

INSTRUCTIONS FOR COMPLETION OF PATIENT CHARACTERISTIC FORM (OPTIONAL)

- If you are opting to completing this form, remember to number this form the same as the family survey number.
 - All dates will be recorded in the dd-mmm-yyyy format.
 - All times will be recorded in the 24 hour format.
 - Must utilize all taxonomies provided.
1. Enter patient's date of birth in format i.e. 03/Feb/1949.
 2. Sex : Indicate with an X male or female.
 3. Ethnic group: Indicate with an X one of the five categories. If other specify in the space provided.
 4. ICU Admission Diagnosis: Please refer to the Admission Taxonomy included in Appendix A. Enter the numeric representation for the diagnosis or the best representation. The choice here should be the most responsible diagnosis for the ICU admission. There are 2 categories non-operative and operative. To be categorized as post-op, the patient must have come to ICU directly from the OR or the recovery room.
 5. Comorbid Diseases: Please refer to the Comorbid Disease Taxonomy in the Appendix B. Enter the numeric representation for the disease or diseases. You can choose more than one disease (3 boxes have been provided). If none, enter "0".
 6. Apache II Score: Refer to the worksheet in the Appendix C. Values for the Apache II are collected from the first 24 hours in ICU..
 - Indicate with an X the range that the value corresponds to then write the designated severity score (listed at the top of the column) in the right-hand column.
 - Temperature: Recorded as core. Conversion is add 0.5° to oral temp, add 1.0 ° to axilla temperature.
 - MAP: Mean Arterial Pressure. $MAP = \frac{SBP - DBP + DBP}{3}$
 - Heart Rate: enter the most extreme value
 - Respiratory rate: (either ventilated or non-ventilated)
 - Oxygenation:
 - Choose (a) if FiO2 is > 0.5. Calculate using the formula: $AaDO_2 + [(FiO_2(713) - (PaCO_2/0.8)) - PaO_2]$
 - Choose (b) if the FiO2 is < 0.5 Enter the PaO2 value
 - Arterial pH
 - Serum Sodium: the units of measure are mmol/L.
 - Serum Potassium: the unit of measure is mmol/L.
 - Serum Creatinine: the unit of measure umol/L. For acute renal failure double the value.
 - Hematocrit: enter this value as a percentage

- White Blood Cells (total/L)(x10⁹)
- Glasgow Coma Scale. For this category use the lowest calculated GCS (unsedated) for the first 24 hours in ICU.
- To calculate the GCS choose the best response from each of the 3 categories at the time of scoring.
- Add the values for the 3 separate categories and subtract from 15 to determine the score.
- If the patient is sedated, then go back to the period when the patient was not receiving sedation.
- Serum HCO₃ should only be used if there are no ABGs available in the previous 24 hours.
- Patient's age: Refer to the chart for the appropriate value.
- Chronic Health Points: Choose one of the 3 categories listed on the next sheet
- To calculate Add The A (APS) + B(Age Points) + C(Chronic Health Points) = Apache II Score

7. Enter the date and time of mechanical ventilation initiation for the patient.
8. Enter the date and time of admission to ICU.
9. Enter the date and time of discharge from ICU.
10. Indicate whether the patient was alive or dead upon discharge from the ICU.

PATIENT CHARACTERISTICS

PT NUMBER _____

1. Date of Birth:

DD	MMM	YYYY

2. Sex:

Male Female

3. Ethnic Group:

Caucasian Black Asian Native Other

If other, please specify: _____

4. 1° ICU Admission Dx:

(See Appendix A: Admission Taxonomy)

5. Comorbid Diseases:

(See See Appendix B: Comorbid Disease Taxonomy at end)

6. APACHE II Score:

(See Appendix C: Apache II Worksheet at end)

7. Date of initiation of mechanical ventilation:

DD	MMM	YYYY	Time (24hr)

8. Date and time of admission to ICU:

DD	MMM	YYYY	Time (24hr)

9. Date and time of discharge from ICU:

DD	MMM	YYYY	Time (24hr)

10. ICU Discharge Status:

ALIVE DEAD

APPENDIX A: ADMISSION TAXONOMY

A. NON-OPERATIVE CONDITIONS

Cardiovascular / vascular:

1. Cardiogenic shock
2. Cardiac arrest
3. Aortic aneurysm
4. Congestive heart failure
5. Peripheral vascular disease
6. Rhythm disturbance
7. Acute myocardial infarction
8. Hypertension
9. Other CV disease: _____

Respiratory:

10. Parasitic pneumonia (ie. pneumocystis carinii)
11. Aspiration pneumonia
12. Respiratory neoplasm (includ. larynx, trachea)
13. Respiratory arrest
14. Pulmonary edema (non-cardiogenic)
15. Bacterial / Viral pneumonia
16. Chronic obstructive pulmonary disease
17. Pulmonary embolism
18. Mechanical airway obstruction
19. Asthma
20. Other respiratory disease: _____

Gastrointestinal:

21. Hepatic failure
22. GI perforation/obstruction
23. GI bleeding due to varices
24. GI inflammatory disease (ulcerative colitis, crohn's disease, pancreatitis)
25. GI bleeding due to ulcer/laceration
26. GI bleeding due to diverticulosis
27. Other GI disease: _____

Neurologic:

28. Intracerebral hemorrhage
29. Subarachnoid hemorrhage
30. Stroke
31. Neurologic infection
32. Neurologic neoplasm
33. Neuromuscular disease
34. Seizure
35. Other neurologic disease: _____

Sepsis:

36. Sepsis (other than urinary tract)
37. Sepsis of urinary tract origin

Trauma:

38. Head trauma (with/without multiple trauma)
39. Multiple trauma (excluding head trauma)

Metabolic:

40. Metabolic coma
41. Diabetic ketoacidosis
42. Drug overdose
43. Other metabolic disease: _____

Hematologic:

44. Coagulopathy/neutropenia/thrombocytopenia
45. Other hematologic condition: _____

46. Renal disease:

47. Other medical disease: _____

B. POST-OPERATIVE CONDITIONS:

Vascular / cardiovascular:

48. Dissecting/ruptured aorta
49. Peripheral vascular surgery (no bypass graft)
50. Valvular heart surgery
51. Elective abdominal aneurysm repair
52. Peripheral artery bypass graft
53. Carotid endarterectomy
54. Other CV disease: _____

Respiratory:

55. Respiratory infection
56. Lung neoplasm
57. Respiratory neoplasm (mouth, sinus, larynx, trachea)
58. Other respiratory disease: _____

Gastrointestinal:

59. GI perforation/rupture
60. GI inflammatory disease
61. GI obstruction
62. GI bleeding
63. Liver transplant
64. GI neoplasm
65. GI cholecystitis/cholangitis
66. Other GI disease: _____

Neurologic:

67. Intracerebral hemorrhage
68. Subdural/epidural hematoma
69. Subarachnoid hemorrhage
70. Laminectomy/other spinal cord surgery
71. Craniotomy for neoplasm
72. Other neurologic disease: _____

Trauma:

73. Head trauma (with/without multiple trauma)
74. Multiple trauma (excluding head trauma)

Renal:

75. Renal neoplasm
76. Other renal disease: _____

Gynecologic:

77. Hysterectomy

Orthopedic:

78. Hip or extremity fracture
79. Other surgical condition: _____

APPENDIX B: COMORBID DISEASE TAXONOMY

0. None

MYOCARDIAL

1. Angina
2. Arrhythmia
3. Valvular
4. Myocardial infarction
5. Congestive heart failure
6. Other myocardial illness (specify: _____)

VASCULAR

7. Hypertension
8. Peripheral vascular
9. Cerebrovascular
10. Other vascular illness (specify: _____)

PULMONARY

11. Chronic obstructive pulmonary disease
12. Asthma
13. Other pulmonary illness (specify: _____)

NEUROLOGIC

14. Dementia
15. Hemiplegia (paraplegia)
16. Other neurologic illness (specify: _____)

ENDOCRINE

17. Diabetes
18. Diabetes with end organ
19. Other endocrine illness (specify: _____)

RENAL

20. Renal disease

GASTROINTESTINAL

21. Chronic liver disease and cirrhosis
22. GI Bleeding
23. Inflammatory bowel
24. Peptic ulcer

CANCER/IMMUNE

25. Tumor
26. Lymphoma
27. Leukemia
28. AIDS
29. Metastatic cancer

MISCELLANEOUS

30. Rheumatologic
31. Coagulopathy
32. Other: _____

APPENDIX C: APACHE II SEVERITY OF DISEASE CLASSIFICATION SYSTEM

Use variables from first 24 hours in ICU, only.

Physiologic Variable		HIGH ABNORMAL RANGE					LOW ABNORMAL RANGE					Severity Score
		(Check one range per variable and write the severity score in the column to the right. Note: use the worst possible score for all variables, except for the GCS score.)										
Severity Points		+4	+3	+2	+1	0	+1	+2	+3	+4		
1	Temperature – rectal (°C) (add 0.5° to oral temp, add 1.0° to auxiliary temp)	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
		≥41°	39-40.9°		38.5°-38.9°	36°-38.4°	34°-35.9°	32°-33.9°	30°-31.9°	≤29.9°		
2	Mean Arterial Pressume (mmHg)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
		≥160	130-159	110-129		70-109		50-69		≤49		
3	Heart Rate (Ventricular Response)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
		≥180	140-179	110-139		70-109		55-69	40-54	≤39		
4	Resp. Rate (non-ventilated or ventilated)	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
		≥50	35-49		25-34	12-24	10-11	6-9		≤5		
5	Oxygenation: a. FIO ₂ ≥ 0.5 record A·aDO ₂ *	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>						
	b. FIO ₂ < 0.5 record only PaO ₂	≥500	350-499	200-349		<200						
						PaO ₂ >70	PaO ₂ 61-70		PaO ₂ 55-60	PaO ₂ <55		
6	Arterial pH	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
		≥7.7	7.6-7.69		7.5-7.59	7.33-7.49		7.25-7.32	7.15-7.24	<7.15		
7	Serum Sodium (mmol/L)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
		≥180	160-179	155-159	150-154	130-149		120-129	111-119	≤110		
8	Serum Potassium (mmol/L)	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
		≥7	6-6.9		5.5-5.9	3.5-5.4	3-3.4	2.5-2.9		<2.5		
9	Serum Creatinine (µmol/L) (double point score for acute renal failure)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>				
		≥309.4	176.8-309.3	132-177		53-133		<53				
10	Hematocrit (%)	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
		≥60		50-59.9	46-49.9	30-45.9		20-29.9		<20		
11	White Blood Count (total/mm ³) (in 1000s)	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
		≥40		20-39.9	15-19.9	3-14.9		1-2.9		<1		
12	Glasgow Coma Score (GCS) Score=15 minus actual GCS	(Note: The best GCS used for the 1 st 24 hours)									(15 - GCS Total)	
		Eye	Verbal	Motor	GCS Total (= Eye + Verbal + Motor)							
A=Total ACUTE PHYSIOLOGY SCORE (APS): Total severity points indicated for Variables 1-12 in the column to the right.												
	Serum HCO ₃ (venous-mmol/L) (Use in place of variable 5 if no ABGs)	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
		≥52	41-51.9		32-40.9	22-31.9		18-21.9	15-17.9	<15		

* A·aDO₂ = [(FiO₂ (713)-(PaCO₂/0.8)]-PaO₂

A= APS Points (see back)
 B= Age Points (see back)
 C= Chronic Health Points
 Total= APACHE II Score

Glasgow Coma Scale:

Eye Opening
 4 – Spontaneous
 3 – To speech
 2 – To pain
 1 – None

Verbal Response

5 – Oriented
 4 – Confused
 3 – Inappropriate words
 2 – Incomprehensible words
 1 – Incomprehensible sounds

Best Motor Response

6 – Obeys commands
 5 – Localizes to pain
 4 – Withdraws from pain
 3 – Abnormal flexion
 2 – Extension
 1 – None

How to score age points (B):

Age (years)	Points
≤ 44	0
45-54	2
55-64	3
65-74	5
≥ 75	6

How to score chronic health points (C):

(If the patient has a history of severe organ system insufficiency or is immunocompromised assign points as follows.

1. For nonoperative or emergency postoperative patients → 5
2. For elective postoperative patients → 2
3. Patient does NOT have a history of severe organ system insufficiency and is NOT immunocompromised: → 0