Systolic Target Assessment Tool (STAT) for TBI Management

AWARD AMOUNT: $73,975

THE TEAM

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THE PROBLEM

Having timely and accurate knowledge of SBP is helpful in preventing hypotension, a major cause of secondary brain injury. Currently, there are no non-invasive methods capable of continuously measuring SBP.

- Invasive methods can lead to infection
- Physical exams are unreliable for measuring SBP
- Existing devices are too expensive or inaccurate

THE SOLUTION

A device that monitors systolic blood pressure (SBP) to prevent secondary brain injury

STAT is a high-fidelity monitor that provides a near continuous indication of a patient’s SBP. This will allow first responders to keep patients at an optimal SBP, which is associated with improved survival and neurologic outcome.

- Guides optimal blood pressure for TBI management
- Compact, self-contained, automated device
- Inexpensive relative to current technologies

THE TECHNOLOGY

The device combines pulse oximeter and blood pressure cuff data with a programmable algorithm to near-continuously monitor SBP.

If the pressure falls below a clinician-selected goal, the device sounds audible and visual alarms.

DEVD data visualized and stored