

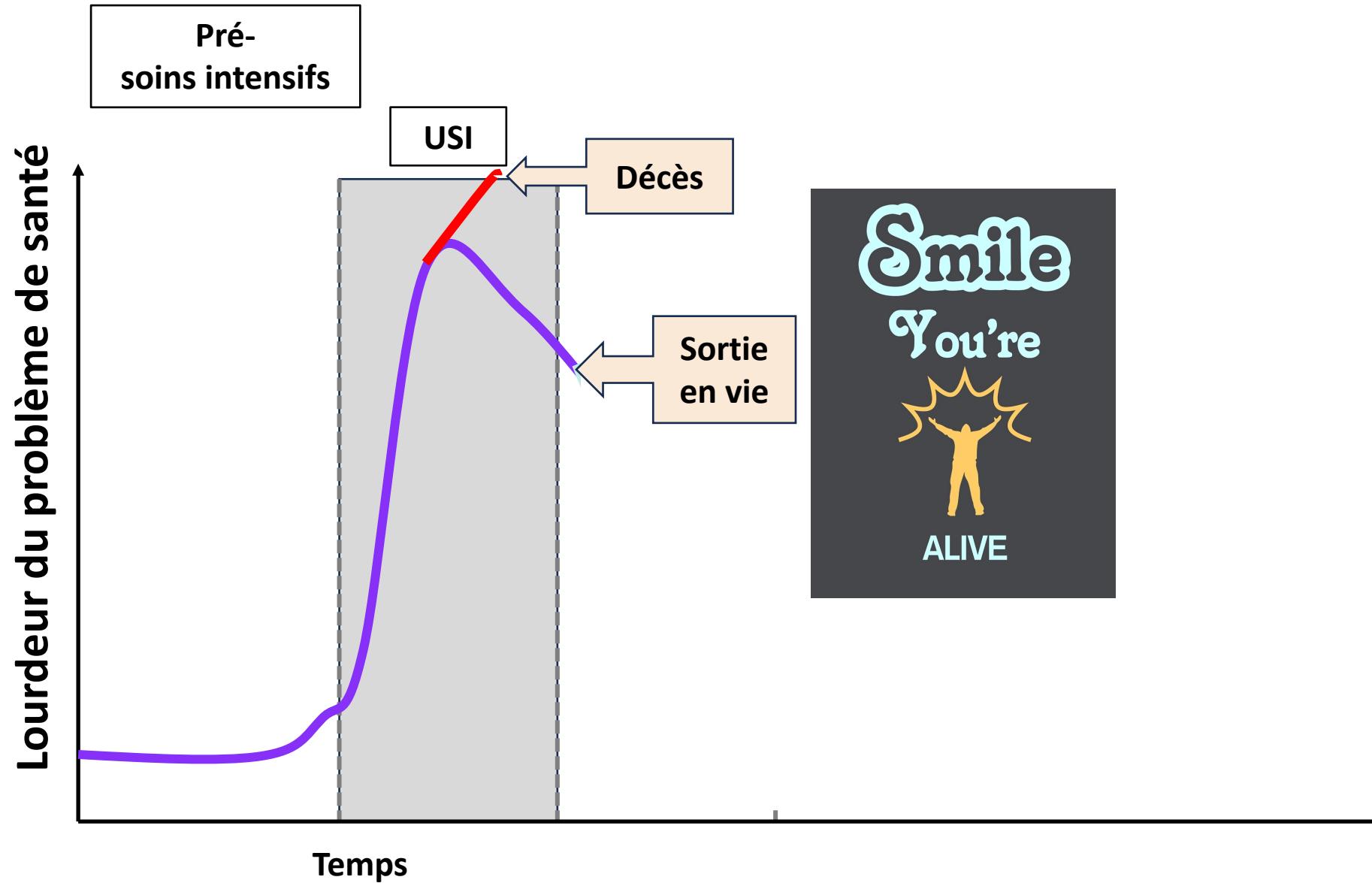


Le syndrome post-reanimation (PICS)

Pr Anne-Françoise ROUSSEAU

MD, PhD, DESAIC, FESAIC





Mme C.D. – 2004

Je me sens encore fatiguée, mais j'ai envie de reprendre mes études.

Dessiner HORLOGE (10 h 05 min)
(3 points)



[]
Contour

[]
Chiffres

[]
Aiguille

Mr P.P. – 1974

Je n'arrive toujours pas à monter les escalier, je suis essoufflé au moindre effort, impossible de reprendre le travail.

...

Mme G.T au sujet de son mari
Il a changé, il est marqué, on ne le reconnaît plus, il est irritable et très fatigué. C'est comme si j'avais à nouveau un enfant à la maison.

Mr S.G. – 1977

Quand on quitte les soins intensifs, on se sent abandonné. J'étais très anxieux ...

Mr G.H. - 1946

Je me suis senti perdu et impuissant,
j'avais l'impression d'être infantilisé ...

Melle O.M. – 1993

Une infirmière se présentait toujours
par son prénom. Quand je l'entendais, je
me disais que j'étais toujours en vie ...

Mr P.P. – 1956

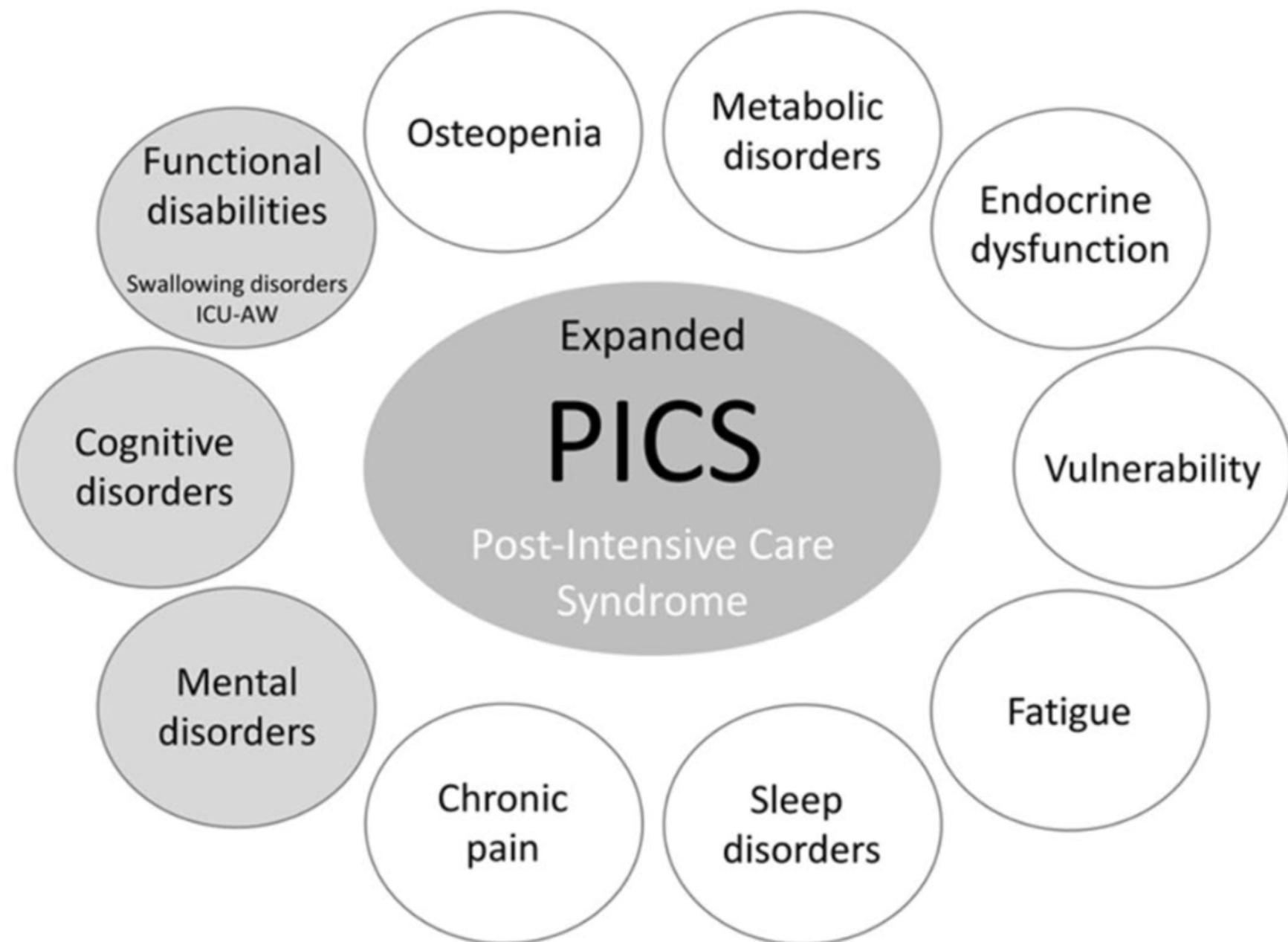
Ce qui m'a surtout aidé à garder
courage, c'était de voir mes enfants ...

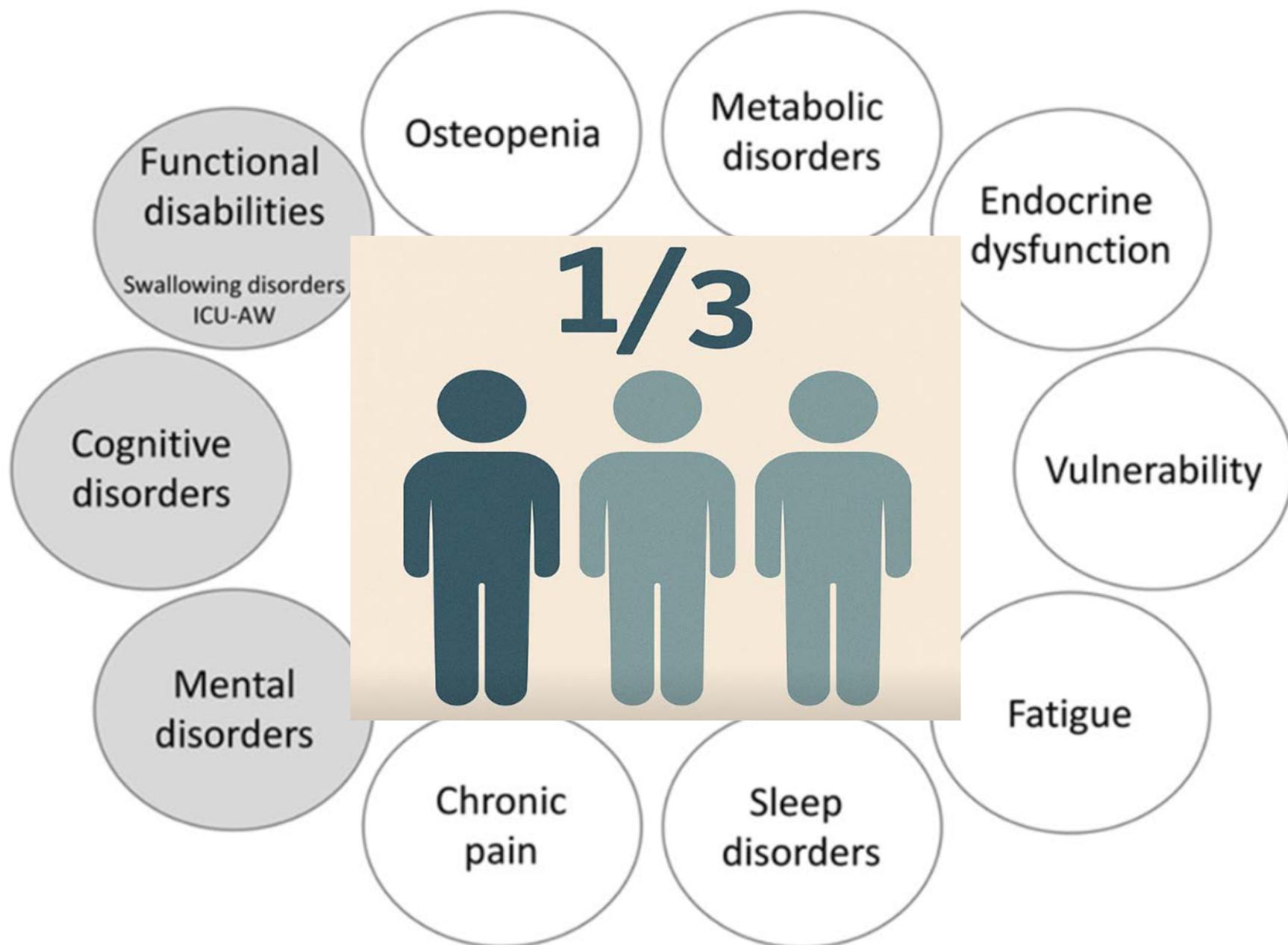
Mme I.V. – 1968

Je voulais parler mais les mots ne
sortaient pas. J'étais attachée. La seule
manière que j'avais de m'exprimer,
c'était de bouger encore et encore ...

Mme M.T.. – 1971

J'ai parlé avec ma maman décédée,
j'étais assise à côté de mes grands-
parents... J'avais envie de rester auprès
d'eux mais aussi de revenir près de mon
mari ...





Patients' opinions on outcomes following critical illness

H. K. Nedergaard^{1,2} , T. Haberlandt¹, P. D. Reichmann¹, P. Toft³ and H. I. Jensen¹

¹Department of anesthesiology and intensive care, Lillebaelt Hospital, Kolding, Denmark

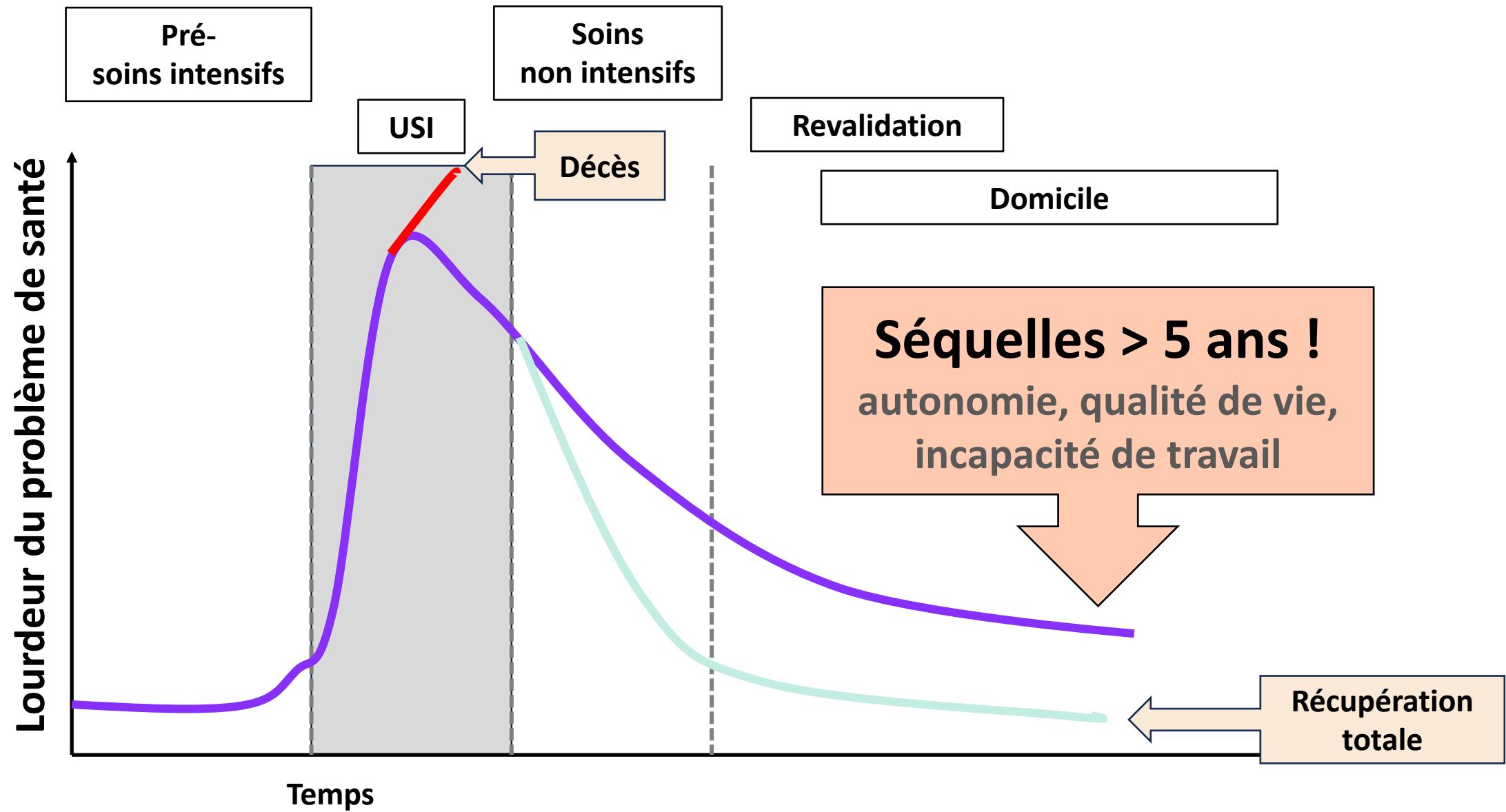
²Institute for Clinical Research, University of Southern Denmark, Odense, Denmark

³Department of anesthesiology and intensive care, Odense University Hospital, Odense C, Denmark

Acta Anaesthesiologica Scandinavica **62** (2018) 531–539

Item	Patients, n = 32		
	Rating	Median	IQR
Lack of physical strength	1	4	2–7.5
Fatigue	2	5	2–8
Decreased walking distance	3	6	3–8
Shortness of breath	4	5	3–14
Difficulties in ADL	5	7	3–9
Decreased quality of life	6	7	3–10
Less independence	7	7	4–10.5
Pain	8	8	6–13
Sadness/depression	9	9.5	6.5–13
Readmission/control visits	10	12	6–17.5
Anxiety	11	12.5	4–15
Difficulties concentrating	12	13	5–14
Memory loss	13	13	5–15
Feeling isolated	14	13	8–15.5
Weight loss	15	14	8–18
Nightmares	16	14.5	10.5–17
Incontinence	17	16	7–19
Move to nursing home	18	18	16–20
Short tempered	19	19	11–20
Difficulties returning to work	20	20	19–20

Table 2 The 20 outcomes prioritized by patients,



Cuthbertson B. et al, Crit Care 2010

Herridge M. et al, NEJM 2011

Kamdar B. et al, Thorax 2019

Hétérogénéité de phénotype





Etat préalable

Fragilité
Troubles cognitifs
Anxiété
Sexe féminin ?
Age ?



Pathologie critique Prise en charge

Délirium
Expérience negative
Etat fonctionnel à la
sortie
Durée USI ?



Période de recuperation Prise en charge



Suivi Resources

Prédictible ?





Patients' perceptions and ICU clinicians predictions of quality of life following critical illness☆



Michael E. Detsky ^{a,b,c,*}, Rachel Kohn ^{a,d,e,f}, Aaron M. Delman ^a, Anna E. Buehler ^a, Saida A. Kent ^a, Isabella V. Ciuffetelli ^a, Mark E. Mikkelsen ^{c,f}, Alison E. Turnbull ^{h,i,j}, Michael O. Harhay ^{a,e,g}

Table 4

Number of ICU clinician predictions of six-month quality of life.

Predictions	Patient-reported quality of life			
	Better	Same	Worse	Total
Physician prediction	Worse	28	22	31
	Same	18	28	21
	Better	6	4	3
	Total	52	54	55
Nurse prediction	Worse	22	24	27
	Same	20	19	21
	Better	11	10	7
	Total	53	53	55



Approche
individualisée

Suivi approprié



Challenges du dépistage



- Présentation variable, parfois retardée ou subtile
- PICS peu connu des collègues / des patients
- PICS oublié des transmissions
- Absence de trajet de soins établi
 - Financement
 - Guidelines internationales



Outils validés et standardisés

Table 1 Summary of instruments to diagnose post-intensive care syndrome, as defined in the princeps definition

Domain	Assessment instrument	Advantages	Limitations
Physical function	6-min walking test	Simple to administer; evaluates functional exercise capacity.	Influenced by patient motivation and comorbidities; requires space.
	Medical Research Council (MRC) Muscle Strength Score	Quantifies muscle weakness; quick bedside assessment.	Subjective; inter-rater variability; poorly discriminating at highest scores.
	Handgrip dynamometry	Objective measure of muscle strength; portable.	May not reflect overall muscle strength.
	Pulmonary function test	Objective	Influenced by patient understanding, requires specific devices.
Autonomy	Barthel Index	Assesses basic self-care activities; simple.	Ceiling effects; does not assess higher-level functions.
	Instrumental Activities of Daily Living (IADL)	Evaluates more complex daily tasks; sensitive to functional changes.	Subjective; may be influenced by cultural factors.
Cognition	Montreal Cognitive Assessment (MoCA)	Comprehensive; detects mild cognitive impairment.	Requires training to administer; time-consuming.
	Mini-Mental State Examination (MMSE)	Widely used; assesses various cognitive domains.	Less sensitive to mild impairments; cultural and educational biases.
	Short Memory Questionnaire (SMQ)	Brief; focuses on memory-related issues.	Limited scope; may not detect nonmemory cognitive deficits.
Psychological health	Hospital Anxiety and Depression Scale (HADS)	Screens for both anxiety and depression; easy to use.	May not capture severe cases; excludes somatic symptoms.
	Impact of Event Scale-Revised (IES-R)	Assesses posttraumatic stress symptoms; validated in ICU populations.	May be influenced by current mood and sleep disorders.
	Patient Health Questionnaire-9 (PHQ-9)	Specific for depression; aligns with diagnostic criteria.	May not capture anxiety or PTSD symptoms.
Quality of life	Short Form Health Survey (SF-36)	Comprehensive; covers multiple health domains.	Lengthy; may be burdensome for critically ill patients.
	EuroQol-5 Dimension (EQ-5D)	Brief; provides utility scores for economic evaluations.	Less detailed; may not capture all aspects of health-related quality of life.
PICS	Healthy Aging Brain Care Monitor (HABC-M)	Multidomain instrument; can be remotely administered by phone; gives a total score; validated to PICS detection.	Not widely translated, may not capture all disabilities of PICS



Spécialiste référent



Hors de son champ d'action /
d'intérêt



Médecin généraliste



Connaît le mieux le patient
Reco dédiées
MAIS ...
Connaît moins bien les soins
intensifs
Chronophage
Accès difficile à la
multidisciplinarité



Clinique post-réa / follow-up



Aide à la prise en charge, dans un
domaine très spécifique
Approche intégrée et proactive
Continuité des soins
Qualité des soins en USI
Donne du sens aux équipes USI
Recherche



Chatterjee et al. *Critical Care* (2025) 29:421
<https://doi.org/10.1186/s13054-025-05634-x>

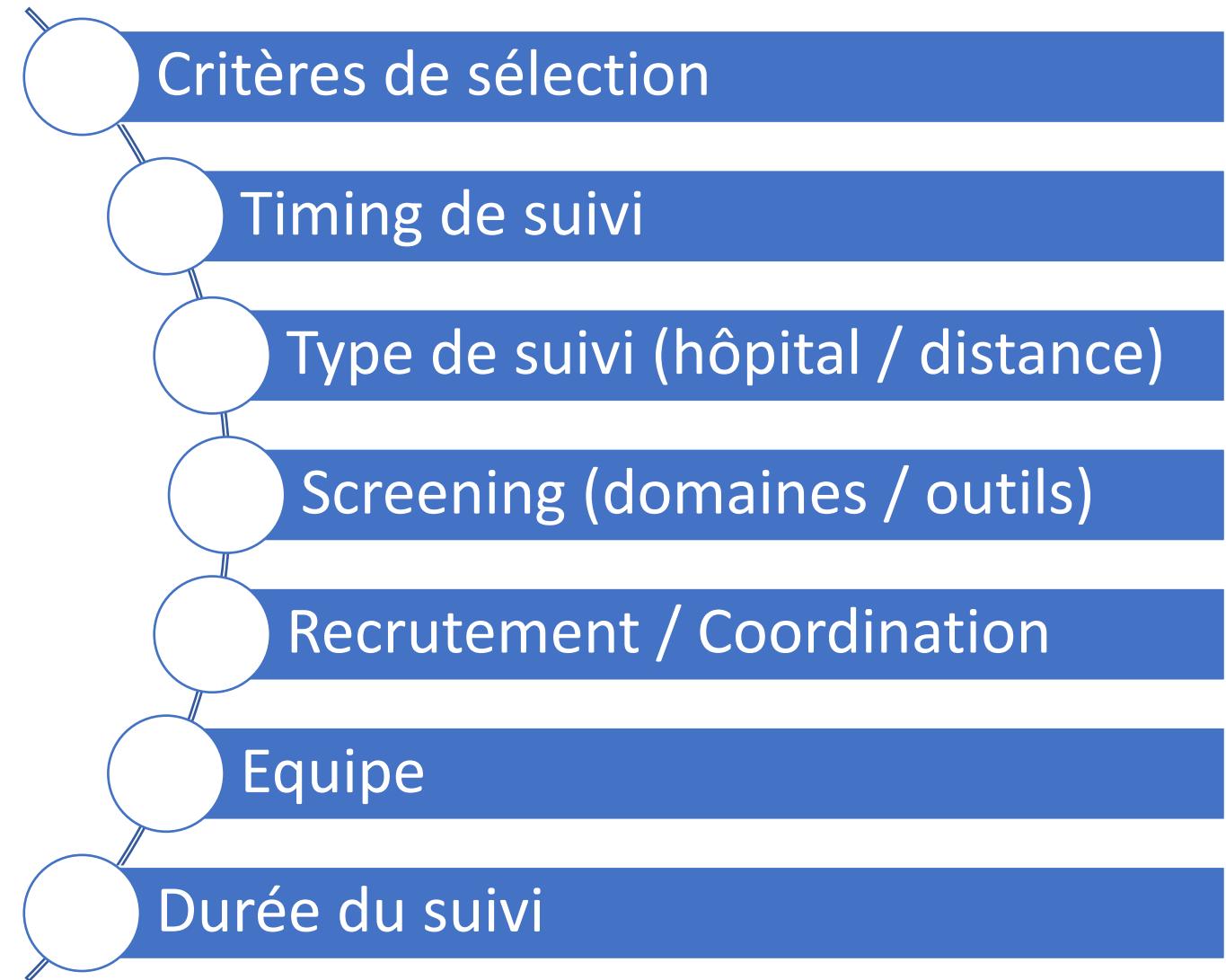
REVIEW

Open Access



Post-intensive care unit clinics: models and implementation - a systematic review

Critical Care



REVIEW

Open Access



Effectiveness of targeted post-acute interventions and follow-up services for sepsis survivors: a systematic review

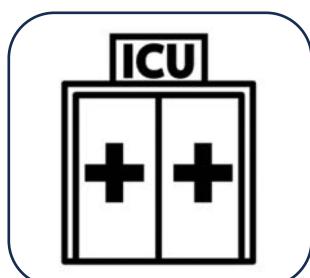
14 études

> 380000 patients

Suivi coordonné et réhabilitation

Meilleures capacités physiques,
santé mentale, et survie

Transition



Impact of a Nurse-Driven Patient Empowerment Intervention on the Reduction in Patients' Anxiety and Depression During ICU Discharge: A Randomized Clinical Trial

Cecilia Cuzco, RN, PhD^{1,2,3}

Critical Care Medicine 50(12):p 1757-1767, December 2022.

Variables	Total (N = 178)
Gender, female	63 (35.4)
Age, yr	60.8 ± 14.8
Educational level	
No studies	12 (6.7)
Primary	82 (46.1)
Secondary	48 (27.0)
Superior	36 (20.2)
Family presence	
Live alone	31 (17.4)
Family	137 (77.0)
Friends	10 (5.6)
Marital status	
Unmarried	32 (18.0)
Married	112 (62.9)
Couple	4 (2.2)
Widow/er	17 (9.6)
Divorced	13 (7.3)
Acute Physiology and Chronic Health Evaluation II	15.5 ± 6.4
ICU days of stay	11.9 ± 14.7

Entretien avec infirmier (état, USI, transition) Brochure

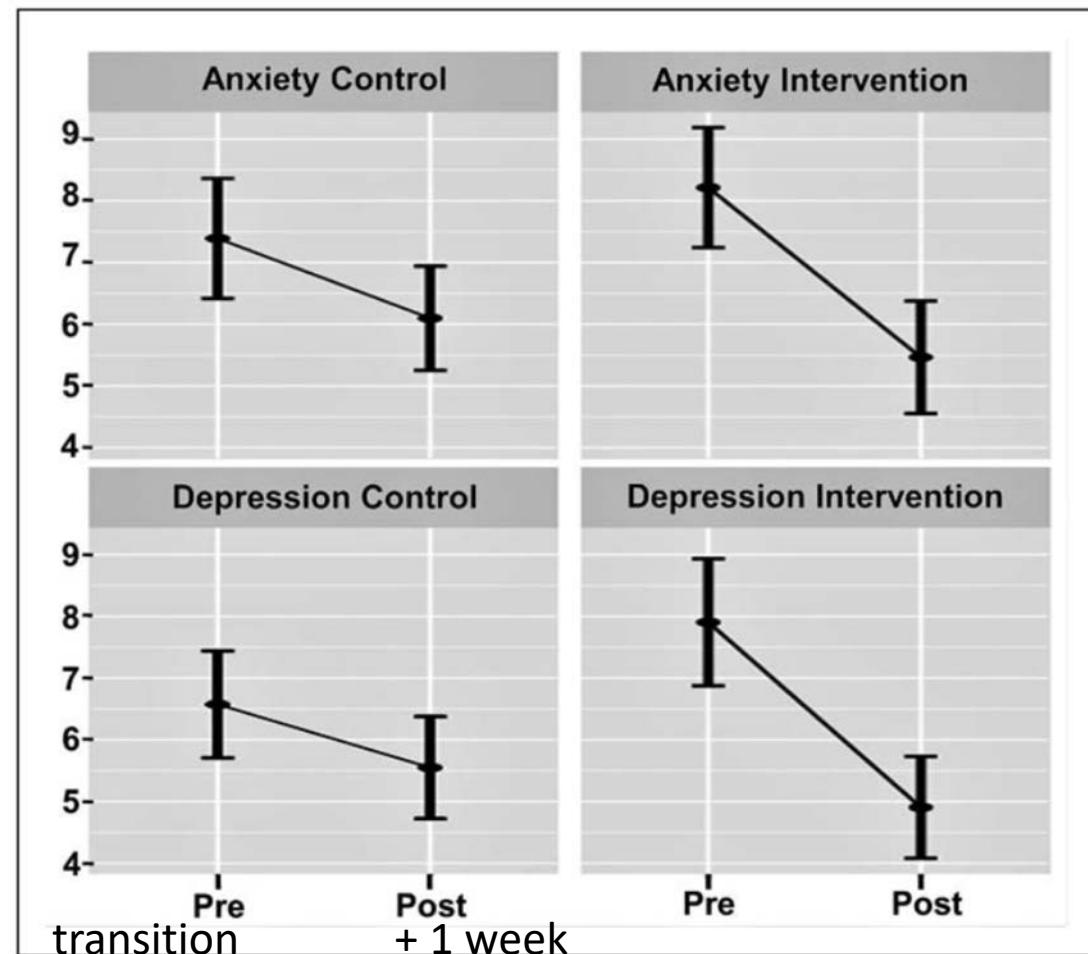
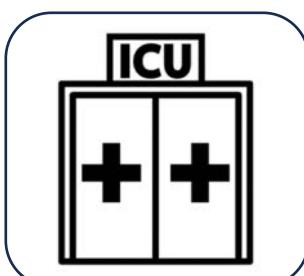


Figure 2. Levels of anxiety and depression in the intervention and control groups.

En USI



The ICU Liberation Bundle

Represents the implementation strategy used to provide each of the recommendations in the PADIS guidelines to every ICU patient.

Assess, prevent, and manage pain

Understand pain and find tools for its assessment, treatment, and prevention

A

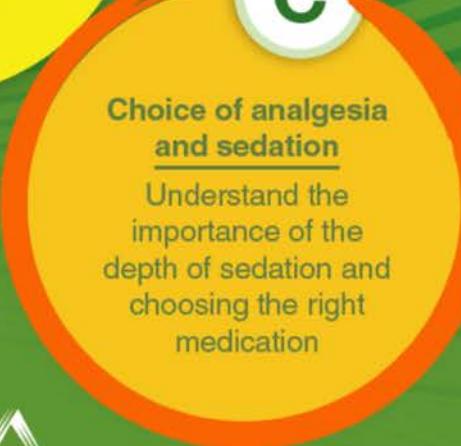
Both SAT and SBT

Use both spontaneous awakening trials and spontaneous breathing trials

B

Choice of analgesia and sedation

Understand the importance of the depth of sedation and choosing the right medication



C

Delirium: Assess, prevent, and manage

Understand delirium risk factors and find tools for its assessment, treatment, and prevention

D

Family engagement and empowerment

Involving the family in patient care can help patients recover

F

Early mobility and exercise

ICU early mobility involves more than changing the patient's position

E

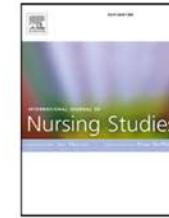




Contents lists available at ScienceDirect

International Journal of Nursing Studies

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The effect of the ABCDE/ABCDEF bundle on delirium, functional outcomes, and quality of life in critically ill patients: A systematic review and meta-analysis

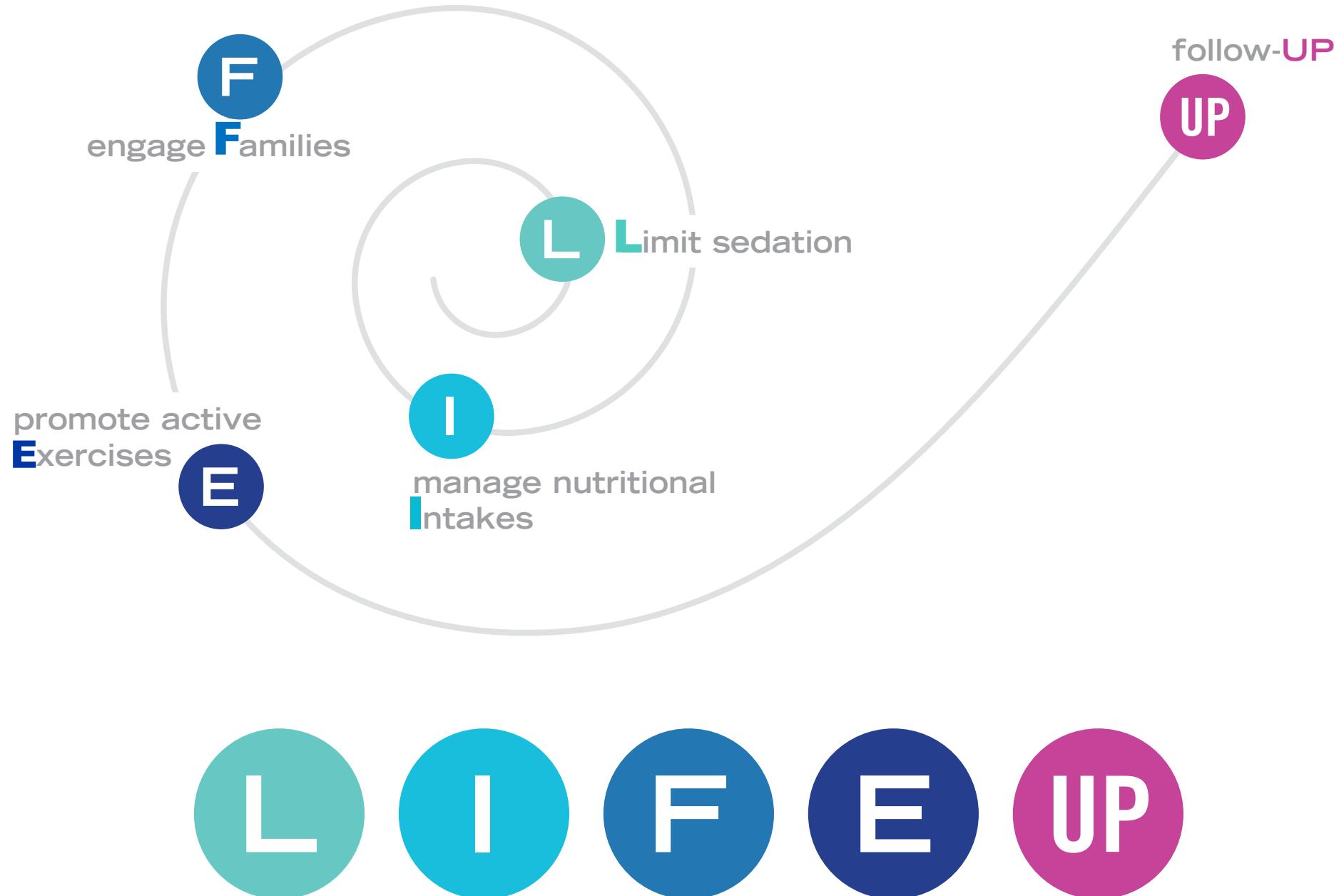


Kellie Sosnowski ^{a,b,c,*}, Frances Lin ^d, Wendy Chaboyer ^{a,c,e}, Kristen Ranse ^a,
Aaron Heffernan ^{b,f,g}, Marion Mitchell ^{a,c}

Réduction incidence / durée delirium

Peu d'évidence

Bundle rarement implémenté en entier



Calories

Dose ?

Omega 3 ?

Protéines

Dose ?

HMB ? Leucine ?



Micronutriments

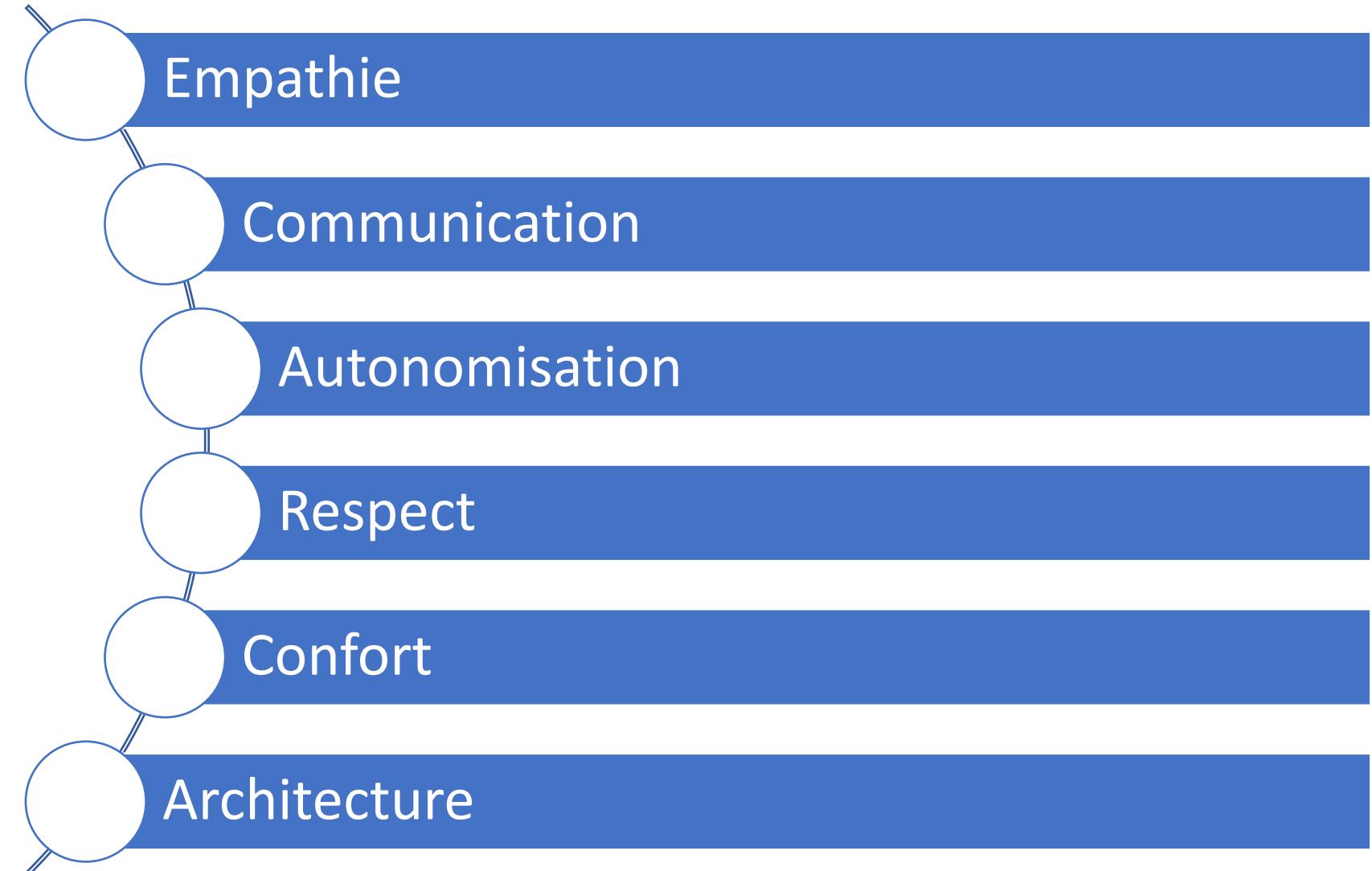
Antioxydants ? Vit D?

Timing !?
Modulation
métabolique ?

Patient-centered care



Humanized care



Get To Know Me Board

Name Beny Dean Anderson

I like to be called Ben

Favorite

Movie OH! God!

TV Show News Junkie — MSNBC

Book IQ of 63, SD WHAT! by Ben D Anderson

Music Parties

Sport drinking beer to his not for a long time

Food

Pet

Activities/Hobbies Ben is CEO of Break Through Inc 40 years celebration. Speaker on Disabilities
Website : bendanderson.com

Achievements

A.S. in Vocational Rehab UW-STOUT Wisconsin 1992

Things that Stress Me Out

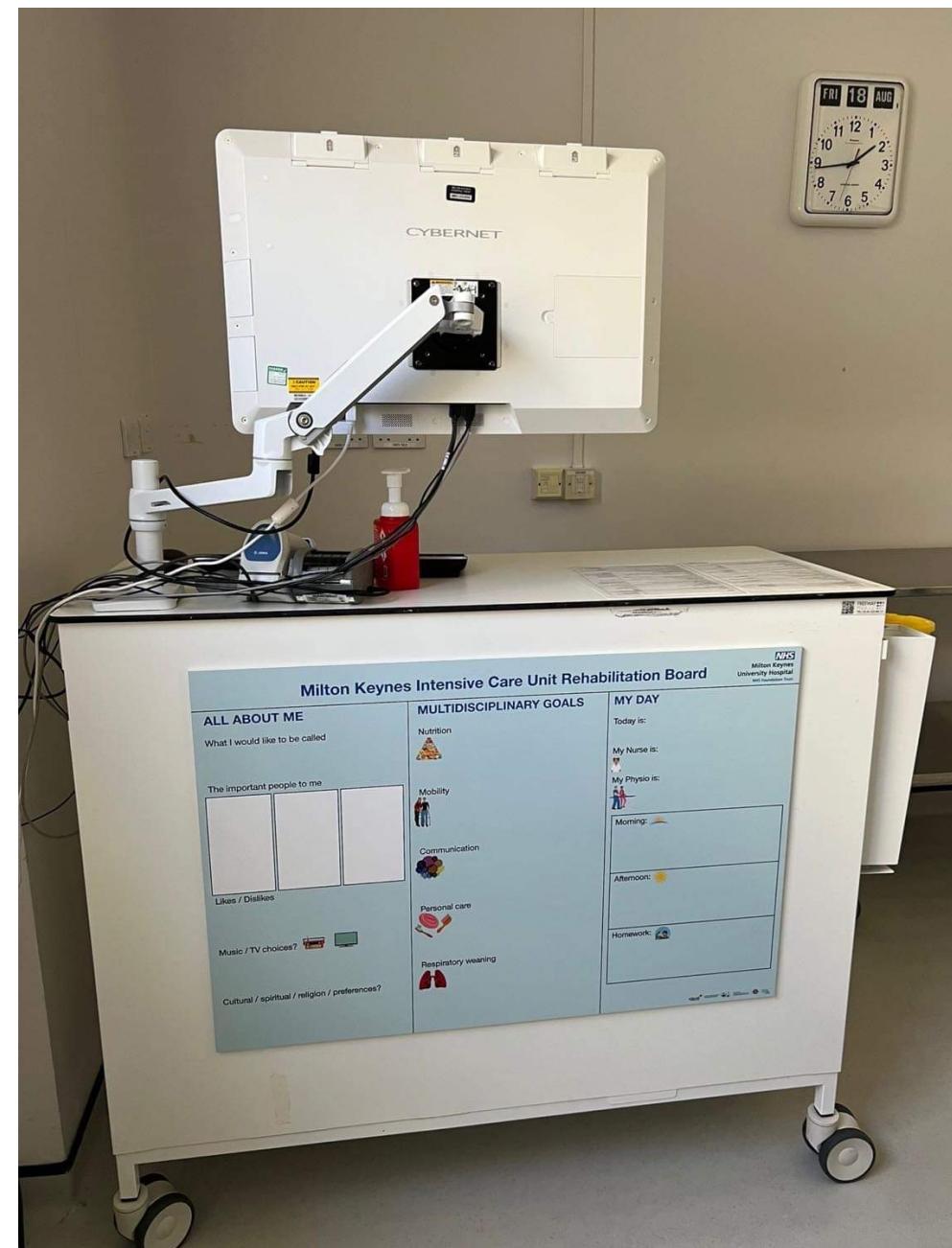
Going to the hospital

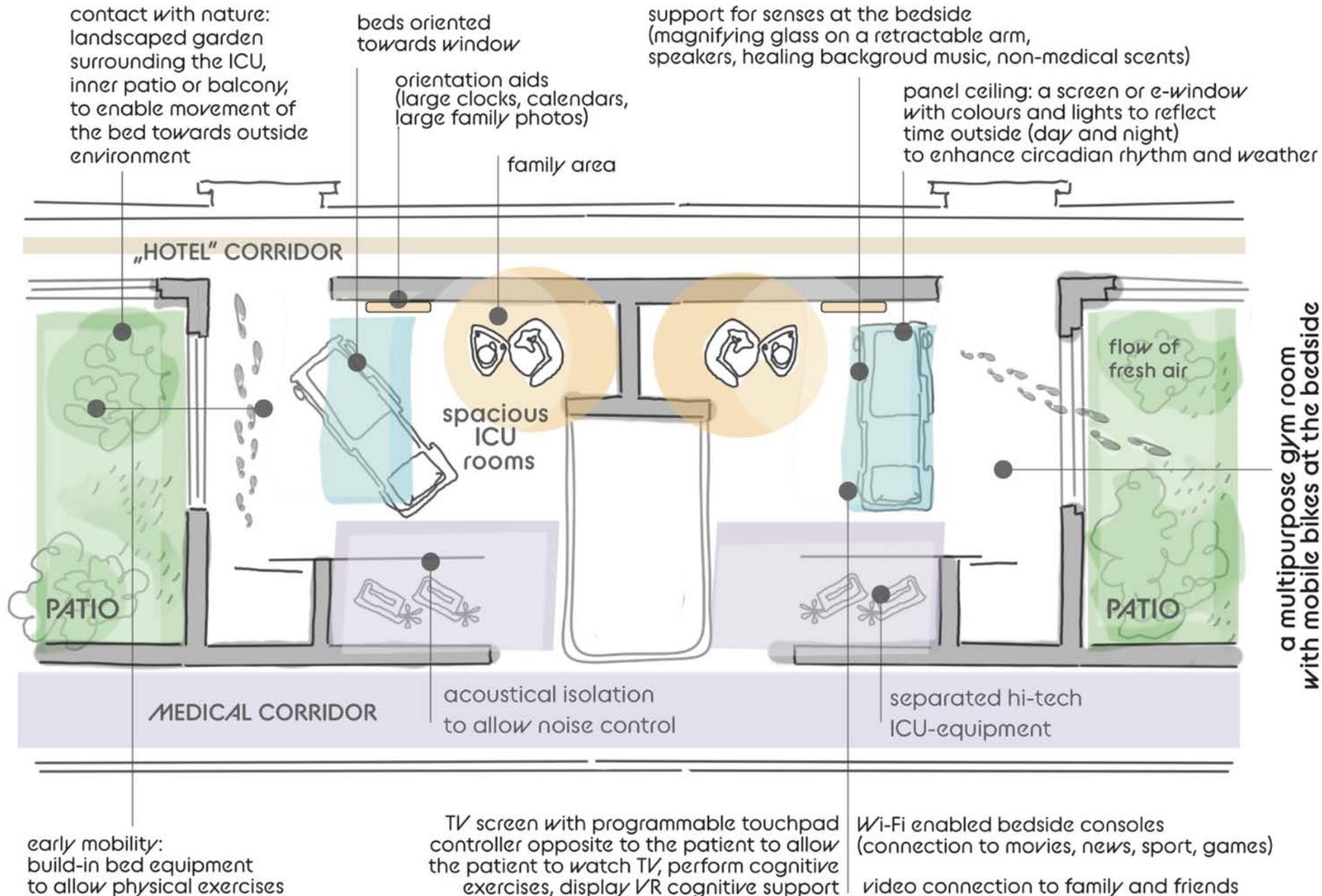
Things that Cheer Me Up

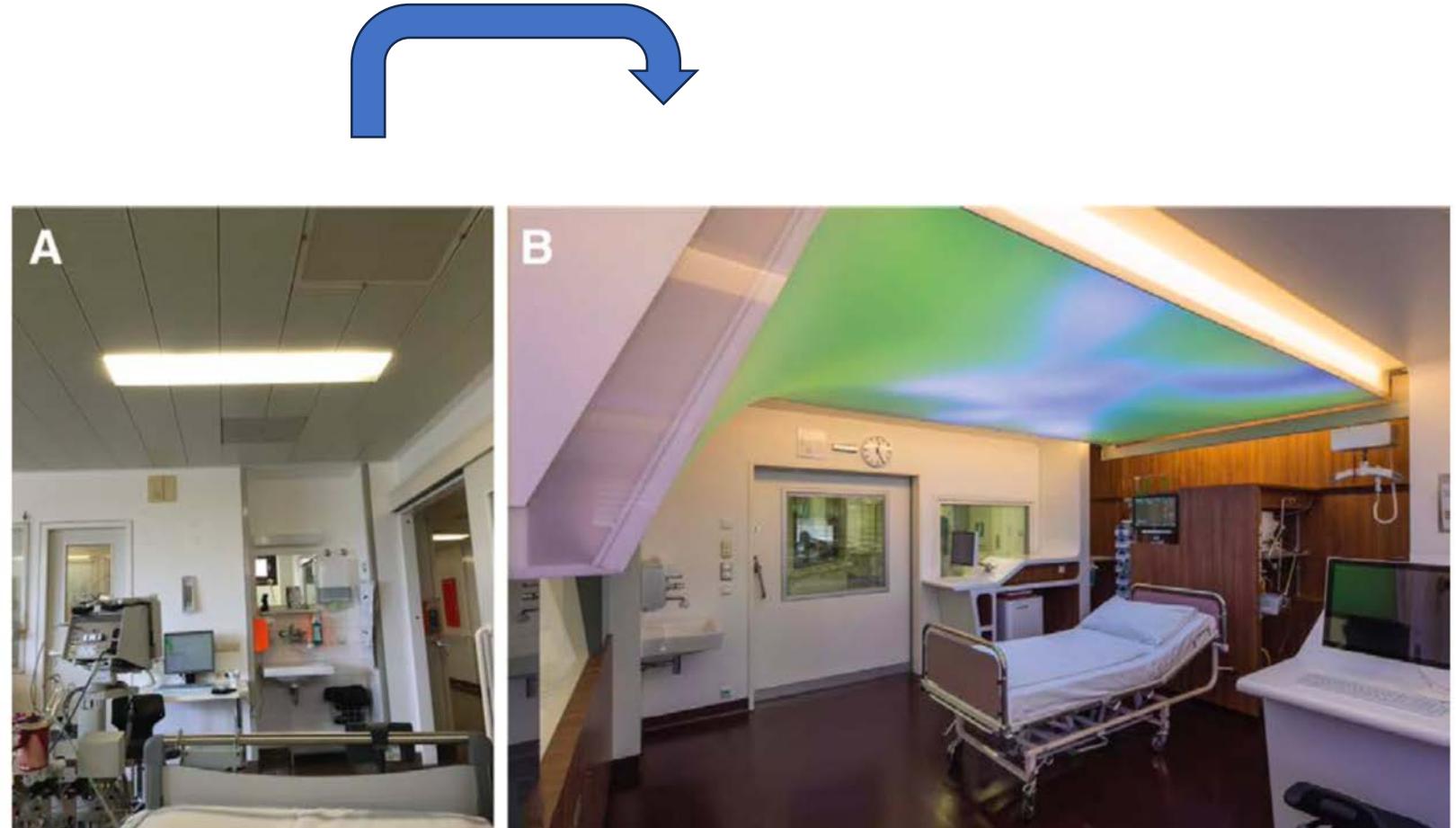
going home from the hospital

Other Things I'd Like You to Know About Me

Married to Dee wife March 26 2006 wife Dee







RESEARCH ARTICLE

Impact of self-perceived discomfort in critically ill patients on the occurrence of psychiatric symptoms in post-intensive care syndrome (PICS): A prospective observational study

Romain Ronflé^{1*}, Julie Hermitant¹, Christine Conti-Zolin¹, Laurent Lefebvre¹, Thibault Helbert¹, Aurélien Culver¹, Florence Molenat¹, Baptiste Borwel², Mohamed Boucekkine³, Pierre Kalfon⁴, Marc Leone^{5*}

PLOS One | <https://doi.org/10.1371/journal.pone.0324099> June 6, 2025

Intensive Care Med (2019) 45:223–235
<https://doi.org/10.1007/s00134-018-05511-y>

ORIGINAL



Tailored multicomponent program for discomfort reduction in critically ill patients may decrease post-traumatic stress disorder in general ICU survivors at 1 year

Pierre Kalfon^{1,2*}, Marine Alessandrini², Mohamed Boucekkine², Stéphanie Renault³, Marie-Agnès Geantot⁴, Stéphanie Deparis-Dusautois⁵, Audrey Berric⁶, Olivier Collange⁷, Bernard Floccard⁸, Olivier Mimo⁹, Amour Julien¹⁰, René Robert¹¹, Juliette Audibert¹, Anne Renault¹², Arnaud Follin¹³, Didier Thevenin¹⁴, Nathalie Revel¹⁵, Marion Venot¹⁶, René-Gilles Patriceon¹⁷, Thomas Signouret¹⁸, Mélanie Fromentin¹⁹, Tarek Sharshar²⁰, Coralie Vigne²¹, Julien Pottecher²², Quentin Levrat²³, Achille Sossou²⁴, Maïté Garrouste-Orgeas²⁵, Jean-Pierre Quenot²⁶, Claire Boulle²⁷, Elie Azoulay¹⁶, Karine Baumstarck², Pascal Auquier² and On behalf of the IPREA-AQVAR Study Group

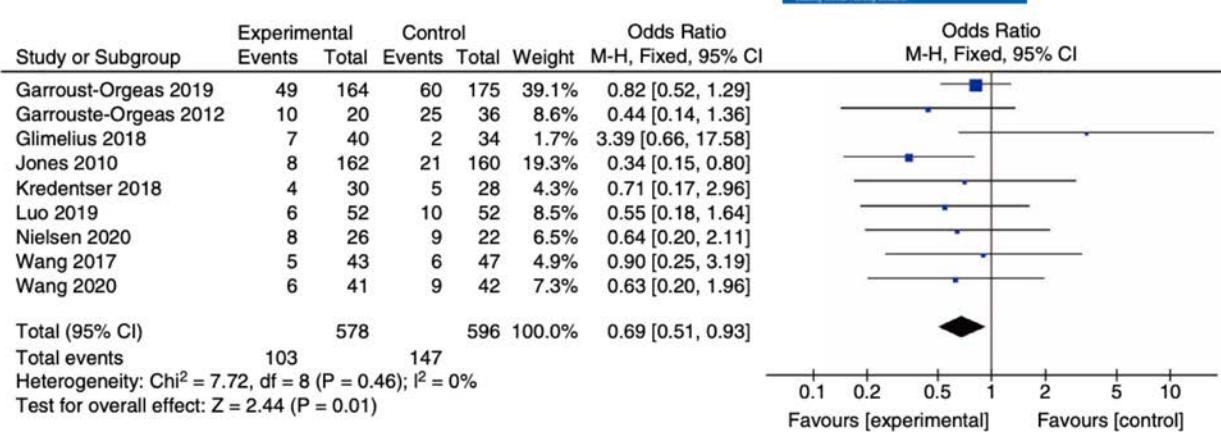


FIGURE 3 Forest map of post-traumatic stress disorder [Colour figure can be viewed at wileyonlinelibrary.com]

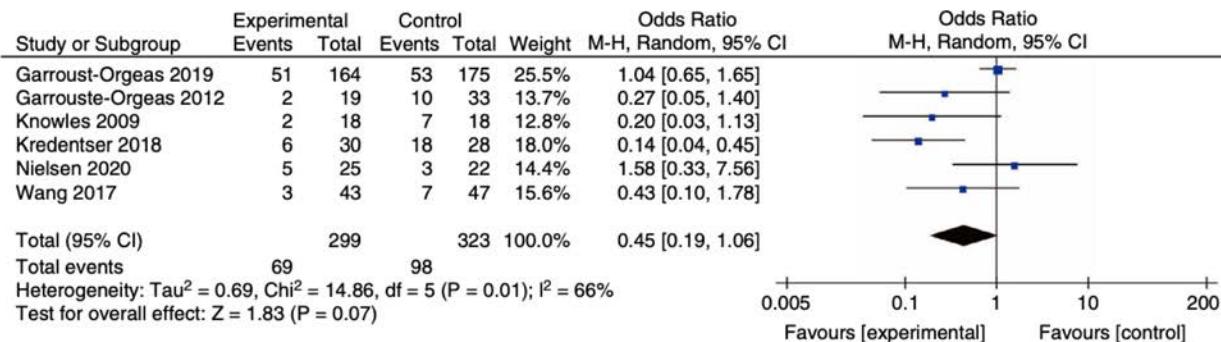
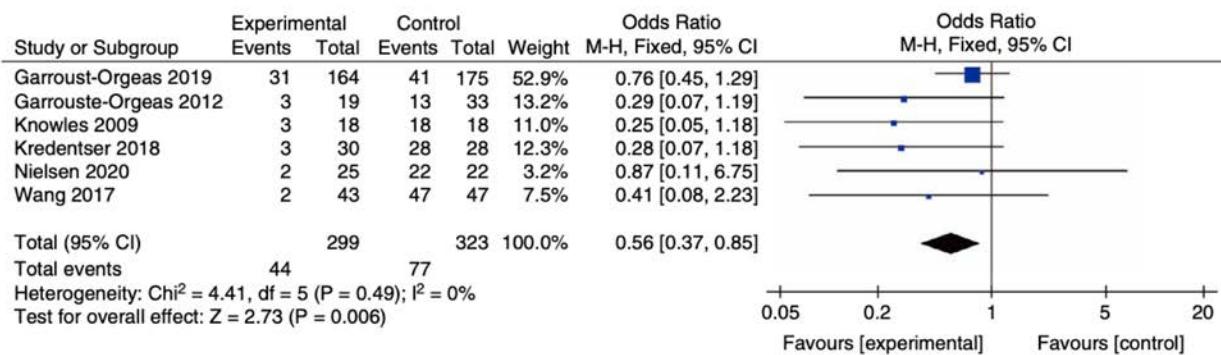
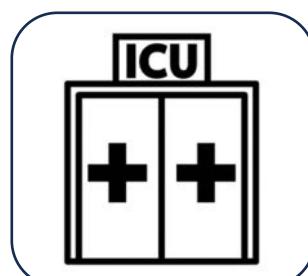
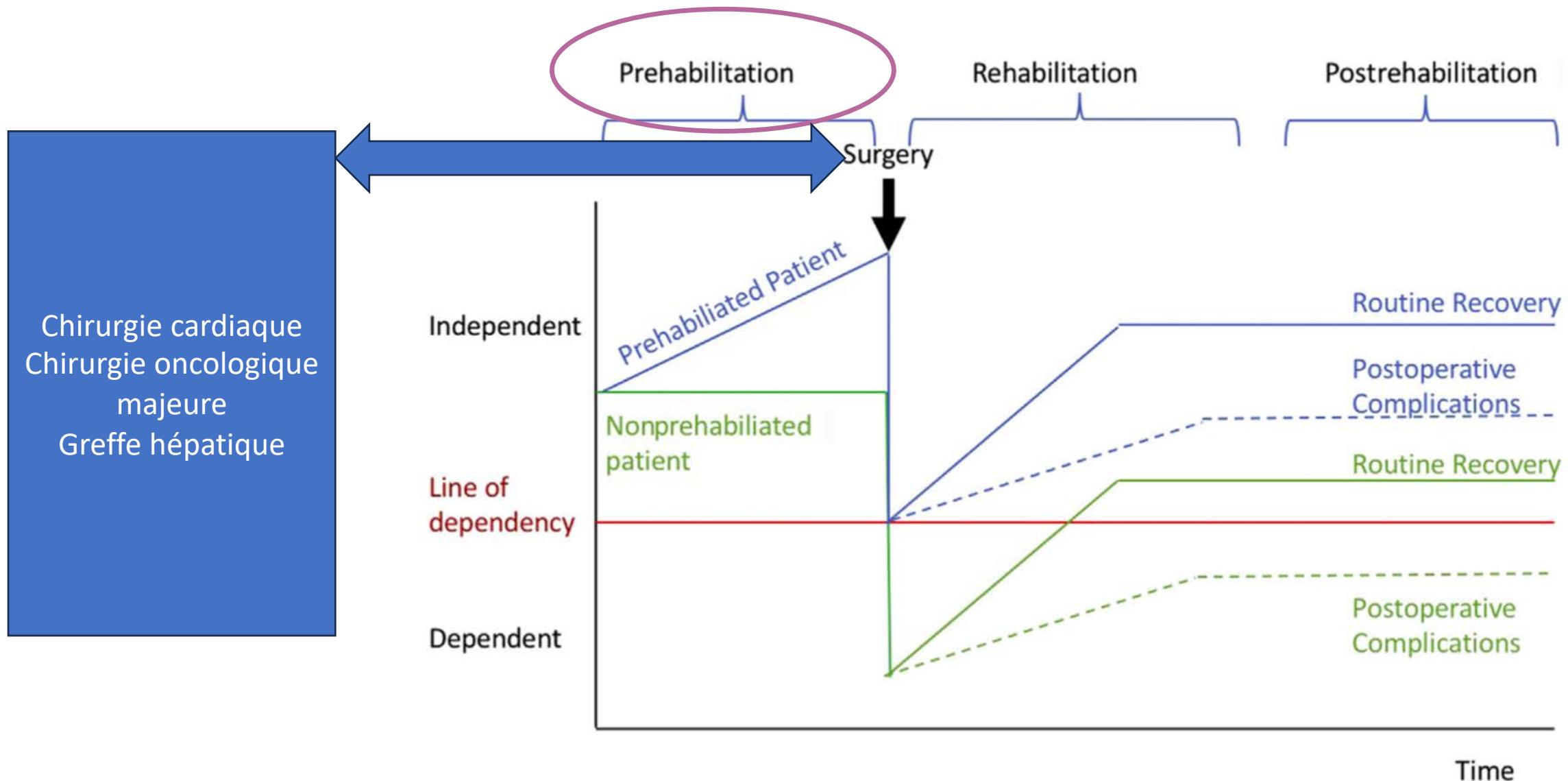


FIGURE 4 Forest map of anxiety incidence rate [Colour figure can be viewed at wileyonlinelibrary.com]

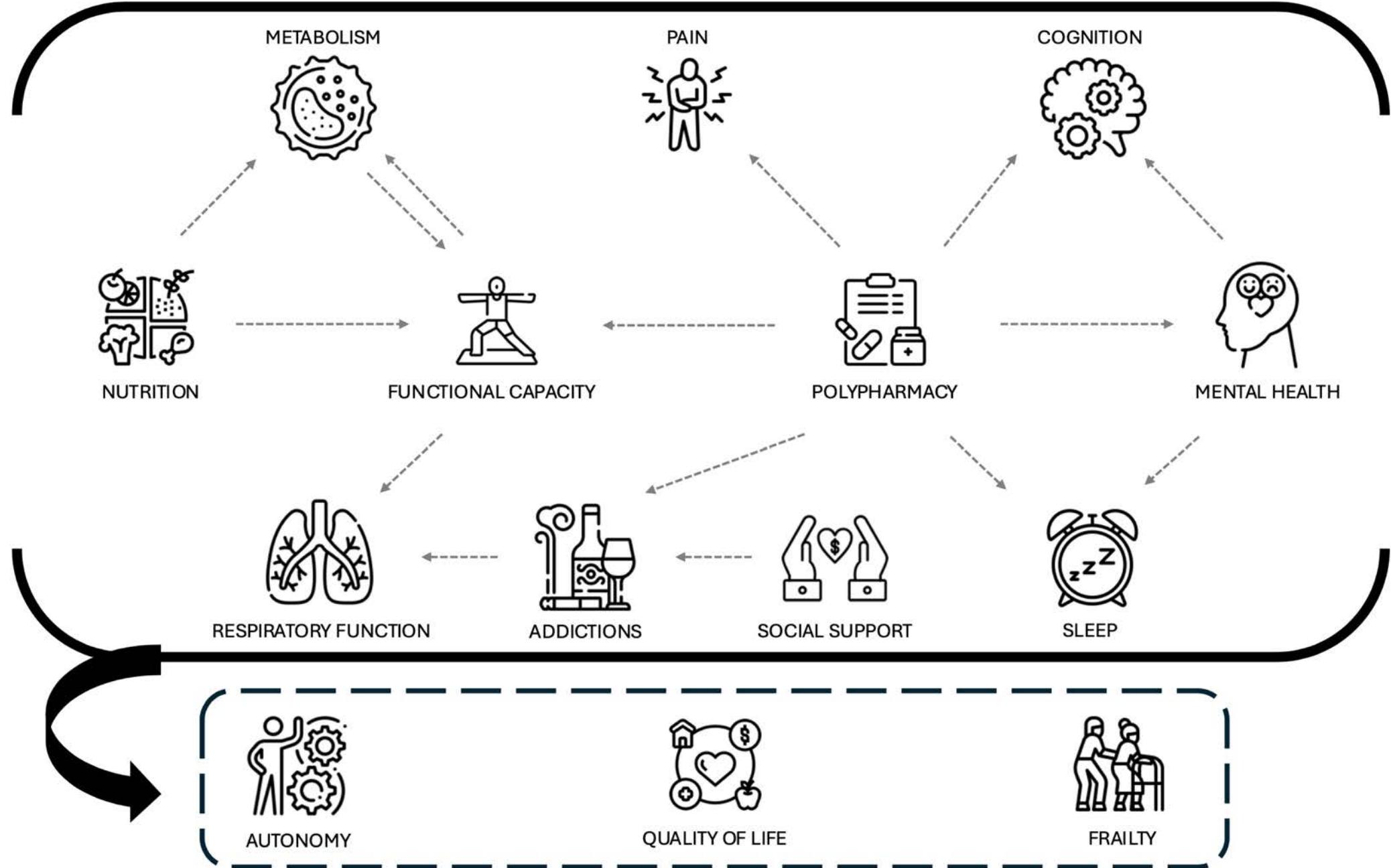


Préhabilitation





PREHABILITATION

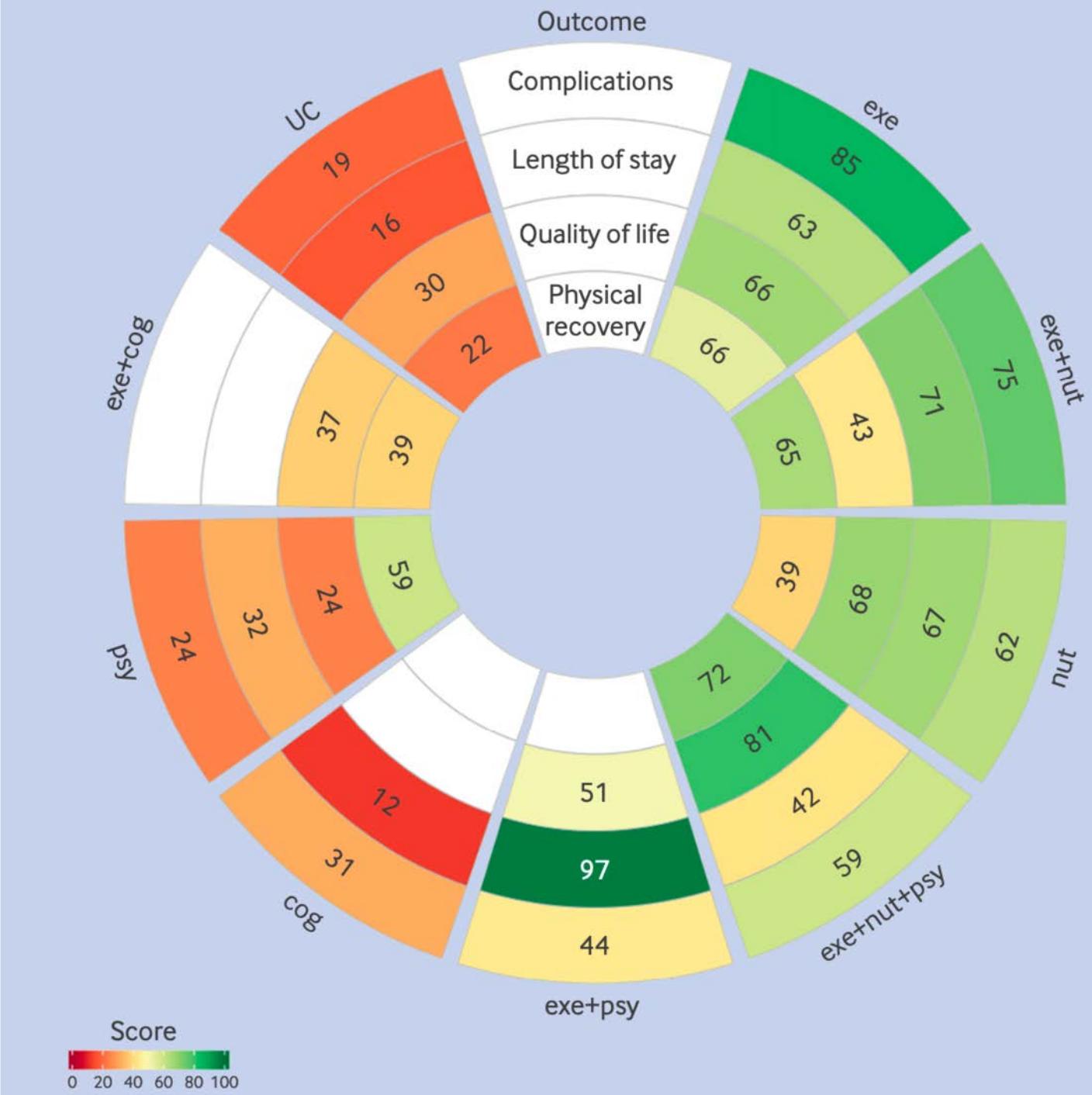


Relative efficacy of prehabilitation interventions and their components: systematic review with network and component network meta-analyses of randomised controlled trials

Daniel I McIsaac,¹ Gurlavine Kidd,² Chelsia Gillis,³ Karina Branje,² Mariam Al-Bayati,² Adir Baxi,² Alexa L Grudzinski,⁴ Laura Boland,⁵ Areti-Angeliki Veroniki,⁶ Dianna Wolfe,² Brian Hutton²

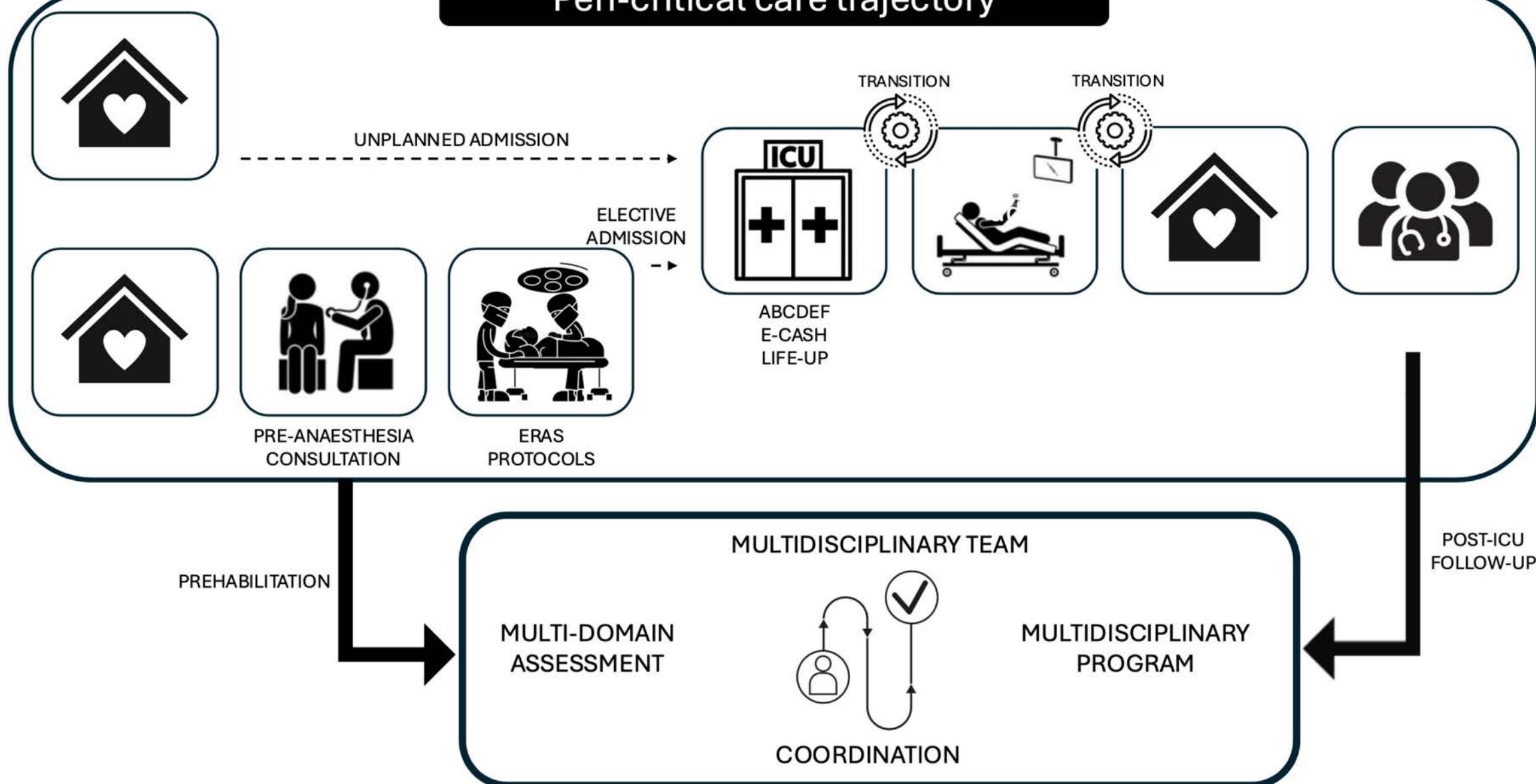
the **bmj** | BMJ 2025;388:e081164 | doi: 10.1136/bmj-2024-081164

Echelle représentant le bénéfice



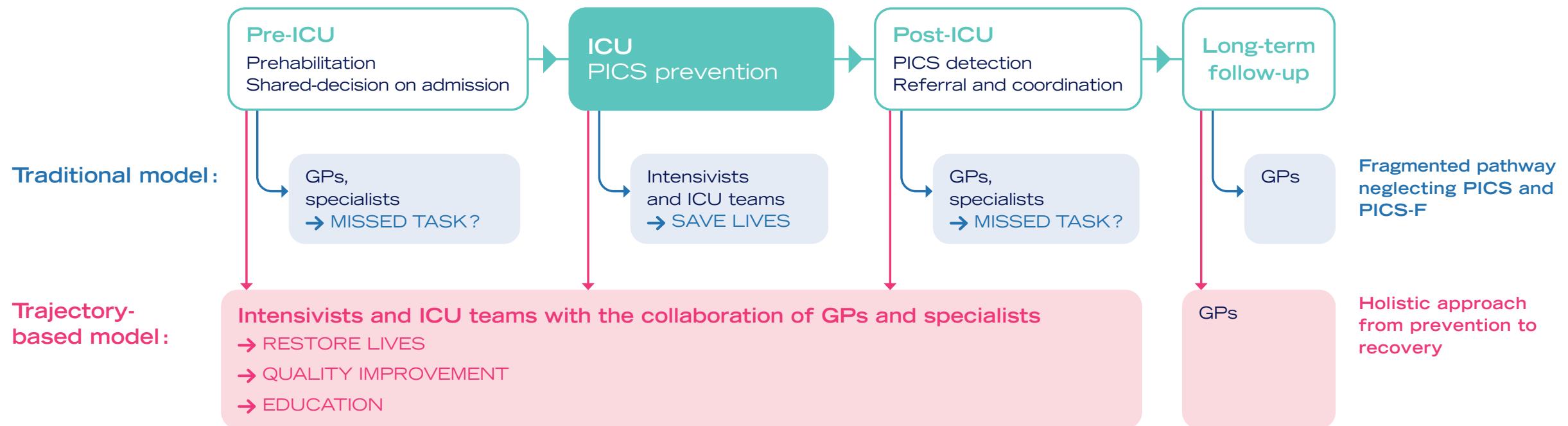
Un trajet
de soins
autour du
PICS

Peri-critical care trajectory

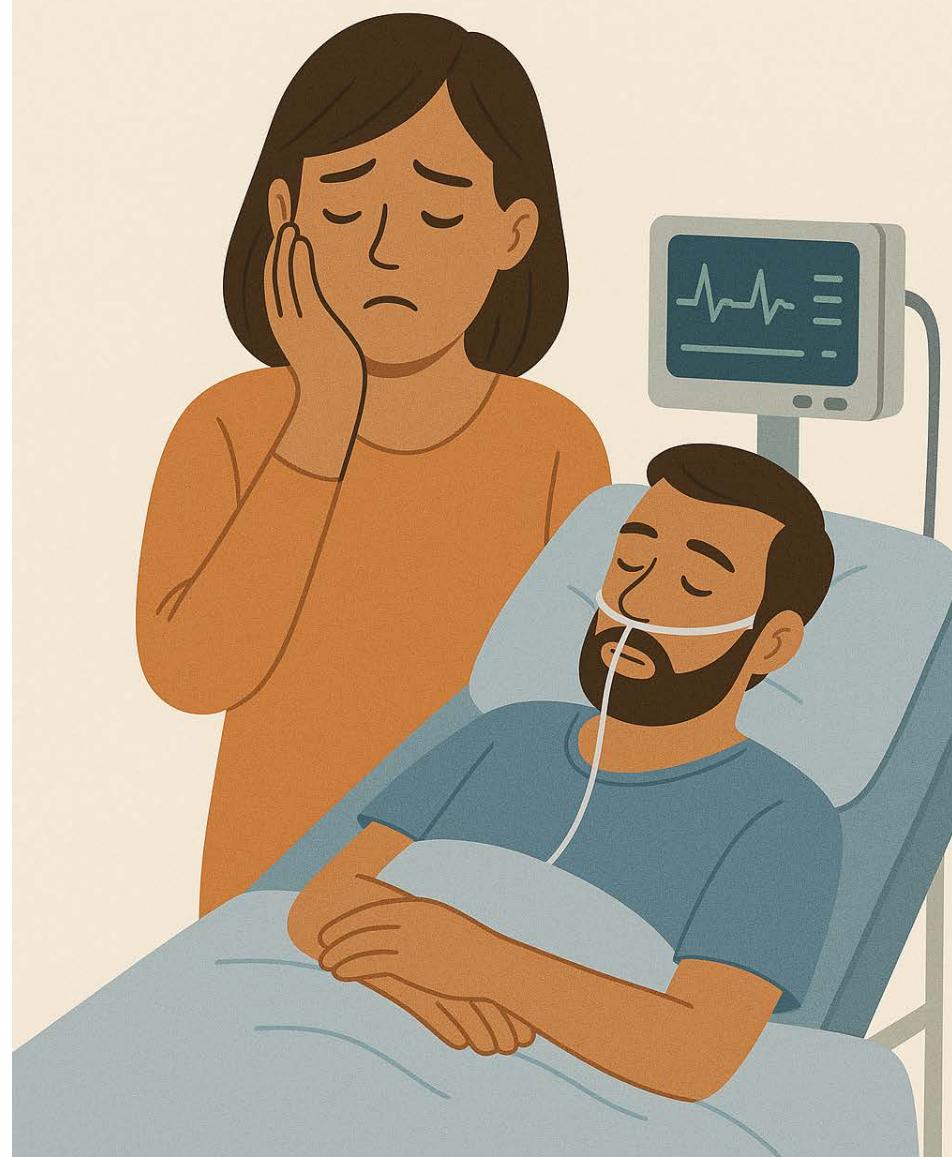


Rethinking the scope of intensive care medicine

Step outside the traditional ICU walls



PICS-family



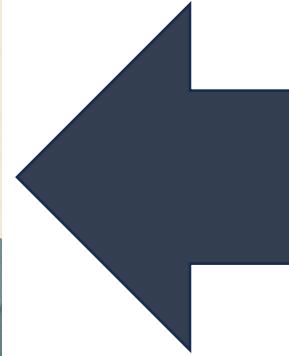
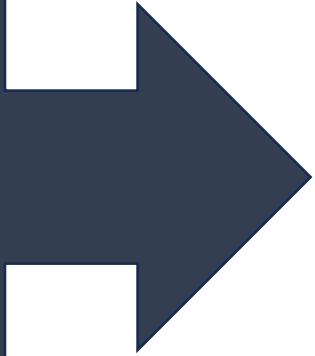
PICS-family



Anxiété
Dépression
PTSD
Troubles du sommeil

Incapacité de travail
Coûts

Vulnérabilité génétique
Atteintes psychologiques préalables
Addictions
Dysfonctionnements familiaux
Manque de support social



HILLY
(atteinte psychologique familiale associée aux soins)

Anxiété
Dépression
PTSD
Troubles du sommeil

Incapacité de travail
Coûts

FAMILY CENTERED CARE

Visites flexibles

Entretiens - Informations justes

Communication empathique, respectueuse

Environnement sécurisé

Décisions partagées

Implication des proches dans les soins

Journal de bord

Implication de psychologues

PICS-family



ORIGINAL

Long-term effects of flexible visitation in the intensive care unit on family members' mental health: 12-month results from a randomized clinical trial



Jennifer Menna Barreto de Souza^{1,2*}, Aline Paula Miozzo¹, Rosa da Rosa Minho dos Santos¹, Duane Mocellin¹, Gabriela Soares Rech¹, Geraldine Trott¹, Gabriel Pozza Müller Estivalete¹, Daniel Sganzerla³, Denise de Souza¹, Regis Goulart Rosa¹ and Cassiano Teixeira^{1,2}

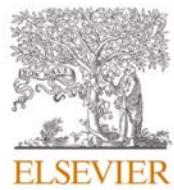
Table 2 Twelve-month outcomes of family members of critically ill patients

	Total (n = 519)	Flexible visitation (n = 288)	Restrictive visitation (n = 231)	Adjusted effect estimate ^a (95% CI)	p value
Post-traumatic stress symptoms					
IES-6 score mean > 1.75—n/total n (%)	126/501 (25.1)	59/281 (21)	67/220 (30.5)	0.91 (0.85;0.98)	0.01
IES-6 score—n assessed	501	281	220	-1.36 (- 2.22; - 0.50)	0.002
Mean (SD)	6.97 (5.39)	6.35 (5.13)	7.76 (5.63)		
Median (IQR)	6 (2; 11)	5 (2; 10)	7 (3; 11)		
Anxiety and depression symptoms					
Anxiety subscale					
HADSA > 7—n/total n (%)	154/500 (30.8)	81/280 (28.9)	73/220 (33.2)	0.93 (0.72; 1.21)	0.59
HADSA > 10—n/total n (%)	78/500 (15.6)	43/280 (15.4)	35/220 (15.9)	0.97 (0.63; 1.49)	0.88
HADS anxiety score—n assessed	500	280	220	-0.55 (- 1.16; 0.06)	0.08
Mean (SD)	6.28 (4.16)	6.02 (4.07)	6.61 (4.26)		
Median (IQR)	6 (3; 8)	5 (3; 8)	6 (4; 9)		
Depression subscale					
HADSD > 7—n/total n (%)	109/501 (21.8)	54/281 (19.2)	55/220 (25)	0.78 (0.60; 1.02)	0.07
HADSD > 10—n/total n (%)	50/501 (9.9)	23/281 (8.2)	27/220 (12.3)	0.61 (0.39; 1)	0.05
HADS depression score—n assessed	501	281	220	-0.65 (- 1.17; - 0.13)	0.01
Mean (SD)	4.77 (3.81)	4.48 (3.59)	5.13 (4.05)		
Median (IQR)	4 (2; 7)	4 (2; 7)	4 (2; 7.3)		

The differing denominators indicate missing data

HADS Hospital Anxiety and Depression Scale, ICU intensive care unit, IES-6 Impact of Event Scale, IQR interquartile range (p25;p75), SD standard deviation

^a Prevalence ratio for categorical outcomes, and mean difference for continuous outcomes. The analysis was performed using generalized estimating equations adjusted by cluster, period, age, gender, previous history of anxiety or depression, and the patient's vital status at 12 months



Family-centered interventions and patient outcomes in the adult intensive care unit: A systematic review of randomized controlled trials



Julia Duong ^a, Gary Wang, MD ^b, Graham Lean, MSc ^a, Douglas Slobod, MD ^c, Michael Goldfarb, MD MSc ^{d,*}

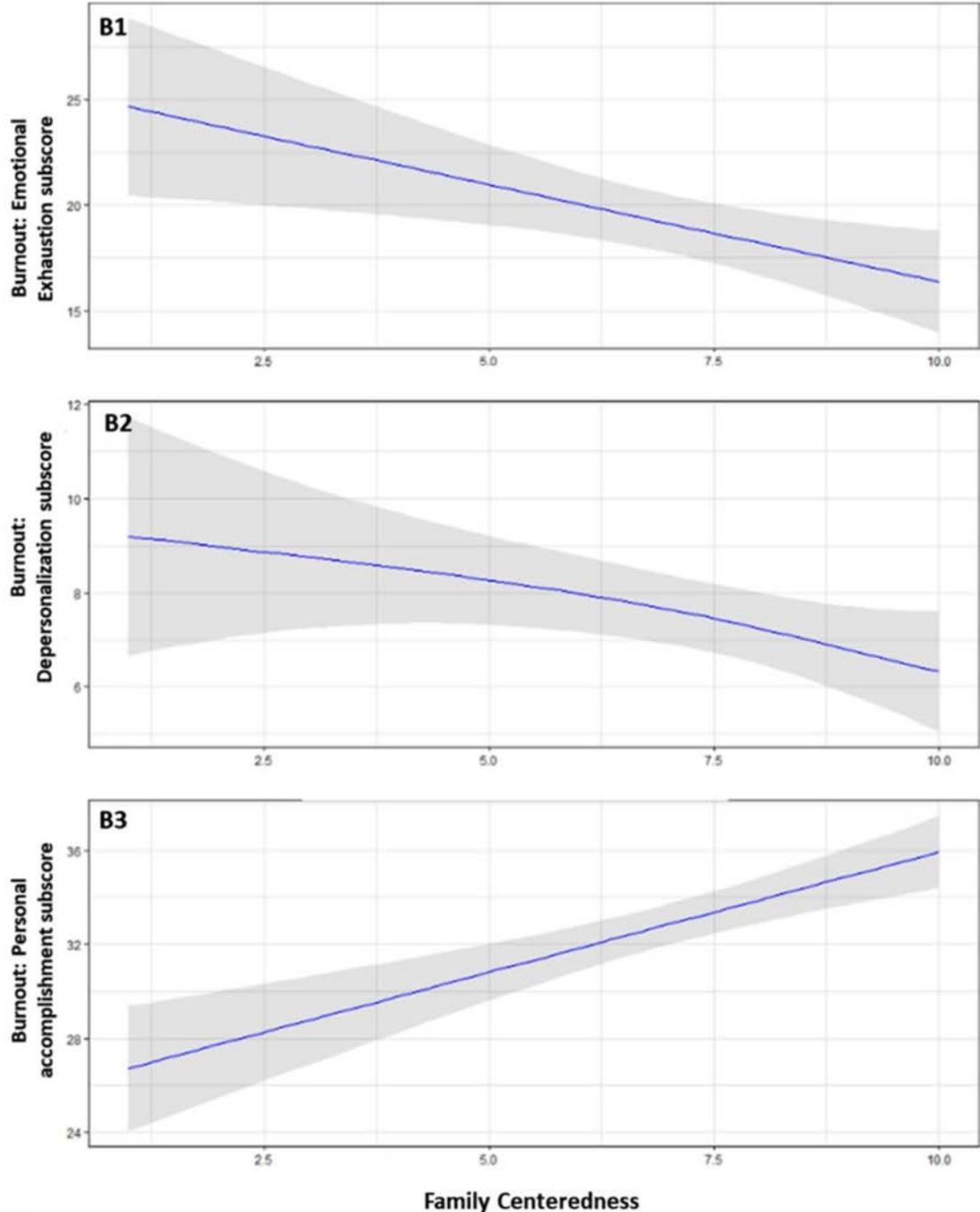
3.1. *Patient-reported outcomes*

There were improvements in at least one patient-reported outcome in 10 of 16 studies (62.5%) that included patient-reported outcomes [13-22]. There were improvements in anxiety ($N = 5$; 434 participants) [13,14,16,18,21], care satisfaction ($N = 4$; 917 participants) [13,15,17,22], post-traumatic stress symptoms ($N = 3$; 470 participants) [16,20,21], depression ($N = 2$; 166 participants) [16,21], and health-related quality of life ($N = 1$; 1096 participants) [19]. Positive patient-

RESEARCH

Open Access

Family centeredness of care: a cross-sectional study in intensive care units part of the European society of intensive care medicine



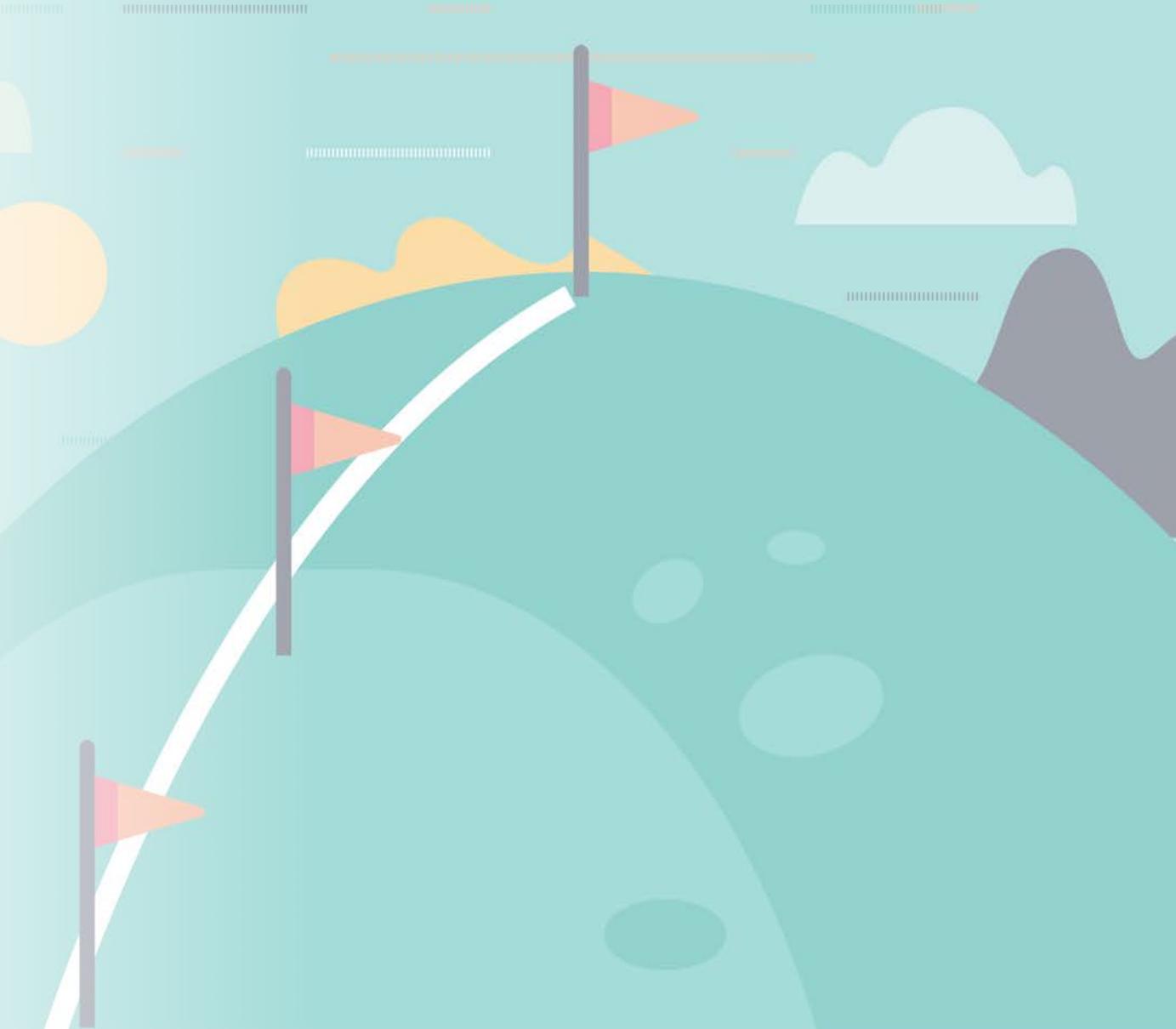
now
IT IS TIME
TO
finish



Le syndrome post-reanimation

(PICS-P et PICS-F)

- **Réalité**
- **Hétérogénéité**
 - Présentations
 - Facteurs de risques
- **Prévention**
 - Pas toujours une réalité
 - Sur mesure
- **Trajet spécifique**
- **Education nécessaire**





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Comment est perçu le suivi post-réa?



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