# Instruction Manual

For

The Universal Mobility Coach System



Rolling



Side Lying to Sitting



Standing & Ambulation



Sitting Balance



Sitting to Standing



**Kneeling & Fall Recovery** 

NSPIPE
COULCOMES ILC
"Because People Matter"

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#### **FORWARD**

Nobody has recognized the importance of Safe Patient Handling, Safe Patient Mobility, and the importance of maximizing patient outcomes more than Inspire Outcomes LLC. We have helped therapists and rehabilitation caregivers recognize their extremely important role in promoting Safe Patient Handling and Mobility in acute care, post-acute care, rehabilitation hospitals, and long term care. With our products and consulting services Inspire Outcomes reaches across the entire continuum of care. Our commitment to the Safe Patient Handling and Mobility industry is what inspired the development of the universal mobility coach system. Use it once and you will see why Inspire Outcomes LLC is recognized as the leader in the Safe Patient Handling and Mobility industry and why professional caregivers across the nation (all over the world) consistently come to us for Safe Patient Handling solutions and counsel.

Therapists and Rehabilitation caregivers have a prime role in promoting patient mobility across the continuum of care, from acute care, through post-acute care and rehabilitation hospitals, to long term care.

The American Physical Therapy Association released their vision statement in 2013 which reads: "Transforming society by optimizing movement to improve the human experience".

Based on the experience of many rehabilitation professionals, the universal mobility coach system helps caregivers perform transfer activities and perform multiple therapeutic and rehabilitative functions. In Rehabilitation, the goal is to maximize what the patient can do for themselves and normal movement is desired wherever possible. The unique design of the universal mobility coach system assists the therapist/caregiver to provide varying levels of support or assistance to the patient during performance of therapeutic activities.

The universal mobility coach system can be used by the therapist / caregiver to improve body mechanics and improve handling and leverage for the therapist / caregiver. It can also be used by the therapist / caregiver in combination with assistive devices, either powered or non-powered, to assist the patient with mobility tasks.

While this manual describes a variety of activities that can be performed while using the univeral mobility coach system, it should be understood that this disclosure is for illustration only. A caregiver having ordinary skill in the art and knowledge of customary protocols understands that therapeutic devices may be used in more ways by a properly licensed caregiver following recognized safety measures and protocols.

USERS ARE RESPONSIBLE TO ENSURE THAT ALL SAFETY WARNINGS AND INSTRUCTIONS ARE READ AND FOLLOWED COMPLETELY.



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#### **SAFETY**

#### **IMPORTANT!** READ AND UNDERSTAND ALL SAFETY WARNINGS BEFORE USING



# FAILURE TO COMPLY WITH MANUFACTURER'S INSTRUCTIONS FOR USE AND WITH SAFETY WARNINGS WILL RESULT IN SOLE RESPONSIBILITY OF ANY INJURY OR DEATH TO PATIENT OR CAREGIVER WITH THE END USER



#### **MAXIMUM WEIGHT LIMIT 400LBS**

Do not attempt to use the universal mobility coach system to lift or move any patient who exceeds this weight limit.

**ALWAYS** use the rigid strap with the elastic strap.

The elastic strap alone is not designed to hold the full weight of the patient. The rigid strap is designed to support the full weight of the patient that weighs less than 400 pounds.

Note the picture on the left has only the elastic strap. Correct use includes both the rigid strap and the elastic strap connected to the universal connector.

#### NEVER USE THE ELASTIC STRAP ALONE AS INJURY OR DEATH TO THE PATIENT COULD RESULT.









Correct

#### **ALWAYS** double check strap connections.

Ensure that the carabineer is properly closed and is through the webbing loop that is being used for the lift. Note that incorrect attachments do not have the webbing loop properly in the carabineer. Improper securing of the carabineer could result in injury or death to the patient.





**Incorrect** 



Correct



Correct

#### **SAFETY**

#### ENSURE SUFFICIENT PATIENT SUPPORT.



If using the universal mobility coach system in a weight bearing position, make certain that thigh supports are used to prevent the pelvic belt from "riding up."



Always ensure all straps are properly secured before lifting and before moving the patient. Read and understand the user's manual fully before using the universal mobility coach system. Always tighten the straps to provide the necessary level of support to your patient.



#### THE UNIVERSAL MOBILITY COACH SYSTEM IS NOT A DEPENDENT SYSTEM.

The universal mobility coach system is designed to assist with mobility for only those patients who have some ability themselves to do part of the mobility task. The system is NOT designed to carry a dependent patient from one surface to another. A dependent system should be used for that function.



#### DOUBLE CHECK THAT THERE ARE NO STRAPS OR CLIPS PINCHING THE PATIENT BEFORE LIFTING.

Take time to check all attachment points and system placement to ensure you are not pinching any part of the patient before you apply tension to the system to move the patient.



#### CHECK FOR SIGNS OF WEAR.

Before using, check the system garments, the webbing straps and loops for signs of wear or tear. Loose stitching or tears, or worn edges of webbing are signs of wear. Damaged and worn systems are NOT safe to use and could result in injury to your patient. If there are any signs of wear or any tears in the universal mobility coach system, discontinue use immediately. DO NOT attempt to repair the universal mobility coach system components or have them repaired. The universal mobility coach system is rigorously tested for load testing and safety. Modifying the system in any way, including attempted repair, may result in injury or death to your patient or to you, the caregiver, and will void any and all warranty. Any such injuryor death to the patient or caregiver resulting from use of a Universal Mobility Coach System that has been modified, including attempted repair, will be the sole responsibility of the end user.



#### ENSURE THE BUCKLES CLOSE PROPERLY.

Check the parachute buckles to make sure they clip closed and are not broken. Do not use the universal mobility coach system if any of the buckles do not properly close.



#### CHECK FOR COMPATABILITY WITH YOUR PATIENT LIFT COMPANY BEFORE USING THE UNIVERSAL MOBILITY COACH SYSTEM WITH LIFT EQUIPMENT.

If the company you purchased the system from is not the company whose safe patient handling equipment you use, ask your lift company for a letter of compatibility with their lift equipment. Use of the universal mobility coach system with non-approved lifting devices could result in injury or death to the patient.



#### USE ONLY THE CARABINEERS PROVIDED WITH THE UNIVERSAL MOBILITY SYSTEM.

Do NOT replace with unapproved clips as this can result in injury or death to your patient or to you, the caregiver.



The universal mobility coach system is not to be used for any purpose other than as specifically addressed in this manual.

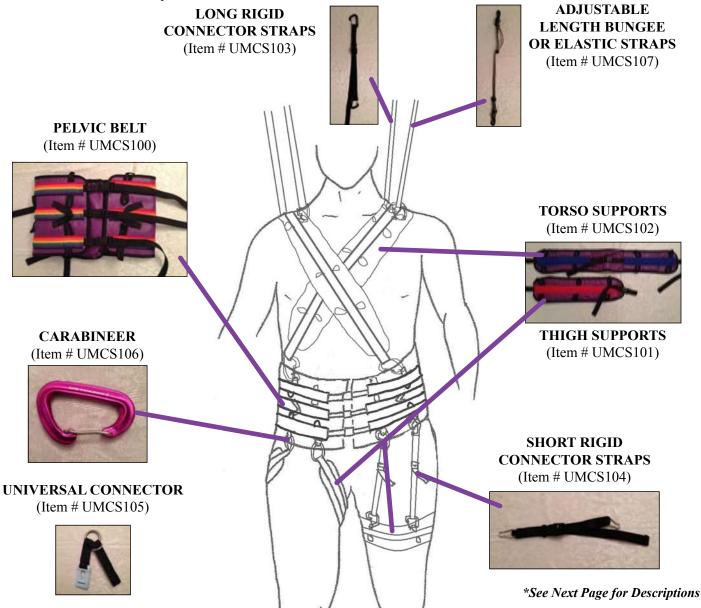
The universal mobility coach system, including each and every component and accessory part, all information contained herein, and each statement contained herein, are for use of and only of a properly licensed caregiver following recognized safety measures and protocols for rehabilitative care.

Information and statements in this manual have NOT been evaluated by the Food and Drug Administration and are NOT intended to diagnose, treat, cure, or prevent any disease, ailment, or deficiency.

The universal mobility coach system, including each and every component and accessory part, all information contained herein, and each statement contained herein, are provided "as is" and without any implied warranty, including a WARRANTY OF MERCHANTABILITY and a WARRANTY OF FITNESS, each such warranty being EXPRESSLY DISCLAIMED.

### **SYSTEM COMPONENTS**

The unique capability of the universal mobility coach system is its ability to perform multiple functions, within one system. The system is comprised of a basic pelvic belt with multiple points of attachment. There are additional pieces that can be added as needed, and connector straps to connect the system to an assistive device depending on the desired function of the system, and the desired level of assistance for the patient.



In the universal mobility coach system, the straps are separate from the garment piece. The function of the system is determined by the caregiver and defined by the location of the straps and the angle of pull on the patient. The system has been designed to closely mimic the variability used by therapists to support, to facilitate, to inhibit, or to assist patients with various mobility tasks. A caregiver can consider the pelvic garment as a flexible "exoskeleton" in concept, to which straps can be attached along pull lines of the patient's muscles. A caregiver may use the force generated from an external source when the patient has insufficient strength to complete the movement themselves.

The universal mobility coach system also has an elastic or "bungee" component. Elastic straps provide the option of helping the patient work in a given range of motion. The rigid straps are hooked up and adjusted to the desired length, as determined by how much freedom of movement the therapist wants to allow the patient. As the patient improves, the straps can be adjusted to allow more freedom of movement and allow the patient to work harder. The rigid strap is set as the endpoint (or point beyond which the patient must not go) and the elastic can give the patient assistance within this range of motion. The elastic straps can be shortened to give more assistance, or lengthened to give less assistance.



ALWAYS USE THE RIGID STRAPS WITH THE ELASTIC STRAPS FOR SAFETY OF THE PATIENT

IT IS THE RESPONSIBILITY OF THE CAREGIVER TO ENSURE THAT THE STRAPS ARE PROPERLY CONNECTED AND THE PATIENT IS APPROPRIATELY SUPPORTED AT ALL TIMES.

### **SYSTEM COMPONENTS**



PELVIC BELT (Item # UMCS100)

#### 400lbs weight limit.

Generally fits girth of 28 inches to 50 inches. Due to variability in patient size, shape and body mass distribution, there may be times when a patient falls within the stated maximums but mass distribution prohibits adequate support. Each patient should be evaluated to ensure that the patient is adequately supported for the mobility task.



THIGH SUPPORTS
(Item # UMCS101)

The thigh supports are designed to go between the legs to stop the belt from riding up when using the system for any activity where the patient is weight bearing. They can also be used circumferentially around the thighs if more comfortable for the patient or if crotch support is uncomfortable or inappropriate.



TORSO SUPPORTS (Item # UMCS102)

The torso supports can be used to attach to the pelvic belt to provide more support to the torso either in sitting, standing or quadruped position.

It should also be noted that the thigh and torso supports can also be used as short and long limb slings.





LONG & SHORT RIGID CONNECTOR STRAPS (Item # UMCS03 & UMCS104)

These straps connect the pelvic belt to the mechanical or non-mechanical support system. Each strap is individually adjustable. This enables the therapist to adjust how much freedom of movement to give the patient.



UNIVERSAL CONNECTOR (Item # UMCS105)

The universal connector has a clip as well as a loop attachment. This will allow the Universal Mobility System to be compatible with multiple manufacturers' lifts that have loop or clip style attachments. The carabineers then attach to the metal "O" ring. It is the responsibility of the end user caregiver to obtain a letter of compatibility of the Universal Mobility Coach system with each company's lifts.



CARABINEER (Item # UMCS106)

The carabineers connect the supports to the garment pieces and to the universal connector. The carabineers are also used to connect pieces of the system together, such as the leg or torso supports to the pelvic belt etc.





ADJUSTABLE LENGTH BUNGEE OR ELASTIC STRAPS (Item # UMCS107)

The elastic straps can be used ONLY in addition to the rigid straps to provide assistance within the range of motion. This allows the patient some "freedom of movement." The elastic straps will provide assistance within the range if needed. The level of assistance can be increased by shortening the straps and decreased by lengthening them.

ALWAYS use a rigid strap along with the elastic strap for patient safety. Failure to do so could result in patient injury or death.

### PRINCIPLES OF USE



- 1. Decide the task to be performed
- 2. Determine the level of assistance required by the patient
- 3. Identify the dependent portion of the task that will be difficult to perform, and will put you, the caregiver at risk, or limit the length of time or number of repetitions the patient is able to do
- 4. If the task and level of dependency will require more than minimal assistance, consider which device will be appropriate (non-powered sit-stand, powered sit-stand, mobile or ceiling mounted vertical lift)
- 5. Apply the universal mobility coach system (UMCS)
- 6. If additional trunk support is needed, apply torso supports. May be applied in front, in back or to side of patient.
- 7. Attach connector straps to the appropriate device, using the carabineers and either the clip or "O" ring attachment to the device
- 8. Adjust length of straps according to how much support or freedom of movement the patient requires.
- 9. Elastic Bungee straps may be added to provide more "spring" within range of work.
- 10. Always use a rigid strap with an elastic strap. Failure to do so could result in injury or death to the patient.
- 11. Perform Task.

#### **APPLICATION**

A caregiver having ordinary skill in the art and knowledge of customary protocols understands that therapeutic devices may be used in more ways by a properly licensed caregiver following recognized safety measures and protocols.

The universal mobility coach system can be applied in lying or sitting position.

If the patient can roll, have them do so and position the pelvic belt under their pelvis. (The lower rim of the belt should be at the patient's hip). Ensure that the loops are on the outside, away from the patient, and the smooth surface is on the inside, toward the patient.

In Supine if patient cannot roll over easily.

- 1. Fold one end of the pelvic belt in thirds, width-wise, so that the buckles are on the inside.
- 2. Hold the folded end of the pelvic belt with your fingers, palm down, with the rest of your hand on top of the system.
- 3. Holding the sheets with your other hand, reach under the natural inward curve of the patient's back with the pelvic belt, reaching as far under the patient as possible. The belt should slide through to the other side.

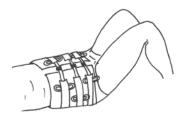








- 4. Pull the pelvic belt through so that it is as symmetrical as possible. It will be easier to apply the straps to the lifts if the loops are evenly located on either side.
- 5. Wrap the pelvic belt around, and tighten the buckles, pulling on both sides at the same time of each loose end. (If you find you have too much slack at the front, you can roll the patient over, using the leverage provided by the pelvic belt, and tighten further in the back, again ensuring that the belt stays centered)





- 6. Depending on the intended function of the universal mobility coach system, add the additional support pieces as necessary, for example: If the functional task to be performed is rolling, then attach the connector straps to the top and bottom of one side of the pelvic belt. Use the Carabineers to hook through the webbing loops, ensuring that they are properly connected and clipped closed.
- 7. If the function includes standing or walking, then attach the thigh supports to the pelvic belt as follows:
  - a. Clip the carabineer securely onto a webbing loop on the lateral side of the pelvic belt
  - b. Bring the thigh support along the outside of the thigh, under the thigh, between the legs and up in front of the thigh, bringing it back to the outside.
  - c. Thread the webbing strap of the support through the loop on the lower rim of the pelvic belt, clipping to the webbing loop on the outside edge of the belt with the carabineer.
  - d. Tighten the strap with the adjuster, which should be in the front of the patient.
  - e. Repeat on both sides.













Do Not attempt to get the patient up to standing position without the thigh straps, as this may cause the pelvic belt to ride up on the patients' torso and could result in injury or death to the patient.

#### **EXAMPLES OF USE**

While this manual describes a variety of activities that can be performed while using the univeral mobility coach system, it should be understood that this disclosure is for illustration only. A caregiver having ordinary skill in the art and knowledge of customary protocols understands that therapeutic devices may be used in more ways by a properly licensed caregiver following recognized safety measures and protocols.

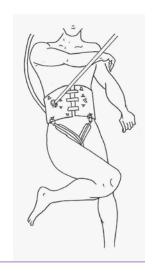
### Task: Rolling and turning Components Needed:

1 Pelvic belt (UMCS100)

2 Long Rigid connector straps (UMCS105)

Optional: 2 Elastic Bungee straps (UMCS107)





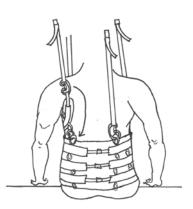
### Task: Sitting balance work Components Needed:

1 Pelvic belt (UMCS100)

2 thigh supports (UMCS101)

4 Long Rigid connector straps (UMCS105)

Optional: Elastic bungee cords (UMCS107)





### Task: Side lying to sitting Components Needed:

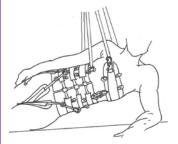
1 pelvic belt (UMCS100)

1 Torso support (UMCS102)

(Could use thigh support in smaller patient (UMCS101)

2 Thigh supports (UMCS101)

4 Long Rigid Connector straps (UMCS105)







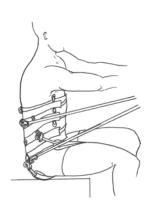
#### Task: Sit to stand Components Needed:

Pelvic belt (UMCS100)

2 Long Rigid Connector straps (UMCS105)

2 thigh supports (UMCS101)

Optional: 2 bungee elastic straps (UMCS107)





### **EXAMPLES OF USE**

### Task: Standing and ambulation Components Needed:

Pelvic belt (UMCS100)

- 4 long rigid connector straps (UMCS103)
- 2 thigh supports (UMCS101)





### Task: 4 point work and Fall Recovery Components Needed:

Pelvic belt (UMCS100)

2 thigh supports (UMCS101)

4 Long Rigid Connector straps (UMCS102)

Alternate: If rigid connector straps are uncomfortable across the

chest, substitute with 2 torso supports (UMCS102) Optional: 2 Elastic bungee straps (UMCS107)





### Task: Sitting on ball Components Needed:

1 Pelvic belt (UMCS100)

2 thigh supports (UMCS101)

4 Long Rigid connector straps (UMCS105) Optional: Elastic bungee cords (UMCS107)





# Task: Ambulation with thigh supports used circumferentially.

**Components Needed:** 

Pelvic belt (UMCS100)

2 thigh supports (UMCS101)

4 long rigid connector straps (UMCS103)

4 short rigid connector straps (UMCS104)



### **CLEANING INSTRUCTIONS**

#### "C" CLOTH SLINGS

THE UNIVERSAL MOBILITY COACH SYSTEM IS COMPLETELY WIPEABLE, INCLUDING WEBBING STRAPS AND GARMENT PIECES USING APPROVED HOSPITAL DISINFECTANTS. IN THE EVENT THAT IT BECOMES VISIBLY SOILED OR FOR CONTACT PRECAUTIONS, IT SHOULD BE LAUNDERED BETWEEN PATIENTS.

WHEN THE SLING BECOMES SOILED OR CONTAMINATED IT CAN BE LAUNDERED WITH MILD DETERGENT IN WATER NOT TO EXCEED 167°F.

DO NOT USE BLEACH AS IT CAN WEAKEN THE STITCHING AND FABRIC.

AIR DRY OR TUMBLE DRY IN DRYER TEMPERATURE NOT TO EXCEED 167°F.



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