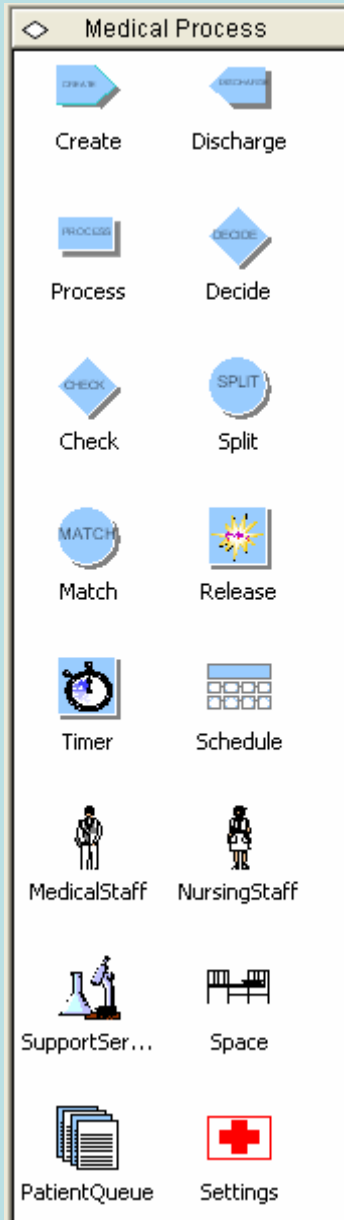


## Simulation Modeling in the Healthcare Industry with Arena's Medical Process Template



**REDUCE PATIENT LOS**

**INCREASE STAFF  
UTILIZATION**

**EXCEED EMERGENCY  
RESPONSE SERVICE LEVELS**

**LOWER COST PER PATIENT**

**TREAT MORE PATIENTS**

### Today's Challenge

**Balancing elective surgery and  
emergency services**

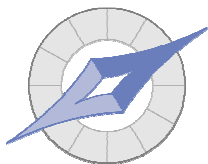
**Staffing according to demand**

**Ward allocation and sizing**

**Meet emergency response service  
requirements**

**Staff allocation to patient**

**Manage waiting lists**



Hospital Navigator is a specialized software and consultancy company, delivering operational decision support systems based on operations research technology such as simulation, optimization & heuristics. We help customers in making better decisions regarding strategic, tactical & operational issues.

*Choose the Right Direction!*



## Background

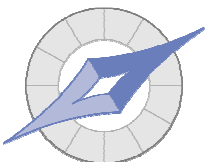
Balancing elective surgery with emergency services, is an every day challenge in Hospitals around the world. Scheduling highly skilled resources proves to be difficult, and patient waiting lists demand constant attention. Mastering this balancing act, means having the right mix of medical staff and other resources available during the week. This results in good emergency response times in combination with high overall bed utilization and reduced cost per patient.

## Solution

The Medical Process Template for Arena allows you to create a dynamic simulation model of your healthcare processes. It consists of 16 dedicated Arena Modules, for modeling. Model building is assisted by a Model Check Add-In. Once the model is finished, a custom User Interface allows problem owners to create and run scenarios, and evaluate the model results. Historical patient information can be imported from any PAS system, making validation quick and easy.

## Results

Hospital Navigator has received the preferred supplier status from the UK's NHS, based on our initial work in 4 large hospitals in the United Kingdom. Simulation Modeling has allowed these hospitals to be able to meet the 4 hrs emergency service time limit, improve their staff utilization, reduce LOS and overall become more efficient.



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*Choose the Right Direction!*