



# **3UPSCALE**

adjustable-height exam table and weight scale in one

**USER MANUAL** 

# **IMPORTANT INFORMATION**

Complete this form and have it available when calling for service.

Date of Purchase:	Serial Number:
Manufactured For:	Manufactured By:
Medical Accessibility, LLC	Med-Mizer Inc.
10632 N. Scottsdale Road, Suite #133	80 Commerce Drive
Scottsdale, AZ 85254	Batesville, IN 47006
Name of Authorized Dealer:	
Dealer Phone Number:	

# **Calling for Service**

If you have questions about your UpScale or problems which require service, please have your model and serial numbers available and call your dealer, if you have one. If your dealer is unable to resolve the issue, call Medical Accessibility, LLC at 480-781-0601.

Warranty information can be found on page 28 in the accompanying "Installation and Service Guide."



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## INTRODUCTION

This manual provides instructions for use of the UpScale adjustable-height exam table with built-in weight scale. For unpacking, assembling, cleaning and performing routine maintenance on the UpScale, see the accompanying "Installation and Service Guide."

Do not operate the table without first reading and understanding the warnings and cautions provided in this manual. Make sure this manual is located near the table for user reference.

#### **INTENDED USE**

The UpScale is intended to provide the means to position and support a single patient during a physical examination, and for medical staff to take a patient's height and weight measurements. Foot stirrups, knee crutches, and a pelvic tilt feature are provided for staff to perform gynecologic examinations. Removable grab bars ease patient transfers. The table is particularly suited for patients with limited mobility.

The UpScale is intended for use in U.S. long and short term care facilities, acute care facilities, health clinics, physician offices, infirmaries, and other places where patients are examined in a reclining or sitting position.

The UpScale is intended to support a safe working load of 450 lbs./204kg., which includes the weight of the patient, his/her clothing, any other items on the upholstered cushion, and any attached accessories. The scale is intended to weigh patients between 30 lb./13kg. and 450lb./204kg.

The UpScale's leg support is intended to support the patient's lower extremities when the patient is seated or reclining on the UpScale and is designed to support a safe working load of 125 lbs. The leg support is **not** intended to bear a patient's full weight, and patients should **not** sit on the leg support at any time.

The UpScale is intended for operation by physicians, nurses and nurse aides who have read and understand this User Manual.

The UpScale is intended for indoor use in environments where it will not get wet, where floors are stable and level, and in ambient temperatures between 40°F and 104°F.

The UpScale is intended for operation on 120 VAC, 60 hz mains power.

The UpScale is **not** intended to provide a means for transport of the patient.

The UpScale power cord can be used as mains disconnect.



## **REQUIREMENTS AND SAFETY**



This symbol identifies a **WARNING** or **CAUTION**.

**WARNING** represents potentially dangerous situations that can lead to serious physical injury or death.

**CAUTION** represents potentially dangerous situations that can lead to minor physical injury.



Type B, Applied Part (Upholstery)



**Fuse Rating Specification** 



**Protective Earth Ground** 



Dangerous Voltage/Shock Hazard



Patient Weight Limit



Refer to Manual

#### **GENERAL USE SAFETY**



**WARNING** UpScale must be used as specified under the "Intended Use" heading. Use of the table or weight scale outside of the specified conditions may result in patient or user injury.



**WARNING** Close supervision by an adult user who has read and understands this User Manual is required when the exam table is used around children or others who have not or cannot read and/or understand this User Manual.



**WARNING** When lowering the UpScale, make sure the area between the table frame and floor is clear of objects (especially patient's legs and feet). Failure to check the area beneath the table increases the risk of objects and feet being crushed.



**CAUTION** Keep the UpScale in low position when the patient is unattended. High exam table positions increase the risk of injury from falling when getting on or off the exam table, or when reclined.



**CAUTION** If the UpScale malfunctions, unplug the power cord, assist the patient from the table, and call for service. Failure to comply may result in injury to the patient and/or damage to the UpScale.





**CAUTION** The scale is intended to weigh patients between 30 lb./13kg. and 450 lb./204kg. Weighing loads greater than 450 lb. can cause damage to the table.



**WARNING** Do not modify the UpScale without authorization from Medical Accessibility, LLC. If the UpScale is modified, appropriate inspection and testing must be conducted to ensure continued safe use of the equipment.



**WARNING** There are no known contraindications.

#### **ELECTRICAL SAFETY**



**CAUTION** To avoid a fire hazard; do not use the UpScale in an oxygen-enriched environment or in the presence of explosive gases.





**CAUTION** To avoid an electric shock hazard; do not plug the power cord into a wall outlet if the power cord is damaged, if the ground pin is missing, or if the wall outlet does not provide for the power cord ground pin.





**CAUTION** When using high frequency surgical devices or performing a cauterization or similar treatment, use a non-conductive material to insulate the patient from the metal portions of the UpScale. Failure to do so may result in electric shock or burns to the patient.







**CAUTION** Do not spill or spray liquid on the UpScale. Excessive liquid on the UpScale can result in an electric shock hazard. In the event of a liquid spill or excessive liquid on the UpScale, unplug the UpScale immediately. Remove excess liquid and allow UpScale to dry thoroughly before restoring power.







**WARNING** Use 120 VAC/60 Hz as noted on the rating label. Failure to do so may result in electric shock to the user and will result in damage to the UpScale.







**WARNING** To avoid the risk of electrical shock, this equipment must be connected to a supply mains with protective earth.



**CAUTION** Do not use any power supply other than that listed on the rating label. Failure to do so may result in serious injury and/or equipment damage.



**CAUTION** The UpScale has been evaluated with respect to hazards only in accordance with UL60601-1; IEC60601-1 and CAN/CSA C22.2 No. 601.1.



**CAUTION** The UpScale has been evaluated with respect to radiated emissions only in accordance with FCC Part 15B; CAN ICES-003. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.



#### TABLE ARTICULATION SAFETY



**WARNING** Always confirm the area under the UpScale is free and clear of user's or patient's extremities, children, pets/service animals, and/or objects when raising and lowering the table.



**CAUTION** When lowering the UpScale, always confirm the patient's limbs and extremities are not under any portion of the table.



**CAUTION** Always confirm patient's body, limbs and extremities are within the perimeter of the upholstered cushion and/or not in a position where they can be trapped or pinched when adjusting back rest, pelvic tilt, or leg support.



**CAUTION** Keep moving parts of the UpScale free of obstructions, including tubes, cords and wires. Items caught in moving parts may be crushed, cut or pulled during table adjustment.

#### **GRAB BAR SAFETY**



**WARNING** Always confirm the grab bars are fully engaged on the table. Improperly engaged grab bars can result in a fall hazard due to sudden unexpected movement.

#### **LEG SUPPORT SAFETY**





**CAUTION** The leg support is designed to hold a maximum of 125 lb./57 kg. The leg support should not be used as a seat or to hold a patient's entire weight.

#### WEIGHT SCALE SAFETY



**CAUTION** The battery for the scale display must be disposed of by appropriate methods. Batteries contain hazardous materials.

#### **TAPE MEASURE SAFETY**



**CAUTION** Be sure to retract tape measure when not in use to prevent someone from being entangled.



**CAUTION** When retracting the tape measure, guide the tape away from the patient's body to prevent injury.

#### **HAND PENDANT SAFETY**



**CAUTION** Pendant cord must be routed and secured properly to ensure cord does not become entangled and damaged during normal operation of table.

#### **SERVICE SAFETY**



**CAUTION** Use only replacement parts supplied or approved by Medical Accessibility, LLC for the UpScale.



**CAUTION** Attachment, support, or connection of equipment not specified herein requires evaluation of the entire system to the requirements of UL 60601-1, IEC60601-1 and CAN/CSA C22.2 No. 601.1

#### **CLEANING SAFETY**





**WARNING** To avoid the possibility of electric shock or damage to the instruments, always switch off the power supply before cleaning electric components.





**WARNING** Do not spill or spray excessive liquid on the UpScale. Excessive liquid on the UpScale can result in an electric shock hazard. In the event of a liquid spill or excessive liquid on the UpScale, unplug the UpScale immediately. Remove excess liquid and allow exam table to dry thoroughly before restoring power.



**CAUTION** Follow manufacturer's instructions for proper use of cleaning and disinfecting agents. Improperly diluted or improperly applied cleaning and disinfecting agents can result in inadequate disinfection and patient or user injury. Refer to cleaning instructions in accompanying "Installation and Service Guide."

#### **MAINTENANCE AND SERVICE SAFETY**





**WARNING** Before performing table maintenance or service, unplug the power cord to avoid an electric shock hazard.



**WARNING** If a fault or problem is found during preventative maintenance inspections, remove the UpScale from service until the appropriate repair or adjustment is made.

#### **DISPOSAL OF EQUIPMENT**



**CAUTION** The UpScale and accessories may become contaminated during normal use. At the end of product life, consult local codes and ordinances for proper disposal.

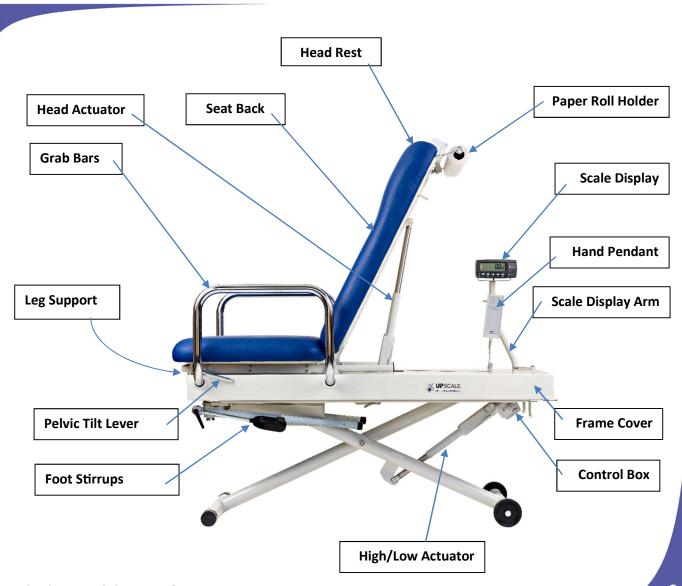


## **COMPLIANCE STATEMENT**

The UpScale was designed to minimize electromagnetic interference with other devices and has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. Any modification to the UpScale may violate the rules of the Federal Communications Commission and make operation of the product unlawful. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

If interference is noticed between the UpScale and another device, remove the interfering device from the room or plug the Upscale into an isolated circuit.

## **GENERAL OVERVIEW**



## **EXAM TABLE OPERATION**

## Overview

The UpScale is intended to provide the means to position and support a single patient during a physical examination, and for medical staff to take a patient's height and weight measurements. Foot stirrups, knee crutches, and a pelvic tilt feature are provided for staff to perform gynecologic examinations. Removable grab bars ease patient transfers. The table is particularly suited for patients with limited mobility.

## **Preparing to Take a Patient's Weight**

Before a patient can be weighed on the UpScale, the scale display must be turned "on" and zeroed before the patient is positioned on the table.

If planning to weigh a patient, first turn the power on the scale display "on" by pressing and releasing the "power" button on the scale display. The monitor will run a start-up sequence. Ensure that the scale has been zeroed. If a weight other than zero is displayed, press and release the "zero" button. The scale is now prepped and ready to take a patient weight. Patient's feet should not touch the floor for weight measurement.

Refer to pages 18-to-19 of this manual for complete directions for weighing a patient.

# **Positioning a Patient**

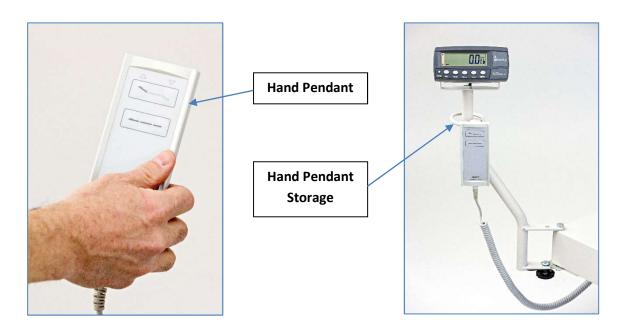
To ensure safety of both patient and medical staff, use the hand-held pendant to lower the deck of the UpScale to a comfortable height for patient transfer and positioning. For patients in a wheelchair or scooter, this means lowering the exam table to a low setting of 17"-to-25" off the floor. The grab bars may be removed and placed to the side to provide more maneuvering clearance and/or to make space for a transfer board. The UpScale's base can accommodate the use of most portable patient lifts. Once a patient is comfortably positioned on the table, the table can be raised to exam height using the hand-held pendant.

Refer to pages 11-to-12 of this manual for directions on lowering and raising the table using the hand pendant.



#### **Hand Pendant**

The UpScale is equipped with a hand pendant that controls both the height of the table and the angle of the back rest.



When the hand pendant is not in use, hook the pendant onto the arm of the scale display arm, as shown above. Use care not to drop the hand pendant, as damage to the hand pendant caused by misuse is not covered by the warranty.

# **Table Height Adjustment**

The UpScale can be raised up to an exam height of 33.5''/85.09 cm and lowered to a low height of 17''/43.18 cm. At the lowest height, the clearance between the table frame and the floor is 8''/20.32 cm.



**WARNING** Before lowering the table, always confirm the area under the UpScale is free and clear of children, pets/service animals, and objects when raising and lowering the table.



**CAUTION** When lowering the UpScale, always confirm the patient's limbs and extremities are not under any portion of the table.

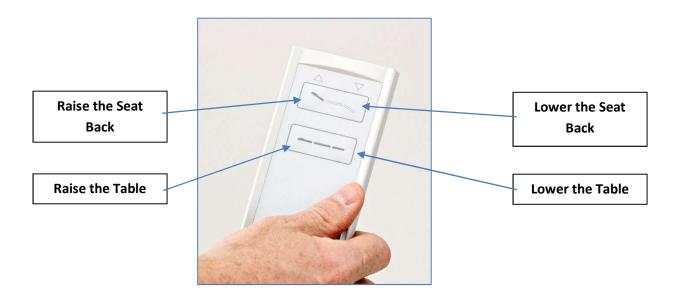
To raise and lower the UpScale, press and hold the buttons on the Hand Pendant as indicated in the diagram on the next page.

# **Seat Back Adjustment**

To raise and lower the seat back, press and hold the hand pendant as indicated in the diagram below. Seat back range - fully powered,  $0^{\circ}$  to  $62^{\circ}$ .



**CAUTION** Always confirm that a patient's body, limbs and extremities are within the perimeter of the upholstered cushion and/or not in a position where they can be trapped or pinched when adjusting the back rest.



#### **Grab Bars**

The grab bars are intended to be installed as a convenience for all patients – both able-bodied and those with mobility challenges. When transferring a patient from wheelchair, scooter, or patient lift to the UpScale, it may be necessary to remove a grab bar from one side of the table to ease access.

Grab bars are easily installed and removed.

When installing grab bars, use care to make sure they are pushed completely into the receptacles on either side. The patient's own weight, when bearing down on the grab bars, will hold them in place and provide stability during use. Only trained staff should install, adjust or remove the grab bars.

Place the grab bars to the side or stow in a closet when not in use.





# **Leg Support**

A padded and upholstered leg support is located under the seat cushion and can be extended 18"/45.72 cm. for the patient prone position. It is designed to hold a maximum of 125 lb./57 kg.

The leg support should not be used as a seat or to hold a patient's entire weight.

Use the handle shown in the photo to extend the leg support out to the desired position.



**Leg Support - Stowed** 

**Leg Support – Fully Extended** 



Foot Stirrups – Fully Extended Position

To engage the foot stirrups, grasp the end of each stirrup support bar and pull away from the table. You may encounter resistance when pulling the stirrups from the stowed position. Note that this resistance is a normal and intentional part of the locking mechanism. If you encounter resistance, lift the stirrup support bars slightly as you pull outward.

Once the support bars are extended, unfold the foot stirrups until they are in a fully extended position. Adjust the stirrups outward to the desired lateral position by lifting the stirrups and rotating them outward to one of three additional, lockable positions. The stirrups will click into place. The downward pressure of the patient's feet within the heel rests will add further stability.

To further adjust stirrup positioning, you may slide the stirrup support bars in or out.

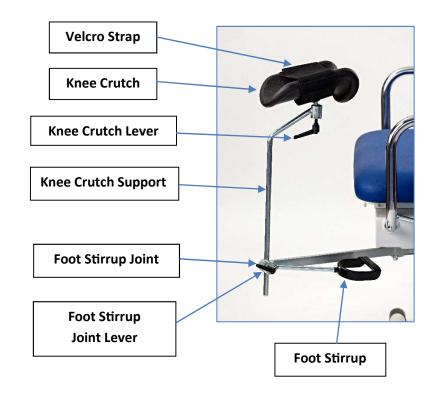


To return the stirrups for storage, fully extend the stirrup support bars. Lift the stirrup support bars slightly to disengage the locking mechanism and return the stirrups to a perpendicular position, extending straight from the table. Fold the foot stirrups inward so they rest upon the stirrup support bars, then slide the stirrups back into the stowed position.



#### **Knee Crutches**





To install the knee crutches, first partially extend the foot stirrups. Grasp the end of each stirrup support bar and pull outward away from the table, pulling the foot stirrup joint a few inches from the end of the table. The distance extended will be dictated by the patient's height and comfort. You may encounter resistance when pulling the stirrups from the stowed position. Note that this resistance is a normal and intentional part of the locking mechanism. If you encounter resistance, lift the stirrup support bars slightly as you pull outward.

After partially extending the foot stirrups, adjust the stirrups outward according to the patient's height and comfort. Place the end of one of the knee crutch support into the hole in the foot stirrup joint. Adjust the height of the knee crutch up or down. Use the foot stirrup joint lever to tighten the knee crutch support in place. Once the knee crutch is installed, use the knee crutch lever to loosen and adjust the angle of the upholstered knee crutch, then tighten. Repeat for the second knee crutch. Use the Velcro straps to secure the patient's legs in place.

To remove the knee crutches for storage, loosen the foot stirrup joint levers to release the knee crutch supports. You may have to use significant force to loosen the levers. Pull the knee crutch supports from the joints and stow the knee crutches in a cabinet or closet.

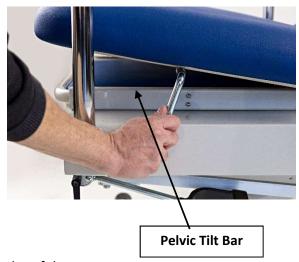
Lift the foot stirrup support bars slightly and return the stirrups to a perpendicular position, extending straight from the table. Slide the stirrups back into the stowed position beneath the UpScale.

## **Pelvic Tilt**

The seat pad can be raised and tilted from  $0^{\circ}$  to  $9^{\circ}$  to support the patient in the lithotomy position.



To adjust the seat, use the pelvic tilt bar as shown in the photo. Grasp the lower edge of the seat and lift slightly. Tilt the pelvic tilt bar up until it rests in an upright position. Gently rest the seat pad on the pelvic tilt bar.



To lower the seat back to a flat position, grasp the lower edge of the seat and lift slightly. Tilt the pelvic tilt bar down until it rests on the exam table frame. Gently lower the seat section down.



## **Paper Roll**





Paper Roll at Top of Seat Back

**Tucking the Paper Under the Seat Rest** 

Paper (not included) can be pulled and laid across the length of the UpScale to create a sanitary exam surface for each patient.

Before a patient is positioned on the table, pull the paper from the head of the table across the entire length of the upholstery, then lift the seat and tuck the paper underneath the seat to hold the paper in place.

The UpScale is designed to accommodate paper rolls of standard width - 18"/45.7 cm or 21"/53.3 cm.

To install the paper roll, place the steel support rod through the paper roll, and then thread the rod through the eyelets located at the head of the back rest. The rod has grooves on either end, which will rest within the eyelets. To change the paper roll, simply lift the rod and thread it out of one of the eyelets, releasing it from the assembly.



## TAKING A PATIENT'S WEIGHT

The scale is intended to weigh patients between 30 lb./13kg. and 450 lb./204kg.

The scale provides a weight within .2 decimal points and is accurate within +/- 0.5%. Note that the hand pendant and cord can add up to .7 lbs (0.32 kg) to the total weight when the hand pendant is hanging on the scale display arm. For the most accurate weight, best practice dictates that the scale be "zeroed" with the hand pendant stowed on the scale arm, before a patient is positioned on the table. Detailed instructions follow on the next page.

**Operation Keys and Battery Life Indicator** 

**Power** – Press and release "power" to turn the scale display on. The scale display will run through a power-up sequence for three seconds. To turn the unit off, hold the "power" button and do not release until "OFF" displays.

**Zero** – Press and release "zero" before a patient is positioned on the table. Note that everything that rests above the exam table legs will be weighed when a weight is captured. Staff must "zero" the scale to take into account all items that are on the table or hanging on the scale arm (e.g. the hand pendant) before a patient is positioned on the table.

Weigh – Press and release "weigh" to capture a patient's weight. A long hold switches the scale to "auto" mode, which will sample and average multiple weights. A further short press and release of the "weigh" button in auto mode executes a recalculation of weight.

**Recall**– Recalls the last captured weight.

**Light** – Provides backlighting to increase readability in low ambient light conditions. Turns off after five seconds to preserve battery life.



**LB/KG** – Toggles the units from pounds to kilograms for five seconds, before returning to pounds.

The scale display is powered by four size AA batteries. When battery voltage is low and batteries need replacing or recharging, a low battery symbol will show in the top right corner of the display. Unscrew the black pins from the sides of the display unit and remove the unit from the metal bracket. Turn the display unit over, open the battery compartment, and replace all of the batteries. Return the cover, and screw the display unit back into the metal bracket. For detailed instructions, see page 27 in the accompanying "Installation and Service Guide."

To preserve battery life, the UpScale scale display is programmed to power off 30 seconds after weight has been captured (i.e., the "weigh" button has been pushed), or after five minutes of disuse.



Low Battery Indicator



Weighing a patient – manual mode (for most patients)

- 1. Before seating a patient on the UpScale, turn the power on by pressing and releasing the power button.
- 2. Next, ensure that the scale has been zeroed. Place the hand pendant in the stowed position (hanging on the scale arm). If a weight other than zero is displayed, press and release the "zero" button.
- 3. Position the patient on the table.
- 4. Use the hand pendant to raise the patient to exam height. Patient's feet should not touch the floor. Staff should not lean on table during weigh-in. Return the hand pendant to stowed position.
- 5. When the patient is stable, press and release the "weigh" button. The patient's weight is captured and will display.

30 seconds later, the scale will power off to conserve battery. To recall the last weight taken, power the scale on again, then press and release the "recall" button.

Weighing a patient – auto mode (for patients with movement disorders)

This is the preferred method to weigh patients with movement disorders or when a patient's excessive motion causes fluctuations in the displayed weight.

- 1. Before seating a patient on the UpScale, turn the power on by pressing and releasing the power button.
- 2. Next, ensure that the scale has been zeroed. Place the hand pendant in the stowed position (hanging on the scale arm). If a weight other than zero is displayed, press and release the "zero" button.
- 3. Position the patient on the table.
- 4. Use the hand pendant to raise the patient to exam height. Patient's feet should not touch the floor. Staff should not lean on table during weigh-in. Return the hand pendant to stowed position.
- 5. Press and hold the "weigh" button until the scale display flashes "AUTO". The scale will sample multiple weights and display an average. Staff can trigger a recalculation with a short press of the "weigh" button.

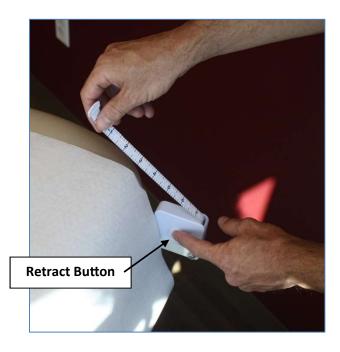
30 seconds later, the scale will power off to conserve battery. To recall the last weight taken, power the scale on again, then press and release the "recall" button.

When weighing a patient, remember the following:

- For best practice, zero the scale BEFORE the patient transfers to the UpScale.
- Make sure patient's feet are off the floor.
- Make sure staff are not leaning on the table or otherwise applying load while measuring weight.
- Don't weigh patients while other items are on the upholstered cushion (e.g. coats, purses, medical supplies, etc.).

## **MEASURING A PATIENT'S HEIGHT**





**Extending the Tape Measure** 

**Retracting the Tape Measure** 

Patient height can vary throughout the day, with many people measurably taller in the morning because the vertebrae in the disks separate while the body is laying down during sleep. Height can also vary depending on the methods of measurement. Correct and consistent measuring techniques ensure the best results, however a certain amount of variability is to be expected due to human error. For best results, take three readings and average the findings.

# **Full Body Measurement**

To measure a patient's height, first cover the exam surface with paper, then position the patient on his/her back without shoes. Pull out the leg support for patient comfort. Position the patient's body as flat as possible with feet close together and heels touching. Utilizing the tape measure located at the top of the seat back, gently pull the measurement tape and measure from the top of the patient's head to the sole of the heel, without rounding up. It may be helpful to mark the paper with a pencil at the patient's head to use as a reference point.

After measuring the patient, gently depress the button on the side of the tape measure (indicated in photo above) to slowly retract the measuring tape.



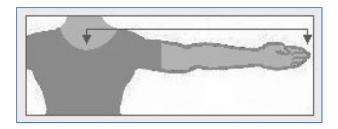
**CAUTION** When retracting the tape measure, guide the tape away from the patient's body to prevent injury. Slowly retract the tape to avoid injury.



## **Demi-Span Measurement**

The demi-span measurement is an alternative to measuring patients who are unable to stand. It is often used in nutritional assessments to identify elderly patients who may be malnourished. The demi-span measurement has a margin of error of +/- 4 cm.

Demi-span is measured as the distance from the middle of the sternal notch to the tip of the middle finger in the coronal plane.



Height is then calculated from a standard formula.

Utilizing the tape measure located at the head of the seat back, gently pull the measurement tape and measure the distance from the middle of the sternal notch to the tip of the middle finger (left arm if possible). Check that the patient's arm is horizontal and in line with the shoulders. Calculate the patient's stature from the formula below:

Females: Height in cm =  $(1.35 \times demi-span (cm)) + 60.1$ Males: Height in cm =  $(1.40 \times demi-span (cm)) + 57.8$ 

After measuring the patient, gently depress the button on the side of the tape measure to retract the measuring tape.



**CAUTION** When retracting the tape measure, guide the tape away from the patient's body to prevent injury. Slowly retract the tape to avoid injury.



**CAUTION** Be sure to retract tape measure when not in use to prevent someone from being entangled.