

# FOOBScan

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Vi holder mennesker i bevægelse






Rigshospitalet

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COUNCIL OF THE DANISH VICTIMS FUND



# First out-of-bed mobilisation in adults with severe acquired brain injury in Scandinavian neurointensive care units: A survey of current clinical practice (FOOBScan)

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# Introduction on early mobilisation.

RESEARCH ARTICLE

Early head-up mobilisation versus standard

care for patient

injury: A system

and Trial Sequ

Christian Gunge Riberholt<sup>1</sup>,  
Jesper Mehlsen<sup>4</sup>, Kirsten M

Effectiveness of a Very Early Stepping

Verticalizat

Brain Injure

Study in IC

**Early Orthostatic Exercise by  
Head-Up Tilt With Stepping vs.  
Standard Care After Severe  
Traumatic Brain Injury Is Feasible**

Christian Gunge Riberholt<sup>1,2\*</sup>, Markus Harboe Olsen<sup>2,3</sup>, Christian Bastrup Søndergaard<sup>4</sup>,

**Effect of early mobilization and  
complications in aneurysmal su**

Tanja Karic, MD,<sup>1,2</sup> Cecilie Røe, M  
Frank Becker, MD, PhD,<sup>3,4</sup> Wilhe

Huge variability in restrictions of mobilization for patients with aneurysmal  
subarachnoid hemorrhage - A European survey of practice

Iftakher Hossain<sup>a,b,1</sup>, Alexander Younsi<sup>c,1</sup>, Ana Maria Castaño Leon<sup>d,1</sup>, Laura Lippa<sup>e</sup>,  
Péter Tóth<sup>f</sup>, Nicole Terpolilli<sup>g</sup>, Lovisa Tobieson<sup>h,i</sup>, Francesco Latini<sup>j</sup>, Andreas Raabe<sup>k</sup>,  
Bart Depreitere<sup>l</sup>, Elham Rostami<sup>j,m,\*</sup>, Trauma & Critical Care section of the European  
Association of Neurosurgical Societies

## Objective

The objective of this study was to survey the current clinical practice patterns and perceptions among clinicians involved in the first out-of-bed mobilisation of adult patients with severe ABI in Scandinavian neuro-ICUs.



# Methods

- Cross-sectional, anonymous, web-based survey
- Pre-tested on 16 clinicians
- Survey distributed as an open survey using REDCap
- Link distributed to managers at departments and send to relevant clinical personal



# Included centers



14 neuro-ICUs in  
Scandinavia initially invited  
to participate

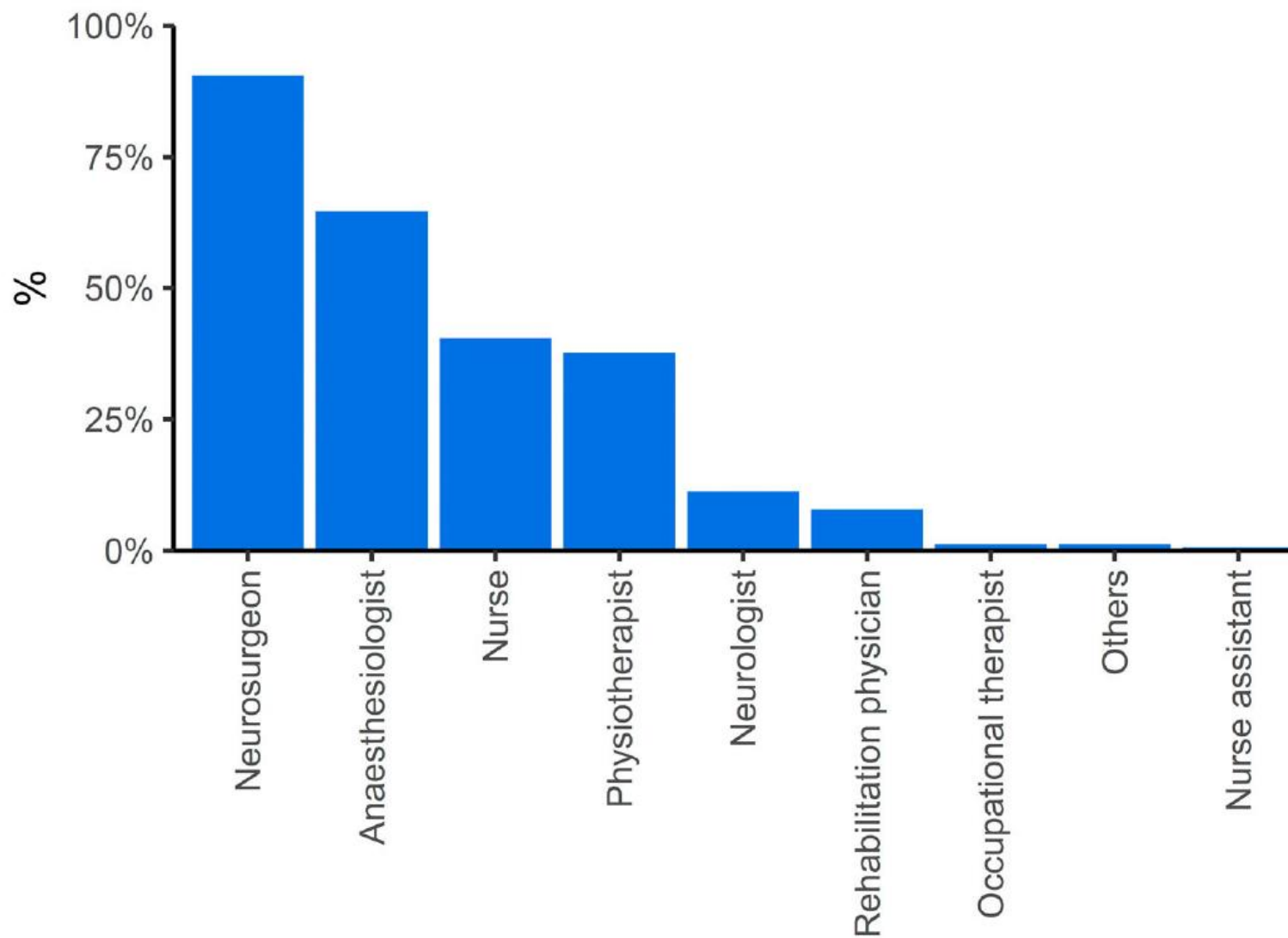
Initially responded to  
the survey  
247 respondents

Excluded respondents:

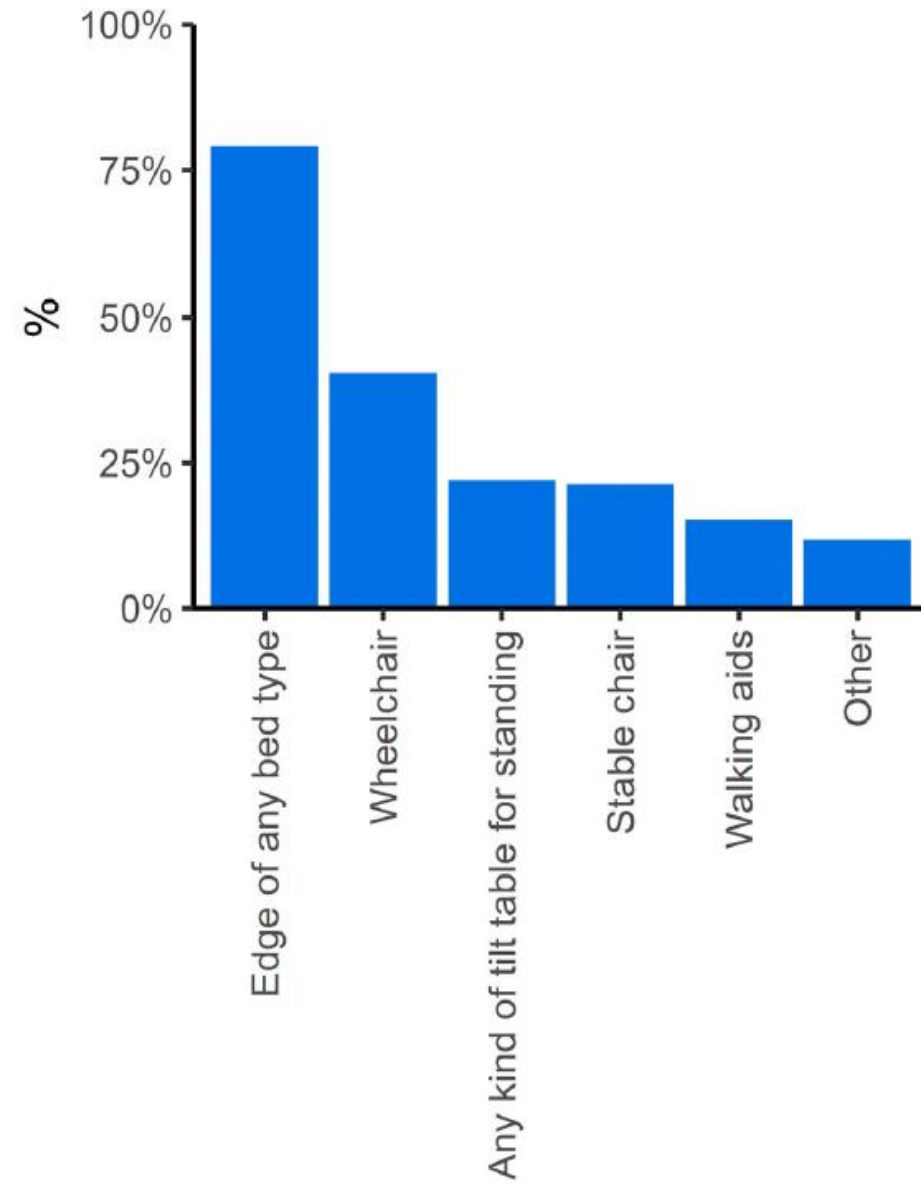
- 8 did not consent
- 59 did not respond to any mandatory questions

Final analysis:  
180 respondents

**FIGURE 2** Professional groups responsible for the initiation of the first out-of-bed mobilisation ( $n = 178$ ).







**FIGURE 3** Mobilisation modalities. ( $n = 178$ ).

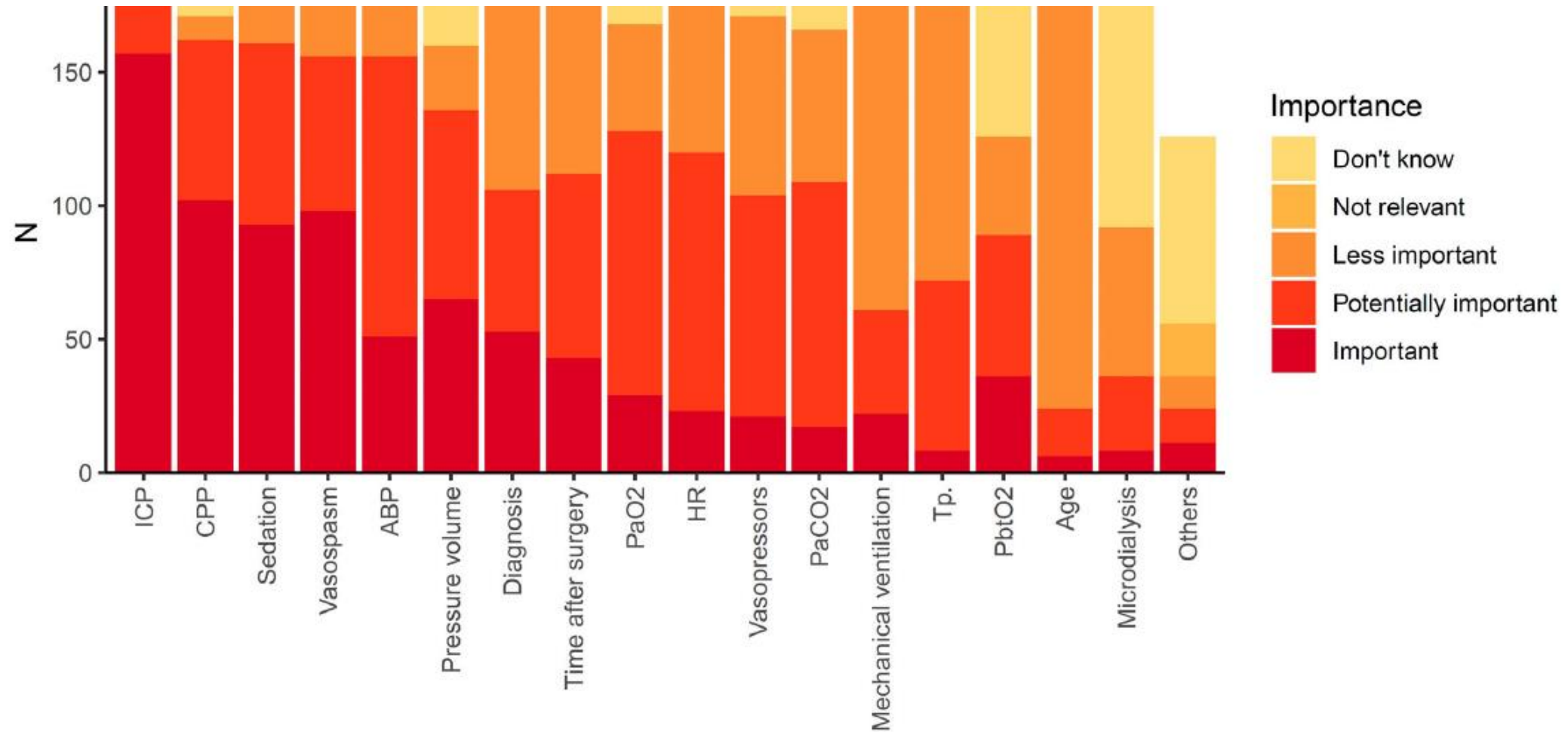
**TABLE 1** Characteristics of survey respondents.

	N = 180
Country/hospital, n (%)	
Norway	70
Oslo University Hospital	23 (12.8%)
Haukeland University Hospital	16 (8.9%)
University Hospital of North Norway	16 (8.9%)
Trondheim University Hospital	15 (8.3%)
Denmark	68
Copenhagen University Hospital-Rigshospitalet	41 (22.8%)
Aarhus University Hospital	19 (10.6%)
Odense University Hospital	8 (4.4%)
Aalborg University Hospital	0 (0%)
Sweden	42
Sahlgrenska University Hospital	15 (8.3%)
Karolinska University Hospital	14 (7.8%)
Skåne University Hospital	4 (2.2%)
Linköping University Hospital	3 (1.7%)
University Hospital of Umeå	3 (1.7%)
Uppsala University Hospital	1 (0.6%)
Unknown	2 (1.1%)

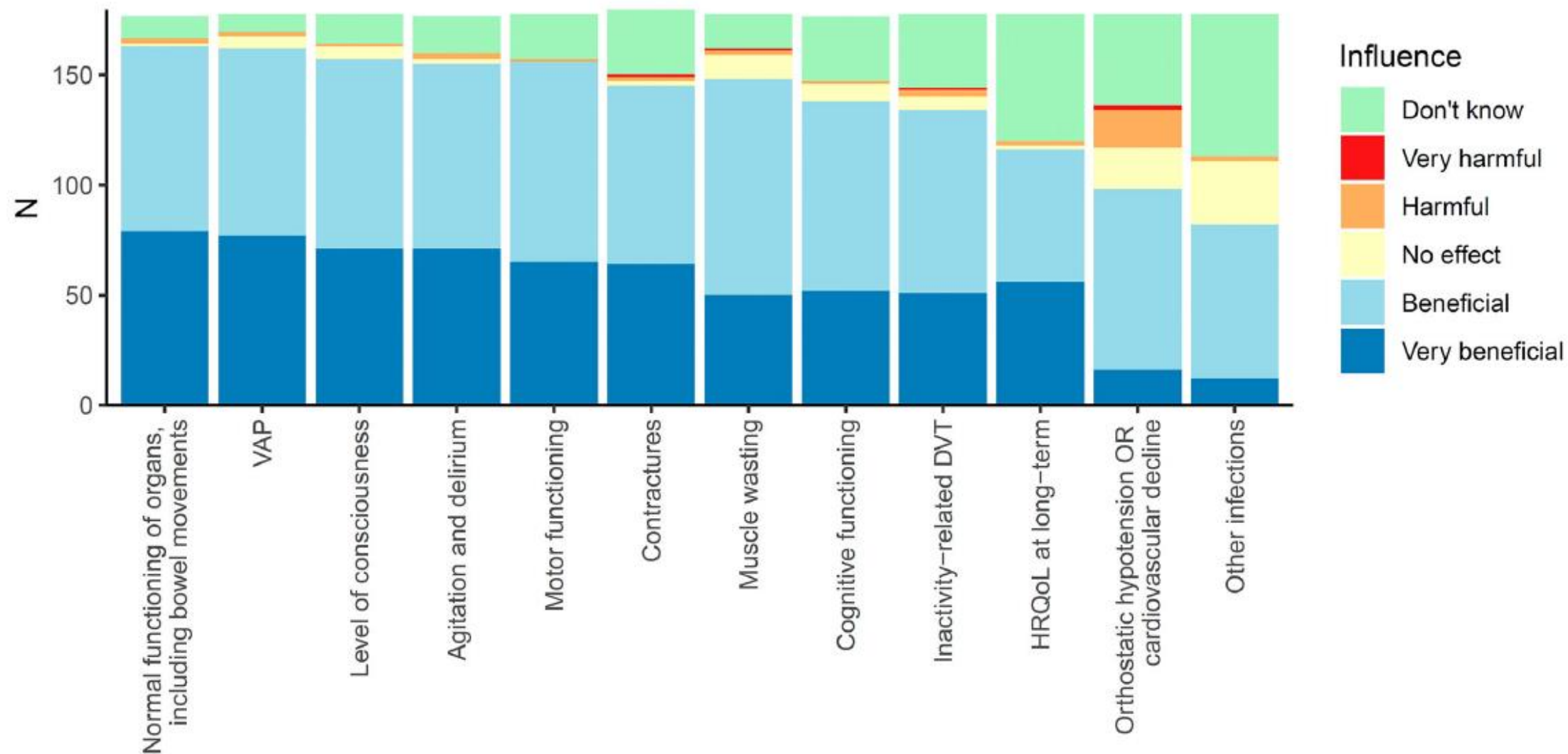
**TABLE 2** Characteristics of current clinical practice in the first-out-of-bed mobilisation in Scandinavian neuro-ICUs.

	N = 180
Availability of written guidelines in the neuro-ICU	
Yes	18 (10%)
No	104 (57.8%)
Unaware	57 (31.8%)
Missing data	1 (0.6%)
Proportion of patients mobilised out of bed, n (%)	
1%–10%	3 (1.7%)
11%–30%	13 (7.2%)
31%–50%	17 (9.4%)
51%–70%	34 (18.9%)
71%–90%	57 (31.7%)
91%–100%	55 (30.6%)
Missing data	1 (0.6%)
Perceived delay between a patient being deemed ready to get mobilised out of bed for the first time and the time for actual mobilisation	
No delay (same day), n (%)	138 (76.7%)
Delay, n (%)	40 (22.2%)
Number of delayed days, median (range), n (%) <sup>a</sup>	1 (1–7)

# What do clinicians consider most important clinical safety indicators?



# Perceived benefits and harms





## Conclusion

Mobilisation out of bed is frequently performed

Mainly ICP, CPP, level of sedation, presence of vasospasms, and ABP are used as clinical safety indicators.

Perceived benefits are most common.

More objective data are needed.



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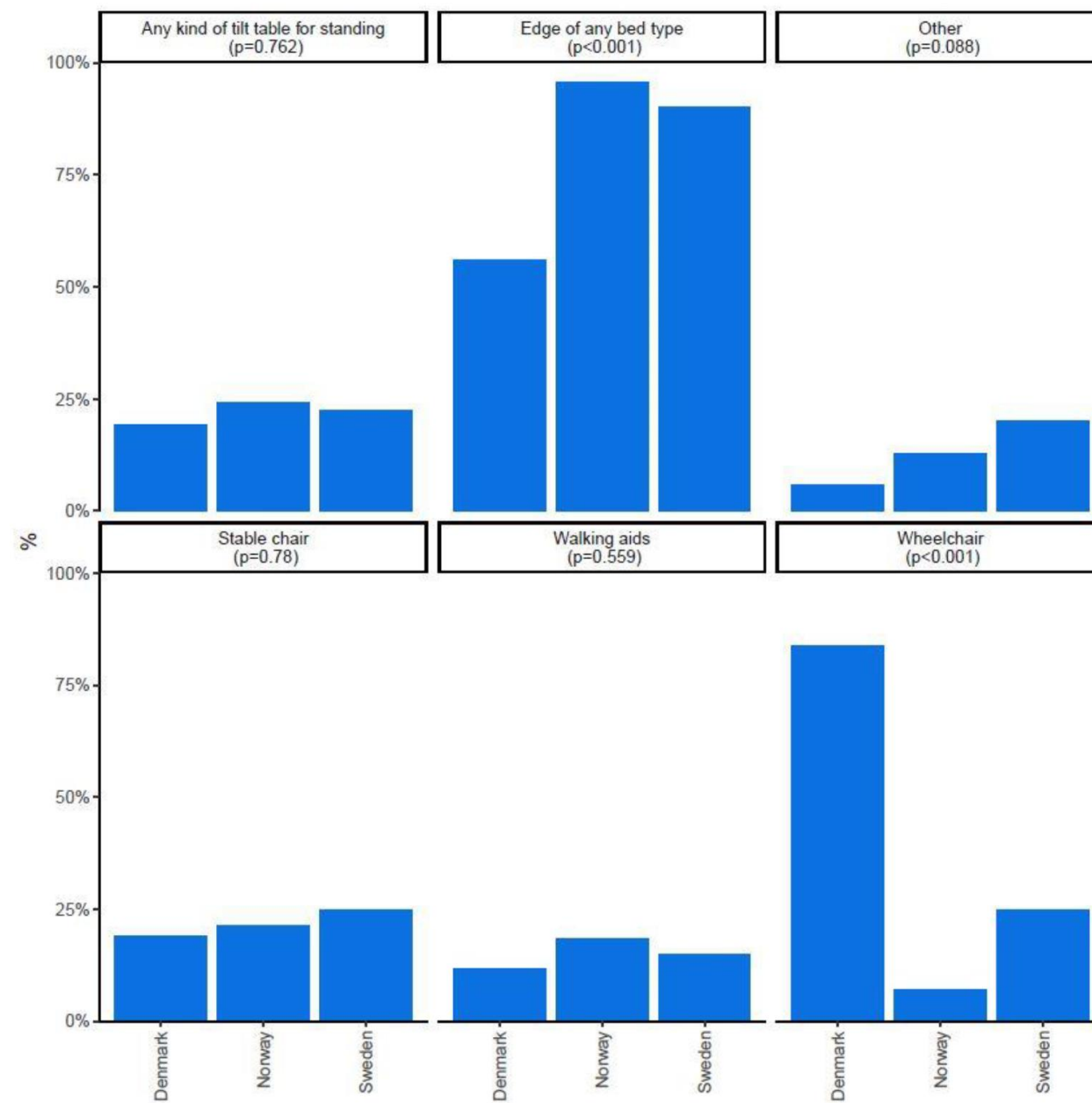
[www.linkedin.com/in/christian-riberholt-neurorehabilitation](https://www.linkedin.com/in/christian-riberholt-neurorehabilitation)

### Appendix 3: Staff per patient ratio

		Nurse	PT	OT	Physician	NS	IN
DK	RH	1	0.20	0.14	0.54	0.15	0.38
	Odense	1	0.20	0.10	0.60	0.20	0.40
	Århus	1	0.16	0.05	0.32	0.05	0.26
	Average	1	0.19	0.10	0.48	0.14	0.35
N	Oslo	1.3	0.20	0.33	0.5	0.20	0.29
	North Norway	1.3	0.13	NR	0.67	0.33	0.33
	Haukeland	1	0.14	0.14	0.29	0.14	0.14
	Trondheim						
	Average	1.20	0.16	0.24	0.41	0.23	0.25
S	Karolinska	0.5	0.25	NR	0.63	0.38	0.25
	Linköping	0.5	0.25	0.00	1.00	0.50	0.50
	Skåne	0.5	0.10	0.00	0.25	NR	NR
	Uppsala	NR	NR	NR	NR	NR	NR
	Umeå	NR	NR	NR	NR	NR	NR
	Sahlgrenska	1	0.17	NR	0.50	NR	NR
	Average	0.63	0.19	0.00	0.59	0.44	0.38
Total average	0.92	0.18	0.11	0.50	0.25	0.32	

Staff per patient ratio of each group. PT: physical therapist; OT: occupational therapist; NS: neurosurgeon; IN: intensivist; NR: not reported.

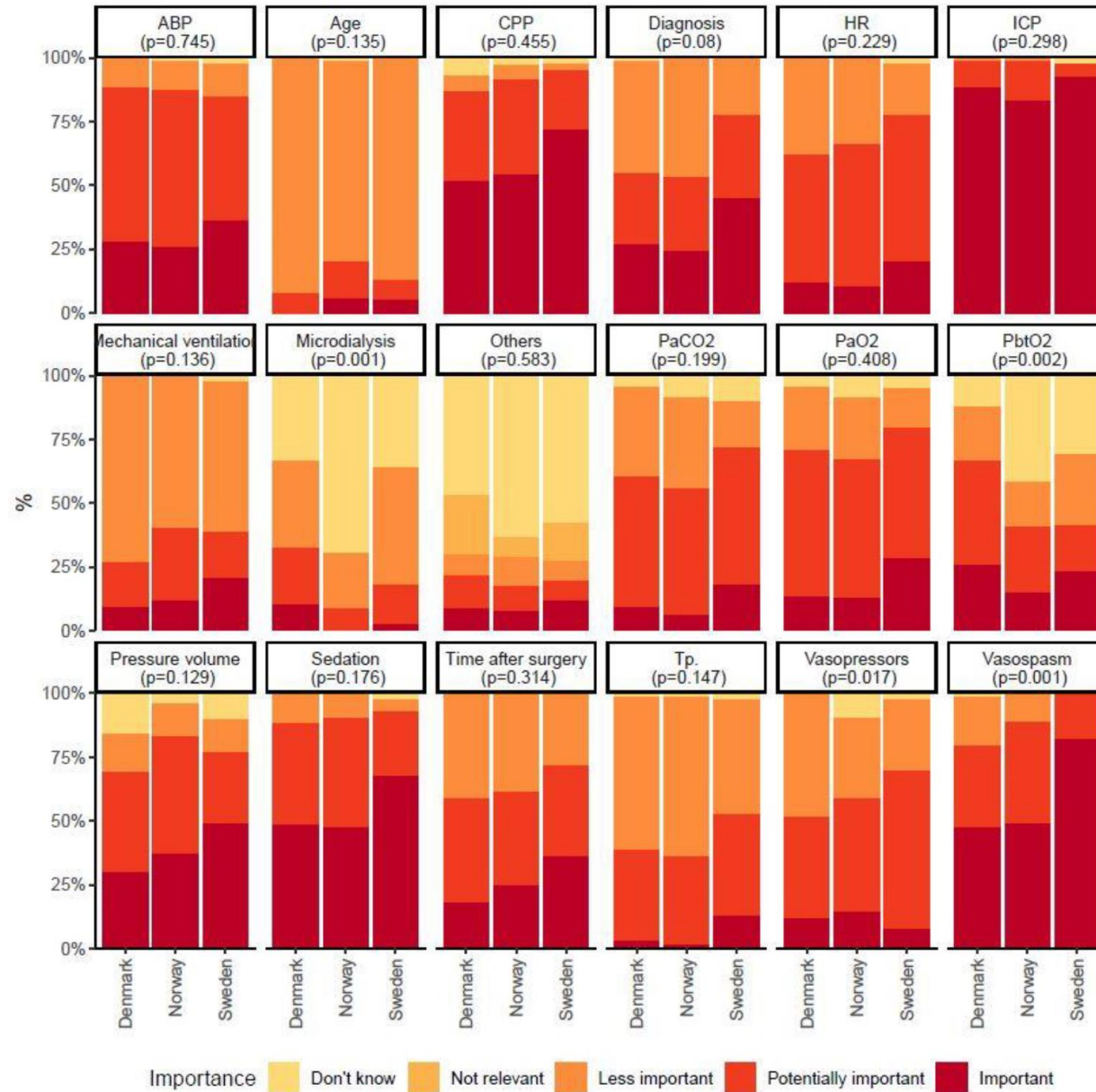
#### Appendix 4: Mobilisation modalities stratified by country



Country-specific differences (p-values, Fishers test).



## Appendix 5: Importance of safety clinical indicators stratified by country



Appendix 6: Perceived harms and benefits of early mobilisation stratified by country

