Introduction:
The aim was analyze the ICU bed rotation pattern, the epidemiological characteristics of patients and to correlate them with prognostic score after software implementation.

Methods:
This is an epidemiological and retrospective study. Data were collected between June 2016 and November 2017, using EPIMED® monitor software, applied in an adult ICU of a public hospital in Bahia / Brazil. Authorization for collection and use of data was granted by the institution. All patients hospitalized in the period were included regardless of other exclusion criteria.

Results:
During the period evaluated, there were 1,011 new hospitalizations, 649 men (64.19%) and 362 women (35.81%). 46.38% (469) were in the age group of 18 to 44 years, followed by 28.28% of the patients (286), who were between 45 and 64. The mean duration of hospitalization in our unit was approximately 8.45 days. During the period covered, 1,009 exits occurred: 701 patients (69.47%) were discharged and 308 died (30.53%). The turnover rate of the ICU was 59.35. The occupancy rate calculated during the period was 101.39%. There were only 5 readmissions (0.49%) within 24 hours of admission. Regarding the hospital evolution of these patients we had 837 exits in this period, 429 (51.25%) were discharge and 408 (48.74%) were deaths, of these, 100 (11.95%) were after discharge from the ICU. The mean SAPS score was 51.11 (ranging from 17 to 99). The probability of death, according to the standard equation was 24.60% and the adjusted for Latin America of 32.10%.

Conclusion:
The ICU has a high occupancy rate and rotation turnover, as well as a higher mortality than predicted by the score. These indicators show the great population demand that we have and alert to the impact on the sustainability of the unit and patient safety. These data allow a more informed management.