Scientists of the Siberian State Medical University have developed an automated system to quickly determine the degree of blood loss in patients. The development is intended for use in ambulances and intensive care units.

The new system analyzes the key indicators of the patient's condition: blood pressure, heart rate, oxygen level in the blood and other parameters. For data processing, a neural network is used, trained in more than 21 840 records of physiological indicators.

A feature of development is a high accuracy of diagnosis, reaching 99%. This significantly reduces dependence on the subjective assessment of doctors, especially in emergency situations in accidents, disasters and natural disasters.

The system was created on the basis of a modified simulator of human physiology. It is currently tested in university clinics using real patients. According to developers, there are no analogues of such technology in world practice.