

initiated clinical trials at WashU. RESULTS/ANTICIPATED RESULTS: WashU currently has 217 grants submitted and 114 grants awarded for NIH clinical trials. In the proof of concept, we confirmed and successfully matched over 100 awarded NIH investigator-initiated clinical trials at WashU across RMS and the NIH Reporter Tool. We determined Phase I of the dashboard would track clinical trial data from these two sources via the WashU Data Warehouse. The pilot of Phase I of the dashboard will begin in February 2025. We also identified mission critical data elements not accessible via the WashU Data Warehouse (e.g., enrollment diversity, IND, and IDE). The plan to procure this data will require continued stakeholder support in Phase II of the dashboard to (1) expand data capture in RMS and (2) ingest additional data into the WashU Data Warehouse from RMS or new systems (e.g., ClinicalTrials.gov). DISCUSSION/SIGNIFICANCE OF IMPACT: Early access to robust data about NIH investigator-initiated clinical trials via our newly created Phase I dashboard will better position our centralized service cores to support trial success, compliance, and quality improvement across the lifecycle of these clinical trials. In Phase II, we plan to expand the data available in the dashboard.

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### Value of TriNetX national database to inform characteristics of observation patients assessed for acute syncope

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OBJECTIVES/GOALS: Syncope is a common diagnosis in observation medicine, and characterization of observation patients is often limited to single unit, single center, or single payer systems. TriNetX, a federated deidentified multicenter national public database, provides an opportunity to study these patients from across the USA. METHODS/STUDY POPULATION: This retrospective cohort study queried data from 56 health care organizations (HCO) in TriNetX to examine differences between observation patients with syncope who required admission vs. those who were discharged. All observation stays with a diagnosis of syncope, defined by ICD-10, CPD, and SNOWMED codes, were queried. A total of 281,162 observation encounters were included in analysis, of which 46.4% (n = 130,357) were admitted and 53.6% (n = 150,805) were discharged. Data on age, gender, race, ethnicity, presence of congestive heart failure, EKG, and serum labs were collected for comparative analysis. T-test and Chi-square analyses were deployed with significance = p RESULTS/ANTICIPATED RESULTS: The cohorts demonstrated statistically significant differences across all demographic factors, however, they were not clinically meaningful. Clinically significant differences include that only 72.8% of admitted patients and 68.3% of discharged patients had an EKG recorded in TriNetX

during the period of observation (p DISCUSSION/SIGNIFICANCE OF IMPACT: Patients admitted from observation status were more likely to have CHF, higher BNP, and pro-BNP values. TriNetX is a powerful tool to study patients across multiple hospital systems and payer types. Limitations, however, include incomplete data and inaccuracies among claims records.

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### Learning experience from establishing a Research Seed Grant Program supporting an integrated community-based research and practice via the learning health system framework

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OBJECTIVES/GOALS: Community-based practices have limited research opportunities for providers. As a rural community-based health system, Mayo Clinic Health System (MCHS) sought to create intramural funding mechanisms to help early-stage researchers conduct pilot research so they are more competitive to compete for more robust extramural funding opportunities. METHODS/STUDY POPULATION: We created a Research Seed Grant Program infrastructure across our four MCHS regions (Southwest and Southeast Minnesota, Northwest and Southwest Wisconsin). This model program featured an initial research funding announcement call based on 6 prioritized programs (AI Validation & Stewardship, Cancer, Health Equity, Population Health, Rural Health, Learning Healthcare System [LHS]), with submissions uploaded to a central electronic repository. Proposal review and ranking was organized on a regional basis, with ranking of all proposals by at least 2 clinical scientist reviewers according to the NIH domain-specific framework (i.e., 1.0 best > 9.0 worst). Awards were competitively selected by conformity to prioritized research areas and through ranking of most competitive overall application scores. RESULTS/ANTICIPATED RESULTS: For our inaugural RFA, we received 55 grant application submissions across the MCHS regions. Fifteen of the most highly ranked applications were selected for awards on a per region basis, providing direct funding as well as protected investigator research time of 10% for up to six months. The selected projects address several research priorities including improving access, reducing health disparities, improving behavioral health in our communities, increasing cancer screening and prevention, and community-based pragmatic trials and interventions. Outcomes from these now completed pilot projects remain pending at this time. Funding for this seed grant program was supported by philanthropy, Mayo Clinic Research Administration, Mayo Clinic Comprehensive Cancer Center, and the Mayo Clinic CCaTS Rural Core. DISCUSSION/SIGNIFICANCE OF IMPACT: We present this framework for a LHS-focused Seed Grant program model for consideration of adoption by other national/international LHS. Future plans include tracking of outcome metrics (e.g., published peer review articles, extramural grant applications) of this initial cycle and future expansion of this program to support the goals of our LHS.