Treatment Process Chain CC-LRD-Home

Acute Care Facility (Intensive Care Unit)
Patient is in the Intensive Care Unit
Perform extubation trial
XOR
Weaning after first trial (Gr. 1)
Up to 3 weaning trials in 7d (Gr. 2)
Discharge w/o MV
Decision to discharge to rehabilitation
Decision to transfer to different ward
Manage transition
> 3 weaning failures in 7d (Gr. 3)
Patient requires additional therapeutic interventions (transfer currently not possible)
Transfer to EC/WC
EC/WC Clinic
Patient is admitted to respiratory care unit for initiation of elective MV
Decide on type of MV
Decision for non-invasive MV
Decision for invasive MV
Initiation of non-invasive MV
Initiation of invasive MV
Invasive MV is initiated
Patient in EC/WC
Perform patient evaluation
Successful weaning
Decision to discharge
Decision against ventilatory support
Discharge without MV (Gr. 3a)
Transfer to regular ward
Consider appropriate discharge strategies (consider patient preferences)
Decision to discharge to home setting
Decision to discharge to rehabilitation
Decision to discharge to other hospital
Decision for non-invasive MV
Discharge with non-invasive MV (Gr. 3b)
Transfer to weaning unit
Decision to discharge into assisted living
Decision to discharge to LTRU
Patient is in prolonged weaning
Continue weaning process
Unsuccessful weaning
Assign weaning category 3c
Patient requires other care strategies
Perform other therapeutic procedures
Permanent invasive MV required
Patient has long-term weaning potential
Patient is stabilized
Perform further stabilization
Check discharge criteria
Patient does not meet discharge criteria
Patient meets discharge criteria
Identify patient preferences
Decision to discharge into LTRU
Decision against LTRU
Consider appropriate discharge strategies
Mobilize transition team
Transition team mobilized
Transition conference
organization completed
Contact LTRU
Request sent
Inform health insurance
Cost coverage confirmed
Adapt to home ventilator
Adaptation performed
Plan secretion management
Planning completed
Plan assistive device requirements
Contact responsible outpatient physician
outpatient management accepted
Outpatient manag
Recruit outpatient physician
Recruiting completed
Recruit device supplier
Prescriptions for assistive devices, nursing, therapies (max. 3d)
Prescriptions available
Communicate preferred care plan w/ insurer
Solution (compromise) for outpatient care found
Check medical, technological, and logistic requirements
Requirements fulfilled
Requirements not met
Perform discharge conference
Discharge conference performed
Check for possibility of discharge
Requirements aren't met
Amend reasons for inability to discharge
Reasons for inability to discharge have been solved
Requirements are met
eConference Discharge (eK-01-01)
Discharge to home setting
Discharge to assisted living
Discharge to MV-facility
Discharge to LTRU
LTRU (Long-Term Respiratory Unit)
Provide feedback
Request received
Gather patient information
Gathering completed
Check criteria for patient admission
Criteria not met
Criteria met
Decision regarding patient admission
Decision against admission
Decision for admission
LTRU: reserve bed
LTRU: bed reserved
LTRU: inform case manager
LTRU: case manager informed
Give feedback
Attend discharge conference
Conference attended
Inform team manager concerning admission
When is patient admission planned?
LTRU: Cost coverage
Team manager informed
Name responsible nurse
Responsible nurse named
Prepare MV set-up
Preparation complete
Prepare patient documentation
Prepare patient-specific devices
Commence treatment
Patient in LRD
eConference-Hand-over (eK-02-01, eK-02-02)
3 weeks after discharge
eKonferenz-Erst-Evaluation (eK-02-03, eK-02-05)
Content: Evaluate current care situation and living arrangements
Perform nursing anamnesis (in first week)
Nursing assessment completed
Check for discharge criteria (Module 1)
Plan therapy and care
Nursing and social care
Physician care
Weekly physician visit at EC/WC
Weekly visit by General Physician
eConference-Progress planned (eK-02-04)
eConference-Progress-Demands (eK-02-05, eK-02-06)
Other therapeutic care
Patient arrives at LRD
Hand out info-sheet
Patient wants to use PAUL
Patient does not want to use PAUL
Assess required modules
Module requirements established
Apply for internet-usage
Application sent
Initiate PAUL in LRD
PAUL initiated
Give access to learning material
Access to learning material granted
Perform PAUL user training
PAUL user training performed
Commence PAUL-use
Interactive smart-home devices in place
Nursing plan (within first 4 weeks)
Check for necessary adjustments
Adjustment necessary
Adjustment not necessary
(adjusted) nursing and social care
(adjusted) physician care
(adjusted) therapeutic care
Follow-up appt. in EC/WC required
Arrange appointment
Appointment arranged
Organize transport
Transport organized
Perform transport
Consent not present
Hospital-admission required
Indication for admission
Admission planned
Plan Elective Hospital Admission eConference (eK-02-08)
eConference completed
Inform patient, relatives, etc.
Consent present
Gather documents for discharge
Documents gathered
Find appropriate discharge location
Discharge location found
Organize transport
Transport organized
Prepare bed and environment
Postprocessing complete
LTRU: inform health insurance regarding temp. absence
Insurance informed
Emergency
Call emergency physician
Perform patient transport
Discharge is requested
eConference-Consulting (eK-02-07)
eConference completed
Obtain patient consent
Start module 2
Set time for discharge
Discharge time set
Perform discharge as planned in eConference
Decision for alternative institution during eConference
Perform module 2
Module 2 performed
Discharge Pat. to alternative institution
Patient has passed away
Contact EC/WC
EC/WC has been contacted
Instructions Dying & Death
Decision for home care during eConference
Contact outpatient physician
Confirmation present
Contact care provider
Contact therapists
Contact relatives
Inform EC/WC
EC/WC informed
Contact medical supplies provider
Set final appointment
Appointment set
Feedback to involved parties
Feedback given
Gather patient documents + personal belongings
Documents + personal belongings gathered
Organize transport
Transport organized
eConference Discharge (eK-02-09, eK-02-10)
Follow-up on patient placement
Follow-up performed
Transport to home setting
Re-Check after 48 h, 3 days, 7days, 4 weeks, 3/6 months
Home
Unplanned Event (demand-scenario 1)
Patient is in home setting
Perform assessment/documentation
Assessment performed
Perform caregiving-/documentation
Care/Documentation performed
Perform communication/feedback/documentation
Communication has taken place
Consult and perform documentation
Consultation has taken place
eConference-Primary-Evaluation (eK-03-01, eK-03-02)
Follow-up with respiratory therapist/specialized provider
Adjustment necessary
Physician conference/visit required
Physician eConference Visit (eK-03-02)
Admission to EC/WC required
Organize transport
Transport organized
Perform transport
Initiation of further procedures
Follow-up appointment rec.
Decision on follow-up appointment
Patient does not want follow-up
Patient wants follow-up
Inform responsible outpatient physician
Outpatient physician informed
Contact EC/WC (eK-03-03)
Appointment requested
Contact with EC/WC (eK-03-03)
Organize transport
Transport organized
Admission to acute care required
Acute emergency
Emergency Physician decides to admit
Patient wishes to remain at home
Inform responsible outpatient physician
Outpatient physician informed
Admission to EC/WC required
Educational resources
Advance Care Planning (incl. advance directives)
PAUL - patient-centered assistance for daily life
Documents / Information
Transition plan
Transition form (round table)
Completed transition form
Transition form (round table)
Completed transition form
Respiratory Therapy Request
Physician's Report
Respiratory Protocol
Discharge Report
Appointment Follow-Up
Patient Chart
Patient File
Transition Form (round table) optional
Preliminary Physician's Report
Prescription
Emergency Medical Card
Emergency Contact
Tele-Protocol
Transition report (round table)
Medical Report w/ Lab values
Patient Chart
Discharge Management Module 1
Biography-Form
AEDL-Form
Nursing Plan
Care Process Documentation
ABG
PhysicianD Documentation
Teleconsult Documentation
Transition Form (round table)
Medical Report (optional)
Medication
Last ABG
Labs/ Mikrobiology
Patient ID
Health Insurance Card
Advance Directives
Health Care Proxy Confirmation
Transport Form & Prescription
Discharge Management Module 2
Nursing Transition Form
Completed Nursing Transition Form
Ventilatory Documentation (IV/NIV)
Ventilatory Device Settings
ABG-Protocol
Administration Report
Diagnosis- and Therapy Plan
Physician Communication
Transition Form
IT-systems
COPRA ICU (eChart)
COPRA weaning center (CC12)
KIS (Hospital Information System)
SAP (Billing)
Electronic patient data management system
Paper-based documentation (folders at home)
PAUL

Medical prerequisites:
- Testing for ability to change from invasive to non-invasiv ventilatory support,
- No short-term improvements are expected within the next 4 weeks,
- All weaning options have been exhausted and a stable situation has been reached (<7d),
- The patient is hemodynamically stable without vasopressors,
- The patient's renal function is stable or dialysis is available for patients requiring it,
- Nutrition orally, enterally or parenterally.

Technical prerequirements
- Cost coverage of assistive devices has been confirmed by the insurance provider,
- Assistive devices and materials are available at patient's destination,
- Patients and relatives have been instructed on the use of the assistive device or medical product

Organizational prerequisites
- Physician discharge documents completed,
- Patients and relatives have been informed about the different care options,
- Contact with all relevant parties has been established (care facility, general physician, insurance provider) and the health insurance has received the necessary documents.

Transition Team:
- Transition Manager (from transition team)
- Physician (clinician)
- health insurance case manager

- Protocol discharge conference
- (preliminary) physician discharge notes

Timing: at least 14d prior to discharge
Required attendants:
- Care facility,
- Hospital physician,
- Hospital nursing,
- Patient, relatives,
- Social worker,
- (MdK -> dependant on state)

Transport organized, chaperone present, care facility informed, etc.

Timing: 1 h prior to discharge
Required attendants:
- **Discharging physician** (EC/WC)
- Nurse (EC/WC, optional)
- Physician (LTRU)
- Respiratory therapis(EC/WC+ LTRU)
- Head nurse LTRU

Timing: within first week
Required attendants:
- **Discharging physician** (EC/WC)
- Nurse (EC/WC, optional)
- General Physician (in LRD-room)
- Department manager (LRD)
- Nurse LTRU
- Pat., relative/ power of attorney (optional)

Timing: within first week
Required attendants:
- **Respiratory therapist/transition manager** (EC/WC)
- Respiratory therapist (LRD)
- Department manager (optional)
- Responsible nurse (LRD)

General criteria for decision-making:
- Patient requires MV
- Patient-/Power of attorney consented to care by LTRU
- Hemodynamically stable, effective MV, ABG's within tolerable limits, lack of short-term weaning potential
- Admitting institution is equipped to supply the necessary patient care
- over 16 years of age, without special education needs
- free bed available (gender-appropriate)
- Isolation? (possible hindrance when bed available)
- adequate staffing
- Medication is delivered orally or enterally
- Feeding is possible (oral/enteral/parenteral)
- Patient does not require sedation
- Preliminary physician note and transition notes are available (if possible)
- Adaptation to home-MV completed (at least 3d prior to transfer)
- Health insurance coverage provided
- Consent for possible co-pay present

Timing: every 3 months
Required attendants:
- **Department manager** (LRD)
- Responsible nurse (optional)
- General Physician (LRD)
- Pat., relative/power of attorney (optional)
- Physician (EC/WC)

Timing: whenever required
Required attendants:
- **Department manager** (LRD)
- **Transition manager** (EC/WC)
- Responsible nurse (LRD, optional)
- General Physician (LRD, optional)
- Pat., relative/power of attorney (optional)
- Physician (EC/WC)
- Respiratory therapist (EC/WC, optional)
- Respiratory therapis (LRD, optional)

Attendants:
- Department manager (LTRU),
- Transition manager (WC)

Timing: whenever necessary
Required attendants:
- **Department manager**
- Responsible nurse (LTRU, optional)
- General Physician (LTRU, optional)
- Pat., relative/power of attorney (optional)
- Physician (EC/WC)
- Transition manager(EC/WC, optional)
- Respiratory therapist (EC/WC, optional)
- Respiratory therapist (LTRU, optional)

- Responsible nurse (LTRU, optional)
- General Physician(LTRU, optional)
- Pat., relative/power of attorney (otpional)
- Physician (EC/WC)
- Transition manager (EC/WC, optional)
- Respiratory therapist (EC/WC, optional)
- Respiratory therapist (LTRU, optional)

Timing: 1 h prior to discharge
Required attendants:
- Hospital physician (EC/WC)
- General Physician(LRD)
- Outpatient physician
- **Department manager** (LRD)
- Patient
- Future care team: untrained, nursing assistants, nurses

Required attendants:
- Hospital physician (EC/WC)
- **General Physician** (LRD)
- Outpatient physician (optional)
- Department manager (LRD)

Module 3 Questions:
- Have all assistive devices been prepared?
- Was all respiratory equipment prepared?
- Were all directives and learning materials supplied?
- Did the choice of care institution reflect the needs of all involved parties?
- Were you satisfied with the Remeo discharge management? What are potential areas for improvement?

Unplanned Events
- Caregiver unavailable (illness, death, etc. of relative, nursing care unavailable)
- Social circumstances (eviction, damage to house, lack of electricity, etc.)
- Lay-caregiver cannot/does not want to continue patient care

- Pat., relative/power of attorney (optional)
- Physician (EC/WC)
- General Physician (optional)

- Outpatient physician
- Respiratory therapist/specialized provider
- Patient
- Caregiver: layperson, nursing assistant, professional nurse
- Hospital physician (EC/WC)
- Care facility / Casemanager of the health insurance provider (optional)

Legende

Event	AND-Link	S2-Guideline Non-Invasive and invasive Mechanical Ventilation for Treatment of Chronic Respiratory Failure
Function	OR-Link	Guidelines for Invasive Outpatient Respiratory Support
	EITHER-OR-Link	S2k-Guideline Prolonged Weaning
Documents	Dynamic Link	EC/WC Expert Centre / Weaning Centre
Available Documents		

Process-Interface

Process-Interface with programmed application scenario

- Consultation Summary = Conference
- „eConference" = Telemedical Conference with varying participants