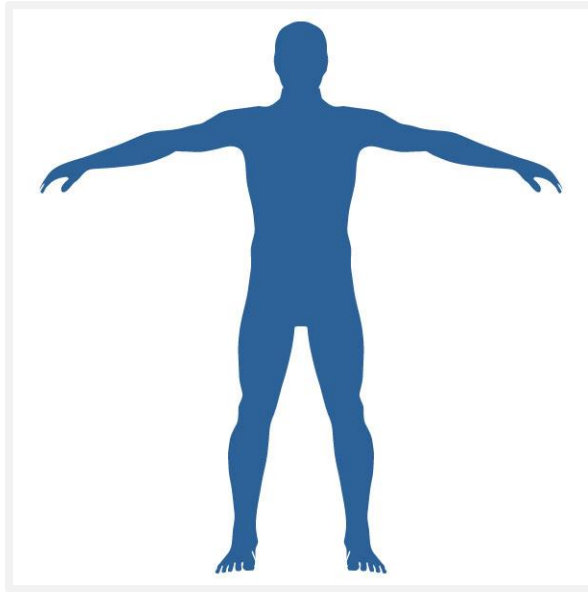


# HEAD TO TOE ASSESSMENT

Estimated Time: Flexible



Scan to Begin



## CASE STUDY OVERVIEW

This case study has been designed with maximum flexibility for instructors to augment the reality of patient assessment in the simulation lab or classroom setting. Instructors may select QR codes for various images, sounds and videos to incorporate into a learning activity from one or all of the following categories: Cardiovascular, Pulmonary, GI/GU, Integumentary and Equipment. See the Media table below for the sounds and images that are included under each category. This media can be incorporated into a group classroom learning activity tapping on the associated tab on the iPad and displaying the media using a projector.

## LEARNING OBJECTIVES

1. Perform a physical assessment using images and sounds that augment the reality of a manikin or standardized patient.

## CURRICULUM MAPPING

### WTCS NURSING PROGRAM OUTCOMES

- Provide patient centered care by utilizing the nursing process across diverse populations and health care settings













### WTCS RESPIRATORY THERAPY PROGRAM OUTCOMES

















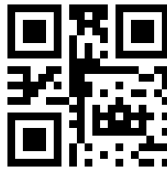









- Apply respiratory therapy concepts to patient care situations



















### WTCS PARAMEDIC PROGRAM OUTCOMES













- Integrate pathophysiological principles and assessment findings to provide appropriate patient care.


## QR CODE TABLE




	Cardiovascular	Pulmonary	Abdomen	Integumentary	Equipment/ Other	ECG
A	CV – A 	P – A 	A – A 	I – A 	E/O – A 	ECG – A 
B	CV – B 	P – B 	A – B 	I – B 	E/O – B 	ECG – B 

C	CV - C 	P - C 	A - C 	I - C 	E/O - C 	ECG - C 
D	CV - D 	P - D 	A - D 	I - D 	E/O - D 	ECG - D 
E	CV - E 	P - E 	A - E 	I - E 	E/O - E 	ECG - E 
F	CV - F 	P - F 		I - F 	E/O - F 	
G	CV - G 	P - G 		I - G 	E/O - G 	

H	CV - H 	P - H 		I - H 	E/O - H 	
I	CV - I 	P - I 		I - I 	E/O - I 	
J	CV - J 	P - J 		I - J 	E/O - J 	
K		P - K 		I - K 	E/O - K 	
L		P - L 		I - L 	E/O - L 	

M		<p>P - M</p> 		<p>I - M</p> 	<p>E/O - M</p> 	
N		<p>P - N</p> 		<p>I - N</p> 	<p>E/O - N</p> 	
O		<p>P - O</p> 		<p>I - O</p> 		
P		<p>P - P</p> 		<p>I - O</p> 		
Q		<p>P - Q</p> 		<p>I - Q</p> 		

R		<p>P - R</p> 		<p>I - R</p> 		
S		<p>P - S</p> 		<p>I - S</p> 		
T		<p>P - T</p> 		<p>I - T</p> 		
U		<p>P - U</p> 		<p>I - U</p> 		
V		<p>P - V</p> 		<p>I - V</p> 		

W		<p>P - W</p> 		<p>I - W</p> 		
X				<p>I - X</p> 		

QR CODE KEY

	Cardiovascular	Pulmonary	Abdomen	Integumentary	Equipment/Other	ECG
A	Normal	Normal Adult	Normal Adult BS	Staples	IV Site Hand	ST Elevation
B	S3	Wheezing	Newborn BS	Sutures	IV Site Antecubital	ST Depression
C	S4	Crackles	Seat Belt Sign	Edema	IV Site Forearm	PVCs
D	Murmur	Pleural Friction Rub	ABD Pad	Venous Ulcer	IV Site Hand: Dark Skin	Atrial Fibrillation
E	Newborn	Stridor	Urinal with Urine	Arterial Wound A	PICC Site	Ventricular Fibrillation



<b>F</b>	Irregularly Irregular Rhythm	Rhonchi		Arterial Wound B	BiPAP	
<b>G</b>	Capillary Refill	Diminished		Diabetic Ulcer	Pacemaker	
<b>H</b>	JVD	Normal Newborn		Heel A	Foley Bag	
<b>I</b>	Decreased Perfusion	Neonatal Grunting		Heel B	CABG with MSI, Chest Tube Site & Pacer Wires	
<b>J</b>	12 Lead ECG Attached	Croup Cough		Heel C	Chest Tube	

K		Flail Chest		Heel D	Chest Tube Site	
L		Pectus Excavatum		Buttocks A	Pulmonary Artery Catheter	
M		Pectus Carinatum		Buttocks B	Triple Lumen Central Line	
N		Digital Clubbing		Sacral Wound A	IV Site Hand: Child	
O		Sputum		Sacral Wound B		

P		FEV1 Results		Sacral Wound C		
Q		Peak Flow Results		Sacral Wound D		
R		Ventilator		Sacral Wound E		
S		Sedated on Ventilator		Ear Wound		
T		Scoliosis		Mottling		

U		Kyphosis		Jaundice		
V		JVD		Cyanosis		
W				Steristrips		
X				Arterial Thrombosis		

## FACILITATOR INSTRUCTIONS

This case study was designed for maximum flexibility for multiple disciplines to augment the reality of simulations and learning activities in the classroom and/or lab. Use the QR Code Key to select the media and associated QR codes you would like to incorporate, then cut out the associated unlabeled QR Codes. QR Codes can then be placed on a simulator, manikin, printed image of a “patient,” or on the clothing of a student who is playing the role of a “patient.”


Alternatively, in an instructor-led discussion, after scanning the QR Start Code, these images and sounds may be quickly accessed via tabs and buttons on the iPad. They can be displayed on a projector screen using a VGA adaptor connected to the iPad or via “Airplay” and an Apple TV.

### SUGGESTED USES:

1. In a lab setting: Divide students into pairs. Assign one student to role play the “patient” and the other to role play the “health care professional.” Select various sounds or images associated with the overall learning objectives of the day. Place associated QR Codes on the outer clothing of partners and have students practice identifying the adventitious lung sounds, abnormal heart sounds, and/or wounds by scanning the QR Codes with an iPad. Students role-playing the “patient” can provide subjective data related to the sounds or images selected. Alternatively, the QR Codes can be placed on static manikins for assessment.
2. In simulation: Select the sounds and/or images you desire to incorporate into your pre-designed simulation. Cut out the selected QR Codes and attach them to the simulator.
3. In a classroom: Attach the iPad to the teaching station using a VGA connector or use “Airplay” associated with an Apple TV. Demonstrate sounds and/or images associated with the lesson by tapping on the tab associated with the desired category of media and then on the selected media.


# SAMPLE TEACHING PLAN

SEE ADDITIONAL SUGGESTIONS FOR TEACHING PLANS IN APPENDICES

iPad Prompts		Facilitator Prompts & Discussion Points
1.	Prebrief	Explain how to use the iPad to scan QR Codes in order to augment the reality of the assessment. Divide students into pairs.
2.	Scan the Start QR Code	
3.	Discuss the “Learning Objective”	<p><b>LEARNING OBJECTIVE</b></p> <ol style="list-style-type: none"> <li>1. Perform a cardiac assessment</li> </ol>
4.	Select associated QR Codes	<p>Select corresponding QR Codes from the media table for your designed “patient scenarios.”</p> <ul style="list-style-type: none"> <li>• Normal</li> <li>• S3 and Edema</li> <li>• S4</li> <li>• Murmur</li> <li>• Irregularly irregular</li> <li>• Newborn</li> </ul>
5.	Place QR Codes	Place a different QR Code on one student from each pair. This is the “patient.” Then, provide index cards with associated symptoms to the “patients.” The “patients” should use these cards to provide information to the other students who are role playing “care-givers.” Each pair receives a different heart sound.
6.	<i>(Optional)</i> Create a patient “story” for each heart sound	Each “patient” has a different story to provide context for the associated heart sound for the student “assessing this patient to obtain associated history. For example:

		<p>Patient A: (S3 and Edema) History of chronic heart failure; has been feeling more short of breath lately; takes the following medications: Furosemide, Metoprolol, Lisinopril; has been eating more soup for dinner lately because too tired to cook</p> <p>Patient B: (S4) History of hypertension; sometimes forgets to take Furosemide and Lisinopril</p> <p>Patient C: (Irregularly irregular). History of atrial fibrillation; sometimes feels like heart is skipping around</p> <p>Patient D: (Murmur) History of mitral valve prolapse; feeling more tired lately</p> <p>Patient E (newborn): Baby Noah was born yesterday; obtain a heart rate</p>
7.	Assess “patients”	The second student or “caregiver” in each pair should assess the “patients” including obtaining a focused health history. Then, have students write a narrative note of their findings. Optional: students could assess other “patients” from the other student pairs.
8.	Debrief	<p><b>POSSIBLE DISCUSSION POINTS</b></p> <ul style="list-style-type: none"> <li>• How did you feel the assessment went?</li> <li>• Relate discussion to learning objective.</li> <li>• What findings did you discover on assessment?</li> <li>• How should the assessment findings be documented?</li> <li>• What disease processes are associated with your assessment findings?</li> <li>• If you could re-do your assessment, is there anything you would change or improve?</li> <li>• Take away: What have you learned from this activity that you will take to your clinical practice?</li> </ul>
	End Scenario	<ul style="list-style-type: none"> <li>• Students can exit at any time by tapping the Exit tab and following instructions.</li> <li>• Please have each student complete the provided survey.</li> </ul>


## APPENDIX A: SAMPLE TEACHING PLAN FOR PULMONARY ASSESSMENT

iPad Prompts		Facilitator Prompts & Discussion Points
1.	Prebrief	Explain how to use the iPad to scan QR Codes in order to augment the reality of the assessment. Divide students into pairs.
2.	Scan the Start QR Code	
3.	Discuss the “Learning Objective”	<b>LEARNING OBJECTIVES</b> 1. Perform a respiratory assessment
4.	Select associated QR Codes	Select corresponding QR Codes from the media table for your designed “patient scenarios.” <ul style="list-style-type: none"> <li>• Normal</li> <li>• Crackles</li> <li>• Wheezing</li> <li>• Rhonchi</li> <li>• Pleural friction rub</li> <li>• Stridor</li> <li>• Newborn</li> </ul>
5.	Place QR codes	Place a different QR Code on one student from each pair. This is the “patient.” Then, provide index cards with associated symptoms to the “patients.” The “patients” should use these cards to provide information to the other students who are role playing “care-givers.” Each pair receives a different lung sound.
6.	<i>(Optional)</i> Create a patient “story” for each cardiac sound selected	Each “patient” has a different story to provide context for the associated lung sound for the student “assessing this patient to obtain associated history. For example: Patient A: (Crackles) History of chronic heart failure; feeling more short of breath lately; takes the following medications: Furosemide, Metoprolol, Lisinopril; has been




		<p>eating more soup for dinner lately because too tired to cook</p> <p>Patient B: (Wheezing) History of asthma; uses albuterol; was exposed to a cat today</p> <p>Patient C: (Rhonchi) Has a cough; bringing up clear sputum</p> <p>Patient D: (Pleural Friction Rub) Has pleurisy; hurts to cough.</p> <p>Patient E: (Stridor- child) 5 year old child with an upper respiratory infection for a week; “barking” cough</p> <p>Patient F: (Newborn) Baby Noah was born yesterday; obtain a respiratory rate</p>
7.	Assess “patients”	<p>The second student or “caregiver” in each pair should assess the “patients” including obtaining a focused health history. Then, have students write a narrative note of their findings. Optional: students could assess other “patients” from the other student pairs.</p>
8.	Debrief	<p><b>POSSIBLE DISCUSSION POINTS</b></p> <ul style="list-style-type: none"> <li>• How did you feel the assessment went?</li> <li>• Relate discussion to learning objective:</li> <li>• What findings did you discover on assessment?</li> <li>• How should the assessment findings be documented?</li> <li>• What disease processes are associated with your assessment findings?</li> <li>• If you could re-do your assessment, is there anything you would change or improve?</li> <li>• Take away: What have you learned from this activity that you will take to your clinical practice?</li> </ul>
	End Scenario	<ul style="list-style-type: none"> <li>• Students can exit at any time by tapping the Exit tab and following instructions.</li> <li>• Please have each student complete the provided survey.</li> </ul>

APPENDIX B: SAMPLE TEACHING PLAN FOR WOUND ASSESSMENT

iPad Prompts		Facilitator Prompts & Discussion Points
9.	Prebrief	Explain how to use the iPad to scan QR Codes in order to augment the reality of a wound assessment on a manikin or simulator.
10.	Scan the Start QR Code	
11.	Discuss the “Learning Objective”	<p><b>LEARNING OBJECTIVES</b></p> <ol style="list-style-type: none"> <li>1. Perform a wound assessment</li> </ol>
12.	Select associated QR Codes	<p>Select corresponding QR Codes from the media table for your designed “patient scenario.” There are several wound images available. For this sample we will use 4.</p> <ul style="list-style-type: none"> <li>• Heel pressure ulcer stage 1</li> <li>• Venous ulcer</li> <li>• Arterial ulcer</li> <li>• Diabetic ulcer</li> </ul>
13.	Place QR Codes	Place associated QR Codes on four manikins or simulators.
14.	<p><i>(Optional)</i></p> <p>Create a patient “story” for each cardiac sound selected</p>	<p>Each “patient” has a different story to provide context for the associated wound for the student “assessing this patient to obtain associated history. For example:</p> <p>Patient A: (Heel) Patient has been confined to bed due to weakness for over a week. He has poor nutritional intake.</p> <p>Patient B: (Venous Ulcer) History of congestive heart failure with bilateral lower extremity edema.</p> <p>Patient C: (Arterial Ulcer) History of peripheral artery disease; has pain in calves when walks; often has to stop and rest</p>

		Patient D: (Diabetic Ulcer) Has a history of diabetes; sometimes has burning pain in feet; has decreased sensation in toes and feet
15.	Assess “patients”	The second student or “caregiver” in each pair should assess the “patients” including obtaining a focused health history. Then, have students write a narrative note of their findings. Optional: students could assess other “patients” from the other student pairs.
16.	Debrief	<p><b>POSSIBLE DISCUSSION POINTS</b></p> <ul style="list-style-type: none"> <li>• How did you feel the assessment went?</li> <li>• Relate discussion to learning objective:</li> <li>• What findings did you discover on assessment?</li> <li>• How should the assessment findings be documented?</li> <li>• What disease processes are associated with your assessment findings?</li> <li>• If you could re-do your assessment, is there anything you would change or improve?</li> <li>• Take away: What have you learned from this activity that you will take to your clinical practice?</li> </ul>
	End Scenario	<ul style="list-style-type: none"> <li>• Students can exit at any time by tapping the Exit tab and following instructions.</li> <li>• Please have each student complete the provided survey.</li> </ul>

APPENDIX C: SAMPLE HEAD TO TOE ASSESSMENT TEACHING PLAN

iPad Prompts		Facilitator Prompts & Discussion Points
17.	Prebrief	Explain how to use the iPad to scan QR codes in order to augment the reality of an assessment on a manikin or simulator.
18.	Scan the Start QR Code	
19.	Discuss the “Learning Objective”	<p><b>LEARNING OBJECTIVES</b></p> <ol style="list-style-type: none"> <li>1. Perform a head to toe assessment</li> </ol>
20.	Select associated QR Codes	Select QR Codes from the media table for your designed “patient scenario,” which may include: an abnormal heart sound, adventitious lung sounds, a wound image, and/or many others. See the QR Code media table for available QR Codes.
21.	Place QR Codes	Place associated QR Codes on manikin or simulator. Run the scenario as you normally would, but instruct students to scan QR Codes for additional information during the scenario.
22.	Debrief	<p><b>POSSIBLE DISCUSSION POINTS</b></p> <ul style="list-style-type: none"> <li>• How did you feel the assessment went?</li> <li>• Relate discussion to learning objective:</li> <li>• What findings did you discover on assessment?</li> <li>• How should the assessment findings be documented?</li> <li>• What disease processes are associated with your assessment findings?</li> <li>• If you could re-do your assessment, is there anything you would change or improve?</li> </ul>

		<ul style="list-style-type: none"> <li>• Take away: What have you learned from this activity that you will take to your clinical practice?</li> </ul>
	End Scenario	<ul style="list-style-type: none"> <li>• Students can exit at any time by tapping the Exit tab and following instructions.</li> <li>• Please have each student complete the provided survey.</li> </ul>

## SURVEY

Print this page and provide to students.

Students, please complete a brief (2-3 minute) survey regarding your experience with this ARISE simulation. There are two options:

1. Use QR Code: Survey
  - a. Note: You will need to download a QR Code reader/scanner onto your own device (smartphone or tablet). There are multiple free scanner apps available for both Android and Apple devices from the app store.
  - b. This QR Code will not work in the ARIS app.



2. Copy and paste the following survey link into your browser.
  - a. [https://ircvtc.co1.qualtrics.com/SE/?SID=SV\\_6Mwfv98ShBfRnBX](https://ircvtc.co1.qualtrics.com/SE/?SID=SV_6Mwfv98ShBfRnBX)

## CREDITS

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Coughing sounds from Soundbible. Downloaded from <http://soundbible.com/tags-cough.html>

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