



Debra K. Weiner, MD

Professor of Medicine

Division of Geriatric Medicine

Primary Email: dweiner@pitt.edu

Assistant: Linda Eazor

Assistant's Email: lre9@pitt.edu

Phone Number: 412.802.8615

Key questions defining research program:

- Implementation in the week-long geriatrics course for medical student of a one-hour self-study module on pain evaluation and management in the older adult with chronic knee pain and dementia. Comparison can be made to control group that viewed a control module. Impact on knowledge/skills, attitudes and/or confidence can be evaluated.
- The primary aim of this ongoing 5-site prospective cohort study is to develop algorithms usable in the clinical setting that predict decompressive laminectomy (DL) outcomes (i.e., success vs. failure) in older adults with lumbar spinal stenosis (LSS), the most common indication for spine surgery in older patients.
- For the tech savvy resident with experience in building web sites, I have a paper chronic pain evaluation and management guide. This could be developed into a web app and its efficacy in guiding resident pain management could be tested.

Key words describing research program:

- Pain evaluation, dementia
- Decompressive laminectomy outcomes, lumbar spinal stenosis
- Chronic pain management, web app

Titles for shovel-ready research projects:

- Efficacy of an E-learning Module on Evaluation and Management of Pain in a Patient with Chronic Knee Pain and Dementia in Improving Medical Student Knowledge, Attitudes and Confidence
- Toward Optimizing Decompressive Laminectomy Outcomes: Looking Outside the Spine
- Building and Conducting Usability Testing of a Chronic Pain Management Web App

Data sources for shovel-ready research projects:

- Self-study modules have been created by our NIDA-funded Center of Excellence in Pain Education and data are available for analysis and manuscript preparation.
- 250 patients with symptomatic LSS scheduled to undergo DL without fusion and who have no dementia, spinal instability, or prior lumbar surgery are being recruited and will be followed for one year after undergoing DL. The following baseline data are being collected within 30 days prior to DL: 1) SS symptoms with the Brigham Spinal Stenosis questionnaire (BSS, the most specific available LSS measurement tool); 2) musculoskeletal comorbidities (scoliosis, kyphosis, hip osteoarthritis, fibromyalgia symptoms, severity of spinal stenosis, degenerative disc and facet disease); 3) mood (depression [with the PHQ-9], anxiety [with the GAD-7]); 4) cognitive function (normal vs. mild cognitive impairment with the QMCI); 5) psychological function (fear-avoidance beliefs [with the Fear Avoidance Beliefs Questionnaire], chronic pain self-efficacy [with the Chronic Pain Self-Efficacy Scales], dysfunctional pain coping skills [with the Cognitive Strategies Questionnaire], treatment expectancy, illicit substance use, alcohol use, smoking status, PTSD symptoms); 6) medical comorbidity (including BMI); 7) demographic factors (age, gender, race, educational/marital status).
- Dr. Weiner has created a chronic pain management pocket guide that is currently being distributed to residents. Someone with experience in building web apps could convert this guide, or parts of it, into a web app and conduct usability testing among fellow residents.