University. Participants were recruited through Upstate's Family Medicine and OB/GYN practices via a MyChart invitation sent by the practices. Participating patients will be asked to complete a survey, through MyChart, every 3 months for 18 months. Participating health providers will be trained to use the decision support tool and participate in 3 interviews with the researchers to gain insight into the usefulness and effectiveness of the tool. RESULTS/ANTICIPATED RESULTS: Of the 465 eligible women, 117 women responded to our MyChart invitation to join our study. Of these, 105 agreed to participate and 98 met eligibility criteria. Only half of the women currently enrolled in our study had spoken to a provider about menopause related symptoms (56.1%) prior to study enrollment. DISCUSSION/SIGNIFICANCE OF IMPACT: The goal of this study is to improve menopause related symptoms in women, thus increasing their quality of life, but it will also provide important process evaluation for using EPIC and MyChart for future research studies.

**2506**

## Using Amazon's Mechanical Turk as a tool for a global survey: Lessons learned from a large-scale implementation

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OBJECTIVES/SPECIFIC AIMS: To share lessons learned from implementing a health survey to a global sample of mTWs. METHODS/STUDY POPULATION: mTWs were paid $0.50 for taking a 15 minute survey to ascertain attitudes and intentions toward participating in genetic research. Two phases included: pilot survey targeting 7 global regions and a large-scale implementation in English in United States, India, and other countries and in Spanish in Spanish speaking countries. Administrative and descriptive information were collected and analyzed by region/country including: completions by location, demographics, time to complete, and survey satisfaction. RESULTS/ANTICIPATED RESULTS: There are 4 key lessons: (1) MTurk is fast. The US sample (n = 505) accrual took <2 days and the Indian sample (n = 505) took 11 days, while the response from other countries (n = 118) generally exceeded 30 days. (2) Using Amazon country specification was the best way to ensure responses from specific countries and regions. (3) Demographic differences exist in mTWs between countries. For example, US mTWs were significantly more likely female (60.1%) compared with India (30.2%) and other countries (34.2%). (4) mTWs found the survey understandable/acceptable. mTWs reported high understandability and acceptability of the survey, which did not vary significantly across countries or by language. DISCUSSION/SIGNIFICANCE OF IMPACT: mTurk provides an efficient platform for survey research from diverse US and Indian samples. In other countries and in Spanish, the mTurk mechanism yielded a smaller sample more slowly but was still effective.

**2507**

## Towards a scalable informatics platform for enhancing accrual into clinical research studies

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OBJECTIVES/SPECIFIC AIMS: Issues with recruiting the targeted number of participants in a timely manner often results in underpowered studies, with more than 60% of clinical studies failing to complete or requiring extensions due to enrollment issues. The objective of this study is to develop and implement a scalable, organization wide platform to enhance accrual into clinical research studies. METHODS/STUDY POPULATION: We are developing and evaluating an informatics platform called Utah Utility for Research Recruitment (U2R2). U2R2 consists of 2 components: (i) Semantic Matcher: an automated trial criterion to patient matching component that also reports uncertainty associated with the match, and (ii) Match Delivery: mechanisms to deliver the list of matched patients for different research and clinical settings. As a first step, we limited the Semantic Matcher to utilize only structured data elements from the patient record and trial criteria. We are now including distributional semantic methods to match complete patient records and trial criteria as documents. We evaluated the first phase of U2R2 based on a randomized trial with a target enrollment of 220 participants that compares 2 treatment strategies for managing back pain (physical therapy and usual care) for individuals consulting a nonsurgical provider and symptomatic <90 days. RESULTS/ANTICIPATED RESULTS: U2R2 identified 9370 patients from the University of Utah Hospitals and Clinics as potential matches. Of these 9370, 1145 responded to the Back Pain study research team's email or phone communications, and were further screened by phone. In total, 250 participants completed a screening visit, resulting in the current study enrollment of 130 participants. Forty-three of 1145 patients refused to participate, and 50 participants no-showed their screening visit. DISCUSSION/SIGNIFICANCE OF IMPACT: A recruitment platform can enhance potential participant identification, but requires attention to multiple issues involved with clinical research studies. Clinical eligibility criteria are usually unstructured and require human mediation and abstraction into discrete data elements for matching against patient records. In addition, key eligibility data are often embedded within text in the patient record. Distributional semantic approaches, by leveraging this content, can identify potential participants for screening with more specificity. The delivery of the list of matched patient results should consider characteristics of the research study, population, and targeted enrollment (eg, back pain being a common disorder and the possibility of the patient visiting different types of clinics), as well as organizational and socio-technical issues surrounding clinical practice and research. Embedding the delivery of match results into the clinical workflow by utilizing user-centered design approaches and involving the clinician, the clinic, and the patient in the recruitment process, could yield higher accrual indices.

**2510**

## QIPR: Creating a Quality Improvement Project Registry

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OBJECTIVES/SPECIFIC AIMS: To create a searchable public registry of all Quality Improvement (QI) projects. To incentivize the medical professionals at UF Health to initiate quality improvement projects by reducing startup burden and providing a path to publishing results. To reduce the review effort performed by the internal review board on projects that are quality improvement Versus research. To foster publication of completed quality improvement projects. To assist the UF Health Sebastian Ferrero Office of Clinical Quality & Patient Safety in managing quality improvement across the hospital system. METHODS/STUDY POPULATION: This project used a variant of the spiral software development model and principles from the ADDIE instructional design process for the creation of a registry that is web based. To understand the current registration process and management of quality projects in the UF Health system a needs assessment was performed with the UF Health Sebastian Ferrero Office of Clinical Quality & Patient Safety to gather project requirements. Biweekly meetings were held between the Quality Improvement office and the Clinical and Translational Science – Informatics and Technology teams during the entire project. Our primary goal was to collect just enough information to answer the basic questions of who is doing which QI project, what department are they from, what are the most basic details about the type of project and who is involved. We also wanted to create incentive in the user group to try to find an existing project to join or to commit the details of their proposed new project to a data registry for others to find to reduce the amount of duplicate QI projects. We created a series of design templates for further customization and feature discovery. We then proceed with the development of the registry using a Python web development framework called Django, which is a technology that powers Pinterest and the Washington Post Web sites. The application is broken down into 2 main components (i) data input, where information is collected from clinical staff, Nurses, Pharmacists, Residents, and Doctors on what quality improvement projects they intend to complete and (ii) project registry, where completed or "registered" projects can be viewed and searched publicly. The registry consists of a quality investigator profile that lists contact information, expertise, and areas of interest. A dashboard allows for the creation and review of quality improvement projects. A search function enables certain quality project details to be publicly accessible to encourage collaboration. We developed the Registry Matching Algorithm which is based on the Jaccard similarity coefficient that uses quality project features to find similar quality projects. The algorithm allows for quality investigators to find existing or previous quality improvement projects to encourage collaboration and to reduce repeat projects. We also developed the QIPR Approver Algorithm that guides the investigator through a series of questions that allows an appropriate quality project to get approved to start without the need for human intervention. RESULTS/ANTICIPATED RESULTS: A product of this project is an open source software package that is freely available on GitHub for distribution to other health systems under the Apache 2.0 open source license. Adoption of the Quality Improvement Project Registry and promotion of it to the intended audience are important factors for the success of this registry. Thanks goes to the UW-Madison