

Shriners HQ Project Phase II: GT + Shriners Accelerating Informatics Research

Principal Investigator
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PROJECT OVERVIEW

This project builds on the Georgia Tech and Shriners Children's collaboration to develop advanced HealthIT infrastructure for pediatric research and clinical analytics. Phase II focuses on improving the quality of warehoused research data, validating OMOP Common Data Model infrastructure, expanding FHIR adoption, and supporting next-generation cloud-based clinical data tools.

The Challenge

Large healthcare systems need reliable, standardized, and interoperable data infrastructure to support multi-site research, evidence-based care, and AI-enabled clinical decision-making. Without strong data quality checks and shared standards, research data can be difficult to query, validate, exchange, or visualize across clinical sites.

The Innovation

The team adapted OHDSI's Data Quality Dashboard into a Python version compatible with Shriners' MS Fabric environment and developed dashboards that can be implemented within the Shriners research cloud. The project also advances FHIR-compatible web applications, Azure-based FHIR and DICOM infrastructure, motion data visualization, and proof-of-concept extended reality tools for EHR visualization.

Potential Impact

This work could strengthen Shriners Children's clinical research infrastructure, improve data quality and interoperability, and enable broader use of AI and precision medicine tools across pediatric care sites.

INSTITUTION

Georgia Institute of
Technology

FUNDING

\$509,804

STATUS

Active
Research Ongoing

TIMELINE

2023–2026