

Event Overview

Applying leadership and 21st century skills, the Healthcare Practices event will allow participants to gain knowledge and skills for working with patients in a wide variety of healthcare situations. This event consists of two rounds. Round one is a 30-question multiple choice test, demonstrating their understanding of how the human body maintains homeostasis and how healthcare workers assess their patient's body functions. All participants will advance to round two, where they will demonstrate their knowledge of a variety of skills. Skills may include appropriate interactions with patients, proper handwashing, appropriate use of gloves, and taking vital signs of patients, including heart rate, blood pressure, height, and weight. Participants will be asked to demonstrate several of these skills to a judge. This event aims to inspire and encourage participants to learn about basic practices in healthcare.

Competitors:

Participants will compete individually.

Competitors Must Bring:

- pencil
- calculator (not a phone calculator)

Competition:

Pre-Conference:

1. Participants can use the event resources below to learn about homeostasis and how we use vital signs to monitor the health of patients. The questions in the Round 1 exam will be taken from those resources.

Resources:

- A. Homeostasis (pdf)
 - https://drive.google.com/file/d/1kss7Wg85MsIB3GcQrp3qXW_NpoPOco7K/view?usp=sharing
- B. Vital Signs (pdf)
 - <https://drive.google.com/file/d/1W12rITl6sH0muipW8mGfw9x8qYea3JgH/view?usp=sharing>
- C. Vital Signs, John Hopkins Medicine
 - <https://www.hopkinsmedicine.org/health/conditions-and-diseases/vital-signs-body-temperature-pulse-rate-respiration-rate-blood-pressure>
- D. Unitek, A Step-byStep Guide to taking Vital Signs
 - <https://www.unitekcollege.edu/blog/a-step-by-step-guide-to-taking-vital-signs/>

2. Participants can use the resources listed below to learn how to take patient vital signs. Participants should practice the steps so that they get good at them! Round 2 will consist of assessing their ability to perform these skills.

Patient Introduction and Hand Washing (WHO technique)

- <https://wtcs.pressbooks.pub/nursingskills/chapter/1-2-initiating-patient-intraction/>

Working with exam gloves

- <https://www.youtube.com/watch?v=xy9xxpscSQw>

Taking a patient's weight

- https://youtu.be/BpY7xDZ_1Cg?si=gQgav7hZMxRWrxn

Taking a patient's height

- <https://youtu.be/aS6Jt5KUSYU?si=2XAmX-wSuiHbY5i5>

Taking a patient's Oral Temperature

- <https://youtu.be/Mlou84U2sRM?si=4nryuOlbkvrMQjn8>

Taking a patient's Axillary Temperature

- https://youtu.be/h140N9J_jDU?si=GLGBmMoMwQ_wKJa1

Taking a patient's Blood pressure

- <https://youtu.be/Gmic13mvsgo?si=tv8gZqzhjXLZLI0u>
- https://youtu.be/oioFVbsiwEk?si=D5vOXonmzt6X_o3b
- https://youtu.be/UGOoeqSo_ws?si=xKBxJjihvxQyc8Qj

Taking a patient's Resting Heart Rate

- <https://youtu.be/oAjnIDZH9H8?si=CUgx6zteZ7AMzFF4>

Round 1:

Round 1 is a multiple choice, 30-question exam covering homeostasis and principles of taking vital signs. Participants will be given 45 minutes to complete the exam.

Sample questions:

1. When the heart is at rest between beats, the pressure exerted by the blood inside an artery is called the ____.
 - a. Systolic pressure
 - b. Diastolic pressure
 - c. Blood pressure
 - d. Heart rate

2. Which of these is not part of our body's homeostasis controls?
 - a. Body temperature
 - b. Blood sugar
 - c. Hair growth
 - d. Hormone levels

Round 2:

Round 2 is a skills assessment where participants will be asked to demonstrate at least 3 of the following skills to a judge:

- | | |
|------------|---|
| Skill I: | Patient Introduction and Hand Washing |
| Skill II: | Working with sterile gloves |
| Skill III: | Taking a patient's height and weight |
| Skill IV: | Taking a patient's oral and/or axillary temperature |
| Skill V: | Taking a patient's blood pressure |
| Skill VI: | Taking a patient's resting heart rate/pulse |

Note - not all skills will be assessed during the competition, but participants need to be prepared for all 6 skills.

Final Scoring

Final rank is determined by adding the round one test score plus all round two skill scores. In case of a tie, the highest exam score will be used to determine the rank.

Hand Washing Judge Rating Sheet

Competitor Name _____

Judge's Signature _____

Description	Excellent 2 points	Poor or Missing 0 points	JUDGE SCORE
1. Wets hands with water			
2. Applies soap to cover all hand surfaces			
3. Uses the correct progression of steps (in this order) <ul style="list-style-type: none"> a. palm to palm b. palm to back of hand c. palm to palm, interlaced fingers d. backs of fingers to palm e. thumbs f. fingers in palms 			
4. Rinses hands with water			
5. Uses a single-use towel to dry hands and uses the same towel to turn off the faucet.			
Total Points			

Patient Introduction Judge Rating Sheet

Competitor Name _____

Judge's Signature _____

Description	Excellent 2 points	Acceptable 1 point	Poor or missing 0 points	JUDGE SCORE
1. Acknowledge Greet the patient by name, in a friendly manner, and ask their preferred name.				
2. Introduce Introduce themselves and explain what their role is.				
3. Duration: Explain why they are there and how long it should take				
4. Explanation Explain step-by-step what the patient should expect and answer questions.				
5. Thank you Thank the patient and ask them if they need anything				
Total Points				

**Working with Exam Gloves
Judge Rating Sheet**

Competitor Name _____

Judge's Signature _____

Description	Excellent 2 points	Poor or missing 0 points	JUDGE SCORE
1. Hand hygiene Uses hand sanitizer or washing hands with soap and water.			
2. Puts on the proper sized gloves, keeping them as clean as possible			
3. Removes gloves in the proper sequence a. grabs the palm of one glove and pulls the glove off b. holds the glove in a ball in the palm of the gloved hand c. Inserts finger into the inside cuff of the remaining glove and pulls it off, inside out			
4. Hygiene a. Discards the gloves and performs hand hygiene again			
Total Points			

Taking a Patient's Height and Weight Judge Rating Sheet

Competitor Name _____

Judge's Signature _____

Description	Excellent 2 points	Acceptable 1 point	Poor or missing 0 points	JUDGE SCORE
1. Proper Introduction Follows introduction procedures and explains what will happen				
2. Preparation Asks the patient to remove heavy clothing and shoes				
3. Measures Patient's Weight a. Assists the patient onto the scale, with his or her feet centered on the platform and slightly apart. b. Reads and records the patient's weight c. Helps the patient get off the scale.				
4. Measures Patient's Height a. Raises the height bar higher than the height of the patient. b. Helps the patient get back on the scale with his or her back to the scale. c. Has the patient stand as erect as possible and to look straight ahead. d. Moves the measuring scale down until it just touches the top of the patient's head. e. Reads and records the measurements in inches or centimeters. f. Elevates the height bar and helps the patient get off the scale				
5. Finishing a. Resets the equipment b. Tells the patient that they are finished and excuses the patient in a friendly manner c. Washes hands				
Total Points				

**Taking a Patient's Oral or Axillary Temperature
Judge Rating Sheet**

Competitor Name _____

Judge's Signature _____

Description	Excellent 2 points	Poor or missing 0 points	JUDGE SCORE
1. Hand Hygiene Uses hand sanitizer or washing hands with soap and water.			
2. Proper Introduction Follows introduction procedures and explains what will happen			
3. Puts on gloves Uses proper exam glove technique			
4. Places thermometer in the correct location a. Under the tongue for oral temperature b. Under the armpit for axillary temperature			
5. Hygiene Discards the gloves and performs hand hygiene again. Records the patient's correct temperature			
Total Points			

Taking a Patient's Blood Pressure Judge Rating Sheet

Competitor Name _____

Judge's Signature _____

Description	Excellent 2 points	Acceptable 1 point	Poor or missing 0 points	JUDGE SCORE
1. Hand Hygiene Uses hand sanitizer or washing hands with soap and water.				
2. Proper Introduction Follows introduction procedures and explains what will happen. Sits the patient in the proper position.				
3. Places BP cuff and stethoscope in the correct position a. Cuff is fit over the upper arm with the label and tubes in the correct position b. Places stethoscope under the cuff over brachial artery and into the ears				
4. Inflates cuff and properly reads blood pressure a. Closes valve and pumps the cuff up to about 170mmHg b. Releases the valve and slowly lets out pressure c. Listens for the beginning of heart beat sounds d. and notes the pressure e. Listens for the heart beat sounds to stop and notes the pressure f. When sounds have stopped, release the cuff completely and takes it off of the patient's arm				
5. Hygiene Discards the gloves and performs hand hygiene again. Records the patient's correct blood pressure (systolic/diastolic)				
Total Points				

Taking a Patient's Heart Rate/Pulse Judge Rating Sheet

Competitor Name _____

Judge's Signature _____

Description	Excellent 2 points	Poor or missing 0 points	JUDGE SCORE
1. Hand hygiene Uses hand sanitizer or washing hands with soap and water.			
2. Proper Introduction a. Follows introduction procedures and explains what will happen. b. Sits the patient in the proper position.			
3. Locates the radial pulse position Uses fore and middle finger to feel and count heartbeats for 15 seconds			
4. Properly counts heartbeats count heartbeats for 15 seconds			
5. Calculating heart rate Converts heart rate in 15 seconds to beats per minute by multiplying by 4			
6. Hygiene a. Discards the gloves and performs hand hygiene again. b. Records the patient's correct heart rate in BPM.			
Total Points			