

SIGNIFICANCE OF IMPACT: PDR has the potential reduce the time to complete enrollment, and early reports suggest, as referral chains spread through social networks, the heterogeneity and representativeness of the sample increases. Integrating PDR into trials requires a tailored approach.

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When faith meets medicine: Exploring religiosity and medical mistrust among diverse patients in primary care

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OBJECTIVES/GOALS: Medical mistrust is a persistent challenge to effective healthcare delivery and disproportionately affects Black, Indigenous, and other people of color (BIPOC). The relationship between religiosity and patient trust is not well understood but can provide key insight into improving primary care. **METHODS/STUDY POPULATION:** This study examines the association between religiosity and trust among BIPOC and White patients receiving primary care at Tufts Medical Center. Eligible participants will be adults aged ≥ 18 years without cognitive impairment. Recruitment will occur via telephone and during office visits. We will create surveys measuring religiosity and trust in primary care physicians (PCPs), and mean scores will be compared across subgroups, including race, sex, age, and religious affiliation. We will also conduct interviews to explore patient perspectives on PCP characteristics that encourage or discourage trust, as well as the role of religion in shaping trust within primary care settings. **RESULTS/ANTICIPATED RESULTS:** Based on prior literature, we hypothesize that BIPOC patients will have higher mean scores of mistrust than White patients. We also hypothesize a statistically significant interaction between religiosity and trust for both BIPOC and White patients, such that higher religiosity scores will be associated with greater levels of mistrust. In subgroup analyses, we hypothesize that Black/African American and Hispanic patients will have the strongest moderating effect between religiosity and mistrust. We further expect patients who report high levels of trust in their PCPs to identify physician qualities including perceived expertise, empathy, cultural humility, and shared decision-making. **DISCUSSION/SIGNIFICANCE OF IMPACT:** Our results will inform the development and implementation of a medical mistrust screening tool that measures individual rather than broader group-based perceptions of trust – a tool that is not yet widely integrated into primary care – and can enhance physicians' approach to patient-centered care.

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The implementation and impact of a novel funding program for clinical and translational research: Leveraging 'Research Scouts' embedded within a university to establish a funding program with minimal administrative costs

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OBJECTIVES/GOALS: This evaluation seeks to demonstrate the feasibility and impact of a new funding program for clinical and translational research launched by U-M Michigan Medicine. 'Research Scouts' with established research agendas at U-M were identified and trained to invite and fund research proposals from U-M colleagues they had not collaborated with. **METHODS/STUDY POPULATION:** In 2023, Research Scouts identified and orientated to the program and goals. Each Scouts was given a year to invest \$150,000 in innovative research projects. A web-based submission portal was used to anonymize the proposals to remove the potential for bias. All projects were granted a two-year funding period. The sequential mixed methods used for this evaluation includes surveys of 'Research Scouts' and awardees, followed by the collection on administrative data regarding the awardees scientific production, including both research publications and grants. The survey results and administrative data were analyzed and informed the iterative refinement of an interview protocol designed to investigate the impact of the funding on awardees' development of novel and collaborative research agendas. **RESULTS/ANTICIPATED RESULTS:** Surveys of the 2023 Scouts (N=24) and Awardees (N=51) had a 59% response rate. Awardees agreed they were able to pursue new lines of investigation (Mean 4.62, on a 5-point Likert scale); test a new idea that otherwise would go unexplored (Mean 4.62); had more latitude for intellectual creativity and exploration than traditional funding mechanisms permit (Mean 4.46); had new scientific conversations and new connections (Mean 4.54). The results also indicate that Research Scouts agreed with these benefits. Analysis of Awardee's administrative data yielded evidence that they were actively producing new research; for example, of 146 papers, at least 30 were relevant to their award. Ongoing interviews will yield evidence indicating how the award accelerated their clinical and translational research agendas. **DISCUSSION/SIGNIFICANCE OF IMPACT:** Given the long gestation time for new research ideas to yield new publications or extramural funding, the full impact of the program won't be known for years. However, preliminary evidence indicates that the Research Scouts program successfully provides a mechanism for pursuing novel ideas with minimal administrative costs and burden.

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Adapting to shifting NIH funding priorities: Researcher autonomy, grant-writing strategies, and the negotiated space

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OBJECTIVES/GOALS: This study aims to quantitatively examine successful US researchers who may engage in pragmatic 'negotiation' over time with external funders, their university administration, and other scientific and scholarly parties about their research lines and content. **METHODS/STUDY POPULATION:** The purpose of this quantitative correlational research is to pilot a new quantitative survey tool to measure researcher autonomy in selecting and pursuing their research agendas. The current study is modeled after a landmark peer-reviewed publication on negotiated space in evaluating researchers' agendas in Finland and the United Kingdom by Luukkonen and Thomas in 2016. Using a mixed methods design,

the study surveys NIH Director's Pioneer and Keck Foundation Awardees (2018–2021) to assess perceptions of autonomy, competition, and institutional support. This study examines how NIH-funded researchers adapt grant strategies to shifting NIH priorities while preserving autonomy. **RESULTS/ANTICIPATED RESULTS:** Of 24 respondents, most were White and male, with varied project portfolios and funding levels. Many described their fields as resource-intensive, with typical projects lasting 3–5 years. Primary funding sources were generally flexible, though stability and administrative burdens were concerns. Most researchers reported shifts in research aims driven by field developments rather than institutional pressures, with limited involvement in commercialization. Collaborations with global and industry leaders were common and largely stable. Overall, findings suggest US researchers adapt strategically to funding realities while balancing autonomy, collaboration, and institutional support. **DISCUSSION/SIGNIFICANCE OF IMPACT:** This study demonstrates how US researchers balance autonomy with demands from funders and institutions within a “negotiated space.” Funding is flexible but administratively burdensome. Findings highlight the tension between innovation and external directives shaping research agendas.

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Enriching recruitment via implementation science: Opportunities to build capacity for recruitment science among learners at the University of Wisconsin–Madison
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OBJECTIVES/GOALS: Implementation strategies to improve clinical trial recruitment exist yet training opportunities for successful recruitment are limited. Using the translational science promotion and research capacity (T-SPARC) framework, we developed and evaluated an educational intervention to increase use of recruitment science in translational research. **METHODS/STUDY POPULATION:** We conducted focus groups with investigators and trainees (n=10) involved in CTSA programming at the University of Wisconsin–Madison. Focus groups explored participants' experiences with study recruitment and their perceptions of recruitment strategies associated with implementation science. Data analysis was organized around identifying themes to inform a capacity-building recruitment science short course. The short course development was aligned with T-SPARC and featured interactive sessions on applying implementation science to successful recruitment, with real-world examples and community expert input. Following the course, we collected and analyzed post-survey data from attendees (n=168) regarding their changes in recruitment science knowledge due to participation in the short course. **RESULTS/ANTICIPATED RESULTS:** Most focus group participants were unfamiliar with recruitment science, though some described applying related concepts such as partnering with community members in research. All participants expressed a need for ongoing support and training in recruitment science, including workshops, mentoring,

and consultation. This indicated a need for training in translational science, specifically recruitment science, as the mechanism of change. Following the short course that was developed based on these focus group findings, attendees showed a significant increase in how to use recruitment science strategies ($Z = -4.87$, $p < .001$) and understanding of how implementation science can promote effective recruitment of research participants ($Z = -4.45$, $p < .001$). **DISCUSSION/SIGNIFICANCE OF IMPACT:** There is need and interest in capacity-building for effective recruitment and implementation science strategies among investigators, and these needs can be met through activities like the implementation science short course. Building capacity in this area enhances research rigor, collaboration, and the translational impact of clinical trials.

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Implementation of personalized statistical prediction models: Uptake as a function of potential risk/benefit
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OBJECTIVES/GOALS: Multivariable statistical models are commonly used as clinical decision aids. However, more research examining real-world implementation of models is needed. The goal of this mixed methods study is to explore to what degree clinician uptake of risk models is influenced by perceptions of the potential risks and benefits of taking action on model output. **METHODS/STUDY POPULATION:** Mixed qualitative and quantitative data for the 'low-risk/low-reward' scenario arise from an implementation trial of a electronic medical records-based (EMR) model to alert primary care providers of potential cognitive problems in patients ages 65 and older. We evaluated adoption of the EMR model based on provider actions (cognitive screening/referrals/medications/diagnoses) following Epic best practice alert (BPA), and acceptability of the models through semi-structured qualitative interviews. Data for the 'high-risk/high-reward' scenario will be gathered from clinical notes documenting the use of statistical models to support elective surgical decision-making in scenarios where such models have been regularly used at our institution. Mixed methods analyses will be holistic. **RESULTS/ANTICIPATED RESULTS:** Early quantitative analyses following implementation indicated that primary care providers largely did not adopt the BPA, but did take action (referrals, diagnoses, medications) when automated cognitive screening was performed in preparation for the appointment. Qualitative analyses of interview data to understand provider perspectives are ongoing. In the high-risk/high-reward scenario, we expect that providers will more frequently utilize statistical models for decision-making and report positive attitudes regarding their use, when compared to the low-risk/low-reward scenario. **DISCUSSION/SIGNIFICANCE OF IMPACT:** Though used in practice with increasing frequency, the implementation of personalized statistical prediction models has not been widely studied. Understanding in what scenarios providers feel risk models are useful and actionable can guide decision-making for the development and implementation of future models.