

Table of Changes in SAPS Variables

Variable	SAPS I	SAPS II	SAPS III
Age	✓	✓	✓
Heart rate	✓	✓	✓
Systolic blood pressure	✓	✓	✓
Body temperature	✓	✓	✓
Glasgow Coma Scale (GCS) score	✓	✓	✓
Mechanical ventilation or CPAP	✓	✓	✓
PaO ₂ /FiO ₂ ratio	✓	✓	✓
Urinary output	✓	✓	✓
Blood urea nitrogen (BUN)	✓	✓	
Creatinine			✓ (or BUN)
White blood cell count	✓	✓	✓
Serum potassium level	✓	✓	✓
Serum sodium level	✓	✓	✓
Bicarbonate level	✓	✓	✓
Bilirubin level	✓	✓	✓
Type of admission	✓ (3 categories)	✓ (3 categories)	✓ (expanded)
Chronic diseases	✓ (4 categories)	✓ (3 categories)	✓ (refined)
Length of stay in hospital before ICU admission			✓
Location of patient before ICU			✓

admission			
Admission diagnosis category			✓
Region-specific adjustments			✓

Key Takeaways:

- **SAPS I to SAPS II:** From SAPS I to SAPS II, there's a noticeable increase in the detail and specificity of the variables, including a finer categorization of chronic diseases and types of admission.
- **Blood Urea Nitrogen (BUN) and Creatinine:** SAPS I included BUN directly; SAPS III mentions creatinine specifically, but allows for BUN as an alternative, reflecting the use of these measures to assess kidney function.
- **Expansion in SAPS III:** SAPS III introduced variables to account for the patient's journey before ICU admission (length of stay and location prior to ICU), and broadened the categorization of admission diagnosis. This version also introduced region-specific adjustments to enhance its applicability globally.
- **Chronic Diseases:** The categorization and specificity of chronic diseases have been refined over the versions, indicating a more nuanced understanding of how these conditions impact patient outcomes.