

# Service de médecine intensive adulte



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La coordination des séjours pour les Chronically Critically Ill patients :  
un programme dédié



E Favre

A Fishman



Pr P Eckert

A Martinez

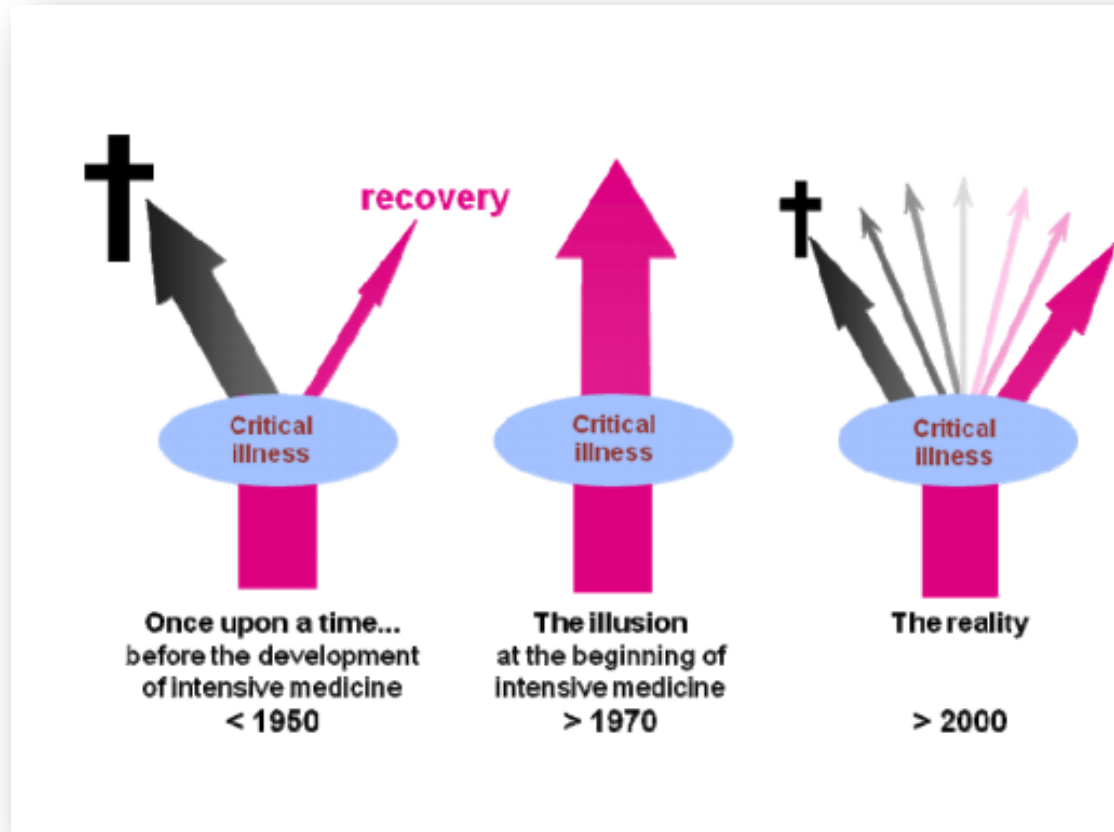


# Contexte des soins intensifs





# The dream of the intensivist



Merlani P, Conti M, Ricou B. After ICU. *ICU Management* . 2011, vol. 3, p. 6-8

*"Created a new population who are chronically critically ill"*

Nierman DM. A structure of care for the chronically critically ill. *Crit Care Clin* 2002;18:477-491.

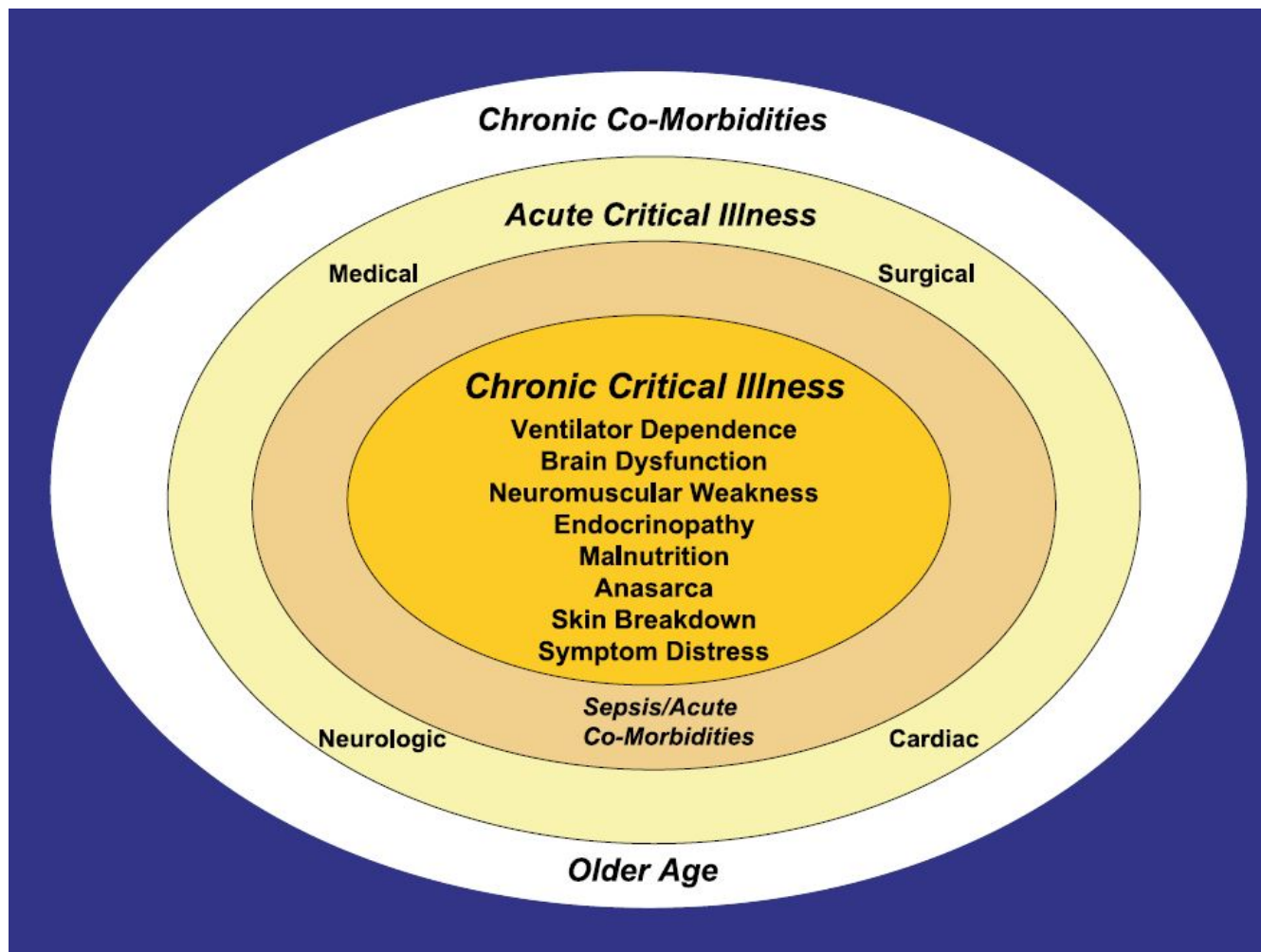


# Définition

The definition of the “**chronically critically ill patient**” was coined by Girard and Raffin **in 1985** in an article describing a set of patients who **remained dependent on vital support treatments** after an acute critical disease that required admission to the ICU

Girard K, Raffin TA. The chronically critically ill: to save or let die? *Respir Care* 1985;30:339–347.



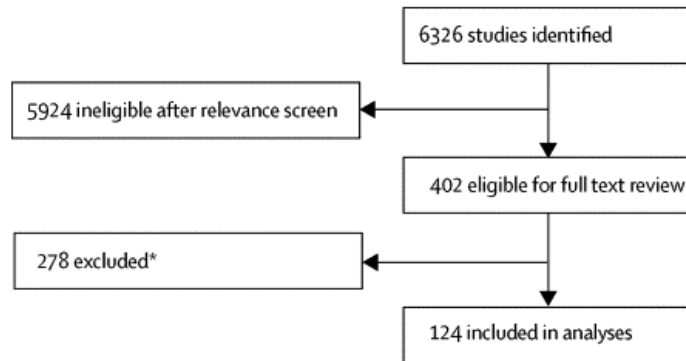


Chronic critical illness is a **devastating condition:** **mortality** exceeds that for most malignancies, and **functional dependence** persists for most survivors

Profil  
du Chronically  
Critically Ill Patient  
ou Patient Long  
Séjour (PLS)



# CII caractéristiques et survie



**Figure 1 Study flow chart**

The 124 studies included a total of 318 621 patients from 16 different countries: 62 from the USA, 16 from Taiwan, 11 from Italy, nine from Germany, seven from the UK, three from Australia, three from France, two from Argentina, two from Canada, two from Israel, two from Spain, one from Brazil, one from South Korea, one from the Netherlands, one from Saudi Arabia, and one from the United Arab Emirates. Among the 124 studies, 56 were from acute care hospital ICUs, 25 from ventilator weaning units in acute care hospitals, 36 from post-acute care hospitals, and seven from a combination of these study settings. [Table 2](#) displays pooled data for patient characteristics.

- Age 64 ans (63-66)
- Femmes 44 % (42-47)
- APACHE II 19 (18-20)
- Mortalité à la sortie de l'hôpital 26% (95% CI 24-28)
  - 57% sevrés de la Ventilation Mécanique : 80 études
  - 66% mortalité après au mois 1 an : 18 études (1- 2 ou 4 ans)



# CI caractéristiques

**TABLE 1. OUTCOMES OF CHRONIC CRITICAL ILLNESS RELATIVE TO COHORT DEFINITION\***

Cohort Definition	Ventilation for $\geq 14$ d		Ventilation for $\geq 21$ d		Tracheotomy for Prolonged Mechanical Ventilation	
	Combes <i>et al.</i> (34)	Carson <i>et al.</i> (25)	Cox <i>et al.</i> <sup>†</sup> (24)	Cox <i>et al.</i> <sup>†</sup> (24)	Engoren <i>et al.</i> (14)	
Study (reference)	Combes <i>et al.</i> (34)	Carson <i>et al.</i> (25)	Cox <i>et al.</i> <sup>†</sup> (24)	Cox <i>et al.</i> <sup>†</sup> (24)	Engoren <i>et al.</i> (14)	
n	347	200	114	267	347	
Age (yr), median (IQR) or mean $\pm$ SD	63 $\pm$ 14, 67 $\pm$ 13 <sup>‡</sup>	58 (42–69)	66 (47–74)	66 (45–75)	64, 71 <sup>§</sup>	
Duration of ventilation, median (IQR) or mean $\pm$ SD	36 $\pm$ 25, 37 $\pm$ 28 <sup>‡</sup>	35 (26–51)	27 (23–36)	16 (10–24)	23–30 <sup>  </sup>	
Hospital length of stay, median (IQR)	—	51 (36–72)	39 (30–52) <sup>‡</sup>	29 (22–38)	28–37 <sup>  </sup>	
Died in hospital, %	43	41	31	20	22	
Discharged home, %	—	11	4	7	—	
Alive at 12 mo, %	32	48	42	52	50	

# CCI caractéristiques

**Table 2: Comparison of Characteristics and Outcomes: The Chronically Critically Ill and the Critically Ill**

Characteristic	Chronically Critically Ill	Critically Ill
Average age	65 y <sup>3</sup>	62 y <sup>102</sup>
Gender	Female 53% <sup>1</sup>	Male 53% <sup>102</sup>
APACHE III score	75.9 ± 16.1 <sup>3</sup>	50 <sup>10</sup>
Number of comorbidities	3.9 <sup>17,22</sup>	3 or less <sup>101,102</sup>
Cognitive impairment	20%–75% <sup>2,14,24</sup>	No data from reports of overall ICU patients
Length of ICU stay	15–25 d <sup>12,116,31</sup>	4–8 d <sup>4,16,27,102</sup>
Length of hospital stay	21–37 d <sup>1,2</sup>	6–10 d <sup>102</sup>
Hospital mortality	37%–60% <sup>113</sup>	10%–30% <sup>102</sup>
Postdischarge mortality	>50% at 6 mo <sup>4</sup> 37%–72% at 1 y <sup>2,12,35,38,52,55,56</sup>	10%–36% at 1 y <sup>4</sup>
Functional status at 1 y	11%–28% independent in 3 of 4 activities of daily living (ie, bathing, toileting, feeding, and transferring) <sup>3,12</sup>	Not clear from published reports of overall ICU patients
Readmission rates	40% within 6 mo <sup>2,7,38,51</sup>	1%–19% <sup>103</sup>
Symptom prevalence	90% <sup>5,14,17,29</sup>	50%–75% <sup>15,44,45</sup>
Number of patients reporting at least 1 distressing symptom (eg, pain, fatigue, dyspnea, or thirst)		

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The syndrome of chronic critical illness has well-documented **emotional, social, and financial burdens** for individuals, **caregivers**, and the **health care system.**



# Facteurs influençant les infirmiers de soins intensifs

**Table 1** Factors leading nurses to a feeling of frustration with chronically critically ill patients

Patient characteristics	Nursing and organisational characteristics
Slow progress	Loss of information over time
Specific problems such as	Poor care continuity and coordination
Muscle wasting	Lack of competency in specific techniques such as
Immobility	Tilt tables
Communication impairment	Swallowing rehabilitation
Slow ventilator weaning	Poor knowledge about specific needs and adapted nursing interventions
Sleep disturbances	ICU culture values fast-paced care and recovery
Poor wound healing	
Swallowing difficulties	
Diarrhoea	
Mental problems such as	
Memory loss	
Difficulty concentrating	
Confusion	
Depression	
Frustrated families	

# LE SMIA du CHUV en 2018



2'000



35



250



45

DMS 5.51 J

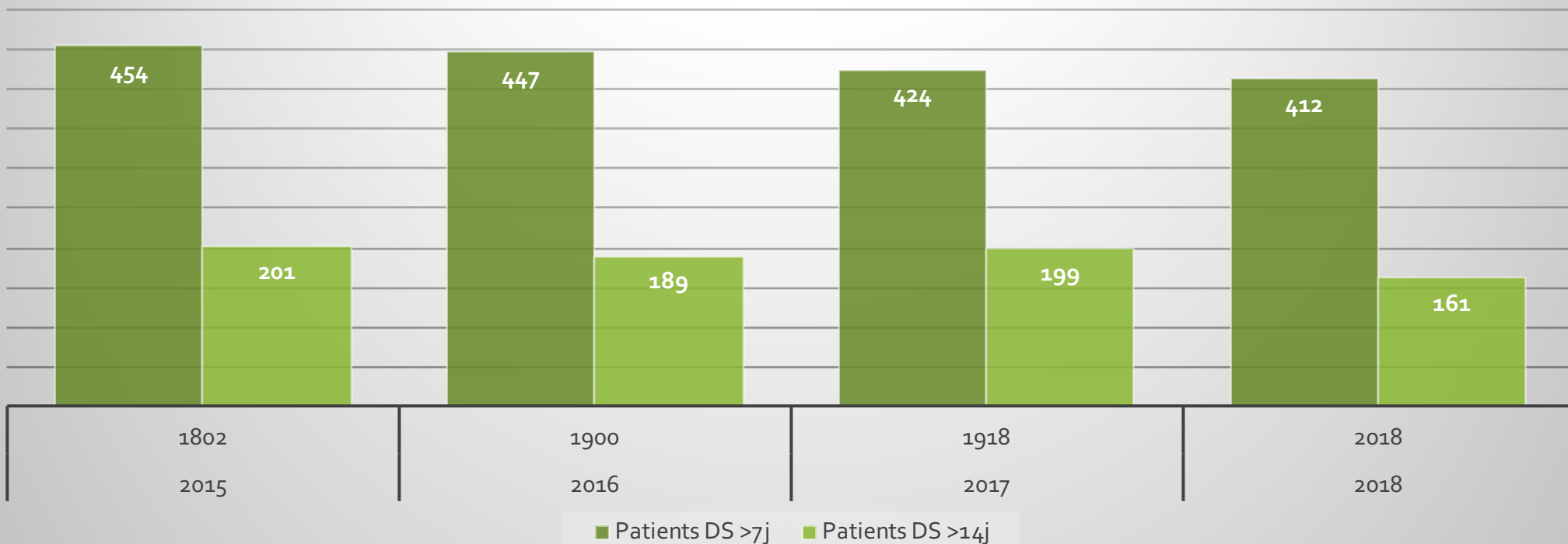
SAPS moyen 40.5

Mortalité 14.2 %



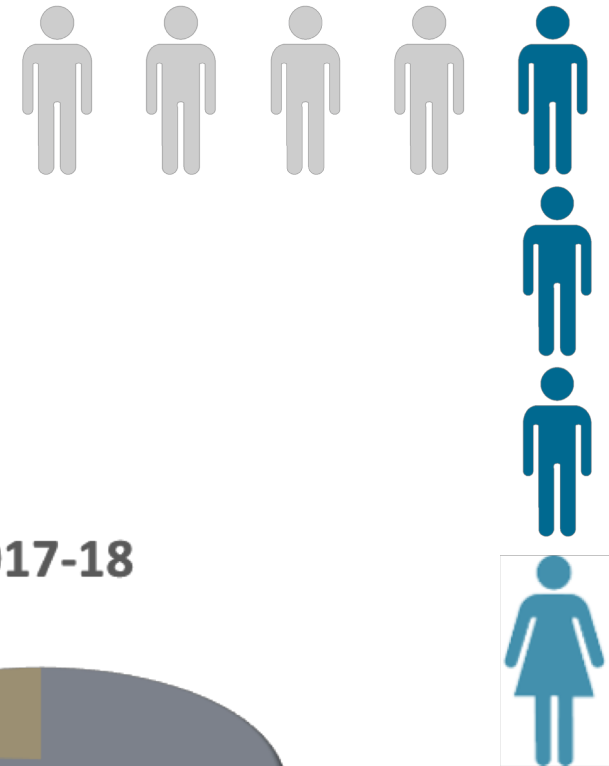
# Les PLS

Nombre de patients long séjours selon durée de séjour sur nombre de patients admis au SMIA

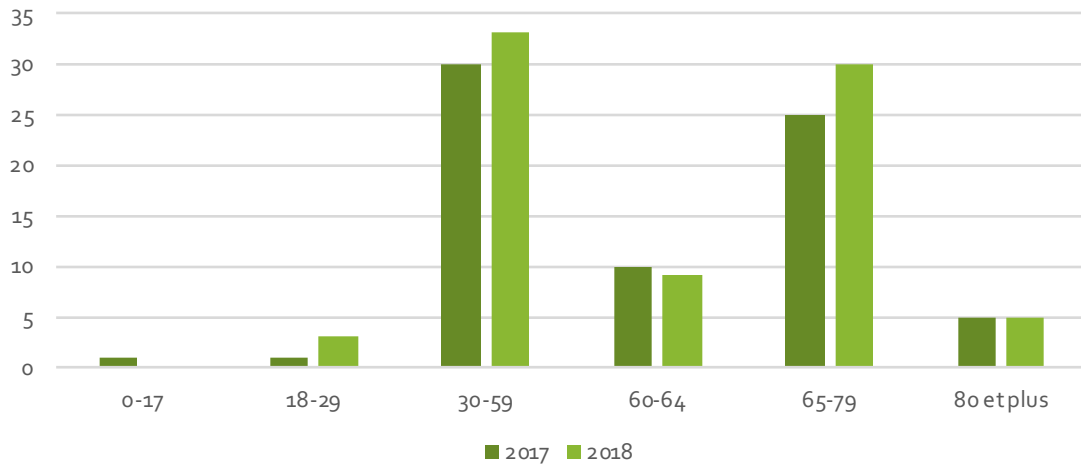




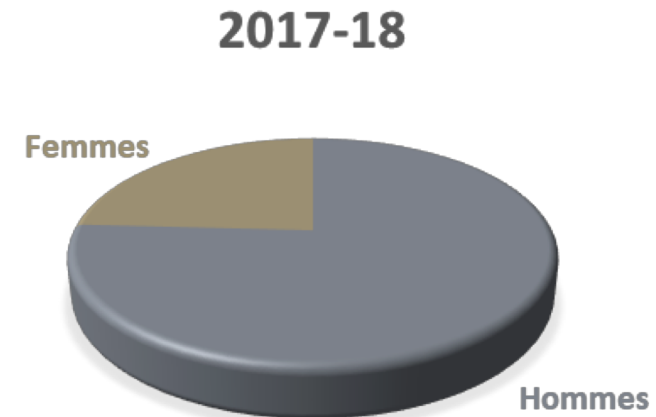
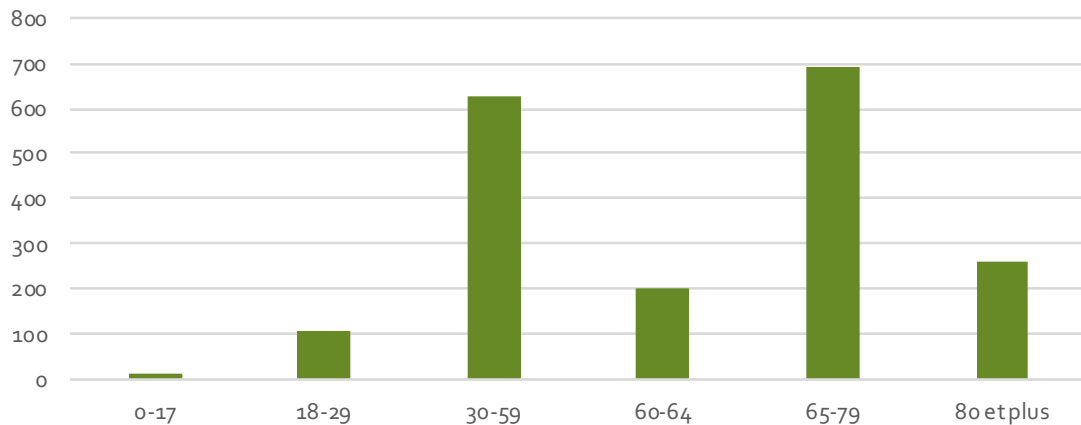
# Descriptif des PLS: âge



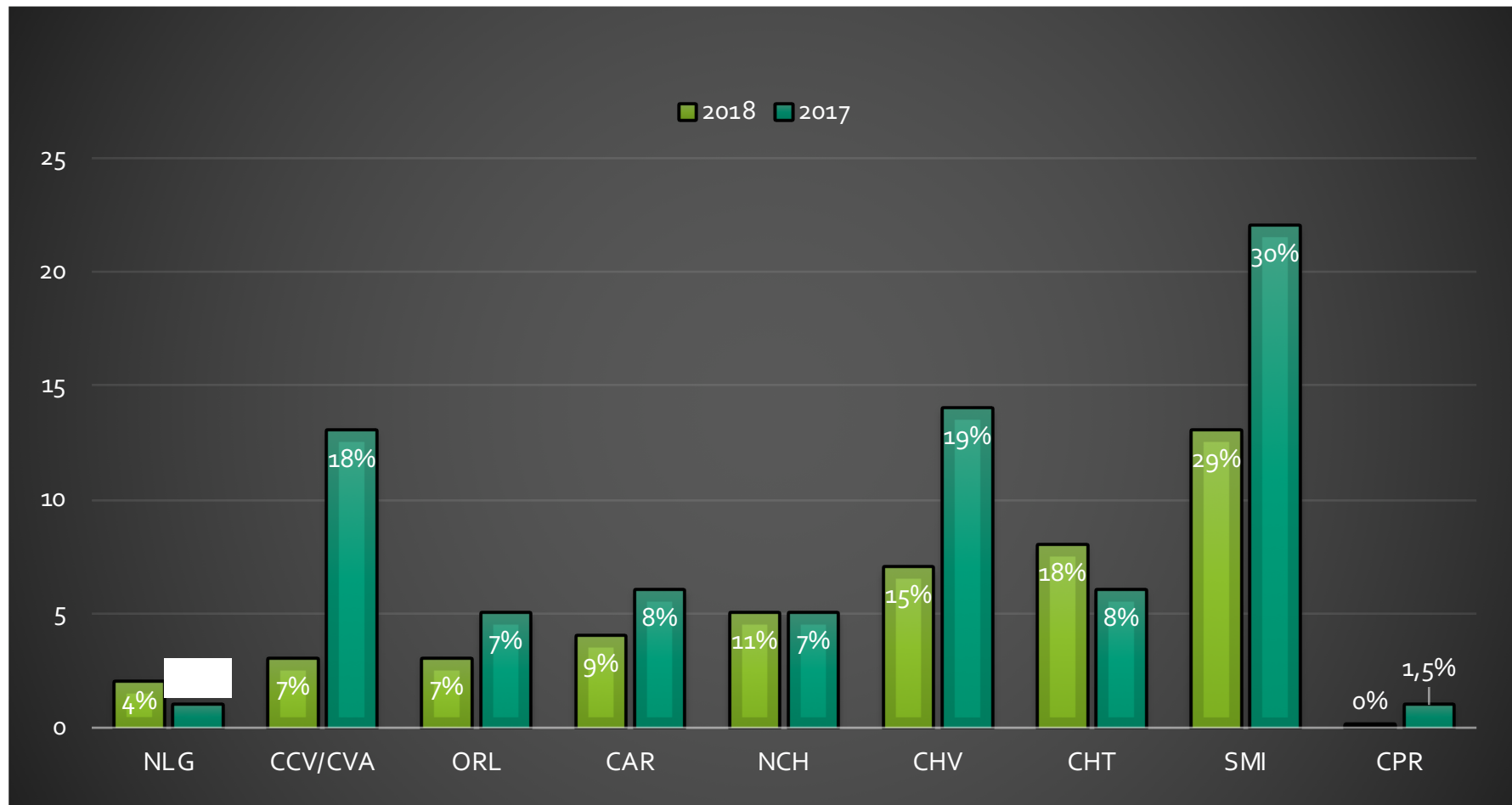
Distribution des âges PLS



Distribution des âges SMIA 2017



# Descriptif des PLS : filières de soins



# CONSTRUIRE UN DISPOSITIF ADAPTÉ AUX PLS

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Service de médecine  
intensive adulte

# Besoins

The **years of expertise** taught us the **specific needs** for the care of PLSs: **multidisciplinary management**, recovery of physical and psychological independence, early rehabilitation, **sleep**, relationships with **family** members, **planning** for the future, and the spiritual dimension.



# Besoins

«Les patients long séjour» d  
cadre pas avec les voies d  
plus des résultats médiocr  
Une attention particulière d  
des soins afin de répondre au

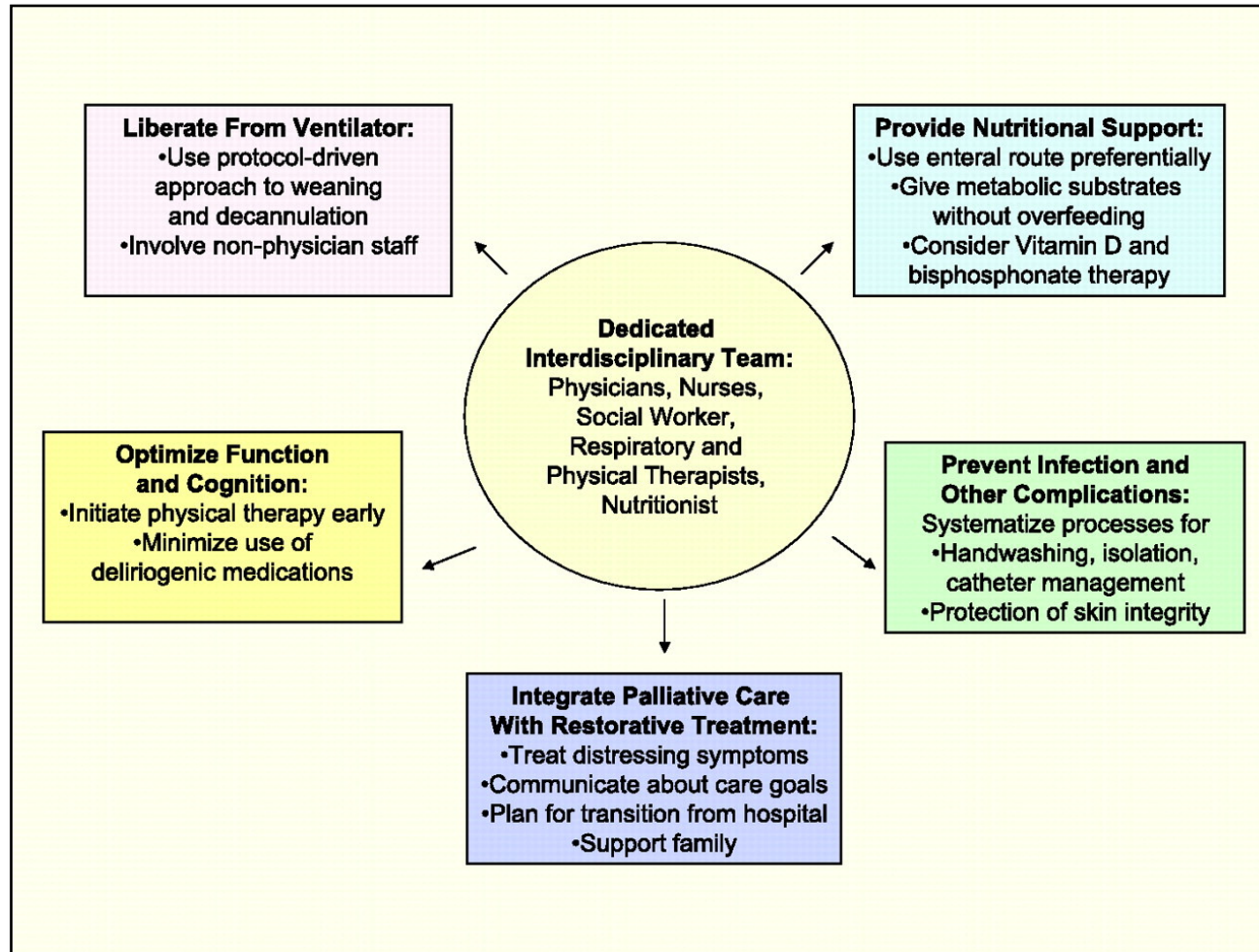
Equilibrer les différentes priori  
du patient en USI nécessite que  
besoins physiologiques, psychos



prolongé  
fraction des  
texte des soins.

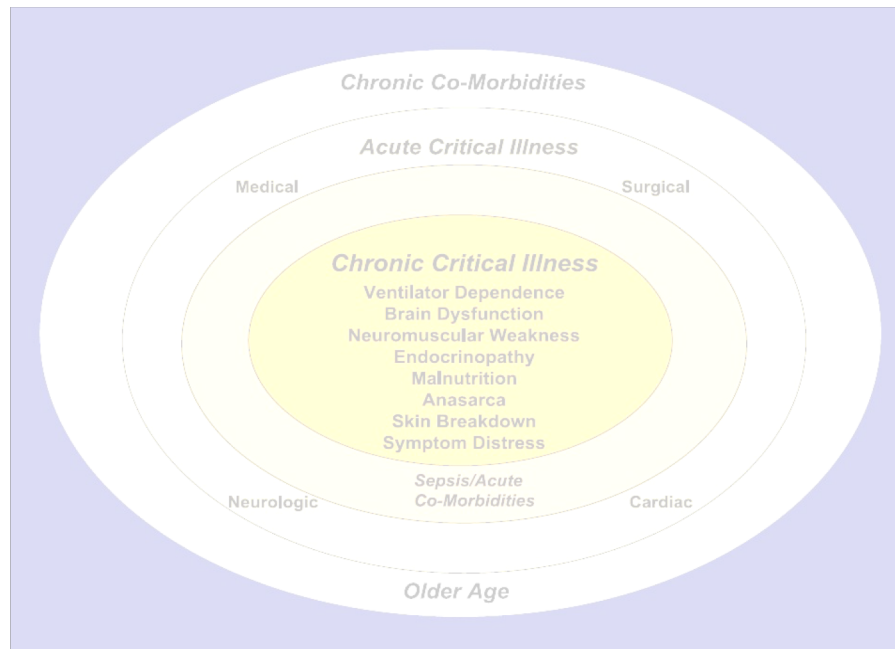
New Zealand

# Buts pour PLS



**Figure 2.**

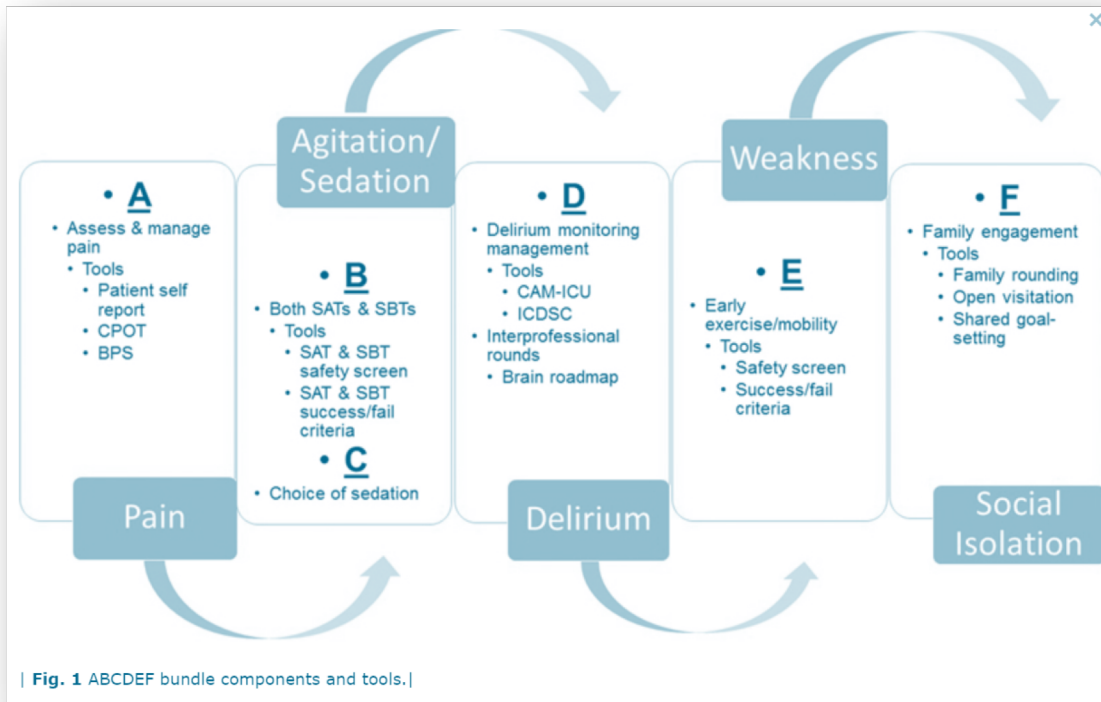
Comprehensive care for the chronically critically ill. Comprehensive care for the chronically critically ill includes multiple components, as illustrated here and discussed more fully in text, with five key goals: ventilator liberation, nutritional support, cognitive and functional recovery, prevention of complications, and attention to palliative needs. Given the unique and complex challenges, a dedicated interdisciplinary team of professionals may be best equipped to provide this care.



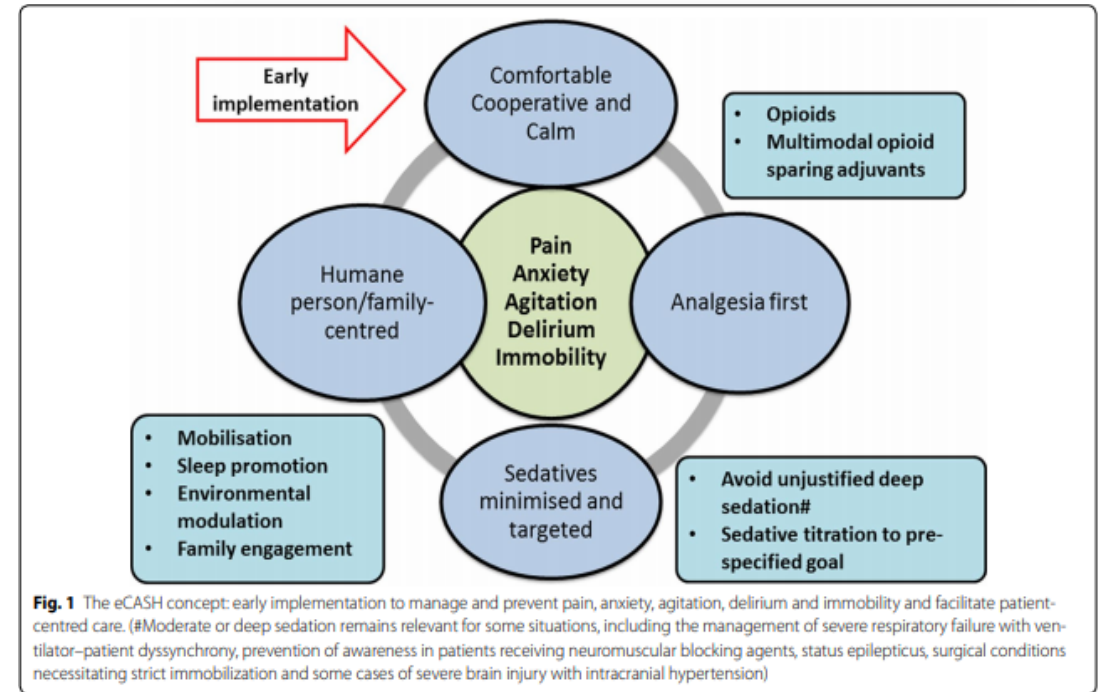
A "mobile" team  
**led by advanced practice nurses**  
using a **protocol-based** approach  
**improved outcomes** and reduced  
costs for ICU patients requiring  
mechanical ventilation for more than 3  
days



# Les approches à considérer



Adapting the ABCDEF Bundle to Meet the Needs of Patients Requiring Prolonged Mechanical Ventilation in the Long-Term Acute Care Hospital Setting: Historical Perspectives and Practical Implications. Balas & al. *Respir Crit Care Med* 2016; 37(01): 119-135

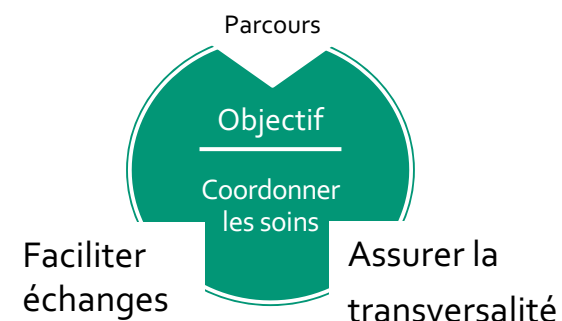
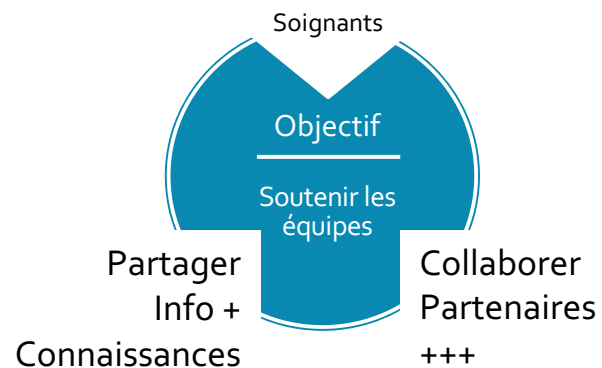
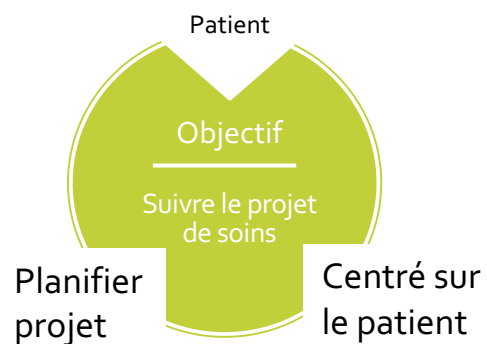


Comfort and patient-centred care without excessive sedation: the eCASH concept Vincent & al. *Intensive Care Medicine* Vol 42, Issue 6 / June 2016 Pages 962 - 971

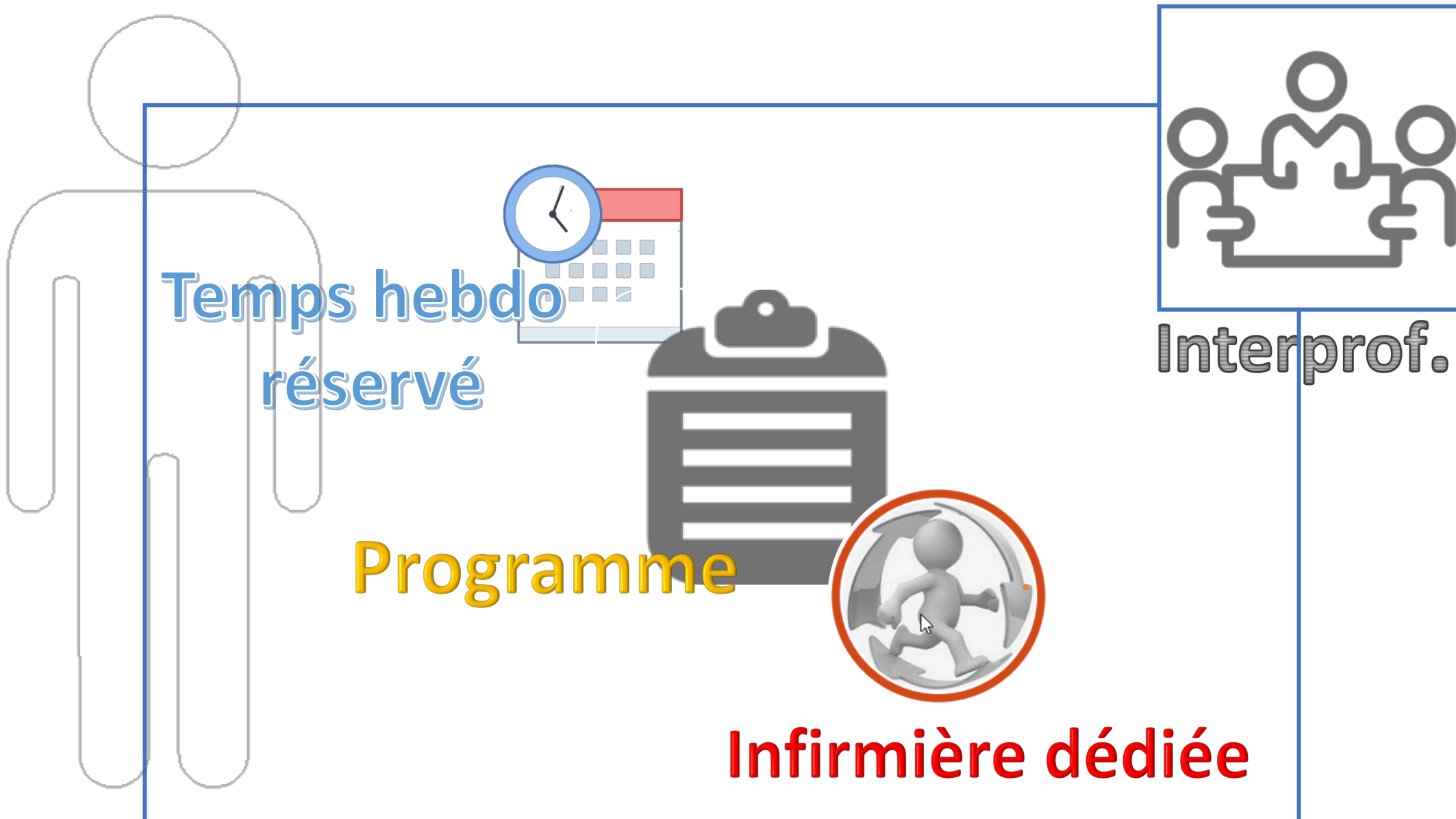


# Objectifs du dispositif PLS

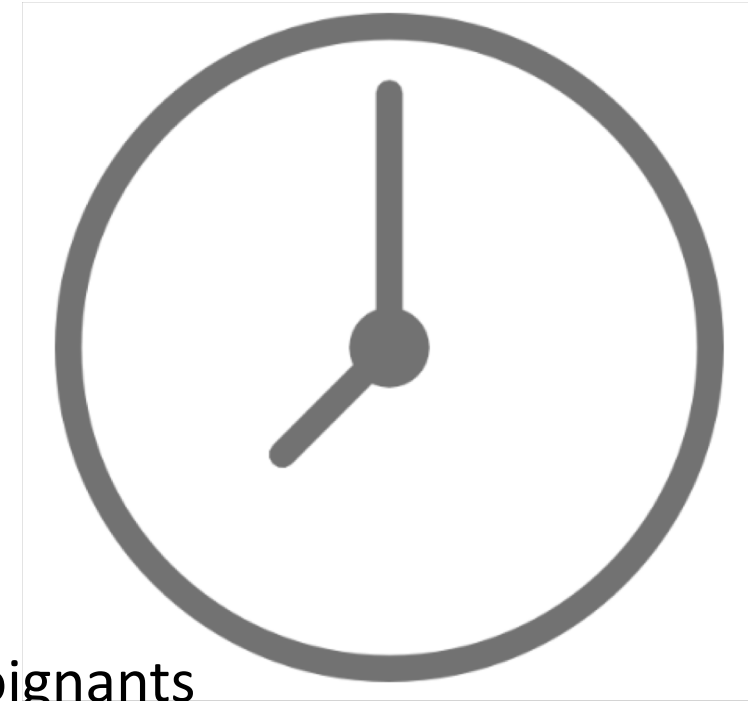
## Construction de compétences spécifiques

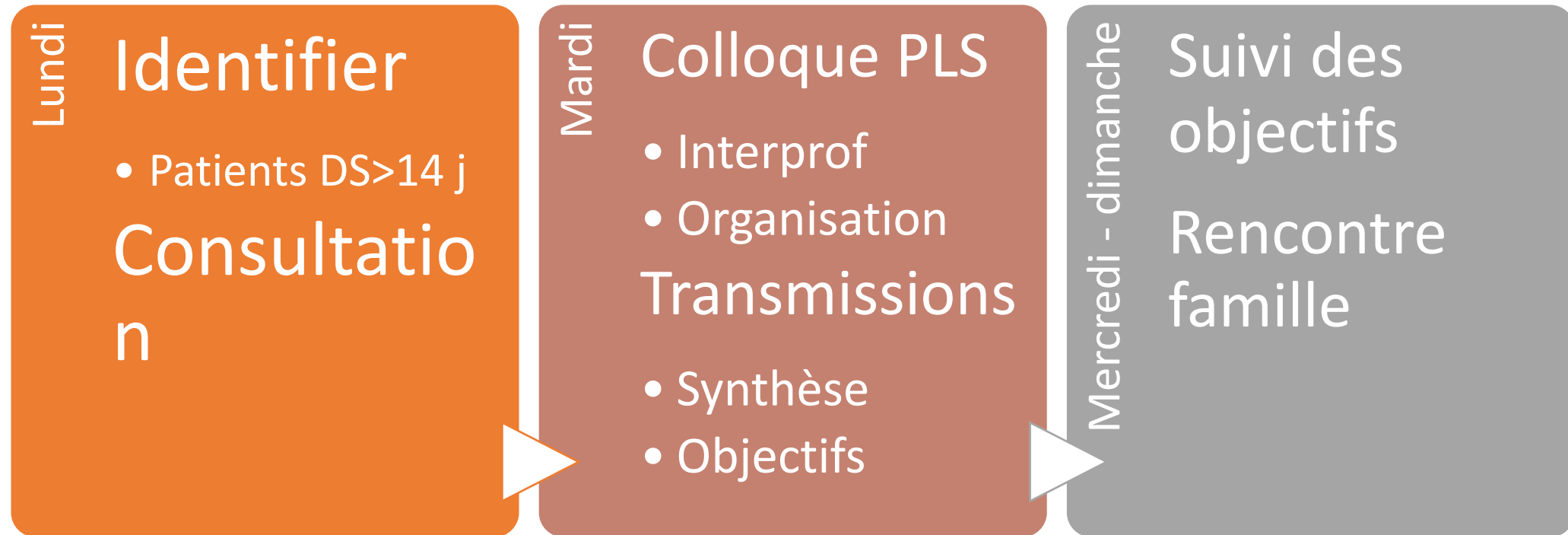


## Soutient de la direction du service



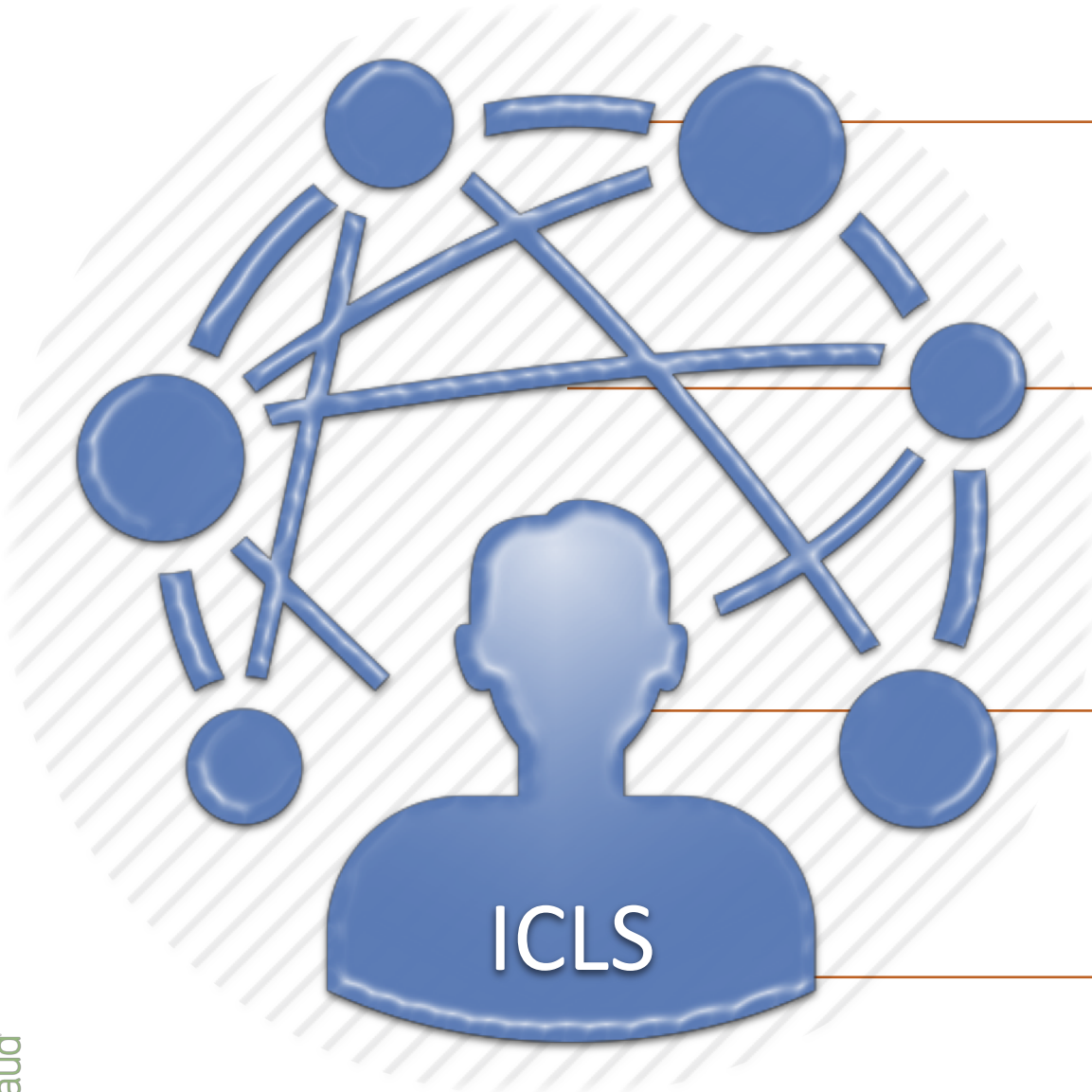
- Octroyer du temps
- Donner la parole
- Organiser les échanges
- Structurer et transmettre les objectifs
- Soutenir les équipes et améliorer la satisfaction des soignants







# Pratiquement l'infirmière clinicienne spécialisée :



effectue une  
consultation



collabore activement  
avec les soignants



organise & anime  
le colloque PLS



transmet les  
objectifs à  
équipe

# Résultats et perspectives



# Résultats du dispositif PLS

01.02.2017 au 31.12.2018

Variable	Résultats	
	2017	2018
Patients inclus dans le programme (PLS en cours non inclus)	75	80
Inclusion moyenne	J17	J14
Age moyen / ans	59.88	61.26
Sexe	Homme 73%	Homme 78%
Nombre consultations ICLS	229 → 3 en moyenne/pt	239 → 3 en moyenne/pt
Nombre de colloques PLS	211 → 2,8 en moyenne/pt	216 → 2,7 en moyenne/pt
Temps moyen lié à la consultation par patient	2h45	
Temps moyen lié au colloque PLS par patient	0h45	
Durée moyenne de séjour	34j	27j

# Phasage

## Phase 1 : Faciliter le suivi du patient

- Consultation infirmière chaque **lundi**
- Colloque interdisciplinaire hebdomadaire chaque **mardi**
  - ↳ Objectifs de soins
  - ↳ Plan de soins
- Outils : Synthèse PLS / **Check-list**

### Phase 1 opérationnelle dans les unités de soins

Bonne satisfaction générale des équipes  
Implication positive de chacun

## Phase 2 : Accompagner le patient et ses proches

- Colloque hebdomadaire avec les proches
- Personnalisation de l'environnement
- Recherche scientifique sur les besoins des proches

### Phase 2 à poursuivre

Actuellement en cours, à travailler

Récolte des données par infirmiers Master Sciences Infirmières terminée fin janvier

Résultats présentés courant de l'été

## Bientôt la phase 3 : continuum dans le suivi des patients

- Transmission des informations lors des transferts
- Continuité du suivi dans les étages





Auriez-vous  
des questions ?

# PLS - Facteurs de risque

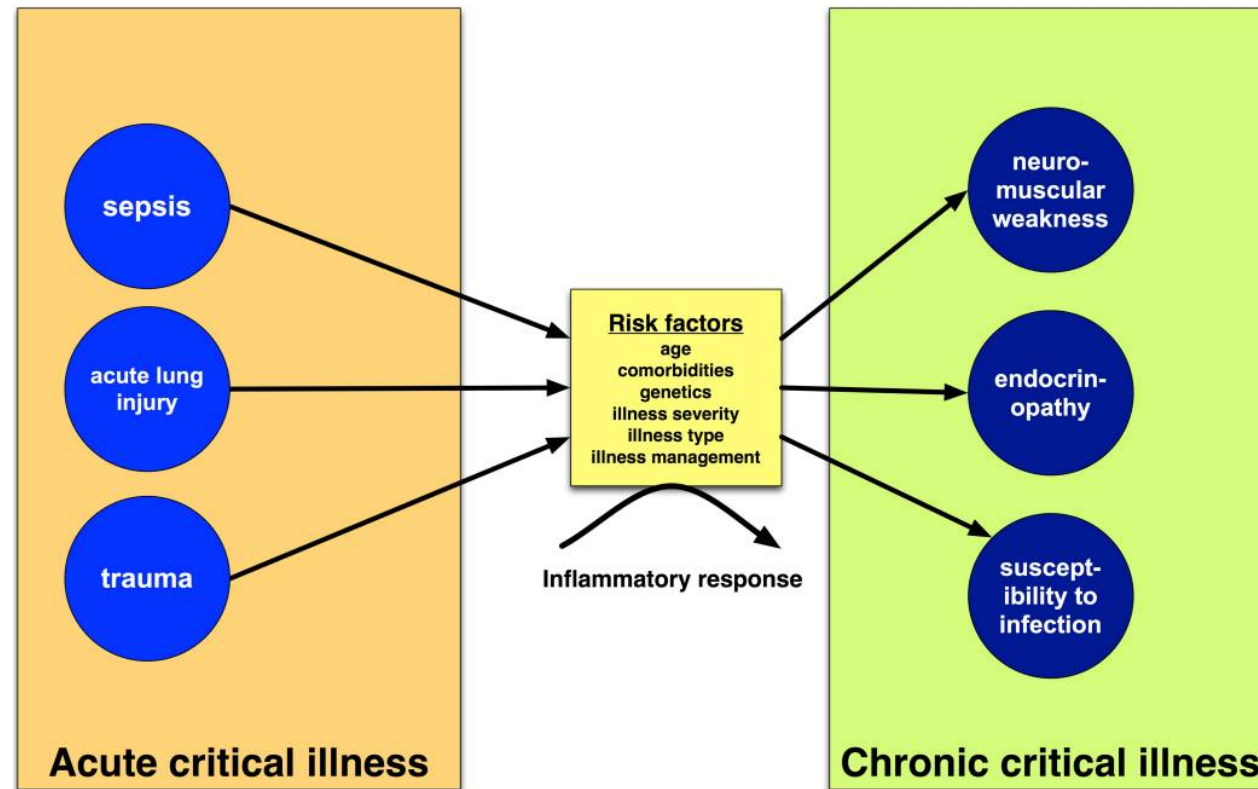


Fig. 2. Risk factors for chronic critical illness. Common precipitants of chronic critical illness, such as sepsis, acute lung injury, and trauma, may be mediated by risk factors shown in the figure. The activity of the host inflammatory response may mediate these risk factors, accentuating their impact on life support duration.