## Lessons learned during implementation of OMOP common data model across multiple health systems

76

William Garneau<sup>1</sup>, Benjamin Martin<sup>2</sup>, Kelly Gebo<sup>3</sup>, Paul Nagy<sup>3</sup>, Johns Hopkins<sup>1</sup>, Danielle Boyce<sup>2</sup>, Michael Cook<sup>2</sup> and Matthew Robinson<sup>3</sup>

<sup>1</sup>Biomedical Informatics & Data Science Program, Johns Hopkins University School of Medicine, Baltimore, MD, USA; <sup>2</sup>Department of Medicine/Division of Infectious Diseases, Johns Hopkins University School of Medicine, Baltimore, MD, USA and <sup>3</sup>Department of Radiology and Radiological Science, Biomedical Informatics & Data Science Program, Johns Hopkins University School of Medicine, Baltimore, MD, USA

OBJECTIVES/GOALS: Adoption of the Observational Medical Outcomes Partnership (OMOP) common data model promises to transform large-scale observational health research. However, there are diverse challenges for operationalizing OMOP in terms of interoperability and technical skills among coordinating centers throughout the US. METHODS/STUDY POPULATION: A team from the Critical Path Institute (C-Path) collaborated with the informatics team members at Johns Hopkins to provide technical support to participating sites as part of the Extract, Transform, and Load (ETL) process linking existing concepts to OMOP concepts. Health systems met regularly via teleconference to review challenges and progress in ETL process. Sites were responsible for performing the local ETL process with assistance and securely provisioning de-identified data as part of the CURE ID program. RESULTS/ANTICIPATED RESULTS: More than twenty health systems participated in the CURE ID effort.Laboratory measures, basic demographics, disease diagnoses and problem list were more easily mapped to OMOP concepts by CURE ID partner institutions. Outcomes, social determinants of health, medical devices, and specific treatments were less easily characterized as part of the project. Concepts within the medical record presented very different technical challenges in terms of representation. There is a lack of standardization in OMOP implementation even among centers using the same electronic medical health record. Readiness to adopt OMOP varied across the institutions who participated. Health systems achieved variable level of coverage using OMOP medical concepts as part of the initiative. DISCUSSION/SIGNIFICANCE: Adoption of OMOP involves local stakeholder knowledge and implementation. Variable complexity of health concepts contributed to variable coverage. Documentation and support require extensive time and effort. Open-source software can be technically challenging. Interoperability of secure data systems presents unique problems.

## Can we do community outreach together?: A CTSI-Cancer Center Partnership

Sylk Sotto-Santiago<sup>1</sup>, Gina Claxton<sup>1</sup>, Brenda Hudson<sup>1</sup>, Lynsey Delp<sup>1</sup>, Tanya Johnson<sup>2</sup>, Sarah Wiehe<sup>1</sup> and Sharon Moe<sup>1</sup>

<sup>1</sup>Indiana Clinical and Translational Sciences Institute and <sup>2</sup>IU Simon Comprehensive Cancer Center

OBJECTIVES/GOALS: The Indiana CTSI is a partnership with Indiana University, Purdue University, University of Notre Dame, and Regenstrief Inst. IU's Comprehensive Cancer Center

is central to cancer research and education. A partnership between these critical entities ensures certain efficiencies. We provide a potential framework for community outreach efforts. METHODS/STUDY POPULATION: The Indiana CTSI's partner institutions have long prioritized community outreach and engagement across the state. However, in environments with limited funding resources, efficiencies are critical to the sustainability of programs and efforts. All IN for Health, an initiative of the Indiana CTSI, has partnered with IU Simon Comprehensive Cancer Center in community outreach by evaluating current practices, aligning staffing, evaluating events, prioritizing outreach efforts, and strategic outcomes. A tool for evaluation was developed and the prioritization matrix along with a database of events now guide outreach efforts. The All IN for Health board continues to be highly engaged in providing feedback and developing strategies. RESULTS/ANTICIPATED RESULTS: This partnership has increased outreach to state-wide events, including urban and rural communities, as well as events contributing to the health of historically marginalized groups in the state. The challenge was our ability to be present at all community events that are critical to the success of all our partners, but most importantly the communities we serve. Opportunities to partner across non-academic and community health partners were evaluated with an assessment of All IN for Health efforts. The resulting approaches are used as an example or a potential framework from which to organize similar partnerships with the goal of advancing research and health equity. Through this partnership, we have extended outreach and added efficiencies, demonstrating creative implementation and strategies. DISCUSSION/SIGNIFICANCE: Unfortunately, limited funding prevents CTSAs and Cancer Centers from engaging everywhere they are needed. Translation research constantly encourages team science and collaboration. Our efforts are a reminder that the same approach applies to operations and synergizing the assets present within our community health and institutional partners.

**78** 

## **Empowering Patients with Congenital Heart Disease: Insights into Serious Video Game Preferences**

Rebecca K. Delaney<sup>1</sup>, Alexander J. Alexander<sup>2</sup>, Ian Lindsay<sup>2</sup>, Nelangi Pinto<sup>3</sup>, Teresa Hagan Thomas<sup>4</sup>, Ellen Lipstein<sup>5</sup>, Tamara Shepherd<sup>6</sup> and Angela Fagerlin<sup>1</sup>

<sup>1</sup>University of Utah Health, Salt Lake City, VA; <sup>2</sup>University of Utah Health, Primary Children's Hospital; <sup>3</sup>Seattle Children's Hospital; <sup>4</sup>University of Pittsburgh; <sup>5</sup>University of Cincinnati; Cincinnati Children's Hospital and <sup>6</sup>Not applicable

OBJECTIVES/GOALS: Serious video games are designed for skill-building and are increasingly being used for healthcare interventions with adolescents and young adults (AYAs). The study goal was to identify AYAs' preferred game features, by demographic groups, to inform the development of a game to improve AYA's engagement in their congenital heart disease (CHD) care. METHODS/STUDY POPULATION: Pediatric patients, 12-18 years old, completed surveys at a routine CHD care visit. Participants rated their likelihood of using games to learn CHD management skills (5-point Likert) and preferences for ten game features commonly used, such as: personalization (make your own avatar) and levels (unlock new, advanced