

MAY 2025



The University of Texas at Austin
Dell Medical School

Health Science Data Platform for AI DISCOVERY

UT System - AI in Healthcare Symposium

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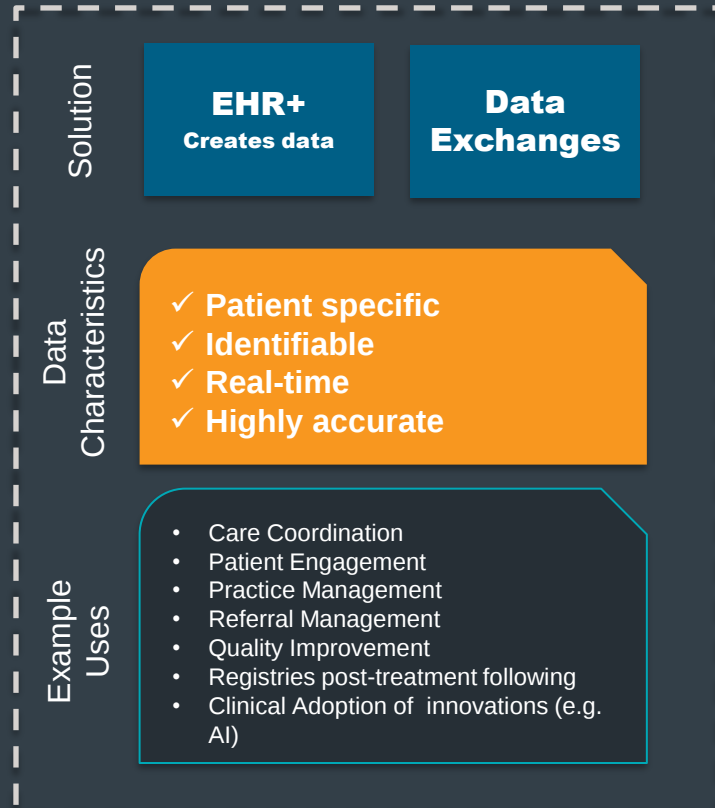
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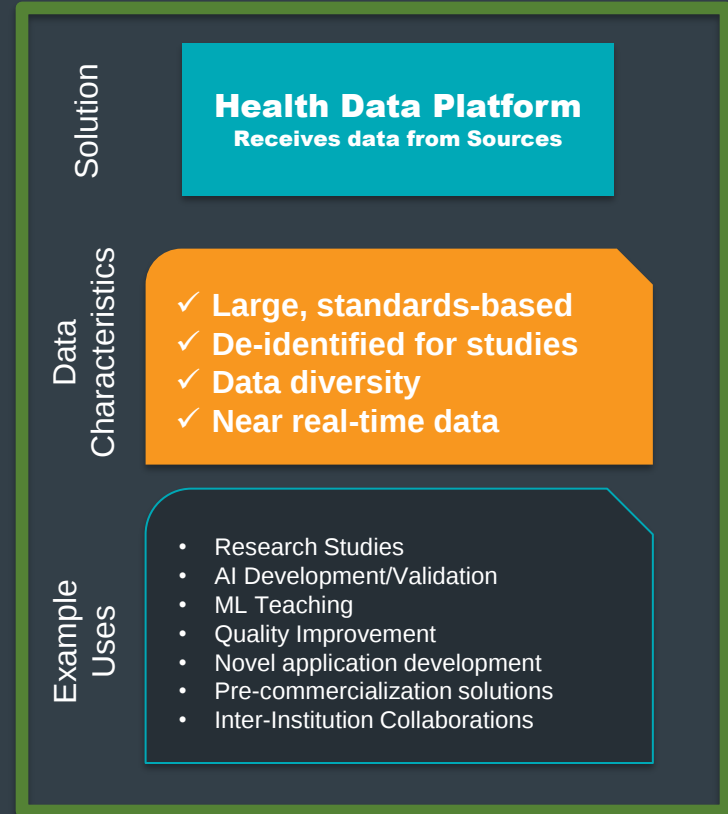


Two-Part Data Strategy

Care Provision



Innovation/Development



SECURITY • PRIVACY • REGULATORY • GOVERNANCE • ETHICS • CONTINUOUS IMPROVEMENT

CREATING A DIFFERENTIATED RESEARCH CAPABILITY



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PROJECT
UNLOCK
MADE FOR INSIGHT

A FUTURE-FORWARD HEALTH DATA SCIENCE PLATFORM



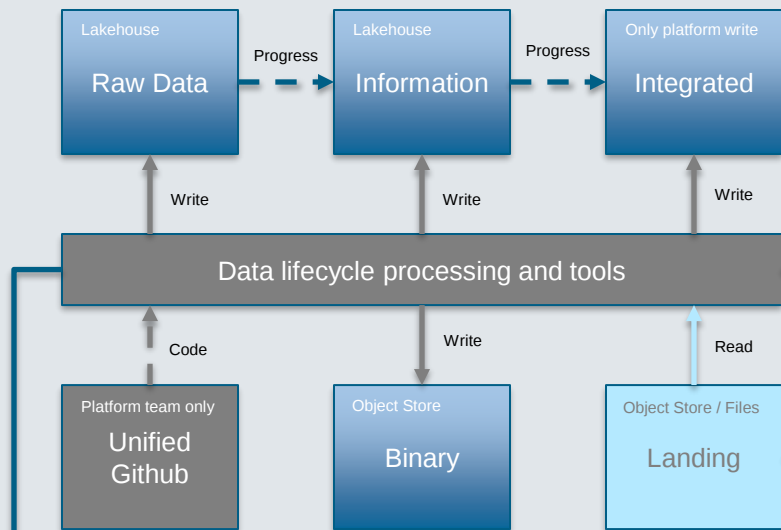
Design a Data Platform That Has...

- Nimble data and a forward-looking architecture
- Shared ecosystem for data management and analytics
- Ease of use for independent research and education projects
- Advanced cohort building capabilities
- Fully enabling enterprise needs for integrated insight
- On-platform BI tools
- On-platform AI and Machine Learning toolkits and languages
- Strong security and compliance
- Infrastructure automation, cohesion, and on-demand capacity



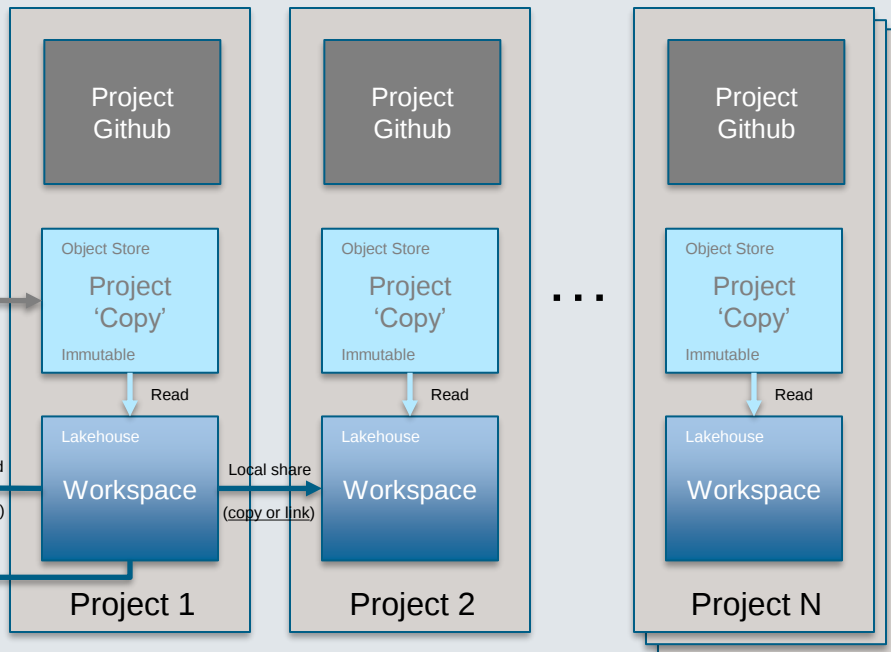
Lifecycle and Environment Setup

Unified 'Data Fabric' (global)



TACC workload "easy button"

Research & Education Workspaces (one per project, overall capacity 'turned off' when not in use)





Strong partnerships across the university

Oden Institute

**Texas Advanced Computing
Center (TACC)**

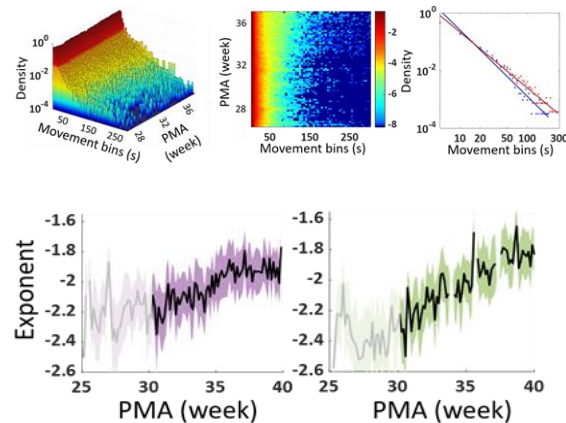
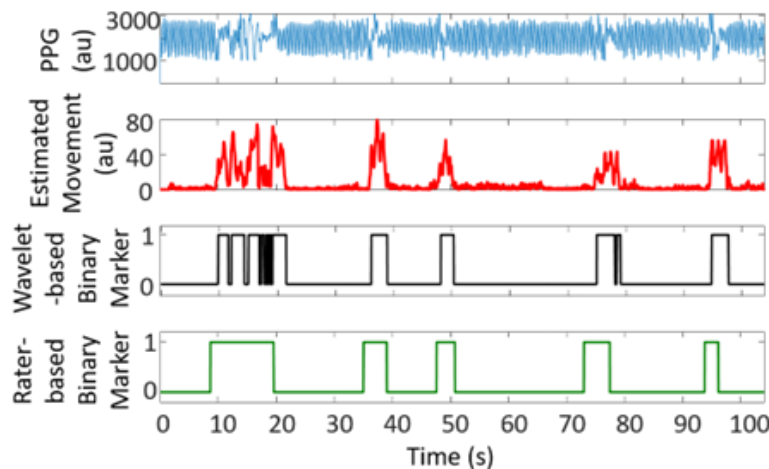
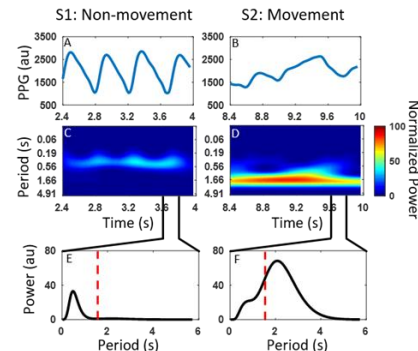
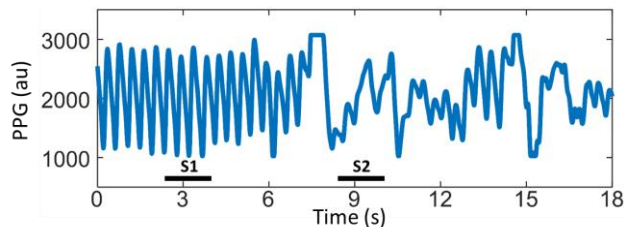
**Center for
Computational
Medicine**

**Machine
Learning
Laboratory**

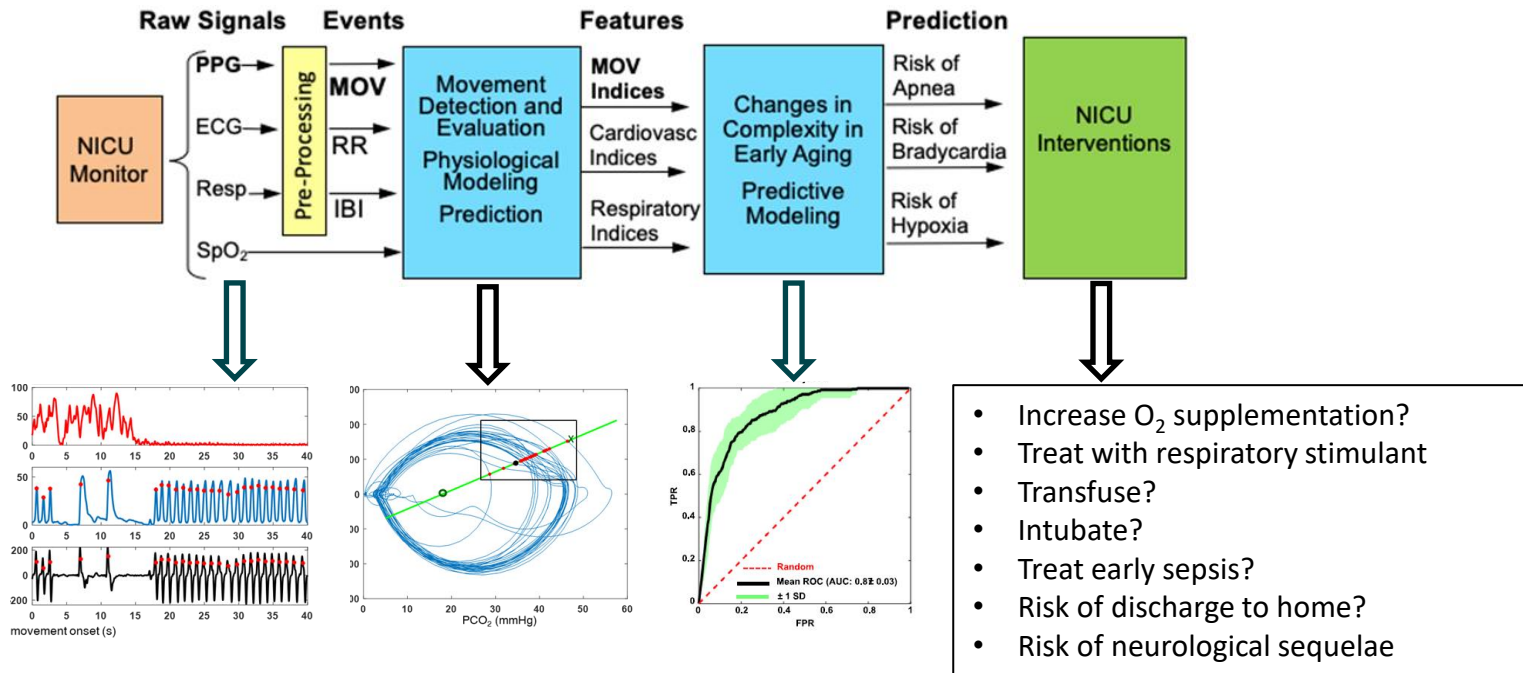
AI Health Lab

- Pediatric Emergency Care (NPRP)
- Women's Health Initiatives on preterm and maternal health / mortality
- Human Centric AI Decision Making
- Neonatal Intensive Care Unit Early Warning systems
- Advanced AI for imaging and modeling techniques to improve diagnostics and treatment in cancer and diabetes

Measuring movement as a neurological vital sign in preterm infants

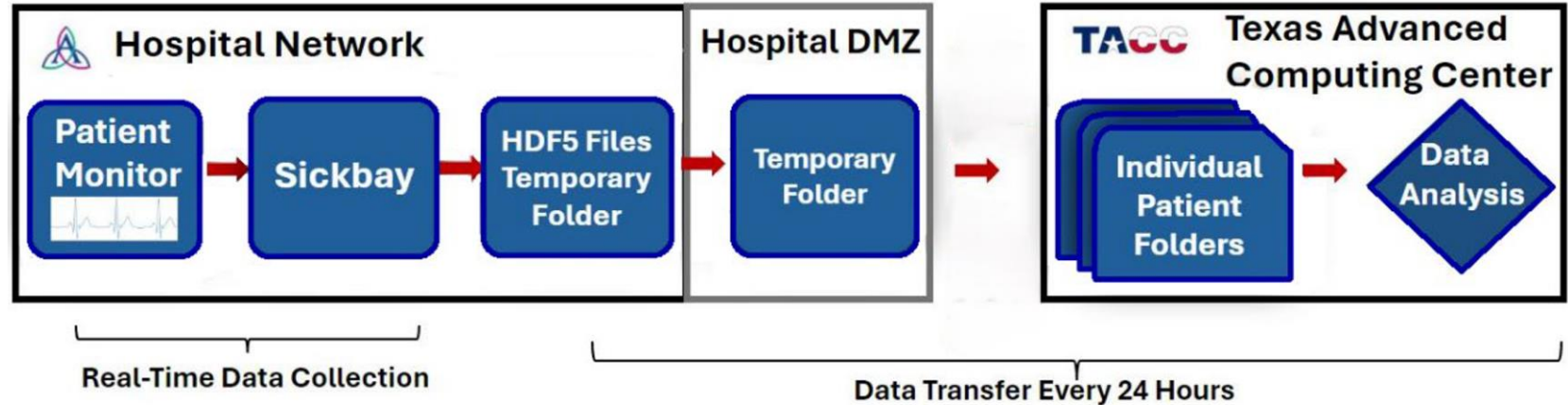


Example: Maturation of cardiorespiratory stability in preterm infants



Clinical trials on early intervention for improving clinical outcomes

Automated pipeline for ICU data transfer



Data flows from bedside patient monitors to HIPAA-compliant platform, where algorithms are implemented for large-scale data analysis