life cycle, sometimes fatal but often address able once identified, include a lack of buy-in from potential product users, a lack of planningabout integration into clinical workflow, inadequately labeled data, and attempting to use machine learning when what is desired is really a causal model for intervening. Recommendations for projects later in the AI life cycle include details of a testing plan (silent evaluation, pragmatic clinical trials), advice about clinical integration, both post-hoc and on going auditing for performance disparities, and planning for regulatory clearance. DISCUSSION/SIGNIFICANCE: Advising is more valuable for projects at the ideation phase, when multi disciplinary interrogation can identify weaknesses. But at all phases, projects have gaps related to a lack of specific disciplinary expertise. A multi disciplinary cluster like the AI Translation Advisory Board seeks to address these gaps.

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Team Science to Assess Effectiveness and Impact in Public Healthcare Delivery System Contracting

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OBJECTIVES/GOALS: Healthcare organizations and payers are moving from accountability to effectiveness frameworks. Static vendor contracts for full-scale implementation limit organizations' ability to evaluate impact before scale-up, or to iteratively improve. Our team science innovation employs science and learning methods as systems engage vendors. METHODS/STUDY POPULATION: Our team science innovation is a method to assess and model impact of interventions at scale in healthcare delivery systems. We are integrating expertise in learning processes of an academic medical center (UCLA CTSI) with the organizational knowledge and methodological expertise of the nation's largest Medicaid managed care plan (LA Care Health Plan), which has over 2 million members. The LA Care Advanced Analytics Lab has unique capability in machine learning, while enables deep learning of variation. Our innovative product is a template to quickly mobilize evaluation and learning for a diverse population in a varied and distributed delivery system. The template design enables rapid learning for the full-scale policy implementation often imposed by government, and in the short timeframes involved. RESULTS/ANTICIPATED RESULTS: LA Care and the UCLA CTSI partnered to provide subject matter expertise and design effective pilots for interventions such as transitional care services, complex care management, and physician home visit strategies, accounting for confounding factors affecting the intervention and outcome. So far, collaborative modeling and design has produced a successful pilot of a physician home visit program intended to reduce avoidable emergency department visits. This pilot quickly revealed several major changes that would need to be incorporated for the contracted vendor to produce results if operated at scale, further informed by machine learning, in sufficient time to inform the contracting process. There are multiple evolving applications, including housing/homelessness. DISCUSSION/SIGNIFICANCE: Integrating the large data and analytics of a large healthcare organization with learning methods from the CTSI – including learning from variation and designs for studying impact during scale-up – fosters academic-community team science that could significantly improve the value of our largest delivery systems, public and commercial.

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Platelets and Leukocytes Interact to Modulate Inflammation in Patients with CKD

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OBJECTIVES/GOALS: Platelets interact with leukocytes in the circulation to modulate inflammation in chronic diseases. In previous clinical study, we showed that platelet leukocyte interaction is reduced in the circulation of patients with CKD. Preclinical studies are needed to show whether these findings are a precursor to or a result of CKD. METHODS/STUDY POPULATION: We used mouse models (wild type and platelet-defect) and induced CKD with intraperitoneal cisplatin injections. We measured platelet leukocyte interactions before and after CKD induction in the two models. RESULTS/ANTICIPATED RESULTS: We found platelet-leukocyte interaction to reduce after CKD induction in both wild type and platelet-defect mice. This coincided with a pro-inflammatory state in these mice, as measured by serum TNFalpha levels. Specifically, pro-inflammatory state was exacerbated in CKD of mice with platelet-defects compared to the wild type. DISCUSSION/SIGNIFICANCE: These findings recapitulate translational findings in human CKD samples and confirm that CKD state results in reduced platelet-leukocyte interactions in the circulation, and this change imparts a pro-inflammatory state in the CKD state.

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Empowering Community Organizations with the Team Science Community Toolkit

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OBJECTIVES/GOALS: To introduce the new Team Science Community Toolkit, co-created by community and academic partners, and showcase its potential to empower Community Organizations (COs) in achieving equity in community-engaged research (CER). METHODS/STUDY POPULATION: In response to the challenges faced by COs in CER collaborations, qualitative interviews were conducted with CO staff from historically marginalized communities. These interviews informed the development of the Team Science Community Toolkit, a collaborative effort involving a Community Advisory Board (CAB) and Team Science experts from Northwestern University. The toolkit, designed using a community-based participatory research approach, incorporates the Science of Team Science and User-Centered Design principles. Integrated into the NIH-sponsored COALESCE website, it includes

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