



Management of Stock Levels for the Manufacture of Aortic Stents

Project Outline:

The Issue: The management of stock levels for raw materials used to manufacture various types of aortic stents at Cook Medical is a difficult task. Both the future demand and actual quantities of raw materials required are unpredictable due to the bespoke nature of these devices. In the past, this has led to delays in delivery of orders and given the critical nature of these devices in the provision of healthcare, this situation must be avoided whilst ensuring that the over ordering of expensive raw materials is minimised.

Aim: Based on the demand forecast and actual demand data, Cook Medical is determined to be as accurate as possible in predicting the stock levels of raw materials required to manufacture various aortic stent grafts. As a result, Cook Medical will be able to place timely orders for the appropriate quantity of raw materials to ensure that demand is met at a predefined level of service.

Known Difficulties: It is difficult to predict the demand for these products and the raw materials required to manufacture them. Sales are affected by many factors including seasonal variability, while due to the customisable nature of aortic stents there is uncertainty about the amount of actual raw materials required to manufacture future products.