PICTURE

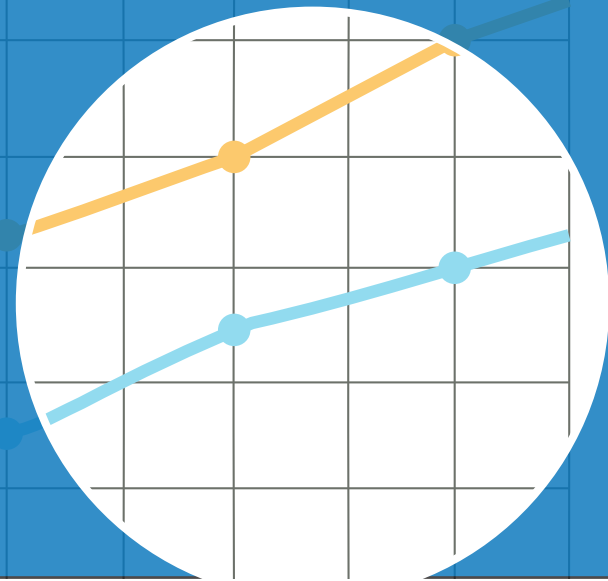## Predicting Intensive Care Transfers & other Unforeseen Events

UNMET NEED

Early detection of patient deterioration has been found to lead to reduced mortality risk, reduction in length-of-stay and decreased hospital costs, yet identifying patient deterioration is a challenge for clinicians.

Existing systems using scores to quantify patient risk have not been able to reliably predict patient deterioration and, as a result, have exacerbated alarm fatigue.

SOLUTION

PICTURE (Predicting Intensive Care Transfers and other Unforeseen Events) is a machine learning algorithm that utilizes electronic health record data to passively and accurately predict ICU transfer or death as a proxy for patient deterioration. In addition, PICTURE also provides an explanation of the main factors contributing to its prediction, which can be used to inform patient care.

COMPETITIVE ADVANTAGE

PICTURE was designed for seamless integration into any hospital. By harnessing machine learning to more accurately predict patient deterioration, PICTURE produces fewer false alarms than any system currently available. In addition, the ability to explain its predictions using SHAP (Shapley Additive exPlanations) provides a layer of invaluable transparency. Other features such as a feedback loop and user-defined and learned thresholds, ensure the system provides optimal performance in each hospital without making changes to the clinician's workflow.

REDUCED CARE COST

REDUCED HOSPITAL STAY

REDUCED MORTALITY