



One Step Further:
The Pursuit of Excellence in Critical Care



AUTOMATIC ROBOTIC SYSTEM OF DIAGNOSING { AND TREATMENT IN INTENSIVE CARE UNIT

Rozaliya Solodova

Lomonosov Moscow State University, Russia

Tel. +7 495 939 46 43; Fax+7 495 939 45 36

E-mail: tactile-lab@imscs.msu.ru



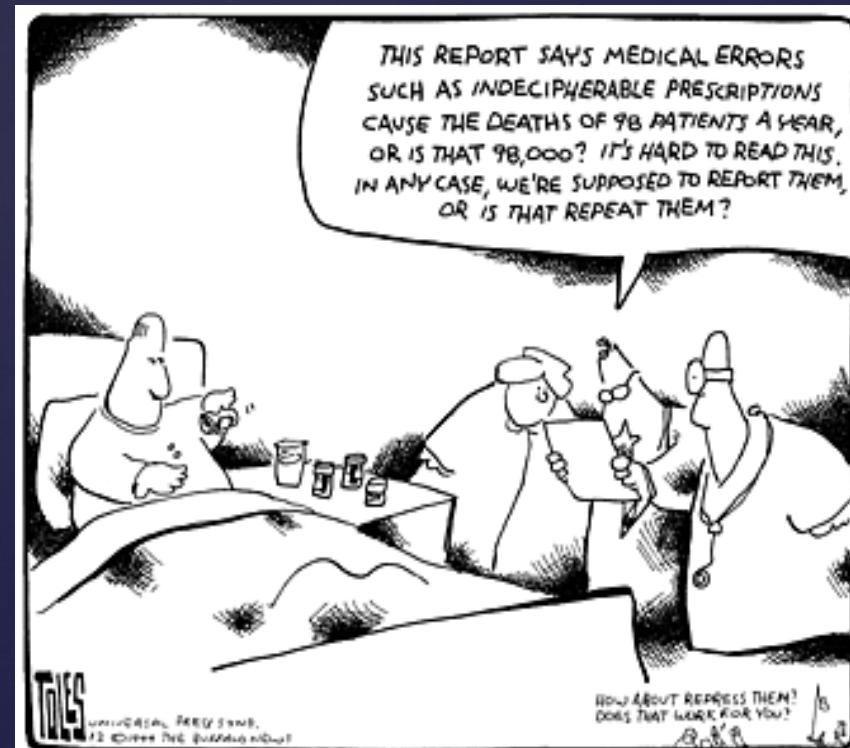
In the intensive care unit, on average, patients experience 1,7 errors per day

Medication errors account for 78% of serious medical errors in the ICU (Rothschild et al, 2005)

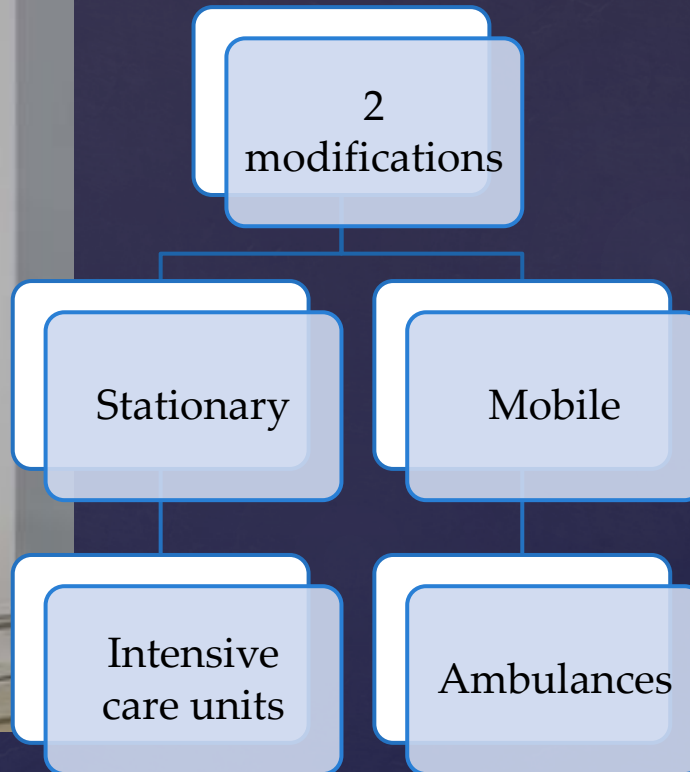
Strategies that have been shown to be successful:

- Medication standardization
- Computerized physician order entry (CPOE)
- Bar code technology
- Computerized intravenous infusion devices
- Medication reconciliation (Moyen E., et al, 2008)

Actuality



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AUTOMATIC ROBOTIC SYSTEM OF DIAGNOSING AND TREATMENT



Block of drug administration



Analytical unit

Patient monitor

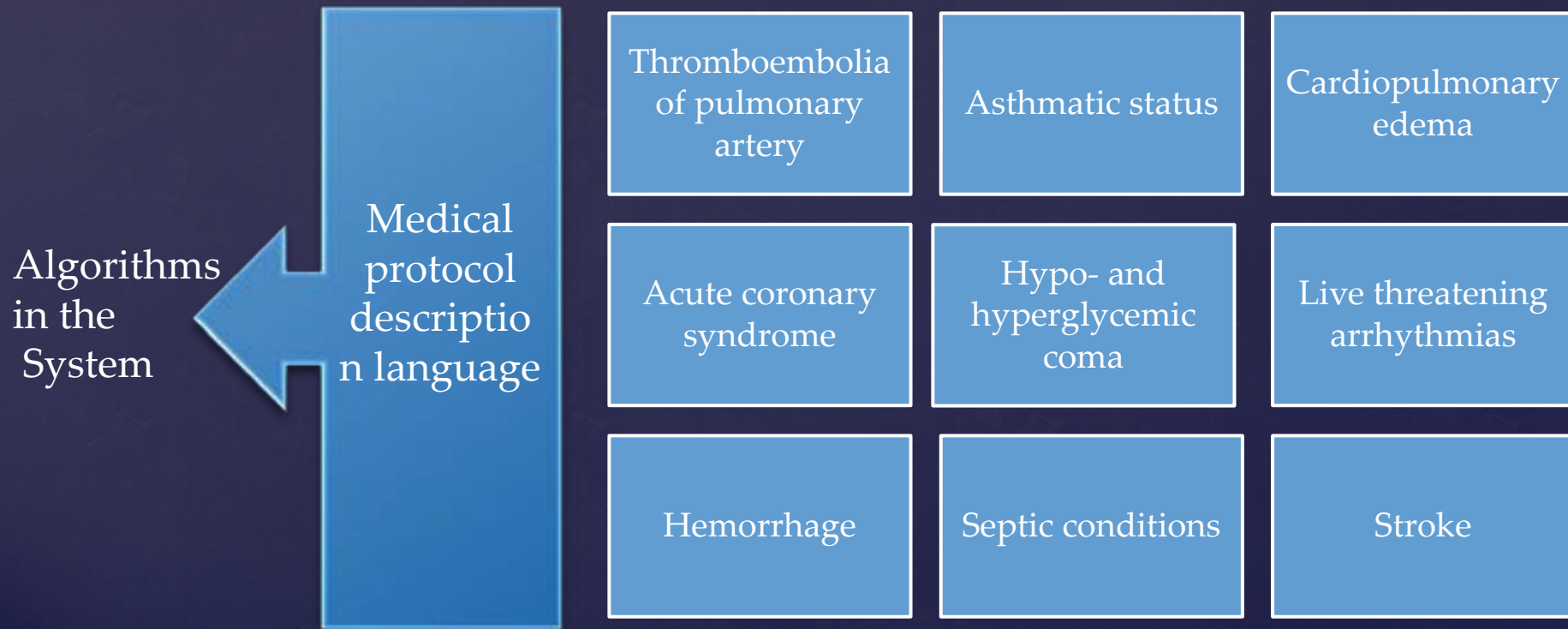
Portable blood analyzer

What is it?



Analytical unit : decision support system -processing of received information, the definition of the state, providing recommendations

Protocols based on National Clinical Guidelines



Analytical unit

Treatment

Diagnosis

Confirmation

Patient data

Bedside Monitor

Required
additional
information



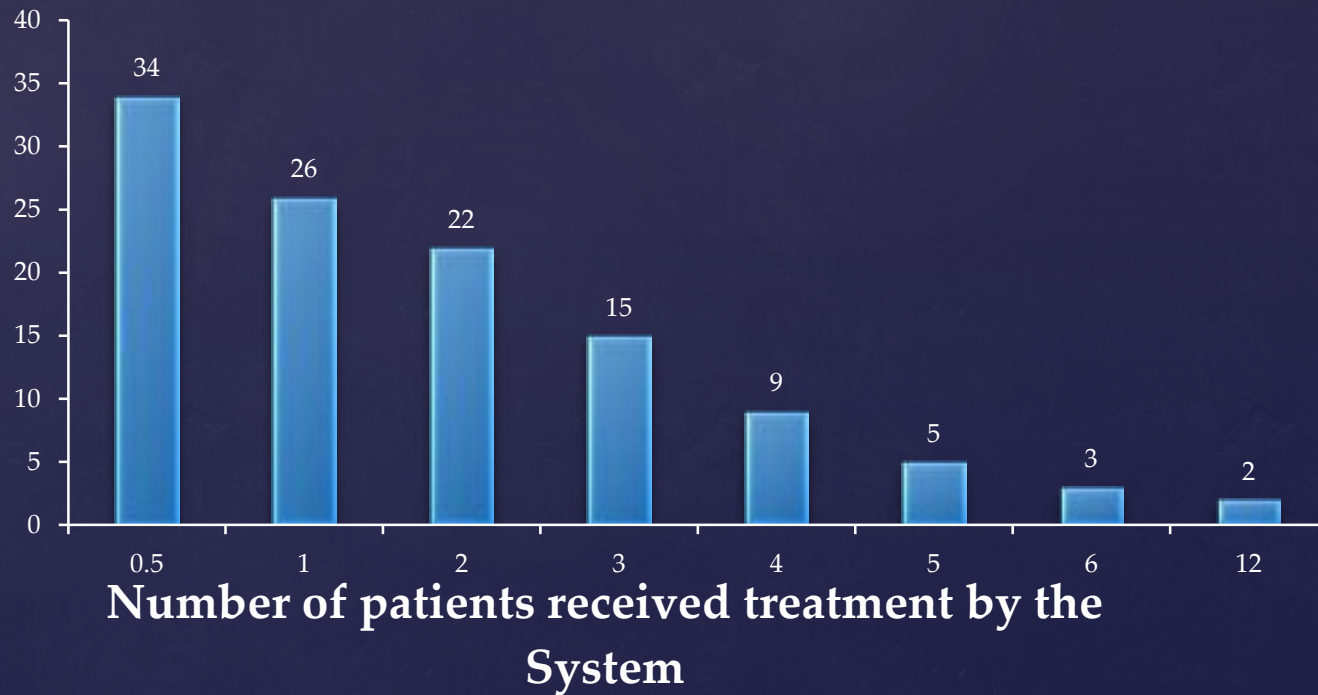
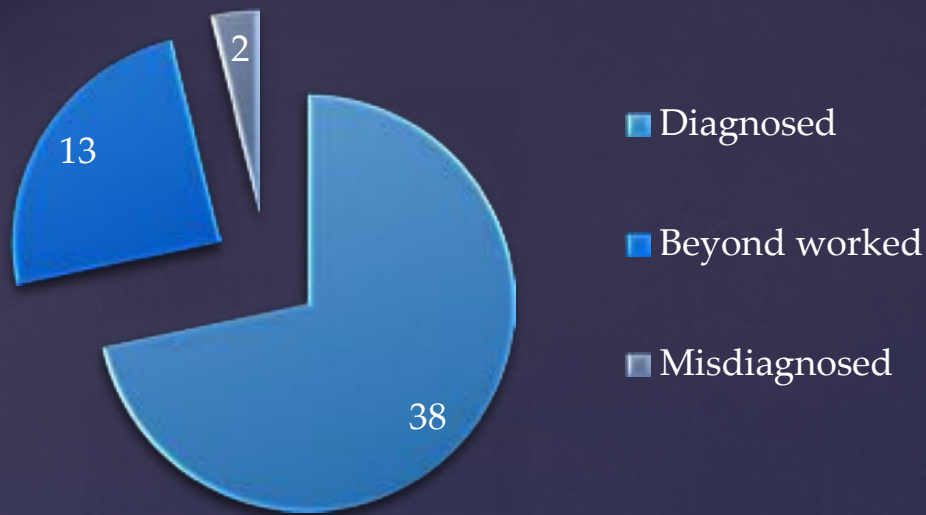
How does the System work?



Interface of the System



Materials and methods



Results



Automatic robotic system helps to diagnosis in 95% of cases and suggest about first therapeutic actions. In time sensitive cases it can prevent misdiagnosis and improper treatment.

Conclusion



Questions?