PRODUCTS CATALOG
simulators and ultrasound phantoms

Kyoto Kagaku America Inc.
Kyoto Kagaku Co., Ltd. was founded in post-war Japan in 1948. This company originated from Shimadzu Corporation, founded by Genzo Shimadzu Sr. in 1875 of the Meiji Period (1868-1912).

Kyoto Kagaku, formerly known as “the specimens division of Shimadzu”, developed in the midst of Japan’s modernization period. The company grew with the primary principle of making knowledge visible and tangible and has been creating unique models and specimens for scientific education. In 1930, we succeeded in creating our first manikin made out of synthetic materials. Our products have since become accepted worldwide, contributing to the advancement of education, academia and industrial research.

Today, our activities are widely involved in the field of education for medical and healthcare professionals. Our customers range from nurses and caregivers, physicians and surgeons, radiographers and sonographers, patients and students, to residents and doctors in practice. In order to contribute to medical education for not only the present but our future generations, Kyoto Kagaku will continue to pursue innovation and hold high standards for our products.
Obstetric Examination Simulator is a true-to-life representation of a 39-40 week pregnancy torso, that allows training in fundamental examination skills for prenatal checkup including palpation, fetal heart auscultation, and abdominal measurement.

**Features**
1. Soft and elastic tissue material that provides true-to-life sensation of palpation
2. Anatomically correct pelvis and fetus
3. A variety of fetal position, orientation and lie with one fetal unit
4. Authentic fetal heart sounds recorded from a real fetus

**Training Skills**

**Auscultation**
- Sounds recorded by a Doppler stethoscope
  - Umbilical blood flow
  - Umbilical blood flow and fetal heart sounds (posterior and anterior)
  - Fetal heart sounds
  *Auscultation using a Doppler stethoscope is not possible.
- Sounds recorded through a conventional stethoscope

**Palpation**
- Leopold’s maneuvers
- CPD assessment (Seitz method)

**Measurement**
- Maternal abdominal girth
- Fundal height
- External pelvimetry

**Sounds recorded by a Doppler monitor and a conventional stethoscope are prepared for training. Sounds are controlled wirelessly by the remote controller, including selection of sounds, volume and heart rate setting as well as switching between internal and external speakers.**

**Remote control**
- Five variations of sounds
  - Sounds recorded by a conventional stethoscope
    - Fetal heart sounds
  - Sounds recorded by a Doppler stethoscope
    - Fetal heart sounds
    - Umbilical blood flow
    - Umbilical blood flow with fetal heart sounds (posterior and anterior)
    *Auscultation using a Doppler stethoscope is not possible.
- Volume control
- Control of fetal heart rate (60-180)
- Switching between internal and external speakers

*A pinaxed stethoscope and conventional stethoscope are not included.*
**Palpation**
(Leopold's maneuvers, CPD assessment)

Anatomically correct landmarks of pelvis and the fetus. The innovative tissue material provides realistic tactile feeling. The fetal unit allows various fetal lie, presentation and position and offers training opportunity of CPD assessment with Seitz method.

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**Leopold's maneuvers**
Palpate parts of the fetus such as head, buttocks and the trunk through the steps from the first to the fourth maneuvers to assess fetal lie, presentation and position as well as degree of fetal descent.

**CPD assessment (Seitz method)**
Height of fetal head against the pubic symphysis can be changed by rotating the fetal unit to prepare different scenario for CPD assessment (Seitz method).

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**Measurement**
(maternal abdominal girth, fundal height, external pelvimetry)

Maternal body measurement to estimate fetal weight, development and change in the volume of amniotic fluid can be performed on the manikin. Anatomically correct landmarks include the pubic symphysis, the navel, the xiphoid process, the iliac crest and the greater trochanters.

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**Specifications**:

<table>
<thead>
<tr>
<th>Set Includes:</th>
<th>Manikin Size:</th>
<th>Power:</th>
<th>Replacement parts:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 pregnancy torso</td>
<td>Size: W30 x D 60 x H30 cm</td>
<td>AC100-240V (main unit)</td>
<td>(11414-000) Skin cover for MW34</td>
</tr>
<tr>
<td>1 AC adaptor</td>
<td>Weight: 11.2 kg</td>
<td>Power Consumption: 1W</td>
<td></td>
</tr>
<tr>
<td>1 remote controller</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 talcum powder</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 instruction manual</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Measuring instruments are not included.
## Obstetric Training Simulator -complete set-

Comprehensive training set with the platform of the maternal body for skills training in pelvic vaginal examination during labor and delivery assistance.

### Features

<table>
<thead>
<tr>
<th>For all training skills</th>
<th>Cervical examination</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Genital area made of innovative material that excels in elasticity, durability and resilience offers repetitive training opportunity.</td>
<td>• Interchangeable five stages of cervical dilation module can be installed with a single action. Descent of the fetal head can also be set.</td>
</tr>
<tr>
<td></td>
<td>• Anatomically correct landmarks including the ischial spine and the public symphysis</td>
</tr>
<tr>
<td></td>
<td>• Anterior fontanelle to determine the fetal position.</td>
</tr>
<tr>
<td></td>
<td>• Repetitive suture training for the first-degree perineal tear.</td>
</tr>
<tr>
<td><strong>Delivery assistance</strong></td>
<td>* Suturing instruments are not included.</td>
</tr>
<tr>
<td>• Anatomically correct vaginal canal, inchiial spine, pubic symphysis and coccyx that facilitate training with anatomical understanding.</td>
<td></td>
</tr>
<tr>
<td>• Elastic external genitalia, realistic shape of vaginal canal and the holding handle for the maternal body facilitate simulating a smooth delivery.</td>
<td></td>
</tr>
</tbody>
</table>
Training Skills

Cervical examination
- Determination of station using landmarks of the ischial spine and the pubic joint to assess the descent of the body
- Assessment of cervical dilation
- Speculum examination
- Procedures of observation and cervical cytology
- Procedures of urine catheterization

Delivery assistance

- Delivery assistance for different delivery positions (dorsal, all-fours)
- Perineal protection
- Delivery of fetus (forceps delivery, vacuum extraction)
- Clamping, tying and cutting of the umbilical cord
- Delivery of placenta
- Insertion of a urine catheter

Perineorrhaphy (perineal repair)

- Perineorrhaphy
  - Single interrupted suture
  - Vertical mattress suture

Specifications:

<table>
<thead>
<tr>
<th>Common Components:</th>
<th>Parts for pelvic examination</th>
<th>Parts for Delivery Assistance</th>
<th>Parts for Perineorrhaphy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 maternal body</td>
<td>1 vagina unit</td>
<td>1 placenta</td>
<td>1 genitalia unit (for perineorrhaphy)</td>
</tr>
<tr>
<td>1 genitalia unit (for pelvic examination and delivery assistance)</td>
<td>1 set of cervical dilation module (5 variations)</td>
<td>3 umbilical cords for omphalotomy</td>
<td></td>
</tr>
<tr>
<td>1 talcum powder</td>
<td>1 holder for the cervical dilation module</td>
<td>1 vat</td>
<td></td>
</tr>
<tr>
<td>3 lubricant (150ml)</td>
<td></td>
<td>5 velamen sheets</td>
<td></td>
</tr>
<tr>
<td>1 instruction manual</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
External genitalia made of the new material and anatomically correct vaginal canal provides true-to-life hands-on training in cervical examination to determine Bishop score from the final stage of pregnancy to the first stage of the labor.

Features
1. Genital area made of innovative material that excel in elasticity, durability and resilience offers repetitive training opportunity.
2. Interchangeable five stages of cervical dilation module can be installed with a single action. Descent of the fetal head can also be set.
3. Anatomically correct landmarks including the ischial spine and the pubic symphysis
4. Posterior fontanelle to determine the fetal position

Training Skills
- Cervical examination
  - Determination of bishop score (cervix score) using landmarks of the ischial spines and the pubic symphysis
  - Assessment of cervical dilation
  - Procedures of urine catheterization
  - Procedures cervical cytology
- Speculum examination

Key Features

**Eternal genitalia that excels in elasticity, resilience and durability**

**Ischial spines and the pubic symphysis to determine fetal position**

Station zero, the line that connect ischial spines can be recognized.

Cervical dilation module can be attached by a single action.

Descent of the fetus can be set by the lever on the holder. (from -3 to +6)

Specifications :

<table>
<thead>
<tr>
<th>Set Includes:</th>
<th>Manikin Size:</th>
<th>Replacement Parts:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 maternal body</td>
<td>W74 x D44 x H33.5 cm</td>
<td>(11415-010) 1 holder for the cervical dilation module</td>
</tr>
<tr>
<td>1 genitalia unit</td>
<td></td>
<td>(11415-020) 3 lubricant (150 ml)</td>
</tr>
<tr>
<td>1 cervix unit</td>
<td></td>
<td>(11415-030) 1 talcum powder</td>
</tr>
<tr>
<td>1 set of cervical dilation module (5 variations)</td>
<td></td>
<td>(11415-030) 1 genitalia unit (for pelvic examination and delivery assistance)</td>
</tr>
</tbody>
</table>
MW36 Vaginal Delivery Assistance Simulator

Elastic external genitalia and realistic shape of vaginal canal realize a highly realistic training sessions on the flow of skills from the perineal protection to the delivery of placenta.

Features

1. Genital area made of innovative material that excels in elasticity, durability and resilience offers repetitive training opportunity.
2. Anatomically correct vaginal canel, ischial spine and pubic joint that facilitate training with anatomical understanding.
3. Elastic eternal genitalia, realistic shape of vaginal canal and the holding handle for the maternal body facilitate simulating a smooth delivery.

Training Skills

- Delivery assistance for different delivery positions (dosal, all-fours)
- Perineal protection
- Delivery of fetus (forceps delivery, vacuum extraction)
- Clamping, tying and cutting of the umbilical cord
- Delivery of placenta
- Inspection of velamen

Key Features

Realistic delivery of a baby with an elastic and resilient external genitalia

Skills training associated with anatomical understanding

Position of the fetus against the pelvis can be observed under direct vision during the delivery.

Two possible birth positions

Dorsal position
All-fours position

Specifications:

<table>
<thead>
<tr>
<th>Set Includes:</th>
<th>Manikin Size: W74 x D44 x H33.5 cm</th>
<th>Replacement Parts:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 maternal body</td>
<td>1 talcum powder</td>
<td>(11415-030) 1 genitalia unit</td>
</tr>
<tr>
<td>1 genitalia unit (for pelvic examination and delivery assistance)</td>
<td>5 velamen sheets</td>
<td>(11416-010) 1 fetus</td>
</tr>
<tr>
<td>1 fetus</td>
<td>10 umbilical cords (150 ml)</td>
<td>(11416-020) 1 placenta</td>
</tr>
<tr>
<td>1 placenta</td>
<td>(11416-040) 5 velamen sheets</td>
<td>(11416-030) 10 umbilical codes</td>
</tr>
<tr>
<td>3 umbilical cords</td>
<td>1 instruction manual</td>
<td>(11416-020) 3 lubricant (150 ml)</td>
</tr>
</tbody>
</table>

Replacement Parts:

- (11417-020) 1 genitalia unit (perineorrhaphy) *skin included
Perineorrhaphy Simulator

Represents a perineal tear that occurs in a vaginal delivery. The innovative tissue material allows repetitive trainings.

Features
1. Suture training for the first-degree perineal tear
2. Genita area that excels in elasticity, durability and resilience for multiple training opportunity.
3. Optional genitalia unit for training with the materbal body.

Training Skills
- Perineorrhaphy (perineal repair)
  - Single interrupted suture
  - Vertical mattress suture

Specifications:
<table>
<thead>
<tr>
<th>Set Includes:</th>
<th>Manikin Size:</th>
<th>Replacement Parts:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 genitalia skin</td>
<td>W16 x D23 x H20.5 cm</td>
<td>(11417-010) 2 genitalia skin (perineorrhaphy)</td>
</tr>
<tr>
<td>1 supporting holder</td>
<td></td>
<td>Optional Parts:</td>
</tr>
<tr>
<td>1 talcum powder</td>
<td></td>
<td>(11417-020) Genitalia unit (frame, skin)</td>
</tr>
<tr>
<td>1 instruction manual</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
MW38 Uterine Involution Assessment Simulator

Pueperal lower torso with anatomically correct landmarks and elastic abdominal wall facilitates realistic training in assessment of uterine involution in early puerperium.

Features
1. Anatomically correct landmarks for palpation including the pubic symphysis, the umbilicus, ribs and the uterus
2. Soft and elastic abdominal wall that permits highly realistic palpation to assess the degree of uterine involution and to measure the fundal height
3. Four variation of uterine inserts that are interchangeable

Training Skills
- Assessment of uterus in early puerperium
- Fundal height measurement by a measure tape palpation of uterine fundus
- Perineal cleansing and assessment
- Demonstration of postpartum massage
- Assessment of anal prolapse

Specifications:

<table>
<thead>
<tr>
<th>Set Includes:</th>
<th>Manikin Size:</th>
<th>Replacement Parts:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 puerperal lower torso</td>
<td>W28 x D42 x H26 cm</td>
<td>(11418-010) 1 skin cover (for uterine involution assessment)</td>
</tr>
<tr>
<td>1 set of uterine module (4 variations)</td>
<td>1 instruction manual</td>
<td>(11418-020) 1 set of uterine module (4 variations)</td>
</tr>
</tbody>
</table>

Palpation of uterine fundus

Measurement of fundal height

Variation of uterine (four)
NCPR Simulator Plus is a full body newborn manikin that facilitates training in basic skills in neonatal care. The simulator is also suitable for NCPR training course.

**Features**

1. Full body newborn manikin with ribs, bronchi, lungs, esophagus and umbilical cord
2. Airway management training with confirmation of bilateral/unilateral ventilation.
3. Soft and realistic umbilical cord with internal anatomy for an array of skills including venous and arterial line placement as well as blood sample collection
4. Feeding tube insertion and confirmation of the tube placement
5. Chest compression

**Recommended Devices**

- Feeding tube: 5 fr.
- Suction catheter: 5 fr.
- Tracheal tube: 3.0mm ID
- Umbilical catheter: 5fr., 30cm
- Laryngoscope: #0
- BVM: 000

**Training Skills**

- Basic neonatal care
  - Changing body position, hygiene
  - Palpation of the anterior fontanel
  - Clamping, tying and cutting of the umbilical cord
  - Umbilical catheterization and care
  - Tube feeding (nasal and oral)
  - *Tube placement can be confirmed by auscultation
  - Suction (nasal, oral)
  - *The product is not designed for bathing with real water

- Reanimation
  - Chest compression
  - Endotracheal intubation
  - BVM ventilation

**Specifications**

<table>
<thead>
<tr>
<th>Set Includes:</th>
<th>Manikin Size:</th>
<th>Replacement Parts:</th>
<th>Replacement Parts (for MW21 only):</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 newborn manikin</td>
<td>50 cm</td>
<td>(11400-010) 1 mask for MW 21, MW 32</td>
<td>(11300-040) 1 right arm skin</td>
</tr>
<tr>
<td>1 lubricant</td>
<td></td>
<td>(11400-020) 1 chest skin for MW21, MW32</td>
<td>(11400-050) 1 right leg skin</td>
</tr>
<tr>
<td>1 instruction manual</td>
<td></td>
<td>(11400-030) 4 umbilical codes for MW21, MW32</td>
<td>(11400-060) 4 vein tube for right arm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(11229-050) 1 lubricant</td>
<td>(11400-070) 4 vein tube for right leg</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(11388-400) 10 simulated blood sticks (swab type)</td>
</tr>
</tbody>
</table>

*for venous access training, MW21 NCPR Simulator Plus is available.*
NCPR Simulator Plus facilitates training in a variety of clinical skills required in NICU. The simulator is also suitable for neonatal CPR training course.

Features

1. Training features of PI catheter insertion from right leg and arm are added to MW32 NCPR Simulator

Training Skills

1. In additions to the training features of NCPR Simulator, NCPR Simulator Plus allows following skills trainings.
   - IV acces with transilluminator guidance Basilic vein, dorsal vein (right arm/hand), Saphenous vein, popliteal vein (right leg)

Specifications:

<table>
<thead>
<tr>
<th>Set Includes:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 newborn manikin</td>
<td></td>
</tr>
<tr>
<td>1 lubricant</td>
<td></td>
</tr>
<tr>
<td>1 instruction manual</td>
<td></td>
</tr>
</tbody>
</table>

* Instruments are not included.

ELBW Simulator offers training opportunity for fundamental skills in caring an extremely low birth weight infant.

Features

1. A male infant of 26-29 week gestational, 900g weight
2. Resuscitation training including chest compression and endotracheal intubation
3. Incorporated anatomies such as bronchi, esophagus and stomach allows for training in basic skills
4. Articulated head and neck

Specifications:

<table>
<thead>
<tr>
<th>Set Includes:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 ELBW manikin</td>
<td>35 cm</td>
</tr>
<tr>
<td>1 lubricant</td>
<td>(11413-010) 1 mask for MW33</td>
</tr>
<tr>
<td>1 instruction manual</td>
<td>(11229-050) 1 lubricant</td>
</tr>
</tbody>
</table>

* Instruments are not included.
Newborn Vital Signs Examination Simulator

Newborn Vital Signs Examination Simulator is an effective tool for nurses to learn how to take vital signs of a newborn child.

Features
1. Arterial pulse in wrists, neck and temples
2. Rectal temperature can be measured.
3. Heart sounds are recorded from actual patients and synchronized with arterial pulses.
4. All vital signs can be controlled with the control unit.

Training Skills
- Vital signs examination
  - Heart sounds
  - Respiration
  - Pulses: superficial temporal, carotid and radial arteries (bilateral)
  - Body temperature (rectal thermometry)

Specifications:
Set Includes: 1 newborn manikin 50cm
1 control box
1 thermometer
1 baby clothes
1 storage case

* A stethoscope are not included.

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Newborn Bathing and Nursery Care Model

Multipurpose newborn for skills training.
This training model is a life-size seamless manikin of a 0-4-week-old infant, which has the weight and balance of the newborn as well as palpable anterior and posterior fontanel.

Features
1. Life-like, life-size newborn model
2. Non-rigid neck flexibility
3. The fonticulus anterior and posterior are palpable
4. The limbs can bend and stretch.
5. Waterproof: the model has a seamless, one-piece structure
6. The umbilical cord is removable.

Training Skills
- Bathing
- Umbilical cord care
- Bottle-feeding
- Ear and nose care
- Diaper and clothing changing
- Physical measurement

Specifications:
Set Includes: 1 newborn manikin 50cm
1 umbilical cord
1 feeding bottle
1 baby clothes
1 cloth cover

* A baby bottle is not included.
Day-to-day, long-term care for pediatric patients

Pediatric Patient Care Simulator offers training of day-to-day pediatric patient care for healthcare professionals, teachers and others who need to acquire such skills.

Features

1. Life-like model of a 6-year-old
2. The simulator is able to sit in an upright position without support.
3. Oral, nasal and endotracheal airway suction
4. Both female and male genitalia are included for catheterization training.

Training Skills

- Positioning
- Patient handling
- Airway suction:
  - oral, nasal or through a tracheostomy opening
- Percutaneous Endoscopic Gastrostomy (PEG) care
- Feeding tube management
- Male & female catheterization

Product Supervision
Medical Association of Osaka Prefecture
Pediatric Medical Care Exploratory Committee

Specifications :

<table>
<thead>
<tr>
<th>Set Includes</th>
<th>Manikin Size:</th>
<th>Replacement Parts:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 pediatric manikin</td>
<td>125 cm</td>
<td>(11355-030)</td>
</tr>
<tr>
<td>1 head &amp; neck anatomy plate</td>
<td></td>
<td>1 valve for catheterization</td>
</tr>
<tr>
<td>1 male &amp; female genitalia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 syringe</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 irrigation bag</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 strap-on IV venipuncture trainer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 gym uniform</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 set of catheter (sample)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Instruments are not included.
With its various patient settings and a range of training features, “Yae” brings uninterrupted training flow in community care and in-hospital procedures.

Featuring more than 40 training skills, “Yae” serves an array of trainees from students to experienced nurses.

Training Skills

- Nasogastric tube feeding
- Airway management, Intubation assistance
- Oral and denture care, Oxygen mask, Stomach pumping
- Tracheotomy care and management
- TPN care
- Assessment of chest and abdomen (observation, palpation and percussion)
- Intravenous injection and infusion, IV route care (left median vein)
- Stoma care
- Urinary catheterization, Enema, Vaginal douche, Digital disimpaction and Suppository insertion
- Foot bath
- Hair care (shampooing, brushing and blowing)
- Intramuscular and SC injection (shoulders)
- Intramuscular and SC injection (hips)
- IV route care (dorsal vein of left hand)

**Feeding**
- Tube Feeding (oral/nasal)

**Elimination**
- Enema
- Urinary catheterization
- Stoma care
- Bowel irrigation
- Bedpan practice
- TPN care

**Drug Administration**
- Suppository
- Subcutaneous injection
- Intramuscular injection
- Intravenous injection and infusion

**Assessment**
- Assessment of chest and abdomen
- Procedure of vital signs taking

**Pain Management**
- Fomentation

**Others**
- Stomach pumping
- Vaginal douche
- Postmortem care

**Respiratory Care**
- Oxygen inhalation
- Airway suction
- Postural drainage
- Tracheotomy care

**Respiratory Care**
- Intubation assistance
- Chest compression
- Airway management
**Features**

**ASSESSMENT OF CHEST AND ABDOMEN**

Soft and elastic abdomen allows deep palpation

- Thoracoabdominal inspection, palpation and percussion
- Anatomical landmarks and soft tissue offer realistic training

**APPEARANCE VARIETY**

Patient variations with different age, sex and personality

Variations in face masks, wigs and external genitals offers wide possibilities of simulation settings and realistic training.

**INFUSION CARE AND MANAGEMENT**

Considerate IV route training

- Left median vein: IV injection, infusion, securing cannula with tapes
- Left hand dorsal vein: Securing cannula with tapes, caring during infusion

**INTUBATION ASSISTANCE**

Airway management and CPR

- Chest compression

Training of intubation assistance can be performed in setting of critical care such as perioperative period and in ICU.

- Preparation of the equipment
- Oral intubation (laryngoscope and video laryngoscope)
- Confirmation of successful ventilation by:
  - Observation of thoracic movement (lung expansion)
  - Auscultation of the chest
- Securing the tube in place with tape
- Chest compression

**Specifications:**

<table>
<thead>
<tr>
<th>Set Includes:</th>
<th>Replacement Parts:</th>
</tr>
</thead>
</table>
| 1 manikin                                         | (11404-020) face mask (young)  
| 1 denture                                         | (11251-330) simulated feces set  
| 1 wig (black)                                     | (11404-040) wig (young)   
| 1 face mask (young)                               | (11251-320) simulated suppository set  
| 1 face mask (young)                               | (11404-060) female genitalia (catheterization, enema)  
| 1 lubricant (for airway suction etc.)             | (11251-040) 2 thigh injection pads  
| 1 irrigation bag                                  | (11251-010) simulated feces set  
| 1 drainage pump (rectum)                          | (11404-080) female genitalia (suppository insertion, digital disimpaction)  
| 1 drainage pump (rectum)                          | (11229-050) 2 shoulder injection pads  
| 2 thigh injection pads                            | (11251-310) female genitalia  
| 2 shoulder injection pads                         | (11404-050) 4 injection pad (median vein)  
| 2 hip IM pads                                      | (11251-030) female genitalia (suppository insertion, digital disimpaction)  
| 1 female genitalia (catheterization)              | (11251-350) female genitalia (suppository insertion, digital disimpaction)  
| 1 instruction manual                               | (11381-800) lubricant (for catheterization)  
| 1 male genitalia (catheterization)                | (11404-070) male genitalia  
| 1 pajama                                           | (11404-010) face mask (elderly)  
| 1 suppository insertion/digital disimpaction       | (11404-030) wig (elderly)  

| Manikin Size: 152cm, 17kg                         | Optional Parts: 
|                                                  | (11404-070) male genitalia  
|                                                  | (11404-010) face mask (elderly)  
|                                                  | (11404-030) wig (elderly)  

* The elderly face mask and the gray wig are optional parts.

* Instruments are not included.
Simple but high-quality, KEIKO reaches a wider range of trainees, including home-care nurses and caregivers.

Keiko provides quality training for trainees and professionals who support long term care of patients in community and hospital.

**Training Skills**

- Nasogastric tube insertion
- Airway suction tube handling
- Oral and denture care
- Airway suction
- Tracheotomy care and management
- Stoma care
- Perineal care, Enema, Suppository insertion, Urinal catheter placement
- Foot bath
- Hand bath
- PEG care
- Explanation on central venous port

---

**Feeding**
- Tube Feeding (oral/nasal)

**Elimination**
- Enema
- Urinary catheterization
- Stoma care
- Bedpan practice

**Hygiene**
- Oral care
- Bed bathing
- Partial bathing
- Change of clothes
- Perineal care
- Hair care*
- Grooming and appearance

**Respiratory Care**
- Oxygen inhalation
- Airway suction
- Postural drainage
- Tracheotomy care

**Wound Care**
- Pressure sore care

**Drug Administration**
- Suppository

**Exercise**
- Body positioning
- Wheelchair transfer

**Assessment**
- Procedure of vital signs taking

**Pain Management**
- Fomentation

**Others**
- Vaginal douche
- Postmortem care

* optional
Features

**BASIC PATIENT CARE**

**Oral Care**
- Oral care on the bed and wheel chair
- Special care for the patient with feeding tube
- Brushing support
- Oral massage
- Denture care

**Pressure sores care**
- Understanding the levels of pressure sores
- Support to the patients having pressure sores
- (Stage 2) Scapula
- (Stage 3) Great trochanter
- (Stage 4) Sacrum bone
- (Unable to judge) Heel

**Perineal care**
- Anatomically correct genitals for detailed care

**Body positioning and transfer**
- Communication and appropriate handling to change the body positioning
- Changing body positioning
- Supporting to transfer the patient to a wheelchair

**Specifications :**

<table>
<thead>
<tr>
<th>Set Includes:</th>
<th>Manikin Size:</th>
<th>Replacement Parts:</th>
<th>Optional parts:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 manikin</td>
<td>149 cm, 15 kg</td>
<td>(11405-010) female genitalia</td>
<td>(12746-020) tracheotomy tube</td>
</tr>
<tr>
<td>1 denture</td>
<td></td>
<td>(11405-020) male genitalia</td>
<td>(11251-320) simulated suppository set</td>
</tr>
<tr>
<td>1 wig</td>
<td></td>
<td>(11251-020) denture</td>
<td></td>
</tr>
<tr>
<td>1 oral cover for suctioning</td>
<td></td>
<td>(11229-060) oral cover for suctioning</td>
<td>(11251-330) simulated feces set</td>
</tr>
<tr>
<td>1 female genitalia</td>
<td></td>
<td></td>
<td>(11405-030) pajama</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(11404-030) washable wig (elderly)</td>
</tr>
</tbody>
</table>
MW22 Patient Care Simulator "Cherry"

Basic patient care manikin for introductory nursing
A basic full-body, nursing manikin that offers training for day-to-day patient care for healthcare professionals.

Features
1. Able to sit in upright position without support
2. Seamless limbs up to fingers and toes
3. TPN and IV routes to simulate patients with catheter lines
4. True-to-life articulation for patient handling
5. Optional parts include replacement male and female genitalia parts that can be used with water.

Training Skills

- Intramuscular injection (limbs)
- Pressure ulcer care (scapula, sacrum, greater trochanter, heel)
- Oral and denture care
- Stomach pumping
- Nasogastric tube placement
- Oxygen/nasal cannula placement
- Body positioning
- Patient handling
- Passive exercise
- Change of clothes
- Intravenous injection (forearm)
- Urinal catheterization
- Enema
- Suppository insertion
- Perineal care

Specifications:

<table>
<thead>
<tr>
<th>Replacement Parts:</th>
<th>Manikin Size:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(11401-010) Insulin injection pad for MW22 (a set of 6)</td>
<td>157 cm</td>
</tr>
<tr>
<td>(11401-020) Gluteal IM pads for MW22 (a set of 4)</td>
<td></td>
</tr>
<tr>
<td>(11401-030) Female genitalia unit for MW22</td>
<td></td>
</tr>
<tr>
<td>(11401-040) Male genitalia unit for MW22</td>
<td></td>
</tr>
<tr>
<td>(11401-050) Shoulder IM pads for MW22 (a pair)</td>
<td></td>
</tr>
<tr>
<td>(11401-060) Thigh IM pads for MW22</td>
<td></td>
</tr>
<tr>
<td>(11401-070) Wound care pad for MW22</td>
<td></td>
</tr>
<tr>
<td>(11401-080) Dentures (a set of upper &amp; lower) for MW22, MW26</td>
<td></td>
</tr>
<tr>
<td>(11401-090) Stomach for MW22</td>
<td></td>
</tr>
</tbody>
</table>

Accessories:

- IV insertion and care
- Subcutaneous injection
- Wound care
- Oxygen/nasal cannula
- Dressing wrap
High quality models for catheterization training

High quality training in male urethral catheterization, perineal care and enema. Soft and anatomically correct genitals and realistic feeling of catheter insertion. Organ unit can be used independently without the lumbar torso, allowing training with SPs or full body manikins in clinical settings. The modular system realizes easy set-up, cleaning and maintenance, saving time and cost for training providers.

Features

1. Soft genitals allow realistic cleansing and other procedures such as holding the penis perpendicular to body.
2. Successful catheter insertion is confirmed by urine (water) outflow.
3. Manual bladder compression is possible.
4. Enema training in lateral position

Training Skills

- Intermittent catheterization
- Indwelling catheterization
- Perineal care
- Enema
- Localization of urethral meatus
- Localization of urethral meatus
- Cleansing
- Catheter insertion and placement
- Withdrawal of catheter
- Manual bladder compression

MW2A

Male Catheterization/Enema Simulator

MW2B

Female Catheterization/Enema Simulator

MW2C

11381-199-B

Genital unit and accessories for MW2A is available as MW2C.

MW2D

11381-299-B

Genital unit and accessories for MW2B is available as MW2D.

Specifications (each):

<table>
<thead>
<tr>
<th>Set Includes:</th>
<th>Manikin Size:</th>
<th>Replacement Parts:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 lower torso manikin</td>
<td>W34 x D33 x H24 cm</td>
<td>(11381-300) 6 replacement valves for MW2A/B</td>
</tr>
<tr>
<td>1 genital organ unit</td>
<td></td>
<td>(11381-610) 1 replacement female skin</td>
</tr>
<tr>
<td>3 valves (one is incorporated in the assembled unit)</td>
<td></td>
<td>(11381-700) 2 replacement female meatus</td>
</tr>
<tr>
<td>1 irrigation bottle</td>
<td></td>
<td>(11381-410) 1 replacement male skin</td>
</tr>
<tr>
<td>1 lubricant</td>
<td></td>
<td>(11381-510) 2 replacement male meatus</td>
</tr>
<tr>
<td>1 storage case</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 instruction manual</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Catheters are not included.
Tube feeding training with anatomical understanding using real liquid food

Tube Feeding Simulator is an effective training tool for caregivers and healthcare professionals to acquire skills of enteral tube nutrition. The manikin has three routes for EN tubes and allows training with real liquid foods.

Features

1. Oral/nasal feeding tube insertion and PEG tube setting are possible.
2. Tube placement can be confirmed by auscultation.
3. The transparent structure allows direct observation of progress and placement of the tube.
4. The manikin can be set at Fowler’s position.
5. Real liquid foods (formulas) can be administrated.
6. The tube feeding routes panel and the chest sheet facilitate demonstration and anatomical understanding.
7. The neck is flexible to learn appropriate neck/head positioning.

Specifications:

<table>
<thead>
<tr>
<th>Set Includes:</th>
<th>Manikin Size:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 male torso</td>
<td>W65 x D35 x H23 cm</td>
</tr>
<tr>
<td>1 funnel</td>
<td></td>
</tr>
<tr>
<td>1 chest sheet</td>
<td></td>
</tr>
<tr>
<td>1 support base</td>
<td></td>
</tr>
<tr>
<td>1 plastic cup</td>
<td></td>
</tr>
<tr>
<td>1 drain tube</td>
<td></td>
</tr>
<tr>
<td>1 instruction manual</td>
<td></td>
</tr>
<tr>
<td>1 tube feeding routes panel</td>
<td></td>
</tr>
</tbody>
</table>

Training Skills

- Feeding tube insertion and confirmation of the tube placement (NG/OG)
- PEG tube setting and care
- Administration of liquid food (formula)
- Anatomical understanding
- Stomach pumping (lavage)

To facilitate anatomical understanding, the feeding routes panel for demonstration and the chest anatomy to overlay the manikin come with the set. The panel is available separately as MW5.
Airway Suction Trainer

Airway suction training for caregivers and healthcare professionals

A representation of human respiratory organs, designed for temporary airway suction and catheter insertion practice. Effective tool with life-like tactile qualities for training in airway suction for choking patients.

Features

1. Realistic anatomy includes the mouth, tongue, oral and nasal pharynx, epiglottis, trachea and esophagus.
2. Catheterization pathways include oral, nasal or through the tracheostomy opening.
3. Life-size organs facilitate learning proper catheter insertion length.
4. The side window allows the passage of the catheter to be observed.
5. Realistic simulated sputum is sticky to the touch.
6. The trainer is washable and can be easily dismantled for cleaning.

Training Skills

- Temporary airway suction (intraoral and intranasal and endotracheal)

Specifications:

<table>
<thead>
<tr>
<th>Set Includes:</th>
<th>Replacement Parts:</th>
<th>Manikin Size:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 head &amp; neck model with airway anatomy</td>
<td>1 metal tray (11229-020) 1 replacement skin with trachea</td>
<td>W45 x D23 x H15 cm</td>
</tr>
<tr>
<td></td>
<td>1 syringe (11229-070) 1 simulated sputum</td>
<td></td>
</tr>
<tr>
<td>1 bottle of lubricant</td>
<td>1 storage case (11229-040) 2 sample catheters</td>
<td></td>
</tr>
<tr>
<td>2 catheters</td>
<td>1 instruction manual (11229-050) 1 lubricant</td>
<td></td>
</tr>
<tr>
<td>1 bottle of simulated sputum</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
An introduction to oral hygiene and dentistry

The life-like oral cavity and the denture with tooth disease provide oral care training which is close to the clinical practice.

Features

1. Oral Care Simulator Advanced has an anatomically correct oral cavity, trachea, esophagus and replacement dentures.
2. Denture with tooth disease provides training in assessment and care of the oral cavity.
3. The patient conditions and positions can be set easily.
4. This simulator allows for training in realistic oral cleaning procedure using of simulated residue.
5. This simulator provides training using water, and also training of suction.

Training Skills

- Observation of the oral cavity
- Care of the oral mucous membrane
- Brushing
- Removal of coat on tongue
- Cleaning of the oral cavity
- Care for humidity retention
- Replacement and maintenance of the denture
- Massage of oral cavity
- Understanding of airway suction

Oral Anatomy and Tooth Problems

- Spaced arch
- Food residue
- Anodontia
- Stomatitis
- Isolated tooth
- Coated tongue
- Crowding
- Gingival recession
- Root fracture
- Stump of a tooth

Patient Conditions

- Complete denture
- Dental problems
- Toothless
- Intratracheal intubation
- Tracheotomy
- Tube feeding

Patient Positions

- Sitting position
- Half sitting position
- Lateral position

Specifications:

<table>
<thead>
<tr>
<th>Set Includes</th>
<th>Manikin Size:</th>
<th>Replacement Parts:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 head/neck manikin</td>
<td>W30 x D50 x H 32 cm</td>
<td>(11408-020) 1 normal denture</td>
</tr>
<tr>
<td>1 base</td>
<td></td>
<td>(11408-030) 1 denture with tooth disease</td>
</tr>
<tr>
<td>1 normal denture</td>
<td></td>
<td>(11408-010) 1 simulated residue</td>
</tr>
<tr>
<td>1 denture with tooth disease</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 denture case</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 simulated residue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 mirror</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 sponge-tipped swabs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 toothbrush</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 denture brush</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 carrying case</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 instruction manual</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Basic foot care for quality of life of patients

Keeping patients' feet in a healthy condition makes a significant impact on the QOL of patients. Medical Foot Care Simulator provides training for simple trimming of nails and callosities as well as general education on basic foot care.

Features

1. The replaceable nails, corn and callosities provide excellent training opportunities with true-to-life feeling.
2. The foot model helps to demonstrate anatomical landmarks, foot assessment procedures, foot massaging and other day-to-day treatment.

Training Skills

- Trimming and clipping of toe nails (thickened nail, ingrown nail, nail ringworm)
- Trimming and removal of callosities
- Trimming and removal of corns
- Foot assessment (demonstration)

Product Supervision

Takako Egawa
Dean, Professor, Kansai University of Nursing and Health Sciences
Professor Emeritus, Kyoto University

Specifications:

<table>
<thead>
<tr>
<th>Set Includes:</th>
<th>Manikin Size:</th>
<th>Replacement Parts:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 foot model with swivel stand</td>
<td>W21 x D21 x H28 cm</td>
<td>(11273-020) 1 replacement parts set for M66 (toe nail A 20 pcs, toe nail B 20 pcs, callosity 10 pcs and corn 10 pcs)</td>
</tr>
<tr>
<td>20 toe nails A (thickened ingrown nail)</td>
<td></td>
<td>(11273-030) Replacement toe nail A 20 pcs</td>
</tr>
<tr>
<td>20 toe nails B (thickened nail with ringworm)</td>
<td></td>
<td>(11273-040) Replacement toe nail B 20 pcs</td>
</tr>
<tr>
<td>10 callosities</td>
<td></td>
<td>(11273-050) Replacement callosity 10 pcs</td>
</tr>
<tr>
<td>10 corns</td>
<td></td>
<td>(11273-066) Replacement corn 10 pcs</td>
</tr>
<tr>
<td>1 instruction manual</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Instruments are not included.
**Pitting Edema Simulator**

**Five variations of pitting edema examples**

**Features**

1. Grades of the edemas are based on “Mosby’s Guide to Physical Examination (7th ed.).”
2. The models can be attached to the lower thighs of an SP or a training manikin.
3. Pitting edema is classified into 4 levels by the degree of response to pressure and the depth of indentations.
4. The detachable fibula plate facilitates training simulation on the soft bases.

**Training Skills**

- Differentiation of the pitting edema: four different levels and a normal case
- Examination procedures for edemas on the lower thighs

**Specifications**

<table>
<thead>
<tr>
<th>Set Includes</th>
<th>Manikin Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 variations of strap-on pitting edema model 1 piece each</td>
<td>W10 x D23 cm each</td>
</tr>
</tbody>
</table>

**Product Supervision**

Junji Otaki
Professor of Tokyo Medical University
Pressure Sores Care Simulator

Four stages of pressure sores for training

Features
1. The set consists of four types of models that explain each case and four types of sore skin to put on a patient care manikin.
2. The set facilitates both the classroom lecture and the practice according to each stage of the pressure sore.
3. Water color is included in the set.

Training Skills
- Pressure sores care

Specifications:

<table>
<thead>
<tr>
<th>Set Includes</th>
<th>Manikin Size:</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 types of the models for explanation</td>
<td>W38 x D38 cm each</td>
</tr>
<tr>
<td>4 types of the sore skins model</td>
<td></td>
</tr>
<tr>
<td>1 set of water color paints</td>
<td></td>
</tr>
</tbody>
</table>
Hone your senses and skills for bedside cardiology

Cardiology Patient Simulator “K” is a classroom staple for cardiology assessment throughout the world’s educational institutes for over 20 years and the upgraded "K" Ver.2 offers an even more efficient and effective clinical training for cardiology.

Cases: (MODE 1) Comprehensive patient simulation with sounds, pulses, apex beats and ECG

<table>
<thead>
<tr>
<th>No.</th>
<th>Normal heart simulation (12 cases)</th>
<th>No.</th>
<th>Heart disease simulation (14 cases)</th>
<th>No.</th>
<th>Arrhythmia (10 cases)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-01</td>
<td>S2 split (-) HR: 60</td>
<td>B-01</td>
<td>aortic stenosis</td>
<td>C-01</td>
<td>sinus arrhythmia</td>
</tr>
<tr>
<td>A-02</td>
<td>S1 split (+)</td>
<td>B-02</td>
<td>mitral regurgitation</td>
<td>C-02</td>
<td>sinus tachycardia</td>
</tr>
<tr>
<td>A-03</td>
<td>S2 split (+)</td>
<td>B-03</td>
<td>mitral stenosis</td>
<td>C-03</td>
<td>sinus bradycardia</td>
</tr>
<tr>
<td>A-04</td>
<td>S2 wide split</td>
<td>B-04</td>
<td>atrial septal defect</td>
<td>C-04</td>
<td>ventricular premature contraction (1)</td>
</tr>
<tr>
<td>A-05</td>
<td>S3 gallop</td>
<td>B-05</td>
<td>hypertrophic cardiomyopathy</td>
<td>C-05</td>
<td>ventricular premature contraction (2)</td>
</tr>
<tr>
<td>A-06</td>
<td>S4 gallop</td>
<td>B-06</td>
<td>pulmonary stenosis</td>
<td>C-06</td>
<td>ventricular premature contraction (3)</td>
</tr>
<tr>
<td>A-07</td>
<td>pulmonic ejection sound</td>
<td>B-07</td>
<td>pulmonary valve stenosis</td>
<td>C-07</td>
<td>sino-atrial block</td>
</tr>
<tr>
<td>A-08</td>
<td>S3 and S4 gallop</td>
<td>B-08</td>
<td>atrial septal defect</td>
<td>C-08</td>
<td>atrio-ventricular block</td>
</tr>
<tr>
<td>A-09</td>
<td>innocent murmur</td>
<td>B-09</td>
<td>ventricular septal defect</td>
<td>C-09</td>
<td>atrial fibrillation</td>
</tr>
<tr>
<td>A-10</td>
<td>midystolic click sound</td>
<td>B-10</td>
<td>tricuspid regurgitation</td>
<td>C-10</td>
<td>atrial flutter</td>
</tr>
<tr>
<td>A-11</td>
<td>S2 split (-) HR: 72</td>
<td>B-11</td>
<td>acute mitral regurgitation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A-12</td>
<td>S2 split (-) HR: 84</td>
<td>B-12</td>
<td>patent ductus arteriosus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A-13</td>
<td>S3 split</td>
<td>B-13</td>
<td>mitral valvular prolapse</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>B-14</td>
<td>dilated cardiomyopathy</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(MODE 2) Arrhythmia simulation, auscultation training with ECG

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-01</td>
<td>normal sinus R</td>
<td>B-01</td>
<td>atrial flutter</td>
</tr>
<tr>
<td>A-02</td>
<td>sinus tachycardia</td>
<td>B-02</td>
<td>av block</td>
</tr>
<tr>
<td>A-03</td>
<td>sinus arrhythmia</td>
<td>B-03</td>
<td>av block &amp; crbbb</td>
</tr>
<tr>
<td>A-04</td>
<td>atrioventricular</td>
<td>B-04</td>
<td>av block (digital)</td>
</tr>
<tr>
<td>A-05</td>
<td>atrioventricular</td>
<td>B-05</td>
<td>av block (mobitz)</td>
</tr>
<tr>
<td>A-06</td>
<td>atrioventricular</td>
<td>B-06</td>
<td>av block (mobitz)</td>
</tr>
<tr>
<td>A-07</td>
<td>atrioventricular</td>
<td>B-07</td>
<td>crbbb</td>
</tr>
<tr>
<td>A-08</td>
<td>normal sinus R</td>
<td>B-08</td>
<td>crbbb</td>
</tr>
<tr>
<td>A-09</td>
<td>paroxysmal atrial</td>
<td>B-09</td>
<td>crbbb (by ami)</td>
</tr>
<tr>
<td>A-10</td>
<td>atrial tachycardia</td>
<td>B-10</td>
<td>av junc R [sust]</td>
</tr>
<tr>
<td>A-11</td>
<td>atrial fibrillation</td>
<td>B-11</td>
<td>av junc R [par]</td>
</tr>
<tr>
<td>A-12</td>
<td>atrial fibrillation</td>
<td>B-12</td>
<td>av junc R</td>
</tr>
<tr>
<td>A-13</td>
<td>atrial tachycardia</td>
<td>B-13</td>
<td>av junc contraction</td>
</tr>
</tbody>
</table>

* A stethoscope is not included.
Features

Basic Skill Training

Physical findings of Simulator "K" Ver.2

Comprehensive Clinical Examination Training

<table>
<thead>
<tr>
<th>Observation</th>
<th>Auscultation</th>
<th>Palpation</th>
</tr>
</thead>
<tbody>
<tr>
<td>carotid artery</td>
<td>jugular venous wave</td>
<td></td>
</tr>
<tr>
<td>aortic area</td>
<td>pulmonic area</td>
<td></td>
</tr>
<tr>
<td>tricuspid area</td>
<td>mitral area</td>
<td></td>
</tr>
<tr>
<td>right ventricular lifting</td>
<td>left ventricular heaving</td>
<td></td>
</tr>
<tr>
<td>left ventricular enlargement</td>
<td>brachial artery</td>
<td></td>
</tr>
<tr>
<td>radial artery</td>
<td>femoral artery</td>
<td></td>
</tr>
<tr>
<td>respiratory sound</td>
<td>abdominal inspiration</td>
<td></td>
</tr>
</tbody>
</table>

A real stethoscope can be used.

Heart Sounds and Murmurs
Auscultation in relation to synchronized electrocardiograms and findings.
- differentiation of S1, S2, S3 and S4
- discrimination between systolic and diastolic murmurs

Palpation of Arteries
Slight variations of the arterial pulse waves under different cardiac conditions or arrhythmias can be detected by palpation.

Observation of Jugular Veins
The strength and timing of "α" and "V" waves vary with cases.

Palpation of Cardiac Impulses
RV, LV and DLV are simulated and can be palpated.

Monitoring Screen
Real time dynamic charts on the screen:
- phonocardiogram
- sphygmogram (CAP/JVP/AC)
- electrocardiogram (ECG)

Respiratory Sounds and Abdominal Movement
Respiratory cycle is represented to understand respiratory related phenomena.

Specifications:

Set Includes:
- 1 main unit with the model body
- 1 external speaker (built-in the unit)
- 1 PC / keyboard / mouse (built-in the unit)
- 1 air compressor unit (built-in the unit)
- 1 storage cover

1 main monitor

4 textbooks

1 control PC

2 instruction manuals

- built-in help file of software operation

- instruction manual

Unit Size:
W140 x D75 x H170 cm

For Effective Training Sessions

Up to 5 Simulators at One Time

OSCE, group session and scenario based simulation

Up to five cardiology simulators with respective can be controlled by one wireless tablet.
The system realize:
- scenario based training that involves more than one patient.
- learning with comparison between related or easy case examples.
- skills assessment sessions with different cardiovascular stations.

Playlist System
Simulator "K" is not just for individual task training. Incorporated "Play List Maker" facilitates creating and conducting scenario based training sessions which feature change in findings over time.

Playlist Maker facilitates:
- sessions with temporal change in physical findings.
- standardizing training contents among different instructors.
- saving time of preparation.

Ready-to-use
Simple connection and all-in-one unit structure.

Error Indicator
The error indicator performs check-up of the system to keep Simulator K in its best condition.
MW28 Lung Sound Auscultation Trainer "LSAT" Ver.2

Used by "96%" of medical faculties in Japan and OSCE in South Korea, the new and improved "LSAT"!

Kyoto Kagaku's LSAT has upgraded to offer an efficient and effective training for respiratory sound auscultation. This unique and exclusive simulator is best suited for training in sound classification and is controlled by a touchscreen tablet.

36 lung sound cases can be played with or without the heart sound. Each case is accompanied by descriptions and clinical data of the patient including patient history, illustrations, radiograph and CT images.

**Cases**

**Background heart sounds are now available in 5 volume levels.**

<table>
<thead>
<tr>
<th>Normal</th>
<th>Abnormal</th>
</tr>
</thead>
<tbody>
<tr>
<td>A01 standard</td>
<td>B01 weak: left lower area</td>
</tr>
<tr>
<td>A03 mildly strong sounds</td>
<td>B02 weak: left whole area (adhesion)</td>
</tr>
<tr>
<td>A05 mildly rapid</td>
<td>B03 weak: left whole area (pneumothorax)</td>
</tr>
<tr>
<td>A07 loud heart sounds</td>
<td>B06 absent: right middle and lower areas</td>
</tr>
<tr>
<td></td>
<td>B07 absent: right whole area</td>
</tr>
<tr>
<td></td>
<td>B11 absent: right whole area</td>
</tr>
<tr>
<td></td>
<td>B12 absent: whole area</td>
</tr>
<tr>
<td></td>
<td>B13 weak: whole area</td>
</tr>
<tr>
<td></td>
<td>B15 bronchial breathing</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coarse Crackles</th>
<th>Fine Crackles</th>
</tr>
</thead>
<tbody>
<tr>
<td>C01 right lower area</td>
<td>D01 both lower area</td>
</tr>
<tr>
<td>C03 both lower area</td>
<td>D03 both middle lower area</td>
</tr>
<tr>
<td>C05 right middle area</td>
<td>D05 whole area (IPF)</td>
</tr>
<tr>
<td>C07 left lower area</td>
<td>D07 whole area (NSIP)</td>
</tr>
<tr>
<td>C09 both upper area</td>
<td></td>
</tr>
<tr>
<td>C11 whole area</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wheezes</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>E01 upper area 600-700Hz</td>
<td>F01 trachea and upper area 150-250Hz</td>
</tr>
<tr>
<td>E03 upper area 350-450Hz</td>
<td>F03 trachea and upper area 150-450Hz (polyphonic)</td>
</tr>
<tr>
<td>E05 upper area 200-1000Hz</td>
<td>F05 trachea and upper area 80-120Hz</td>
</tr>
<tr>
<td></td>
<td>F07 whole area 80-200Hz</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Miscellaneous continuous sounds</th>
<th>Miscellaneous</th>
</tr>
</thead>
<tbody>
<tr>
<td>G01 stridors</td>
<td>H01 pleural friction rubs: right lower area</td>
</tr>
<tr>
<td>G03 squawks</td>
<td>H03 pleural friction rubs: left lower area</td>
</tr>
<tr>
<td></td>
<td>H07 Hamman's sign</td>
</tr>
<tr>
<td></td>
<td>H09 Vocal fremitus</td>
</tr>
</tbody>
</table>

**Specifications:**

<table>
<thead>
<tr>
<th>Set Includes:</th>
<th>1 torso manikin</th>
<th>1 control PC</th>
<th>1 PC (built-in the unit)</th>
<th>1 AC adapter</th>
<th>1 power cord</th>
<th>1 LAN cable</th>
<th>1 external speaker (built-in)</th>
<th>1 lung T-shirt</th>
<th>2 instruction manual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manikin Size:</td>
<td>W39 x D45 x H 130 cm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* A stethoscope is not included.
### Features

<table>
<thead>
<tr>
<th>Basic Features</th>
<th>NEW Features</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Auscultation sites</strong></td>
<td>Up to five “LSAT” can be controlled by one wireless control PC.</td>
</tr>
<tr>
<td><em>Anterior</em></td>
<td><em>Each simulator can be individually set with a respective case.</em></td>
</tr>
<tr>
<td>1. trachea</td>
<td><em>Cases can be switched promptly by clicking at anytime during session.</em></td>
</tr>
<tr>
<td>2. upper right lung field</td>
<td></td>
</tr>
<tr>
<td>3. upper left lung field</td>
<td></td>
</tr>
<tr>
<td>4. middle left lung field</td>
<td></td>
</tr>
<tr>
<td>5. middle right lung field</td>
<td></td>
</tr>
<tr>
<td>6. lower right lung field</td>
<td></td>
</tr>
<tr>
<td>7. lower left lung field</td>
<td></td>
</tr>
<tr>
<td><strong>Posterior</strong></td>
<td></td>
</tr>
<tr>
<td>0. upper left lung field</td>
<td></td>
</tr>
<tr>
<td>1. upper right lung field</td>
<td></td>
</tr>
<tr>
<td>2. middle right lung field</td>
<td></td>
</tr>
<tr>
<td>3. middle left lung field</td>
<td></td>
</tr>
<tr>
<td>4. lower left lung field</td>
<td></td>
</tr>
<tr>
<td>5. lower right lung field</td>
<td></td>
</tr>
<tr>
<td>6. right costophrenic angle</td>
<td></td>
</tr>
<tr>
<td>7. left costophrenic angle</td>
<td></td>
</tr>
</tbody>
</table>

### Case Information

Images of plain X-ray, CT and bronchoscopy are included.

1. trachea
2. upper right lung field
3. upper left lung field
4. middle left lung field
5. middle right lung field
6. lower right lung field
7. lower left lung field

### Classification of Lung Sounds

LSAT features lung sounds classification of the American Thoracic Society based on acoustic analysis of recorded clinical sounds. With this approach, lung sounds are categorized as continuous (wheezes, rhonchi, or stridor) or discontinuous (crackles). Crackles are further identified as fine or coarse.

- Normal sounds
- Abnormal sounds
- Coarse crackles
- Fine crackles
- Wheezes
- Rhonchi
- Miscellaneous continuous sounds
- Miscellaneous

- **Lung sound of each area can be played by tapping the plain X-ray image**

- **Anterior and posterior auscultation at the same time**

  Two or more trainees can work simultaneously.

- **Indication of inspiration and expiration with the LED light panel**

  Note the rhythm of breathing while listening to the sound during examination.

- **Create a custom playlist**

  Choose from 36 sound cases. Create a custom playlist to optimize training sessions.

- **Error Indication System**

  The simulator automatically scans for errors during start-up.

* A stethoscope is not included.
Effective combination for chest examination

Two simulators, the Lung Sound Auscultation Trainer and the Cardiology Patient Simulator, make a complete duo for chest examination training. With 36 lung sound cases and 88 cardiology patient cases, the Simulator "K" Plus offers and extensive array of scenarios that make it a great addition to classrooms and training sessions.

Training Skills

- Comprehensive cardiopulmonary physical examination training
- Obtaining reliable skills in auscultation skills of the chest
- A thorough understanding with realistic physical findings of anatomy

Auscultation of heart sounds
Observation of jugular veins
* A penlight is not included.
Auscultation of lung sounds
* A stethoscope is not included.
Features

1. Wireless remote control with touchscreen control panel
2. Up to five systems can be operated simultaneously.
   (all five in either cardiology mode or lung sound mode)
3. Ready-to-use with connection to power supply
4. Large monitoring screen for visual understanding
5. Outstanding sound quality: cases are recorded from actual patients
6. Natural propagation of the sound
7. Explanation windows for each case

Cardiology Patient Simulator:

1. 36 cases of total patient simulation
2. 52 cases of arrhythmia/ECG simulation
3. Observation of jugular veins
4. Palpation of cardiac impulses (RV, LV and DLV)
5. Palpation of arteries
6. Heart sounds and murmurs

Lung Sound Auscultation Trainer:

1. 36 lung sound cases: posterior & anterior, with & without heart sound as background
2. Sound volume, the rate of respiration and the operation time are controllable.

Specifications:

<table>
<thead>
<tr>
<th>Set Includes</th>
<th>Manikin Size:</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 unit (each unit includes a PC, a speaker, a keyboard and a mouse)</td>
<td>Main unit: W140 x D 75 x H170 cm</td>
</tr>
<tr>
<td>1 control PC</td>
<td>LSAT unit: W39 x D45 x H130 cm</td>
</tr>
<tr>
<td>1 chest sheet</td>
<td>4 text books</td>
</tr>
<tr>
<td>1 t-shirt for LSAT2</td>
<td>1 t-shirt for LSAT2</td>
</tr>
<tr>
<td>1 monitor</td>
<td>1 instruction manual</td>
</tr>
<tr>
<td>1 protect cover</td>
<td>1 instruction manual</td>
</tr>
</tbody>
</table>

* The Cardiology Patient Simulator and Lung Sound Auscultation Trainer cannot be operated simultaneously.
* The Cardiology Patient Simulator software needs to be shut down to switch to Lung Sound Auscultation Trainer, and vice versa.
Physiko can do what SP can not do.

Physiko is a physical assessment training simulator for medical and nursing students. Twelve preset example of outpatients are designed to cover typical complaints, facilitating training in assessment procedures, assessment skills and providing hands-on experience of important abnormal findings. New patients for your original scenario can be created by simply selecting contents from built-in data.

Cases

<table>
<thead>
<tr>
<th>Assessment item</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pupillary reflex</strong></td>
<td>Normal</td>
</tr>
<tr>
<td></td>
<td>Pupillary construction</td>
</tr>
<tr>
<td><strong>Pupillary dilation</strong></td>
<td>Normal</td>
</tr>
<tr>
<td></td>
<td>Bilateral asymmetry</td>
</tr>
<tr>
<td><strong>Blood pressure</strong></td>
<td>Arbitrary-setup</td>
</tr>
<tr>
<td><strong>Auscultation of lung sounds</strong></td>
<td>Normal</td>
</tr>
<tr>
<td></td>
<td>Bronchial breathing</td>
</tr>
<tr>
<td></td>
<td>Wheezes</td>
</tr>
<tr>
<td></td>
<td>Weak in the left lung</td>
</tr>
<tr>
<td></td>
<td>Coarse crackles</td>
</tr>
<tr>
<td></td>
<td>Rhonchi</td>
</tr>
<tr>
<td></td>
<td>Absent in the right lung</td>
</tr>
<tr>
<td></td>
<td>Fine crackles</td>
</tr>
<tr>
<td><strong>Auscultation of heart sounds</strong></td>
<td>S2 split(-)</td>
</tr>
<tr>
<td></td>
<td>Aortic stenosis</td>
</tr>
<tr>
<td></td>
<td>Atrial fibrillation</td>
</tr>
<tr>
<td></td>
<td>S2 split(+)</td>
</tr>
<tr>
<td></td>
<td>Mitral regurgitation</td>
</tr>
<tr>
<td></td>
<td>Arterial flutter</td>
</tr>
<tr>
<td></td>
<td>S3 gallop</td>
</tr>
<tr>
<td></td>
<td>Mitral stenosis</td>
</tr>
<tr>
<td></td>
<td>Premature ventricular contraction (single)</td>
</tr>
<tr>
<td></td>
<td>S4 gallop</td>
</tr>
<tr>
<td></td>
<td>Aortic regurgitation</td>
</tr>
<tr>
<td></td>
<td>Ventricular flutter</td>
</tr>
<tr>
<td></td>
<td>S3 and S4 gallop</td>
</tr>
<tr>
<td></td>
<td>Sinus tachycardia</td>
</tr>
<tr>
<td></td>
<td>Ventricular fibrillation</td>
</tr>
<tr>
<td></td>
<td>Innocent murmur</td>
</tr>
<tr>
<td></td>
<td>Sinus bradycardia</td>
</tr>
<tr>
<td></td>
<td>Sound volume adjuster</td>
</tr>
<tr>
<td><strong>Auscultation of bowel sounds</strong></td>
<td>Normal</td>
</tr>
<tr>
<td></td>
<td>Decrease</td>
</tr>
<tr>
<td></td>
<td>ileus</td>
</tr>
<tr>
<td></td>
<td>Increase</td>
</tr>
<tr>
<td></td>
<td>Subileus</td>
</tr>
<tr>
<td><strong>ECG simulation</strong></td>
<td>Normal</td>
</tr>
<tr>
<td></td>
<td>Ventricular flutter</td>
</tr>
<tr>
<td></td>
<td>Atrial fibrillation</td>
</tr>
<tr>
<td></td>
<td>Ventricular fibrillation</td>
</tr>
<tr>
<td></td>
<td>Atrial flutter</td>
</tr>
<tr>
<td></td>
<td>Myocardial infarction (acute stage)</td>
</tr>
<tr>
<td></td>
<td>Premature ventricular contraction</td>
</tr>
<tr>
<td></td>
<td>Myocardial infarction (subacute stage)</td>
</tr>
<tr>
<td></td>
<td>Ventricular tachycardia</td>
</tr>
<tr>
<td></td>
<td>Myocardial infarction (chronic stage)</td>
</tr>
</tbody>
</table>

* A stethoscope and penlight are not included.
Physiko’s twelve preset patients cover typical outpatient complaints such as chest pain or smothering sensations.

Cases Comprehensive examination of 12 typical patients

<table>
<thead>
<tr>
<th>Case</th>
<th>Age, Sex</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thoracic Pain</td>
<td></td>
<td></td>
</tr>
<tr>
<td>58 yrs, Male</td>
<td></td>
<td>Myocardial Infarction</td>
</tr>
<tr>
<td>55 yrs, Male</td>
<td></td>
<td>Dissecting Aortic Aneurysm</td>
</tr>
<tr>
<td>76 yrs, Female</td>
<td></td>
<td>Lung Infarction</td>
</tr>
<tr>
<td>28 yrs, Male</td>
<td></td>
<td>Intercostal Muscle Ache</td>
</tr>
<tr>
<td>Abdominal Pain</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26 yrs, Female</td>
<td></td>
<td>Ileus</td>
</tr>
<tr>
<td>19 yrs, Male</td>
<td></td>
<td>Diarrhea</td>
</tr>
</tbody>
</table>

Physical Assessment Mode 1

Patient Cases

Choose a patient

Start a session

Users can create a new simulated patient by selecting each findings from the built-in data.

Physical Assessment Mode 2

Patient Cases Editor

Specifications:

<table>
<thead>
<tr>
<th>Set Includes:</th>
<th>Manikin Size:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 manikin</td>
<td>155 cm</td>
</tr>
<tr>
<td>1 terminal box</td>
<td></td>
</tr>
<tr>
<td>1 ECG electrodes unit</td>
<td></td>
</tr>
<tr>
<td>1 laptop PC</td>
<td></td>
</tr>
<tr>
<td>1 sphygmomanometer unit</td>
<td></td>
</tr>
<tr>
<td>1 clothes</td>
<td></td>
</tr>
</tbody>
</table>
Training Skills

- Ear examination with an otoscope
- Ear wax and foreign body removal

Cases

- Normal
- Serious otitis media (SOM)
- Mucoid otitis media (MOM)
- Chronic otitis media with perforation
- Acute suppurative otitis media (AOM)
- Cholesteatoma
- Tympanosclerosis
- Traumatic perforations
- Cerumen block

Ear Examination Simulator II is an upgraded trainer to acquire safe and reliable skills for examining the external acoustic meatus and tympanic membrane with a direct otoscope. Featured is an alarm when painful insertion is detected. The alarm has two modes: self-learning mode (with a beep), and instructor mode (silent).

Features

1. Alarm against painful insertion:
   - beep (self learning mode)
   - red light/yellow light (instructor mode)

2. 9 major cases are preset.
3. Quick switch between cases.

4. Ear canals come in 2 sizes.
5. Anatomically correct soft ear model that allows training in straightening the auditory canal by pulling the auricle.
6. Work with a real otoscope.
7. The manikin neck can be tilted.
8. Training is possible with both left and right ears.

Specifications:

<table>
<thead>
<tr>
<th>Set Includes:</th>
<th>Replacement Parts:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 manikin head and shoulder</td>
<td>(11391-010) ear units and foreign body set</td>
</tr>
<tr>
<td>1 types of ear units - 1 pair each</td>
<td>- 4 types of ear units - 1 pair each</td>
</tr>
<tr>
<td>- exam ear (normal)</td>
<td>- ear exam(normal), ear exam(stenosis),</td>
</tr>
<tr>
<td>- exam ear(stenosis)</td>
<td>- FB ear(normal), FB(stenosis)</td>
</tr>
<tr>
<td>- FB ear (normal)</td>
<td>- 1 set of foreign body removal kit</td>
</tr>
<tr>
<td>- FB ear (stenosis)</td>
<td>- simulated ear wax, small toys,</td>
</tr>
<tr>
<td></td>
<td>- small sponge fragments and a spoon</td>
</tr>
<tr>
<td>1 set of foreign body removal kit</td>
<td>1 instruction manual</td>
</tr>
<tr>
<td>1 instruction manual</td>
<td></td>
</tr>
</tbody>
</table>

Manikin Size:

W42 x D22 x H38 cm
M82  EYE Examination Simulator (3 steps)

Product Supervision
Japan Society for Medical Education
Working Group with the cooperation of:
Kansai Medical University Department of Ophthalmology

---

**Cases**

1. Normal eyeground
2. Hypertensive retinopathy:
   arteriolar vasoconstriction grade 3, arteriolosclerosis grade 1, hemorrhages and cotton wool spots, simple vein concealment
3. Simple/background diabetic retinopathy:
   microaneurysm, hemorrhages and hard exudates
4. Papilloedema (chronic phase)
5. Papilloedema (acute phase)
6. Glaucomatous optic atrophy:
   glaucomatous optic disc cupping and nerve fiber defect
7. Retinal vein occlusion (acute phase):
   flame-shaped hemorrhage and cotton wool spots
8. Retinal vein occlusion
   (after retinal laser photocoagulation)
9. Toxoplasmosis: retinochoroiditis
10. Age-related macular degeneration:
    macular exudates and subretinal hemorrhage

**Features**

1. 10 cases of fundus slides are provided for training in identifying common eye diseases.
2. The slide images are from actual clinical images.
3. The lens-equipped eyeball units reproduce the visual axis close to that of the human eye providing a realistic eyeground view.
4. Soft and supple material of the manikin allows hands-on practice of examination procedures, such as raising the eyelid.
5. The depth of the fundus slides can be set in 3 levels: hyperopic, normal, and myopic views.
6. Red reflection can be simulated.

**Specifications**

<table>
<thead>
<tr>
<th>Set Includes:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 manikin head and shoulder</td>
<td>1 set of case slides</td>
</tr>
<tr>
<td>- 3 steps (2, 3.5, 5 mm diameter)</td>
<td>1 slide duster</td>
</tr>
<tr>
<td>- 1 slide holder with 3 steps depth setting</td>
<td>1 storage case</td>
</tr>
<tr>
<td>1 instruction manual</td>
<td></td>
</tr>
</tbody>
</table>

Replacement Parts:
(1120-010) 1 replacement fundus case slides (set of 10 cases)

Manikin Size:
W42 x D22 x H38 cm

---

M82A  EYE Examination Simulator (2 steps)

Fundus examination with 10 clinical images and variations of 2 pupil sizes and depth of focus.

Different sizes of pupil can be set at 2 sizes.
(0.14 and 0.32 in diameter)
2-in-1 simulator for prostate and rectal exams
The Prostate and Rectal Simulator includes 9 types of prostates and 4 types of rectums that are easily changeable. The lower torso manikin can be positioned in 3 different ways.

Features
1. Nine types of prostate simulate different scenarios
2. Four rectum units
3. Training with multiple prostates and rectal cases is concurrent and time efficient
4. Lateral, supine and prone positioning
5. 3 revolving units with 9 prostates can easily be interchanged.

Training Skills
- Digital-examination of the prostate and rectum
- Insertion and the use of the anal-scope and the proctoscope

Specifications:
Set Includes:
- 1 lower torso manikin
- 3 prostate units (include 9 types of prostates)
- 4 rectum units
- 1 Vaseline
- 1 body
- 1 storage case

Manikin Size:
W34 x D33 x H24 cm
M44 Visual-Tactile Breast Examination Simulator

A compact and realistic breast examination trainer

An excellent training and demonstration tool in breast lumps palpation both for breast self-examination and professional examination.

Features
1. Four breast lumps (tumor with dimple, tumor with skin depression, fibroadenoma and mastopathy)
2. Bony landmarks for palpation: clavicle and ribs
3. Soft and life-like texture

Training Skills
• Tactile breast examination
• Breast self-examination

Cases

(A) Tumor with a dimple sign:
Hard. Uneven surface. Partially unclear boundary

(B) Cancer with a depression in the skin:

(C) Fibroadenoma:

(D) Mastopathy:

Specifications:

<table>
<thead>
<tr>
<th>Set Includes:</th>
<th>Manikin Size:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 breast model (attached to the case)</td>
<td>W20 x D28 x H15 cm</td>
</tr>
<tr>
<td>1 talcum powder</td>
<td></td>
</tr>
<tr>
<td>1 storage case</td>
<td></td>
</tr>
</tbody>
</table>
Breast Self Examination Model - body-worn type -

Breast examination trainer for self examination

Practice in finding and distinguishing 6 different lumps through visual-tactile examination.

Features
1. The model is designed to facilitate the diagnosis of six signs of breast tumors: skin dimples, cysts, cystoma, fibroadenoma, cancerous tumors.
3. The appearance and texture of this life-size model are life-like enough to facilitate clinical training.

Training Skills
- Tactile breast examination
- Breast self-examination

Cases

Specifications:

Set Includes:

<table>
<thead>
<tr>
<th>Set Includes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 breast model with the strap belts</td>
</tr>
<tr>
<td>1 storage case</td>
</tr>
</tbody>
</table>
Endoscopy Training System

Specifications:

<table>
<thead>
<tr>
<th>Set Includes:</th>
<th>Replacement Parts:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 anatomical colon model</td>
<td>(11419-010) Straight colon tube</td>
</tr>
<tr>
<td>1 abdomen cover</td>
<td>(11419-020) Colon-rectum tube</td>
</tr>
<tr>
<td>1 stand</td>
<td>(11419-030) Colon tube fixtures</td>
</tr>
<tr>
<td>1 anti-slip mat</td>
<td>(7 rings without spring, 3 rings with spring)</td>
</tr>
<tr>
<td>1 straight colon model</td>
<td>(11361-040) Lubricant for colon-rectum tube</td>
</tr>
<tr>
<td>1 simulated biopsy tool</td>
<td>(11361-050) Endoscope lubricant (Pink packs) 30 bags</td>
</tr>
<tr>
<td>1 scope manipulation screen overlay</td>
<td>Endoscope lubricant (Blue packs) 30 bags</td>
</tr>
<tr>
<td></td>
<td>(11419-040) simulated biopsy tool</td>
</tr>
</tbody>
</table>

- A endoscope is not included.

Specifically designed to meet the new training requirements of the American Board of Surgery Flexible Endoscopy Curriculum.

This system consists of a straight colon model and an anatomic colon model which allows the learner to gain endoscopic skills through practice.

Features

1. Can be used to simulate a simple colonoscopy, redundant sigmoid, alphaloop, reverse alphaloop, and others.
   Haptic feedback nearly identical to actual endoscopy.
2. Allows use of actual colonoscope or gastroscope.
3. Electronic sensors provide visual and auditory feedback and help track task completion.

Training Skills

- Scope Manipulation
  - Performing basic endoscopic navigation, using tip deflection & torque of the scope.
- Tool Targeting
  - Hand-eye coordination with biopsy forceps and an endoscope.
- Retroflexion
  - Bending the endoscope backward to identify and navigate to targets. Simulates evaluation of cardia of stomach and distal rectum.
- Loop Management
  - Scope navigation to manage the correct reduction of a standard alpha loop.
- Mucosal Inspection

Exclusive distributor: Limbs and Things LTD
USA, CANADA, UK, IRELAND, SWEDEN, AUSTRALIA, NEW ZEALAND
Colonoscopy trainer for safe maneuvering

The soft, flexible colon tube provides a life-like response to the use of a colonoscope and facilitates training in skills such as preventing "loops" and safely advancing to the cecum.

Features

1. From simple and uncomplicated cases to difficult and sensitive variations. This training model is designed to allow for a wide range of challenges for students and professionals alike.
2. The colon tube can be made airtight, allowing for air insufflation and suction.
3. The anal sphincter opening can be manipulated with a hand ball pump.

Training Skills

- Colonoscopy

Specifications :

<table>
<thead>
<tr>
<th>Set Includes:</th>
<th>Manikin Size:</th>
<th>Replacement Parts:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 abdomen model</td>
<td>W48 x D22 x H30 cm</td>
<td>(11361-010) 1 colon-rectum tube</td>
</tr>
<tr>
<td>1 colon rectum tube</td>
<td></td>
<td>(11361-020) 1 anus unit</td>
</tr>
<tr>
<td>1 anus unit</td>
<td></td>
<td>(11361-030) 1 colon fixture set</td>
</tr>
<tr>
<td>1 air bulb</td>
<td></td>
<td>(11361-120) 1 set of colon layout guide</td>
</tr>
<tr>
<td>1 abdomen skin cover</td>
<td></td>
<td>(11361-040) lubricant for colon-rectum tube (blue packs) 30 pcs x 50 ml each</td>
</tr>
<tr>
<td>1 set colon fixture</td>
<td></td>
<td>(11361-040) lubricant for colon-rectum tube (blue packs) 30 pcs x 50 ml each</td>
</tr>
<tr>
<td>5 colon layout guides (6 cases total)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 lubricant for colon-rectum tube (50 ml each)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 endoscope lubricant (20 ml each)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* A endoscope is not included.
Ultrasound-Guided PICC Training Simulator

Comprehensive, hands-on training for PICC insertion

This model provides training in full procedural skills from the needle insertion, manipulation of the PICC to the placement of the distal tip in the SVC. Both basilic and cephalic veins are accessible for different levels of challenges in cannulation. The replaceable puncture pad is ultrasound-compatible. Anatomically correct bifurcation of the vein provides realistic resistance on its outer walls and simulates complications such as catheter malpositioning.

Features

1. Excellent image quality and visualization of the needle tip for ultrasound guided venous access
2. Movable shoulder to demonstrate positioning
3. Realistic flashback in needle provides confirmation for successful venous access
4. Ribs and right clavicle provide anatomical understanding of correct PICC placement
5. Anatomically correct bifurcation of the vein
6. Simulation of cannula malposition

Training Skills

- Correct needle insertion, PICC, manipulation and catheter tip placement
- Selection a puncture site under ultrasound guidance
- The Seldinger technique
- Technique for the peel-away sheath
- Advancing of the cannula into the SVC

Specifications:

<table>
<thead>
<tr>
<th>Set Includes:</th>
<th>Manikin Size:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 male upper torso with the right arm</td>
<td>W40 x D15 x H60 cm</td>
</tr>
<tr>
<td>2 PICC puncture pads</td>
<td>Replacement Parts:</td>
</tr>
<tr>
<td>10 simulated blood (swab type)</td>
<td>(11348-010)</td>
</tr>
<tr>
<td>1 syringe</td>
<td>2 PICC puncture pads</td>
</tr>
<tr>
<td>1 instruction manual</td>
<td></td>
</tr>
<tr>
<td>1 storage case</td>
<td></td>
</tr>
</tbody>
</table>

* A ultrasound machine and PICC instruments are not included.
CVC Insertion Simulator II

Great practice simulator for CVC catheter insertion with a variety of methods

CVC Insertion Simulator II offers training in both landmark and ultrasound-guided central venous catheterization. The simulator is designed to develop trainees' skills in sequence using the introductory training block and the anatomical block. The simulator can also simulate common complications such as mislodging.

Features

1. Realistic ultrasound-guided CVC.
2. Landmark puncture pad with anatomically correct vein bifurcations simulates mechanical complications including pneumothorax, mislodging and artery puncture.
3. Transparent anatomical block for anatomical understanding and guide wire manipulation.
4. Introductory ultrasound training block to acquire basics of ultrasound-guided venous access.
5. Both internal jugular and subclavian (axillary) veins are accessible.

Training Skills

- Ultrasound-guided CVC
- Landmark guided CVC
- Ultrasound-guided venous access
- Prevention of mechanical complications

Specifications:

<table>
<thead>
<tr>
<th>Set Includes:</th>
<th>Manikin Size:</th>
<th>Replacement Parts:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 male upper torso manikin</td>
<td>W40 x D20 x H 34 cm</td>
<td>(11347-119) 2 landmark puncture pads</td>
</tr>
<tr>
<td>1 landmark puncture pad</td>
<td></td>
<td>(11347-170) 2 ultrasound puncture pads</td>
</tr>
<tr>
<td>1 ultrasound puncture pad</td>
<td></td>
<td>(11347-210) 2 introd. ultrasound blocks</td>
</tr>
<tr>
<td>1 transparent anatomical block</td>
<td></td>
<td>(11347-240) 2 CVC placement pads</td>
</tr>
<tr>
<td>1 introductory ultrasound training block</td>
<td></td>
<td>(11347-260) 1 pulsation unit (for M93UB)</td>
</tr>
<tr>
<td>1 red coloring powder</td>
<td>1 sample syringe</td>
<td></td>
</tr>
<tr>
<td>1 blue coloring powder</td>
<td>1 sample needle</td>
<td></td>
</tr>
<tr>
<td>1 air bulb</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 plastic jars</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 syringe</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 sample syringe</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A ultrasound machine and CVC instruments are not included.
CVC Insertion Simulator III provides training in a sequence of procedural skills from the needle insertion to catheter placement, including Seldinger technique.

CVC Insertion Simulator III provides training opportunities in array of procedural skills from determining the insertion site placement of the catheter without interruption. Both landmark and ultrasound-guided catheterization are possible in one pad.

Features

1. Repeated insertion:
   Improved frictionless tissue of the pad allows Seldinger technique and repeated insertion and removable of the catheter with less needle marks left on the surface of the pad.

2. Both landmark and ultrasound-guided CVC:
   Anatomically correct structure facilitates training in both landmark and ultrasound-guided CVC.

3. Mechanical complications, such as arterial puncture and pneumothorax can be simulated for training.

4. New material
   Close to human tissue material of the pad provides true-to-life sensation to the catheter.

5. Realistic venous collapse

Training Skills

- Ultrasound-guided CVC
- Landmark guided CVC
- Ultrasound-guided venous access
- Prevention of mechanical complications

Specifications:

<table>
<thead>
<tr>
<th>Set Includes:</th>
<th>Replacement and Optional Parts:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 male upper torso manikin</td>
<td>(11347-210) 2 introductory ultrasound training block REAL VESSELS</td>
</tr>
<tr>
<td>2 CVC placement pad</td>
<td>1 pulsation unit (for landmark technique)</td>
</tr>
<tr>
<td>1 skin for cannulation training</td>
<td>1 irrigation bottle (for UG technique)</td>
</tr>
<tr>
<td>1 transparent anatomical block</td>
<td>1 plastic jar</td>
</tr>
<tr>
<td>2 artery tube (transparent): 2 type</td>
<td>1 coloring powder (red/blue)</td>
</tr>
<tr>
<td>2 vein tube (blue): 2 type</td>
<td>1 sample needle</td>
</tr>
<tr>
<td>2 vein pipe</td>
<td>1 syringe (2.5ml, 50ml each)</td>
</tr>
<tr>
<td></td>
<td>1 introductory ultrasound training block REAL VESSELS</td>
</tr>
<tr>
<td></td>
<td>Manikin Size: W40 x D20 x H 34 cm</td>
</tr>
</tbody>
</table>

* A ultrasound machine and CVC instruments are not included.
Ultrasound-Guided Thoracentesis Simulator

Features
1. Excellent ultrasound image
2. Ribs can be palpated.
3. Realistic needle-tip resistance and needle-penetrating feeling
4. Strap-on puncture units to learn patient positioning and face-to-face communication
5. Two sites for access: right mid-scapular line and left mid-axillary line
6. Volume of pleural effusion can be controlled to set different levels of challenges.
7. Body torso for one-man training

Training Skills
- Patient positioning
- Recognition of anatomical landmarks by ultrasound
- Assessment of level and volume of pleural effusion
- Determination of insertion site
- Needle insertion and collection of the fluid
Engaging thoracentesis simulator with ultrasound guidance

Ultrasound-Guided Thoracentesis Simulator features strap-on (wearable) puncture units that facilitate hybrid training sessions with SPs.

Features
1. Excellent ultrasound image
2. Ribs can be palpated.
3. Realistic needle-tip resistance and needle-penetrating feeling
4. Strap-on puncture units to learn patient positioning and face-to-face communication
5. Two sites for access: right mid-scapular line and left mid-axillary line
6. Volume of pleural effusion can be controlled to set different levels of challenges.

Training Skills
- Patient positioning
- Recognition of anatomical landmarks by ultrasound
- Assessment of level and volume of pleural effusion
- Determination of insertion site
- Needle insertion and collection of the fluid
This simulator allows trainees to insert the needle under ultrasound guidance, pierce the “pericardial sac” and aspirate pericardial fluid.

**Features**
1. Puncture pad is durable and replaceable.
2. Landmarks for palpation and ultrasonic landmarks are prepared to practice the subxiphoid approach and the parasternal approach.
3. Realistic needle tip feeling when the needle pierces the “pericardial sac”

**Training Skills**
- Patient positioning
- Visualization of pericardial fluid under ultrasound scanning
- Landmark palpation
- Needle insertion to the pericardial space
- Aspiration of pericardial effusion

**Product Supervision**
Takahiro Amano, M.D.
Vice President
Senior Vice-Dean, Postgraduate School
Professor and Director, Center of Postgraduate Medical Education
International University of Health and Welfare
Honorary Director, Sanno Medical Center

**Landmark palpation**
Identification of “Larrey’s point” (left xiphisternal junction) for needle insertion

**Ultrasound guided pericardiocentesis**
Inserting needle to the pericardial space with ultrasound guidance. Ventricles, ribs, pericardium, liver and main artery can be visualized.
Ultrasound-Guided Thoracentesis / Pericardiocentesis Simulator

Two puncture skills training in 1 model

Set includes list for MW4, MW15, MW17 and MW4A

<table>
<thead>
<tr>
<th>Item</th>
<th>MW4</th>
<th>MW15</th>
<th>MW17</th>
<th>MW4A</th>
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</thead>
<tbody>
<tr>
<td>1 adult chest model</td>
<td>○</td>
<td>○</td>
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</tr>
<tr>
<td>1 mid-axially line unit</td>
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<td>○</td>
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<td>○</td>
</tr>
<tr>
<td>1 mid-scapular line unit</td>
<td>○</td>
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<td>○</td>
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</tr>
<tr>
<td>1 pericardiocentesis unit</td>
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<td>1 pillow for positioning</td>
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</tr>
<tr>
<td>1 explanation model for thoracentesis</td>
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<td>○</td>
<td>○</td>
</tr>
<tr>
<td>1 instruction manual</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td><strong>Accessories</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-1 irrigator</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>-1 funnel</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>-1 syringes (50ml)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>-1 joint hose</td>
<td>○</td>
<td>○</td>
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<td>○</td>
</tr>
<tr>
<td>-1 tube with three-way stopcock</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>-1 plastic jar</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

* A ultrasound machine and needles are not included.
Simulator for acquiring skills for epidural anesthesia that entail potential risks of complications

Epidural Anesthesia Simulator offers multiple training methods on both thoracic and lumbar areas with its puncture block includes spinal columns from T7 to L5.

Features
1. Anatomically correct spinal column covering from T7 to L5.
2. Landmarks for palpation: IC, angulus inferior scapula and spinous process
3. True-to-life resistance and “pop” felt through the needles. Both left and right lateral positions are possible.
4. Loss of resistance technique is possible.
5. The broad puncture pad allows paramedian access as well as median approach.

Training Skills
- Epidural anesthesia procedures at lumbar and thoracic area
- Lumbar puncture

Specifications:
Set Includes:
- 1 life size unisex torso W48 x D23 x H29 cm
- 5 puncture pads
- 1 supporting stand (11382-010)
- 1 50ml syringe
Replacement Parts:
- 2 replacement puncture pads

* A needle is not included.
M43B Lumbar Puncture Simulator II

World's best practice simulator for lumbar puncture and epidural anesthesia

Five types of puncture blocks enhance training with different levels of challenges

Features

1. M43B model closely simulates the lumbar anatomy including the landmarks.
2. Provides life-like sensation of both skin and tissue resistance to the spinal needle.
3. Allows students to measure CSF fluid pressure, collect CSF fluid and practice epidural anesthesia procedures under clinically realistic conditions.
4. Epidural block with excellent needle-tip feeling.
5. Loss-of-pressure technique with water or air can also be simulated.
6. Lumbar region support bases for either individual or group practice
7. 5 types puncture blocks: normal CSF, obesity CSF, senior CSF, senior obesity CSF, epidural for various levels of training

Training Skills

● Palpation of landmarks
● Lumbar puncture
● CSF collection
● CSF pressure measurement
● Epidural anesthesia
● Anatomical understanding

Specifications:

| Set Includes                                      | Manikin Size:          | \n|---------------------------------------------------|------------------------|
| 1 lumbar region model                            | 1 lumbar spine model   |
| 6 lumbar puncture blocks                         | 1 irrigation bag       |
| 2 normal CSF, 1 obesity CSF, 1 senior CSF,       | 1 syringe              |
| 1 senior obesity CSF, 1 epidural                | 1 stand for irrigation bag |
| 1 lumbar region skin cover                       | 1 instruction manual    |
| 3 lumbar region support bases: sitting position, lateral position, base for team teaching | 1 storage case          |

* A needle is not included.
Lumbar puncture training with ultrasound guidance
Ultrasound compatible puncture block is anatomically correct and offers realistic image of ultrasound. It includes lumbar vertebrae, spinous process, superior articular process, transverse process, epidural space and spinal dura mater.

Features
1. Ultrasonic landmarks of lumbar spine can be visualized.
2. Replacement parts are durable for multiple procedures.
3. This simulator can be positioned in the upright or lateral position.
4. Translucent block makes the needle trace visible.
5. The lumbar region model provides a platform for wide training opportunities, by adding interchangeable training blocks for landmark and fluoroscopic procedures.

Training Skills
- Ultrasound-guided lumbar puncture
- Ultrasound-guided epidural anesthesia
- CSF collection and CSF pressure measurement

Specifications:

<table>
<thead>
<tr>
<th>Set Includes</th>
<th>Manikin Size:</th>
<th>Replacement Parts:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 lumbar region model</td>
<td>W33 x D21 x H30 cm</td>
<td>(11348-190) 1 ultrasound lumbar puncture/epidural block</td>
</tr>
<tr>
<td>1 ultrasound lumbar puncture/epidural block</td>
<td></td>
<td>(11348-230) 1 ultrasound lumbar region skin cover for M43E</td>
</tr>
<tr>
<td>1 ultrasound lumbar region skin cover</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 irrigation bag</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 syringe</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 stand for irrigation bag</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 instruction manual</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* A ultrasound machine and needles are not included.
Acquire skills for safe pediatric LP
Simulator for acquiring safe and reliable skills for pediatric lumbar puncture

Features
1. Soft, seamless baby manikin facilitates trainings in safe patient positioning and holding.
2. Two types of puncture pads have different spinal cord's depth.
3. Realistic resistance to needle tips and anatomically correct landmarks provides excellent hands-on experience.

Training Skills
- Patient positioning
- Palpation of landmarks
- Lumbar puncture and CSF collection
- CSF pressure measurement

Specifications:

<table>
<thead>
<tr>
<th>Set Includes</th>
<th>Manikin Size:</th>
<th>Replacement Parts:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 baby manikin (7-10 months) 1 stand for irrigation bag</td>
<td>W43 x D34 x H20 cm</td>
<td>(11348-410) 2 pediatric LP blocks (shallow) spinal cord at 12 mm depth</td>
</tr>
<tr>
<td>2 pediatric LP blocks (shallow) 1 syringe (50mL)</td>
<td></td>
<td>(11348-420) 2 pediatric LP blocks (deep) spinal cord at 17 mm depth</td>
</tr>
<tr>
<td>2 pediatric LP blocks (deep) 1 instruction manual</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 irrigation bag</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* A needle is not included.
An essential tool for radial artery puncture training

Radial artery puncture is a common approach for blood collection and artery catheterization. However, it is a challenging skill for trainees. This innovative simulator is designed to provide training in arterial puncture with true-to-life feeling.

Features
1. Arterial pulsation is palpable.
2. Realistic resistance of tissue and artery wall felt with the injection needle.
3. Natural flashback of artificial blood into the needle can be observed.
4. Radial arterial line placement can be simulated.
5. No puncture trace remains on the injection site.
6. One-touch, leak-free connections.

Training Skills
- Radial arterial puncture
- Artery blood sampling
- Radial line placement

Specifications:

<table>
<thead>
<tr>
<th>Set Includes</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 wrist and hand model</td>
<td>1 spoon</td>
<td>1 replacement skin set</td>
<td></td>
</tr>
<tr>
<td>1 circulation pump</td>
<td>2 plastic jars</td>
<td>(11351-030) 4 replacement silicon tape</td>
<td></td>
</tr>
<tr>
<td>2 sets of puncture skins (inner and outer skin)</td>
<td>2 connection tubes</td>
<td>(11351-040) 4 replacement artery tube</td>
<td></td>
</tr>
<tr>
<td>4 artery tubes</td>
<td>1 vinyl sheet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 silicon tape</td>
<td>1 syringe</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 jar of coloring powder (red)</td>
<td>1 storage case</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 instruction manual</td>
<td></td>
</tr>
</tbody>
</table>

* A needle is not included.

Product Supervision
Dr. Hiroshi Koyama,
Medical Director, General Internal Medicine National Hospital Organization Kyoto Medical Center
**Peripheral Venous Catheter Placement Simulator**

Practice over ten IV skills with one arm
Peripheral Venous Catheter Placement Simulator provides full procedural skills from injection to fixing the IV cannula.

**Features**
1. All training skills for the peripheral venous route management
2. Two puncture sites: median antebrachial vein and dorsal vein
3. Practice for the extension of hand skin and the application of pressure on vein
4. Durable puncture pad with IV cannula

**Training Skills**
- Wrapping with tourniquet
- Confirmation of puncture site
- Sterilization of puncture site
- Puncture with IV cannula
- Confirmation of back flow in puncture
- Application of pressure on vein
- Setting of infusion tube
- Confirmation of natural instillation
- Fixing of the puncture site
- Injection of simulated medical solution from injection sub port

<table>
<thead>
<tr>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set Includes:</td>
</tr>
<tr>
<td>1 arm model</td>
</tr>
<tr>
<td>2 injection pads for dorsal vein of hand</td>
</tr>
<tr>
<td>2 injection pads for median antebrachial vein</td>
</tr>
<tr>
<td>1 bottle for simulated blood</td>
</tr>
<tr>
<td>1 stand for bottle of simulated blood</td>
</tr>
<tr>
<td>1 infusion set</td>
</tr>
<tr>
<td>1 infusion bag</td>
</tr>
<tr>
<td>1 syringe (50ml)</td>
</tr>
<tr>
<td>1 plastic beaker</td>
</tr>
<tr>
<td>10 simulated blood sticks (swab type)</td>
</tr>
<tr>
<td>1 carrying bag</td>
</tr>
<tr>
<td>1 instruction manual</td>
</tr>
</tbody>
</table>

**Affordable training unit for venipuncture**

Strap-on Venipuncture Simulator is a simple, economical training kit for intravenous injection. This trainer is to be strapped onto the upper arm of an SP (Standardized Patient) or a life-size training manikin.

**Features**
1. Realistic tissue and vein wall resistance
2. Vein tube can be filled and refilled easily using a soft plastic bottle that works as a manual pump.
3. Three vein tubes are embedded: 2 normal and 1 thin.

**Training Skills**
- Blood collection and intravenous injection

<table>
<thead>
<tr>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set Includes:</td>
</tr>
<tr>
<td>5 puncture pads (vein tube embedded)</td>
</tr>
<tr>
<td>5 supporting frames with belt</td>
</tr>
<tr>
<td>5 drain tubes</td>
</tr>
<tr>
<td>5 injector tubes</td>
</tr>
<tr>
<td>5 injection bottles</td>
</tr>
</tbody>
</table>
*Simulated blood powder is not included in the set.
| Manikin Size: |
| W25 x D11 x H3 cm |
| Replacement Parts: |
| (11326-010) 1 replacement puncture pad |
| (11326-020) 5 replacement puncture pads |
*A needle is not included.
Quality and economy in one

Basic IV Arm is realistic with fine detail, inexpensive and durable, perfect for large number of trainees to practice skills required in their courses. Lightweight and portable, easy set up so that each trainee can have their own arm to practice. The vein tube can easily be filled with simulated blood using a soft plastic injection bottle.

Features

1. Flexible skin and palpable veins (replicates venous dilatation)
2. Realistic needle tip feeling and blood flashback
3. Injection pad is easily replaceable and durable.
4. No needle marks remain.
5. Hemorrhage can be stopped by compressing with the finger.
6. Adhesive plaster sticks well to the arm and can be easily removed.
7. Arm and supporter stand integrated so that users can set up easily.
8. Compact, lightweight and portable

Training Skills

- Tourniquet application
- Venipuncture (including puncture with IV cannula)

Specifications :

<table>
<thead>
<tr>
<th>Set Includes:</th>
<th>Manikin Size:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 arm model with supporter stand</td>
<td>W54 x D11 x D11 cm</td>
</tr>
<tr>
<td>1 injection pad</td>
<td></td>
</tr>
<tr>
<td>1 syringe (50ml)</td>
<td></td>
</tr>
<tr>
<td>1 jar of coloring powder (red)</td>
<td></td>
</tr>
<tr>
<td>1 spoon</td>
<td></td>
</tr>
<tr>
<td>1 injection bottle for simulated blood</td>
<td></td>
</tr>
<tr>
<td>1 carrying bag</td>
<td></td>
</tr>
</tbody>
</table>

Perfect for a large number of trainees for IV

Basic IV Arm is realistic with fine detail, inexpensive and durable, perfect for large number of trainees to practice skills required in their courses. Lightweight and portable, easy set up so that each trainee can have their own arm to practice. The vein tube can easily be filled with simulated blood using a soft plastic injection bottle.

Features

1. Flexible skin and palpable veins (replicates venous dilatation)
2. Realistic needle tip feeling and blood flashback
3. Injection pad is easily replaceable and durable.
4. No needle marks remain.
5. Hemorrhage can be stopped by compressing with the finger.
6. Adhesive plaster sticks well to the arm and can be easily removed.
7. Arm and supporter stand integrated so that users can set up easily.
8. Compact, lightweight and portable

Training Skills

- Tourniquet application
- Venipuncture (including puncture with IV cannula)

Specifications :

<table>
<thead>
<tr>
<th>Set Includes:</th>
<th>Manikin Size:</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 arm model with supporter stand</td>
<td>W54 x D11 x D11 cm (each)</td>
</tr>
<tr>
<td>4 injection pad</td>
<td></td>
</tr>
<tr>
<td>4 syringe (50ml)</td>
<td></td>
</tr>
<tr>
<td>1 jar of coloring powder (red)</td>
<td></td>
</tr>
<tr>
<td>1 spoon</td>
<td></td>
</tr>
<tr>
<td>4 injection bottle for simulated blood</td>
<td></td>
</tr>
<tr>
<td>1 carrying bag</td>
<td></td>
</tr>
</tbody>
</table>
Simulator Pediatric IV Hand

Set of pediatric hands for practicing IV
Higher skills are essential in performing safe IV procedures on small infant hands with thin and soft veins that are difficult to find.

Features
1. The fingers and the back of the hand are flexible enough to be gripped or pulled as in real-life procedures.
2. Two puncture sites on the back of the hand are available.
3. Needle fixing procedure can be practiced.

Training Skills
- Pediatric dorsal hand vein injection
- Blood collection
- Intravenous infusion

Specifications :
Set Includes:
- 2 injection arm-hands (one-year-old)
- 2 injection arm-hands (three-year-old)
- 2 stands
- 1 circulation pump
- 1 jar of coloring powder (red)
- 1 spoon
- 1 plastic jar
- 1 plastic beaker
- 1 storage case
- 1 instruction manual
Manikin Size:
- W23 x D6 x H5 cm (one-year-old)
- W30 x D8 x H6 cm (three-year-old)
Replacement Parts:
- (11350-010) 1 replacement injection arm-hand (three-year-old)
- (11350-020) 1 replacement injection arm-hand (one-year-old)

Intradermal Injection Training Simulator

Training in intradermal injection of forearm
This simulator provides training for intradermal injection to the inner forearm. Swelling of the skin will form when proper injection procedures are followed.

Features
1. Life-like touch and resistance of the injection site resemble the human arm
2. Injection pads are easily changeable.
3. No needle trace remains.

Training Skills
- Intradermal Injection

Specifications :
Set Includes:
- 5 puncture pads
- 1 forearm model
- 1 supporter stand
- 1 storage case
- 1 instruction manual
Manikin Size:
- W20 x D20 x H8 cm
Replacement Parts:
- (11346-010) 1 replacement puncture pad

* A needle is not included.
"Real" and "Objective" assessment develops skills for first class surgeons.

Laparoscopic Suture Simulator evaluates skills in laparoscopic intestinal suture, as well as simple skin suture and forceps training. This simulator also provides real experience by using real clinical devices and also life-like softness and anatomy of intestinal wall and skin.

Features

1. Innovative assessment criteria and quantitative measurement provide objective feedback to trainers.
2. Trainees' personal skills assessment data can be saved for reviewing and analysis.
3. True-to-life simulated tissue that provides convincing hands-on experiences.
4. Real clinical instruments can be used.
5. A variety of training options
6. All in one unit is convenient for training.

Training Skills

- Laparoscopic intestinal suture
- Skin suture under direct vision
- Handling of laparoscopic instruments

Product Supervision

Prof. Hashizume, Center for Advanced Medical Innovation Kyushu University
Laparoscopic Intestinal Tract Suture

Use forceps to start training in suture skills. Trainees’ skills can be assessed in 5 criteria.

Assessment Criteria

5 assessment criteria give feedbacks are given in two levels:

- Successfulness:
  Higher possibility of leak-free suturing
- Skills level:
  Lower negative impact on patients

1. Is the wound sutured without a leak?
   Air leak from the sutured area can be checked by applying air pressure on the intestinal tract sheet.
2. Is suture completed through muscular layer to mucosal layer?
3. Is ligature appropriate for suture?
4. How much open area is there in mucosal layer?
5. How long does it take for suturing procedure?

Life-like Intestinal Tract

Intestinal tract has four layers with respective characteristics. When holding with forceps and suturing, these four layers react like tissue.

Evaluation on Skin Suture under Direct Vision

Simple interrupted skin suturing can be assessed quantitatively by validated criteria. Objective evaluation score encourages trainees to hone their skills.

Laparoscopic Forceps Training

Forceps Training mode enables dry box training for handling of laparoscopic instruments.

Assessment Criteria

1. Force and tension
   - Time
   - Force on tissue
   - Suture tension

2. Image analysis
   - Spacing of stitches
   - Width of stitches
   - Wound dehiscence

Specifications:

<table>
<thead>
<tr>
<th>Set Includes:</th>
<th>Manikin Size:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 monitor</td>
<td>W50 x D110 x H160 cm</td>
</tr>
<tr>
<td>1 touch-monitor</td>
<td>93 kg</td>
</tr>
<tr>
<td>1 video camera for assessment (intestinal tract suturing)</td>
<td>30 pieces of suturing sheet (intestinal tract)</td>
</tr>
<tr>
<td>1 video camera for assessment (skin suturing)</td>
<td>30 pieces suturing sheet (skin)</td>
</tr>
<tr>
<td>1 printer</td>
<td>Power:</td>
</tr>
<tr>
<td>1 key board</td>
<td>ACT00-240V, 50/60 Hz</td>
</tr>
<tr>
<td>1 set of trocar</td>
<td>Power Consumption:</td>
</tr>
<tr>
<td>1 container</td>
<td>180 VA</td>
</tr>
<tr>
<td>1 instruction manual</td>
<td>* Forceps are not included.</td>
</tr>
</tbody>
</table>

* Laparoscopic instruments and training pad or games are not supplied with the set.
Various types of skins to improve the basic of suturing skills

Features
1. The artificial skin can be cut easily at any site to prepare a novel wound.
2. The soft skins are made of durable materials.
3. Simple and durable supporters keep the soft skins arched or maintain tension in the tubular models.
4. All instruments for the practice session are included in the package.

Training Skills
- 4 skills for suture: abdominal skin suture, blood vessel suture, intestinal suture, limbs skin suture

Specifications:

<table>
<thead>
<tr>
<th>Set Includes</th>
<th>Replacement Parts</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 set of simulated skins, ducts and supporters</td>
<td>(11219-030) 1 abdominal skin</td>
</tr>
<tr>
<td>- abdomen set: 2 abdominal skins, 1 supporter</td>
<td>(11219-050) 5 blood vessels</td>
</tr>
<tr>
<td>- blood vessels: 5 narrow tubes</td>
<td>(11219-070) 5 intestinal tracts</td>
</tr>
<tr>
<td>- intestine set: 5 wide tubes, 1 supporter</td>
<td>(11219-010) 5 limbs skins</td>
</tr>
<tr>
<td>- limbs set: 2 narrow skins, 1 supporter</td>
<td></td>
</tr>
<tr>
<td>1 set of instruments</td>
<td></td>
</tr>
<tr>
<td>- needle-holders</td>
<td></td>
</tr>
<tr>
<td>- suture needles</td>
<td></td>
</tr>
<tr>
<td>- scissors</td>
<td></td>
</tr>
<tr>
<td>- suture threads</td>
<td></td>
</tr>
<tr>
<td>- tweezers</td>
<td></td>
</tr>
<tr>
<td>1 storage case</td>
<td></td>
</tr>
</tbody>
</table>
M57B  Suture Evaluation Simulator

Score your suturing skills to improve faster and better

Simple interrupted skin suturing can be evaluated quantitatively by validated evaluation items. Objective evaluation score and record of learning curve would encourage trainees to improve their skills effectively.

Features

1. There are three modes for different training purposes.
   - Evaluation: objective evaluation for self-learning
   - Learning: reference of examples and recorded data
   - Examination: skills assessment by the instructor
2. Evaluation analyzed on 6 items leads trainees to "desirable" suture skills.

Training Skills

- Suture: Simple interrupted suture
- Ligature: Instrument tying

Evaluation Items

The sensors measure force and tension to the skin.
- Time
- Force on the tissue
- Suture tension

USB camera for Image Evaluation
- Spacing of stitches
- Equidistance
- Wound dehiscence

Specifications:

<table>
<thead>
<tr>
<th>Set Includes</th>
<th>Replacement Parts</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 unit base</td>
<td>(11230-010)</td>
</tr>
<tr>
<td>1 skin suturing unit</td>
<td></td>
</tr>
<tr>
<td>40 simulated skins</td>
<td></td>
</tr>
<tr>
<td>1 USB unit</td>
<td></td>
</tr>
<tr>
<td>1 PC with software</td>
<td></td>
</tr>
<tr>
<td>1 movie demonstration (CD)</td>
<td></td>
</tr>
<tr>
<td>1 storage case</td>
<td></td>
</tr>
<tr>
<td>1 instruction manual</td>
<td></td>
</tr>
</tbody>
</table>

* Instruments are not included.

---

M57C2  Laparoscopic Suture Evaluation Simulator

Quantitative assessment of suturing skills using laparoscopic forceps.

*Training Box is not included in the standard set

Features

1. There are three modes for different training purposes.
   - Evaluation: objective evaluation for self-learning
   - Learning: reference of examples and recorded data
   - Examination: skills assessment by the instructor
2. Evaluation analyzed on 6 items leads trainees to "desirable" suture skills.

Training Skills

- Suture: Simple interrupted suture
- Ligature: Instrument tying

Evaluation Items

The sensors measure force and tension to the skin.
- Time
- Force on the tissue
- Suture tension

USB camera for Image Evaluation
- Spacing of stitches
- Equidistance
- Wound dehiscence

Specifications:

<table>
<thead>
<tr>
<th>Set Includes</th>
<th>Replacement Parts</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 M57C suturing unit</td>
<td></td>
</tr>
<tr>
<td>40 simulated skins</td>
<td></td>
</tr>
<tr>
<td>1 USB unit</td>
<td></td>
</tr>
<tr>
<td>1 PC with software</td>
<td></td>
</tr>
<tr>
<td>1 demonstration movie (CD)</td>
<td></td>
</tr>
<tr>
<td>1 instruction manual</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>1 storage case</td>
<td></td>
</tr>
<tr>
<td>1 instruction manual</td>
<td></td>
</tr>
</tbody>
</table>

* Instruments are not included.
You may be able to intubate a patient, but are you as good as you think you are?

This simulator is the world exclusive system that offers objective feedback on intubation skills carried out by "hands-on" with the true-to-life airway manikin real instruments. Real time visualization of performance on each evaluation point helps to assess trainees' skill as well as to identify the area where trainees need further improvement.

Features

1. Objective feed-back is given at two levels:
   - Intubation result: higher possibility of saving patient’s lives
   - Skills assessment: lower negative impact on patients

2. Assessment criteria feedback is quantitatively monitored and displayed.

3. Each session can be saved and stored for review and debriefing.

4. A variety of difficult airway can be set by touch panel control.

5. All-in-one unit is convenient for training.

Training Skills

- Tracheal intubation
- Intubation and ventilation on difficult airways

Product Collaboration
Atsuo Takanishi, Laboratory of Faculty of Science and Engineering, Waseda University

Feature 01 True-to-Life Hands-on Experience
Reality of procedure is a critical to ensure reliable assessment and skills development.

Feature 02 Normal and 3 Difficulty Levels
Different levels of difficulty for the intubation procedure can be set with the touch panel. There is one "normal" setting and three additional levels with increasing difficulty.

<table>
<thead>
<tr>
<th>Normal</th>
<th>Intubation Difficulty</th>
</tr>
</thead>
<tbody>
<tr>
<td>★★★★</td>
<td>Lock Jaw</td>
</tr>
<tr>
<td>★★★</td>
<td>Rigid Neck</td>
</tr>
<tr>
<td>★★</td>
<td>Micrognathia</td>
</tr>
</tbody>
</table>
Specifications:

<table>
<thead>
<tr>
<th>Set Includes:</th>
<th>Manikin Size:</th>
<th>Optional Parts:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 unit base including 1 video camera, 1 monitor, 1 manikin</td>
<td>W50 x D110 x H160 cm 82 kg</td>
<td>(11392-040) 1 chest skin</td>
</tr>
<tr>
<td>1 printer</td>
<td>Power:</td>
<td>(11392-050) 5 pairs of lungs</td>
</tr>
<tr>
<td>1 stereo mini plug</td>
<td>AC100-240V, 50/60 Hz</td>
<td>(11392-060) 5 stomachs</td>
</tr>
<tr>
<td>1 keyboard</td>
<td>Power consumption:</td>
<td>(11392-090) 1 face mask</td>
</tr>
<tr>
<td>1 lubricant for manikin</td>
<td>120 VA</td>
<td>(11390-010) sensor-installed tongue</td>
</tr>
<tr>
<td>1 instruction manual</td>
<td></td>
<td>(11390-020) sensor (blade force and position)</td>
</tr>
</tbody>
</table>

* Instruments are not included.

**Feature 03**

**Visual Feedback of Objective Assessment**
Real-time dynamic feedback on performance is visually displayed.

**Feature 04**

**Record of Personal Training History Supports Skills Development**
The performance assessment can be saved. This helps users review their skills and measures their improvement.

5 most recent sessions are visually summarized to analyze each trainee’s achievement.

Training skills are classified by difficulty level. Percentage of success is calculated from each trainee’s 5 most recent sessions.

**Intubation Result Display**
Successful intubation is defined as dual-lung ventilation within the time limit.

**Multiple Skill Assessment**
Objective assessment of components of intubation skills based on skill level of professionals.

**Recommended Devices:**
- (Macintosh laryngoscope) blade size 3
- (Endotracheal tube) internal diameter 7.5mm
- (Video laryngoscope) AWS-S200

**Movie Recording**
An overview movie and a movie from the video laryngoscope can be displayed and recorded along with the assessment data.
From beginners to experts with a range of difficulty levels

Difficult Airway Management Simulator provides training for users from all levels of experience with availability of 24 different cases. The robust structure and stable base make the model compatible for various training scenarios such as emergency, pre-hospital or clinical settings. A variety of real clinical devices can be used for training, such as a laryngoscope, bag valve mask, or a video laryngoscope.

Features
1. 24 variations of patient scenario (including 1 normal case):
   - 3 stages of mouth opening, 2 stages of neck flexibility, 2 tongue sizes and 2 positions of the vocal cords
2. Upper incisors are designed to break off when excessive force is applied.

Training Skills
- Airway opening techniques (head tilt, jaw thrust)
- Bag-Valve-Mask ventilation
- Pre-intubation airway assessment
- Recreating the sniffing position
- Pressurization of external larynx to improve the laryngeal view
- Intraoral/Intranasal Intubation
- Use of oropharyngeal airway (OPA)
- Use of nasopharyngeal airway (NPA)
- Use of laryngeal airway mask
- Use of video laryngoscope
- Confirmation of successful ventilation by:
  - observation of thoracic and abdominal movement (lung expanding, stomach inflating) or auscultation of the chest
- Simulates incorrect procedures including intubation in the esophagus and unilateral intubation
- Practice securing tubes after intubation

Recommended Devices:
- (Macintosh laryngoscope) blade size 3,4
- (Endotracheal tube) internal diameter 7.0mm, 7.5mm
- (Laryngeal mask) Air-Q: size 3.5
- LMA Supreme: size 4
- I-gel: size 4

Variation of DAM Setting
- Neck Flexibility (Life-like jaw movement)
- Mouth Opening - Normal - Intermediate - Difficult
- Tongue - Normal - Swollen
- Laryngospasm - Normal - Laryngospasm

Variation of DAM Training
- Bag-Valve-Mask Ventilation
- Confirmation of Endotracheal Tube Placement
- A Variety of Possible Airway Skills

Specifications:

<table>
<thead>
<tr>
<th>Set Includes:</th>
<th>Manikin Size:</th>
<th>Replacement Parts:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 manikin</td>
<td>W70 x D39 x H25 cm</td>
<td>(11392-010) 10 upper incisors</td>
</tr>
<tr>
<td>3 upper incisors</td>
<td></td>
<td>(11392-090) 1 face mask</td>
</tr>
<tr>
<td>1 lubricant</td>
<td>Optional Parts:</td>
<td>(11392-040) 1 chest cover</td>
</tr>
<tr>
<td>1 syringe</td>
<td>(11384-100) bronchofiberscopy training unit</td>
<td>(11392-080) 2 replacement tongues II</td>
</tr>
<tr>
<td>1 carrying bag</td>
<td></td>
<td>(11392-050) 5 pair of lungs</td>
</tr>
<tr>
<td>1 instruction manual</td>
<td></td>
<td>(11392-060) 5 stomachs</td>
</tr>
</tbody>
</table>

* Instruments are not included.
**MW14 Difficult Airway Management Simulator -Demonstration Model-**

Great addition as a demonstration tool for airway management

Compact table-top design, anatomical accuracy and a variety of DAM settings. Ideal for demonstration of skills and devices.

**Features**

1. Anatomically correct airway
2. The incisors are removable when excessive force is applied.
3. Successful tube tip placement can be confirmed by indicators.

**Training Skills**

- Airway opening techniques (head tilt, jaw thrust)
- Bag-Valve-Mask ventilation
- Pre-intubation airway assessment
- "Sniffing position"
- Pressurization of external larynx to improve the laryngeal view
- Intraoral/Intranasal Intubation
- Use of oropharyngeal airway (OPA)
- Use of nasopharyngeal airway (NPA)
- Use of laryngeal mask airway
- Use of video laryngeal scope
- Confirmation of successful ventilation by indicators.
- Feedback of incorrect procedures including esophagus intubation and unilateral intubation
- Securing the tube in place with tape or Thomas™ endotracheal tube holder

**Recommended Devices:**

- (Macintosh laryngoscope) blade size 3,4
- (Endotracheal tube) internal diameter 7.0mm, 7.5mm
- (Laryngeal mask) Air-Q: size 3.5
  LMA Supreme: size 4
  I-gel: size 4

**Specifications :**

<table>
<thead>
<tr>
<th>Set Includes:</th>
<th>Manikin Size:</th>
<th>1 manikin</th>
<th>W45 x D20 x H25 cm</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 upper incisors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 lubricant</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 syringe</td>
<td>Replacement Parts:</td>
<td>1 syringe</td>
<td>11393-020</td>
</tr>
<tr>
<td>1 carrying bag</td>
<td>2 replacement tongues II</td>
<td>1 carrying bag</td>
<td>11392-080</td>
</tr>
<tr>
<td>1 instruction manual</td>
<td>10 upper incisors</td>
<td>1 instruction manual</td>
<td>11392-010</td>
</tr>
</tbody>
</table>

---

**MW19 Difficult Airway Management Simulator for Bronchofiberscopy**

Realistic trainings in insertion and management of a fiberscope

Anatomically correct trachea and bronchi provides realistic view through a scope, allowing recognition of bifurcations.

**Features**

1. Anatomically correct trachea and bronchi that include trachea bifurcation for segmental bronchi.

**Training Skills**

- Insertion and management of a fiberscope
- Recognition of bifurcations by a fiberscope
- Airway opening techniques (head tilt, jaw thrust)
- "Sniffing position"

**Specifications :**

<table>
<thead>
<tr>
<th>Set Includes:</th>
<th>Manikin Size:</th>
<th>1 manikin</th>
<th>W45 x D20 x H25 cm</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 upper incisors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 lubricant</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 syringe</td>
<td>Replacement Parts:</td>
<td>1 syringe</td>
<td>(11393-020) 1 face mask</td>
</tr>
<tr>
<td>1 carrying bag</td>
<td>2 replacement tongues II</td>
<td>1 carrying bag</td>
<td>(11392-080) 2 replacement tongues II</td>
</tr>
<tr>
<td>1 instruction manual</td>
<td>10 upper incisors</td>
<td>1 instruction manual</td>
<td>(11392-010)</td>
</tr>
</tbody>
</table>

---

Tel: 1-310-325-8860 / Fax: 1-310-325-8867
**World’s First Ultrasound Neonatal Head Phantom**

Head ultrasound is one of most difficult scanning skills, and trainees have few opportunities for training. This head model features an accurate depiction of a newborn’s cerebral anatomy, and facilitates a realistic user experience with its life-like soft touch.

**Training Skills**
- Scanning of brain anatomy in Sagittal (Angled Parasagittal), Coronal and Transverse planes via any fontanel.

**Anatomy**
- Skull
- Anterior fontanel, Posterior fontanel
- Cerebrum
- Cerebellum
- Brain-stem
- Lateral ventricle
- Ventricle
- Third cerebroventricle
- Fourth ventricle
- Septum lucidum

**Specifications :**

<table>
<thead>
<tr>
<th>Set Includes:</th>
<th>Manikin Size:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 ultrasound phantom</td>
<td>W5.1 x D5.1 x H6.7 inch</td>
</tr>
<tr>
<td>1 storage case</td>
<td></td>
</tr>
<tr>
<td>1 instruction manual</td>
<td></td>
</tr>
</tbody>
</table>

**World’s First Ultrasound Neonatal Head Phantom with Hydrocephalus**

This head phantom is designed to demonstrate abnormal anatomy, such as Hydrocephalus, in which the shape of the skull is altered due to intracranial pressure.

**Training Skills**
- Scanning of brain anatomy in Sagittal (Angled Parasagittal), Coronal and Transverse planes via any fontanel.

**Anatomy**
- Skull
- Anterior fontanel, Posterior fontanel
- Hypertrophied lateral ventricle

**Specifications :**

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<td>W5.1 x D5.5 x H7.8 inch</td>
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<td>1 storage case</td>
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<tr>
<td>1 instruction manual</td>
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</table>
Abdominal ultrasound phantom with pathologies

Unique high-fidelity ultrasound phantoms that facilitate effective training in abdominal ultrasound scanning with your own clinical devices.

Pathologies (ABDFAN only)
- Hepatic lesions (cystic and solid)
- Gallbladder and bile duct stones
- Pancreatic tumors
  (one invading the portal vein)
- Spleenic lesions
- Both kidney lesions
- Left adrenal tumor

Features
1. Detailed hepatobiliary, pancreatic and other abdominal anatomy
2. Eight Couinaud's hepatic segments can be localized.
3. ABDFAN has various simulated lesions to provide wider training variety.

Training Skills
- Basics of abdominal sonography:
  - Cross sections and sonographic anatomy
  - Sonographic demonstration of each individual organ
  - Localization of hepatic Couinaud's segments

Anatomy
- Liver
  (segmental anatomy, portal and hepatic venous systems, ligamentum teres and ligamentum venosum)
- Biliary tract
  (gallbladder, cystic duct, intrahepatic and extrahepatic bile ducts)
- Pancreas (pancreatic duct)
- Spleen / kidneys
- Detailed vascular structures
  (aorta, vena cava, celiac artery and its branches, portal vein and its branches, superior mesenteric vessels, renal vessels, and more)

Specifications:

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<tr>
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<tr>
<td>1 storage case</td>
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Conduct "FAST" assessment to save a trauma patient!
FAST/ER FAN provides simulated training in FAST (Focused Assessment with Sonography for Trauma); an ultrasound examination directed at detection of the presence of free fluid in trauma patients.

Features
1. An innovative phantom for repetitive training of FAST as an adjunct to the ATLS primary survey
2. Pathologies include cholecystitis, an aortic aneurysm and a lesion on the colon.

Training Skills
- Internal hemorrhage at perihepatic, perisplenic, pelvis and pericardium area
- Sonography for acute patients

Specifications:
- Set Includes: Phantom Size:
  - 1 ultrasound phantom with carrying base W62 x D30 x H24 cm
  - 1 tutorial manual (DVD)

Junji Machi, MD, PhD
University of Hawaii at Manoa and Kuakini Medical Center

*The small intestine is also embedded.
Ultrasound training for pediatric FAST procedures

This world's first pediatric ultrasound torso phantom provides opportunities of hands-on training in ultrasound examination of young patients.

Features

1. The phantom of a 2-year-old, thoracoabdominal organs, a bone structure, free-fluid to learn FAST procedures and pathologies that are commonly seen in pediatrics.
2. With this phantom, trainees can acquire skills in the basics of pediatric abdominal ultrasound as well as FAST/Acute sonography.

Training Skills

- FAST procedures:
  - Internal hemorrhage at perihepatic, perisplenic, pelvis, and pericardium area
- FAST procedures:
  - Internal hemorrhage at perihepatic, perisplenic, pelvis, and pericardium area

Specifications:

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<td>1 tutorial manual</td>
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</tbody>
</table>

Product Supervision
Shunsuke Nosaka, MD, PhD
Director of Radiology
National Medical Center for Children and Mothers

Images:
- Pleural Hemorrhage
- Hydronephrosis
- Hemorrhage at Rectovesical Area

Diagrams:
- Ultrasound images showing various pathologies like pleural hemorrhage, pericardial hemorrhage, and hydronephrosis.

*The small intestine is also embedded.*
Effective training tool for abdominal intraoperative ultrasound examination

Innovative phantom simulating abdominal open intraoperative and laparoscopic ultrasound examination.

Features

1. Soft phantom materials allow realistic probe manipulation.
2. Various simulated lesions including biliary stones and cysts, solid tumors (hypoechoic, hyperechoic and target-appearance) in the liver, pancreas, spleen and kidneys.
3. Detachable stomach and duodenum allows various scanning methods of the bile duct and pancreas.

Training Skills

- Abdominal intraoperative ultrasound examination
- Laparoscopic ultrasound examination

Anatomy

- Liver
  (segmental anatomy, portal and hepatic venous systems, ligamentum teres and ligament venosum)
- Biliary tract
  (gallbladder, cystic duct, intrahepatic and extrahepatic bile ducts)
- Pancreas (pancreatic duct)
- Spleen / kidneys
- Detailed vascular structures
  (aorta, vena cava, celiac artery and its branches, portal vein and its branches, superior mesenteric vessels, renal vessels, etc.)

Specifications :

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<td>1 stomach ultrasound phantom</td>
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<td>1 phantom container</td>
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<tr>
<td>1 tutorial manual (DVD)</td>
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</table>

* A ultrasound machine is not included.

Pancreatic head

Intraoperative ultrasound

Bileduct stones

Laparoscopic ultrasound

Gallstones

Junji Machi, MD, PhD
University of Hawaii at Manoa and Kuakini Medical Center
Highly popular phantom to learn second trimester screening

SPACEFAN-ST provides high quality training for second trimester screening in pregnancy. A 23-week fetus is included with detailed anatomies which are essential for the assessment at the period.

Features
1. SPACEFAN-ST provides high quality training for routine second trimester screening.
2. The oval shape phantom abdomen can be set in four different positions.
3. The fetus includes full skeletal structure and key organs.
4. Come with a didactic DVD and a fetus demonstration model for comprehensive trainings.

Training Skills
- Fetal size assessment: BPD, AD, AC and FL
- Measurement of amniotic fluid volume
- Determination of fetus presentation (cephalic or breech)
- Assessment of each body part
  - Head: skull and brain
  - Spine and limbs
  - Cardiac chambers, blood vessels and lungs
- Assessment of umbilical cord and placenta position
- Determination of sex (This phantom represents a male fetus.)

Anatomy
- Uterus:
  - amniotic fluid, placenta, umbilical cord, and a 23-weeks fetus (26 cm)
- Fetus:
  - skeletal structure, brain with septum lucidum, lateral ventricles and cerebellum,
  - heart with four chambers, lungs, spleen, kidneys, aorta, UV, UA and the external genital

Specifications:

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<tr>
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<td>1 ultrasound pregnant uterus phantom</td>
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<td>1 fetus demonstration model</td>
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<td>1 tutorial manual (DVD)</td>
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<td>1 carrying case</td>
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</table>

* A ultrasound machine is not included.

**Fetus Ultrasound Examination Phantom "SPACE FAN-ST"**

![Image of phantom and fetus demonstration model]
Improve skills in breast screening with ultrasound. BREASTFAN is a unique phantom for training in basic breast ultrasound examination. Simulated targets with different echogenicities are embedded in the phantom mammary gland.

Features
1. State-of-the-art breast phantom with ultrasound anatomy
2. Skills required for ultrasound breast screening can be greatly advanced with practice.
3. Excellent ultrasound image quality

Training Skills
- Skills to scan full area of breast systematically
- Visualization of key anatomical landmarks
- Tracking galactophore
- Visualization and differentiation of typical pathologies
- Localization and measurement of cysts and tumor

Anatomy
- Subcutaneous adipose
- Mammary gland
- Galactophore
- Cooper's ligament
- Retromammary adipose
- Costae
- Clavicle
- Pectoralis major
- Lung
- Lymph nodes at axilla

Product Supervision
Tokiko Endo, MD, PhD
Director of Department of Advanced Diagnosis, Clinical Research Center, National Hospital Organization Nagoya Medical Center

Tokiko Endo, MD, PhD
Director of Department of Radiology, National Hospital Organization Nagoya Medical Center

Specifications:

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<td>1 storage case</td>
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<tr>
<td>1 tutorial manual</td>
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</table>

* A ultrasound machine is not included.
Provides step by training in ultrasound guided breast biopsy

Combination of the two types of breast phantoms provides step-by-step development of skills in needle biopsy.

Features

1. Fine Needle Aspiration Biopsy (FNAB), Core Needle Biopsy (CNB) and Mammotome biopsy can be performed under ultrasound guidance.
2. Tissue of the breast phantom represents softness and resistance of the mammary gland.
3. Excellent image quality
4. Targets are colored to confirm successful sampling.
5. Targets are embedded in three levels to allow training in needle access with different angles and depth.
6. Transparent and opaque type phantoms provides various level of training.
7. An inexpensive and disposable phantom that provides many numbers of trials.

Training Skills

- Hand-eye coordination in ultrasound biopsy
- Localization of targets under ultrasound guidance
- Sampling of target

Basic (Transparent)

Hand-eye coordination

Size of targets: 6 mm dia. and 10mm dia.
Type of targets: Hyperechoic (blue)
Number of targets: 12 pieces

Advanced (Opaque)

Acquisition of skills in safe and reliable needle biopsy

Size of targets: 6 mm dia. and 10mm dia.
Type of targets: Hyperechoic (blue), Hypoechoic (red)
Number of targets: 12 pieces

Specifications:

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<tr>
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<td>Transparent set: (11387-100) 1 pair of transparent type</td>
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<tr>
<td>Opaque set: (11387-200) 1 pair of opaque type</td>
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</table>

* A ultrasound machine and needles are not included.
**Female Pelvic Ultrasound Phantom**

Two interchangeable inserts to cover basic gyn ultrasound

Female Pelvic Ultrasound Phantom facilitates teaching and learning how to practice both transvaginal and transabdominal ultrasound procedures using one’s own device. Typical female pelvic pathological are prepared for various training.

**Features**

1. Both transvaginal and transabdominal scanning are possible.
2. Two types of interchangeable phantom inserts with different pathologies
3. Realistic view of female external genital
4. Excellent ultrasound image quality

**Training Skills**

- Handling and manipulation of transvaginal and transabdominal transducers
- Interpretation of sonogram
- Visualization and localization of anatomies and pathologies

**Anatomy**

- **Pathological Phantom:**
  - endometrial cancer
  - uterine fibroid
  - dermoid cyst of ovary
  - bleeding at Douglas pouch

- **Ectopic Phantom:**
  - ectopic pregnancy in a fallopian tube
  - bleeding at Douglas pouch

**Specifications:**

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<th>Set Includes:</th>
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<td>W34 x D33 x H24 cm</td>
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<td>1 ultrasound pathology unit</td>
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<tr>
<td>1 ultrasound ectopic pregnancy unit</td>
<td></td>
</tr>
<tr>
<td>1 storage case</td>
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</tbody>
</table>

**Replacement Parts:**

- (41909-030) 1 ultrasound pathology unit
- (41909-040) 1 ultrasound ectopic pregnancy unit

* Ultrasound machines are not included.

**US-10a Female Pelvic Ultrasound Phantom with 3 units**

Includes a normal unit, a ectopic pregnancy unit and pathology unit.
Scrotal Ultrasound Phantom

Repeated training to acquire skills in safe and painless examination

Scrotal Ultrasound Phantom provides trainees life-like training with high quality ultrasound images. Interchangeable normal and cancerous phantoms offer not only an anatomical understanding but also pathological images.

Features
1. Two types of interchangeable scrotums: normal and pathology
2. Excellent ultrasound image quality

Training Skills
- Patient positioning and preparation for examination
- Scrotal ultrasound screening
- Visualization of testicular cancer

Anatomy

- Normal Phantom
  - scrotum, testicle, epididymis and penis

- Pathological Phantom
  - scrotum, testicle, epididymis and penis
  - testicular cancer (each one in left and right testis, 10mm dia.)

Specifications:

<table>
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<td>W34 x D33 x H24 cm</td>
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<td>1 pathological scrotum</td>
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</tr>
<tr>
<td>1 storage case</td>
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</table>

* A ultrasound machines is not included.
Best tool to teach Graf's method

This is the world's first training phantom with ultrasound anatomy of a 6-week-old infant and it expands training opportunities for pediatricians, radiologists and orthopedists. Before working on real infants, trainees can repetitively practice on this phantom to become familiar with the examination procedures and key points. Using real ultrasound devices, trainees can learn key ultrasound landmarks to identify standard plane for Graf's classification. This is a foundation to acquire skills in handling and positioning of the baby as well as correct positioning of the transducer.

Features

1. The market's only training model for hip sonography on a full body manikin of 6-week-old infant
2. Bilateral hips for examination
3. Key landmarks that can be recognized under ultrasound include:
   - chondro-osseous junction (bony part of femoral neck),
   - femoral head, synovial fold, joint capsule, labrum,
   - hyaline cartilage preformed acetabular roof,
   - bony part of acetabular roof, bony rim (check list I),
   - lower limb of os ilium, correct plane, labrum (check list II).
4. Facilitate anatomical understanding
5. The full body manikin with movable arms allows training in supporting and changing the position of the infant.

Specifications:

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<td>W55 x D25 x H13 cm, 3kg</td>
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<tr>
<td>1 instruction manual</td>
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</table>
Durable and stable

Useful both for daily assessment and further research. Gray scale for evaluation, cyst targets with non-resonance cylinders, line targets for geometrical evaluation including close range (dead zone) resolution, axial and lateral resolution are prepared for scanning. The phantom is designed to allow scanning from all four side walls.

Specifications:

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</table>

Ensure highly detailed images to ensure reliable breast cancer examinations

Ultrasound QA phantom for high precision imaging in the high frequency sonography around 10 MHz that is required in breast examination. For monthly basic quality check of ultrasound images, as well as longer term quality assurance to maintain consistency of the performance of scanners and transducers.

Specifications:

<table>
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<td>1 thermometer</td>
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<tr>
<td>1 storage case</td>
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</table>

*A ultrasound machines is not included.*
The circulatory system is on the left side of the model and the nervous system is on the right. A thorough and convenient replica for students and is approximately 54 in. tall.

The left half of the skull reveals the brain and the medulla oblongata. The nerves are fully shown, and the model is mounted on a metal stand for a total height of 51.2 in.
**A61** Circulatory System Model

This 47 inch model displays arteries on the left side of the body and veins on the right, displaying an accurate relationship between the circulatory system and organs.

---

**A62** Circulatory System with Skeleton Model

This 47 inch, plastic model is mounted on a metal stand and replicates anatomies such as the cochlea, skeleton, blood vessels, brain, heart, liver, kidney and spleen.

---

**A144** Nerves and Vessels of Arm

A model of arm from the upper arm to the hand with a full replica of the blood vessels and nerves. A great addition for lessons on drawing blood or IV procedures.
This torso model consists of more than 700 parts and is approximately 1m tall mounted on a metal stand. The intricate details and full anatomy facilitate a complete understanding of the human body.

**A1A** Human Anatomy Torso (dual sex)

This model made of rigid plastic is 27.2 inch high. It is mounted on a base with a supporting rod and has a descriptive key for 90 separate parts.

**A2A** Dissectible Anatomy of Arm (15 parts)

This model made of rigid plastic is 36.2 inch high and can be separated into 27 parts. This model is mounted on a base, and the principal nerves and blood vessel systems are replicated in detail.

**A3A** Dissectible Anatomy of Leg (27parts)
**TM90 Junior Torso**

This model is made of flexible plastic and separates into 15 parts.

---

**TM90-II Junior Torso (Advanced model)**

This torso is a very useful study aid for students and is a great illustration of the digestive system. It is made of flexible plastic, separates into 18 parts and is approximately 33.6 inches tall.

---

**M42 Muscles of Arm**

This model is a great tool for visualizing the functions of the joint and muscle of the elbow. The state of the muscle can be observed when the arm is stretched and bent.

---

**A83A Pregnant Uterus Model**

This plastic model replicates the anatomy of a mother’s body at her final stage of pregnancy. The fetus can be removed out of the mother’s body. The model is mounted on a wooden base.

---

**A89 Fetal Development Model Set**

Made of plastic, this set of embryo models demonstrates regular fetal development in sequence from the first month of pregnancy up to the last. Each model is mounted on a stand.
**A27 Brain with Color Coded Cortical Area**

This model made of rigid plastic is placed on a metal stand and is approximately 19 inches tall. The right cerebral hemisphere is painted in different colors into the cortical areas.

**A36 Eye Anatomy B**

The optic nerve and the ocular muscles are represented, as well as the nerves and blood vessels. The eyeball can be dissected to show the choroids vitreous body, lens, etc.

**A120 Cerebral Arteries**

This life-size replica of the brain arteries spreads over and into the cerebrum region. The cerebrum and the spinal bulb are accurately depicted. Model on a metal stand.

**A107 Head Cross Section Model**

Model separates into six pieces and displays the brain, nasal cavity, tongue and larynx in detail. Composed of rigid plastic.

**A42 Ear Anatomy B**

This model shows a portion of the cochlea dissected transversally, and the scala vestibuli, scala tympani, canalis cochleae and hearing organs are replicated. Mounted on a wooden base.
**A54 Nasal Cavity Model**

A model for the respiratory system with the anterior and dorsal aspect. The nasal cavity is cut on a sagittal plane to show its detailed structure. Made of plastic, mounted on a stand.

**A106 Tongue and Larynx Model**

This model is made of rigid plastic and is approximately 13.2 inches tall. Details of the tongue, larynx, jawbone, hyoid bone, muscles, blood vessels and nerves are shown.

**A123A Bronchus, Pulmonary Vessels Model**

This model was created under the guidance of Dr. Rikuto Hatanaka at The Kyoto Katsura Hospital and accurately replicates the positions and structure of the organs three-dimensionally.

**A48-1 Bronchus and Pulmonary Vessels Model**

The model shows in detail the relation between the bronchus, the pulmonary arteries, and veins and clearly shows how the arteries and veins are distributed to the right and left lungs.
A69 Liver, Kidneys and Spleen Model

Life-size model, mounted on a base. Three organs are represented in visceral positions showing the principal blood vessels and nerves.

A59 Heart Anatomy B

This plastic, human-size heart is dissectible into 6 parts and is approximately 10 inches high. The esophagus, stomachs and aorta descendens are removable, and the model comes with a descriptive key.

A142 Coronary Artery and Conducting System Model

This model replicates the location of the impulse conducting system and coronary arteries in the human heart. It is useful for primary guidance in scientific education.

A71 Intestines Model

This model demonstrates a posterior view of the digestive system. The mesenteric vessels are shown in three parts: the cecum, the jejunum and the ileum. The model is composed of plastic.

A32 Tract and Reflection of Spinal Nerve Model

This pair forms a set that illustrates the nervous system. One shows the reflection of the spinal nerve, and the other shows its main tract. Approximately 9.2 in. in diameter and 4.8 in. in height.

A136 Coronary Arterial Model

Placed in a transparent case with angular gradations. A knob on the top moves the model to demonstrate. Approximately double the life-size.
Have You Found What You Are Looking For?

We also have a wide variety of high quality radiology phantoms! Please do not hesitate to contact us to get a catalog for radiology phantoms.