Fewer and larger hospitals are expected in the forthcoming years due to the latest and on-going structural changes in the Danish healthcare sector. These large hospitals must be able to handle an increasing flow of patients, thus creating challenges for both logistics and resources. In connection to the establishment of the new hospitals, one of the biggest changes is the new concept of emergency departments (called "FAM"). In practice, the new emergency department (ED) is a merger of the former ED, urgent care unit, and observation unit, where most acute patients are to pass through a joint entrance. From here, patients are either treated completely or transferred to other specialty in-hospital departments. The EDs at the new hospitals can expect to cover a demographical area with 200,000-400,000 inhabitants, equivalent to an area two to three times as large as the current catchment area. The Danish regions have realised that the establishment of a joint reception of acute patients in the ED will be an important step towards improved quality in treatment and better utilisation of resources. It is a requirement that the reception process is formalised and evidence-based to ensure the logistics and resources at the ED is applied in the best possible manner and the most urgent patients are attended first. To meet such requirements, several initiatives are launched. These are, for instance, improving current competencies, new working procedures, enhanced documentation and registration practices, and the use of triage. All of the mentioned initiatives are new and not well validated to date. It would be desirable to enable measurement of each of the initiative’s effects. The goal of this PhD project was to develop a performance measurement model for EDs. The new model comprises only the most important performance measures that provide an estimate for overall ED performance levels. Furthermore, a thorough analysis of the interdependencies between the included performance measures was conducted in order to gain deeper knowledge of the ED as a system. The model enables monitoring of how well the ED performs over time, including how performance is impacted by the various initiatives. In the end, the developed model will be an important management tool to meet the management’s vision of providing the best possible care for the acute patient meanwhile achieving the highest possible utilisation of resources.