



Appendix 1

Nursing Activity Score – weight list

(Miranda, D.R. et al. 2003, Crit Care Med; Padilha et al. 2015, Rev Esc Enferm USP)

BASIC ACTIVITIES		
1	Monitoring and titration	NAS-points
1a	Hourly vital signs, regular registration and calculation of fluid balance	4.5
1b	Present at bedside and continuous observation or active for 2 hours or more in any shift, for reasons of safety, severity or therapy, such as: non-invasive mechanical ventilation, weaning procedures, restlessness, mental disorientation, prone position, donation procedures, preparation and administration of fluids and/or medication, assisting specific procedures	12.1
1c	Present at bedside and active for 4 hours or more in any shift for reasons of safety severity or therapy, such as those examples above (1b)	19.6
2	Laboratory. Biochemical and microbiological investigations	4.3
3	Medication. Vasoactive drugs excluded	5.6
4	Hygiene procedures	
4a	Performing hygiene procedures such as: dressing of wounds and intravascular catheters, changing linen, washing patient, incontinence, vomiting, burns, leaking wounds, complex surgical dressing with irrigation, special procedures (e.g. barrier nursing, cross-infection related, room cleaning following infections, staff hygiene), etc	4.1
4b	The performance of hygiene procedures took more than 2 hours in any shift	16.5
4c	The performance of hygiene procedures took more than 4 hours in any shift	20
5	Care of drains. All (except gastric tube)	1.8
6	Mobilization and positioning , including procedures such as: turning the patient; mobilization of the patient; moving from bed to chair; team lifting (e.g. immobile patient, traction, prone position)	
6a	Performing procedure(s) up to 3 times per 24 hours	5.5
6b	Performing procedure(s) more frequently than 3 times per 24 hours, or with 2 nurses - any frequency	12.4
6c	Performing procedure with 3 or more nurses - any frequency	17
7	Support and care of relatives and patient , including procedures such as telephone calls, interviews, counseling. Often, the support and care of either relatives or patient allow staff to continue with other nursing activities (e.g.: communication with patients during hygiene procedures, communication with relatives whilst present at bedside and observing patient)	
7a	Support and care of either relatives or patient requiring full dedication for about one hour in any shift such as: to explain clinical condition, dealing with pain and distress, difficult family circumstances	4
7b	Support and care of either relatives or patient requiring full dedication for 3 hours or more in any shift such as: death, demanding circumstances (e.g. large number of relatives, language problems, hostile relatives)	32

8	Administrative and managerial tasks	
8a	Performing routine tasks such as: processing of clinical data, ordering examinations, professional exchange of information (e.g. ward rounds)	4.2
8b	Performing administrative and managerial tasks requiring full dedication for about 2 hours in any shift such as: research activities, protocols in use, admission and discharge procedures.	23.2
8c	Performing administrative and managerial tasks requiring full dedication for about 4 hours or more of the time in any shift such as: death and organ donation procedures, co-ordination with other disciplines.	30
VENTILATORY SUPPORT		
9	Respiratory support Any form of mechanical ventilation/assisted ventilation with or without positive end- expiratory pressure, with or without muscle relaxants; spontaneous breathing with or without positive end-expiratory pressure (e.g. CPAP or BiPAP), with or without endotracheal tube; supplementary oxygen by any method	1.4
10	Care of artificial airways. Endotracheal tube or tracheostomy cannula	1.8
11	Treatment for improving lung function. Thorax physiotherapy, incentive spirometry, inhalation therapy, intratracheal suctioning	4.4
CARDIOVASCULAR SUPPORT		
12	Vasoactive medication, disregard type and dose	1.2
13	Intravenous replacement of large fluid losses. Fluid administration > 3 lit/m ² /day, irrespective of type of fluid administered	2.5
14	Left atrium monitoring. Pulmonary artery catheter with or without cardiac output measurement	1.7
15	Cardiopulmonary resuscitation after arrest; in the past period of 24 hrs (single precordial thump not included)	7.1
RENAL SUPPORT		
16	Hemofiltration techniques. Dialysis techniques	7.7
17	Quantitative urine output measurement (e.g., by indwelling urinary catheter)	7
NEUROLOGICAL SUPPORT		
18	Measurement of intracranial pressure	1.6
METABOLIC SUPPORT		
19	Treatment of complicated metabolic acidosis/alkalosis	1.3
20	Intravenous hyperalimentation	2.8
21	Enteral feeding. Through gastric tube or other gastrointestinal route (e.g., jejunostomy)	1.3
SPECIFIC INTERVENTIONS		
22	Specific intervention(s) in the intensive care unit. Endotracheal intubation, insertion of pacemaker, cardioversion, endoscopies, emergency surgery in the past period of 24 hrs, gastric lavage. Routine interventions without direct consequences to the clinical condition of the patient, such as: X-rays, echography, electrocardiogram, dressings, or insertion of venous or arterial catheters, are not included	2.8
23	Specific interventions outside the intensive care unit. Surgery or diagnostic procedures	1.9

Legend: The sub-items of items 1, 4, 6, 7 and 8, are mutually exclusive The weights represent average nursingtime (percentage of 24 hours)

Appendix 2

NASA-TLX – questionnaire

Mental Demand: How much mental and perceptual activity was required? Was the task easy or demanding, simple or complex?

Minimal

Maximal

Physical Demand: How much physical activity was required? Was the task easy or demanding, slack or strenuous?

Minimal

Maximal

Temporal Demand: How much time pressure did you feel due to the pace at which the task or task elements occurred? Was the pace slow or rapid?

Minimal

Maximal

Overall Performance: How successful were you in performing the task? How satisfied were you with your performance?

Good

Poor

Frustration Level: How irritated, stressed, and annoyed versus content, relaxed, and complacent did you feel during the task?

Minimal (content, relaxed etc.)

Maximal (irritated, stressed etc.)

Effort: How hard did you have to work (mentally and physically) to accomplish your level of performance?

Minimal

Maximal

Additional question (Chapter 6):

Experienced workload: Grade your satisfaction about the experienced workload during this shift

0	1	2	3	4	5	6	7	8	9	10
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

