	C.R.N.P.
Nurse Aide or Nursing Assistant	N.A.
Physical Therapist	P.T.