

## Village-Based Dental Practice

Effective communication with a supervisor who is remotely located is critical to ensure timely, HIPPA compliant, and safe patient care. The purpose of the Village-Based Dental Practice book is to prepare dental health aides working under general supervision. This book includes these topics:

- Recognition of Medical Conditions
- Medical Emergencies in the Dental Clinic
- Recognition of Dental Conditions
- Use of Telemedicine Technology









#### **Problem Specific History Taking**

**Notes** 

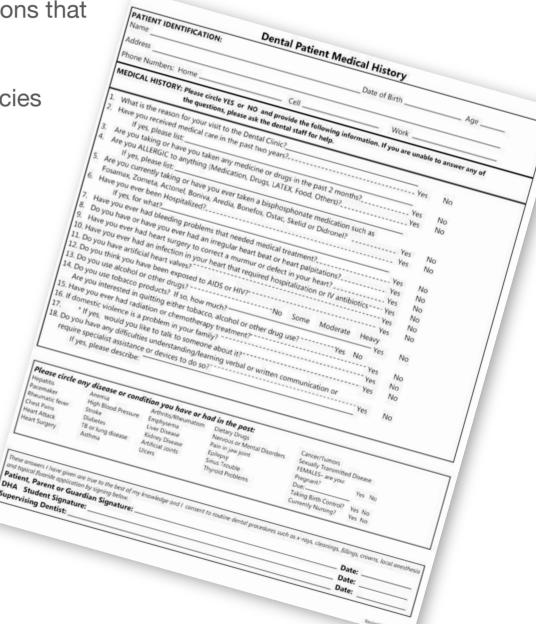
The medical history includes questions about a patient's previous and current health conditions, allergies, and medications. The answers to these questions are helpful to:

 Alert dental providers to possible medical conditions and medications that could complicate or interfere with dental treatment.

 Aid dental providers in anticipating any potential medical emergencies based on the patient's medical conditions.

Identify special treatment needs that a patient may require.





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Dental Patient Medical History	Tap the buttons to lea
PATIENT IDENTIFICATION:  Name Mary Tones  Date of Birth 19 1956 Age 62	Tap the batterie to let
	items circled "Yes."
Address 123 main Street	Troitio direted 100.
Phone Numbers: Home 907-555-1111 Cell Work	
MEDICAL HISTORY: Please circle YES or NO and provide the following information. If you are unable to answer any of the questions, please ask the dental staff for help.	
What is the reason for your visit to the Dental Clinic?	
2. Have you received medical care in the past two years?	Have you received medical care in the past two years? If yes what for?
Are you taking or have you taken any medicine or drugs in the past 2 months?  Yes  No	
4. Are you ALLERGIC to anything (Medication, Drugs, LATEX, Food, Others)?Yes  If yes, please list:	
5. Are you currently taking or have you ever taken a bisphosphonate medication such as	
Fosamax, Zometa, Actonel, Boniva, Aredia, Bonefos, Ostac, Skelid or Didronel?Yes  6. Have you ever been Hospitalized?Yes	
6. Have you ever been Hospitalized? Yes	
7. Have you ever had bleeding problems that needed medical treatment?Yes No	
8. Do you have or have you ever had an irregular heart beat or heart palpitations?(Yes) No	Do you have or have you ever had an irregular
9. Have you ever had heart surgery to correct a murmur or defect in your heart?Yes No	heart beat or heart palpitations?
10. Have you ever had an infection in your heart that required hospitalization or IV antibiotics Yes	Na 1 Va
11. Do you have artificial heart valves? Yes  12. Do you think you have been exposed to AIDS or HIV? Yes	
13. Do you use alcohol or other drugs?No Some Moderate Heavy	
14. Do you use tobacco products? If so, how much? Yes	
Are you interested in quitting either tobacco, alcohol or other drug use?Yes No	
15. Have you ever had radiation or chemotherapy treatment? Yes 16. If domestic violence is a problem in your family? Yes	
(Park - 1999)	
17. * If yes, would you like to talk to someone about it? Yes	
18. Do you have any difficulties understanding/learning verbal or written communication or require specialist assistance or devices to do so?	
require specialist assistance or devices to do so?  Yes  If yes, please describe:	
	Pacemaker
Please circle any disease or condition you have or had in the past:	
Hepatitis Anemia Arthritis/Rheumatism Dietary Drugs Cancer/Tumors	TD or Lung Disease
Pacemaker         High Blood Pressure         Emphysema         Nervous or Mental Disorders         Sexually Transmitted Disease           Rheumatic fever         Stroke         Liver Disease         Pain in jaw joint         FEMALES—are you:	TB or Lung Disease
Chest Pains Diabetes (Kidney Disease) Epilepsy Pregnant? Yes No	
Heart Attack Heart Surgery  Asthma  Artificial Joints Sinus Trouble Due: Taking Birth Control?  Yes Mo	
Currently Nursing? Yes No	Asthma
	Asthma
These answers I have given are true to the best of my knowledge and I consent to routine dental procedures such as x-rays, cleanings, fillings, crowns, local anesthesis	
and topical fluoride application by signing below.  Patient, Parent or Guardian Signature:  Date: 8   20   20   8	Kidney Disease
DHA Student Signature: Alice Communication of the Student Signature: Date: 9 - 20 - 20.5	Triditey Disease

Review the dental patient medical history form.

Tap the buttons to learn more about each of the items circled "Yes."

Follow-up

questions

Medical

concerns

Dental

concerns

Notes

(i)

Pharmacology

Pacemaker	0	0		0
TB or Lung Disease		0		0
Asthma		0	0	0
Kidney Disease		0	0	0

Date: 8/20/2018

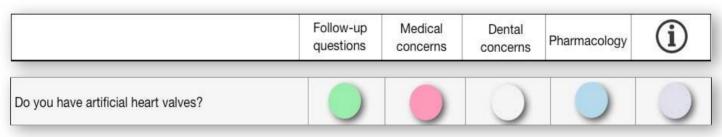
Revised 10-21-13



**Notes** 

Watch the video. Tap the buttons to learn why the Dental Health Aide wants to consult with a supervising dentist.







Watch the video. Tap the buttons to learn more about the patient's medical history.



	Follow-up questions	Medical concerns	Dental concerns	Pharmacology	(i)
Are you ALLERGIC to anything (Medicine, Drugs, LATEX, Food, Others)? If yes what?			0		0
Have you ever been hospitalized? If Yes, what for?	0		0		
Do you use tobacco products? If so how much?			0		0
Thyroid Problems			0		0

#### Note Pad

## Recognition of Medical Conditions

**Notes** 

Referral: an act of referring someone for consultation, review, or further action.



#### **Presentation 1.1**

HEALTH CARE SYSTEM ACCESS

	Follow-up questions	Medical concerns	Dental concerns	Pharmacology	i
What is the reason for your visit to the Dental Clinic?					
Have you received medical care in the past two years? If yes what for?					
Are you taking or have you taken any medicine or drugs in the past 2 months? If Yes, what?					
Are you ALLERGIC to anything (Medicine, Drugs, LATEX, Food, Others)? If yes what?					
Are you currently taking or have you ever taken a bisphosphonate medication such as Fosamax, Zometa, Actonel, Boniva, Aredia, Bonefos, Ostac, Skelid or Didronel?					
Have you ever been hospitalized? If Yes, what for?					
Have you ever had any bleeding problems that needed medical treatment?					
Do you have or have you ever had an irregular heart beat or heart palpitations?					
Have you ever had heart surgery to correct a murmur or defect in your heart?					

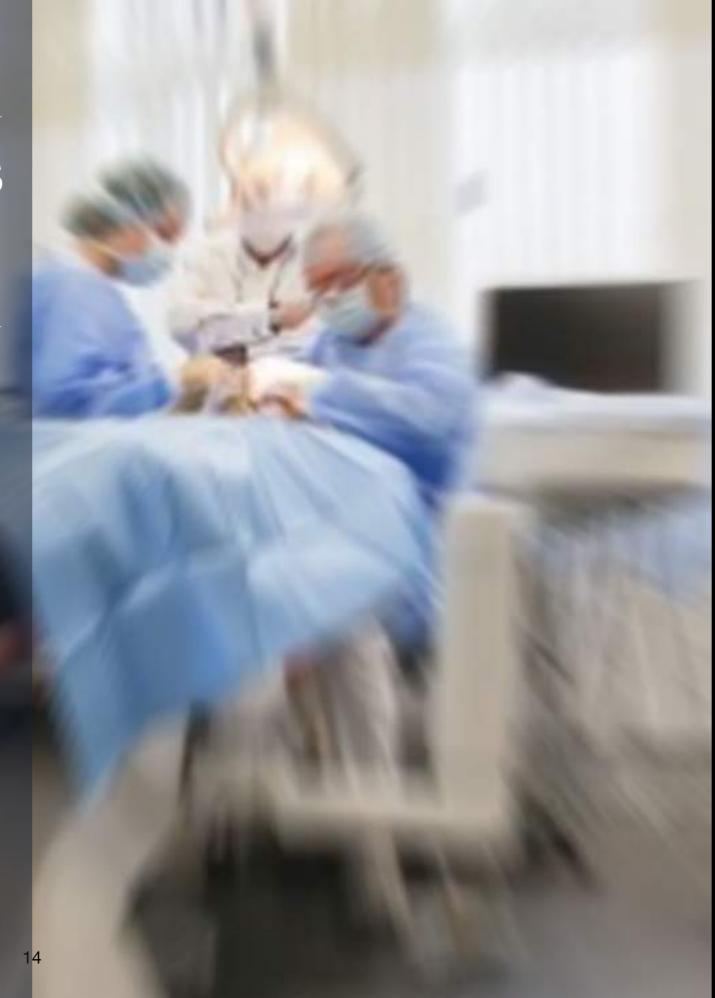
	Follow-up questions	Medical concerns	Dental concerns	Pharmacology	(i)
Have you ever had an infection in your heart that required hospitalization or IV antibiotics?					
Do you have artificial heart valves?					
Do you think you have been exposed to AIDS or HIV?					
Do you use alcohol or other drugs?					
Do you use tobacco products? If so how much?					
Have you ever had radiation or chemotherapy treatment?					
If domestic violence is a problem in your family or a friend's family would you like to talk to someone about it?					
Do you have any difficulties understanding/learning verbal or written communications or require special assistance or devices to do so? If yes, please describe:					

	Follow-up questions	Medical concerns	Dental concerns	Pharmacology	(i)
Hepatitis					
Pacemaker					
Rheumatic Fever					
Chest Pains					
Heart Attack					
Heart Surgery					
High Blood Pressure					
Stroke					
Anemia					

	Follow-up questions	Medical concerns	Dental concerns	Pharmacology	i
Diabetes mellitus					
TB or Lung Disease					
Asthma					
Emphysema					
Liver Disease					
Kidney Disease					
Artificial Joints					
Arthritis/Rheumatism					
Ulcers					

	Follow-up questions	Medical concerns	Dental concerns	Pharmacology	i
Mental or Nervous Disorder					
Pain in Jaw Joint					
Epilepsy					
Sinus Trouble					
Thyroid Problems					
Cancer/ Tumors					
Dietary Drugs (Phen-Fen)					
Sexually Transmitted Diseases					
FEMALES - Are you: Pregnant?  Y N Due: Taking Birth Control?  Y N  Currently Nursing?  Y N					

Medical History Tool Page 5

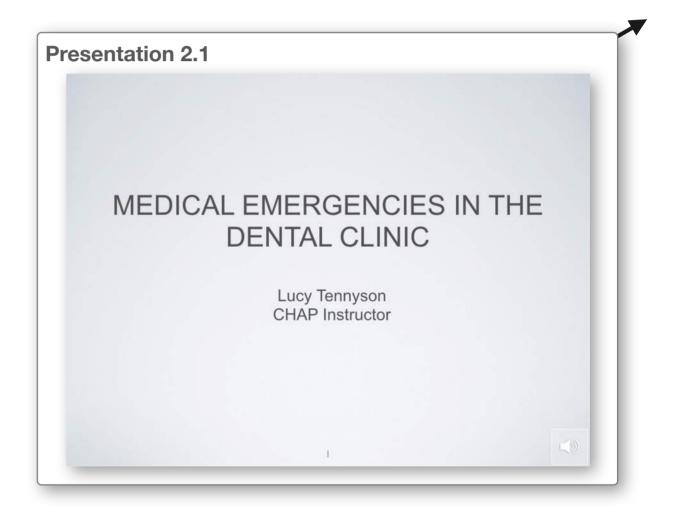


#### Note Pad

## Medical Emergencies in the Dental

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Conditions to Know	Definition	Signs and Symptoms	Contributing Factors	Notes
Syncope				Notes
Mild Allergic Reaction				Notes
Chest pain				Notes
Postural Hypotension				Notes
Seizures				Notes
Asthmatic Attack				Notes
Hyperventilation				Notes
"Epinephrine Reaction"				Notes
Hypoglycemia				Notes

Conditions to Know	Definition	Signs and Symptoms	Contributing Factors	Notes
Cardiac Arrest				Notes
Anaphylaxis				Notes
Heart attack				Notes
Local Anesthetic Overdose				Notes
Stroke				Notes
Obstruction of the Airway				Notes

**Notes** 

#### Documenting a medical emergency needs to include the following information:

- Description of the medical emergency.
- Patient's symptoms during the medical emergency. This includes the patient's symptoms and signs. For
  example, did the patient lose consciousness; was there any pain; did the patient have seizures; what was
  their breathing and pulse rate.
- Medications given to the patient during emergency care.
- What was happening prior to the medical emergency or what was the patient/ provider doing prior to the medical emergency.
- Timeline of events. When did the medical emergency begin; what emergency services were provided and at what times; when were vital signs taken; when was 9-1-1 called or when was medical assistance requested; when was the patient transported out of the dental clinic and where was the patient taken.
- Names of people who assisted with the medical emergency.

#### Sample SOAPE Note for a Medical Emergency

Notes

S: Revisit for ART. 8 year old patient states he gets food caught in the hole in his tooth. Pain Scale = 0.

O: RMH. Patient has a history of asthma, but no significant findings or changes noted.

#A: O cavitation with soft brown dentin exposed.

#B: DO cavitation with soft brown dentin exposed

A: #A-O, #B-DO caries charted on 1-5-16 treatment plan.

P: PARQ with mother and patient. Cotton rolls placed for isolation. The patient began wheezing and coughing, and having shortness of breath prior to beginning the procedure. Patient did not have inhaler with him, but his mother had it. DHA (Mary Shell) stayed with patient and removed cotton rolls while the dental assistant (Helen Bass) asked mother to return to the operatory with inhaler. During the incident the pulse increased to 120/min and the respiratory rate increased to 30/min. The patient used his inhaler, and breathing was less labored. After 10 minutes vital signs returned to normal range. Pulse 60/min. Respiratory rate 20/min. A phone call was made to Dr. Brown letting her know that the patient had an asthma attack during the appointment, but appeared to be in breathing normally again. When the patient and his mother left the clinic the patient was breathing normally and no longer in any distress. The mother was going to take son to his medical provider before rescheduling the appointment for ART.

E: Parent and patient encouraged to have follow-up appointment with medical provider.

NV: ART #A-O, B-DO

#### Resources

- Medical Emergencies in the Dental Offices, Sixth Edition, Stanley F. Malamed, 2007
- Medical emergencies and their management; https://www.blackwellpublishing.com/content/BPL\_Images/ Content\_store/Sample\_chapter/1405135409/1405135409\_4\_016.pdf
- Management of Medical Emergencies in the Dental Office, Crest® Oral-B® at dentalcare.com Continuing Education Course, Revised January 24, 2012; http://www.dentalcare.com/media/en-US/education/ce445/ce445.pdf
- Medical Emergencies In The Dental Office, Barry Krall, DDS; http://www.bkanesthesia.com/pdfs/ emergency\_management.pdf
- http://www.nblbi.nih.gov
- http://www.nlm.nih.gov/medlineplus
- http://www.mayoclinic.org
- http://www.diabetes.org
- http://www.strokeassociation.org
- http://www.cdc.gov
- http://www.webmed.com
- http://www.healthline.com
- http://heart.org

Review



#### Review

Let's apply what we learned about medical emergencies by using these case studies.

#### Case Study 1

George, a 30-year-old male is getting ready for a dental cleaning.

He seems a little nervous, but everything in his history checks out fine.

After settling him in the chair, adjusting the light and getting ready to have a look, he suddenly moans and goes limp.

His color turns very pale.

#### What should you do?



#### Case Study 2

Roger, a 66-year-old man is in the dental chair.

He is a large fellow with a long history of chronic problems.

He is early for his 8:00 am appointment. Neither the dentist nor the CHA/P are at the clinic yet.

You give Roger the medical history form to fill out and start getting ready for the day.

You notice on Roger's history form that he takes dabigatran (Pradaxa) for blood thinning.

You inform him that the dentist will have to review his medical history before doing any work on his teeth.

Roger gets irritated and says, "They told me this was better than Coumadin, and I could get dental work!"

You offer to call the dentist right away.

While you are on the phone with the dentist in the back room, Roger says,

"Hey, can you come out here. I don't feel so well."

You quickly tell the dentist, and then go see what is happening.

Roger is sitting in a chair, his fist over his chest.

He looks pale and has a sweaty face.

He says, "I have chest pain, just like the last time."

#### What should you do?



#### Case Study 3

Nolan, a 25-year-old man with a known seizure disorder, has an appointment for a cleaning.

His chart says he takes his meds every day and he confirms this.

His mom brings him to the clinic, as he is disabled with a traumatic brain injury from a 4-wheeler accident when he was 14 years old.

Mom says he has not had a seizure in a long time.

She says, "Ever since they changed his medicine, he does good."

You listen while she explains to Nolan that he should keep his mouth open and do what you tell him to.

Nolan is very cooperative, and just as you are finishing up with his cleaning, you notice him start to stiffen, like he is getting up out of the chair.

You say to him, "Hang on just a minute Nolan, I need to rinse."

Before you get the rest of the sentence out, his body stiffens, his neck is thrown to the side and his legs and arms start jerking.

You see his neck veins and they look like they are going to pop open!

#### What should you do?



#### Case Study 4

15-year-old Sandi is in the clinic for an exam and cleaning.

She is tired, and smells a little like alcohol.

She tried to cancel the appointment, but her mom insisted she go.

Reluctantly, she shows up for her appointment.

She is asked to put her cell phone on the counter during the visit.

While you are getting her ready for the cleaning, her cell phone vibrates.

Sandi pops up from the chair and grabs it off the counter.

She stares at it in disbelief. She then sobs, "My boyfriend just broke up with me!"

At first she just seems shocked and angry.

As she leans back in the chair, she starts to breathe fast and deep and sobbing between breaths.

She appears short of breath and between sobs says she can't breathe and her body is going numb.

She appears to be weak and starts shaking all over.

#### What should you do?



#### Case Study 5

Carol, a 49-year-old woman has just had a cleaning and is waiting to see the dentist.

She is sitting in the waiting room, and is the last appointment of the day.

The dentist is running behind, so Carol is a little frustrated.

She said she took her metformin (Glucophage) this afternoon, and didn't have time to eat.

Plus, she didn't want to have food in her mouth when she got her teeth cleaned.

You reassure her that the dentist will see her shortly.

You walk back to find out how long Carol will have to wait, and the dentist tells you it's going to be another 10-15 minutes.

Carol says she will wait and has some water to sip on.

When the dentist is ready, you show Carol to the exam room.

As you are walking, she suddenly stops and grabs on to your arm.

In a slurred voice, she says she doesn't feel well and then she sits down on the floor.

#### What should you do?



#### Case Study 6

Sandra, a 56-year-old female is in your chair for a cleaning.

It's 7:40 pm- the end of a long day.

The dentist left about 7:00 pm and said to call if you had any problems.

Halfway through the cleaning, Julie hand-signals you for a break.

When she sits up, she says, "I feel funny. My arms itch like crazy and my throat feels weird.

Did you give me something?"

As you try to reassure her, Sandra starts to have very noisy breathing and says, "I am having trouble here.

It must have been the salad I ate.

I am allergic to crab. I didn't know what was in it...must have been crab!"

You see red blotches appearing on her face and arms and she seems to be struggling.

#### What should you do?





Notes



**Abscessed Tooth** 







Aphthous Ulcers (Canker Sores)







Bad Breath (Halitosis)







Broken Jaw









**Chipped Tooth** 







Dry Mouth (Xerostomia)





Notes



Herpetic Lesions (Cold Sores)







Malocclusion (Bad Bite)







Oral Candidiasis (Oral Thrush)







Oral Cancer







Toothache







**Tooth Sensitivity** 





Notes



Temporomandibular Joint (TMJ) Disorders







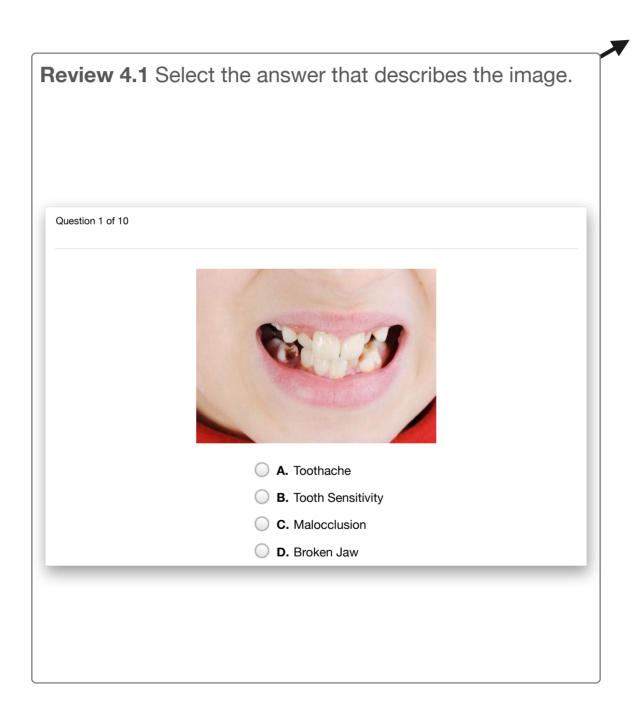
Wisdom Teeth





Resources





# Use of Telemedicine Technology

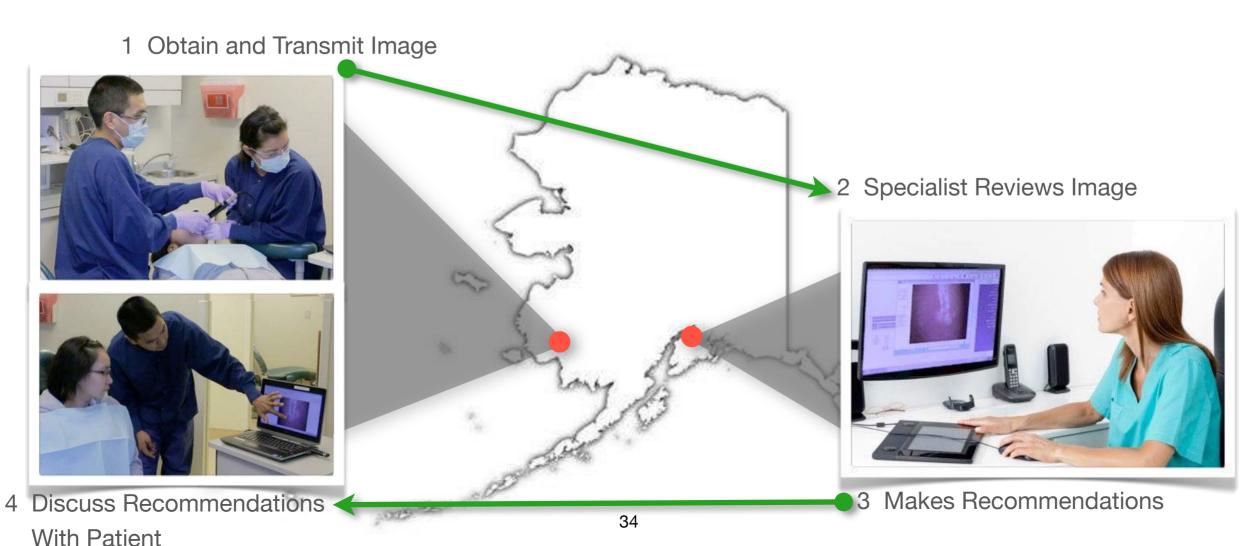


## Telemedicine Technology

Notes

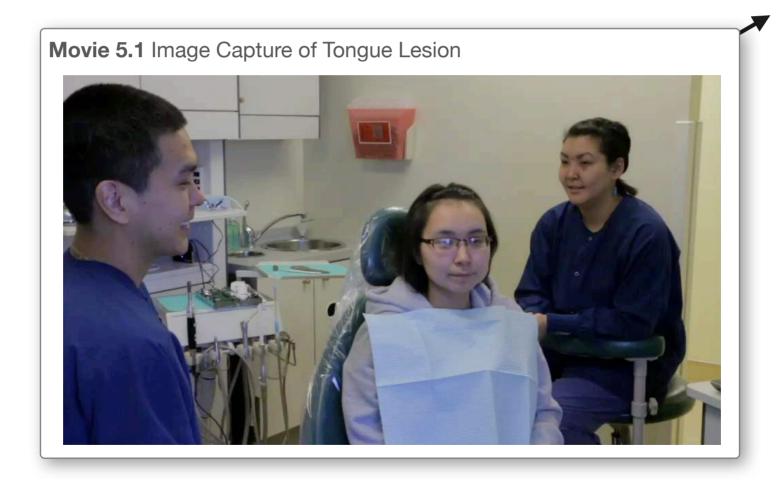
Telemedicine uses information technology and telecommunications to provide services to underserved populations living in rural or less developed areas.

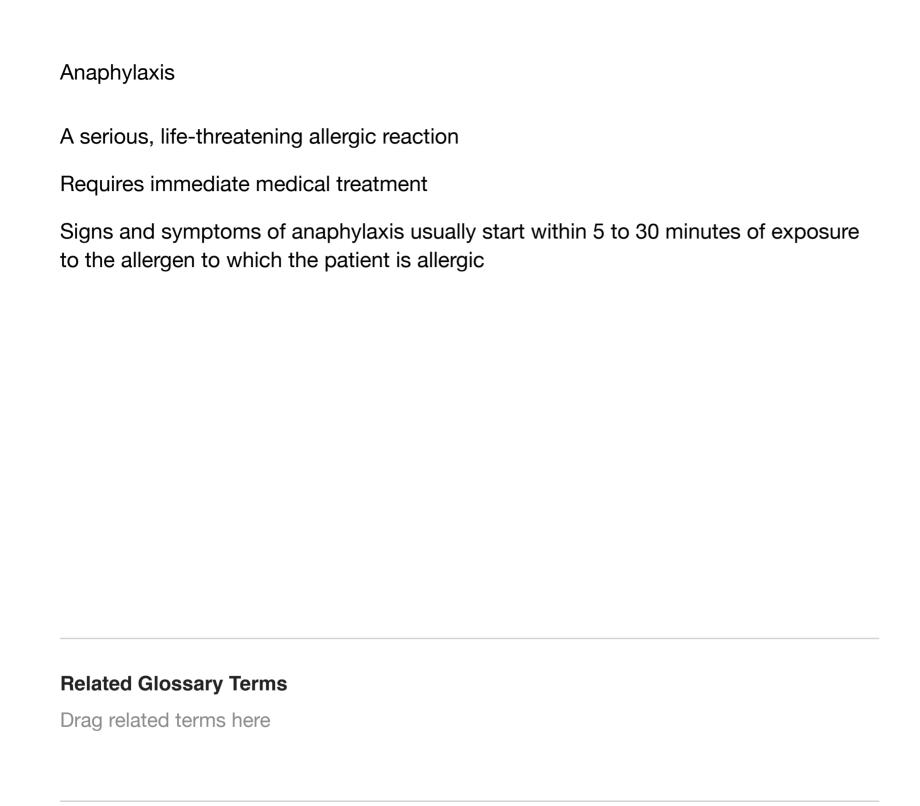
One example of a dental application is to use a digital video camera to capture images of a patient's intraoral tissues and teeth. These images enable dental providers to inform and educate patients about problem areas in their mouth. The images can be used to document suspicious lesions, and to be able to observe any changes over time. The images can also be useful when requesting consultation from specialists.



## Telemedicine Technology







Index Find Term

### **Asthmatic Attack**

A condition due to inflammation of the air passages in the lungs that affects the sensitivity of the nerve endings in the airways so they become easily irritated. In an attack, the lining of the passages swell causing the airways to narrow and reducing the flow of air in and out of the lungs.

Asthma attacks all age groups but often starts in childhood. It is a disease characterized by recurrent attacks of breathlessness and wheezing, which vary in severity and frequency from person to person. In an individual, they may occur from hour to hour and day to day.

### **Related Glossary Terms**

Drag related terms here

Index Find Term

### Cardiac Arrest

The sudden, unexpected loss of heart function, breathing and consciousness

Usually occurs with no warning signs

Usually the result of an electrical disturbance in the heart that disrupts its pumping action, stopping blood flow to the rest of the body

Not the same thing as a "heart attack"; however, a heart attack can trigger cardiac arrest

A medical emergency that needs immediate treatment to prevent sudden cardiac death

## **Related Glossary Terms**

Drag related terms here

Index Find Term

### Chest pain

Chest pain can be felt anywhere between the upper neck/ jaw to the upper abdomen, including the back and/ or one or both arms

Chest pain can be sharp, dull, burning, stabbing, and/ or a tight, squeezing or crushing sensation

Any organ or tissue in the chest can cause the pain, including the heart, lungs, esophagus, muscles, ribs, tendons, or nerves

# **Related Glossary Terms**

Drag related terms here

Index Find Term



Patient feels "funny" after receiving local anesthesia

An "epinephrine reaction" is not due to an overdose, but is an adverse reaction to the drug

You cannot be allergic to epinephrine since it is occurs naturally in the body

# **Related Glossary Terms**

Drag related terms here

Index Find Term

### Heart attack

A heart attack occurs when the flow of oxygen-rich blood to a section of the heart muscle suddenly becomes blocked and the heart cannot get oxygen – if blood flow is not restored quickly, the section of heart muscle begins to die

Heart attacks most often occur as a result of coronary heart disease/ coronary artery disease

Another common name for a heart attack is a myocardial infarction (MI)

## **Related Glossary Terms**

Drag related terms here

Index Find Term

Hyperventilation
Breathing that is deeper and more rapid (faster) than normal
Sometimes called "over breathing"
Related Glossary Terms
Drag related terms here
Index Find Term
Chapter 2 - Medical Emergencies Tool

Hypoglycemia
Abnormally low blood glucose (blood sugar) levels
Sometimes called "insulin reaction" or "insulin shock"
Related Glossary Terms
Drag related terms here
Index Find Term  Chapter 2 - Medical Emergencies Tool
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### Local Anesthetic Overdose

- · The administration of local anesthetic in a quantity greater than recommended
- Caused by high blood levels of anesthetic as a result of an inadvertent intravascular injection or repeated injections
- Results in excitation followed by depression of the central nervous system and to a lesser extent the cardiovascular system
- In rare cases an overdose can be fatal (lead to death)
- Usually occur within 5 to 10 minutes after the injection
- · Contributing factors may include the patient's:
  - Weight
  - Age
  - · Other drugs they may be taking

### **Related Glossary Terms**

Drag related terms here

Index Find Term

# Mild Allergic Reaction

A hypersensitive response of a person's immune system to a substance (allergen) that comes into contact with their skin, nose, eyes, respiratory tract, and/ or gastrointestinal tract.

# **Related Glossary Terms**

Drag related terms here

Index Find Term

Obstruction of the Airway
A partial or total blockage of the airway that can prevent air from getting into the lungs
Related Glossary Terms
Drag related terms here
Index Find Term
Chapter 2 - Medical Emergencies Tool

# Postural Hypotension

A form of low blood pressure that happens when a patient stands up from sitting or lying down

Usually caused by blood pooling in the lower extremities upon a change in body position

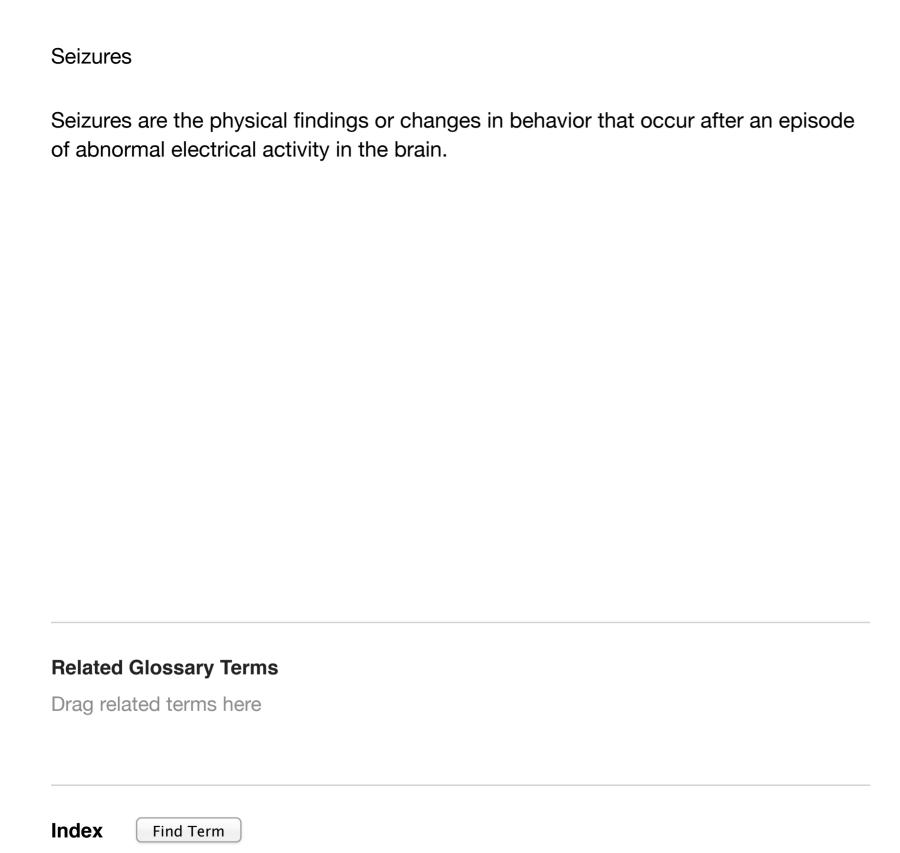
Usually mild, lasting a few seconds to a few minutes after standing

Mild symptoms do not need treatment

### **Related Glossary Terms**

Drag related terms here

Index Find Term



Stroke
A stroke occurs if the flow of oxygen-rich blood to a portion of the brain is blocked. Without oxygen, brain cells start to die after a few minutes
Related Glossary Terms
Drag related terms here
Index Filt
Index Find Term
Chapter 2 - Medical Emergencies Tool

# Syncope A temporary loss of consciousness, usually related to not enough oxygen-rich blood flowing to the brain. Many times this occurs when the blood pressure is too low. **Related Glossary Terms** Drag related terms here

Index Find Term