

## HealthCorps Reader

### *What Are Health Centers?*

Community health centers are **local, non-profit, community-owned health care providers** serving low income and medically underserved communities. For nearly 40 years, the national network of health centers has provided **high-quality, affordable primary care and preventive services** and often provides on-site dental, pharmaceutical, mental health and substance abuse services as well.

Also known as Federally Qualified Health Centers (FQHCs), they are located in areas where care is needed but scarce and **improve access** to care for millions of Americans regardless of their insurance status or ability to pay. Their costs of care rank among the lowest, and they reduce the need for more expensive in-patient and specialty care, saving billions of dollars for taxpayers. Currently, 1,000+ community, migrant, and homeless health centers serve 3,500+ urban and rural communities in every state and territory.

### *Whom Do Health Centers Serve?*

Health centers serve as the medical home and family physician to 15 million people nationally – a number that is quickly growing. Health center patients are among the nation’s most vulnerable populations – people who *even if insured* would nonetheless remain isolated from traditional forms of medical care because of where they live, who they are, the language they speak, and their higher levels of complex health care needs.

Additional facts about community health centers include:

- About half of health center patients reside in rural areas, while the other half generally lives in economically depressed inner city communities;
- Health centers serve one in five low-income children;
- Two-thirds of health center patients have family incomes at or below the Federal poverty level (\$15,020 annual income for a family of three in 2002);

## Prescription 10: Primary Care Environment

---

- Nearly 40% of health center patients are uninsured and another 36% depend on Medicaid, much higher than the national rates of 12% and 15%, respectively; and
- Two-thirds of health center patients are members of racial and ethnic minorities.

### *How Do Health Centers Overcome Barriers to Care?*

Health centers remove common barriers to care by serving communities who otherwise confront geographic, linguistic, cultural and other barriers, making health centers different from most private, office-based physicians. They:

- Are **located in high-need areas** identified by the Federal government as having elevated poverty and higher-than-average infant mortality, where few physicians practice;
- Are **open to all residents**, regardless of insurance status, and provide free or reduced-cost care based on ability to pay;
- **Tailor their services** to fit the special needs and priorities of their communities and provide services in a linguistically and culturally appropriate setting. Nearly a third of all patients are best served in languages other than English; and
- **Offer services that help their patients access health care**, such as transportation, translation, interpretation, case management, health education, and home visitation.

For many patients, the health center may be the **only source** of health care services available. In fact, the number of uninsured patients at health centers is rapidly growing – from over 3.5 million in 1998 to over 5.8 million today.

### *How Do Health Centers Make a Difference?*

Central to health centers' accomplishments is **patient involvement in service delivery**. Governing boards – the majority of which must be patients according to Federal grant requirements – manage health center operations. Board members represent their community and make decisions on services provided. Active patient management of health centers assures responsiveness to local needs and helps guarantee that health centers improve the quality of life for millions of patients in the following ways.

## Prescription 10: Primary Care Environment

---

- **Improve Access to Primary and Preventive Care.** Health centers provide preventive services to vulnerable populations that would otherwise not have access to immunizations, health education, mammograms, pap smears, and other screenings. Health centers have also made significant strides in preventing anemia and lead poisoning. Low income, uninsured health center users are also *much more likely to have a regular source of care* than the uninsured nationally.
- **Effective Management of Chronic Illness.** Health centers meet or exceed nationally accepted practice standards for treatment of chronic conditions. In fact, the Institute of Medicine (IOM) and the General Accounting Office (GAO) have recognized health centers as models for screening, diagnosing, and managing chronic conditions such as diabetes, cardiovascular disease, asthma, depression, cancer, and HIV / AIDS. Health centers' efforts have lead to *improved health outcomes* for their patients, as well as *lowered the cost of treating patients* with chronic illness.
- **Reduction of Health Disparities.** Because of health centers' success in removing barriers to care, the IOM and GAO recognize them for reducing and in some cases eliminating the health gaps for racial and ethnic minorities as well as for the poor in the U.S. A recent landmark study found that *health centers are associated with reducing racial and ethnic disparities* in such key areas as infant mortality, prenatal care, tuberculosis case rates, and death rates. Another major study found that disparities in health status do not exist among health center users, even after controlling for socio-demographic factors, and that the absence of disparities at health centers may be related to their culturally sensitive practices and community involvement – features that other primary care settings often lack.
- **Cost-Effective Care.** Health centers provide comprehensive health care for about \$1.25 a day per patient served – about 10 times *less* than average per capita spending on personal health care. Several studies have found that health centers save the Medicaid program at least 30% in annual spending for health center Medicaid beneficiaries due to reduced specialty care referrals and fewer hospital

Prescription 10: Primary Care Environment

---

admissions, thereby *saving billions* in combined federal and state Medicaid expenditures.

- **High Quality of Care.** Studies have found that the quality of care provided at health centers is *equal to or greater than* the quality of care provided elsewhere. Moreover, 99% of surveyed patients report that they were satisfied with the care they received at health centers.
- **Fewer Infant Deaths.** Several studies have found that communities served by health centers have infant mortality rates between 10% and 40% lower than communities not served by health centers. Health centers are also linked to improvements in accessing early prenatal care and reductions in low birth weight.
- **Create Jobs and Stimulate Economic Growth.** Health centers employ over 70,000 people, including many local community residents. They bolster local businesses and stabilize neighborhoods by stimulating community development and economic growth.

*The following pages present  
prefixes, word roots, and suffixes  
commonly used in clinical settings.*

Prescription 10: Primary Care Environment

**Common Clinical Prefixes, Roots, and Suffixes**

Prefixes				Suffixes	
a(d)-	towards	infra-	below, underneath	-ase	fermenter
a(n)-	without	inter-	among, between	-ate	do
ab-	from	intra-	within, inside, during	-cide	killer
ab(s)-	away from	intro-	inward, during	-c(o)ele	cavity, hollow
ad-	towards	iso-	equal, same	-ectomy	removal of, cut out
allo-	other, another	juxta-	adjacent to	-form	shaped like
ambi-	both	kata-	down, down from	-ia	got
amphi-	on both sides, around	macro-	large	-iasis	full of
ana-	up to, back, movement from	magno-	large	-ile	little version
aniso-	different, unequal	medi-	middle	-illa	little version
ante-	before, forwards	mega-	large	-illus	little version
anti-	against, opposite	megal-	very large	-in	stuff
ap-, apo-	from, back, again	meso-	middle	-ism	characteristic of
bi(s)-	twice, double	meta-	beyond, between	-itis	inflammation
bio-	life	micro-	small	-ity	makes a noun of quality
brachy-	short	neo-	new	-ium	thing
cata-	down	non-	not	-ize	do
circum-	around	ob-	before, against	-logy	study of
con-	together	octa-	eight	-megaly	large
contra-	against	octo-	eight	-noid	mind, spirit
cyte-	cell	oligo-	few	-oid	resembling, image of
de-	from, away from, down from	pan-	all	-ogen	precursor
deca-	ten	para-	beside, to the side of	-ol(e)	alcohol
di(s)-	two	pent-	five	-ole	little version
dia-	through, complete	per-	by, through, throughout	-oma	tumor (usually)
di(a)s	separation	peri-	around, round-about	-osis	full of
diplo-	double	pleo-	more than usual	-ostomy	"mouth-cut"
dur-	hard, firm	poly	many	-pathy	disease of, suffering
dys-	bad, abnormal	post-	behind, after	-penia	lack
e-, ec-	out, from out of	pre-	before, in front, very	-pexy	fix in place
ecto-	outside, external	pros-	besides	-plasty	re-shaping
ek-	out	prox-	besides	-philia	affection for
em-	in	pseudo-	false, fake	-rhage	burst out
en-	into	quar(t)-	four	-rhea	discharge, flowing out
endo-	into	re, red-	back, again	-rhexis	shredding
ent-	within	retro-	backwards, behind	-pagus	Siamese twins
epi-	on, up, against, high	semi-	half	-sis	idea
eso-	I will carry	sex-	six	-thrix	hair
eury-	broad, wide	sept-	seven	-tomy	cut
ex-, exo-	out, from out of	sub-	under, beneath	-ule	little version

Prescription 10: Primary Care Environment

<b>extra-</b>	outside, beyond, in addition	<b>super-</b>	above, in addition, over	<b>-um</b>	thing
<b>haplo-</b>	single	<b>supra-</b>	above, on the upper side		
<b>hemi-</b>	half	<b>syn-</b>	together, with		
<b>hept-</b>	seven	<b>sys-</b>	together, with		
<b>hetero-</b>	different	<b>tetra-</b>	four		
<b>hex-</b>	six	<b>thio-</b>	sulfur		
<b>homo-</b>	same	<b>trans-</b>	across, beyond		
<b>hyper-</b>	above, excessive	<b>tri-</b>	three		
<b>hypo-</b>	below, deficient	<b>uni-</b>	one		
<b>im-, in-</b>	not	<b>ultra-</b>	beyond, besides, over		
<b>Stems</b>					
<b>acou</b>	hear	<b>coagul</b>	coagulate, clot	<b>helic</b>	spiral
<b>acu</b>	sharp, abrupt, sudden	<b>cox(a)</b>	hip	<b>helm</b>	worm
<b>adeno</b>	gland	<b>corp</b>	physical body	<b>hermaphro</b>	male and female in one body
<b>adipo</b>	fat	<b>cutis</b>	skin	<b>hepat</b>	liver
<b>aero</b>	air	<b>cyan</b>	dark blue	<b>hernia</b>	rupture, hernia
<b>(a)esth</b>	perception	<b>cycl</b>	circle, wheel	<b>hidr</b>	sweat
<b>alb</b>	white	<b>cysto</b>	urinary bladder	<b>hippo</b>	horse
<b>algo</b>	pain	<b>cyto</b>	cell	<b>histo</b>	tissue, web, cloth
<b>alien</b>	stranger, strange	<b>dent</b>	tooth	<b>hy(a)l</b>	glass, primitive material
<b>ambi/amph</b>	both sides	<b>derm</b>	skin	<b>hydatid</b>	water drop
<b>amnio</b>	amnion, "bowl"	<b>desis</b>	binding	<b>hydro</b>	water
<b>andro</b>	male	<b>desmo</b>	hard	<b>hypno</b>	sleep
<b>angio</b>	vessel (blood, bile)	<b>dynia</b>	pain	<b>hystero</b>	uterus
<b>anthrac</b>	black	<b>echin</b>	spiny	<b>iatric</b>	healing
<b>anthro</b>	man / human	<b>echo</b>	echo	<b>iatro</b>	physician
<b>aort</b>	aorta	<b>embryo</b>	embryo, fetus	<b>ichth</b>	fish
<b>aqu</b>	water	<b>em(ia)</b>	blood	<b>idio</b>	self, personal, private
<b>arachn</b>	spider, spiderweb	<b>enceph</b>	brain	<b>inguin</b>	part of body from groin to hip
<b>archo</b>	ancient, beginning	<b>erythro</b>	red	<b>insul</b>	island
<b>artero</b>	artery (as opposed to vein)	<b>esthesia</b>	perception	<b>irid</b>	bright-color circle
<b>arthro</b>	joint	<b>f(a)eco</b>	feces, refuse	<b>ischi</b>	hip joint
<b>asthm</b>	panting, short breaths	<b>fac</b>	make, build, do, perform	<b>islet</b>	island
<b>atri</b>	entry chamber	<b>fract</b>	break into pieces	<b>ject</b>	throw, hurl
<b>axilla</b>	armpit	<b>frag</b>	break into pieces	<b>jejun</b>	hungry
<b>axo</b>	center, axis	<b>fring</b>	break into pieces	<b>junc</b>	join together
<b>aud</b>	hear	<b>gangr</b>	gangrene, gnawing sore	<b>jug</b>	join together
<b>aur</b>	hear	<b>gastr</b>	stomach, belly	<b>jux</b>	join together
<b>aus</b>	hear	<b>genesis</b>	origin	<b>kera</b>	horny

Prescription 10: Primary Care Environment

<b>auto</b>	self	<b>genu</b>	knee	<b>kerato</b>	skin surface, cornea
<b>bronch</b>	bronchus	<b>ger</b>	old age	<b>kine</b>	set in motion
<b>carpo</b>	wrist	<b>gest</b>	bring forth, produce	<b>kyn</b>	dog
<b>calci</b>	limestone	<b>gloss</b>	tongue	<b>lachry</b>	tear (from the eye)
<b>calco</b>	heel, spur	<b>glute</b>	buttocks	<b>labio</b>	lip
<b>centr</b>	center	<b>gnatho</b>	jaw	<b>lacto</b>	milk
<b>carbo</b>	charcoal, carbon	<b>gnosis</b>	know	<b>lal</b>	babble, talk
<b>carcin</b>	crab	<b>gogue</b>	lead	<b>latero</b>	side
<b>carcinoma</b>	cancer from epithelium	<b>gono</b>	offspring, product, semen	<b>lecith</b>	egg yolk
<b>card</b>	heart, heart-shape	<b>gonio</b>	angle	<b>leiomyo</b>	smooth muscle
<b>carot</b>	great neck arteries	<b>gracile</b>	slender	<b>lein</b>	spleen
<b>caus</b>	burn	<b>gram</b>	record	<b>lens</b>	lentil
<b>centesis</b>	puncture	<b>gran</b>	grain	<b>lepros</b>	rough and rotting off
<b>cephal</b>	head	<b>graph</b>	writing, scratching	<b>lepto</b>	thin, fine, slender
<b>cept</b>	seize, take	<b>gryph</b>	claw	<b>leuco</b>	white
<b>cereb(r)</b>	brain	<b>gynec</b>	female	<b>levo</b>	left-sided
<b>cervic</b>	neck	<b>(h)(a)em</b>	blood	<b>liga(t)</b>	bind together, bandage
<b>chemo</b>	chemistry	<b>habeo</b>	to hold, habit	<b>ling</b>	tongue
<b>cide</b>	killing, "falling"	<b>halluc</b>	big toe	<b>lith</b>	stone
<b>cise</b>	cut deep			<b>lumbo</b>	lower back, loin
<b>lumbri</b>	earthworm	<b>nyct</b>	night	<b>phleg</b>	flame
<b>lumen</b>	tube down a hollow organ	<b>occiput</b>	back of the head	<b>phoco</b>	seal (the animal)
<b>lymph</b>	"clear fresh water"	<b>ocul</b>	eye	<b>phoro</b>	carry, bear
<b>lysis</b>	breaking down	<b>(h)odo</b>	way, path, road	<b>phos/phot</b>	light
<b>malar</b>	cheek (outside)	<b>odon</b>	tooth	<b>phragm</b>	divide into two, wall off
<b>mal(i)</b>	abnormal, bad	<b>odyn</b>	pain	<b>phren</b>	mind, breath
<b>malacia</b>	soft	<b>olfact</b>	smell	<b>phth</b>	waste away, wither
<b>malako</b>	soft	<b>oma</b>	tumor/lump	<b>phyllo</b>	leaf-like
<b>malleo</b>	hammer	<b>omen(t)</b>	omentum	<b>physio</b>	nature
<b>medi</b>	middle portion	<b>omphalo</b>	belly button	<b>phyte</b>	a plant
<b>medulla</b>	soft inner part	<b>on(e/t)</b>	to be	<b>pineo</b>	pine cone
<b>meli</b>	sweet	<b>onco</b>	tumor, mass	<b>pinna</b>	feather
<b>mere</b>	part	<b>onycho</b>	nail (finger/toe)	<b>pino</b>	drink
<b>manu</b>	hand	<b>o"</b>	egg	<b>pisi</b>	pea
<b>mara</b>	wither	<b>o"phor</b>	ovary	<b>pituit</b>	snout
<b>mast(i)</b>	whip, flog, beat	<b>op</b>	eye, see, etc.	<b>placent</b>	cake, placenta
<b>mast(o)</b>	breast	<b>ophth</b>	eye	<b>plak</b>	cake
<b>mea</b>	passage	<b>opio</b>	poppy juice	<b>plantar</b>	sole of the foot
<b>meatus</b>	external opening	<b>opsi</b>	late	<b>plasm</b>	molded
<b>meios</b>	lessening	<b>opson</b>	relish, meat seasoning	<b>plast</b>	molded
<b>melano</b>	black	<b>orbi</b>	wheel	<b>platy</b>	flat
<b>melia</b>	limb	<b>orch</b>	testis	<b>plegia</b>	stroke, paralysis
<b>mening</b>	meninges	<b>org</b>	work	<b>pleur</b>	pleura ("side of ribs")

Prescription 10: Primary Care Environment

<b>men(i)s</b>	moon, month	<b>oro</b>	mouth	<b>plex</b>	braid, wind together
<b>ment</b>	mind, chin	<b>ortho</b>	straight	<b>plexy</b>	stroke
<b>meter</b>	measure	<b>os</b>	bone, mouth	<b>plic</b>	braid, wind together
<b>metro</b>	uterus	<b>osm</b>	smell	<b>pn(e)</b>	breath
<b>mito</b>	thread	<b>ost(eo)</b>	bone	<b>pod(o)</b>	foot
<b>mnem</b>	memory	<b>ot(o)</b>	ear	<b>poie(sis)</b>	making
<b>mnes</b>	memory	<b>ovin</b>	sheep	<b>polio</b>	gray matter of the nervous system
<b>mob</b>	move	<b>oxy</b>	oxygen, acid	<b>pollic</b>	thumb
<b>morb</b>	sick	<b>p(a)ed</b>	child	<b>pomp</b>	precede, parade
<b>morph</b>	shapes, dreams	<b>palpebr</b>	eyelid	<b>porph</b>	purple
<b>mot</b>	move	<b>pap</b>	nipple	<b>porta</b>	door
<b>mur(al)</b>	wall	<b>par(i)t</b>	have a baby	<b>posthe</b>	foreskin
<b>musc</b>	mouse, muscle	<b>parietal</b>	wall	<b>prac</b>	done
<b>myc(o)</b>	fungus	<b>partheno</b>	virgin	<b>prag</b>	done
<b>myelo</b>	soft, pith	<b>partum</b>	birth	<b>prax</b>	done
<b>myi</b>	fly (insect)	<b>patho</b>	disease, misery	<b>pre/pro</b>	before
<b>myo</b>	muscle	<b>pect</b>	chest	<b>procto</b>	rectum
<b>myxo/muco</b>	slime	<b>pelvis</b>	basin	<b>pron(o)</b>	prone, face down
<b>narco</b>	sleep	<b>pes/ped</b>	foot	<b>proto</b>	first
<b>naso</b>	nose	<b>phage</b>	eat	<b>pseud</b>	FALSE
<b>necro</b>	dead	<b>phakos</b>	lentil, lens of the eye	<b>psyche</b>	spirit, mind
<b>nephelo</b>	cloud	<b>pharmako</b>	sorcery, poison, drug	<b>psychr</b>	cold, frigid
<b>nephr</b>	kidney	<b>phase</b>	phase	<b>pter</b>	wing
<b>nerv</b>	nerve	<b>pheo</b>	ugly, dusky	<b>pto</b>	droop
<b>neuro</b>	nerve	<b>phero</b>	carry, bear	<b>pty(alo)</b>	spit
<b>nos, nox</b>	nasty, sickening	<b>philo</b>	like, love	<b>pulmo</b>	lung
<b>nous</b>	mind, spirit	<b>phlebo</b>	vein	<b>punct</b>	prick, little spot
<b>pupa</b>	doll, miniature figure	<b>stat</b>	stop	<b>vacc</b>	cow
<b>purp</b>	purple	<b>statio</b>	standing up, being stable	<b>vago</b>	wanderer
<b>pyelo</b>	vat, basin, pelvis	<b>staxis</b>	drip, drop	<b>valgus</b>	turned outward
<b>pykno</b>	shrivelled	<b>stem</b>	standing up, being stable	<b>varus</b>	turned inward
<b>pyo</b>	pus	<b>steato</b>	fat	<b>vaso</b>	blood vessel
<b>p(u/y)ri</b>	pear	<b>sterco</b>	feces	<b>velo</b>	veil, curtain, cover
<b>pyr(o)</b>	fever (cognate to "fire")	<b>sthen</b>	strength	<b>vener</b>	sexual acts, lusty
<b>radi</b>	rod	<b>stigm</b>	spot	<b>veno</b>	vein
<b>r(h)ach</b>	backbone	<b>stole</b>	to pull, to draw	<b>vert</b>	turn
<b>re(i)n</b>	kidney	<b>stom(a)</b>	mouth	<b>vesico</b>	bladder
<b>ret(ic)</b>	net	<b>stomy</b>	mouth	<b>viscero</b>	innards
<b>rhabdo</b>	striated muscle	<b>strepto</b>	wavy	<b>volv</b>	twist around
<b>rhaph</b>	sew together	<b>stylo</b>	stylus	<b>xantho</b>	yellow
<b>rheo</b>	flow	<b>sudo</b>	sweat	<b>xeno</b>	stranger
<b>rheum</b>	runny stuff	<b>sulco</b>	plowed furrow	<b>xero</b>	dry
<b>rhino</b>	nose	<b>syring</b>	pipe, tube, reed	<b>z(a)o</b>	to live

Prescription 10: Primary Care Environment

<b>riso</b>	smile	<b>tachy</b>	fast, swift	<b>zo"</b>	animals
<b>rrha(g)</b>	discharge from a burst vessel	<b>tact</b>	touch	<b>zema</b>	boiled
<b>rub(r)</b>	red	<b>tainia</b>	band, tapeworm	<b>zygo</b>	yoke
<b>sacc</b>	sack	<b>talo</b>	ankle	<b>zyme</b>	ferment
<b>sacch(ar)</b>	sugar	<b>tasis</b>	stretch		
<b>salpinx</b>	trumpet, oviduct	<b>tarso</b>	flat plate		
<b>sang(ui)</b>	blood	<b>taxo</b>	arrangement, put in order		
<b>sapro</b>	dead	<b>telo</b>	the tip, the end		
<b>sarc(o)</b>	flesh	<b>temporal</b>	temple		
<b>sarcoma</b>	cancer from connective tissue	<b>ten(d)o</b>	stretch, tendon		
<b>scato</b>	feces, filth	<b>terato</b>	monster		
<b>scapho</b>	boat	<b>theca</b>	box (sheath, covering)		
<b>schi(s/z)</b>	split	<b>thel</b>	breast, covering layer		
<b>sclero</b>	hard	<b>thenar</b>	palm, sole		
<b>scope</b>	examine carefully	<b>thym</b>	mind, spirit, mood		
<b>sebo</b>	hard fat, skin grease, suet	<b>thym</b>	warty mass, thymus gland		
<b>sec/seg</b>	cut	<b>thyro</b>	oblong shield		
<b>sella</b>	saddle	<b>toco</b>	have a baby		
<b>seps/sept</b>	make rotten	<b>tom(e)</b>	cut		
<b>septo</b>	fence, partition	<b>tono</b>	stretch		
<b>sero</b>	whey, wet protein	<b>topo</b>	place		
<b>sial</b>	saliva	<b>tort</b>	twist		
<b>sinus</b>	hollow or pocket	<b>tox(o)</b>	bow, arrow		
<b>skel</b>	dried up, skeleton	<b>trema</b>	hole		
<b>soma/somy</b>	body	<b>tricho</b>	hair		
<b>spasmo</b>	a drawing tight	<b>trophy</b>	grow/food		
<b>spondylo</b>	spine	<b>tryps</b>	break into many pieces		
<b>sphinct</b>	bind tight, squeeze shut	<b>tuber</b>	bump, potato(e)		
<b>sphygno</b>	heartbeat	<b>typho</b>	smoky, delirious fever		
<b>spir</b>	breathing	<b>typhl</b>	cecum		
<b>splanchn</b>	innards	<b>unguis</b>	nail (finger, toe)		
<b>staphyl</b>	bunch of grapes	<b>uro</b>	urine		
<b>stasis</b>	standing up, being stable	<b>uvo</b>	grape		