CORSO

I PER-CORSI IN NEFROLOGIA E DIALISI

13 maggio 2022
NH Hotel Pontevecchio
Lecco

L'AMBULATORIO DI PRE-DIALISI (MaReA)
Come strutturare un ambulatorio MaReA

9.00	Il ruolo del Medico *M. Sandrini*
9.30	Il ruolo dell'infermiera *M. Todeschini*
10.00	Il ruolo della dietista Schemi di diete da condividere *L. Mantratzi*
10.30	Il ruolo dello psicologo *C. Calabrese*
11.00	Coffee break

Corso

I PER-CORSI IN NEFROLOGIA E DIALISI

Ospedale Manzoni, Lecco
16 aprile 2020

COVID19
25 Settembre 2020

COVID19
13 Maggio 2022

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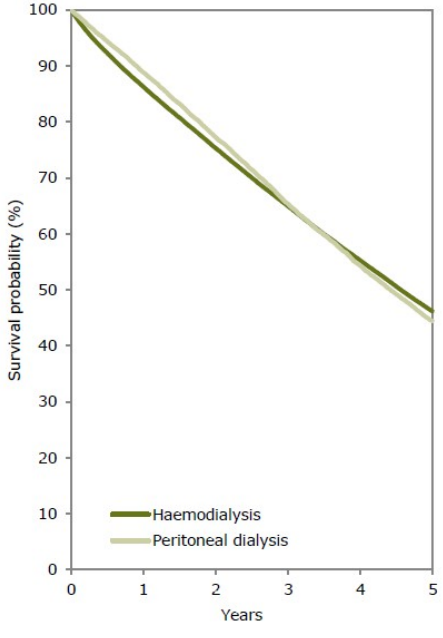
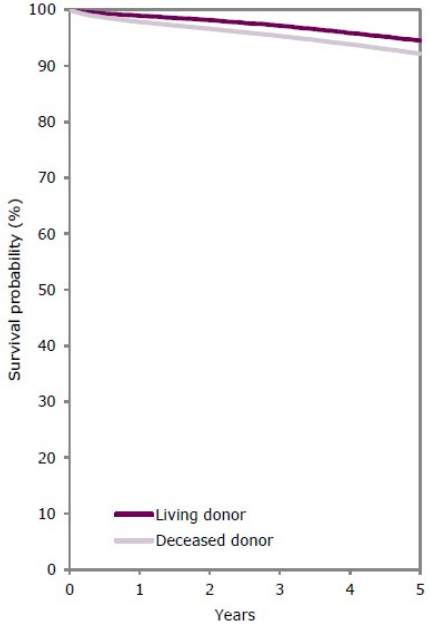
bagaglio culturale

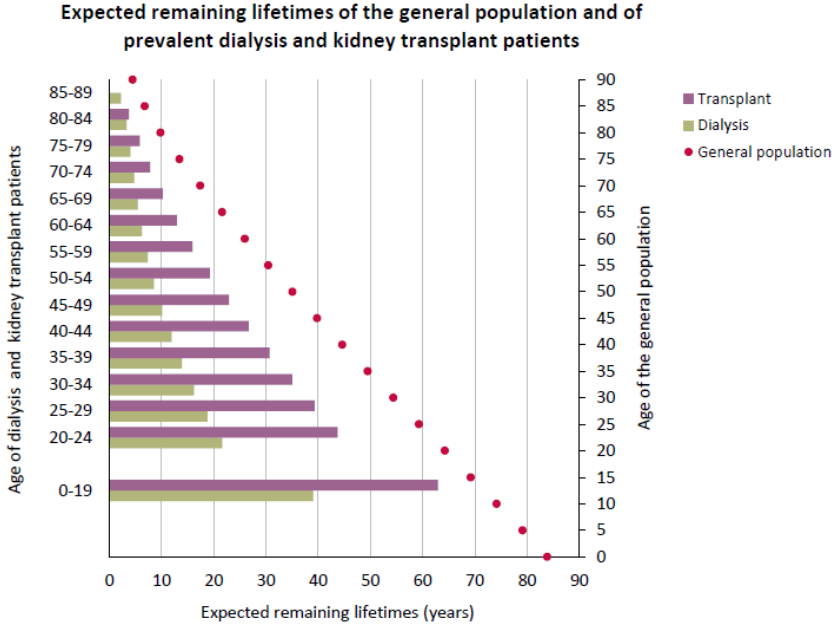
giovani

scenari, dinamiche, motivazioni, strategie, effetti...

ERA-EDTA Registry Annual Report 2017

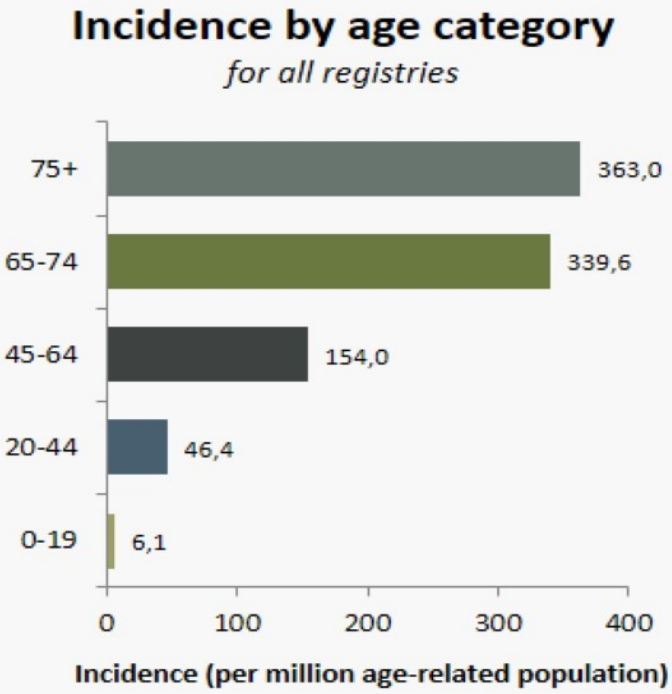


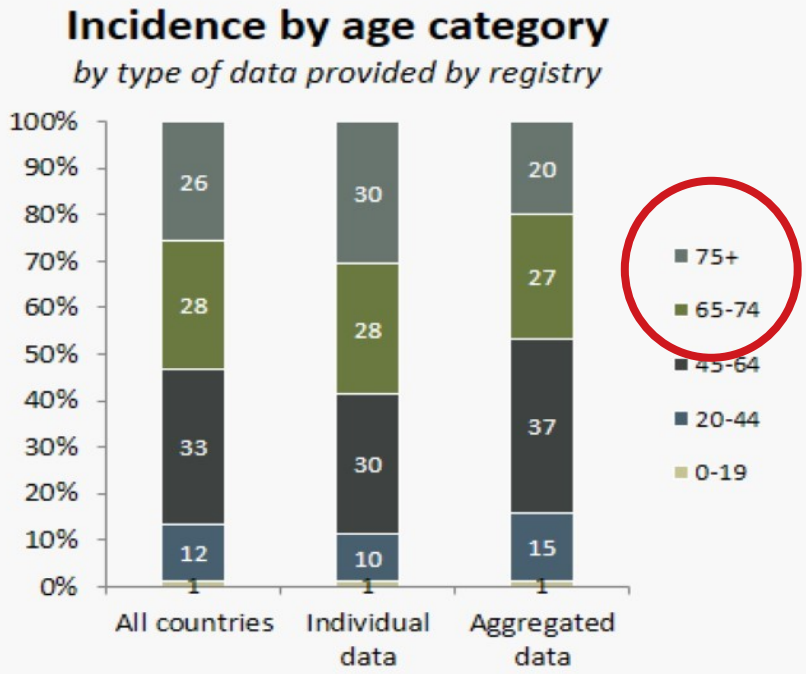




Incident patients accepted for RRT in 2019, at day 1

by age category





Nephrol Dial Transplant (2017) 32: ii91–ii98
doi: 10.1093/ndt/gfw357
Advance Access publication 11 February 2017

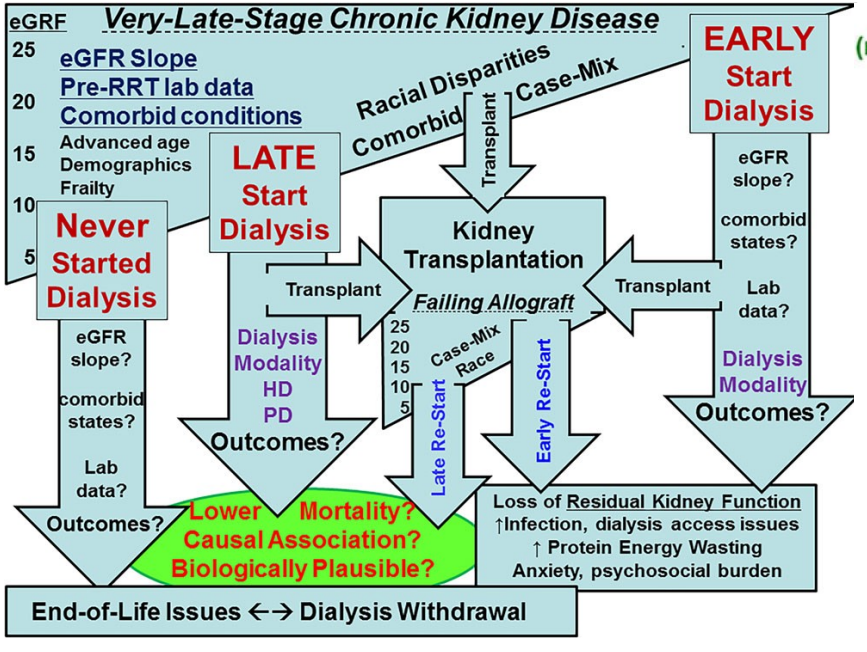
ndt
Nephrology Dialysis Transplantation

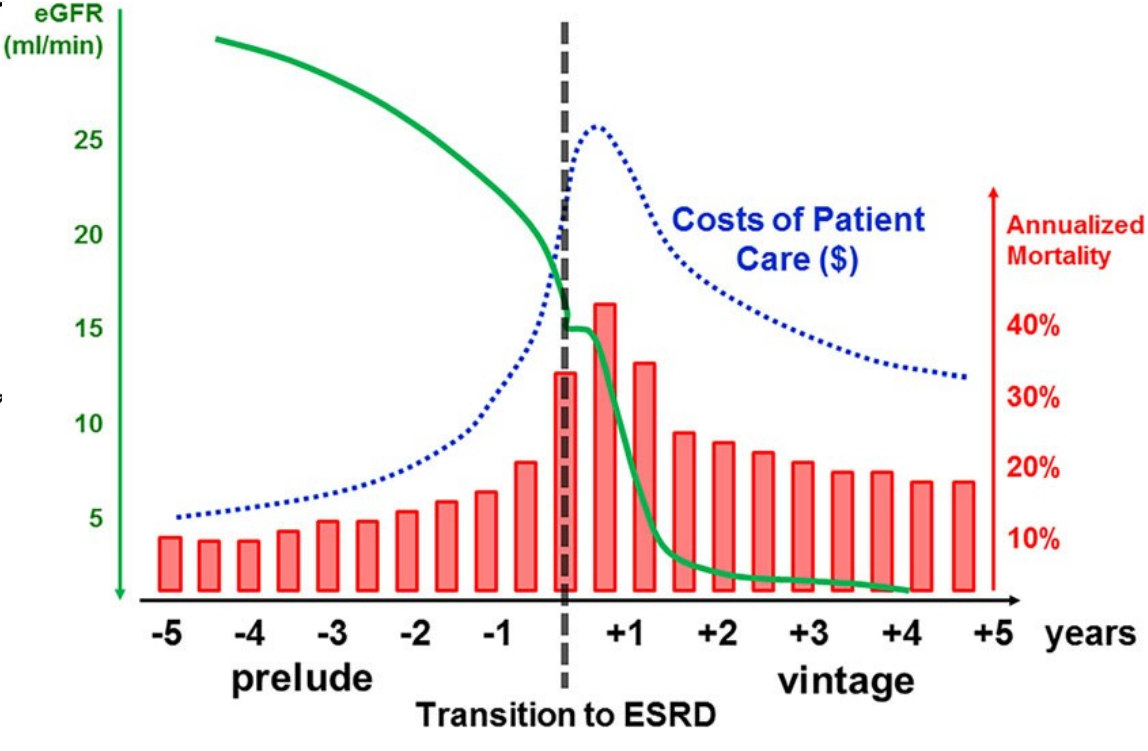
Full Review

Transition of care from pre-dialysis prelude to renal replacement therapy: the blueprints of emerging research in advanced chronic kidney disease

Kamyar Kalantar-Zadeh[1,2,3,4], Csaba P. Kovesdy[5,6], Elani Streja[1,2], Connie M. Rhee[1,2], Melissa Soohoo[1], Joline L.T. Chen[2], Miklos Z. Molnar[5], Yoshitsugu Obi[1], Daniel Gillen[7], Danh V. Nguyen[8,9], Keith C. Norris[4], John J. Sim[10] and Steve S. Jacobsen[10]

transizione /transi'tsjone/ s. f. [dal lat. transitio -onis, der. di transire"passare"]. - 1. il passare da un modo di essere o di vivere a un altro, ...





missione operativa

Educating end-stage renal disease patients on dialysis modality selection: a clinical advice from the European Renal Best Practice (ERBP) Advisory Board

NDT Plus (2010) 3: 225–233

Adrian Covic[1], Bert Bammens[2], Thierry Lobbedez[3], Liviu Segall[1], Olof Heimbürger[4], Wim van Biesen[5], Denis Fouque[6] and Raymond Vanholder[5]

All patients and their families should receive well-balanced information about the different RRT modalities, by means of a structured education programme.

This also applies to late referred patients
and those starting dialysis in an emergency situation.

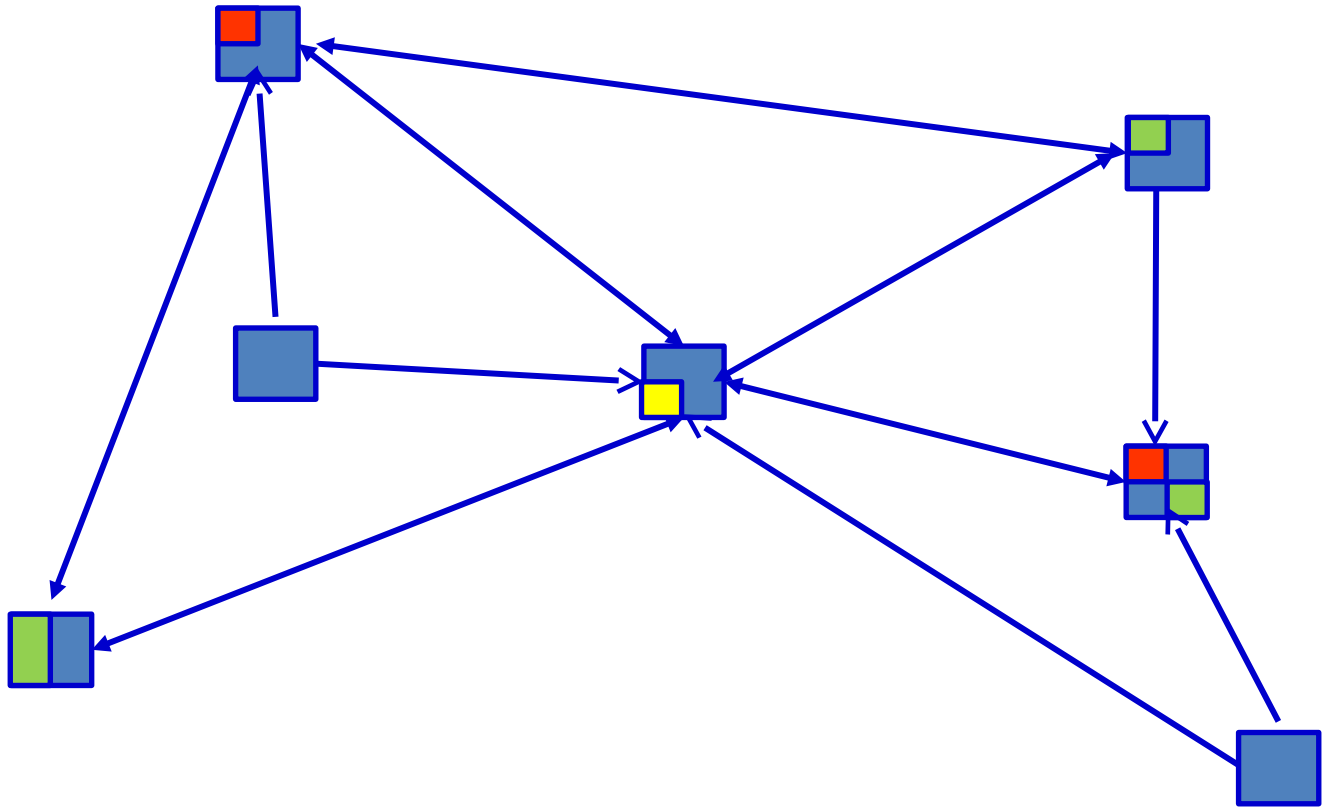
All RRT centres should try and provide, or support in collaboration with other centres, all available treatment options:

PD (including CAPD and APD),
HD (including home HD and nocturnal programmes)
transplantation (including cadaveric and non-cadaveric)

comprehensive conservative care; advance care planning
… terapia conservativa ad oltranza;palliazione di supporto

GESTIONE DELLE RISORSE:
CONCENTRAZIONE DI TECNICHE AD ALTO COSTO E BASSA PREVALENZA O AD ALTO EFFETTO DI ESPERIENZA

FAR RETE PER GARANTIRE A TUTTI I PAZIENTI
LO STESSO STANDARD «ELEVATO» DI TRATTAMENTO



comunicazione

GAZZETTA UFFICIALE
DELLA REPUBBLICA ITALIANA

LEGGE 22 dicembre 2017, n. 219

Norme in materia di consenso informato e di disposizioni anticipate di trattamento. (18G00006)

(GU n.12 del 16-1-2018)

8. Il tempo della **comunicazione** tra medico e paziente costituisce **tempo di cura**.

9. Ogni struttura sanitaria pubblica o privata garantisce con proprie modalita' organizzative la piena e corretta attuazione dei principi di cui alla presente legge, assicurando l'**informazione** necessaria ai pazienti e l'adeguata formazione del personale.

10. La **formazione** iniziale e continua dei medici e degli altri esercenti le professioni sanitarie comprende la formazione in materia di **relazione** e di **comunicazione** con il paziente, di terapia del dolore e di cure palliative.

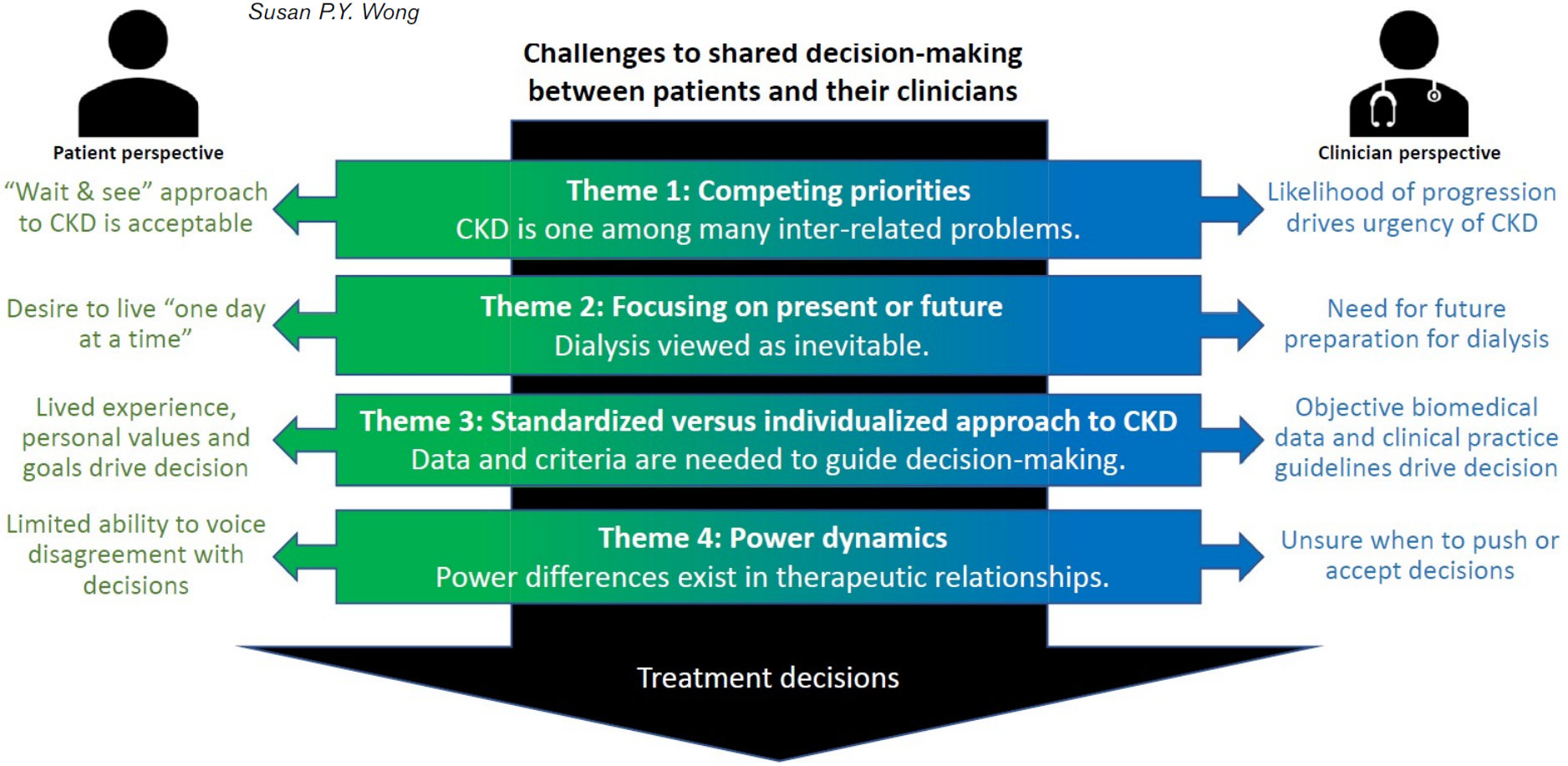
processo decisionale condiviso "shared decision making"

Original Investigation AJKD

Am J Kidney Dis. 2021 Oct 19;S0272-6386(21)00919-7. Online ahead of print

Challenges to Shared Decision Making About Treatment of Advanced CKD: A Qualitative Study of Patients and Clinicians

Taylor R. House, Aaron Wightman, Abby R. Rosenberg, George Sayre, Khaled Abdel-Kader, and Susan P.Y. Wong



Educare
educĕre «trarre fuori»

Istruire
Instruĕre
in-e struĕre «costruire»

afferenza precoce

The American Journal of Medicine (2007) 120, 1063-1070

Outcomes in Patients with Chronic Kidney Disease Referred Late to Nephrologists: A Meta-analysis

Micah R. Chan, MD, MPH,[a] Aaron T. Dall, MD,[a] Kathlyn E. Fletcher, MD, MA,[b] Na Lu, PhD,[c] Hariprasad Trivedi, MD[d]

English-language literature from 1980 through December 2005

Twenty-two studies with a total sample size of 12,749

Table 3 Summary Outcome Based on Timing of Referral

Variable	Early Referrals Mean (SD)	Late Referrals Mean (SD)	Risk Ratio or Difference* (95% CI)	*P*-Value
Overall mortality (%) [n = 12,018]	11 (3)	23 (4)	1.99 (1.66-2.39)	<.0001
Duration of hospitalization at initiation of renal replacement therapy (days) [n =3220]	13.5 (2.2)	25.3 (3.8)	12 (8–16.1)	.0007
1-year mortality (%) [n = 4777]	13 (4)	29 (5)	2.08 (1.31-3.31)	.028

*Risk ratio for the mortality outcome, difference for the hospitalization outcome.

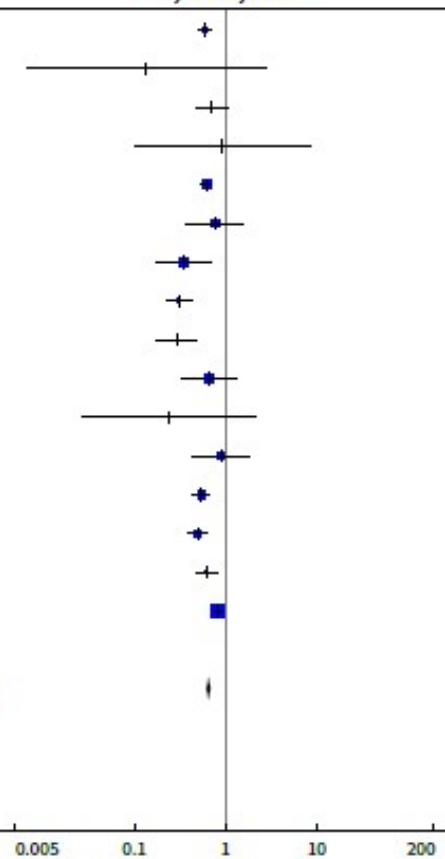
Analysis 1.3. Comparison 1 Mortality, Outcome 3 Mortality at 1 year.

Study or subgroup	Early referral n/N	Late referral n/N	Risk Ratio M-H, Fixed, 95% CI	Weight	Risk Ratio M-H, Fixed, 95% CI
Cass 2002	292/3102	181/1141		12.17%	0.59[0.5,0.71]
Chow 2008	0/61	2/41		0.14%	0.14[0.01,2.75]
Ellis 1998	37/134	25/64		1.56%	0.71[0.47,1.07]
Gallego 2003	3/106	1/33		0.07%	0.93[0.1,8.68]
Hasegawa 2009	765/6836	300/1664		22.2%	0.62[0.55,0.7]
Helal 2010	11/91	15/95		0.68%	0.77[0.37,1.58]
Hoffmann 2006	14/110	10/28		0.73%	0.36[0.18,0.72]
Jungers 1997	55/971	76/420		4.88%	0.31[0.23,0.43]
Lorenzo 2004	19/281	60/257		2.88%	0.29[0.18,0.47]
Mezei 2010	10/63	23/96		0.84%	0.66[0.34,1.3]
Ratcliffe 1984	1/32	3/23		0.16%	0.24[0.03,2.16]
Roubicek 2000	17/177	10/93		0.6%	0.89[0.43,1.87]
Stack 2003	157/1547	134/717		8.42%	0.54[0.44,0.67]
Stoves 2001	103/793	121/467		7.01%	0.5[0.4,0.64]
Van Biesen 1997	84/510	72/271		4.33%	0.62[0.47,0.82]
Winkelmayer 2001	876/1975	553/1039		33.34%	0.83[0.77,0.9]
Total (95% CI)	**16789**	**6449**		**100%**	**0.65[0.62,0.69]**

Total events: 2444 (Early referral), 1586 (Late referral)

Heterogeneity: $Tau^2=0$; $Chi^2=86.31$, df=15(P<0.0001); $I^2=82.62\%$

Test for overall effect: Z=15.66(P<0.0001)



Smart NA, Dieberg G, Ladhani M, Titus T.
Early referral to specialist nephrology services for preventing the progression to end-stage kidney disease.
Cochrane Database of Systematic Reviews 2014, Issue 6. Art. No.: CD007333.

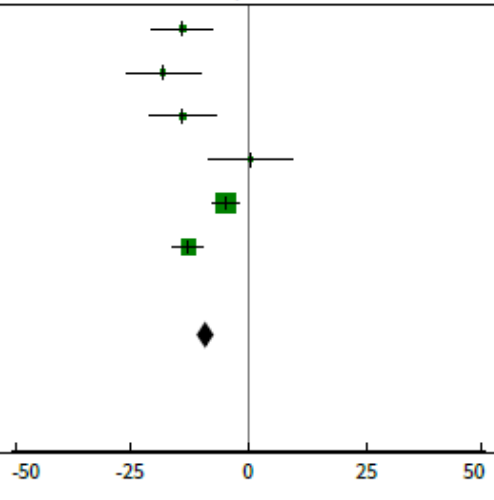
Comparison 2. Duration of hospitalisation

Analysis 2.1. Comparison 2 Duration of hospitalisation, Outcome 1 Duration of hospital stay.

Study or subgroup	Early referral N	Early referral Mean(SD)	Late referral N	Late referral Mean(SD)	Weight	Mean Difference Fixed, 95% CI
Dogan 2005	40	13.4 (7.5)	61	27.3 (24)	7.78%	-13.9[-20.36,-7.44]
Gallego 2003	106	7.6 (16.4)	33	25.6 (21.3)	5.18%	-18[-25.91,-10.09]
Hoffmann 2006	110	8 (12)	28	22 (18)	6.55%	-14[-21.03,-6.97]
Roubicek 2000	177	21.5 (33.7)	93	21.1 (36)	4.15%	0.4[-8.44,9.24]
Sabath 2003	94	5.7 (4.8)	69	10.4 (10.8)	43.58%	-4.7[-7.43,-1.97]
Van Biesen 1997	510	15.1 (16)	271	27.8 (23.7)	32.77%	-12.7[-15.84,-9.56]
Total ***	**1037**		**555**		**100%**	**-9.12[-10.92,-7.32]**

Heterogeneity: $Tau^2=0$; $Chi^2=28.32$, df=5(P<0.0001); $I^2=82.35\%$

Test for overall effect: Z=9.93(P<0.0001)



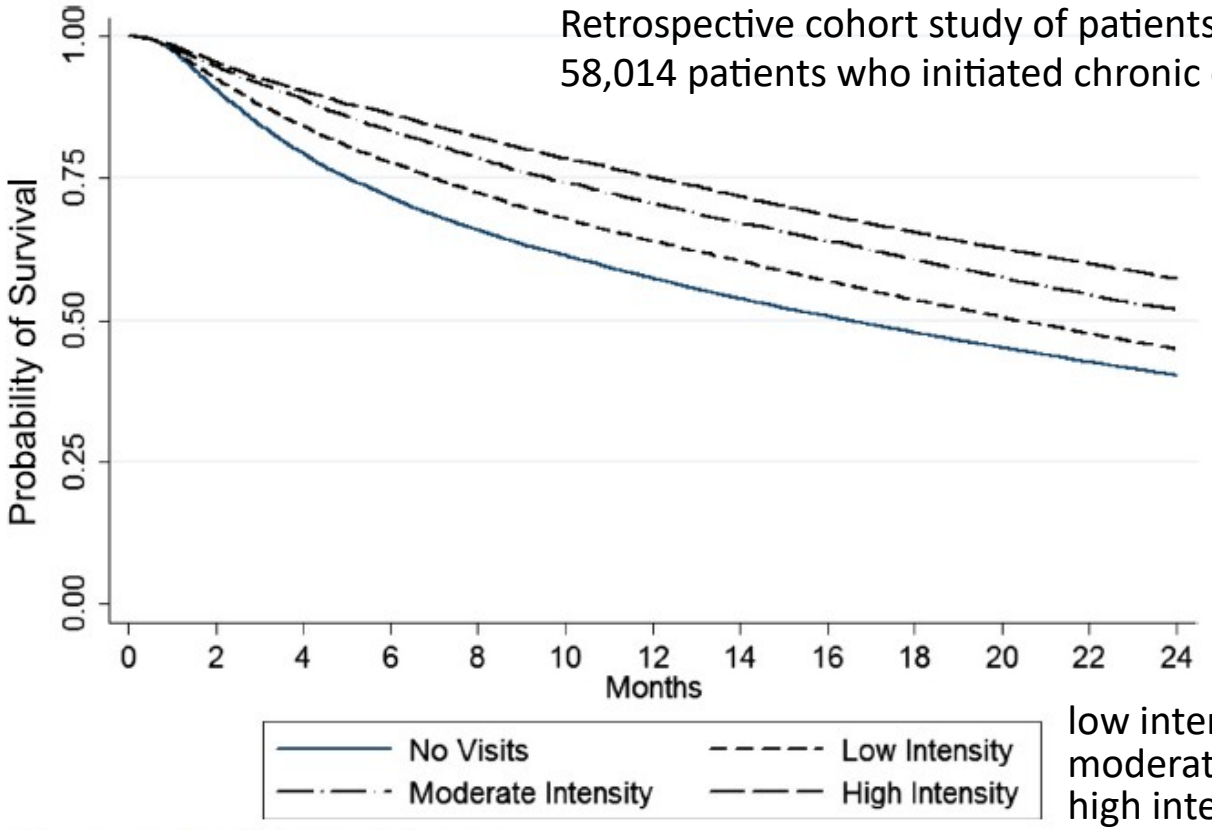
Smart NA, Dieberg G, Ladhani M, Titus T.
Early referral to specialist nephrology services for preventing the progression to end-stage kidney disease.
Cochrane Database of Systematic Reviews 2014, Issue 6. Art. No.: CD007333.

Predialysis nephrology care and dialysis-related health outcomes among older adults initiating dialysis

Intensità e durata del percorso pre-dialisi

Michael J. Fischer[1,2*], Kevin T. Stroupe[2,3], James S. Kaufman[5,6], Ann M. O'Hare[7,8], Margaret M. Browning[2,4], Min-Woong Sohn[2,9], Zhiping Huo[2] and Denise M. Hynes[2,4,10]

Retrospective cohort study of patients ≥66 years
58,014 patients who initiated chronic dialysis in 2000–2001



low intensity (<3 visits)
moderate intensity (3–6 visits)
high intensity (>6 visits)

Fig. 1 Patient survival by intensity of predialysis nephrology care

Fischer *et al. BMC Nephrology* (2016) 17:103

Table 4 Association of dialysis-related health outcomes with Intensity of predialysis nephrology care

Predialysis nephrology care	Adjusted relative risk ratio (99 % CI)[a]		
	Low intensity[b]	Moderate intensity[b]	High intensity[b]
	N = 12,566	*N* = 7,688	*N* = 10,956
At Dialysis Initiation, %			
Very low eGFR[c]	0.72 (0.66 to 0.80)	0.67 (0.59 to 0.77)	0.66 (0.59 to 0.75)
Severe anemia[d]	0.96 (0.92 to 1.01)	0.84 (0.79 to 0.90)	0.70 (0.65 to 0.74)
Permanent vascular access[b]	1.57 (1.48 to 1.67)	2.61 (2.45 to 2.77)	3.60 (3.42 to 3.79)
Fistula	1.66 (1.52 to 1.80)	2.72 (2.50 to 2.97)	3.85 (3.58 to 4.14)
Graft	1.65 (1.46 to 1.87)	3.20 (2.84 to 3.61)	4.28 (3.83 to 4.77)
Other (graft or fistula)	1.15 (0.96 to 1.38)	1.18 (0.94 to 1.49)	1.60 (1.30 to 1.97)
Peritoneal Dialysis	1.44 (1.29 to 1.60)	2.01 (1.77 to 2.27)	2.12 (1.90 to 2.37)
At Dialysis Follow-up, %			
Mortality at 2 years	0.94 (0.92 to 0.97)	0.87 (0.84 to 0.91)	0.80 (0.77 to 0.82)
Kidney transplant at 2 years	1.41 (0.95 to 2.10)	2.13 (1.39 to 3.27)	2.72 (1.91 to 3.88)

[a]Weighted by propensity scores derived from logistic regression models including age, sex, race, Hispanic ethnicity, body mass index, hospital and physician density, urban residence, median income, region, predialysis comorbidities (listed in Table 1), veteran status, and predialysis outpatient care venue. No predialysis nephrology care visits is the reference group in each of the 3 propensity score models

[b]Patients were categorized by intensity of predialysis nephrology care: low intensity care (1–3 nephrology visits), moderate intensity care (4–6 nephrology visits), and high intensity care (>6 nephrology visits). Patients with no predialysis nephrology care were the reference group

[c]eGFR <5 mL/min/1.73m2

[d]hemoglobin level <9 g/dL

[e]*N* = Low Intensity = 11,649; Moderate Intensity = 6,894; High Intensity = 9,708

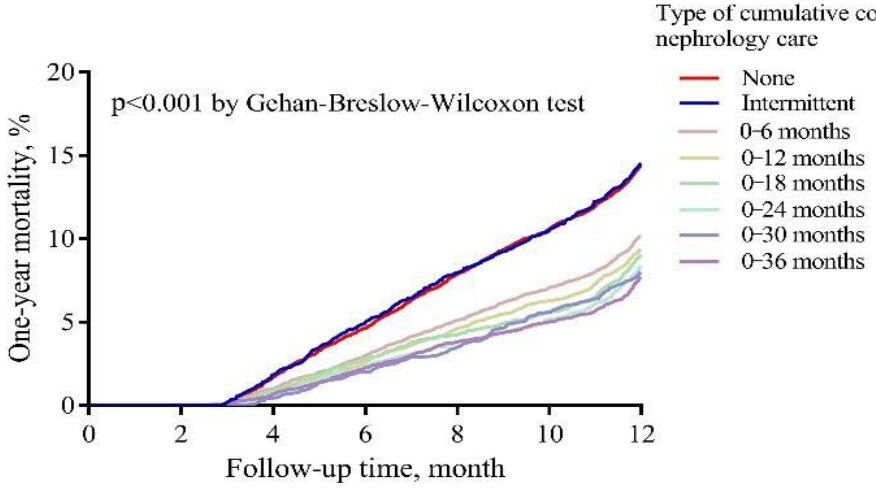
Journal of Personalized Medicine J. Pers. Med. **2021**, 11, 1071. MDPI

Article

Effect of Nephrology Care on Mortality in Incident Dialysis Patients: A Population-Based Cohort Study

Cheng-Yin Chung [1,2], Ping-Hsun Wu [2,3], Yi-Wen Chiu [2,4], Shang-Jyh Hwang [2,4,5] and Ming-Yen Lin [2,4,*]

retrospective cohort study; 44,698 incident patients with dialysis for 3 months in Taiwan from 2004 through 2011



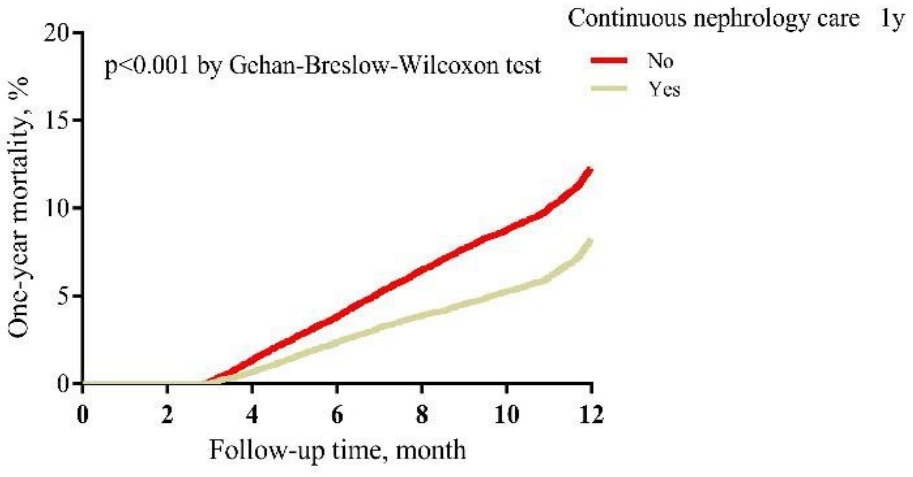


Table 4. Effects of cumulative continuous nephrology care on one-year mortality after dialysis.

Type of Continuous Nephrology Care	Case, *n*	Number of Deaths, *n*	Follow-Up Time, Person-Year	Mortality Rate (95% CI), per 1000 Patient-Years	Weighted HR (95% CI)
None	13,297	1916	12,595	152.1 (145.5–159.1)	1.00 [reference]
Intermittent	3339	485	3160	153.5 (140.4–167.8)	0.88 (0.79–0.97)
0–6 month	8842	897	8531	105.1 (98.5–112.3)	0.65 (0.60–0.71)
0–12 month	5983	561	5795	96.8 (89.1–105.2)	0.60 (0.54–0.66)
0–18 month	3457	313	3354	93.3 (83.5–104.3)	0.60 (0.52–0.69)
0–24 month	2472	207	2407	86.0 (75.1–98.6)	0.48 (0.41–0.57)
0–30 month	1660	133	1617	82.3 (69.4–97.5)	0.50 (0.41–0.60)
0–36 month	5648	435	5504	79.0 (71.9–86.8)	0.52 (0.46–0.59)

percorso strutturato multidisciplinare

Educational Interventions in Kidney Disease Care: A Systematic Review of Randomized Trials

Jo Mason, MA(Hons),[1] Kamlesh Khunti, MD,[2] Margaret Stone, PhD,[2] Azhar Farooqi, MBChB,[3] and Sue Carr, MD[1]

American Journal of Kidney Diseases, Vol 51, No 6 (June), 2008: pp 933-951

Aumento delle conoscenze su IRC e terapia sostitutiva

Aumento dei pazienti orientati verso dialisi domiciliare autogestita

Ritardato ingresso in dialisi

Maggior sopravvivenza in dialisi

Predialysis Psychoeducational Intervention Extends Survival in CKD: A 20-Year Follow-Up

Gerald M. Devins, PhD, David C. Mendelssohn, MD, Paul E. Barré, MD, Kenneth Taub, MD, and Yitzchak M. Binik, PhD

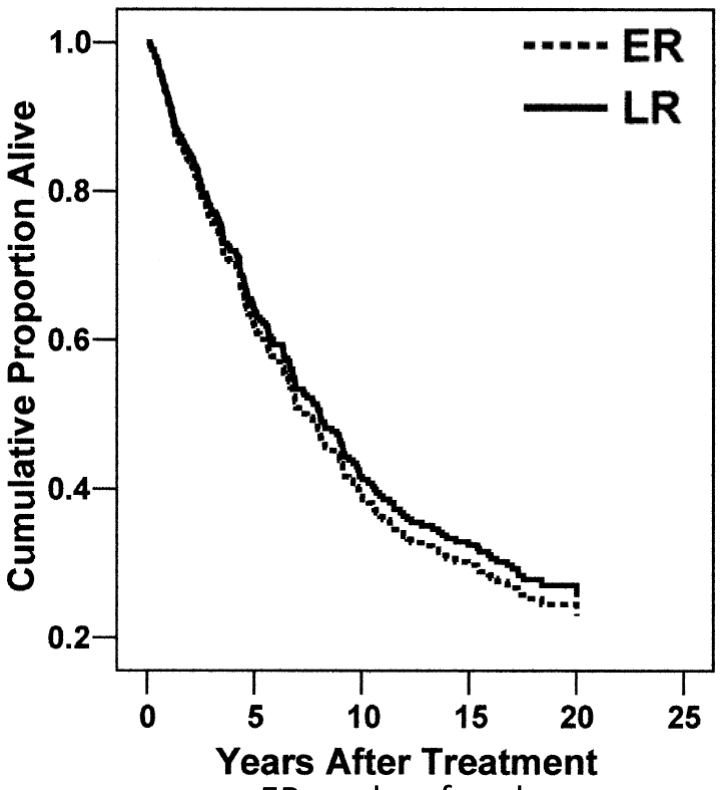
American Journal of Kidney Diseases, Vol 46, No 6 (December), 2005: pp 1088-1098

multicenter randomized controlled trial (between August 1983 and January 1988)

final group sizes for intention-to-treat analyses
- 163 patients: usual care
- 172 patients: predialysis psychoeducational intervention

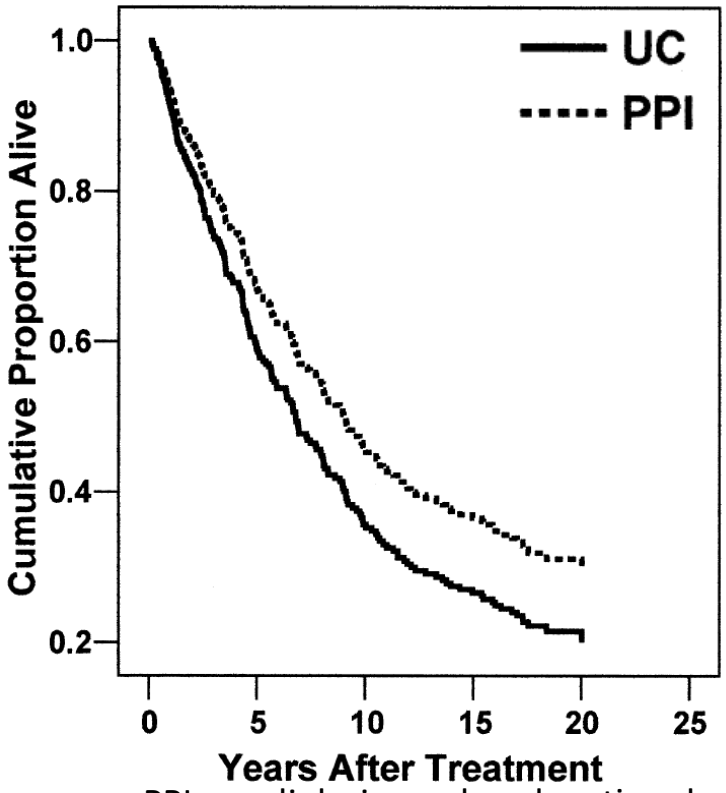
164 patients (48,9%) required the initiation of RRT within less than 3 months, constituting the late referral group

Group			
ER		LR	
Usual Care	Predialysis Psychoeducational Intervention	Usual Care	Predialysis Psychoeducational Intervention
78	93	85	79



ER: early referral

LR: late referral



PPI: predialysis psychoeducational

UC: intervention or usual care

Adjusting for age and general nonrenal health

P =0.053; hazard ratio, 1.32; 95% confidence interval, 1.0 to 1.74

Unadjsted

P =0.036; hazard ratio, 1.35; 95% confidence interval, 1.02 to 1.77

American Journal of Kidney Diseases, Vol 46, No 6 (December), 2005: pp 1088-1098

Suboptimal initiation of dialysis with and without early referral to a nephrologist

Mendelssohn DC, et al. Nephrol Dial Transplant 2011;26:2959-2965

STARRT study (Study To Assess Renal Replacement Therapy)

Incident RRT patients from 1 July to 31 December 2006

Optimal start : 1) RRT was initiated as an outpatient
2) dialysis was initiated with a permanent access
Early referral: nephrologist >12 months prior to RRT initiation

Table 4. Characterization of the initiation of dialysis in all 339 STARRT patients[a]

	n	%
Initiation characteristic		
Optimal start	134	39.5
Suboptimal start (total)	205	60.5
Suboptimal, late referral	88	26.0
Suboptimal, early referral	112	33.0
Suboptimal, unknown referral status	5	1.5

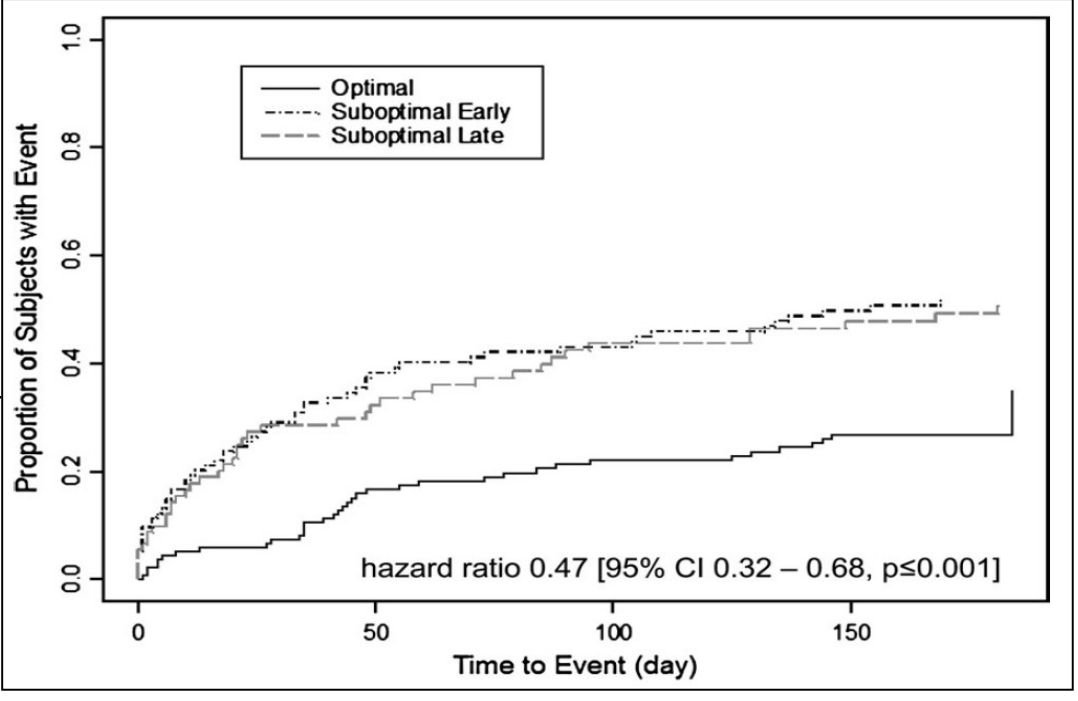


Fig. 1. Kaplan–Meier plot of primary, prespecified cumulative outcome of death, transfusion or subsequent hospitalization, adjusted for age, gender and diabetes. Subsequent hospitalization excludes the hospitalization for initiation of dialysis in the suboptimal group.

Table 6. Multivariate analysis of STARRT[a]

Outcome	Death
Model variable	
Suboptimal start	6.72 (1.56–28.84)[a]
Age	1.03 (1.00–1.06)
Sex (female)	1.16 (0.51–2.64)
Diabetes status	0.51 (0.21–1.20)
No. of comorbidities	N/A

[a]Significant at P <0.05. N/A is not applicable. Data is reported as odds ratio, with CI.

Mendelssohn DC, et al.
Nephrol Dial Transplant 2011;26:2959-2965

inizio terapia dialitica

A Randomized, Controlled Trial of Early versus Late Initiation of Dialysis

Bruce A. Cooper, M.B., B.S., Ph.D., Pauline Branley, B.Med., Ph.D., Liliana Bulfone, B.Pharm., M.B.A., John F. Collins, M.B., Ch.B., Jonathan C. Craig, M.B., Ch.B., Ph.D., Margaret B. Fraenkel, B.M., B.S., Ph.D., Anthony Harris, M.A., M.Sc., David W. Johnson, M.B., B.S., Ph.D., Joan Kesselhut, Jing Jing Li, B.Pharm., B.Com., Grant Luxton, M.B., B.S., Andrew Pilmore, B.Sc., David J. Tiller, M.B., B.S., David C. Harris, M.B., B.S., M.D., and Carol A. Pollock, M.B., B.S., Ph.D., for the IDEAL Study*

N ENGL J MED 363;7 NEJM.ORG AUGUST 12, 2010

When to start dialysis: updated guidance following publication of the Initiating Dialysis Early and Late (IDEAL) study

James Tattersall[1], Friedo Dekker[2], Olof Heimbürger[3], Kitty J. Jager[4], Norbert Lameire[5], Elizabeth Lindley[1], Wim Van Biesen[5], Raymond Vanholder[5], and Carmine Zoccali[6] on behalf of the ERBP Advisory board

Nephrol Dial Transplant (2011) 26: 2082–2086

In any case, dialysis should be started before the GFR has fallen to **6 mL/min/1.73m²**, even if optimal pre-dialysis care has been provided and there are no symptoms.

GFR at Initiation of Dialysis and Mortality in CKD: A Meta-analysis

Paweena Susantitaphong, MD,[1,2] Sarah Altamimi, MBBS,[1]* Motaz Ashkar, MBBS,[1]* Ethan M. Balk, MD, MPH,[2,3] Vianda S. Stel, PhD,[4] Seth Wright, MD,[5] and Bertrand L. Jaber, MD, MS[1,2]*

Am J Kidney Dis. 2012;59(6):829-840

Dialysis initiation, modality choice, access, and prescription: conclusions from a Kidney Disease: Improving Global Outcomes (KDIGO) Controversies Conference

OPEN

Kidney International (2019) **96,** 37–47

Christopher T. Chan[1], Peter J. Blankestijn[2], Laura M. Dember[3], Maurizio Gallieni[4], David C.H. Harris[5], Charmaine E. Lok[1], Rajnish Mehrotra[6], Paul E. Stevens[7], Angela Yee-Moon Wang[8], Michael Cheung[9], David C. Wheeler[10], Wolfgang C. Winkelmayer[11] and Carol A. Pollock[5]; for Conference Participants[12]

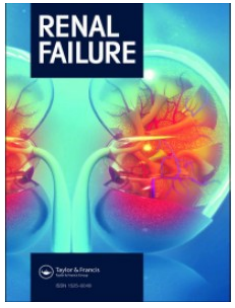
CONCLUSION

A major theme identified during the conference was the need to move away from a "one-size-fits-all" approach to dialysis and provide more individualized or personalized care. Identifying and achieving patient-centered goals is now recognized as an important component of dialysis care, and these will

Initiation of dialysis is usually considered when one or more of the following are present: symptoms or signs attributable to kidney failure (e.g., neurological signs and symptoms attributable to uremia, pericarditis, anorexia, medically resistant acid-base or electrolyte abnormalities, reduced energy level, weight loss with no other potential explanation, intractable pruritus, or bleeding); inability to control volume status or blood pressure; and a progressive deterioration in nutritional status refractory to interventions.

If patients have no other indications for starting dialysis, the decision may be made to delay initiation of dialysis in older patients until eGFR falls to <6 ml/min per 1.73 m^2.

attenzione alle traiettorie



Different kidney function trajectory patterns before dialysis in elderly patients: clinical implications and outcomes

Renal Failure, 2021.43:1, 1049-1059

Josefina Santos, Pedro Oliveira, Milton Severo, Luísa Lobato, António Cabrita & Isabel Fonseca

retrospective cohort study included 378 CKD patients

(aged 65 years and over)

who initiated dialysis between 2009 and 2016

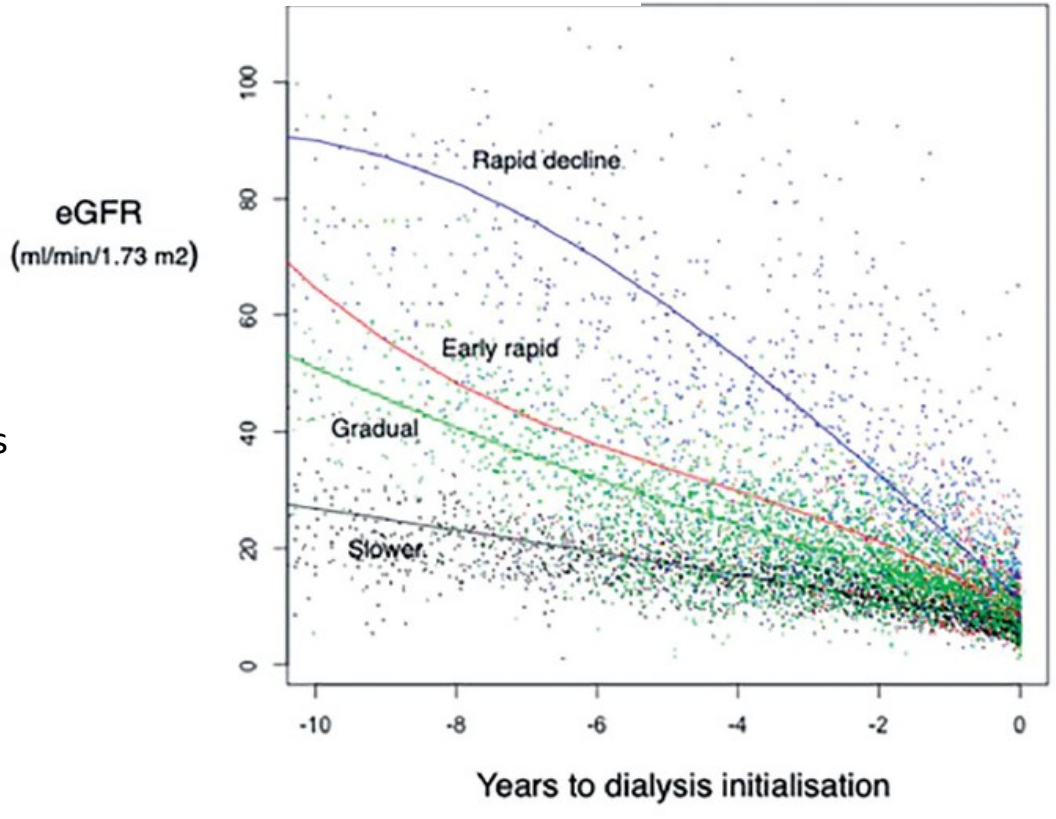
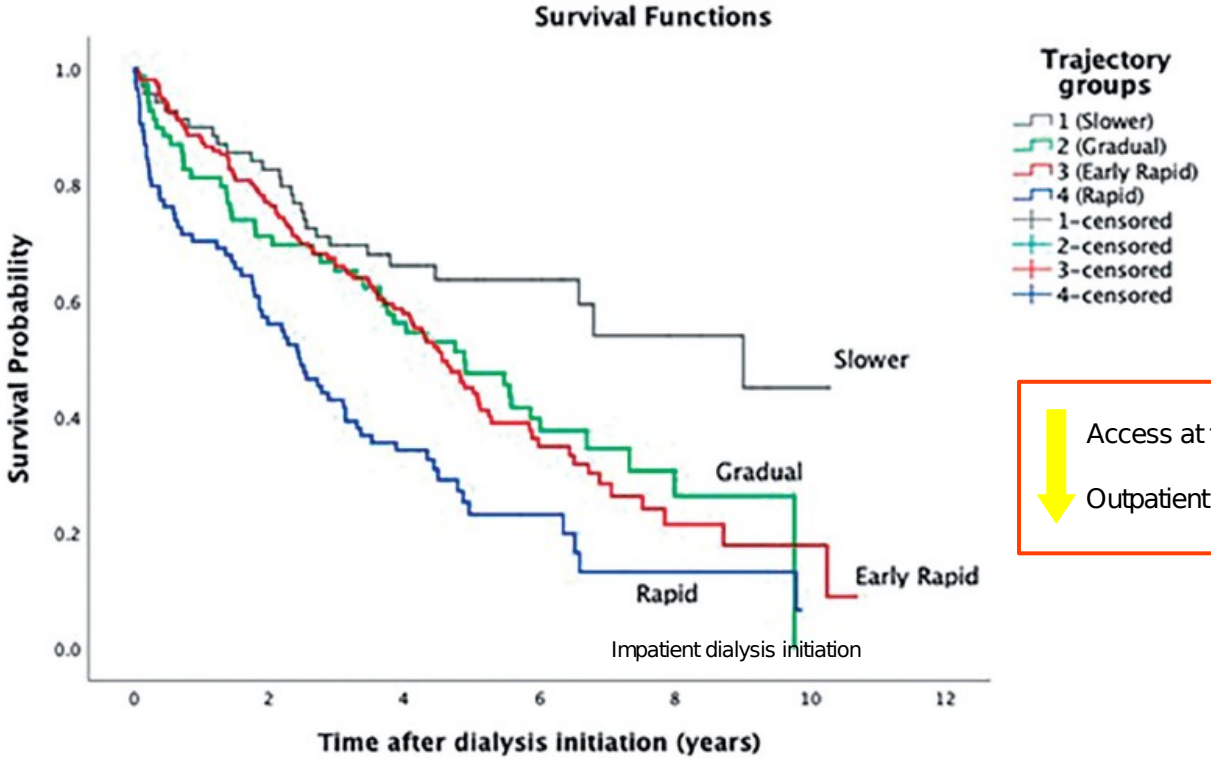


Figure 1. Trajectories decline for the identified groups.



Access at first dialysis (fistula/graft or PD catheter)

Outpatient dialysis initiation

Figure 2. Kaplan–Meier survival curves after dialysis initiation by eGFR trajectory group.

Table 6. Adjusted risk of death over different periods after dialysis initiation by trajectory group using Cox proportional hazards regression model.

	Gradual eGFR decline (Group 2) $n=69$		Early rapid eGFR decline (Group 3) $n=156$		Rapid eGFR decline (Group 4) $n=84$	
Follow-up Time	aHR (95%CI)	*p*-Value	aHR (95%CI)	*p*-Value	aHR (95%CI)	*p*-Value
<1 year	0.584 (0.213–1.601)	0.296	0.549 (0.211–1.426)	0.218	1.185 (0.473–2.973)	0.717
1–4 years	1.653 (0.830–3.292)	0.153	1.805 (1.005–3.243)	0.048*	3.260 (1.693–6.277)	<0.001*
>4 years	3.628 (1.171–11.24)	0.026*	4.259 (1.468–12.35)	0.008*	6.347 (1.868–21.56)	0.003*

Values shown are adjusted hazard for death (95% confidence interval); referent group is slower eGFR decline (group 1).
Adjusted for demographic characteristics (age and gender), diabetes, cognitive status, and hospitalization during the 1-year period before dialysis initiation.
eGFR, estimated glomerular filtration rate.; aHR, adjusted hazard ratio; CI, confidence interval. Predictors starred* are those that were statistically significant.

Josefina Santos et al. Renal Failure, 2021.43:1, 1049-1059

Published in final edited form as:
JAMA. 2016 January 12; 315(2): 164–174. doi:10.1001/jama.2015.18202.

Multinational assessment of accuracy of equations for predicting risk of kidney failure: a meta-analysis

Navdeep Tangri, Morgan E. Grams, Andrew S. Levey et al

Kidney Failure Risk Equation

Failure Risk Equation (4 Variable)

of progression to end-stage renal disease in CKD patients using age,

atinine Ratio? (Note units carefully)

ica

(8 Variable)

CKD patients using 8 variables.

Years

mL/min/1.73m²

mg/mmol

mmol/L

mmol/L

mmol/L

g/L

ica

Sex?

Age?

eGFR?

Urine Albumin Creatinine ratio?

Serum Calcium?

Serum Phosphorous?

Serum Bicarbonate?

Serum Albumin?

Patient Location?

www.qxmd.com/kfre

non trasformare potenziali "early optimal" in un "suboptimal"

Prospective cohort

Urgent-start dialysis in patients referred early to a nephrologist – the CKD-REIN prospective cohort study

Background

Urgent-start dialysis remains a challenge within nephrology care which may affect patients' outcomes whether or not dialysis was previously planned

Estimate the risk of urgent-start dialysis and identify potentially modifiable patient- and provider-level determinants

Methods

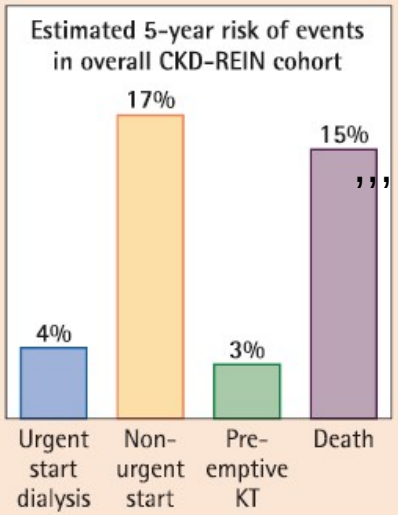
40 nephrology clinics
French CKD-REIN cohort

Patients with CKD stages 3–4 at study entry (n=3033)

Follow-up 4 years

Dialysis starts (n=541)

Urgent-start dialysis, i.e., initiated within 48h after presentation (n=86) (16%)



Results

Factors associated with higher adjusted ORs for urgent start dialysis

Low health literacy	Living alone	Heart failure	Polypharmacy
2.22 (1.28–3.84)	2.14 (1.08–4.25)	2.60 (1.47–4.57)	2.14 (1.17–3.90)

Factors associated with lower adjusted ORs for urgent start dialysis

Planned dialysis modality	Nephrology visits (for each visit in past year before dialysis)
0.46 (0.19–1.10)	0.81 (0.70–0.94)

Conclusion

This study highlights social and health factors, and nephrology practices that are important to address in reducing the burden of urgent-start dialysis.

NEPHROLOGY DIALYSIS TRANSPLANTATION
era edta
Fages V., et al. NDT (2021)
@NDTSocial

rallentamento della progressione

Usefulness of multidisciplinary care to prevent worsening renal function in chronic kidney disease

Clin Exp Nephrol. 2019 Apr;23(4):484-492.

Yoshihiko Imamura[1] · Yasunori Takahashi[1] · Toshihide Hayashi[1] · Masateru Iwamoto[2] · Rie Nakamura[3] · Mikiko Goto[4] · Kazuyo Takeba[4] · Makoto Shinohara[5] · Shun Kubo[6] · Nobuhiko Joki[6]

Table 1 Example of four-session program of multidisciplinary care at our hospital

	1	2	3	4
Sessions				
Physician	Examination Description of clinical findings Prescription	Examination Description of clinical findings Prescription	Examination Description of clinical findings Prescription	Examination Description of clinical findings Prescription
Nurse	Educational guidance Collect data about living conditions and customs Introduction to kidney disease or diabetes mellitus	Explanation of examination related to kidneys and diabetes mellitus	Renal replacement therapy: hemodialysis, peritoneal dialysis or transplant	Importance of foot care: causes and prevention of foot lesions
Dietitian	Nutrition guidance Advice on food survey results, salt, and protein intake	Explanation of total calories, salinity, protein, potassium, phosphorus, and supplements	Advice on food selection, cooking methods, and points about eating out Submission of meal content at home	Assessment of submitted menu Advice on stress-free food intake that can be continued
Pharmacist		Medication counselling Explanation of drug efficacy and adverse effects Assessment of adherence checks of self-medication		

150 pre-dialysis CKD outpatients
decreases in estimated glomerular filtration rates (ΔeGFR)
12 months before and after multidisciplinary care

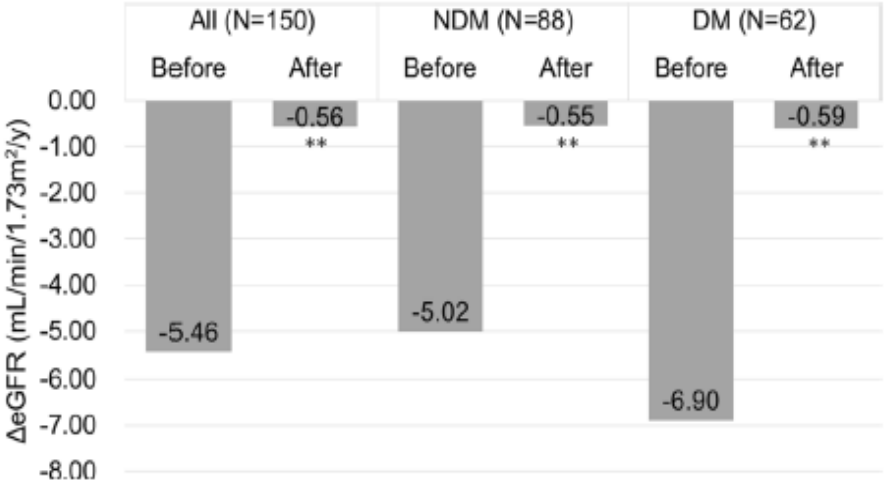


Fig. 1 Annual changes in eGFR decline (ΔeGFR) before and after multidisciplinary care. Significant improvement in ΔeGFR among patients with CKD. Data are expressed as means. $^{**}p<0.01$ vs. before multidisciplinary care

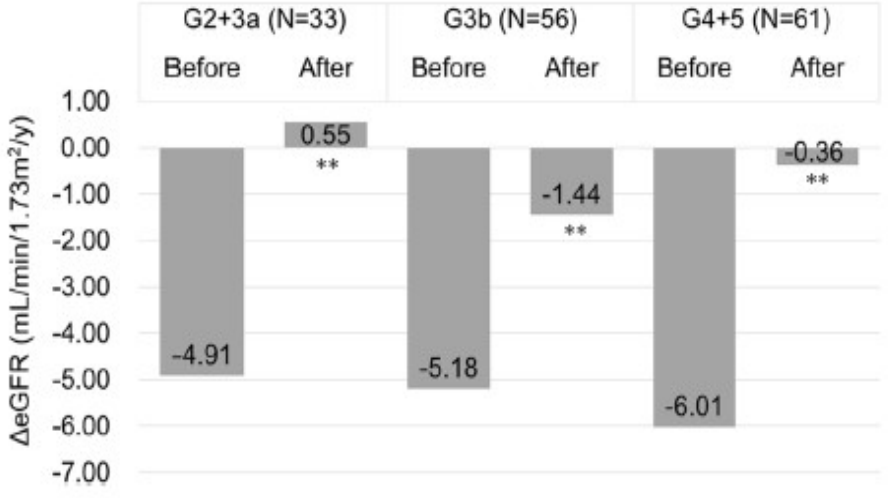


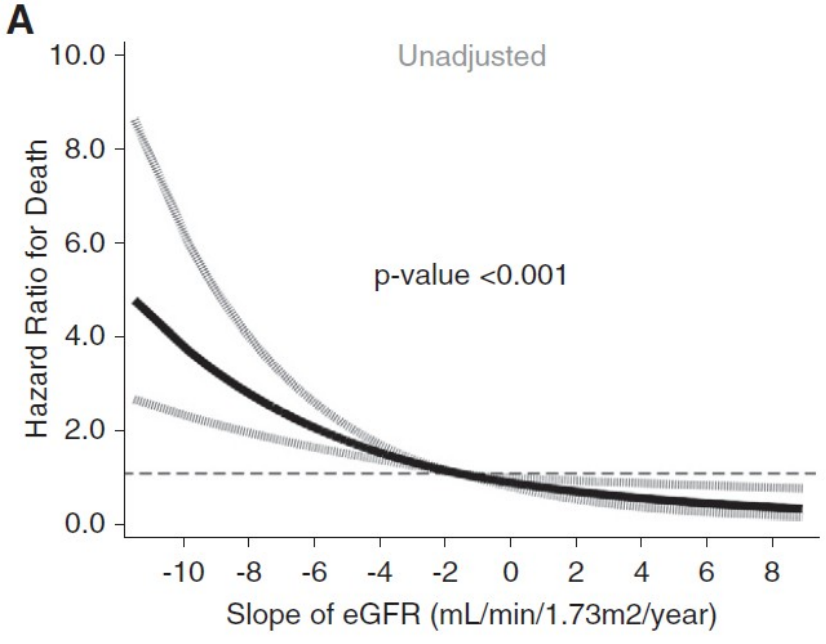
Fig. 2 Annual changes in eGFR decline (ΔeGFR) before and after multidisciplinary care. Significant improvement in ΔeGFR among patients with CKD stages G2+3a, G3b and G4+5. Data are expressed as means. $^{**}p<0.01$ vs. before multidisciplinary care

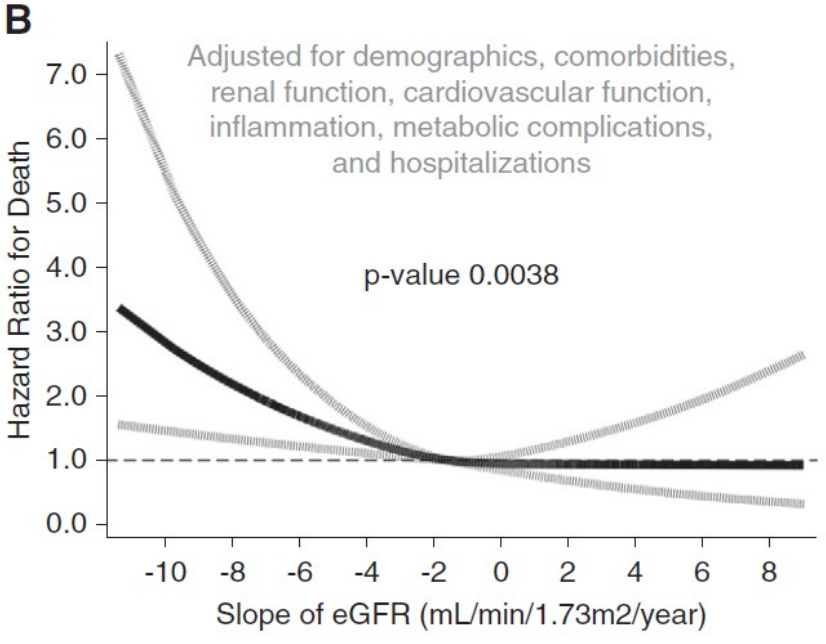
Clin Exp Nephrol. 2019 Apr;23(4):484-492.

Slope of Kidney Function and Its Association with Longitudinal Mortality and Cardiovascular Disease among Individuals with CKD

JASN 31: 2912–2923, 2020. doi: https://doi.org/10.1681/ASN.2020040476

Paula F. Orlandi,[1,2] Dawei Xie,[1,2] Wei Yang,[1,2] Jordana B. Cohen,[1,2] Rajat Deo,[3] Ana C. Ricardo,[4] Sarah Schrauben,[1,2] Xue Wang,[1,2] L. Lee Hamm,[5] Jiang He,[5] James H. Sondheimer,[6] Krishna Kallem,[7] Raymond Townsend,[7] Dominic Raj,[8] Afshin Parsa,[9] Amanda H. Anderson,[1,2,5] and Harold I. Feldman,[1,2] the CRIC Study Investigators*





Unadjusted hazard ratio (95%CI) for selected values of slopes of eGFR					
Slope	-5.5	-3.5	-1.5	0.5	2.5
HR	1.86	1.36	ref	0.76	0.58
95%CI	1.50 - 2.31	1.24 - 1.48	_	0.65 - 0.88	0.41 - 0.82

Adjusted hazard ratio (95%CI) for selected values of slopes of eGFR					
Slope	-5.5	-3.5	-1.5	0.5	2.5
HR	1.60	1.23	ref	0.95	0.94
95%CI	1.20 - 2.13	1.09 - 1.39	_	0.81 - 1.11	0.65 - 1.35

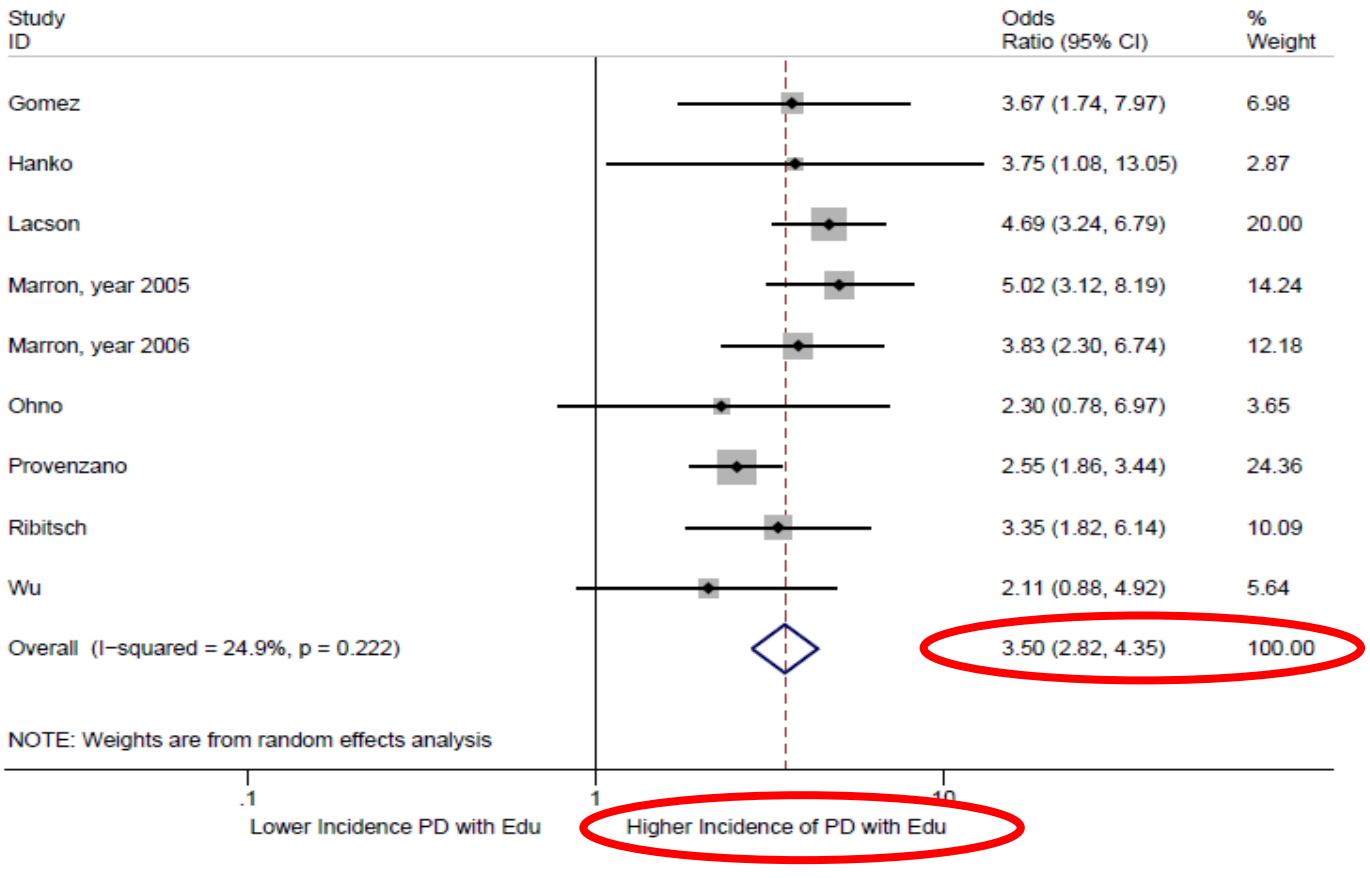
scelta dialitica

AJKD Am J Kidney Dis. 68(3):422-433. © 2016 by the National Kidney Foundation, Inc.

Original Investigation

Patient Education and Peritoneal Dialysis Modality Selection: A Systematic Review and Meta-analysis

Daniel J. Devoe, MSc,[1] Ben Wong, MD, MSc,[1] Matthew T. James, MD, PhD,[1] Pietro Ravani, MD, PhD,[1] Matthew J. Oliver, MD, MHS,[2] Lianne Barnieh, PhD,[1] Derek J. Roberts, MD, PhD,[1] Robert Pauly, MD, MSc,[3] Braden J. Manns, MD, MSc,[1] Joanne Kappel, MD,[4] and Robert R. Quinn, MD, PhD[1]



Propensity score matched mortality comparisons of peritoneal and in-centre haemodialysis: systematic review and meta-analysis

ndt NEPHROLOGY DIALYSIS TRANSPLANTATION

Objective:
Compare mortality between Peritoneal Dialysis (PD) and in-centre Haemodialysis (HD)

17 Propensity score matched studies

N= 113,578
incident dialysis patients
from 1993 to 2014

Peritoneal Dialysis

Haemodialysis

Primary Outcome:

HR = 1.06
(0.99 to 1.14)

Mortality Risk; PD vs. HD

Substantial heterogeneity among studies
I^2=87%

Meta-regression

Cohort Period	1993 ↓ 2014	Improving PD survival
Study Type	Retrospective ↓ Prospective	Improving PD survival
Country of Origin		PD vs. HD survival varies by country

Differences in cohort period, study type and country of origin accounted for a substantial degree of between-studies variance (R^2=90.6%).

Mortality Risk Stratified by Region:

Europe	Asia	North America
HR = 1.04 (0.94 to 1.15)	HR = 1.14 (0.99 to 1.32)	HR = 0.98 (0.87 to 1.10)

Subgroups:

Non-Diabetic	HR = 0.99 (0.90 to 1.09)
Diabetic	HR = 1.09 (0.98 to 1.21)

Conclusion:
Among new dialysis patients,
Peritoneal Dialysis and in-centre Haemodialysis provide equivalent survival.

Elsayed ME, Morris AD, Li X, Browne LD & Stack AG. Propensity score matched mortality,comparisons of peritoneal and in-centre haemodialysis: systematic review and meta-analysis. Nephrol Dial Transplant (2020) 1–10 doi: 10.1093/ndt/gfz278

Ospidéil OL UL Hospitals

GRADUATE ENTRY MEDICAL SCHOOL

UNIVERSITY OF LIMERICK OLLSCOIL LUIMNIGH

Nephrol Dial Transplant (2020) 35: 2172–2182

Peritoneal Dialysis First: Rationale

Kunal Chaudhary,† Harbaksh Sangha,† and Ramesh Khanna†*

Clin J Am Soc Nephrol 6: 447–456, 2011.

Seminars in Dialysis

TRANSITION TO DIALYSIS:
CONTROVERSIES IN ITS TIMING AND MODALITY

PD First: Peritoneal Dialysis as the Default Transition to Dialysis Therapy

Arshia Ghaffari,* Kamyar Kalantar-Zadeh,† Joseph Lee,‡ Franklin Maddux,§
John Moran,¶ and Allen Nissenson¶**

Seminars in Dialysis—Vol 26, No 6 (November–December) 2013 pp. 706–713

Survival Advantage

Infection Rates

Achieving Adequate Clearance

Home Therapy

Short-Term PD in Patients Awaiting Renal Transplant

Preservation of RRF

Lower Healthcare Cost

Satisfaction with Care

"There is no clinical, quality of life, cost benefit, or other acceptable reason for the discrepancy in utilization of HD versus PD."

RIDT 2019
DP incidenza 14,3%
DP prevalenza 8%

Journal of Nephrology
https://doi.org/10.1007/s40620-018-00577-9

ORIGINAL ARTICLE

Incremental dialysis in ESRD: systematic review and meta-analysis

Carlo Garofalo[1] · Silvio Borrelli[1] · Toni De Stefano[1] · Michele Provenzano[2] · Michele Andreucci[2] · Gianfranca Cabiddu[3] · Vincenzo La Milia[4] · Valerio Vizzardi[5] · Massimo Sandrini[5] · Giovanni Cancarini[5] · Adamasco Cupisti[6] · Vincenzo Bellizzi[7] · Roberto Russo[8] · Paolo Chiodini[9] · Roberto Minutolo[1] · Giuseppe Conte[1] · Luca De Nicola[1]

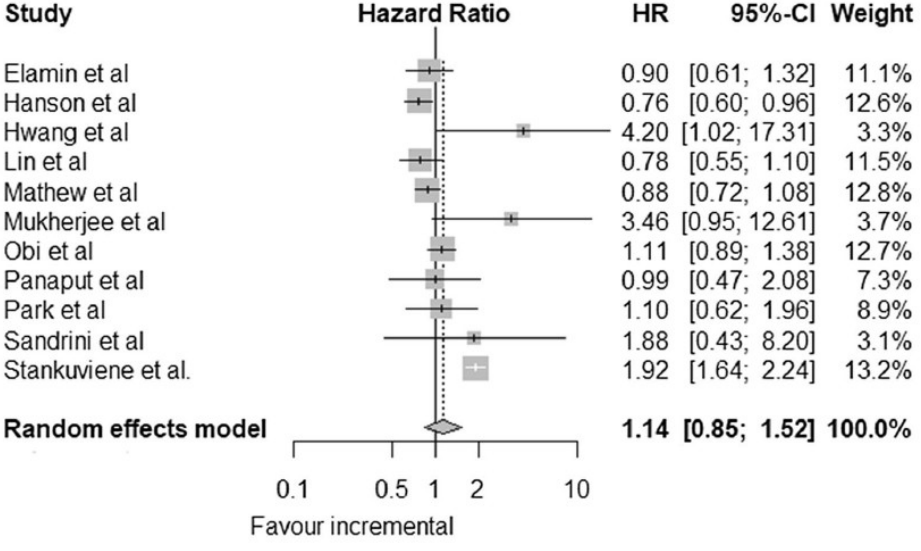


Fig. 2 Overall risk of mortality in subjects treated with incremental versus full dialysis

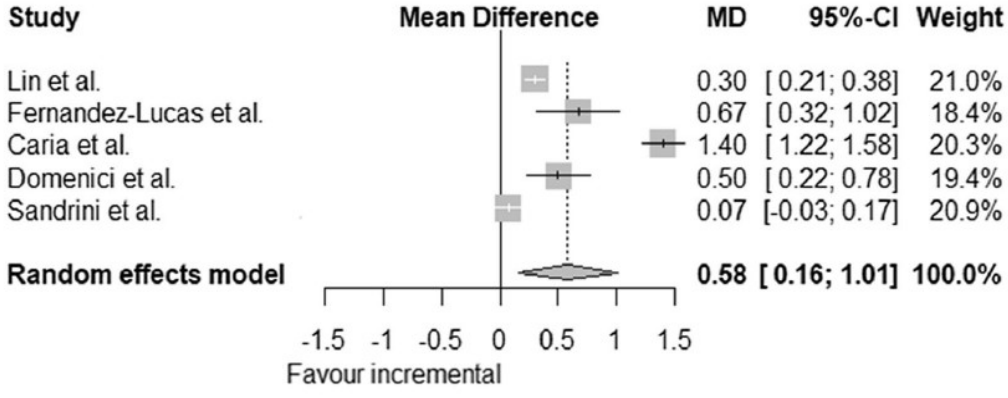


Fig. 3 Random-effect overall mean difference in GFR loss in subjects treated with incremental versus full dialysis

PD Start Strong

Peritoneal dialysis (PD) is associated with clinical benefits that can set up end stage renal disease (ESRD) patients for future success compared to conventional haemodialysis:

- Patients starting on PD have better short-term survival[1,2]
- PD better preserves residual renal function[3*]
- PD is a strong bridge to transplant[4,5]

By starting your patients on PD, you will be preparing them for whatever ESRD sends their way.

PD. Stronger than you think.

scelta dialitica ottimale

PD FIRST

INCREMENTAL PD FIRST

J Nephrol
DOI 10.1007/s40620-016-0344-z

CrossMark

ORIGINAL ARTICLE

Incremental peritoneal dialysis: a 10 year single-centre experience

Massimo Sandrini[1] · Valerio Vizzardi[1] · Francesca Valerio[1] · Sara Ravera[2] · Luigi Manili[1] · Roberto Zubani[1,2] · Bernardo J. A. Lucca[2] · Giovanni Cancarini[1,2]

terapia dietetico-nutrizionale

PRACTICAL ASPECTS

A VA Health Care Innovation: Healthier Kidneys Through Your Kitchen—Earlier Nutrition Intervention for Chronic Kidney Disease

Rebecca Schlueter, RD, LD, Brittany Calhoun, RD, LD, Erin Harned, RD, LD, CNSC, and Suzanne Gore, MS, RD, LD

J Ren Nutr. 2021 Jan;31(1):35-38.

The Nutritional Status of Patients Starting Specialized Predialysis Care

J Ren Nutr. 2015 May;25(3):265-70.

Gjalt J. Westland, MSc,,† Diana C. Grootendorst, PhD,‡,§ Nynke Halbesma, PhD,¶ Friedo W. Dekker,** and Cornelis A. Verburgh, MD, PhD**

Normal Nutritional Status (N 5 333) Moderate Protein–Energy Wasting (N 5 43)

At the start of specialized predialysis care, 11% of patients suffer from moderate protein–energy wasting as measured by SGA.

Table 3. Associations Between Potential Risk Factors and Moderate Protein–Energy Wasting

Potential Risk Factors	Crude OR (95% CI)	Adjusted OR (95% CI)
Age >75 y	2.24 (1.17-4.26)	3.88 (1.74-8.66)
Female gender	2.34 (1.23-4.44)	2.95 (1.37-6.32)
BMI<25 kg/m^2	2.88 (1.47-5.48)	2.56 (1.19-5.49)
eGFR <15 mL/min/1.73 m^2	1.41 (0.69-2.85)	1.63 (0.76-3.48)

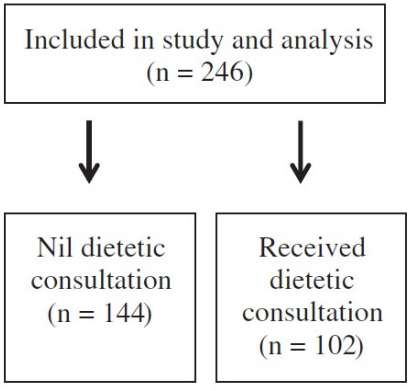
CI, confidence interval; OR, odds ratio.
Each risk factor is corrected for the other risk factors (using the continuous variable).

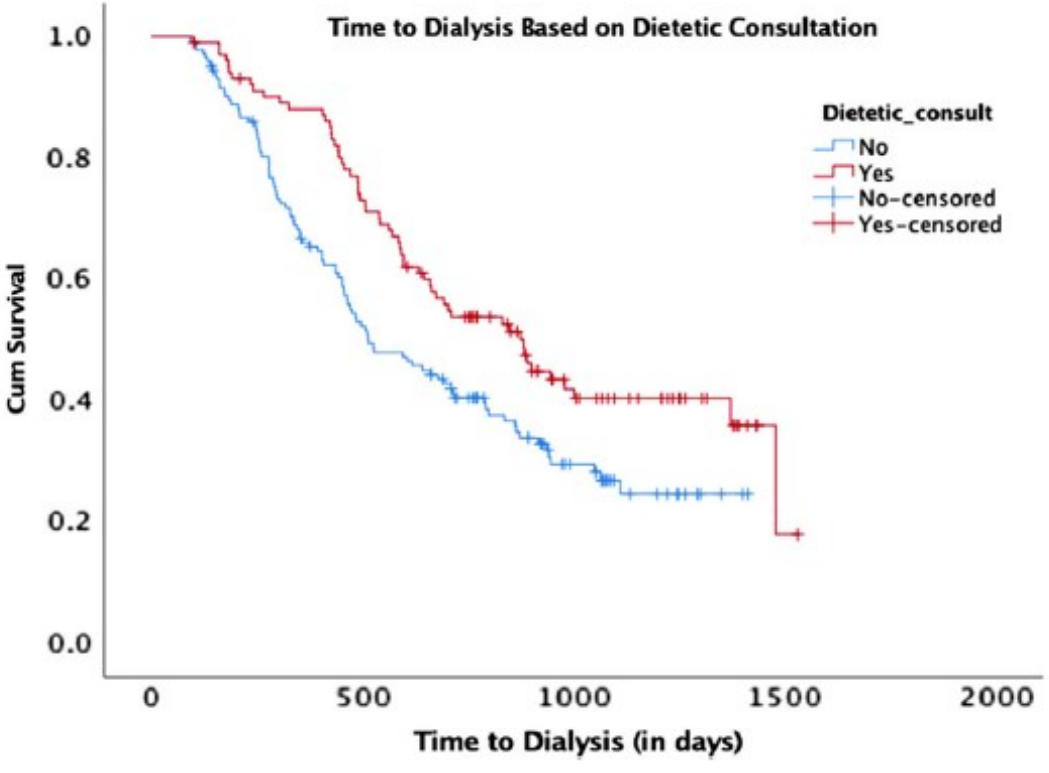
The association between dietetic consultation and time to dialysis for patients attending a pre-dialysis clinic: A retrospective cohort study

STEPHANIE NOTARAS,[1,2] LEANNE GALEA,[1] PAUL LEE,[1] MAY MAK,[1] KELLY LAMBERT[3] and ANGELA MAKRIS[2,4,5]

Nephrology (2019)

Retrospective cohort study





	Multivariate analysis		
Variable	HR	95% CI	*P* Value
Age on admission	0.97	0.96–0.98	<0.001*
eGFR on admission	0.89	0.86–0.92	<0.001*
Male gender	NA	NA	NA
Ischemic heart disease	NA	NA	NA
COPD	NA	NA	NA
Diabetes	1.81	1.28–2.56	0.001*
Congestive Heart Failure	NA	NA	NA
BP – well controlled	NA	NA	NA
BP – not well controlled	NA	NA	NA
English speaking	NA	NA	NA
Smoking	NA	NA	NA
Dietetic consultation (yes/no)	0.63	0.45–0.89	0.008*

Efficacy and Safety of a Very-Low-Protein Diet When Postponing Dialysis in the Elderly: A Prospective Randomized Multicenter Controlled Study

Giuliano Brunori, MD,[1] Battista F. Viola, MD,[1] Giovanni Parrinello, PhD,[2] Vincenzo De Biase, MD,[3] Giovanna Como, MD,[4] Vincenzo Franco, MD,[5] Giacomo Garibotto, MD,[6] Roberto Zubani, MD, PhD,[1,7] and Giovanni C. Cancarini, MD[1,7]

American Journal of Kidney Diseases, Vol 49, No 5 (May), 2007: pp 569-580

Very low-protein diet plus ketoacids in chronic kidney disease and risk of death during end-stage renal disease: a historical cohort controlled study

Nephrol Dial Transplant (2015) 30: 71–77

Vincenzo Bellizzi[1], Paolo Chiodini[2], Adamasco Cupisti[3], Battista Fabio Viola[4], Mauro Pezzotta[4], Luca De Nicola[5], Roberto Minutolo[5], Giuliano Barsotti[3], Giorgina Barbara Piccoli[6] and Biagio Di Iorio[7]

Cost-benefit analysis of supplemented very low-protein diet versus dialysis in elderly CKD5 patients

Luciana Scalone[1,2], Francesca Borghetti[1,2], Giuliano Brunori[3], Battista Fabio Viola[3], Barbara Brancati[4], Laura Sottini[3], Lorenzo Giovanni Mantovani[2,4] and Giovanni Cancarini[3]

Nephrol Dial Transplant (2010) 25: 907–913

utile
efficace
sicura
conveniente

Cross-sectional analysis

Chronic kidney disease, physical activity, and cognitive function in older adults: results from the National Health and Nutrition Examination Survey

Background

Cognitive impairment is common among persons with chronic kidney disease (CKD)

This study examined whether associations between CKD stage and cognitive function differs by physical activity (PA) in older adults

Methods

National Health and Nutrition Examination Survey (NHANES), 2011–2014

Participants' age ≥ 60 years with:
- Serum creatinine (for eGFR calculation)
- Assessment of cognitive function

Cognitive function assessed:
- Objective and subjective measures
- Global and domain-specific

Physical activity by questionnaire
Metabolic equivalent of task (MET) score:
- Low PA: < 600 MET per week
- High PA: ≥ 600 MET per week

Results

N=3223

No CKD: 62.5%
CKD G1–3: 34.9%
CKD G4–5: 2.6%

Low physical activity 50.7%

Adjusted* linear regression for association between CKD stage and global cognitive function

	CKD G1–3	CKD G4–5
Low physical activity	**–0.13** (–0.21 to –0.05)	**–0.57** (–0.82 to –0.31)
High physical activity	**–0.01** (–0.11 to 0.08)	**0.10** (–0.29 to 0.49)

*Adjusted for age, sex, race, education, BMI, depressive symptoms, hypertension, diabetes, CHD, stroke, MI, anemia, and smoking

Conclusion

CKD is associated with lower objective cognitive function among those with low, but not high PA. Clinicians should consider screening older patients with CKD who have low PA for cognitive impairment and encourage them to meet PA guidelines.

ERA ndt NEPHROLOGY DIALYSIS TRANSPLANTATION

Chu, N. et al. NDT (2021)
@NDTSocial

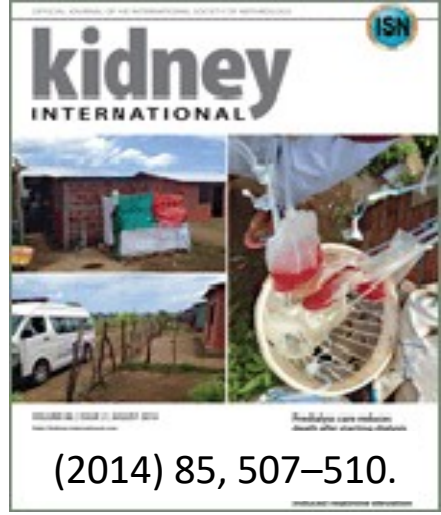
metabolic equivalent of task (MET) score

see clinical investigation on page 686

Better prevention than cure: optimal patient preparation for renal replacement therapy

Xiaoyan Huang[1,2] and Juan Jesús Carrero[1,3]

A generous proportion of end-stage renal disease patients may not b adequately prepared for initiation of renal replacement therapy (RRT) Here we review potential benefits of early patient referral to nephrologists and optimal preparation for RRT. We place this evidenc in the context of the epidemiological study by Kurella Tamura *et al.*, which shows that voluntary community kidney disea education is associated with better patient preparati importantly, improved survival upon initiation of RRT



(2014) 85, 507–510.

Adult patients who developed ESRD between 1 June 2005 and 31 December 2010
- 595 participating in the National Kidney Foundation Kidney Early Evaluation Program (KEEP)
- 290,252 non-KEEP patients from the USRDS database

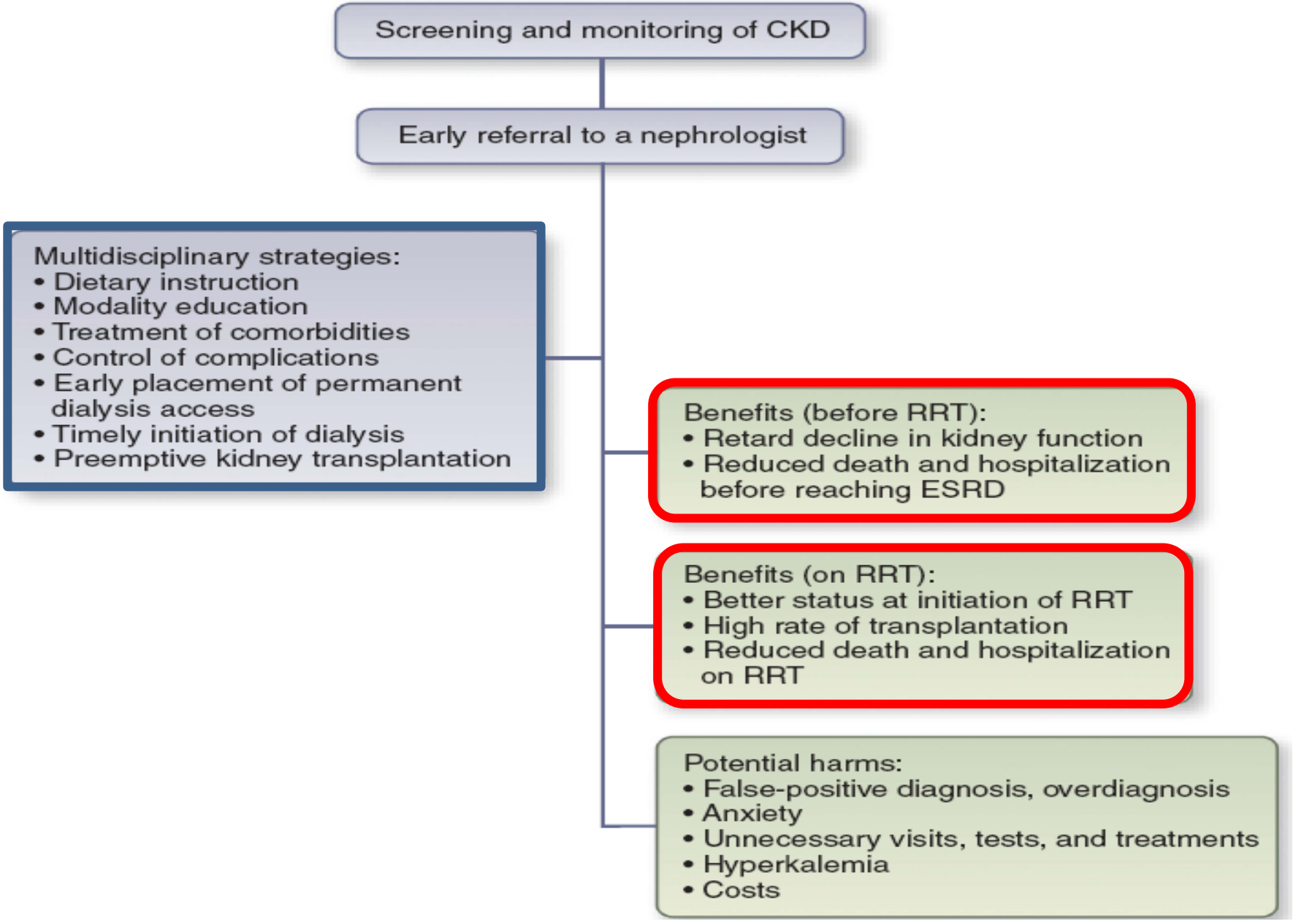
see commentary on page 507

Educational programs improve the preparation for dialysis and survival of patients with chronic kidney disease

Manjula Kurella Tamura[1,2], Suying Li[3], Shu-Cheng Chen[3], Kerri L. Cavanaugh[4], Adam T. Whaley-Connell[5], Peter A. McCullough[6] and Rajnish L. Mehrotra[7] on behalf of the KEEP Investigators

[1]VA Palo Alto Health Care System, Geriatrics Research Education and Clinical Center, Palo Alto, California, USA; [2]Division of Nephrology, Stanford University School of Medicine, Palo Alto, California, USA; [3]Chronic Disease Research Group, Minneapolis Medical Research Foundation, Minneapolis, Minneapolis, USA; [4]Division of Nephrology and Hypertension, Vanderbilt University Medical Center, Nashville, Tennessee, USA; [5]Research Service, Harry S Truman Memorial Veterans Hospital and Division of Nephrology and Hypertension, University of Missouri-Columbia School of Medicine, Columbia, Missouri, USA; [6]St John Providence Health System, Providence Park Heart Institute, Novi, Michigan, USA and [7]Harborview Medical Center and Kidney Research Institute, Division of Nephrology, University of Washington, Seattle, Washington, USA

Kidney International (2014) 85, 507–510.



Optimal predialysis care

Y. W. J. Sijpkens *et al.*
NDT Plus (2008) 1 [Suppl 4]: iv7–iv13

Table 1. Progression factors: treatment and targets

Factor	Target	Treatment
Hypertension	Systolic blood pressure <130 mmHg	Salt restriction, exercise, RAAS-blockade, diuretics, calcium entry blocker
Proteinuria	24 h protein <1 g/day	Salt and protein restriction, RAAS-blockade, diuretics
Hyperlipidaemia	LDL-cholesterol <2.5 mmol/l	Saturated and trans-fat restriction, statine, ezetrol
Obesity	Waist circumference <94 cm (♂), <80 cm (♀)	Calory and mono-disaccharide restriction, increased physical activity, increasing muscle mass
Smoking	0 cigarettes	Ask, advise, assess, assist, arrange
Hyperglycaemia	$HbA1_c$ <7%	Weight reduction, pioglitazon, insulin
Hyperphospataemia	Phosphate <1.2 mmol/l	Phosphate restriction, phosphate binders
Hyperuricaemia	Uric acid <0.35 mmol/l	Purine and fructose restriction, allopurinol

Table 2. Metabolic complications: treatment and targets

Complication	Target	Treatment
Anaemia	Haemoglobin 6.8–7.5 mmol/l, ferritin 100–500 µg/l, transferring saturation (20–50%)	Darbepoëtine/epoëtine β, ferrofumarate/sulfate, vitamin C
Hypovitaminosis D	25(OH)D >75 nmol/l	Cholecalciferol
Hypocalcaemia	Calcium 2.1–2.4 mmol/l	Calcium carbonate/acetate, alfacalcidol, phosphate reduction
Hyperphosphataemia	Phosphate <1.2 mmol/l	Phosphate restriction, phosphate binders
Hyperparathyreoidism	PTH 7–12 pmol/l	Phosphate reduction, cholecalciferol, alfacalcidol, paricalcitol
Metabolic acidosis	Bicarbonate >22 mmol/l	Protein restriction, sodium bicarbonate
Hyperkalaemia	Potassium 3.5–5.5 mmol/l	Potassium restriction, diuretics, resonium
Hyperuricaemia, gout	Uric acid <0.35 mmol/l	Fructose and purine restriction, allopurinol
Cardiovascular disease	LDL-cholesterol <2.5 mmol/l	Statin, aspirin

“nuovi” scenari e “nuove” opzioni terapeutiche

RIDT

REGISTRO ITALIANO DI DIALISI E TRAPIANTO

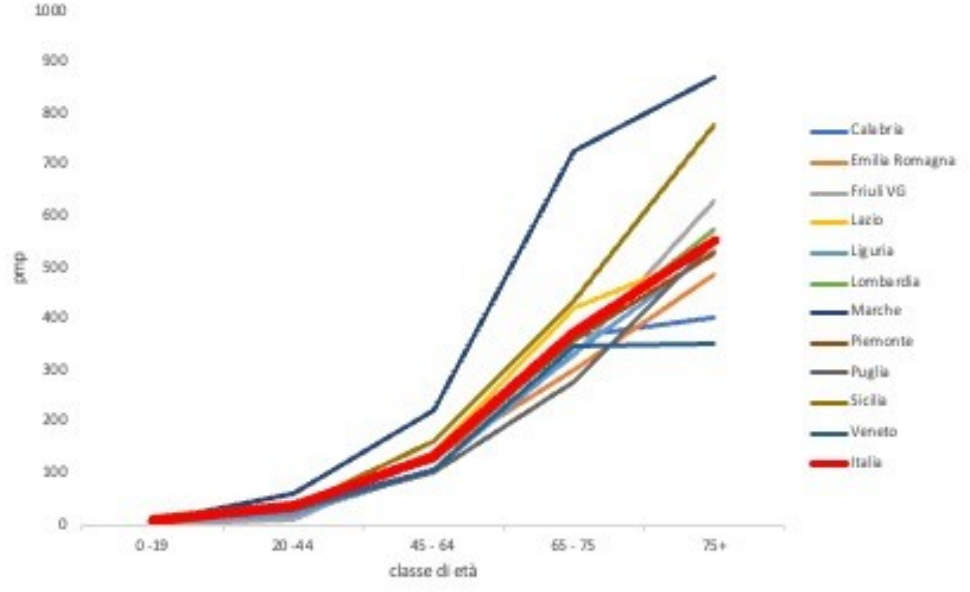
SOCIETÀ ITALIANA DI NEFROLOGIA

"Dati forniti dal RIDT, Registro Italiano di Dialisi e Trapianto: www.sin-ridt.org

Report_RIDT 2019

6° CONGRESSO NAZIONALE SIN

Incidenza per classi di età nelle regioni



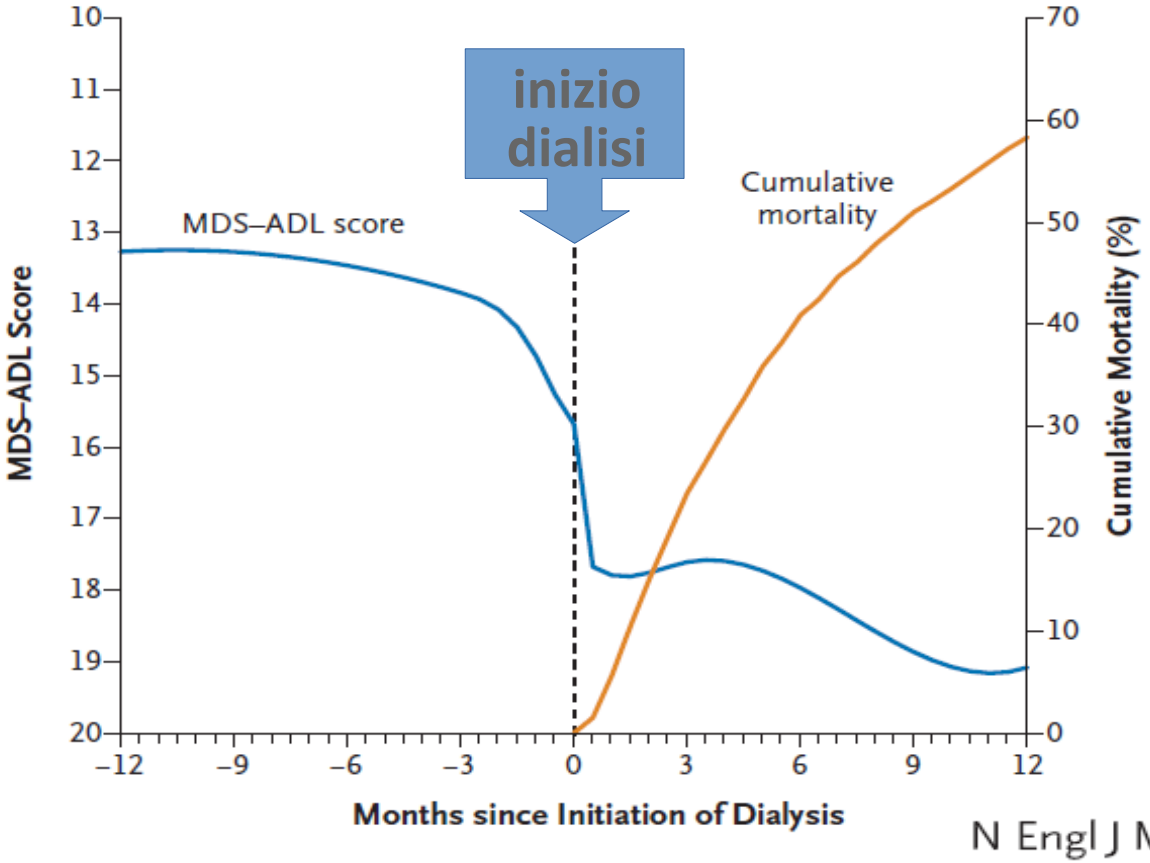
The NEW ENGLAND JOURNAL of MEDICINE

Functional Status of Elderly Adults before and after Initiation of Dialysis

Manjula Kurella Tamura, M.D. et all

3702 nursing home residents in United States

Minimum Data Set–Activities of Daily Living [MDS–ADL]



N Engl J Med 2009;361:1539-47.

Nephrol Dial Transplant (2022) 37: 617–619
https://doi.org/10.1093/ndt/gfab309
Advance Access publication date 29 October 2021

EDITORIAL

Choosing the best renal care for our patients: the evolving landscape of dialysis therapy

Giuliano Brunori[1] and Filippo Aucella[2]

[1]Department of Nephrology and Dialysis, Santa Chiara Hospital, Trento, Italy and [2]Department of Nephrology and Dialysis, Fondazione "Casa Sollievo della Sofferenza" IRCCS, San Giovanni Rotondo, Italy

At the end of this editorial, we recall Karl Jasper's counsel: "The physician must combine the technical work ('technical therapy') with clinical experience ('biological care') and, once scientific medicine clashes with its limit, must educate him or herself in the search for the sense and ethos ('philosophy')"—Nullus medicus nisi philosophus.

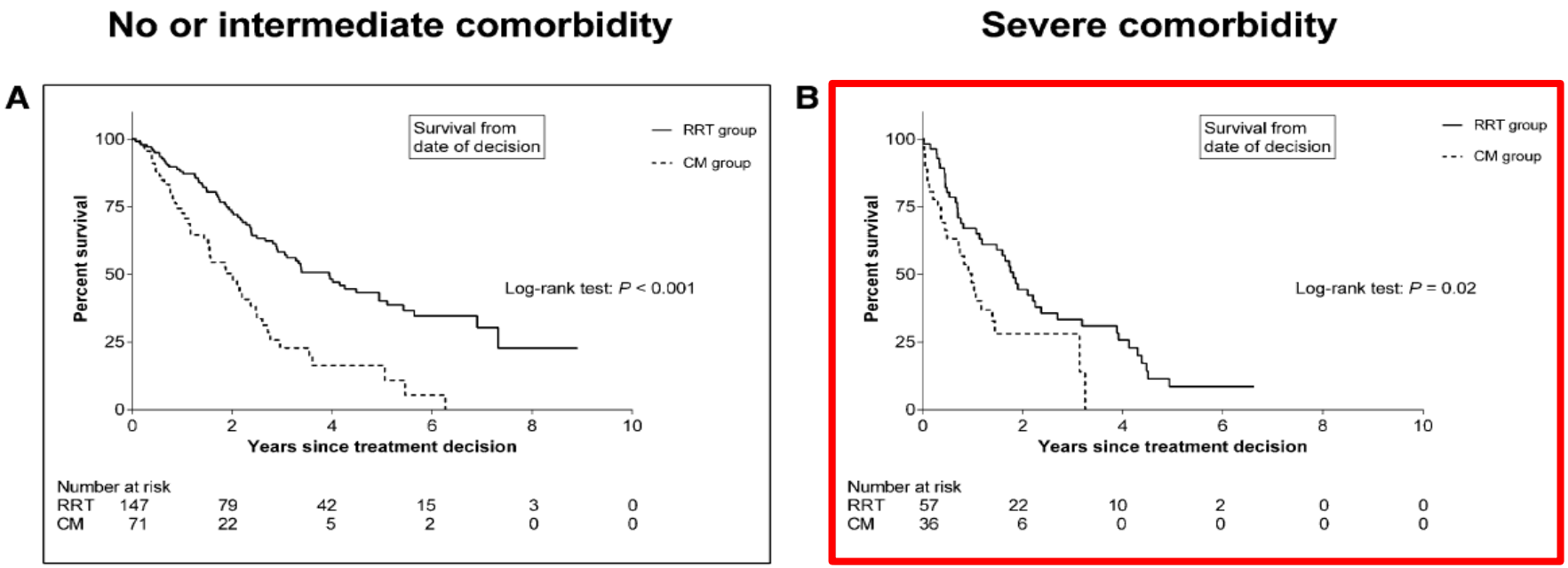


Figure 4. | **Kaplan–Meier survival curves for both treatment groups ages ≥70 years old with stratification of comorbidity.** (A) No and intermediate comorbidity are taken together and correspond to Davies comorbidity scores of 0–2. (B) Severe comorbidity corresponds to Davies comorbidity scores of ≥3. Only survival calculated from time of modality choice is shown. Similar results were observed using the other starting points. CM, conservative management.

Table 2. Multivariate Cox proportional hazards model for survival in 311 patients ages ≥70 years old (107 patients with conservative management and 204 patients with RRT) using the time of modality choice as the starting point in survival calculation

Variable	Hazard Ratio	95% Confidence Interval	*P* Value
Age, yr	1.05	1.01 to 1.08	0.01
Davies comorbidity score (no comorbidity as reference)			<0.001
Intermediate comorbidity	1.89	1.01 to 3.52	
Severe comorbidity	4.11	2.15 to 7.85	
Treatment modality (CM versus RRT; CM as reference)	0.62	0.42 to 0.92	0.02

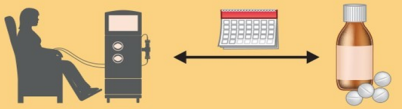
CM, conservative management.

Wouter R. Verberne et al. CJASN ePress. Published on March 17, 2016 as doi:10.2215/CJN.07510715

Survival of patients who opt for dialysis versus conservative care: a systematic review and meta-analysis

Background

Conservative care (CC) has been proposed as a valid treatment alternative to dialysis in vulnerable patients.



Aim: to compare survival outcomes among patients explicitly choosing dialysis versus CC.

Methods

Electronic databases:
PubMed, Embase, Cochrane, CINAHL Plus, PsycINFO

Inclusion criteria:
CKD stage G4–5
Explicit choice for dialysis vs. CC

Outcome:
All-cause mortality

Results

22 observational cohort studies

At baseline, 'choice for dialysis' group had:
↓ lower age, comorbidity, frailty, functional decline

Median survival (unadjusted)

Dialysis choice
20–67 months

CC choice
6–31 months

Pooled mortality risk (age/sex adjusted)

aHR 0.47 (0.39–0.57)

Subgroup analysis

Severe comorbidity — RR 0.66 (0.56–0.78)

Conclusion

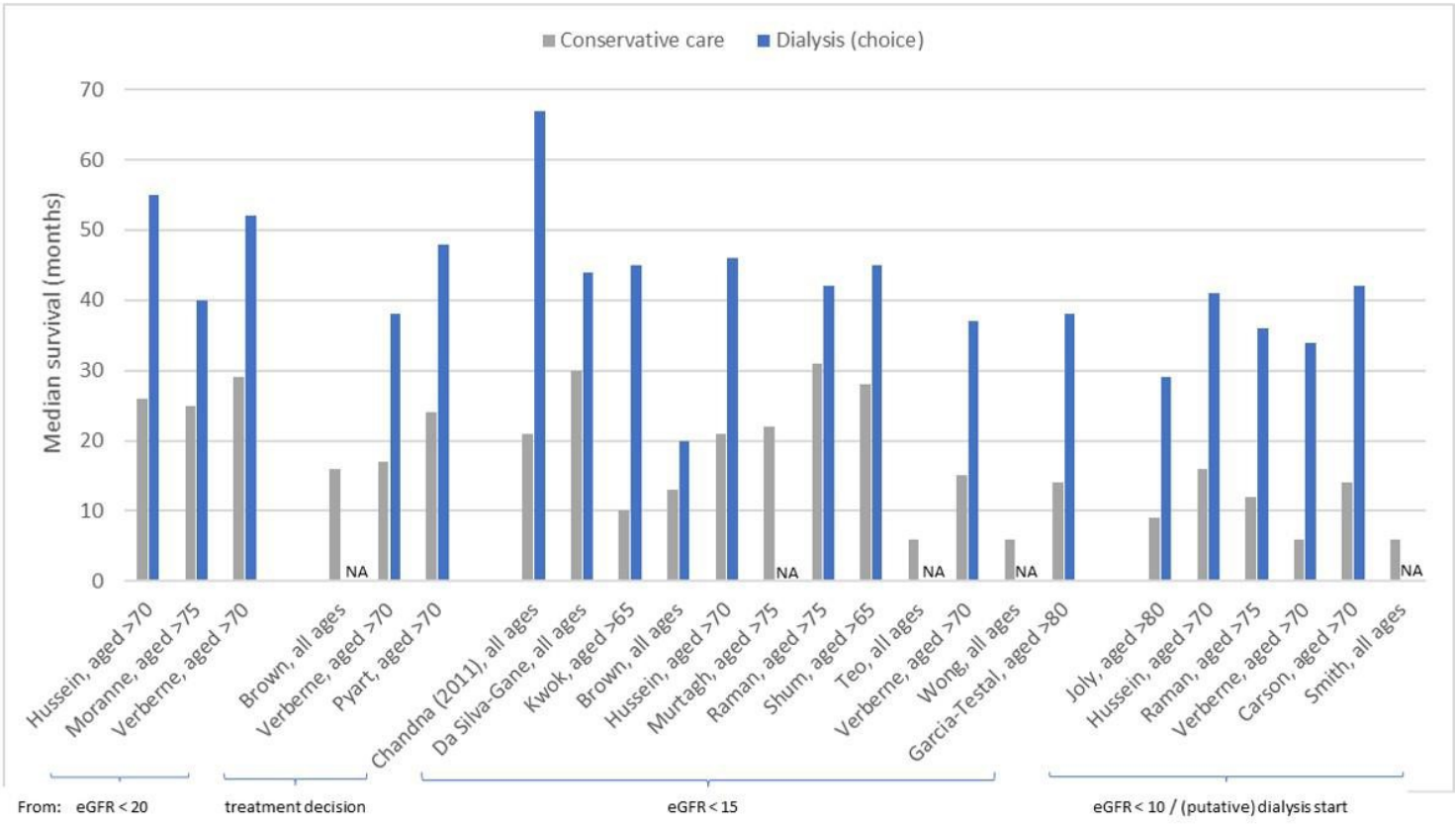
Patients opting for dialysis have an overall lower mortality risk compared to patients opting for CC. Data were limitedly comparable and with high risk of bias.

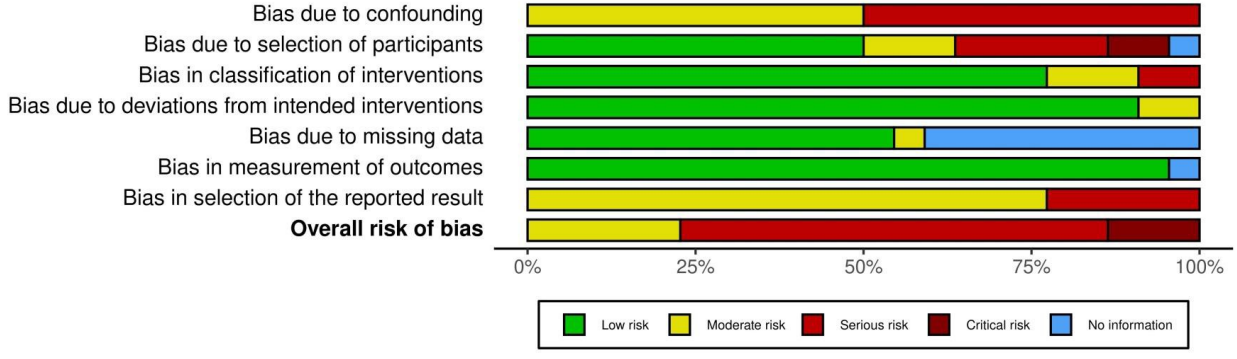
ERA ndt NEPHROLOGY DIALYSIS TRANSPLANTATION

Voorend C.G.N., et al. NDT (2022)
@NDTSocial

Nephrology Dialysis Transplantation, gfac010, https://doi.org/10.1093/ndt/gfac010
Published: 23 February 2022

OXFORD UNIVERSITY PRESS





Carlijn G.N. Voorend et al
Nephrology Dialysis Transplantation, Published: 23 February 2022

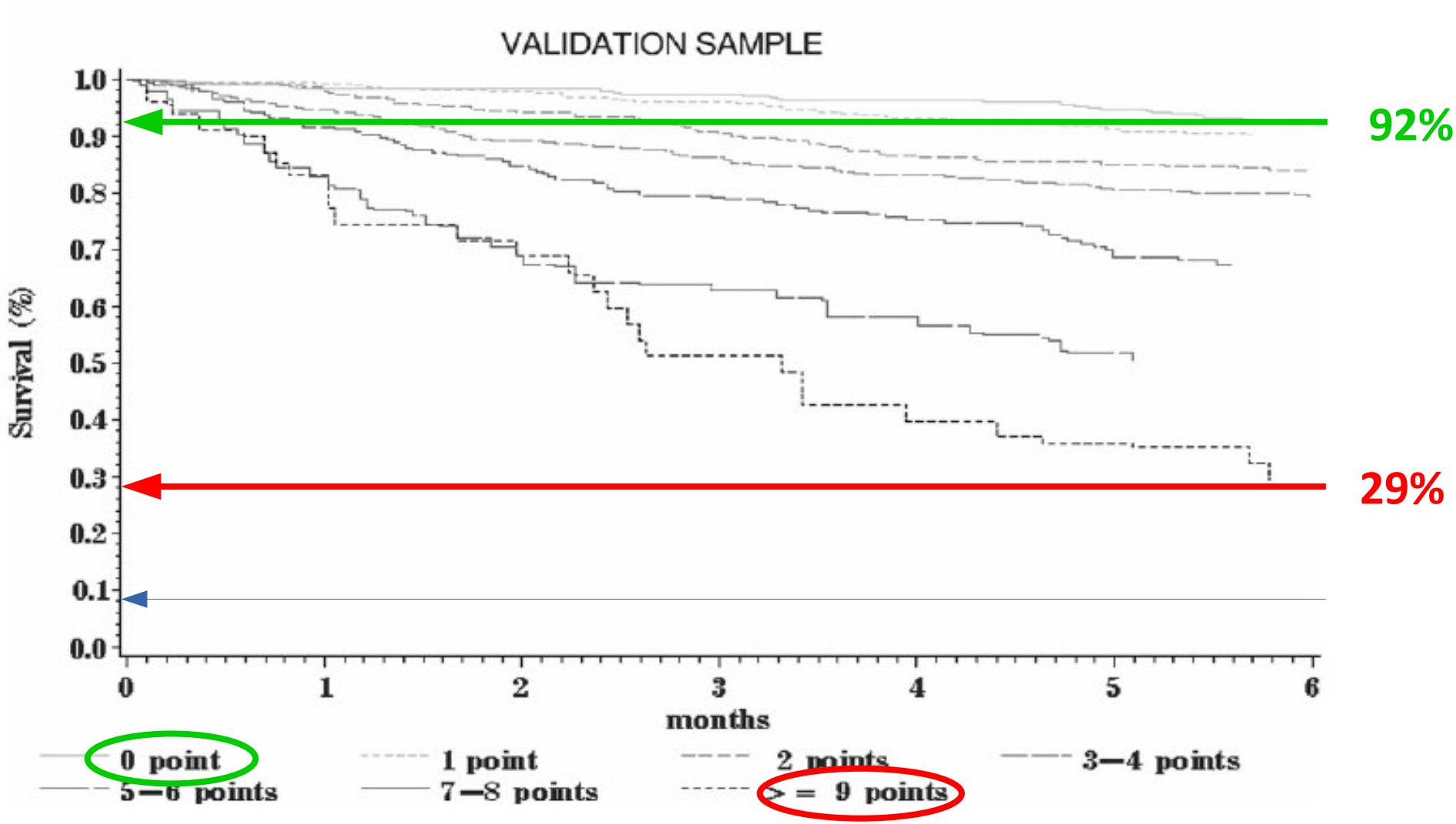
A clinical score to predict 6-month prognosis in elderly patients starting dialysis for end-stage renal disease

Cécile Couchoud[1], Michel Labeeuw[2], Olivier Moranne[3,4,5], Vincent Allot[6], Vincent Esnault[5], Luc Frimat[7], Bénédicte Stengel[3,4], and for the French Renal Epidemiology and Information Network (REIN) registry

Nephrol Dial Transplant (2009) 24: 1553–1561

Tabella 3 - Fattori di rischio di mortalità a 6 mesi nei pazienti incidenti in dialisi (2)

Fattore di rischio	Punteggio
Diabete mellito	1
Aritmie	1
Neoplasia maligna	1
Malnutrizione (BMI < 18.5)	2
Insufficienza cardiaca stadi 3-4	2
Malattia vascolare periferica stadi 3-4	2
Severe alterazioni del comportamento	2
Inizio dialisi non programmato	2
Totale dipendenza per gli spostamenti	3
Punteggio totale	0-16



Nephrol Dial Transplant (2009) 24: 1553–1561

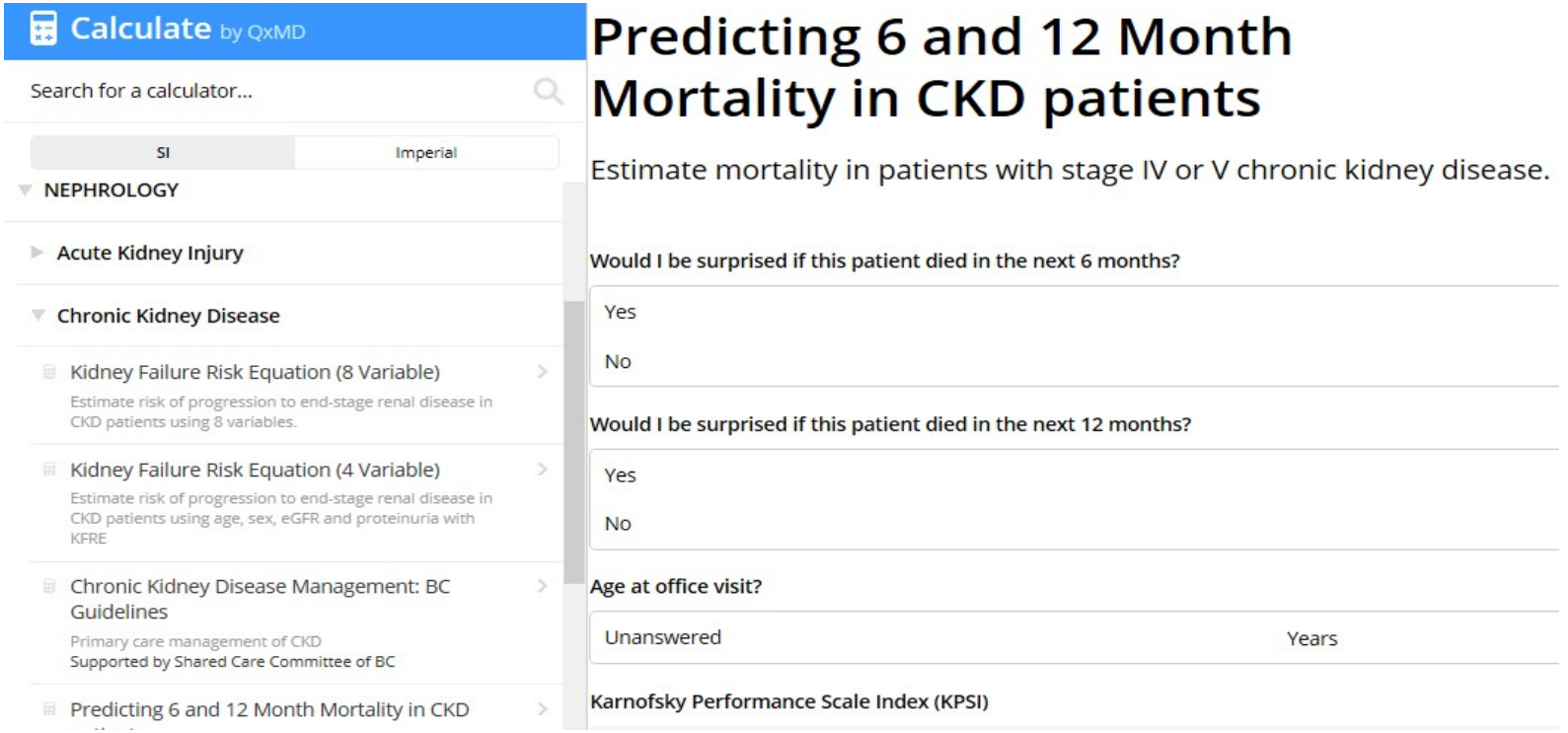


Table 1. Karnofsky Performance Status Scale [26]

Condition	Performance status (%)	Comment
Able to carry on normal activity and to work. No special care is needed	100	Normal. No complaints. No evidence of disease
	90	Able to carry on normal activity. Minor signs or symptoms of disease
	80	Normal activity with effort. Some signs or symptoms of disease
Unable to work. Able to live at home, care for most personal needs. A varying degree of assistance is needed	70	Care of self. Unable to carry on normal activity or to do active work
	60	Requires occasional assistance, but is able to care for most of his needs
	50	Requires considerable assistance and frequent medical care
Unable to care for self. Requires equivalent of institutional or hospital care. Disease may be progressing rapidly	40	Disabled. Requires special care and assistance
	30	Severely disabled. Hospitalization is indicated, although death not imminent
	20	Hospitalization necessary, very sick, active supportive treatment necessary
	10	Moribund. Fatal processes progressing rapidly
	0	Dead

EPIDEMIOLOGY AND CLINICAL GOVERNANCE OF CKD IN THE ELDERLY JNEPHROL 2010; 23 (S15): S5-S10
www.sin-italy.org/jnonline – www.jnephrol.com

A multidimensional approach to the geriatric patient with chronic kidney disease

Alberto Pilotto[1], Daniele Sancarlo[1], Marilisa Franceschi[1], Filippo Aucella[2], Piero D'Ambrosio[1], Carlo Scarcelli[1], Luigi Ferrucci[3]

[1]Geriatric Unit & Gerontology and Geriatrics Research Laboratories, IRCCS "Casa Sollievo della Sofferenza", San Giovanni Rotondo, Foggia - Italy
[2]Nephrology and Dialysis Unit, IRCCS "Casa Sollievo della Sofferenza", San Giovanni Rotondo, Foggia - Italy
[3]National Institute on Aging, Longitudinal Studies Section, Harbor Hospital Center, Baltimore, Maryland - USA

REJUVENATION RESEARCH
Volume 15, Number 1, 2012

DOI: 10.1089/rej.2011.1210

Addition of the Multidimensional Prognostic Index to the Estimated Glomerular Filtration Rate Improves Prediction of Long-Term All-Cause Mortality in Older Patients with Chronic Kidney Disease

Alberto Pilotto,[1,2] Daniele Sancarlo,[2] Filippo Aucella,[3] Andrea Fontana,[4] Filomena Addante,[2] Massimiliano Copetti,[4] Francesco Panza,[2] Giovanni F.M. Strippoli,[5–7] and Luigi Ferrucci[8]

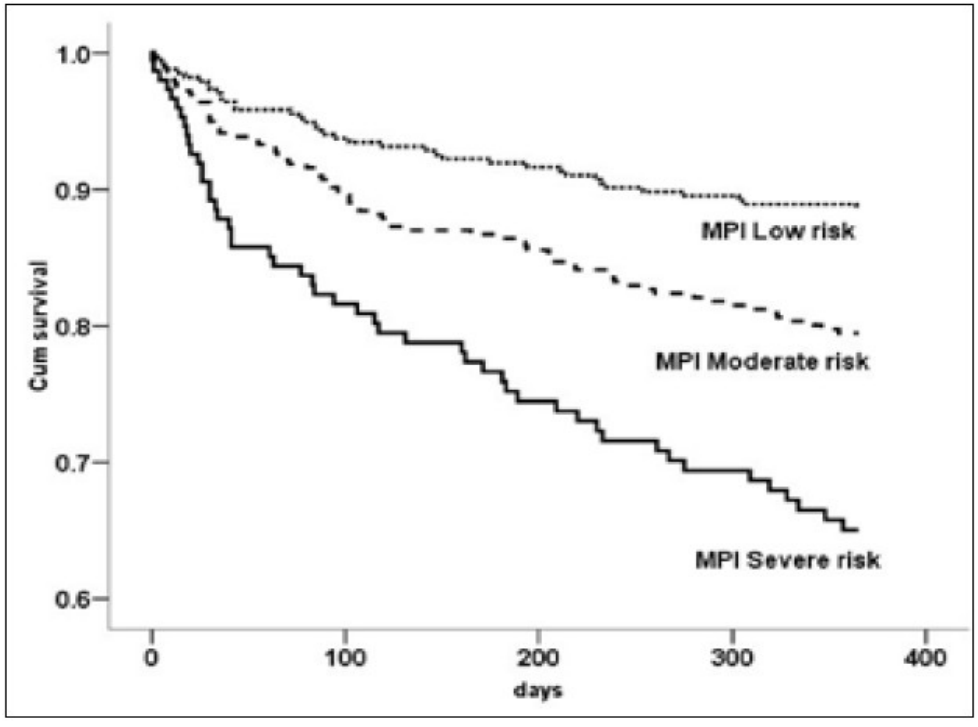


Fig. 1 - Survival curves at 1-year, adjusted for age and sex, for different grades in the Multidimensional Prognostic Index (MPI).

Low performance of prognostic tools for predicting death before dialysis in older patients with advanced CKD

J. Prouvot, E. Pambrun, V. Antoine, C. Couchoud, C. Vigneau, S. Roche, M. Francois, C. Mariat, D. Babici, C. Prelipcean, O. Moranne, for the PSPA investigators,
Journal of Nephrology, 2021

Risk scores should be used to predict death for elderly with advanced CKD, which are unevaluated

Mini review

- 6 scores predicting death among CKD patients were retrieved
- Few scores used geriatric prognostic factors

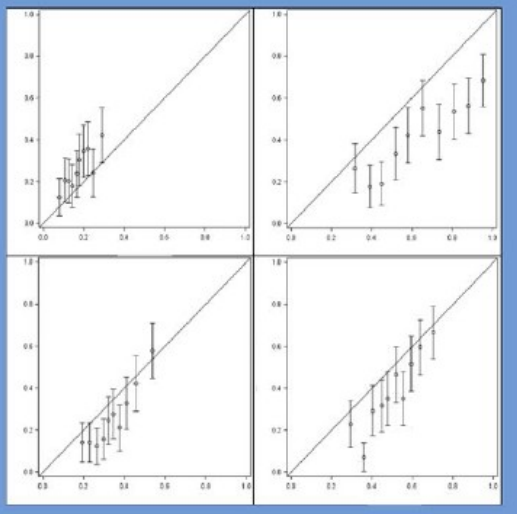
Validation cohort

Multicenter
Prospective cohort
(PSPA)
Follow-up 5 years

n = 573
Age > 75 (mean 83)
eGFR < 20 (median 13)
287 ESRD

Calibration

(Observed versus predicted outcomes for each score)



Discrimination

(Probability to be right when ordering patients according to their risk)

Score	AUC	Observed risk (%)	Predicted risk (%)	Hosmer Lemeshow p-value
Goldfarb	0.61 [0.56 – 0.67]	26	17	0,61
Bansal	0.68 [0.63 – 0.72]	42	61	0,14
Grams 2y	0.68 [0.63 – 0.73]	26	33	0,84
Grams 4y	0.70 [0.65 - 0.74]	39	50	0,18

Conclusion : The low predictiveness for death of the scores tested in a cohort of octogenarian patients with advanced CKD underlines the need to develop new tools for this population considering geriatric prognosis variables

Journal of Nephrology (2022) 35:993–1004

nephroMEET

Documento condiviso SICP-SIN
Le Cure Palliative nelle persone con malattia renale cronica avanzata

00242

release **1** pubblicata il **23 May 2016 11:00** da **Gruppo di Lavoro SIN-SICP**

Autori

Gruppo di Lavoro SIN-SICP

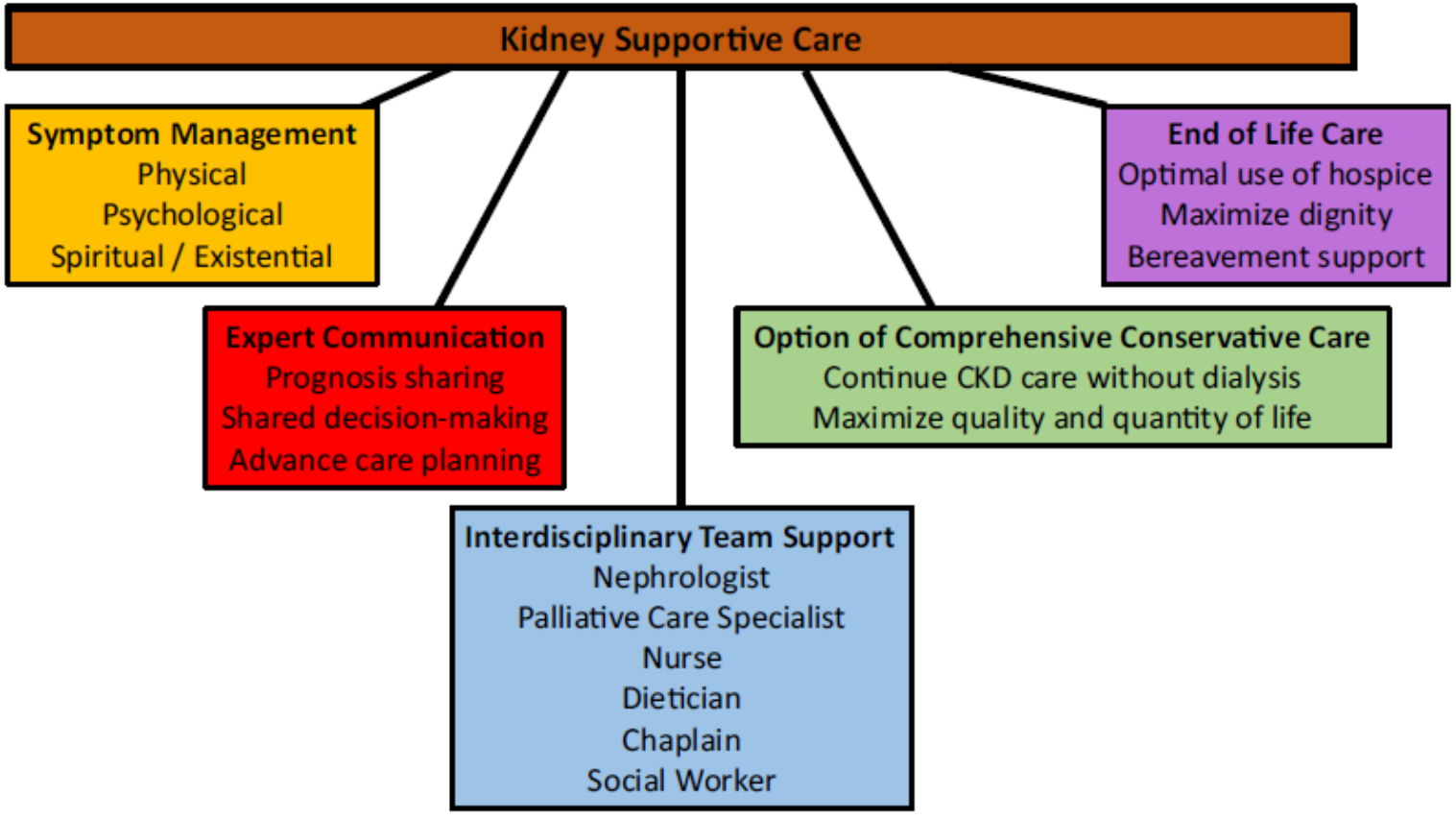
Contenuti

AJKD Vol 75 | Iss 5 | May 2020

AJKD

Kidney Supportive Care: Core Curriculum 2020

Samantha L. Gelfand, Jennifer S. Scherer, and Holly M. Koncicki



Kidney Supportive Care: Core Curriculum 2020

Samantha L. Gelfand, Jennifer S. Scherer, and Holly M. Koncicki

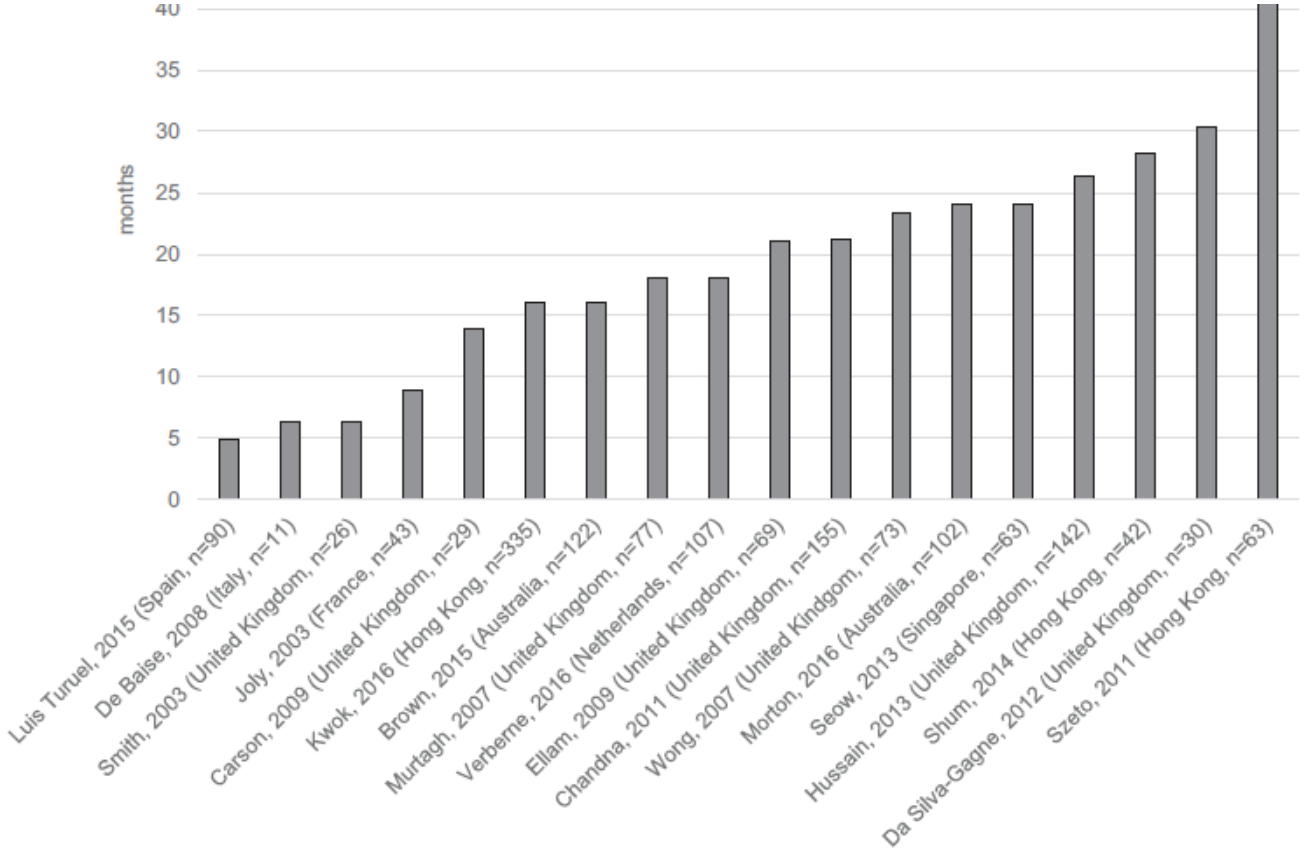
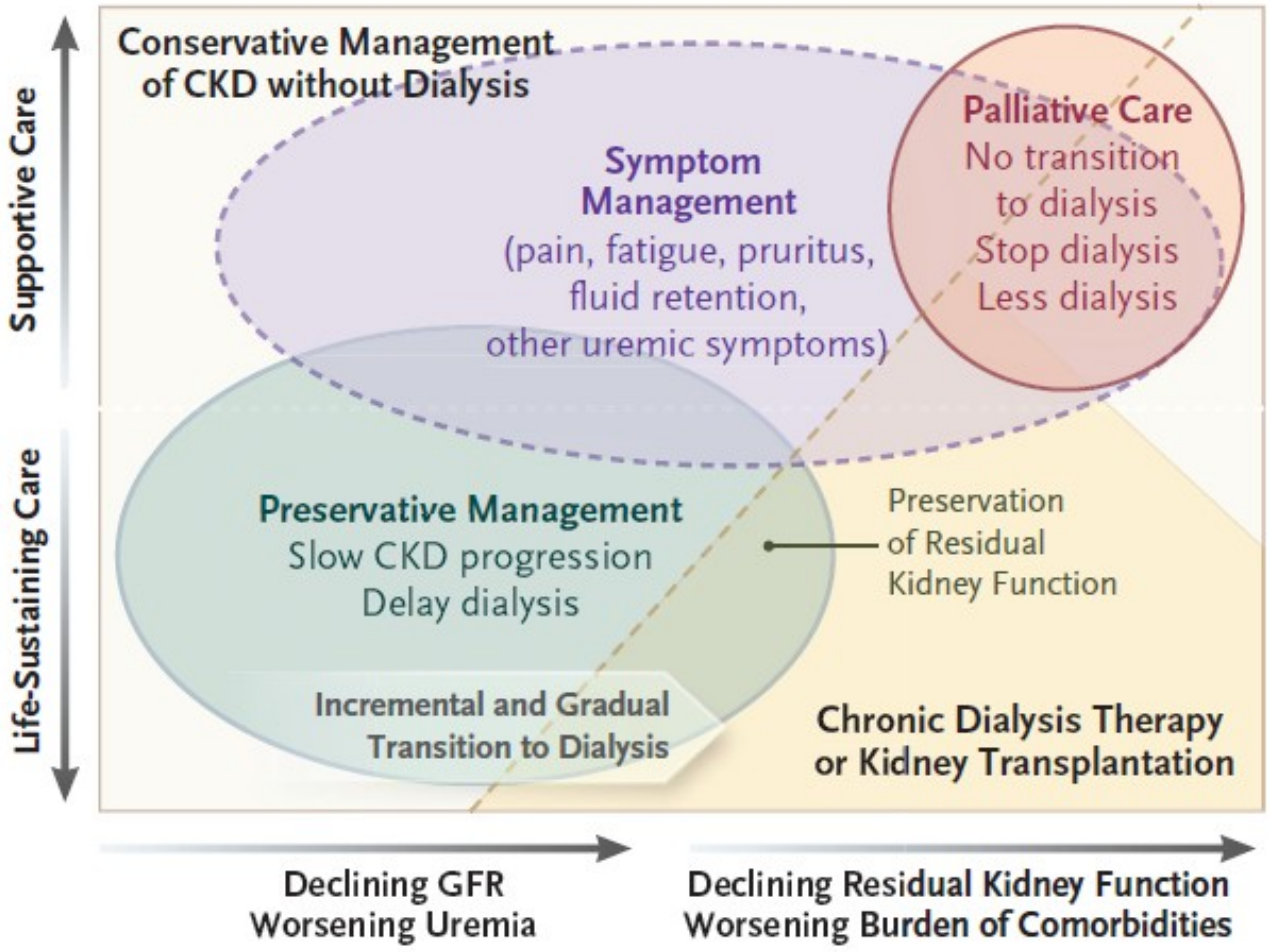


Figure 3. Survival in comprehensive conservative care. Adapted from Wong et al, 2018 (*Am J Kidney Dis.* https://doi.org/10.1053/j.ajkd.2017.11.007); original figure published as a US government work.

Ensuring Choice for People with Kidney Failure — Dialysis, Supportive Care, and Hope

Kamyar Kalantar-Zadeh, M.D., M.P.H., Ph.D., Aaron Wightman, M.D., and Solomon Liao, M.D.



Autodeterminazione

Beneficialità

Proporzionalità

Giustizia distributiva

Availability, Accessibility, and Quality of Conservative Kidney Management Worldwide

Meaghan Lunney et al CJ ASN 16: 79–87, 2021. doi: https://doi.org/10.2215/CJ N.09070620

What is the global state of conservative kidney management?

CJASN
Clinical Journal of the American Society of Nephrology

ISN International Society of Nephrology

Global Kidney Health Atlas (GKHA)
Initiative of the ISN

2018 GKHA survey

160 countries

Questions about conservative kidney management
154 respondents

81% stated conservative kidney management was available

46% utilized multidisciplinary teams

Accessibility was low worldwide, particularly in low-income countries

32% of countries offered shared decision making

25% provided relevant health care providers with specific training

36% provided psychological, cultural, or spiritual support

Conclusions Overall, conservative kidney management is available in most countries. However, it is not optimally accessible or of the highest quality.

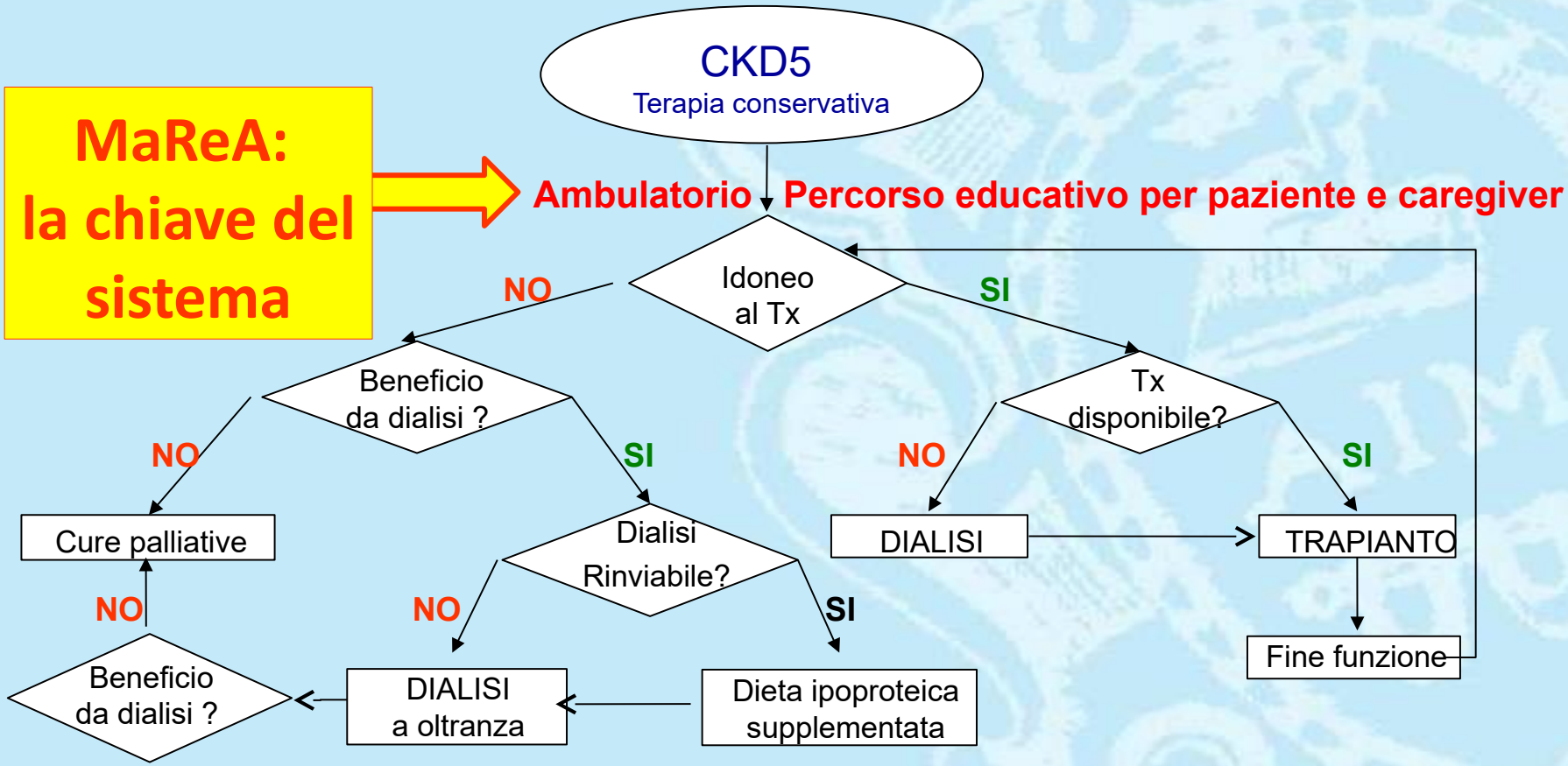
Meaghan Lunney, Aminu K Bello, Adeera Levin, et al. ***Availability, Accessibility, and Quality of Conservative Kidney Management Worldwide.*** CJASN doi: 10.2215/CJN.09070620. **Visual Abstract by Michelle Lim, MBChB, MRCP**

Ambulatorio della Malattia Renale Avanzata (Ma.Re.A.)

...isorisorse

Sede:	**U.O. Nefrologia - ASST Spedali Civili di Brescia**
Inizio attività:	**febbraio 2005**
Afferenza pazienti:	**agenda gestita da UO Nefrologia**
Criterio di inclusione:	**Clearance creatinina ≤15 ml/min**

MaReA: la chiave del sistema

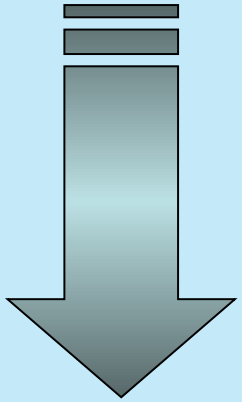


Prof. Giovanni Cancarini, Brescia

Ambulatorio della Malattia Renale Avanzata (Ma.Re.A.)

Approccio multidisciplinare

Nefrologo



Aspetti:
* clinici
* organizzativi
* educazionali
* decisionali

Infermiere

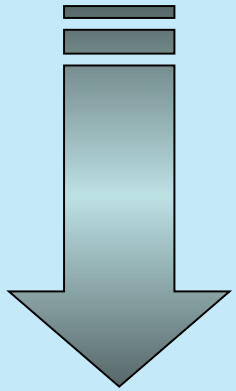
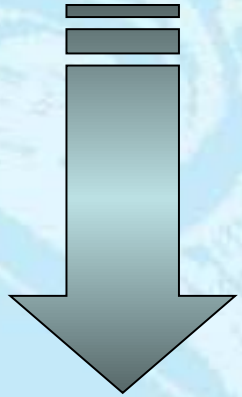


Illustrazione Tecniche dialitiche

Dietista

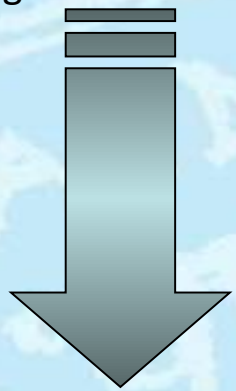
SSD di dietetica e nutrizione clinica



Educazione alimentare
TDN

Psicologo

Progetto di ricerca



Supporto a paziente/caregiver e personale

International Urology and Nephrology
https://doi.org/10.1007/s11255-021-02963-y

NEPHROLOGY - ORIGINAL PAPER

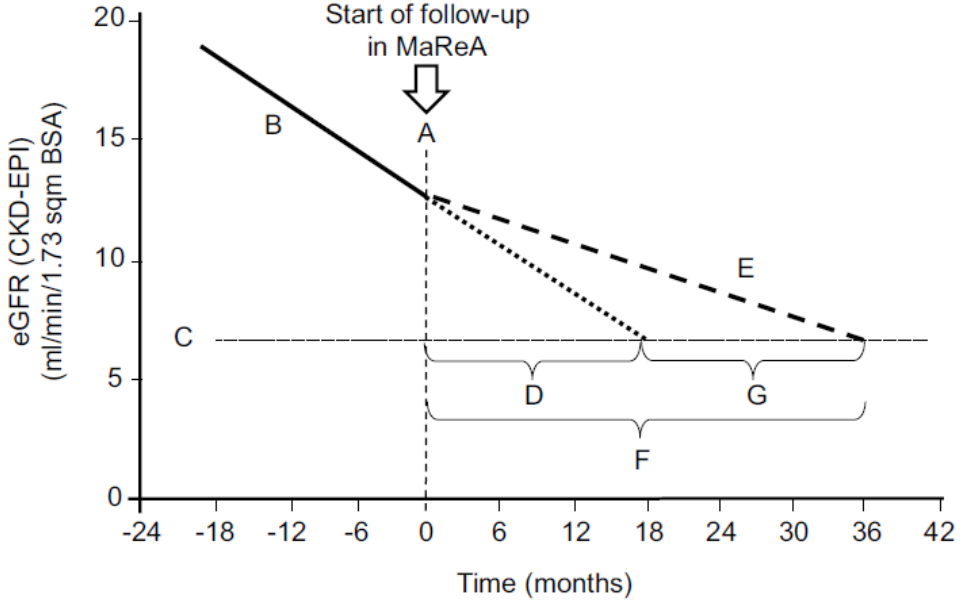
Ten-year experience of an outpatient clinic for CKD-5 patients with multidisciplinary team and educational support

Vincenzo Terlizzi[1] · Massimo Sandrini[1] · Valerio Vizzardi[1] · Mattia Tonoli[2] · Annalisa Facchini[2] · Luigi Manili[1] · Letizia Zeni[1] · Giovanni Cancarini[1,2]

Received: 15 January 2021 / Accepted: 7 July 2021

Conclusion

The follow-up of CKD-5 patients on MaReA is associated with an optimal and delayed initiation of dialysis.



Cima Presanella m 3558

Strumenti:

- formazione continua del personale
- setting
- capacità comunicative
- supporti audio-visivi
- test di valutazione multidimensionali
- tempo dedicato

Mentalità:

- laicità
- messaggi veritieri
- discutere la prognosi

Collaborazioni:

- infermieri
- psicologo
- geriatra
- palliativista
- medico legale
- esperti di bioetica

gestione CKD5:

riduzione complicanze

riduzione ospedalizzazione

dilazione della terapia dialitica

estensione della fase conservativa

TDN: → VLPD

appropriatezza diagnostico-terapeutica

Riallocazione delle risorse

DIALISI DOMICILIARE SÌ, MA QUALE?
EMODIALISI DOMICILIARE E DIALISI PERITONEALE A CONFRONTO: UNA CONTROVERSIA NON CONTROVERSA

Giorgina Barbara Piccoli[1], Martina Ferraresi[1], Flavia Caputo[2], Francesco Quarello[3], Maria Rosa Viganò[4], Franco Mascia[4], Loreto Gesualdo[5]

G Ital Nefrol 2012; 29 (2): 148-159

ORIGINAL PAPER

Springer

CrossMark

The social cost of chronic kidnev disease in Italy

Giuseppe Turchetti[1] · S. Bellelli[1] · M. Amato[2] · S. Bianchi[3] · P. Conti[4] · A. Cupisti[5] · V. Panichi[6] · A. Rosati[7] · F. Pizzarelli[8] · On Behalf of the Tuscany CKD Study Group

Eur J Health Econ. 2016 Oct 3

COSTI DIRETTI

CKD5: 5’230 € /anno **DIALISI: 26’797 € /anno**

Monte Adamello m 3539

GCND
G Clin Nefrol Dial 2021; 33: 141-145
ISSN 2705-0076 | DOI: 10.33393/gcnd.2021.2242
ORIGINAL RESEARCH ARTICLE

Il Chronic Care Model

Luigi Apuzzo[1], Maddalena Iodice[2], Margherita Gambella[3], Angelica Scarpa[3], Francesco Burrai[4]

TABELLA I - Componenti del Chronic Care Model

Componente	Interventi
Sistema sanitario	Organizzazione dell'assistenza sanitaria fornendo una leadership che garantisca risorse e che rimuova le barriere all'assistenza
Supporto all'autogestione	Facilitare l'apprendimento basato sulle competenze e sull'empowerment del paziente
Supporto decisionale	Fornire una guida per l'implementazione dell'assistenza basata sull'evidenza
Progettazione del sistema di erogazione	Coordinare i processi di assistenza
Sistemi di informazione clinica	Monitorare i progressi attraverso feedback sugli outcome a pazienti e operatori sanitari
Risorse e politiche della comunità	Sostenere l'assistenza utilizzando risorse basate sulla comunità e politiche di salute pubblica

SPEDALI CIVILI DI BRESCIA
AZIENDA OSPEDALIERA

MIA

Thank you !

Grazie !