




E-Health@Home
Forschung - Gestaltung - Implementierung

The REMEO® Concept

E-Health@Home Meeting, Duisburg, Nov. 5th 2009

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REMEO® “I RETURN HOME”

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- REMEO® provides programs to reduce the stay of ventilator-dependent patients in ICUs to a minimum.
- As soon as the patients no longer require acute clinical care, they start using the home ventilation systems and are discharged from the hospital to a REMEO® centre
- The holistic approach focuses on making the best use of the patients’ physical resources in order to maximise their quality of life

REMEO® comes from Latin and means “I RETURN HOME”



Diseases

- Lung diseases COPD, Cystis Fibrosis, Post-TBC
- Neuromuscular diseases ALS¹, Multiple Sclerosis, DMD²
- Neurological diseases, e.g. due to tumor
- Trauma patients, spinal cord, brain, chest injuries
- Patients with hypoxic brain damage
- Others e. g. congenital diseases, heart diseases

Treatment

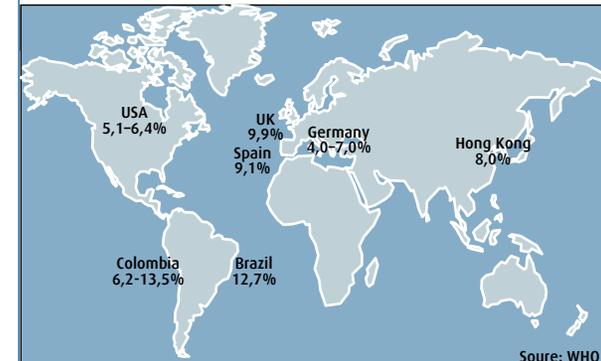
- Mechanical ventilation invasive via tracheotomy or non-invasive via mask or mouth piece
- In addition complex care provided by professional caregivers

Patients

- All gender and all ages possible (pediatric-adult)
- With lung diseases e.g. COPD mainly geriatric
- With congenital diseases e.g. Ondine's Curse pediatric and adolescent
- With muscular diseases ~ 30-70 years
- With trauma diseases all ages

Facts and figures

- COPD is the disease with the highest potential for our program. The primary cause is tobacco smoke. A further reason is exposure to indoor and outdoor air pollution.
- COPD was the fourth leading cause of death in 2002 and will be the third in 2020.
- Prevalence COPD:



ALS prevalence: 4 : 100.000

MS prevalence: 30 : 100.000

DMD¹ prevalence: 1 : 700.000

¹ Amyotrophic Lateral Sclerosis

² Duchenne Muscular Dystrophy

The benefits of better care Mr. Bryan Gonzalez

Bryan has a non specific neuromuscular disease with respiratory failure since he was 16 years old.

He has been depended on mechanical ventilation during the last 3 years, 2 of them in our REMEO® program.

In July 2008 his diagnosis has changed to “Pompe Disease” and he has received pharmaceutical treatment.

During his first days in REMEO® Bryan was very anxious and depressed and he was depended on mechanical ventilation 24 hours, his weight was 31 kg and he had a pressure sore stage III in the coccyx area



The benefits of better care Mr. Bryan Gonzalez

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REMEO® combines all needs from one source

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Professional support

- Qualified nursing / therapeutic staff
- Psychological support
- Physician
- Case Manager
- Device maintenance

Respiratory devices

- Ventilator (incl. back up system)
- Mucus removal systems
- Suction device, ambu bag
- Oxygen (via LOX or concentrator)
- Monitoring system, stethoscope

Disposables

- Tracheal cannulas, talk valves
- Suction catheter and bags
- Tubes, gloves, syringes
- Continence care products
- Dressings / compresses

Other medical devices

- Rehab or long term care bed with suitable anti-decubitus system
- Wheelchair, commode, bedpan
- Nutrition pump, patient lifter
- Instruments (scissors, clamps)

The benefits of better care

Patient success story – Mr. Bryan Gonzalez

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Today Bryan studies IT-programming via internet, his dependency on mechanical ventilation has decreased to 6 hours during a day

His today's weight is 51 kg and the pressure sores are closed and healed



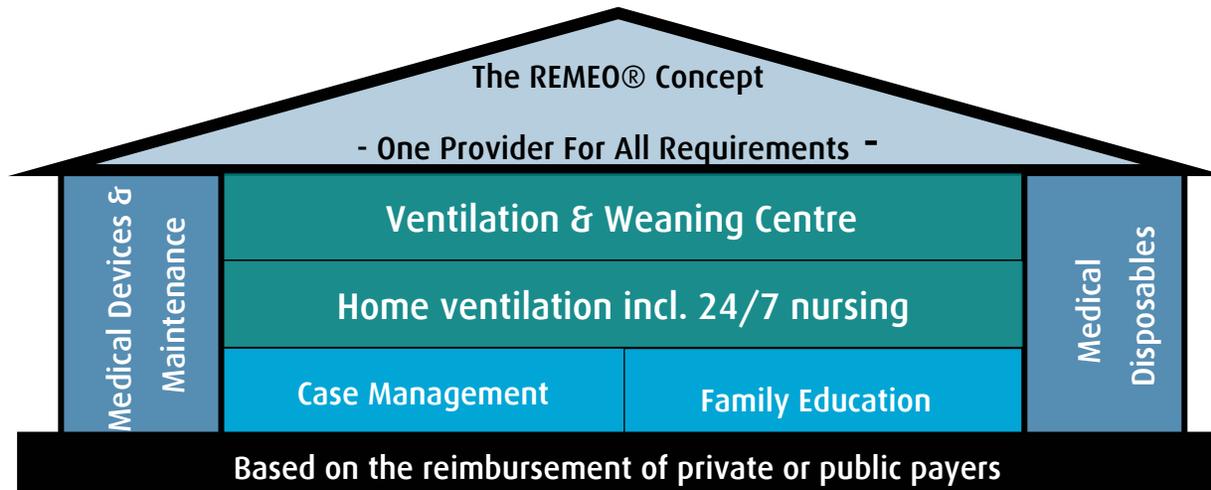
REMEO® - The concept overview

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FOCUS



- Patients with chronic respiratory conditions with the needs of continued respiratory support from mechanical ventilation
- Non Invasive via mask or mouth piece
- Invasive via tracheostomy
- Professional care and ventilatory support to prevent acute re-admissions into hospitals



REMEO® market segmentation within the country

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Segmentation in payers:

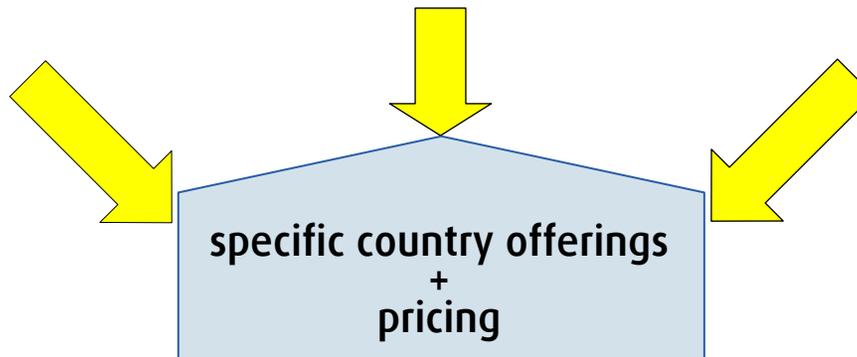
- Public Insurances
- Private Insurances
- Hospitals (outsourcing)
- Private contribution of patients and/or relatives

Segmentation in diseases:

- COPD, Cystic Fibrosis
- ALS, DMD, MS
- Post trauma
- Congenital
- Neurological

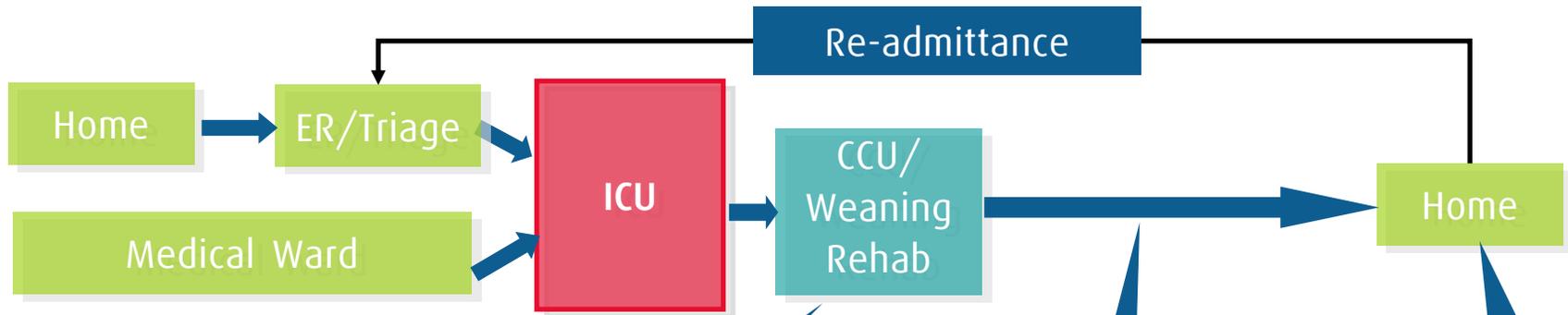
Segmentation of products/services:

- REMEO® centre long term
- REMEO® centre short term
- REMEO® centre weaning
- REMEO® Homecare 24/7
- REMEO® Homecare < 24/7
- REMEO® Occasional care
- REMEO® Tele monitoring
- REMEO® Equipment sales
- REMEO® Equipment rental



REMEO® needs to move beyond the "one fits all" approach and strive to customize products for different needs !

The clinical pathway (e.g. COPD)

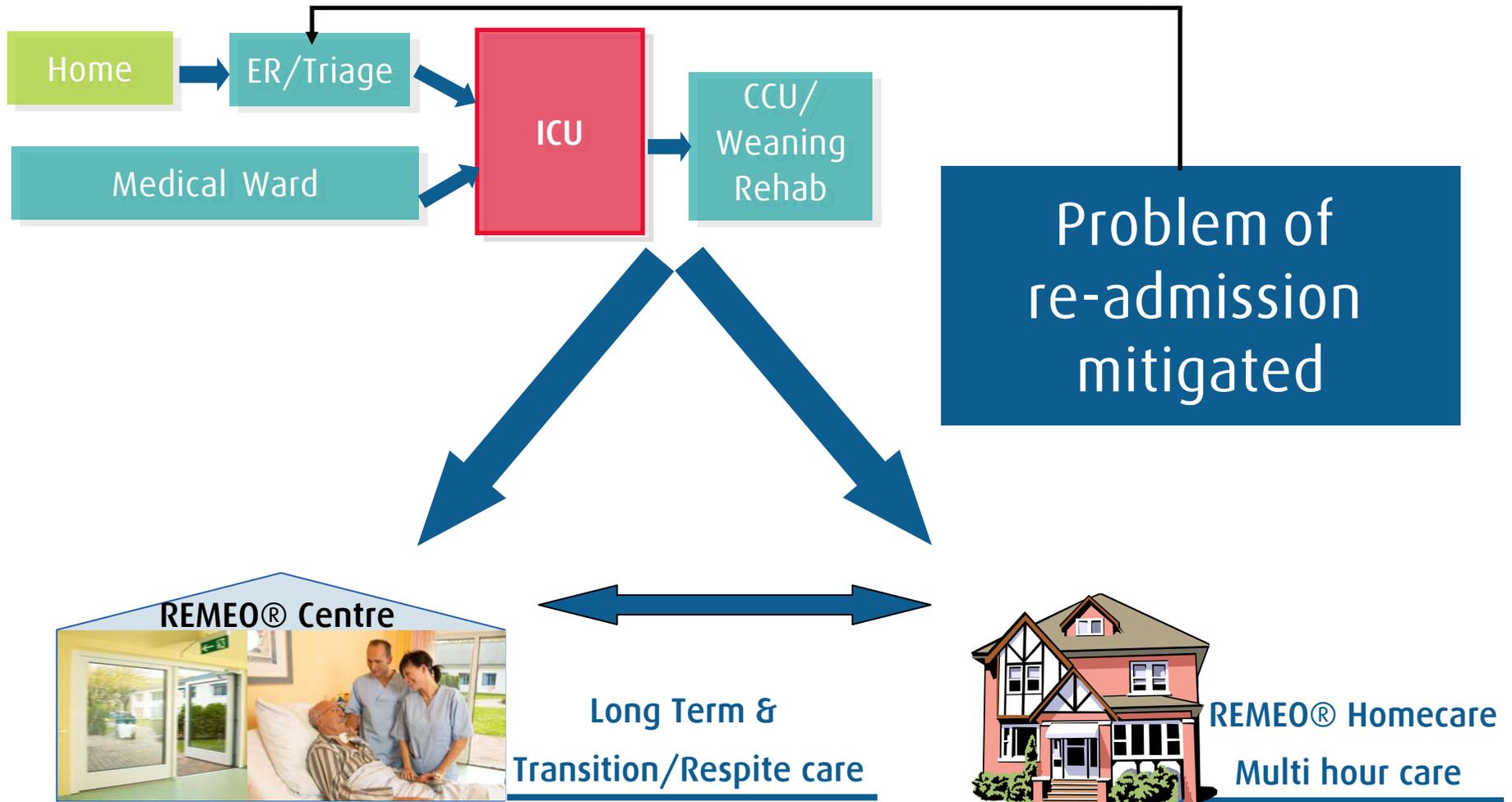


Optional for stabilized patients who are dependent on ventilation when ICU beds are needed for acute cases

Critical GAP has to be closed

Care at home without professional support is a burden for the family caregivers

The clinical pathway (e.g.COPD) within the REMEO® concept



Patient can be shifted between home and centre depending of changes in his health and/or personal circumstances

Inclusion criteria's

Medical stability (non respiratory):

- Non respiratory organ dysfunction stabilized
- Sepsis treated and controlled
- No nosocomial infections (with decompensation symptoms)
- Hemodynamically stable and no need for invasive hemodynamic monitoring
- No uncontrolled arrhythmias or heart failure
- Skin without decubitus ulcers (in case of DU further inquiry to the payer about additional assumption of cost)
- No dependency on pharmaceuticals for stabilising the circulation (e.g.vasopressor or inotrope drugs)
- Renal function and acid-base balance stable or receiving long-term dialysis

Respiratory stability:

- Safe and secure airway; either tracheostomy with a sufficient mature stoma to allow tube changes, or stabilize a regimen of NIV (Non-Invasive Ventilation) with minimal risk for aspiration

The family must be cooperative and willing to support the patient

Patient assessment

- Patient assessment by REMEO® case manager in the hospital whether patient full fills inclusion criteria's
- Inquiry to the payer
- Inform patients family

Patient examination

- Patient examination of all clinical parameters based on status evaluation
- Decision whether patient full fills inclusion criteria
- Assessment of availability of pre-requisite conditions (device, staff, etc)
- Adaptation to the respirator (within the hospital)

Adaptation centre

- Adaptation and stabilization
- Set up a care plan and objectives
- Starting with “weaning” if possible

REMEO® - A win-win concept

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for the patient and the relatives

- Adequate care with specialists in the centres and at home
- Small units with “home feeling”
- Reduced infection rate compared to hospital
- Partly back into the family
- Becoming more active again in their usual life environment and families
- Individual care and training leads them back to a greater independency
- Easy access for friends and family
- Offers respite care when carers need support



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for the hospitals and clinical staff

- Long term ventilated patients (5-10 % of total) consume more than 50 % of the ICU resources
- Free ICU beds for other urgent cases
- Possibility to focus on acute patients
- DRG based system under funds long stay patients
- Less readmission to the hospital



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for insurances/authorities

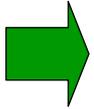
- Cost saving
- Higher rates of weaning successes further reduce treatment costs
- Avoids hospital readmission
- Less investment for building up new ICU bed capacities and / or refurbishment of existing



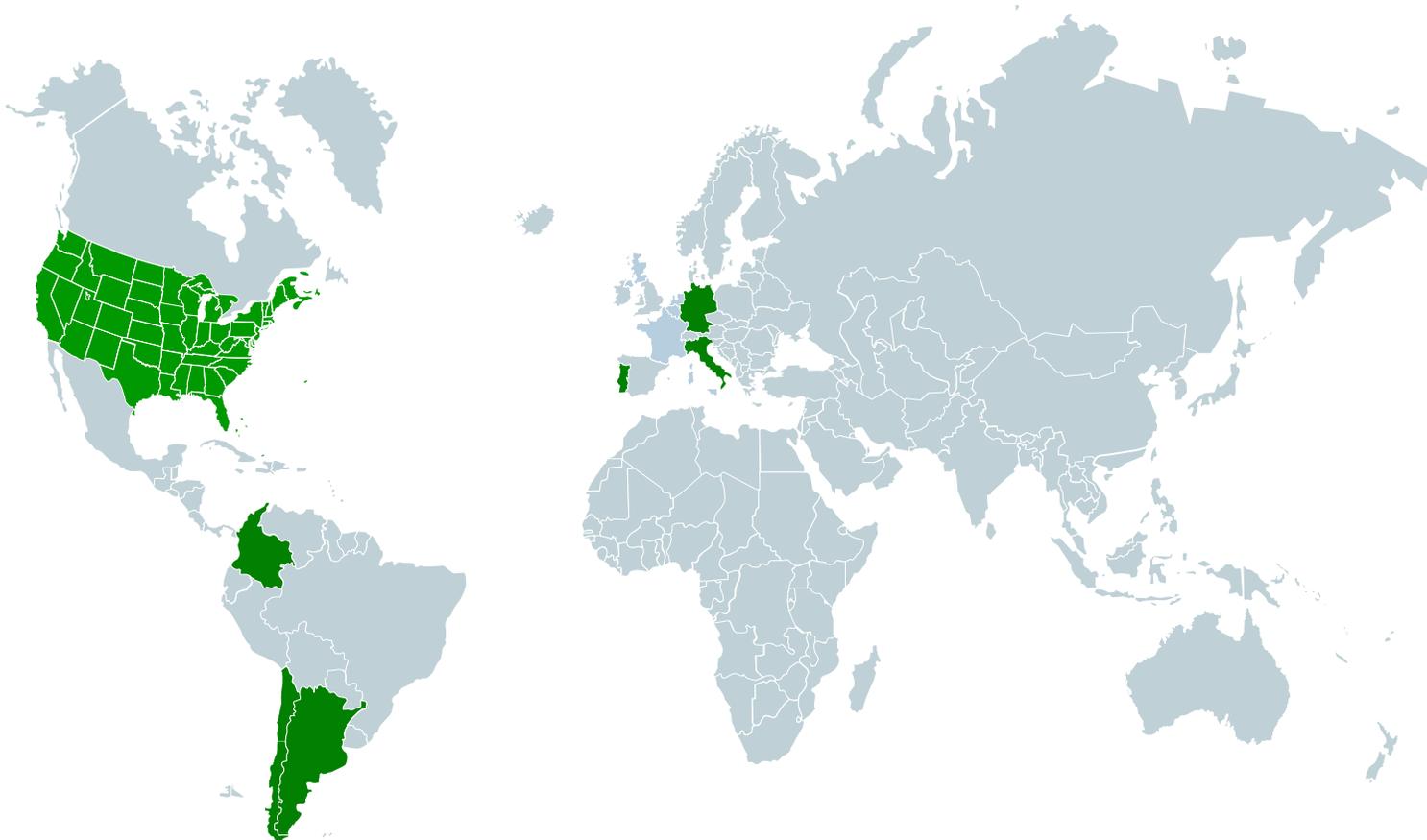
REMEO® Worldwide - At a glance

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7 countries are currently operating the REMEO® concept



See us now for further discussions

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