AI-IMPACT4KidsTBI: Using Artificial Intelligence (AI) innovations to <u>IMprove PAtient Care and ouTcome in Childhood Traumatic Brain Injury</u> T.Y.M. Lo on the behalf of KidsBrainIT and G-WiB

University of Edinburgh & NHS Lothian, Edinburgh, UK



## The 1<sup>st</sup> British Data-driven Research Programme in Children's Critical Care Medicine



**Usher Institute is** the 'home' of the 1<sup>st</sup> British data-driven research, innovation, and engagement programme in children's critical care medicine.



## Why 'Big Data' Research in Children's Critical Care Units



**Children's Critical Care Unit** (Technology heavy environment)



The 'big data' from each patient



- Phase Synchrony (EEG)
- **P**sychology (Emotional)



**Data-Driven** Improvement Research

+ Innovations

ids

An example - Our 'Big Data' Research in Childhood Brain Trauma



## Better Health, Better Future for Critically III & Injured Children

