Implantation and the care of vascular reconstructions and accesses for haemodialysis is one of areas of cardiovascular surgery. Both vascular reconstructions, known as bypasses, and prosthetic haemodialytic accesses, known as grafts, are used only if conventional therapies are unsuccessful. Thus effectivity of these operations is critically important for patient survival. The aim of this thesis is development of software system for evidence data obtained during vascular operations and following checkups. Important is also support for basic analytical and statistical processing of collected data. Another goal is to transform collected data into knowledge useful for increasing effectivity of vascular operations.