



# Von Akut bis Chronisch – Die Dimensionen einer chronisch kritischen Erkrankung

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Pflegeexpertin APN

2. Bayrische Intensivpflege tag | 17.09.2025

# Agenda

1. Definition
2. Pathomechanismen
3. Inzidenz/Prävalenz
4. Outcome
5. Relevanz/Zahlen
6. Therapieansätze
7. Fazit



Krankenhaus



Entlassung



CCI



Versterben

› [Respir Care](#). 1985 May;30(5):339-47.

## The chronically critically ill: to save or let die?

K Girard, T A Raffin

PMID: 10315661

### Abstract

Critically ill patients admitted to an intensive care unit (ICU) are rapidly evaluated, and aggressive management is immediately instituted. They are intubated and placed on mechanical ventilation, and invasive monitoring is begun. Many patients are successfully treated and discharged from the ICU, but unfortunately a large percentage of the critically ill do not improve and become chronically critically ill. A high percentage of these patients do not survive in spite of extraordinary life support for weeks to months. The ICU health care team and the patient's family use their collective judgment to determine which patients are salvageable and which patients have no realistic chance to regain a good quality of life and therefore should have extraordinary life support withdrawn. This article examines why chronically critically ill patients die. We present a management strategy for improving the prognosis of the chronically critically ill patient by concentrating on exercise, nutrition, fluid management, emotional support, and adequate sleep. We address issues dealing with withholding and withdrawing extraordinary life support. We conclude by demonstrating how these concepts were applied in the case of a chronically critically ill young man with the acquired immunodeficiency syndrome (AIDS).

# Definition

Carson et al.  
2012

Vanzant et al.  
2014

Kahn et al.  
2015

Darvall et al.  
2019

FEATURE ARTICLES

## The Epidemiology of Chronic Critical Illness in the United States\*

Kahn, Jeremy M. MD, MS<sup>1,2</sup>; Le, Tri MS<sup>2</sup>; Angus, Derek C. MD, MPH<sup>1,2</sup>; Cox, Christopher E. MD, MPH<sup>3</sup>; Hough, Catherine L. MD, MS<sup>4</sup>; White, Douglas B. MD, MAS<sup>1</sup>; Yende, Sachin MD, MS<sup>1</sup>; Carson, Shannon S. MD<sup>5</sup> for the ProVent Study Group Investigators

Author Information

Critical Care Medicine 43(2):p 282-287, February 2015. | DOI: 10.1097/CCM.0000000000000710

Prolongierte  
Beatmung und  
Prolongiertes  
Weaning

- Behandlung: >8 Tage
- Zusätzliche Faktoren:
  - prolongierte Beatmung >96h
  - Tracheotomie

- Behandlung: >10 Tage
- Die ursprüngliche Erkrankung ist nicht mehr der Grund der Intensivtherapie

## ss: baseline characteristics, intensive care course, and cause of death

Jai N Darvall <sup>1</sup>, Tristan Boonstra <sup>2</sup>, Jen Norman <sup>2</sup>, Donal Murphy <sup>2</sup>, Michael Bailey <sup>3</sup>, Theodore J Iwashyna <sup>4</sup>, Sean M Bagshaw <sup>5</sup>, Rinaldo Bellomo <sup>2</sup>

Affiliations + expand

PMID: 31142241

# Definition

CLINICS 2011;66(4):701-704

## RAPID COMMUNICATION



DOI: 10.1111/jocn.16078

Pulmonology

Volume 26, Issue 2, May-June 2020, Pp. 1-10

Toward

Open Access

## DISCURSIVE PAPER



ELSEVIER

Original Research Article

## Deriving a definition

Rachel Morris<sup>a,\*</sup>, Abdul Hamid<sup>b</sup>,  
E. Ingraham<sup>d</sup>, Michael Kalin<sup>c</sup>

**Bis Dato: keine einheitliche Definition!**

Ohbe<sup>1,2</sup>, Kasumi Satoh<sup>3</sup>, Takaaki Totoki<sup>4</sup>, Atsushi Tanikawa<sup>1</sup>, Kasumi Shirasaki<sup>5,6</sup>, Yoshihide Kuribayashi<sup>7</sup>,  
Taku Tamura<sup>8</sup>, Yudai Takatani<sup>9</sup>, Hiroyasu Ishikura<sup>10</sup>, Kensuke Nakamura<sup>11\*</sup> and J-STAD (JAPAN Sepsis Treatment  
, I and Diagnosis) Study Group

tion, immunosuppression, and catabolism  
of definition potential therapies, and

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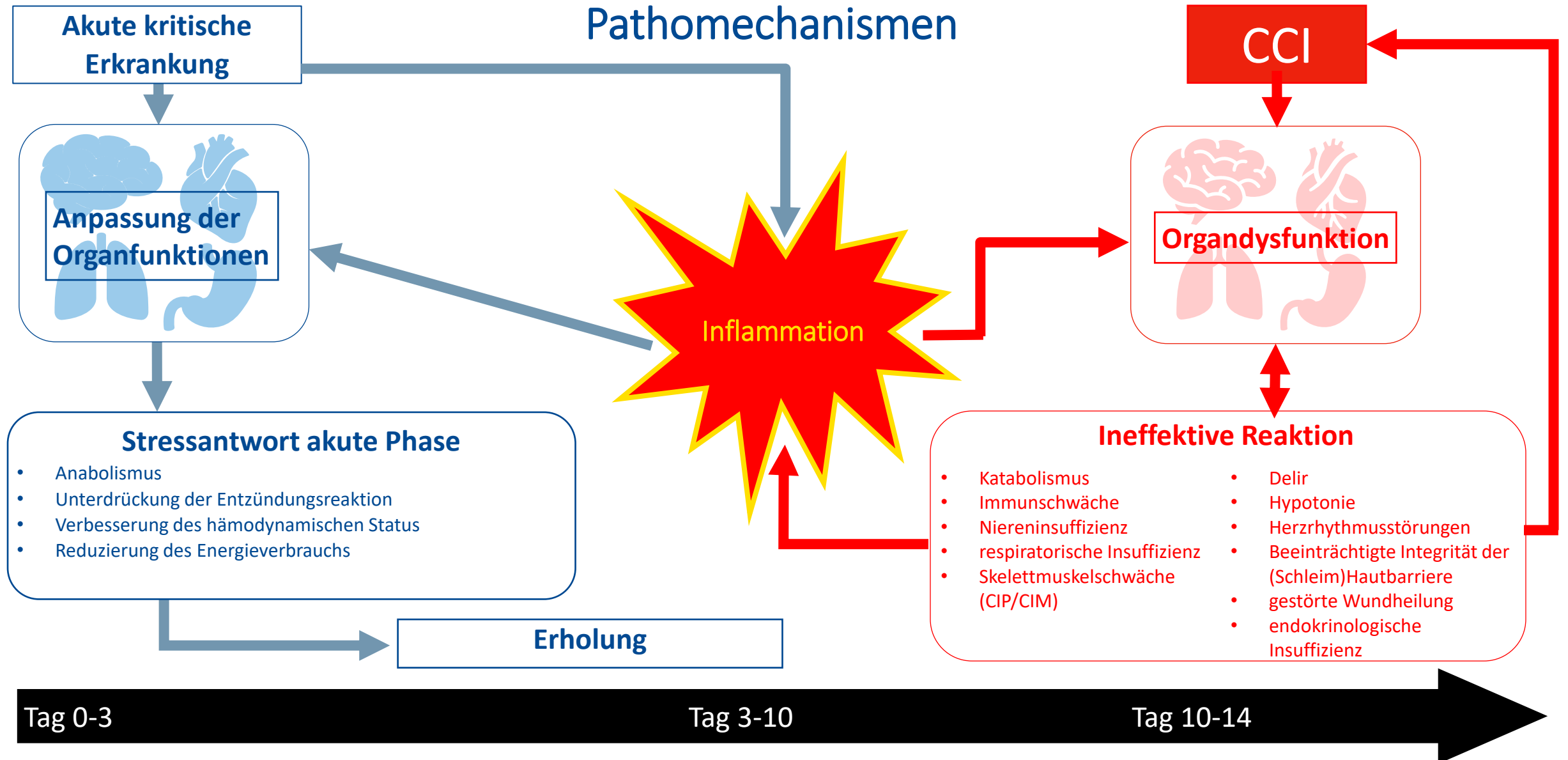
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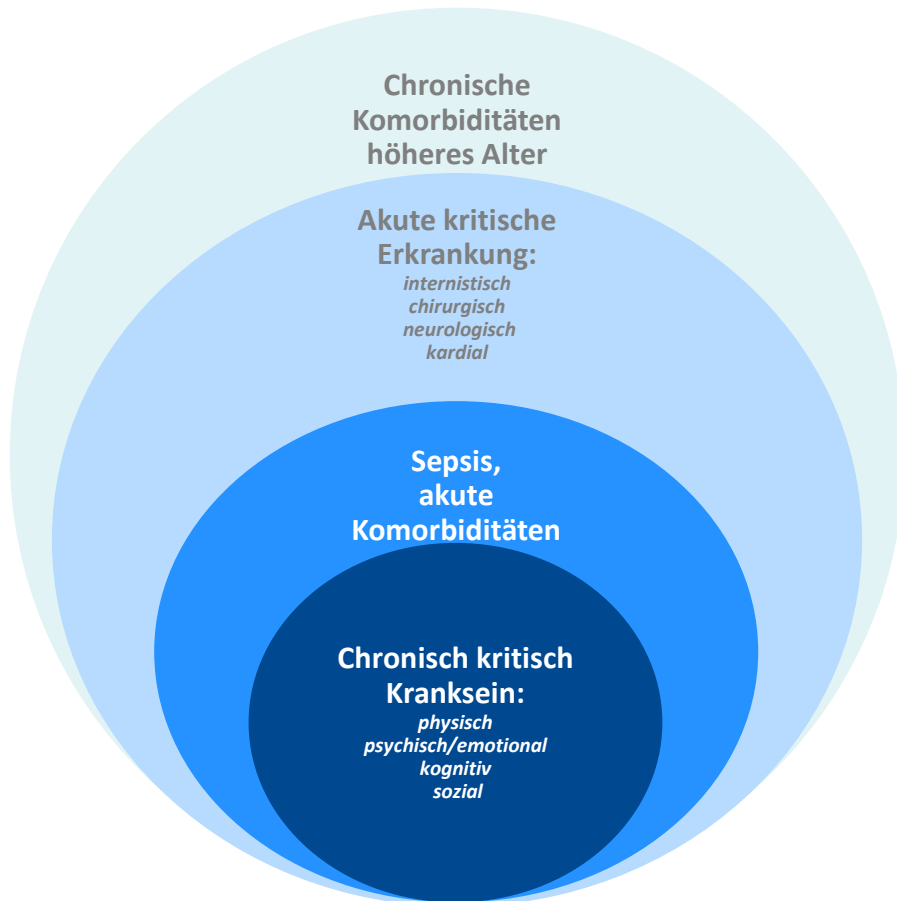
gy, and outcomes

critical illness: a scoping  
translation to clinical practice

onic  
ns variability



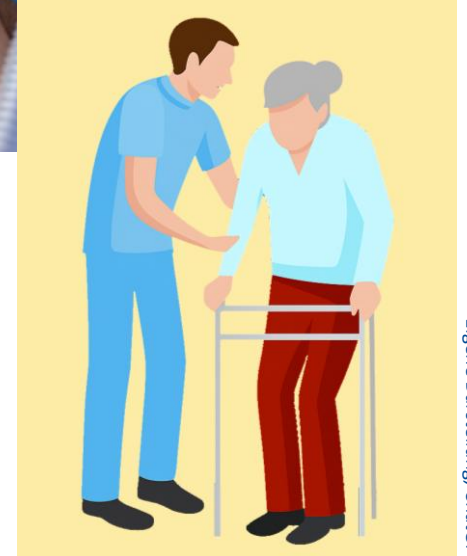
# Klinisches Bild



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Eigene Aufnahme



Eigene Darstellung, ChatGPT

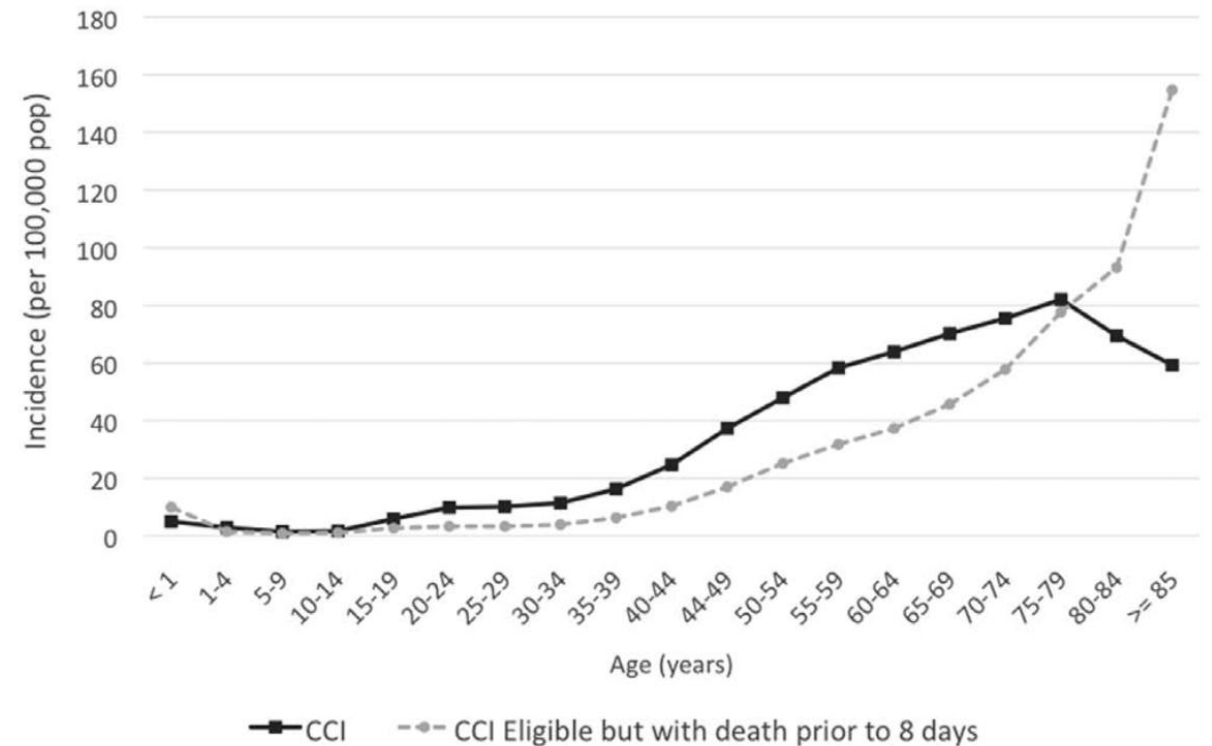
# Inzidenz: Altersbedingt

## The Epidemiology of Chronic Critical Illness in the United States\*

Kahn, Jeremy M. MD, MS<sup>1,2</sup>; Le, Tri MS<sup>2</sup>; Angus, Derek C. MD, MPH<sup>1,2</sup>; Cox, Christopher E. MD, MPH<sup>3</sup>; Hough, Catherine L. MD, MS<sup>4</sup>; White, Douglas B. MD, MAS<sup>1</sup>; Yende, Sachin MD, MS<sup>1</sup>; Carson, Shannon S. MD<sup>5</sup> for the ProVent Study Group Investigators

### ICU LOS > 8 Tage und zusätzliche Faktoren:

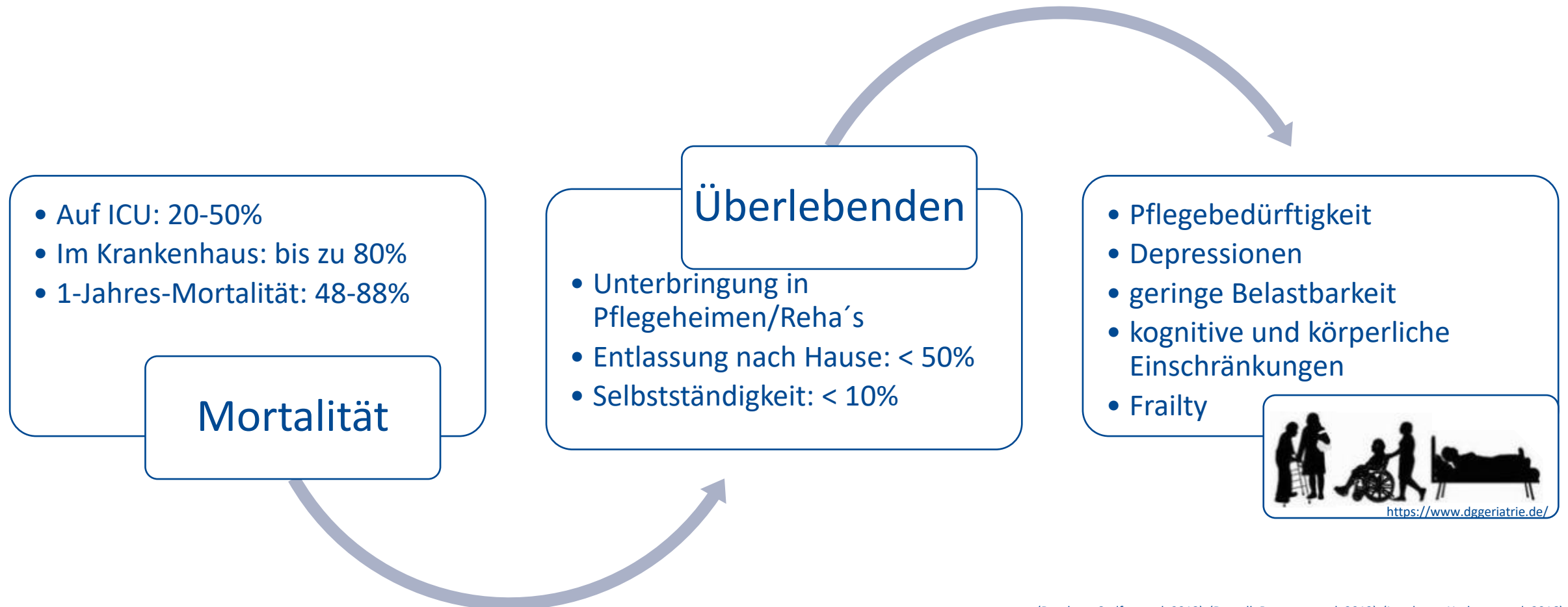
- prolongierte Beatmung >96h
- Tracheotomie
- Sepsis
- Schwere Wunden
- Stroke (ischämisch und hämorrhagisch)
- Schädelhirntrauma





Eigene Aufnahme

# Outcome - Prognose



## Relevanz: Kosten (USA 2004 – 2009)

Year	2004	2005	2006	2007	2008	2009
Cases (N)	302173	317451	324790	339930	365817	380001
Mortality (N, %)	100552 (33.3)	103357 (32.6)	102018 (31.4)	104067 (30.6)	111348 (30.4)	107880 (28.3)
<b>Costs (billions) *</b>	<b>\$15.6</b>	<b>\$17.5</b>	<b>\$19.4</b>	<b>\$21.8</b>	<b>\$24.7</b>	<b>\$26.0</b>

≈ 22.000.000.000 €



\* Costs are inflation adjusted to 2009 dollars using the consumer price index

## Relevanz: Kosten

- **7 Tage Intensivtherapie: rund 25.000–30.000 €** (Beatmung + Dialyse)
  - Bei komplexeren Verläufen (z. B. ECMO, Mehrorganversagen, zusätzliche High-Cost-Medikamente) können die Kosten deutlich darüberliegen.
- **3 Wochen Intensivtherapie mit Beatmung und kontinuierlicher Dialyse: 60.000 - 90.000 €**
  - Die effektiven Kosten können durch Komplikationen (z. B. Sepsis, ECMO, CRRT mit hohen Verbrauchsmaterialien) deutlich über 100.000 € steigen.
- **1 Monat (30 Tage): ca. 100.000–150.000 €**
- **3 Monate: nicht selten > 300.000 €**

Die **Versorgung eines CCI-Patienten auf der ITS** bewegt sich in Deutschland oft im Bereich von **mehreren hunderttausend Euro pro Fall**, abhängig von Dauer, Beatmung, Dialyse, Komplikationen und Bundesland

**Obwohl CCI nur ca. 5 % der ICU-Patient:innen CCI entwickeln, verbrauchen sie 20 - 40 % der Ressourcen im Intensivbereich**

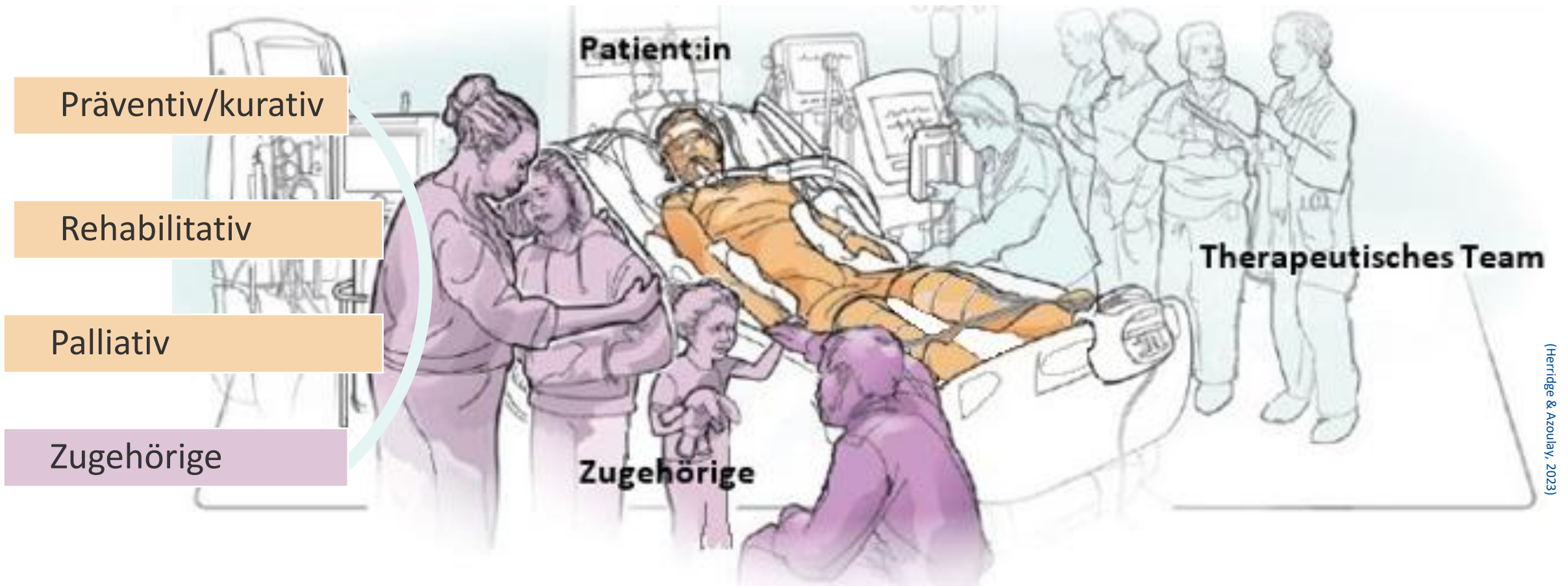
# Behandlungsstrategie

## Koordiniert, organisierte, zielorientierte Behandlungsstrategie (CCI-Bundle)

- Präventive, kurative, rehabilitative, palliative Versorgungsmodelle
- angepasst an die individuellen Bedürfnisse und Möglichkeiten der CCI's
- Rücksichtnahme auf ihre psychosoziale Situation



# Therapie



# Präventiv

- Frühzeitig erkennen von Risikopatienten
  
- Zeitig Therapieziele definieren
  - Patientenwille erörtern
  - Information/Aufklärung
  
- Präventionsmaßnahmen anwenden
  - Infektion, Sepsis, MOF
  - Ernährungsdefizite
  - Hautschädigungen/Dekubitus
  - CIP/CIM/CINM
  - Schmerzen
  - Erschöpfung, Energiemangel, Fatigue
  - Atemnot, Stress während der Beatmung
  - ...



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## Kurativ: A2H Bundle

**A**

- Assess & Manage Pain  
Erfassung, Prävention und Management von Schmerzen

**B**

- Both SATs and SBTs  
Aufwach- (SAT) und Spontanatmungsversuche (SBT), Weaning

**C**

- Choice of Sedation and Analgesia  
Wahl adäquater Analgesie und Sedierung

**D**

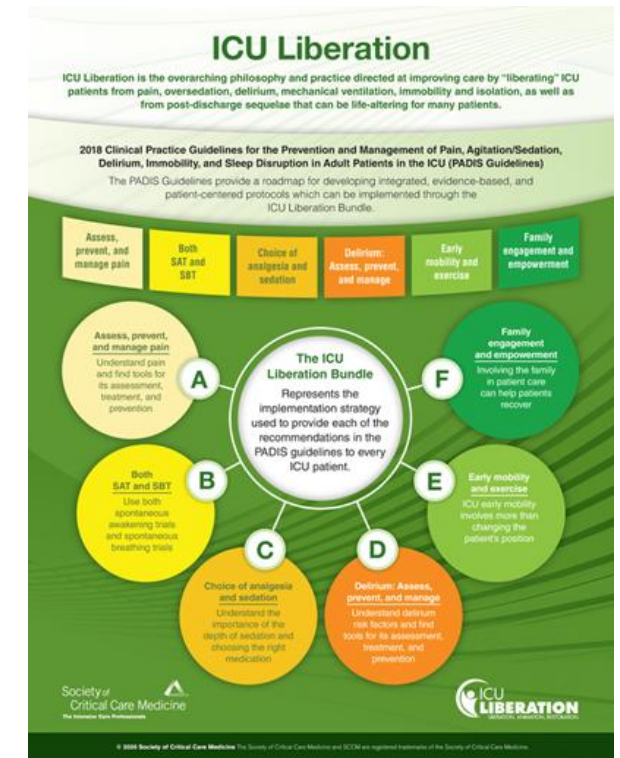
- Delirium Assessment & Management  
Erfassung, Prävention und Management Delirien, Behandlung Kognitive Störungen und psychische Komplikationen

**E**

- Early Mobilisation and Exercise  
Frühzeitige Mobilität und Bewegung, Hautschädigungen/Dekubitus vermeiden

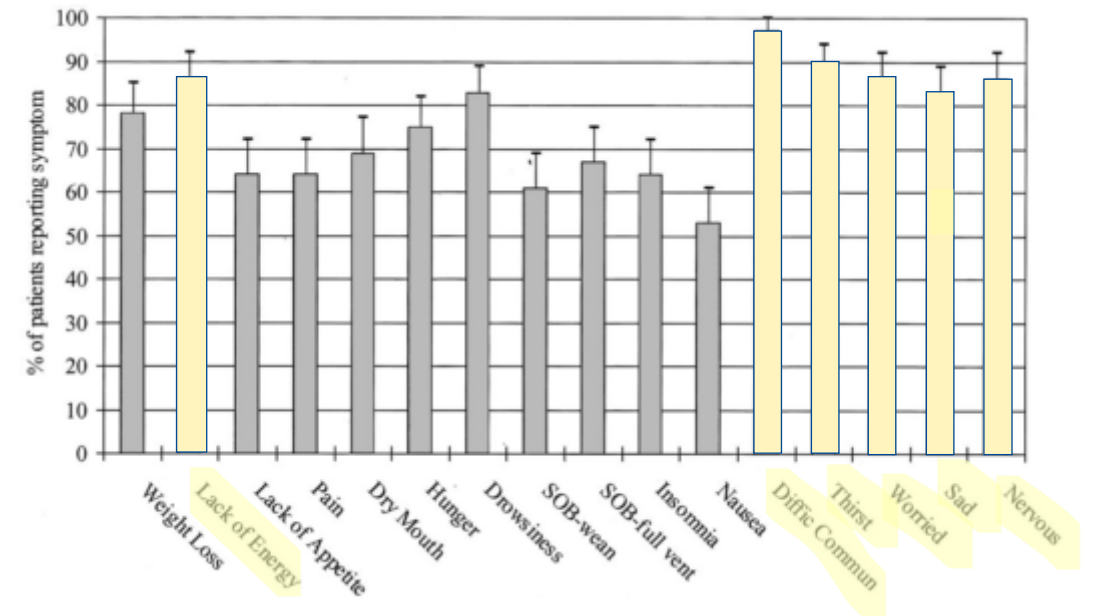
**F**

- Family & Friends Engagement  
Engagement und Empowerment von An- und Zugehörigen

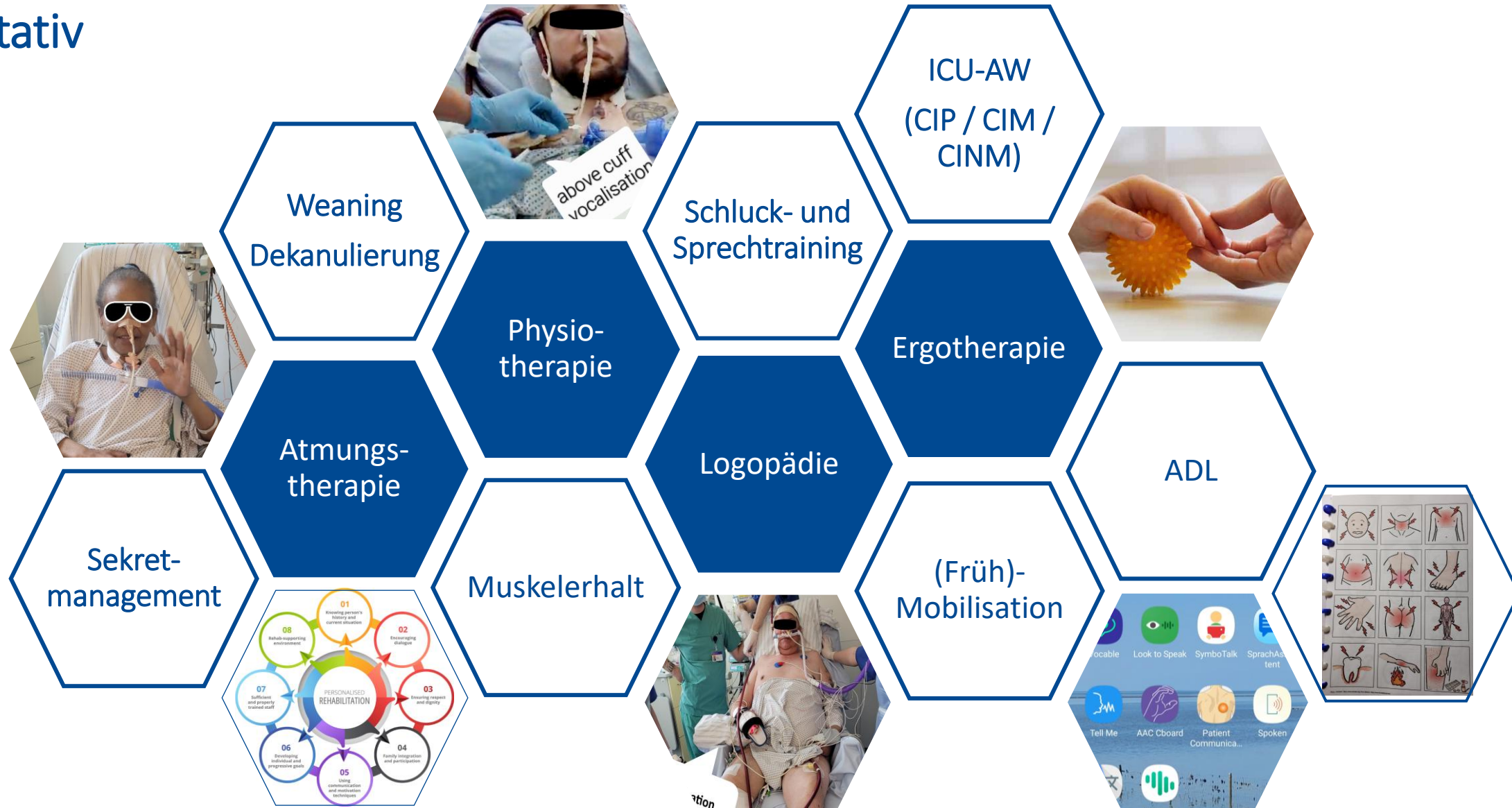


# Kurativ: A2H Bundle

- G**
  - Good Food  
Ernährungsaspekte
- H**
  - Home Care  
Entlass- und Nachsorgeplanung
- I**
  - Infection prevention and therapy  
Behandlung Infektionen/Sepsis/MOF
- S**
  - Symptomassessment and Treatment  
Symptombehandlung



# Rehabilitativ



## Palliativ

› Respir Care. 1985 May;30(5):339-47.

# The chronically critically ill: to save or let die?

K Girard, T A Raffin

**THE CHRONICALLY CRITICALLY ILL: THE VALUE OF SURVIVAL**  
 The chronic ICU patient: Is intensive care worthwhile for patients with very prolonged ICU-stay ( $\geq 90$  days)?

Life?

Kevin Roedl<sup>a,\*</sup>, Dorothee Amann<sup>a</sup>, Lars Eichler<sup>a</sup>, Valentin Fuhrmann<sup>a</sup>, Stefan Kluge<sup>a</sup>,  
 Jakob Müller<sup>a,b</sup>

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# Palliativ

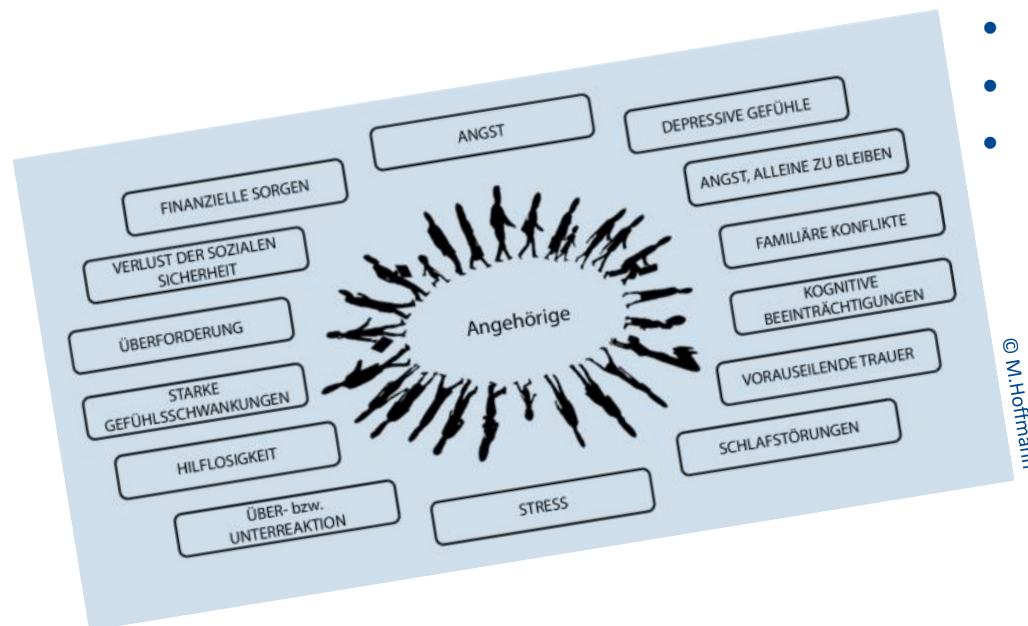
- Patient:innenwillen und -Werte/  
Patient:innenverfügung/Advanced Care Planning
- Behandlungsoptionen
- Frühzeitiges einbeziehen Palliativteam/Palliativmedizin
- End of life care/Best supportive Care
- Psychosoziale und spirituelle Unterstützung
- Gemeinsame Entscheidungsfindung
- Time Trial Treatment/ Therapieeinschränkungen, -begrenzung
- Übertherapie vermeiden/Re-Evaluation des Therapieziels (TRIKK)
- Klinisches Ethikkomitee/ethische Fallberatung



@Ines Mondon

# Zugehörige / Family Decision Maker (FDM)

- Einbeziehung in die (pflegerische) Versorgung
- Psycho-soziale Unterstützung
- Kommunikation und (prognostische) Informationsvermittlung
- PICSF vorbeugen
- Sozialdienst/Psychologe/Seelsorgende
- Interdisziplinäre Angehörigengespräche
- Informed/Shared Decision Making
- Informationsbroschüren
- Intensivtagebuch
- Angepasste Besuchszeiten
- Sprechstunde für An- und Zugehörige



# Fazit

- Uneinheitliche Definition
- CCI's sind hoch-komplexe Patient:innen mit multidimensionalen Problemen
- Hoher Ressourceneinsatz für wenig Patienten
- Steigende Relevanz bei zunehmenden Zahlen
- Multiprofessionelle, koordinierte, organisierte, zielorientierte Behandlungsstrategie ⇒ Teamarbeit
  - Präventive, kurative, rehabilitative, palliative Versorgungsmodelle
- Einbezug und Empowerment von An- und Zugehörigen

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