Assessing research impact: It takes a team
Ashley Dunn and Michelle B. Bass
Stanford University School of Medicine

OBJECTIVES/SPECIFIC AIMS: Dissemination of research findings through the published literature is a complex but critical part of the scholarly communication process. Additionally, this time point on the translational spectrum is a key objective of the National Clinical Association for Advancing Translational Sciences (NCATS). Tracking the dissemination of research outputs can be difficult to identify and evaluate. The purpose of this case study was 2-fold: (1) identify tools and resources available freely to the public and through university subscriptions used to assess research output; and (2) compare the effectiveness of these tools at tracking output at different levels of granularity. METHODS/STUDY POPULATION: The authors, Spectrum staff (D.A.) and School of Medicine librarian (M.B.), attended webinars hosted by other Academic Medical Center libraries conducting work on impact tracking and learned from vendor product managers about available tools and resources during on-site campus visits. Publications from Stanford’s Clinical and Translational Science Award (CTSA) were used to track the diffusion of research outputs (e.g., number of citations, document types, research areas, relative citation ratio, CTSA collaboration) via library subscription services (e.g., Web of Science and Scopus) and freely available tools (e.g., iCite and PubMed). RESULTS/ANTICIPATED RESULTS: The authors found certain tools were more inclusive in retrieving grant funded research outputs. For example, in the case of UL1 grant (UL1TR001085, UL1TR000093, UL1RR025744), a grant-level output, there were discrepancies in the number of publications retrieved: (1) PubMed found 644 outputs; (2) Web of Science found 497 outputs; and (3) Scopus found 190 outputs. After de-duplication, the search across Web of Science (WoS), Scopus, and PubMed yielded 899 publications. In total, 389 outputs were unique to PubMed; 165 were unique to WoS; and 90 were unique to Scopus. Future analysis will be conducted to identify the source of unique outputs from each database (e.g., conference proceeding, specific journals). Additional analysis based on other units of research outputs (e.g., author-level outputs and article-level outputs) are expected to yield similar discrepancies. DISCUSSION/SIGNIFICANCE OF IMPACT: Citation analysis is a valuable method of assessing research output and, to a large extent, research impact in a given field. It can help investigators illustrate qualifications for undertaking new projects, highlight collaborations across schools and departments, justify a grant renewal, and/or highlight accomplishments for promotion. However, systematic and comprehensive evaluations are needed in tandem with citation analysis/bibliometric analysis to assess the translation and uptake of research outputs and activities that result in research impact. Furthermore, both investigators and staff need adequate time and training to process research outputs/activities and to effectively organize them in easily understood visualizations.

Balancing patient-centeredness and patient safety in the hospitals: The case of pain care and patient satisfaction
Olena Mazurenko1, Basia Andraka-Christou2, Matthew Bair3, Areeba Kara1 and Christopher A. Harle3
1 Indiana University School of Medicine; 2 Florida University; 3 Indiana University

OBJECTIVES/SPECIFIC AIMS: This study seeks to understand the relationship between opioid prescribing and patient satisfaction among non-surgical, hospital-ized patients. As part of this study, we qualitatively examined challenges in delivering safe and patient-centered care through voices of physicians, and nurses. METHODS/STUDY POPULATION: We collected data through in-person interviews using semi-structured guides tailored to the informant roles. Study participants came from 1 healthcare system located in a mid-Western state. Each interview lasted 30–45 minutes, was audio-recorded with consent, and transcribed for analysis. Two researchers each coded 17 transcripts for discussions around patient-centeredness (including patient satisfaction, patient experiences), and patient safety for hospitalized patients experiencing pain. Analysis followed a general inductive approach, where researchers identified themes related to the research questions using an open coding technique. They discussed and reached consensus on all codes, and extracted several preliminary themes. The analysis was supported by NVivo software. RESULTS/ANTICIPATED RESULTS: The following themes emerged: (1) complex decision-making process to prescribe opioids for hospitalized patients; (2) the role of objective findings in prescribing decisions; (3) balancing patient-centeredness and patient safety for selected populations; (5) opioids are the predominant medications for pain care. DISCUSSION/SIGNIFICANCE OF IMPACT: Clinicians’ decision to prescribe opioids for nonsurgical hospitalized patients is based on multiple factors, including patient’s condition, patient’s preference for pain medications, or standard hospital’s pain care regimen. Interventions that improve clinicians’ ability to prescribe opioids may be needed to improve delivery of patient-centered and safe pain care.