

PD im fortgeschrittenen Alter

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Berliner Dialyseseminar, 06.12.2019



Auguste-Viktoria-Klinikum



Humboldt-Klinikum



Klinikum Am Urban



Klinikum Kaulsdorf



Klinikum im Friedrichshain



Klinikum Neukölln



Klinikum Spandau



Wenckebach-Klinikum

Alters- und Geschlechtsverteilung inzidenter Dialysepatienten Vivantes

Tabelle III.1: Alter und Geschlecht

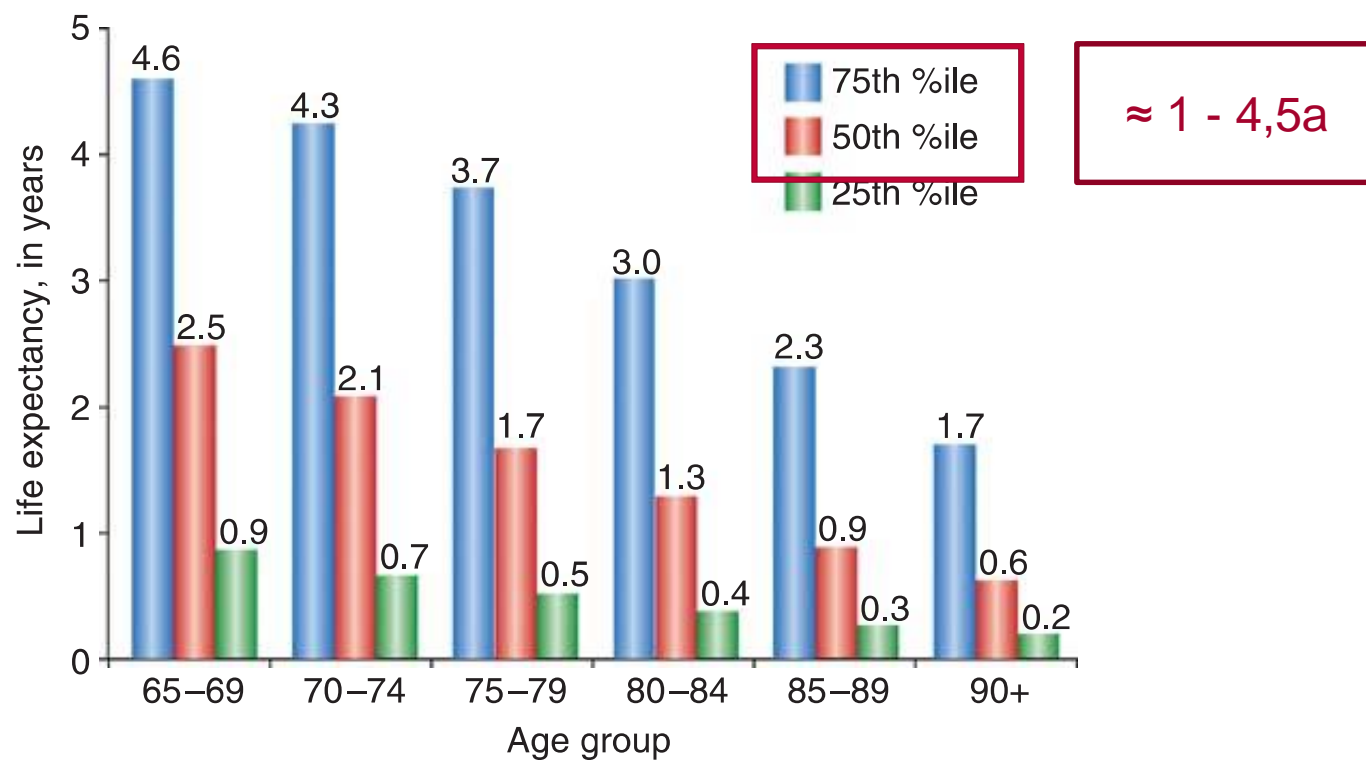
	Alters- und Geschlechtsverteilung							
	Anzahl männlich	Anteil männlich	Median Alter männlich	Mittelwert Alter männlich	Anzahl weiblich	Anteil weiblich	Median Alter weiblich	Mittelwert Alter weiblich
0 bis 17 Jahre	201	0,23 %	10,00	8,68	111	0,13 %	11,00	9,55
18 bis 44 Jahre	4323	5,00 %	36,00	35,31	2603	3,01 %	36,00	35,00
45 bis 64 Jahre	15950	18,48 %	57,00	55,99	9000	10,42 %	57,00	56,04
65 bis 74 Jahre	12019	13,91 %	69,00	69,54	6892	7,98 %	70,00	69,63
75 Jahre und älter	19961	23,11 %	80,00	81,17	15328	17,74 %	81,00	81,49
gesamt	52454	66,72 %	69,00	66,79	33934	55,28 %	72,00	68,53

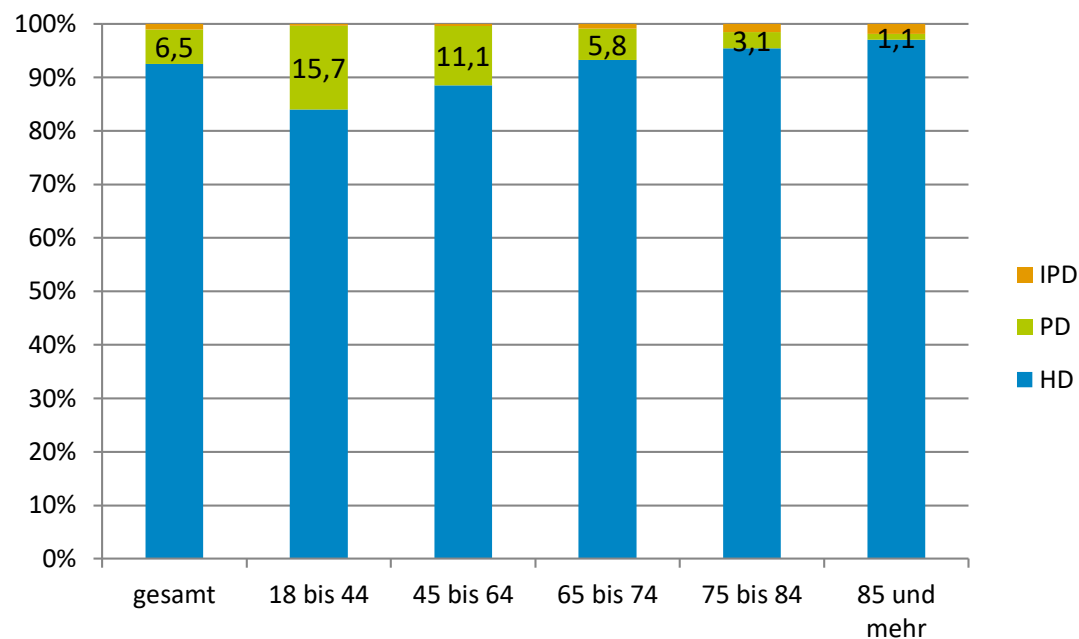
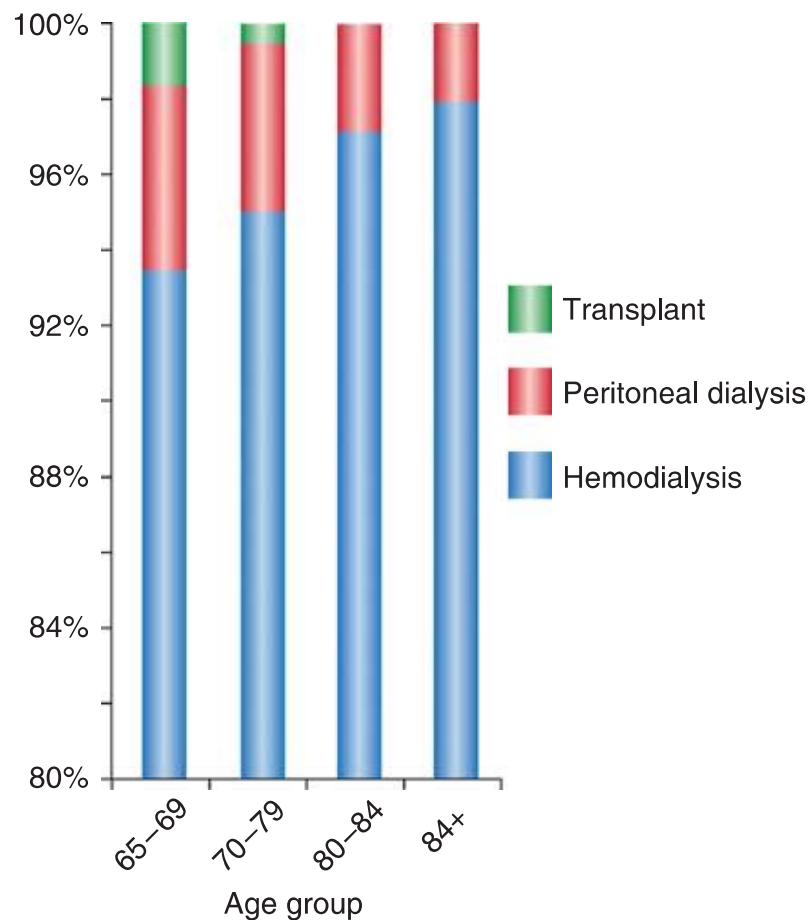
älter: > 65

+

≈ 60%

alt: > 75

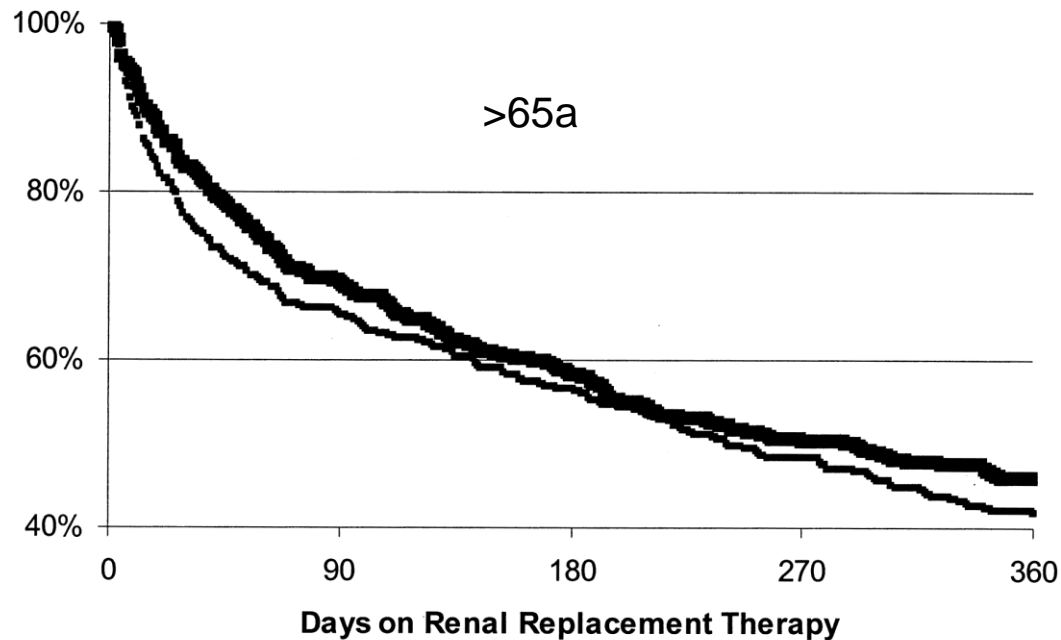




Prävalente Dialysepatienten 2016 nach Dialyseart und Altersgruppen

United States Renal Data System-Adjusted Probability of Survival Among ESRD Patients by Months after Initiation of Treatment in 2007 (3)

	3 months	12 months	24 months	36 month	60 months
Hemodialysis (%)	91.4	75.8	63.7	54.2	39.8
Peritoneal dialysis (%)	96.9	87.6	74.9	64.7	49.2



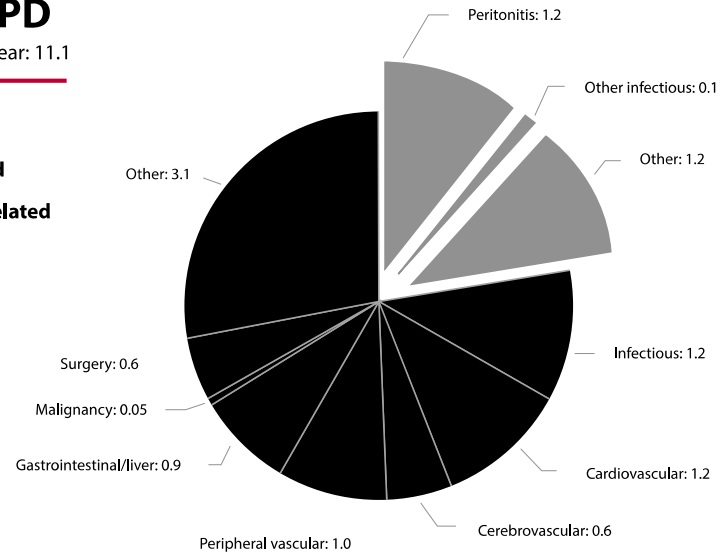
▪ Peritoneal dialysis patients ■ Hemodialysis patients

Cause-specific hospital days for assisted PD compared with in-center HD

Assisted PD

Hospital Days Per Year: 11.1

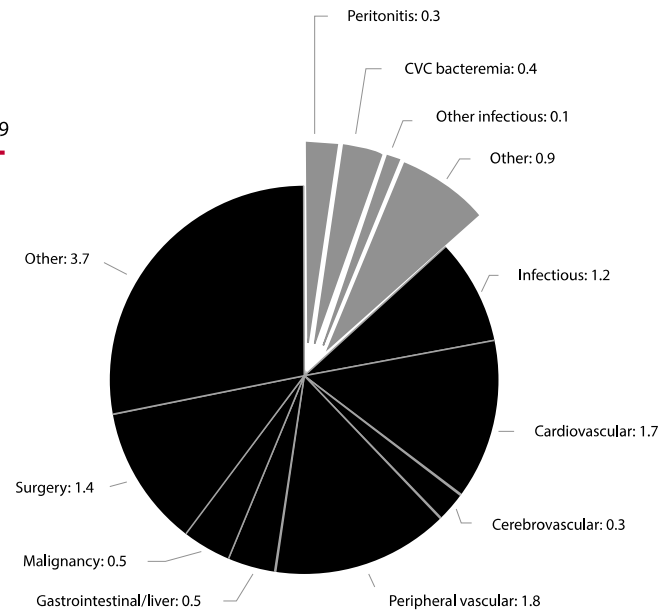
■ Dialysis Related
■ Non-Dialysis Related



Incenter HD

Hospital Days Per Year: 12.9

■ Dialysis Related
■ Non-Dialysis Related



- Peritonitisrisiko
- technischem Überleben / Transferrate zu HD
- kumulativem Überleben
- Keine Unterschiede zwischen selbständigen PD- Pat. > 65a und assistierter PD bei > 65a
- Höhere Zufriedenheit mit Behandlung als HD-Patienten
- Weniger Zugangsprobleme



Clinician



Patient



PATERNALISTIC:

Information and recommendations



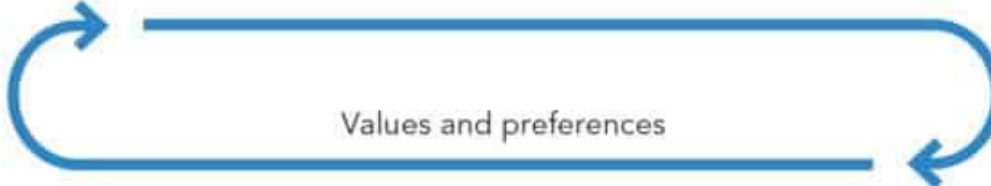
INFORMED MEDICAL DECISION MAKING:

Information



SHARED DECISION MAKING:

Information and recommendations



Values and preferences

- **rechtzeitige (CKD 4-5) + umfassende Aufklärung (Informationspflicht)**

Initial zeitaufwändig, im Verlauf Ressourcen-sparend



- **Subjektiv:** Wünsche + Erwartungen des Patienten
- **Objektiv:** medizinische und soziale Konditionen



- **Therapie-Ziel definieren:** Lebensverlängerung? Lebensqualität?
Ist eine konservative Therapie ausreichend?



- Festlegung eines **klaren Konzeptes** für jeden Patienten
- **Interdisziplinäres Team:**
 - erfahrene PD-Schwester
 - Nephrologe
 - Sozialarbeiter, HKP
 - (Chirurg, Psychiater, Physiotherapeut..)

- selbstbestimmt, Gestaltungsfreiheit i.R. der Leistungsfähigkeit
- alleine oder in Gesellschaft
- Teilhabe am sozialen Leben

- r
- s **so normal, wie möglich** (to achieve a sense of normality)
- f **Erhalt der Selbständigkeit**

- wenige Kri-Aufenthalte
- keine Polypharmazie
- barrierefrei
- gefördert und gefordert

Tab. 1. Frailty-Kriterien nach Fried [1] und 5-Fragen-Screeningtest [6, 7].

Kriterien nach Fried	FRAIL
Unabsichtlicher Gewichtsverlust	Fatigue „Fühlen Sie sich meistens müde?“
Subjektive Erschöpfung	Resistenz (Muskellkraft)

**Frailty bei CKD = um das 3- bis 10-fache häufiger
als in einer altersentsprechenden, nicht nierenkranken Population**

Aktivität	„Haben Sie in den letzten 5 Monaten ungewollt mehr als 5 kg Gewicht verloren?“
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≥ 3 Kriterien: Frailty, 1 – 2 Kriterien: Prä-Frailty.

National Kidney Foundation

Comprehensive Interdisciplinary Patient Assessment (CIPA) Example Questions

Assessment to Plan of Care

The CIPA is the first step in the care planning process and will generate a list of problems. The care team will create or adjust the plan of care to address the problems identified by the CIPA. The CfC (§494.90) state that the Plan of Care must:

- Be individualized
- Specify the services necessary to address the patient's needs identified in the assessment
- Include measurable and expected outcomes
- Include estimated timetables to achieve outcomes
- Contain outcomes consistent with current evidence-base professionally-accepted clinical practice standards

Minimum Criteria of the Assessment

The CIPA must consist of the following minimum criteria:

- Evaluation of current health status and medical condition, including co-morbid conditions
 - Evaluation of the appropriateness of the dialysis prescription, blood pressure, and fluid management needs
 - Laboratory profile, immunization history, and medication history
 - Evaluation of factors associated with anemia, such as hematocrit, hemoglobin, iron stores, and potential treatment plans for anemia, including administration of erythropoiesis-stimulating agent(s)
 - Evaluation of factors associated with renal bone disease
- Evaluation of nutritional status by a dietitian
 - Evaluation of psychosocial needs by a social worker
 - Evaluation of dialysis access type and maintenance (for example, arteriovenous fistulas, arteriovenous grafts, and peritoneal catheters)
 - Evaluation of the patient's abilities, interests, preferences, and goals, including the desired level of participation in the dialysis care process; the preferred modality (hemodialysis or peritoneal dialysis) and setting (for example, home dialysis), and the patient's expectations for care outcomes
 - Evaluation of suitability for a transplantation referral, based on criteria developed by the prospective transplantation center and its surgeon(s). If the patient is not suitable for transplantation referral, the basis for nonreferral must be documented in the patient's medical record
 - Evaluation of family and other support systems
 - Evaluation of patient's current physical activity level
 - Evaluation for referral to vocational and physical rehabilitation services

Method to Assess Treatment Choices for Home Dialysis (MATCH-D)

www.homedialysis.org/match-d

Suitability Criteria for Self Peritoneal Dialysis: CAPD, APD

Strongly Encourage PD
<input type="checkbox"/> Any patient who <i>wants</i> to do PD or has no barriers to it
<input type="checkbox"/> Employed full- or part-time
<input type="checkbox"/> Student – grade school to grad school
<input type="checkbox"/> Caregiver for child, elder, or person with disability
<input type="checkbox"/> New to dialysis or has had transplant rejection
<input type="checkbox"/> Lives far from clinic and/or has unreliable transportation
<input type="checkbox"/> Needs/wants to travel for work or enjoyment
<input type="checkbox"/> Has needle fear or no remaining HD access sites
<input type="checkbox"/> BP not controlled with drugs
<input type="checkbox"/> Can't or won't limit fluids or follow in-center HD diet
<input type="checkbox"/> No (required) partner for HHD
<input type="checkbox"/> Values flexibility and control of own treatment

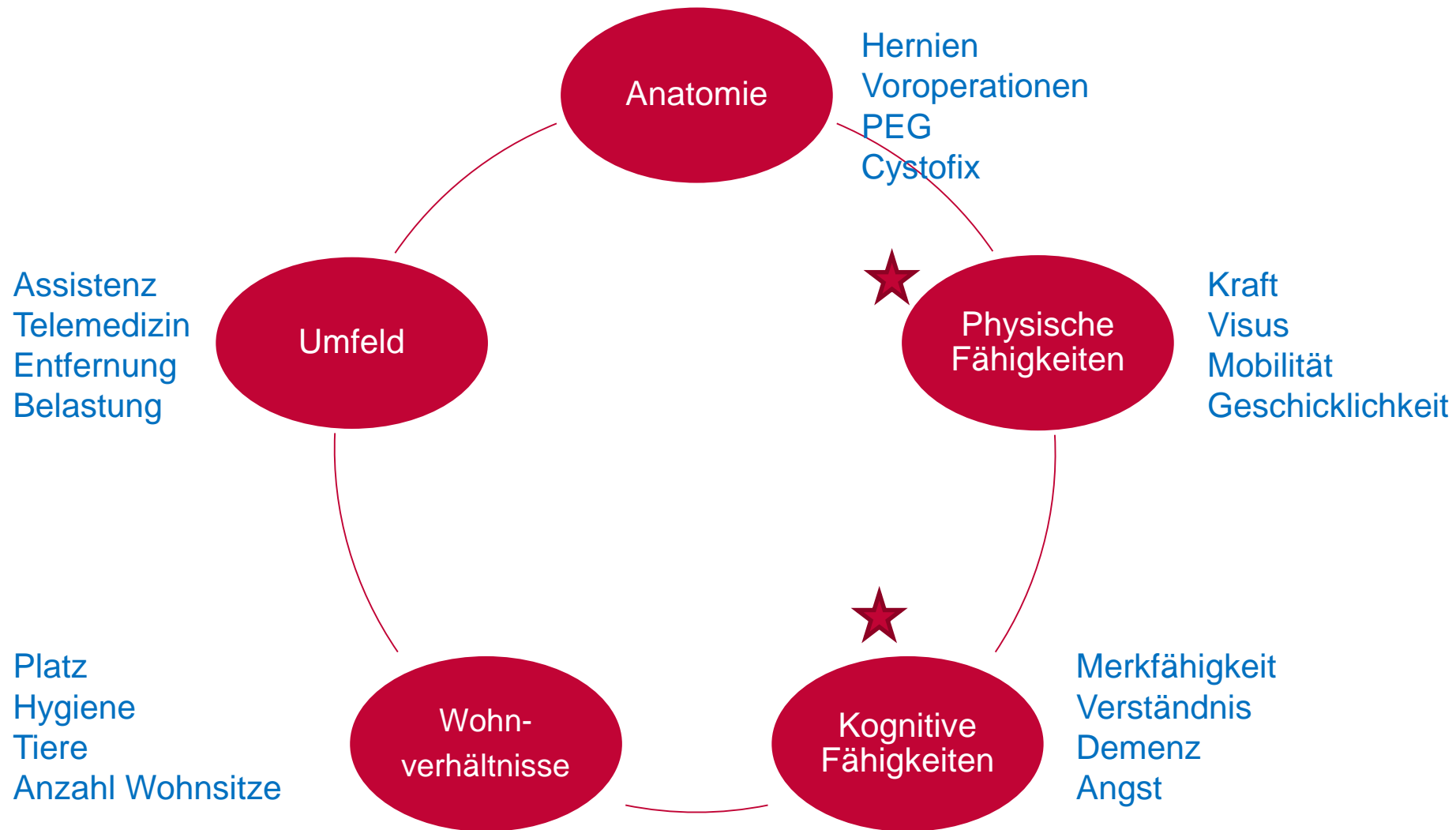
Encourage PD After Assessing & Eliminating Barriers
<input type="checkbox"/> Unemployed, low income, no HS diploma – <i>not barriers to PD</i>
<input type="checkbox"/> Simple abdominal surgeries (e.g. appendectomy, hernia repair, kidney transplant) – <i>not barriers to PD</i>
<input type="checkbox"/> Has pet(s)/houseplants (carry bacteria) – bar from room at least during PD connections
<input type="checkbox"/> Hernia risk or recurrence <i>after</i> mesh repair – use low daytime volume or dry days on cyclor
<input type="checkbox"/> Blind, has no use of one hand, or neuropathy in both hands – train with assist device(s) as needed
<input type="checkbox"/> Frail or can't walk/stand – assess lifting, offer PT, offer CAPD, use 3L instead of larger bags for cyclor*
<input type="checkbox"/> Unable to speak or read local language – use pictures, videos, culturally-specific training tools, interpreters, and demonstrations
<input type="checkbox"/> Resident of a nursing home – train staff to provide dialysis
<input type="checkbox"/> Hearing impaired – use light/vibration for alarms
<input type="checkbox"/> Depressed, angry, or disruptive – increased personal control with PD may be helpful
<input type="checkbox"/> Unkempt – provide hygiene education; assess results
<input type="checkbox"/> Anuric with BSA >2 sqm – assess PD adequacy†‡
<input type="checkbox"/> Swimmer – ostomy dressings, chlorinated pool, ocean
<input type="checkbox"/> Limited supply space – visit home, 2x/mo. delivery
<input type="checkbox"/> Large polycystic kidneys or back pain – use low daytime volume or dry days on cyclor†‡
<input type="checkbox"/> Obese – consider presternal PD catheter
<input type="checkbox"/> RX drugs impair function – consider drug change

May Not Be Able to Do PD (or will Require a Helper)
<input type="checkbox"/> Homeless – refer to social services and reassess when rehoused
<input type="checkbox"/> Can't maintain personal hygiene even after education
<input type="checkbox"/> Home is unclean/health hazard; patient/family won't correct
<input type="checkbox"/> No/unreliable electricity for CCPD; unable to do CAPD
<input type="checkbox"/> Multiple or complex abdominal surgeries; negative physician evaluation.†‡
<input type="checkbox"/> Brain damage, dementia, or poor short-term memory*
<input type="checkbox"/> Reduced awareness/ability to report body symptoms
<input type="checkbox"/> Malnutrition after PD trial leads to peritonitis†‡
<input type="checkbox"/> Uncontrolled anxiety/psychosis*
<input type="checkbox"/> Has colostomy; consider presternal PD catheter

Check all the boxes that apply.
Keep a copy of the
MATCH-D in patient record.



* May be able to do with a helper
† Consider nocturnal HHD
‡ Consider daily HHD



ATL´s	<ul style="list-style-type: none">• Barthel-Index
Mobilität/Sturzrisiko	<ul style="list-style-type: none">• Timed up and Go-Test• Chair rising Test
Kognition	<ul style="list-style-type: none">• MoCa-Test• Depressionsskala
Soziale Situation	<ul style="list-style-type: none">• Sozialanamnese• Biographiearbeit
Ernährung	<ul style="list-style-type: none">• Albumin• NRS
Praktische Übung	<ul style="list-style-type: none">• Beutel heben, aufreißen und mischen• ÜLS ausprobieren

TABLE 1

Relative Contraindications to Peritoneal Dialysis*

Medical conditions

Abdominal surgery – prior scarring, recent or planned surgeries
Colostomy, ileostomy, or ileal conduit
Diverticulitis – active
Gastric tube
Hernias – uncorrectable

TABLE 2

Barriers to Peritoneal Dialysis and Other Factors Influencing Choice

Barriers

Medical barriers – diarrhea, incontinence, gastroparesis
Physical barriers – decreased strength, manual dexterity, vision, hearing, and general frailty
Cognitive barriers – decreased memory, executive functions, dementia, prior stroke, psychiatric conditions

PLEASE NOTE: Patients who have barriers to self home dialysis (PD or home HD) may still be able to successfully do home dialysis with a helper who is willing to take on primary responsibility for care.








PD=peritoneal dialysis.

* Contraindications listed are frequently cited reasons that patients are not offered PD but do not necessarily represent absolute contraindications in all PD programs or in the opinion of all nephrologists.

Flexibility of schedule
Medicalization of the home
Employment
Effect on other caregivers or family members
Finances/ expenses
Availability of space/ storage in the residence
Other lifestyle issues e.g. swimming, pets
Experience of other patients
Desire to socialize with other patients/ health care professionals
Body image with abdominal catheter

TABELLE 1

CSHA* Klinische Frailty-Skala [18]

Kategorie	Piktogramme**	Einstufung	Beschreibung
1		sehr fit	robust, aktiv, energisch, gut motiviert und fit: Diese Menschen trainieren regelmäßig und zählen zur fittesten Gruppe in ihrem Alter.
2		gut	ohne aktive Erkrankungen, aber weniger fit als Menschen der Kategorie 1
3		gut mit behandelten Komorbiditäten	Krankheitssymptome sind im Vergleich zur Kategorie 4 gut kontrolliert
4		scheinbar vulnerabel	obwohl nicht offensichtlich abhängig von anderen Menschen, beklagen sie doch, langsam geworden zu sein und Krankheitssymptome aufzuweisen
5		leicht gebrechlich (frail)	mit begrenzter Abhängigkeit von anderen in den instrumentellen Aktivitäten des täglichen Lebens
6		mittelgradig gebrechlich	Hilfe ist in den instrumentellen und nicht-instrumentellen Aktivitäten des täglichen Lebens nötig
7		sehr gebrechlich	komplett abhängig von anderen Menschen in den Aktivitäten des täglichen Lebens oder im Endstadium krank

Ja

Ja, mit Hilfe

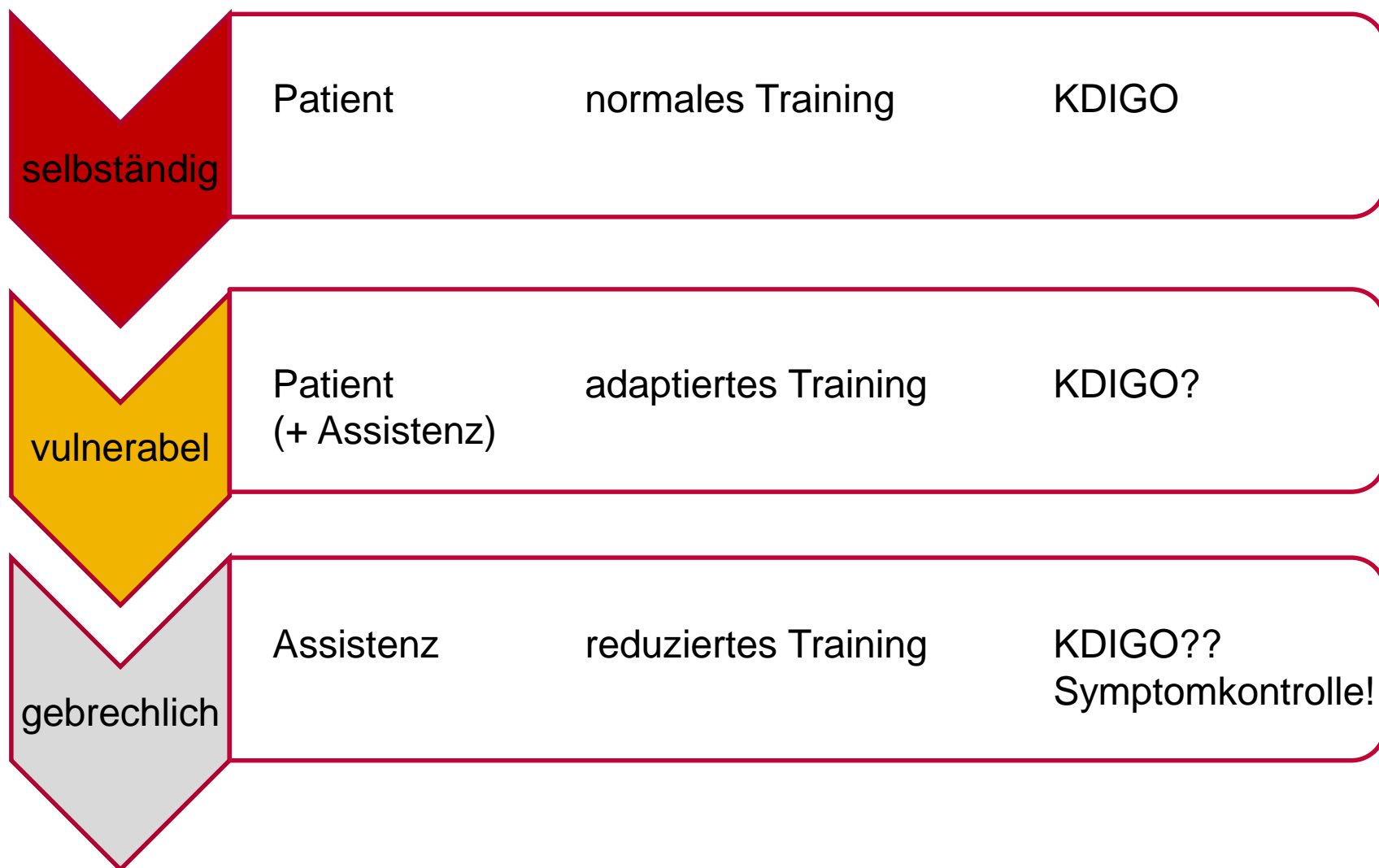
Nein

*: CSHA: Canadian Study on Health and Aging

** : <http://geriaticresearch.medicine.dal.ca/pdf/Clinical%20Frailty%20Scale.pdf>

- Ehepartner / Lebensgefährten
- Familienmitglieder
- HKP – ambulant
- Pflege team – stationär
- IPD in Praxis oder Klinik





Informationsverarbeitungsgeschwindigkeit  **langsamer**

Kapazität des Arbeitsgedächtnisses  **länger**

 Gewichtung der Trainingsinhalte

überlebenswichtig

wünschenswert

möglich



ASSESSMENT AND CHECKLIST FOR PERITONEAL DIALYSIS TRAINING

Learner's name _____

Learner(s): _____ patient _____ partner _____ other caregiver(s) _____

Nurse's name _____

Date training initiated _____ Date training completed _____ Hours per day _____;

Total hours _____; Total days _____

Learning style(s) identified: () visual () auditory () read/ write () motor or kinesthetic

Comments _____

Barriers to Learning:

- | | |
|--|--------------------------------|
| () Decreased motor skill/ dexterity | () Anxiety |
| () Decreased hearing | () Depression |
| () Decreased vision (use of glasses/ blind) | () Fatigue |
| () Low reading literacy | () Memory problems |
| () Low numeracy literacy | () Uremia |
| () Language barrier | () Other Please specify _____ |

Date of planned re-training: _____

TABLE 1
Characteristics of Learning Styles

	<u>Visual</u>	<u>Aural</u>	<u>Read-write</u>	<u>Kinesthetic</u>
Characteristic	Tends to be a fast talker and has a tendency to interrupt	Speaks slowly and tends to be a natural listener; thinks in a linear manner	Prefers information to be displayed in writing – list of ideas	Tends to be the slowest talker of all
Implementing teaching	Use graphs, colorful brochures, different spatial arrangements (fonts) on a page, draw pictures to show ideas, use gestures when speaking Large font size 14	Read to patients and ask them to explain aloud their understanding, tape record for later listening with no background music Explain to others (i.e. staff, family members) the concepts learned	Emphasize text-based input and output Make lists Write definitions Use Powerpoint Manuals Printed handouts Ask patient to rewrite what has been learned using their own words	Hands-on approach, does things to understand, practical sessions Videos and pictures showing real objects Use mannequins or real-life examples

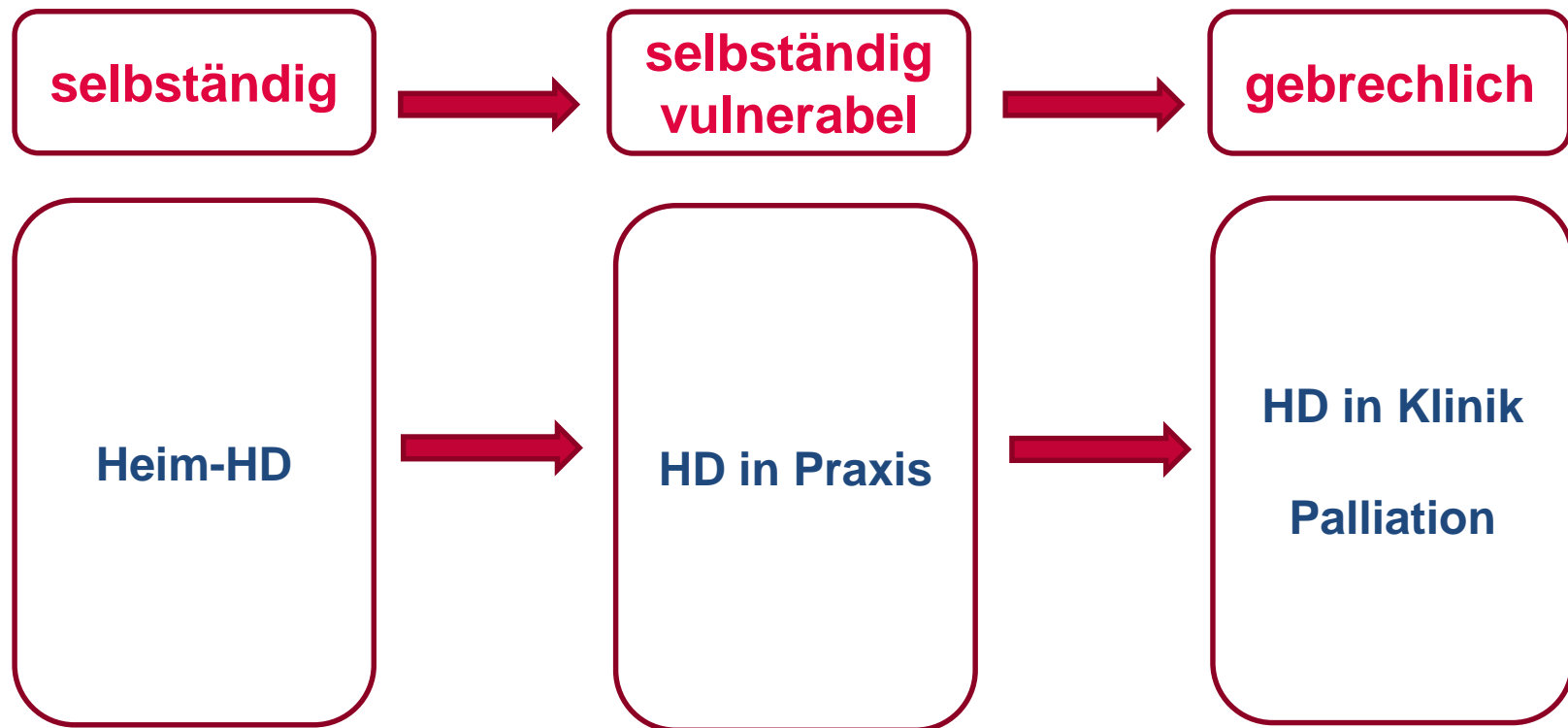
TABLE 1
Suggestion to Teach According to VARK Learning Style

Implementing teaching			
<u>Visual</u>	<u>Aural (Auditory)</u>	<u>Read-write</u>	<u>Kinesthetic (Motor)</u>
Information in diagrams, graphs, colorful brochures.	Information processing through hearing.	Information displayed specifically as words (can be confused with visual).	Sense of touch facilitates learning through actual doing or manipulation.
Use different spatial arrangements (fonts) on a page.	Read to patients and ask them to explain aloud their understanding.	Make lists.	Use hands-on approach.
Draw pictures to show ideas.	Use tape recording for later listening with no background music.	Write definitions.	Needs to do to understand.
Use gestures when speaking.	Encourage discussion, groups speaking, Web chat, and talking things through.	Use PowerPoint.	Practical sessions.
Use large font size – 14 point.	Verbally explain care plan.	Use manuals, printed handouts.	Videos and pictures showing real things.
	Rephrase important points and questions in several different ways to communicate the intended message.	Ask patient to rewrite what has been learned with own words.	Real-life examples.
			Use mannequin to practice.

Adapted from Fleming and Baume (15) and Inott and Kennedy (19).

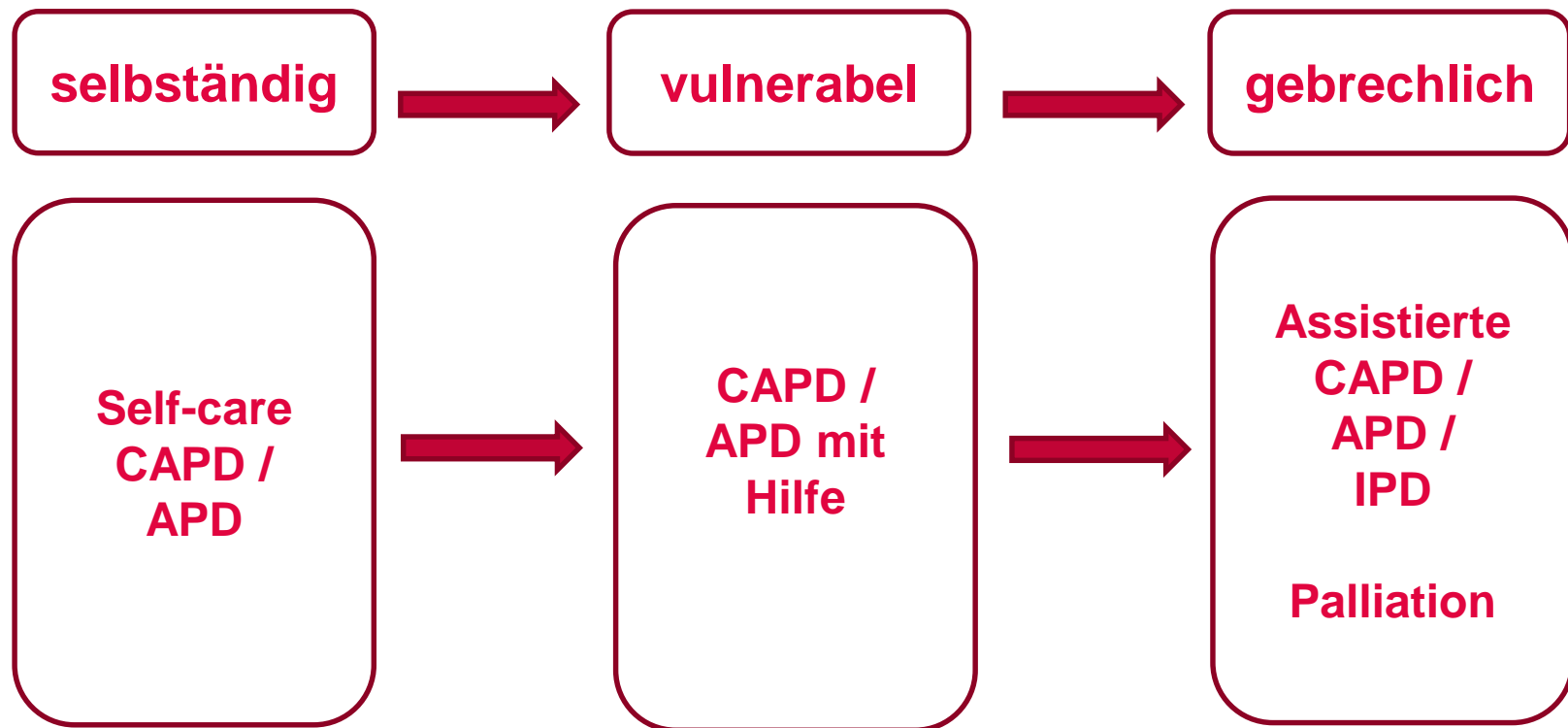
- ruhige Umgebung + ungeteilte Aufmerksamkeit
- 1 Pat. + 1 Schwester: keine Wechsel
- kurze Trainingssitzungen
- regelmäßige Pause (mind. alle 2 h)
- viele Wiederholungen, viel Praxis, wenig Theorie
- ggf. „Trockentraining“ vorab
- Bildmaterial zur Hilfe nehmen, Schriftgröße (>12)
- Hausbesuch
- Training zu Hause durchführen / fortsetzen
- Nur ein Verfahren erlernen (keine CAPD bei APD)

Barrieren	Hilfsmittel
kognitiv	Training anpassen
	Kurzfristige Nachschulung – Hausbesuche (nach 1 Wo, nach 3-4 Wo)
	Hilfestellung: Audiodatei (Sprachmemo), Film, Poster – Lerntyp!
	Incremental (dialysefreie Tage, 3-BW etc.)
	Großzügige Alarmgrenzen am Cyclor
	Nur 1 Verfahren lernen (keine CAPD vor APD)
	Telemedizin
	Assistenz
physisch	Lösungsbeutel mit 3l oder 2,5l für APD „saure“ Lösungen
	Einhändig bedienbarer Infusionsständer, Konnektionshilfen
	Ernährungsberatung
	Prävention: Kardiosport, Schrittzähler, Sturzprophylaxe
	Hilfsmittel: Rollator, Anti-Rutschmatten, Haltegriffe
	Assistenz



Selbständigkeit (kurativ)

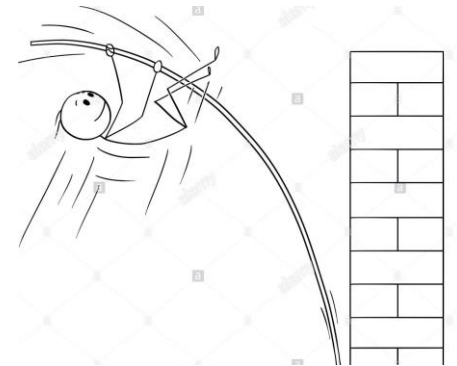
Assistenzbedarf (palliativ)



Selbstständigkeit (kurativ)

Assistenzbedarf (palliativ)

- **Den Willen zum Gelingen**
- **Zeit + Team**
- Interessensfreie Information für Patienten
- Gemeinsame Entscheidungsfindung (subjektiv + objektiv)
- Kompetente PD-Pflege
- Individualisierte Unterstützung / Assistenz (je älter, desto mehr)
- Behandlungszufriedenheit + Lebensqualität in QS Dialyse aufnehmen
- Re-Evaluation in regelmäßigen Abständen (mind. 1 x /Jahr)



**„Jeder nach seinen Fähigkeiten, jedem nach seinen
Bedürfnissen!“**





Darlegung potentieller Interessenskonflikte

Der Inhalt des folgenden Vortrages ist Ergebnis des Bemühens um größtmögliche Objektivität und Unabhängigkeit.

Als Referent versichere ich, dass in Bezug auf den Inhalt des folgenden Vortrags **keine Interessenskonflikte** bestehen, die sich aus einem Beschäftigungsverhältnis, einer Beratertätigkeit oder Zuwendungen für Forschungsvorhaben, Vorträge oder andere Tätigkeiten ergeben.

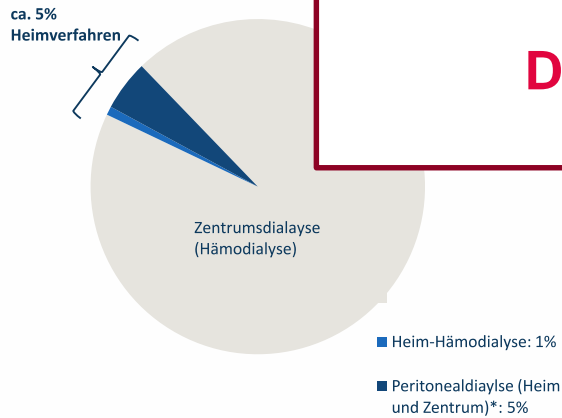
Table 1 | Prevalence of conditions in an incident ESRD population that can act as barriers to self-care peritoneal dialysis

Medical conditions	Number (% of population)
Decreased strength (to lift PD bags)	57 (43)
Decreased manual dexterity	49 (37)
Decreased vision/blindness	33 (25)
Immobility	27 (20)
Decreased hearing/deafness	23 (17)

The patient and/ or caregiver:

- is able to safely perform PD procedures using aseptic technique for connection;
- recognizes contamination and verbalizes appropriate action;
- identifies modification of fluid balance and its relationship to hypertension/ hypotension;
- can detect, report, and manage potential dialysis complications using available resources;
- understands when and how to communicate with the home dialysis unit.

Abb. 3: Tatsächliche Verteilung der Dialyseverfahren im Jahr 2012 [2]



*Peritonealdialyse wird in der Regel als Heimverfahren durchgeführt, so dass von nur einem kleinen Anteil mit Heim-Peritonealdialyse auszugehen ist.

Abb. 4: Mögliche Verteilung der Dialyseverfahren (Delphi-Mittelwerte 2. Runde)

Tatsächlich mögliche Verteilung 2013

12% Heimverfahren
(Hämo- und Peritonealdialyse)

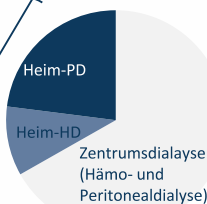
Theoretisch mögliche Verteilung 2020

19% Heimverfahren
(Hämo- und Peritonealdialyse)

Das optimale System ist Zukunft

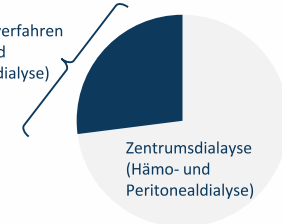
Optimales System

33% Heimverfahren



Patientenentscheidung nach umfassender Beratung

27% Heimverfahren
(Hämo- und Peritonealdialyse)



Welches Verfahren für welchen älteren Patienten mit welchem Ziel?

robust

- CAPD oder APD
- 7 Tage-Woche (incremental)
- $Kt/V \geq 1,7$
- optimale Medikation
- Ziel-RR 130/85 mmHg

Normales
Training

vulnerabel

- CAPD oder APD
- 3-4 Wechsel
- 1 (-2) Tage Dialysepause pro Woche
- Ggf. leeren Tagesbauch
- $Kt/V \geq 1,5-1,7?$
- Ziel-RR 135-150/85-95 mmHg

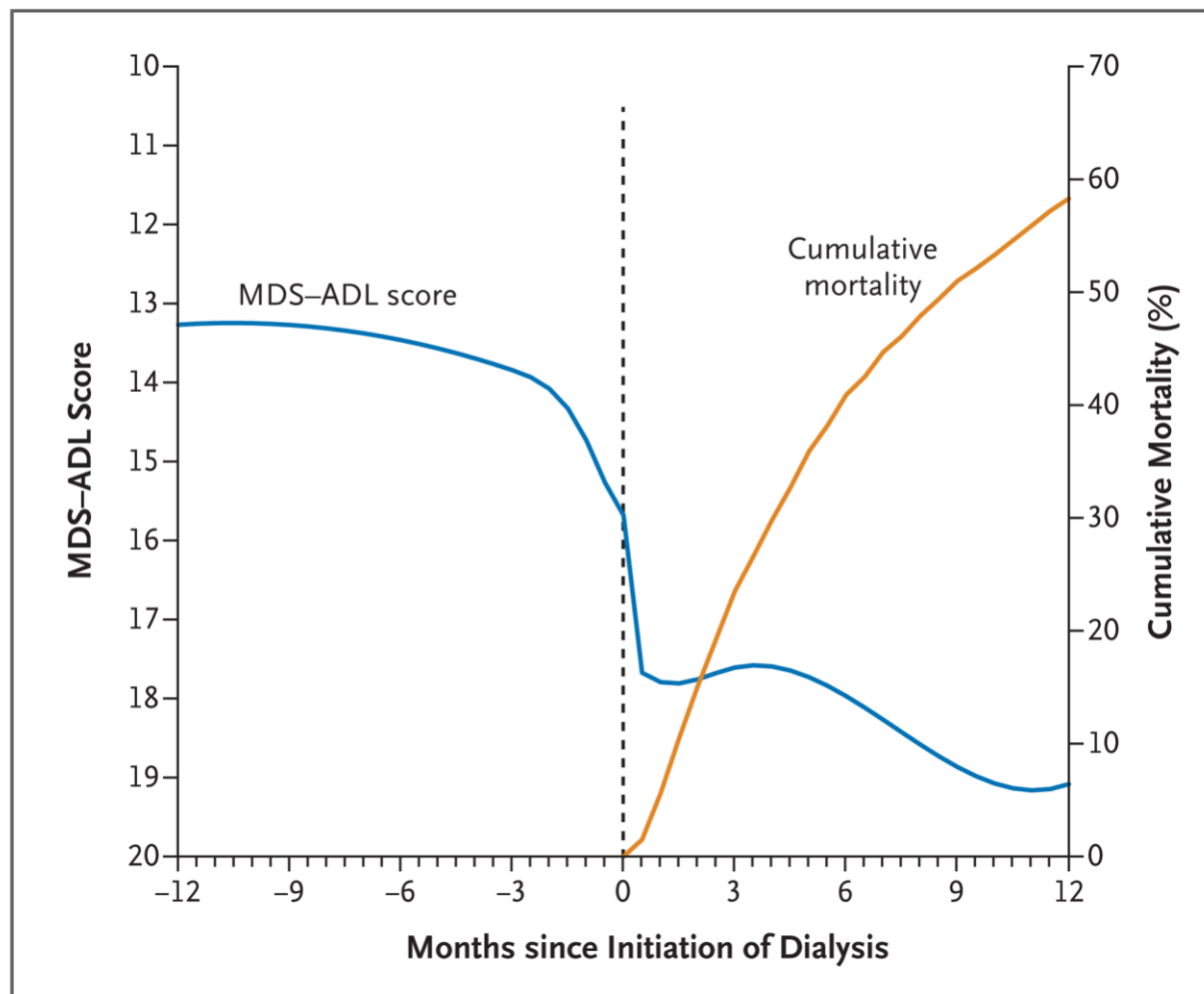
Reduziertes
Training

frail

- Assistierte APD oder IPD 3-5 x wöchentlich
- Leerer Tagesbauch
- Kt/V unerheblich
- Optimale Volumenkontrolle (cave: zu viel UF!)
- Medikation minimieren
- Ziel-RR 140-160/80-100 mmHg

Assistenz-
training

Functional Status before and after the Initiation of Dialysis and Cumulative Mortality Rate



Among nursing home residents with ESRD, the initiation of dialysis is associated with a substantial and sustained decline in functional status.