



# The Benefits of Early Mobilisation in the ICU

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# Quick Poll:

Does your department have a formal recognised mobilisation programme?



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The benefits of Early Mobilization  
with Ergoframe<sup>®</sup>, Cardiac Chair, Microshifting,  
Mobi-Lift<sup>®</sup> , & Alternating Lateral Therapy

# Introduction of customer needs in ICU

## Enhanced Patient Outcome



Improve Pulmonary Outcomes



Early Mobilization



Pressure Injury Prevention



Falls Prevention



Improve Patient Experience

## Improved caregiver & hospital workflow



Safe Patient Moving & Handling



Easy Patient Transportation



Simplify Caregiver Procedures



Hospital Operations Efficiency

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**FROM A STAFF PERSPECTIVE**  
**WHAT PREVENTS**  
**PATIENTS**  
**MOBILIZING**

**The Biggest Barriers to Early  
Mobilisation in your ICU**



# Mobilisation barriers – FOCUSED ON STAFF

- Staffing levels?
- Lack of Time
- Equipment issues?
  - Older technology without advanced features (ALT)
- Concerns of staff (patients are too ill to mobilize)?
- Is there an early mobility program already?

And more.....





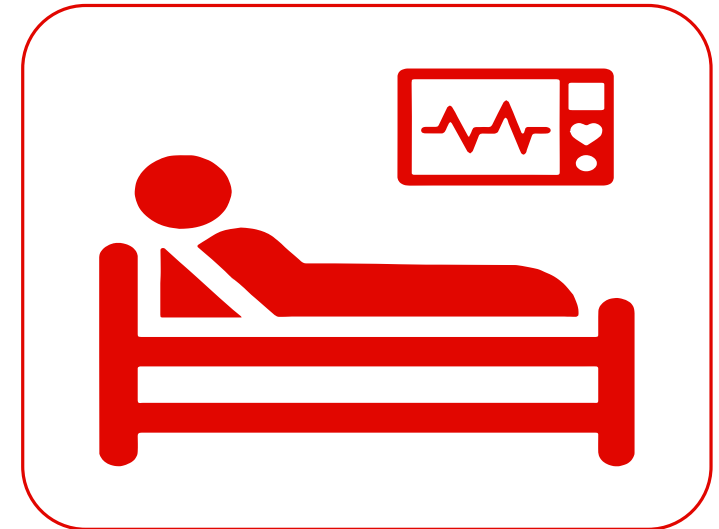
# WHY IS THE PATIENT UNABLE TO MOBILISE

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# Mobilisation barriers – FOCUSED ON PATIENT

- Hemodynamic instability
- Respiratory issues
- Sedation
- Patient Compliance

And more.....





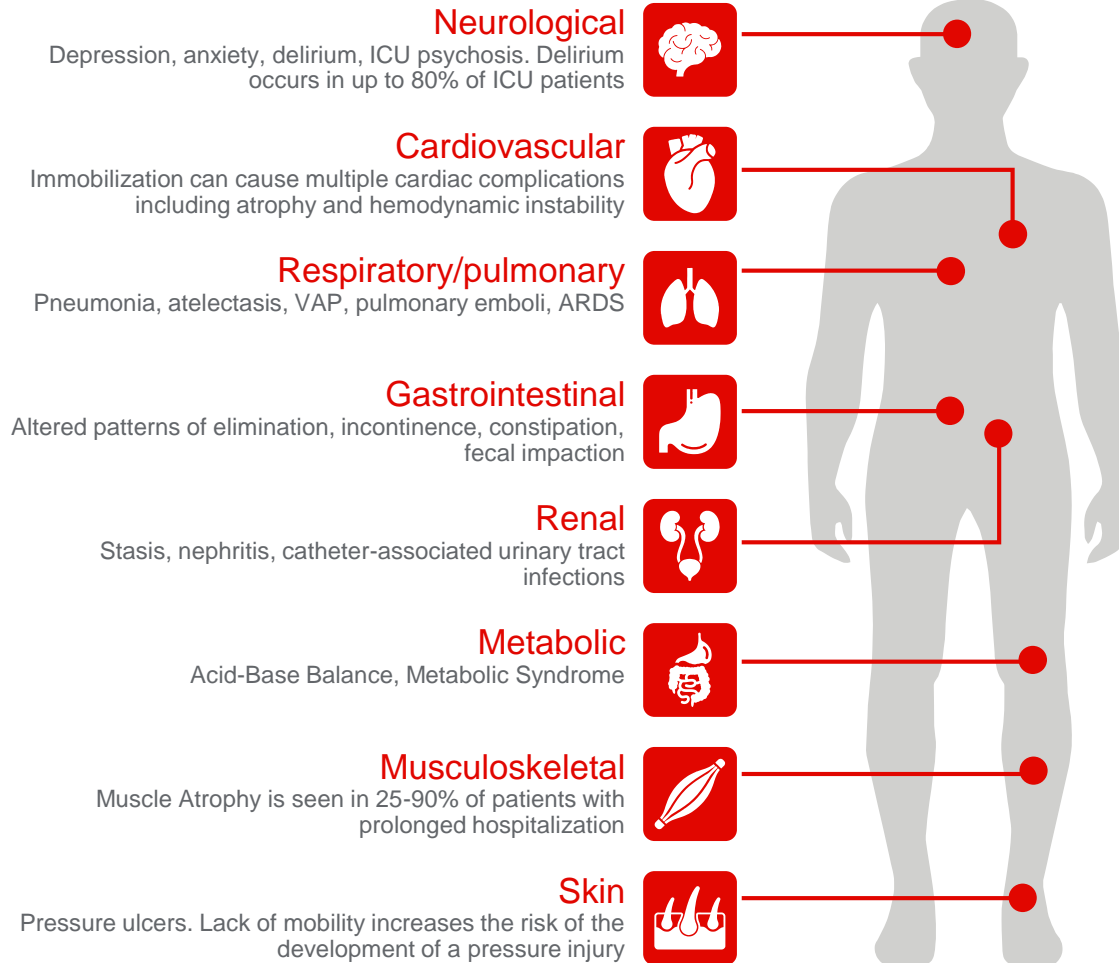
# Challenge

Up to **17%** of muscles atrophy after 3 days of immobility <sup>(1)</sup>

Decreased muscle mass **6 – 12 months** after discharge from ICU<sup>(2)</sup>

Joint contractures may begin to form within **8 hours** of immobility<sup>(3)</sup>

# Complications associated with immobility



Immobility affects every system of the body.

# Impact of Early Mobilisation program

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## Care giver / Facility Focus

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- Releases time for direct patient care
- Increase staff satisfaction
- Reduce staff sickness absence\*



## Patient Focus

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- Improve respiratory function
- Reduce the adverse effects of immobility
- Increase level of consciousness
- Increase functional independence
- Improve cardiovascular fitness
- Increase psychological well-being
- Reduce the risk of delirium
- Increase patient satisfaction

\* The right equipment with the right practices can enhance the working environment and elevate staff attendance. Ref UHS study

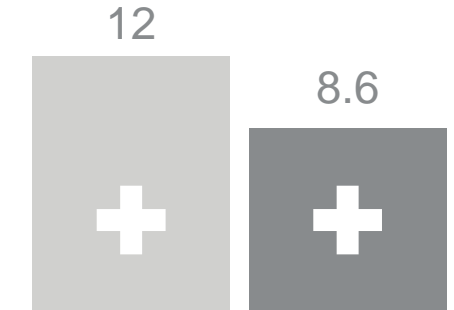
# Solution

## Early Mobilization Programs



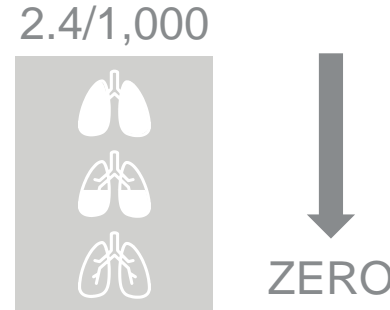
# Proven results of using a mobility program (4)

### Length of hospital stay [days]



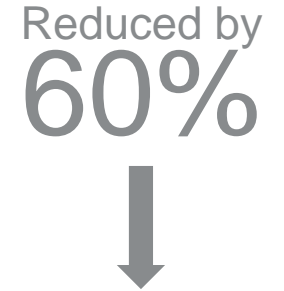
Length of hospital stay significantly decreased from 12 to 8.6 days

### Ventilator Associated Pneumonia (VPA) [days]



Ventilator Associated Pneumonia significantly decreased from a rate of 2.14 per 1,000 days to zero

### Hospital associated infections (HAI)



Hospital associated infections reduced by 60%

Early mobilization in the ICU could minimize **loss** of **functional** abilities and possible **shorten** hospital stay by **28%**

Early mobilization program can **reduce** the incidence of delirium by up to **50%** (5)

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# How can equipment support patient mobilisation?

## Solution

### Early Mobilization Program



Learn more about Early Mobilization with LINET in dedicated brochure



Watch Early Mobilization Program video

Level 1



Level 2



Level 3



Level 4



### Challenges

Moving immobile patient

- Hemodynamic instability

- Patient's trunk and core weakness
- Hemodynamic and orthostatic training

- Patient autonomy
- Assessing muscle strength and hemodynamic stability

- 2-3% loss of muscle mass of first 10 days

### Solutions

- Microshifting
- Automatic Lateral Therapy

- One-button functions
  - Vascular leg position
  - Reverse Trendelenburg

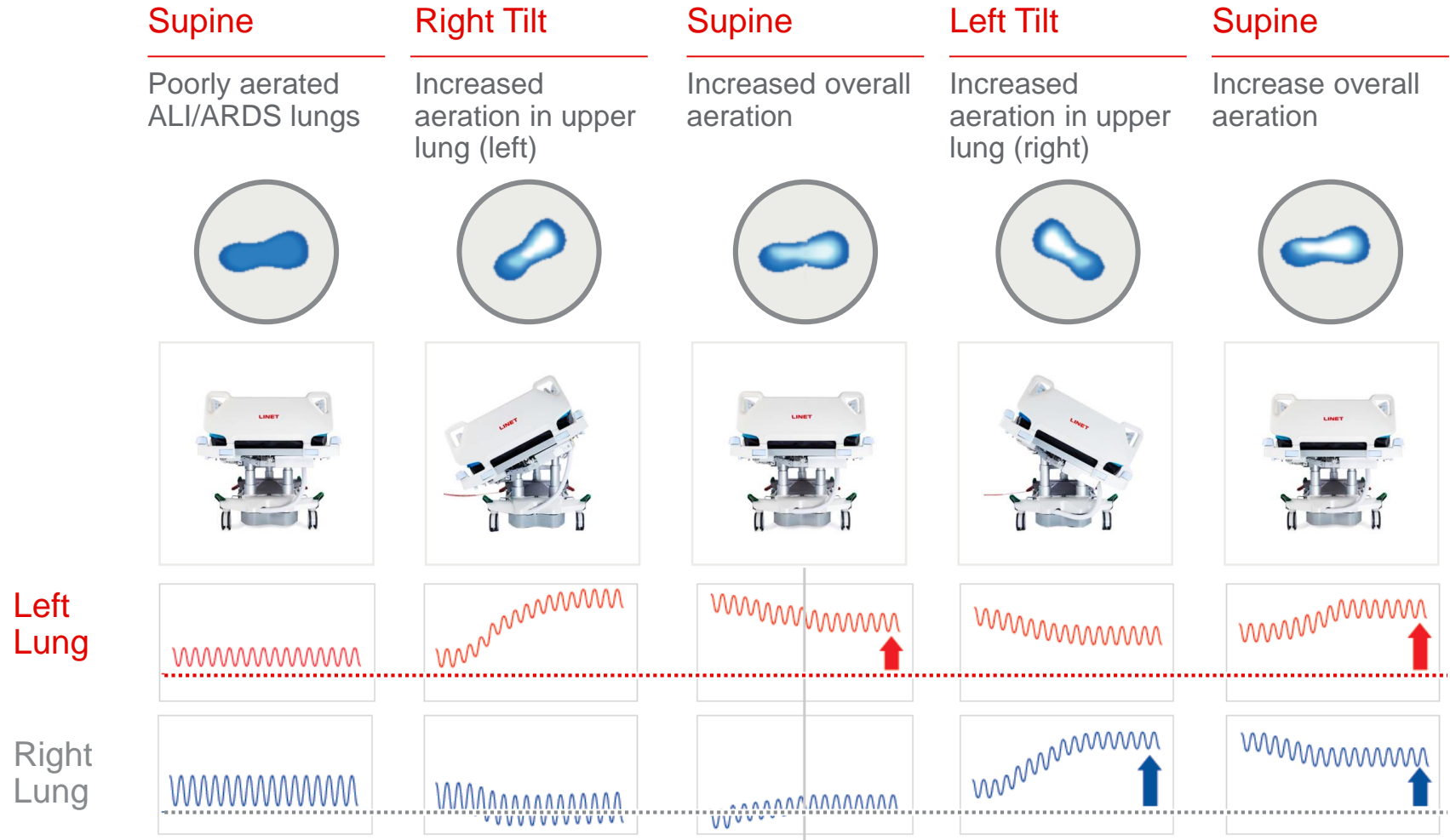
- Mobilization button
- Mobi-Lift® handle
- Siderails concept
- Full chair position

- Mobi-Lift® handle
- Siderails concept
- Lateral tilt

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# Improving lung health by repositioning

## Frame-based Lateral Tilt with programmable Automatic Lateral Therapy



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Ventilation



PEEP Titration



Trends



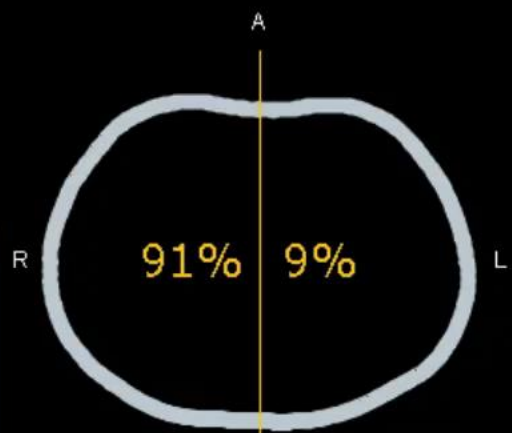
Export Center



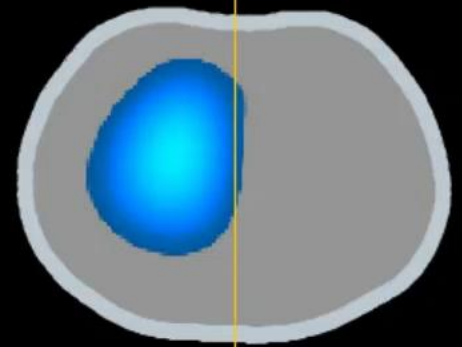
System Configuration



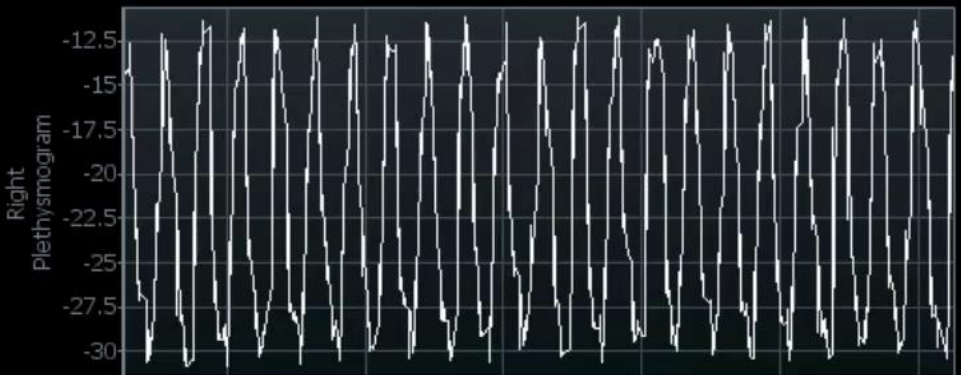
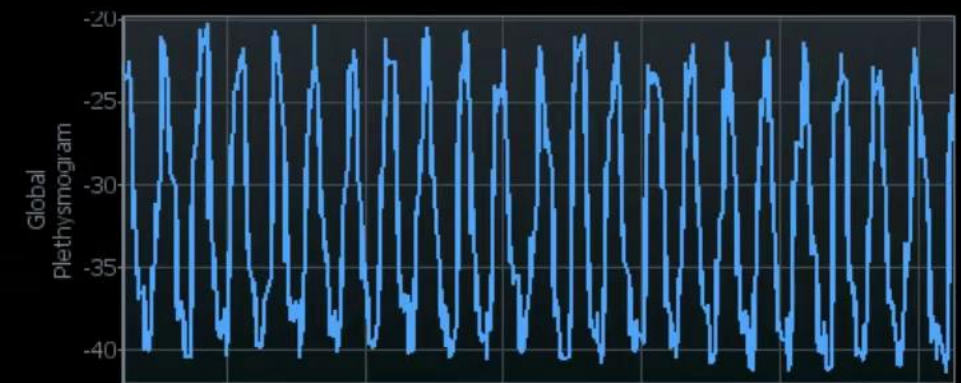
Signal Quality



Ventilation Distribution



Dynamic Image



Supine



Report



Record Video



Tool Options



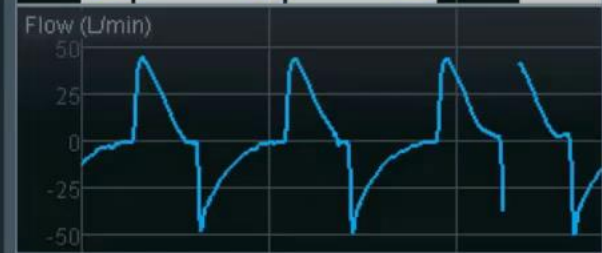
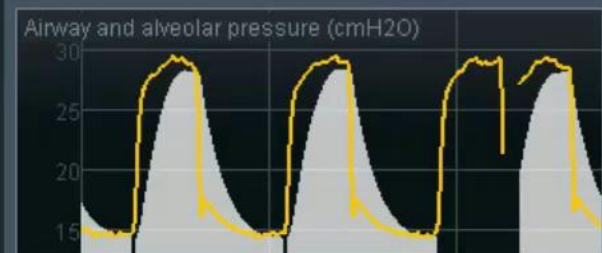
ROIs



Time Range

60 S

These signals are for quality check only.



$P_{Driving}$  (cmH<sub>2</sub>O) **14.0**

PEEP (cmH<sub>2</sub>O) **14.3** Auto PEEP (cmH<sub>2</sub>O) **0.0**

PIP (cmH<sub>2</sub>O) **29.5**  $P_{Plat Alv}$  (cmH<sub>2</sub>O) **28.2**

$V_T$  (mL) **315**  $C_{RS}$  (mL/cmH<sub>2</sub>O) **23**

RR (bpm) **25**  $R_{AW}$  (cmH<sub>2</sub>O/L/s) **9**



# Early Mobilisation Video





# Practical

All stages of Early mobilisation program

**LEVEL 1**  
Microshifting

**LEVEL 2**  
Reverse Trendelenburg

**LEVEL 3**  
Cardiac chair

**LEVEL 4**  
Mobi-Lift® handle,  
mobilization button &  
Lateral tilt



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# Summary



## Early mobilisation program can help with:

- Moving immobile patients
- Muscle strengthening exercises
- Improving patient autonomy and confidence
- Helping patients to safely stand up

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# Spotlight ICU Seminar program

## 1. Reduction of Musculoskeletal Disorders

via Frame based Lateral Tilt

## 2. Enhancing respiratory outcomes and encouraging the reduction of Ventilator Induced Lung Injury (VILI)

via Automatic Lateral Therapy

## 3. The benefits of Early Mobilization

with Ergoframe®, Cardiac Chair, Microshifting, Mobi-Lift®

## 4. A guide to Pressure Injuries and Pressure Injury Prevention when Proning

with Opticare® X, Virtuoso® Pro & Ergoframe®

## 5. Patient and Caregiver Safety

X-ray cassette insertion, Patient Safety, Easy Patient Transportation



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# Access to further resources

Stop by Stand 16

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ICU SEMINAR PROGRAM  
YOUR PATIENTS, YOUR TEAM, YOUR ICU



Report Guide

Effect of lateral tilt on patients †

PROJECT OBJECTIVE:  
Evaluation of physical load on hospital personnel position, using a bed with Lateral Tilt function<sup>1)</sup>

MEASUREMENT PERFORMED BY:  
NATIONAL INSTITUTE OF PUBLIC HEALTH  
National Reference Unit for Occupational Health



**SCAN QR TO BOOK ON:**

LINET ICU Seminar Programme



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Thank you for your attention

# References

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