willingness to participate in a health informatics intervention to improve safe NSAID use. We then developed a concept map and classification scheme for analyzing transcripts from the focus groups. Two trained coders labeled the transcripts using ATLASti. **Results:** Forty-eight KPG adults participated in the focus groups: 83% female; 50% African American; median age 54 years. Fortyseven participants indicated current or recent use of OTC NSAIDs. Easy access to OTC NSAIDs (low cost, no prescription required) promoted their use; however, self-medication strategies often combined multiple OTC NSAIDs or increased OTC NSAID dosing to obtain pain relief. Participants acknowledged that the proposed intervention would benefit their health care through more complete reporting and documentation of OTC NSAID use in their EMR. Concerns were expressed about: keeping this information up-to-date, if the information would be used or (if used) evaluated by a qualified provider on their health care team, and mode (e-mail or telephone) and timeliness about how they would be informed about potential risks from their OTC NSAID use. **Conclusions:** Consistent with the Chronic Care Model, participants acknowledged that the proposed intervention would create productive interactions with their providers and likely improve their health outcomes. Their perspectives also yielded some unexpected insights (e.g. importance of timely updating of OTC NSAID use) and have resulted in modifications to the overall intervention design.

PS1-30:

Research Mentor: A Web-based Reference for Planning and Preparing a Research Proposal

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Background: National emphasis on interdisciplinary and translational research as research priorities has created new challenges in grantsmanship. The Office of Scientific Writing and Publication at Marshfield Clinic Research Foundation utilized an informatics approach to create a comprehensive educational resource to assist new and established investigators engaged in research design. An interactive website accessible on the institutional intranet was designed to provide links to information, resources and support personnel to assist with navigating the central and peripheral processes required for successful procurement of institutional and external grants. **Methods:** Research Mentor was designed to provide comprehensive guidance to research fundamentals in a conveniently accessible interactive, user-friendly, online format. The website included resources and links to guidelines for grant development including feasibility analysis and study design planning, biostatistical considerations, peer review, grantsmanship, intellectual property protection, regulatory policies, computer-based training, institutional and national policies governing research, and access to funding agencies, forms, and appropriate support staff. The website was beta-tested by 25 physicians and scientists with varying degrees of research experience and refined based on user comments before the website was launched in spring of 2008. **Results:** Research Mentor proved to be an effective orientation tool for researchers by enhancing grantsmanship skills and providing access to research resources. Research Mentor has been effective in linking the researchers with appropriate support personnel who offer further assistance to researchers in producing competitive proposals. Tools custom-designed for Research Mentor to assist in project planning and design have been frequently accessed by investigators and reduce time spent by support staff on assisting with project planning. **Conclusions:** Informatics venues such as interactive user-friendly online educational websites can offer step-by-step guidance to research design and processes by providing a comprehensive cross-disciplinary research resource that offers value to new and established investigators alike. These tools promote networking with experienced support personnel to facilitate production of competitive grants.

PS1-35:

Use of Web-based Rheumatology Practice Visual Display Tools With an Electronic Health Record (EHR)

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Background: A variety of different types of data (i.e., patient-reported, lab, imaging, clinician-documented) are required to guide and improve rheumatologic treatment decisions. Although these data elements are available in the electronic health record (EHR), the demands of a busy practice do not allow sufficient time to effectively review all sources of data. Moreover, the EHR does not offer a facility to bring relevant but disparate data together in an integrated visual display. We developed a novel web-based software program–Rheum-PACER (Patient Centric Electronic Redesign) that displays relevant data in a web-based dashboard format. We report on the results of the first phase of implementing Rheum-PACER, i.e., identifying key data elements and designing the user interface. **Methods:** Rheum-PACER is a web-based program that obtains, aggregates, and/or exchanges information from/with four sources: patients, nurses, rheumatologists, and the EHR. It is separate from, but accessed seamlessly from within, the EHR. An iterative consensus process was used to identify the data elements desired by/from each of these four sources. **Results:** The Rheum-PACER dashboard is comprised of four key tabs, each of which allows the provider to complete a specific task within a single interface. The "Outcomes General" tab displays parallel temporal trends of patient reported outcomes (PRO), labs, and rheumatic medications. The "Outcomes Composite" tab displays temporal trends of composite PRO scores and physician-recorded data (e.g., tender joint counts), labs, and rheumatic medications over a 12-month period. The "Demographics" tab visually parses rheumatic versus other diagnoses and medications and allows for entry of data not typically found in the EHR (i.e., date of first rheumatic disease diagnosis). The "Construction" tab is used to construct a visit progress note. This tab incorporates pre-populated patient reported data (e.g., events since last visit, review of systems) and EHR data (e.g, medications, lab values) and allows for entry of nurse and physician-derived measures (e.g., physical exam, global scores). **Conclusions:** Web-based software tools that are external to, but which interact with, the EHR have the potential to improve clinical practice and clinical decision-making by providing clinicians with information that is aggregated, formatted, and presented in a way that reflects their cognitive clinical decision-making process.

Pharmacoepidemiology

C-A4-01:

Computerized Clinical Decision Support During Drug Ordering for Long-term Care Residents With Renal Insufficiency

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Objective: To determine whether a computerized clinical decision support system (CDSS) providing patient specific recommendations in real- time improves the quality of prescribing for long-term care residents with renal insufficiency. **Design:** A randomized trial within the long-stay units of a large long-term care facility. Randomization was within blocks by unit type. Alerts related to medication prescribing for residents with renal insufficiency were displayed to prescribers in the intervention units and hidden but tracked in control units. **Measurement:** The proportions of final drug orders that were appropriate were compared between intervention and control units within alert categories: 1) recommended medication doses; 2) recommended administration frequencies; 3) recommendations to avoid the drug; 4) warnings of missing information. **Results:** The rates of alerts were nearly equal in the intervention and control units: 2.5 per 1000 resident days in the intervention units and 2.4 in the control units. The proportions of dose alerts for which the final drug orders were appropriate were similar between the intervention and control units (relative risk 0.95, 95% confidence interval