



Shock Sense

PEDIATRIC HEMORRHAGIC SHOCK EARLY RECOGNITION



JOHNS HOPKINS
BIOMEDICAL ENGINEERING



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M E D I C I N E

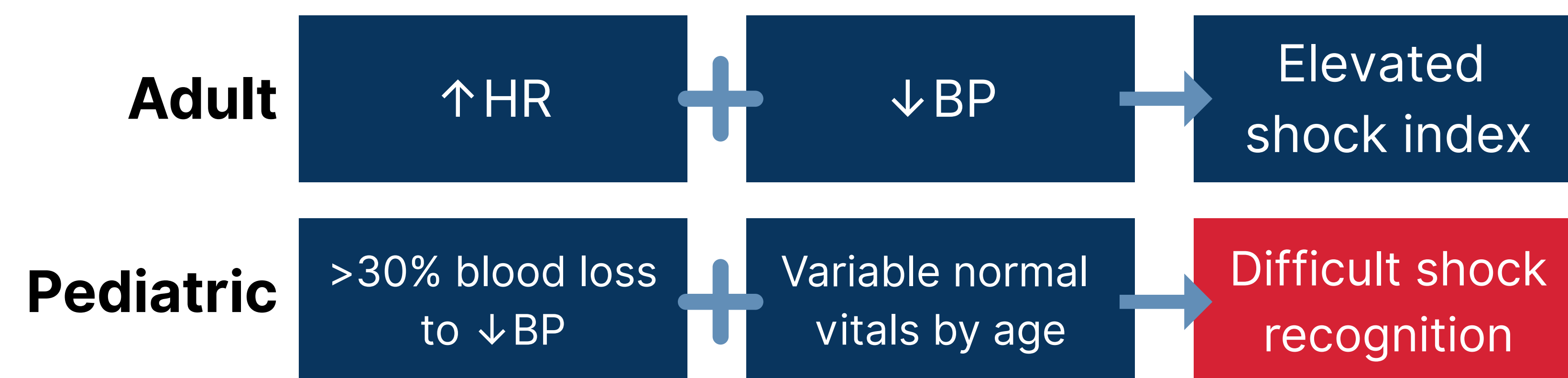
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OVERVIEW

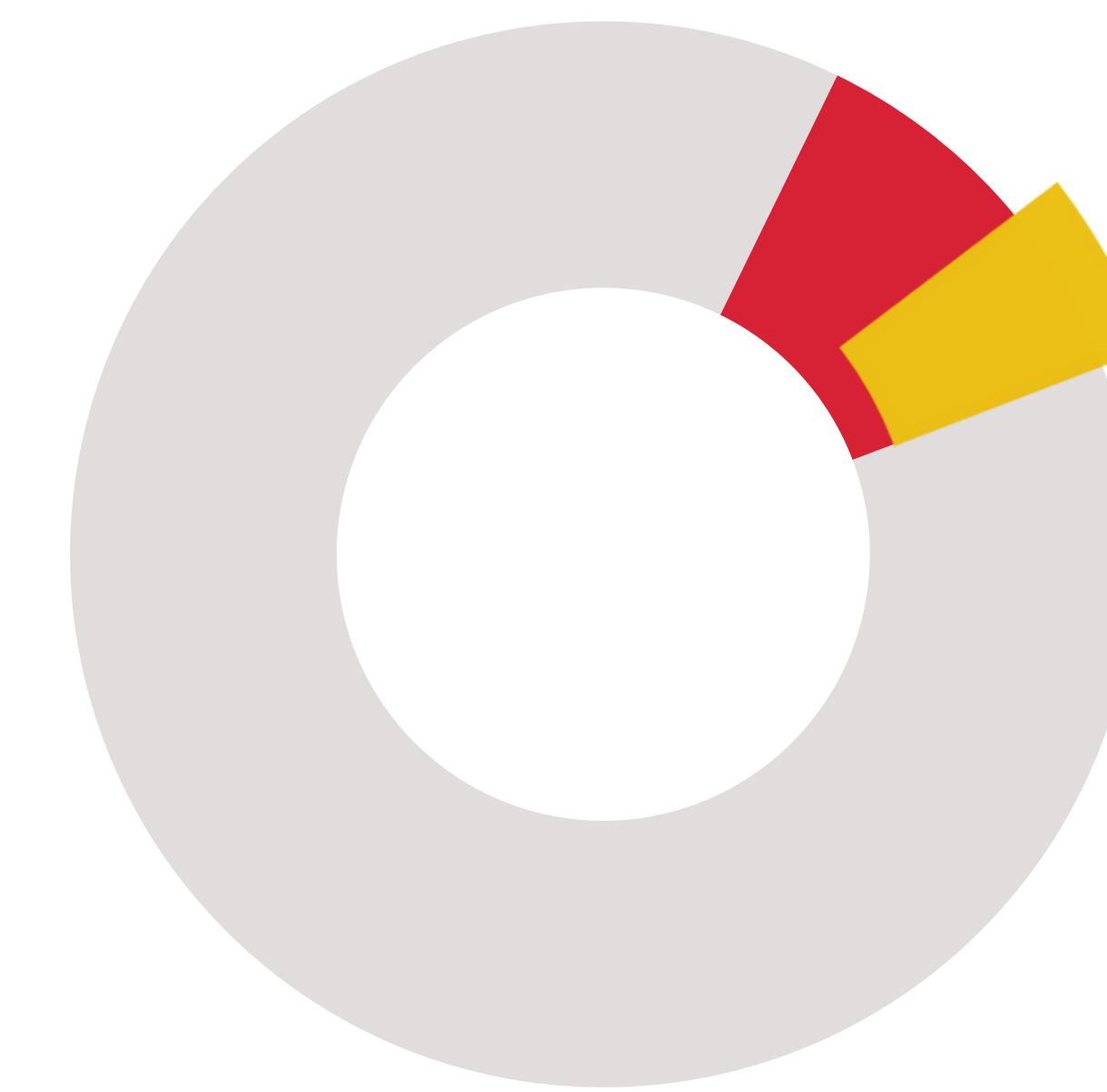
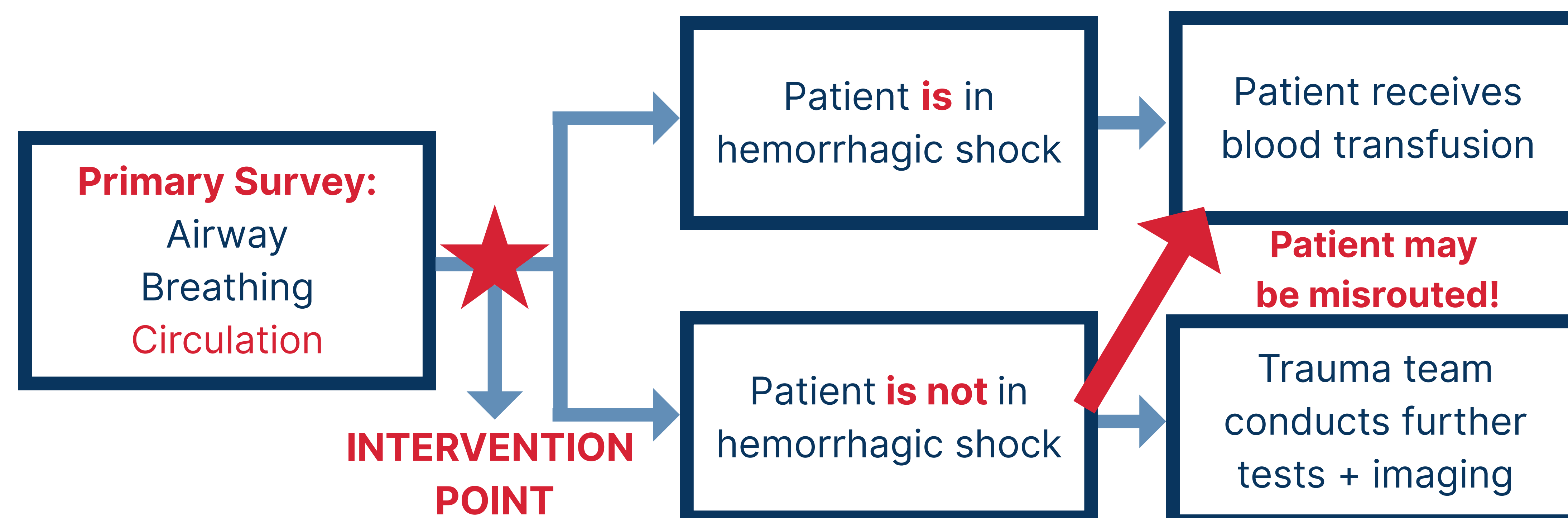
To recognize and treat hemorrhagic shock in pediatric trauma patients, **trauma teams** rely on **heart rate (HR)** and **blood pressure (BP)** to recognize shock. However, due to the fast-paced environment of the trauma bay, and varying classification of shock by patient age, it is challenging to recognize shock in a timely fashion. Especially since children compensate for blood loss better than adults and mask the early signs of shock. As a result, delayed recognition can result in higher mortality and increased risk of complications for pediatric patients.



To address this, we've developed a **fast**, **accurate**, and **easy-to-interpret** device for use in the trauma bay that incorporates existing vitals data to deliver actionable information to the trauma team.

OUR NEED

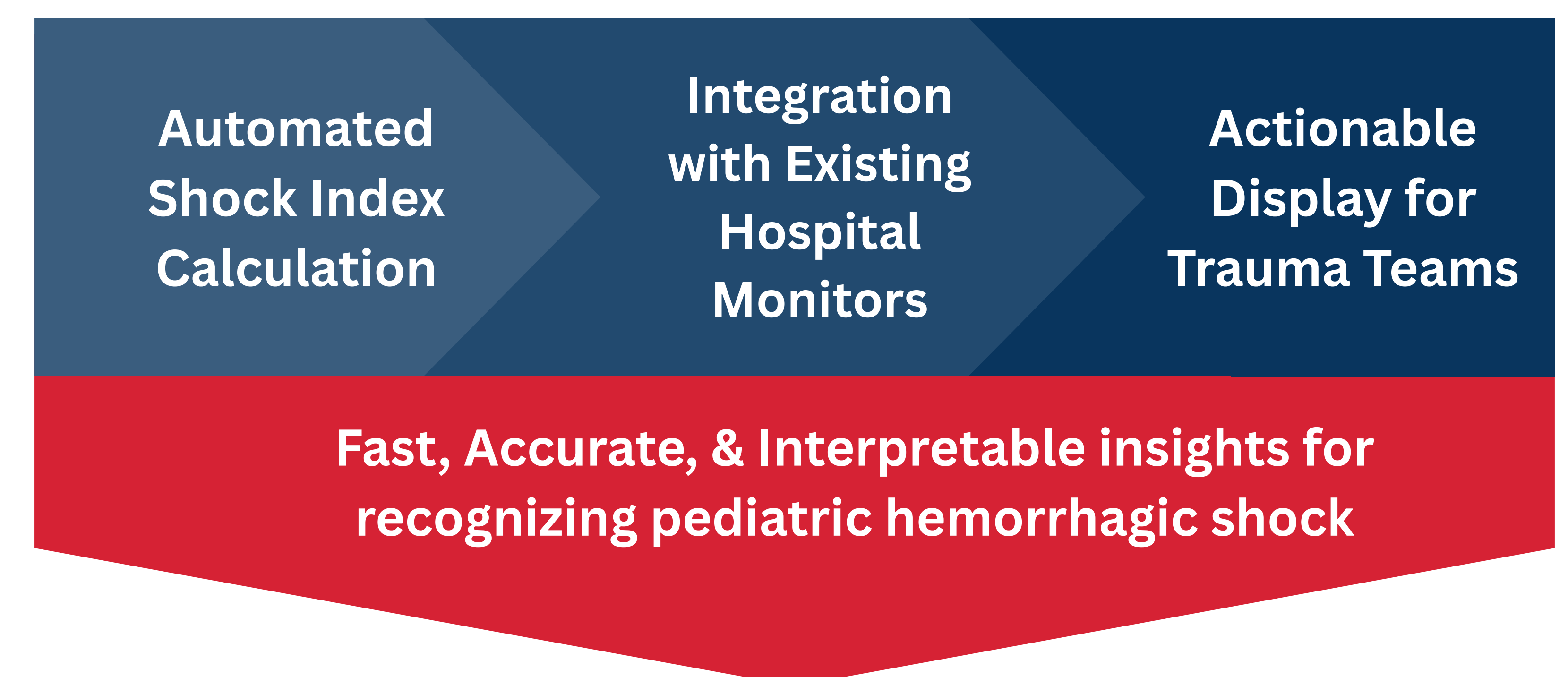
Trauma teams need a way to **quickly assess blood perfusion status** in pediatric trauma victims in order to **more accurately recognize hemorrhagic shock**.



12% US childhood deaths occur due to **hemorrhagic shock complications**

Half could be preventable with **early recognition and transfusion**

OUR APPROACH



VALUE ADDED

