

2018 Healthcare Engineering and Patient Safety Symposium

Mission

Research

Create, test, and publish new knowledge that advances precision health science. Fund precision health science through our Investigators and Scholars Awards programs.

Education

Recruit the best students and faculty through an integrated, rapidly evolving precision health certificate program.

Service

Develop tools to enable the integration of research at the point of care, and evaluate the impact on the health of Michigan residents.

Objectives

- Develop a diverse patient cohort, integrating novel datastreams and sources
- Establish a secure analytics platform with leading-edge software stack and computing hardware
- Enable secure access to real-world data while adhering to expectations of consented participants
- Build a collaborative research community bridging the breadth of expertise at U-M
- Sponsor a competitive grants program to provide funding to advance PH science
- Devise processes that integrate discoveries into patient care
- Tackle important health issues through use cases ranging from opioid misuse to mental health, metabolic disease, and cancer



Making Connections, Discovering Solutions for Healthier Lives

What is Precision Health at U-M?

A population-based strategy that uses advanced tools and technology to discover how genetic, lifestyle, and environmental factors influence a population's health

Precision Health and CHEPS

CHEPS is partnering with Precision Health to enhance:

Process Flow Mapping

- Observing preoperative consent and blood checking components of patient recruitment processes at U-M
- Developing thorough process flow maps to use in other clinical environments

Cohort Development

- Assessing existing data and collecting feedback from the research community
- Diversifying patient population and types of data collected

CLIA Certification

- Structuring a process improvement/quality certification process
- Providing guidance on CHEPS process flow maps to document process changes
- Developing process documentation to standardize processes and support certification applications

Services

Faculty Access to Research Data

- Research Data Warehouse and DataDirect
- Michigan Genomics Initiative
- Central Biorepository
- Faculty-generated data sources

Data Analytics/IT Support

- Secure data enclaves
- HIPAA/PHI/CUI compliant platforms
- Cloud computing
- Scientific facilitators

Education and Training Programs

- Seminar series
- Symposia
- Certificate program
- Patient education
- Health professional training

Research Output Implementation

- Develop processes to take discovery to implementation
- Identify actionable clinical content for further study

