

# **UNIVERSITY ADMIT ELIGIBILITY PREDICTOR**

## **INTRODUCTION**

The University admission is really prominent for a student and it is really hassle for them to wander all the college with their mark sheets and ask for eligibility for the particular college, so the algorithm that we created here on the web application make sure that the student gets to the respective college he chooses based on their marks, the actual eligibility is foreseen here through this predictor.

## **WHAT IS UNIVERSITY ADMIT ELIGIBILITY PREDICTOR?**

University Admission Predictor System is a web based application system in which students can register their marks along with their personal information. This helps to predict their admissions in Universities. Administrator can add the university details and the batch details. Using this Application, the entrance seat allotment becomes easier and efficient. The main advantage of the project is the computerization of the entrance seat allotment process. Administrator has the power for the allotment. Admin can add the allotted seats into a file and the details are saved into the system. The total time for the entrance allotment becomes lower and the allotment process becomes faster. It helps students to make right decisions for choosing their University. In which students can register with their personal as well as marks details to prediction the admission in colleges and the administrator can allot the seats for the students. Administrator can add the college details and the batch details. Using this Application, the entrance seat allotment became easier and can be implemented using system. The main advantage of the project is the computerization of the entrance seat allotment process. Administrator has the power for the allotment. The total time for the entrance allotment became lesser and the allotment process became faster. It helps student for making decision for choosing a right University.

## **AUTHORS AND THEIR PROPOSAL**

## **1. Quality of life before intensive care unit admission is a predictor of survival**

**José GM Hofhuis, Peter E Spronk, Henk F Van Stel, Augustinus JP Schrijvers, Jan Bakker**

**Critical Care 11 (4), 1-7, 2007**

Predicting whether a critically ill patient will survive intensive care treatment remains difficult. The advantages of a validated strategy to identify those patients who will not benefit from intensive care unit (ICU) treatment are evident. Providing critical care treatment to patients who will ultimately die in the ICU is accompanied by an enormous emotional and physical burden for both patients and their relatives. The purpose of the present study was to examine whether health-related quality of life (HRQOL) before admission to the ICU can be used as a predictor of mortality. We conducted a prospective cohort study in a university-affiliated teaching hospital. Patients admitted to the ICU for longer than 48 hours were included. Close relatives completed the Short-form 36 (SF-36) within the first 48 hours of admission to assess pre-admission HRQOL of the patient. Mortality was evaluated from ICU admittance until 6 months after ICU discharge. Logistic regression and receiver operating characteristic analyses were used to assess the predictive value for mortality using five models: the first question of the SF-36 on general health (model A); HRQOL measured using the physical component score (PCS) and mental component score (MCS) of the SF-36 (model B); the Acute Physiology and Chronic Health Evaluation (APACHE) II score (an accepted mortality prediction model in ICU patients; model C); general health and APACHE II score (model D); and PCS, MCS and APACHE II score (model E). At 6 months of follow up, 159 patients had died and 40 patients were lost to follow up. When the general health item was used as an estimate of HRQOL, area under the curve for model A (0.719) was comparable to that of model C (0.721) and slightly better than that of model D (0.760).

## **2. How calculus eligibility and at-risk status relate to graduation rate in engineering degree programs**

**Bradley Bowen, Jesse Wilkins, Jeremy Ernst  
Journal of STEM Education 19 (5), 2019**

The problematic persistence rates that many colleges and schools of engineering encounter has resulted in ongoing conversations about academic readiness, retention, and degree completion within engineering programs. Although a large research base exists about student preparedness in engineering, many studies report a wide variety of factors that makes it difficult to address specific issues that prohibit students from completing a degree in engineering. Many studies anecdotally address mathematics achievement as a factor associated with success, but few contain empirical data for significant findings specifically related to success or readiness to take calculus. This study specifically examines engineering degree completion of calculus eligible students compared to non-eligible calculus students upon acceptance into a College of Engineering as a first-semester freshman, and the mediating effects of being at-risk for non-matriculation on this relationship. A 10-year span of University student engineering admission and completion data was accessed and analyzed in order to provide distinguishing differentiating factors in student preparedness as they pertain to calculus eligibility and student success as defined by being at-risk for non-matriculation. This study documents a partial mediating effect of at-risk status on the relationship between calculus eligibility and graduation rate, however, calculus eligibility remains a significant predictor of graduation rate and together with at-risk status predicts a significant proportion of the variance in graduation rate.

## **3. Delirium in hospitalized older persons: outcomes and predictors**

**Peter Pompei, Marquis Foreman, Mark A Rudberg, Sharon K Inouye,  
Victoria Braund, Christine K Cassel  
Journal of the American Geriatrics Society 42 (8), 809-815, 1994**

The purpose of this study was fourfold: to determine the rate of delirium among hospitalized older persons, to contrast the clinical outcomes of patients with and without delirium, to identify clinical predictors of delirium, and to validate the predictive model in an independent sample of patients. Two prospective cohort studies Medical and surgical wards of 2 university teaching hospitals.

In the derivation cohort, 432 patients were enrolled from the University of Chicago Hospitals. Patients 65 years of age or older admitted to 1 of 4 wards were eligible. Subjects were excluded if they were discharged within 48 hours of admission, unavailable to the research assistants during the first 2 days of hospitalization, or judged too impaired to participate in the daily interviews. In the test cohort, 323 patients 70 years of age or older admitted to Yale-New Haven Hospital were studied.

Subjects were screened for delirium daily and referred to experienced clinician investigators if acute mental status changes were observed. The clinician investigators assessed the patient for delirium based on DSM-III-R criteria. Duration of hospitalization was adjusted for diagnosis-related groups (DRG) and mortality rates were determined at discharge and 90 days after discharge. Socio-demographic characteristics, cognitive and functional status, comorbidity, depression, and alcoholism

The rate of delirium in the derivation cohort was 15%; subjects with delirium had longer hospital stays and an increased risk of in-hospital death. Cognitive impairment, burden of comorbidity, depression, and alcoholism were found to be independent predictors of delirium. The ability of the model to stratify patients as low, moderate, or high risk for developing delirium was validated in the test cohort in which the rate of delirium was 26%. This study confirms the high rate of delirium among hospitalized older persons and the associated adverse outcomes of prolonged hospital stays and increased risk of death. Patients can be stratified according to their risk for developing delirium using relatively few clinical characteristics which should be assessed, on all hospitalized older persons.

