

M55C Physical Assessment Simulator Physiko Plus

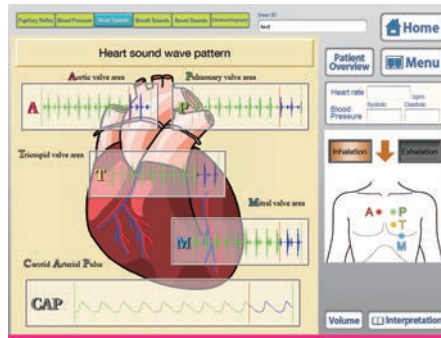


Sold over **2400**
units worldwide
&
used in **OSCE**

Assessment items that can be learned with Physiko

Auscultation of Heart Sounds

Auscultation is possible in each valve area: A (aortic valve area), P (pulmonary valve area), T (tricuspid valve area), and M (mitral valve area). With Physiko, you will deepen your understanding of the auscultation position and the overall case. 6 cases of normal, 7 cases of arrhythmia, and 4 cases of heart diseases can be simulated.



Point Sounds from real patients

- Students can use their own stethoscope.
- Clavicle and ribs are palpable in order to determine the correct auscultation position.

Item	Case		
Heart sound auscultation / Pulse diagnosis	S2 Split (-) HR60	Aortic stenosis	Atrial fibrillation
	S2 Split (+)	Mitral regurgitation	Arterial flutter
	S3 gallop	Mitral stenosis	Premature ventricular contraction(single)
	S4 gallop	Aortic regurgitation	Ventricular flutter
	S3 and S4 gallop	Sinus tachycardia	Ventricular fibrillation
	Innocent murmur	Sinus bradycardia	

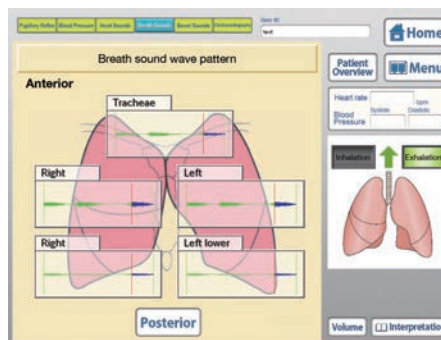
Palpation of Pulse

Pulse diagnosis can be performed in synchronization with heart sounds. The pulse can be palpated at the left and right carotid arteries as well as the radial arteries.

17 cases

Auscultation of Lung Sounds

Auscultation is possible in each of the lung field areas (bronchi, upper and lower lung fields) in 5 places anterior and 4 places posterior. With Physiko, you will deepen your understanding of the auscultation position and the overall case. The major lung sound classifications can be heard.



Point Sounds from real patients

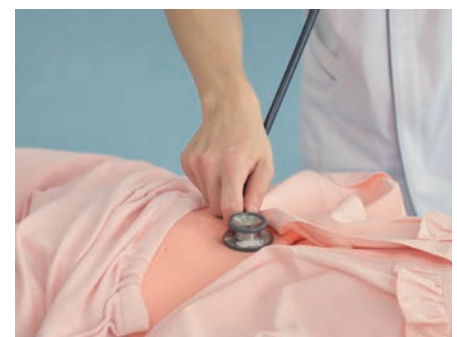
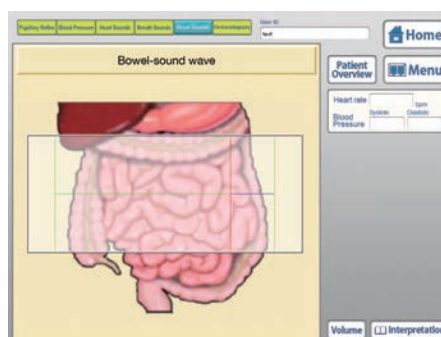
- Students can use their own stethoscope
- Anterior & posterior auscultation possible
- Clavicle & ribs can be palpated → useful to learn the correct auscultation position

Item	Case	
Breath Sounds	Normal	Coarse crackles
	Weak in the left lung	Fine Crackles
	Absent in the right lung	Wheezes
	Bronchial breathing	Rhonchi

8 cases

Auscultation of Bowel Sounds

Intestinal peristaltic sounds as well as ileus & obstruction can be auscultated.



Point Sounds from real patients

- Students can use their own stethoscope.

Item	Case
Abdominal Pathologies	Normal
	Increased
	Decreased
	Obstruction
	Ileus

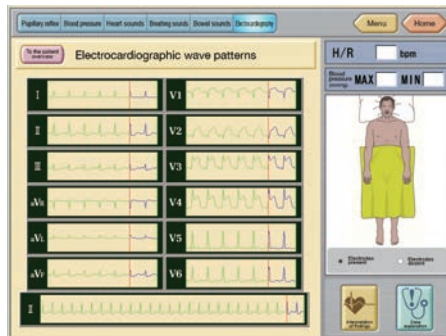
5 cases

ECG Simulation

It is possible to learn how to correctly read & interpret the electrocardiogram.

Point

- Physiko Plus is equipped for the most common ECG recording method - 12-lead ECG
- Clavicle & ribs can be palpated → useful to learn the correct position of electrodes
- In ECG patient screen, you can choose the ECG wave by clicking ECG display
- Great for self studying
- Possible to attach commercially available electrocardiograph
- Placement of electrodes can be checked and controlled by the instructor by using a pedal switch. Electrocardiograph wave patterns will be shown on the screen subsequently.



Item	Case	
ECG Simulation	Normal	Ventricular flutter
	Atrial fibrillation	Ventricular fibrillation
	Atrial flutter	Myocardial infarction (acute stage)
	Premature ventricular contraction	Myocardial infarction (subacute stage)
	Ventricular tachycardia	Myocardial infarction (chronic stage)

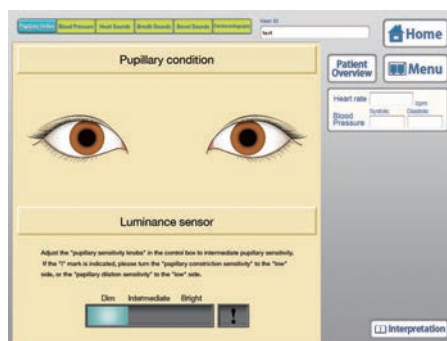
10 cases

Pupillary Reflex

By shining with a penlight, you can inspect the size of the pupil, measure it, and see the light reflex. Simulation of normal, mydriasis, miosis, etc. is possible.

Point Pupillary Light Reflex

- Direct light reflex and indirect light reflex can be checked.
- You can adjust the settings to the surrounding brightness of the room.



Item	Case
Pupillary Light Reflex	Normal
	Pupillary dilation
	Pupillary constriction
	Bilateral asymmetry

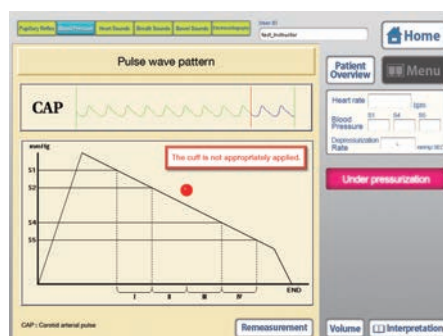
4 cases

Blood Pressure

Pre-installed cases as well as arbitrary settings (S1 + S4 + S5) can be simulated and changes in Korotkoff sounds can be checked in sync with the heartbeat.

Point

- An error message will appear if the cuff is not attached correctly.
- If the decompression speed is too fast, or if the pressurization is too strong, an alarm will sound / an error message will appear.
- The blood pressure can be freely set from zero to a maximum of 200
- Cases where S5 isn't present can be recreated



Item	Case
Blood Pressure Measurement	Arbitrary setting

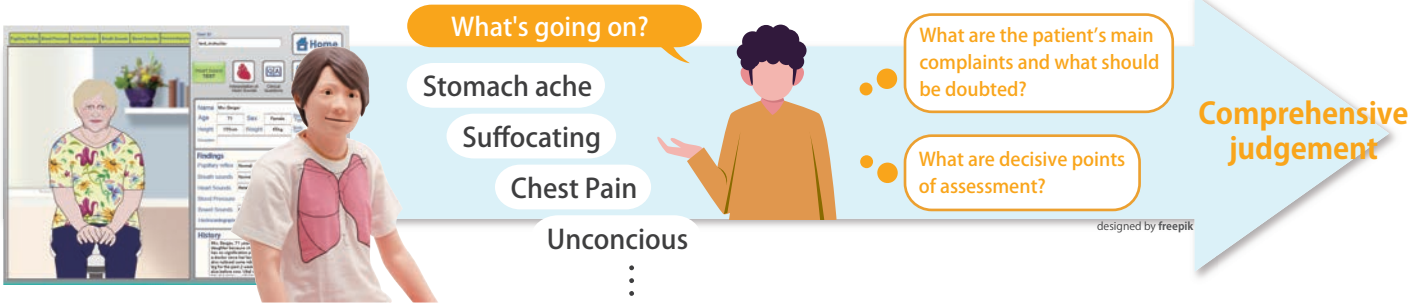
Interview / Communication

With the microphone which comes with the set, Physiko can be used for interview and communication training. The instructor personates the patient responses using a microphone (included) and these are played through Physiko's animated mouth.



Scenario Training

You can perform scenario trainings assuming a clinical site as if students were seeing an actual patient.



Pre-installed Scenarios		
Illness	Age & Gender	Case
Chest Pain	58, Male	Myocardial Infarction
	55, Male	Dissecting Aortic Aneurysm
	76, Female	Lung Infarction
Abdominal Pain	28, Male	Intercostal Muscle Ache
	26, Female	Ileus
Unconscious	19, Male	Diarrhea
	36, Female	Brain Hypertension
Stuffy Feeling	84, Female	Pneumonia
	66, Male	Chronic Obstructive Lung Disease(COPD)
	70, Male	Pulmonic Failure
	73, Male	Heart Failure
	21, Female	Anemia

For Example: A case of a 58 years old, male patient
 58 year old male. Early on a cold winter Monday morning, on his way to work, he suddenly put his hand on his chest and fell painfully.

Case: Myocardial Infarction

- Eyes are normal
- Normal heart sounds
- Futhermore: tachycardia
- Normal blood pressure
- Normal abdominal sounds
- Note: Low pulse pressure
- Breathing is slightly increased
- ECG shows ischemic changes

When you hear "chest pain," myocardial infarction, dissecting aortic aneurysm, and pulmonary infarction must come to my mind. In myocardial infarction, seizures are likely to be induced when suddenly active or when exposed to cold stimuli. It is important to search for risk factors such as age, history of hypertension, and environment. By the way, it should be remembered that about 30 to 50% of people do not complain of chest pain even if they have myocardial infarction.

Point

MODE1

12 patient scenario training modes

- Typical complaints and symptoms of patients encountered in the medical field are divided into four categories so that students can study in a comprehensive and well-balanced manner.
- There is always one normal case included in the list of cases, so that students can understand each pathology more clearly by comparing it with the normal case.

Point

MODE2

Patient Case Editor

- Different pathologies can be combined to create own patient scenarios
- Newly created patient scenarios can be saved & accessed anytime.

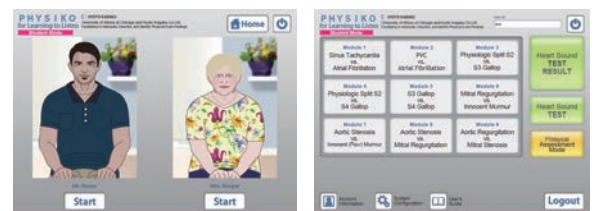
Learning to listen mode

9 Modules challenging students to compare often-mixed-up cardiac cases to facilitate an even deeper understanding of case specific characteristics.

Point

- Designed for medical students to deepen their knowledge of cardiac abnormalities by teaching them to anticipate, describe and identify the findings in each module.
- Students' performance and test results are recorded and can be tracked to show development over time.
- Instructors can track and see results of all students - students can observe their own records.

Physiko +

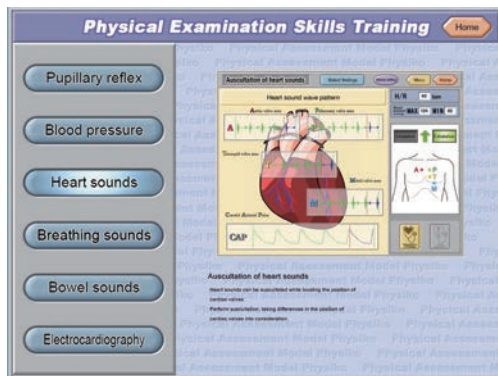


9 Modules		
Heart Rhythms	Module 1	Sinus Tachycardia vs. Atrial Fibrillation
	Module 2	PVC vs. Atrial Fibrillation
Heart Sound	Module 3	Physiologic Split S2 vs. S3 Gallop
	Module 4	Physiologic Split S2 vs. S4 Gallop
	Module 5	S3 Gallop vs. S4 Gallop
Heart Murmurs	Module 6	Mitral regurgitation vs. Flow Murmur
	Module 7	Aortic Stenosis vs. Flow Murmur
	Module 8	Aortic Stenosis vs. Mitral Regurgitation
	Module 9	Aortic Regurgitation vs. Mitral Stenosis

Collaboration with: University of Illinois at Chicago

Practical and technical skills that can be taught with PHYSIKO

PHYSIKO's 4 Modes

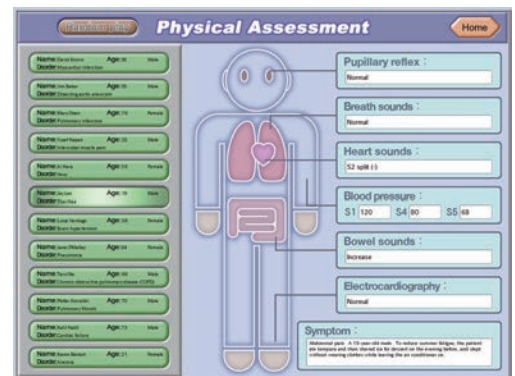


Skills Training

Individual assessment skills training

Depending on each examination procedure, you can repeatedly train indispensable evaluation methods and points while considering the case.

1

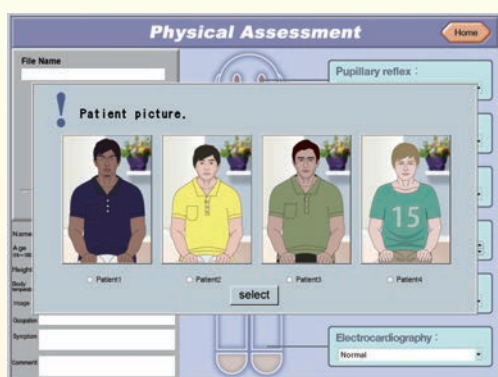


Mode 1

Scenario Training Mode with 12 pre-installed patients

We have carefully selected 12 different patient scenarios often met in the medical field and incorporated their individual representative complaints. Additionally, this mode covers important learning points that allow you to learn to properly judge the probability of major diseases that should not be overlooked.

2

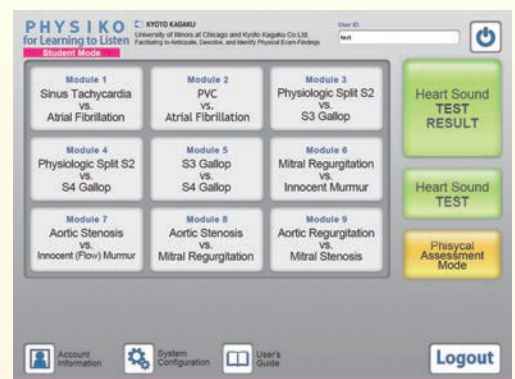


Mode 2

Patient Case Editor

Users can create new simulated patients by selecting from a large variety of built-in options. Not only can these new simulated patients be created from over 44 different medical conditions, but also from different genders, ethnicities and age groups.

3



Physiko +

Learning to Listen

9 Modules challenging students to compare often-mixed-up cardiac cases to facilitate an even deeper understanding of case specific characteristics.

4

Product Supervision

Toyoaki Yamauchi, MD, ND, PhD Professor
Department of Nursing Graduate School of Medicine Nagoya University

Customers



General Hospital

Medical School

A great companion to learn and teach physical assessment skills required in various professions

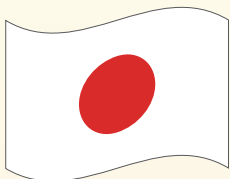
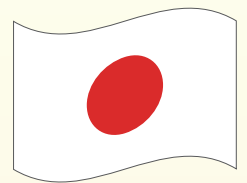
Nursing School

User's Experience



Physiko is an ideal simulator for physical assessment, and also **very easy to set up** in comparison with other high fidelity simulators.

Physiko is **very useful educational product for new medical staff** such as nurses and care workers in hospitals.



We are educating **the basics of physical assessment** with Physiko from early stages in medical education. (Physiko is used in almost all schools of medicine in Japan.) By repeatedly listening to heart sounds that are easy to be mistaken, it becomes possible for the students to distinguish them.

There are competitions held between nursing schools in China. At these events Physiko is being used since **the lung sounds and heart sounds in Physiko are from real patients** and are very educational.



Physiko Plus is an excellent option **for fundamental skills training of medical students:** The realistic auscultation training of lung and heart sounds, the palpation of pulse, the ECG feature as well as the blood pressure feature but also the overall possibilities of physical assessment simulations make up a great trainer for undergraduate students.

Set Includes

Adult Whole Body Model	1
Terminal box	1
Laptop PC	1
Sphygmomanometer unit	1
Set of clothes	1
Wired Microphone	1
Foot switch for ECG	1
Instruction manual	1

Size	Approx.155 cm
Weight	Approx.24kg
Power Consumption	70W
Materials	Soft resin, Hard resin Latex Free
Power Consumption	AC100-240V 50/60Hz



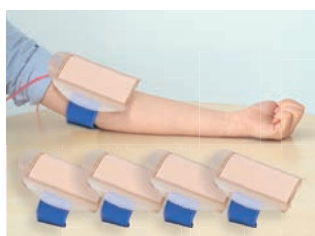
Optional Parts



11354-299-01
Plastic Wig



MW1
Pitting Edema Simulator



MW50
Strap-on Venipuncture Trainer



MW55
Catheterization Simulator
Strap-on (pair)

Related Products



MW25
Patient Care Simulator "Yaye"



MW26
Basic Patient Simulator "Keiko"



MW10
Cardiology Patient Simulator "K"



MW28
Lung Sound Auscultation
Trainer "LSAT" ver.2

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