

Example of a second-time award recipient University-based Center of Excellence application

*The applicant's center name has been replaced with Center A.

Please provide a description of the therapeutic modalities your program offers. Center A (a link was provided to the center's website) offers co-located pharmacologic, procedural, psychological, physical therapy and complementary medicine interventions, all occurring in our new 9000-square-foot clinic and procedure suites or our inpatient setting. Pharmacologic interventions include opioid and non-opioid treatments and continuous medication infusions (e.g., lidocaine, DHE, ketamine). Procedural interventions include diagnostic and therapeutic injections under fluoroscopic or ultrasound guidance, neuroablation, spinal-cord stimulation, intrathecal drug delivery, and disk decompressive therapies. Psychological interventions include individual/group cognitive-behavioral psychotherapy, stress management, coping skills education, and mindfulness/acceptance/relaxation training. Physical rehabilitation interventions include physical and occupational therapy to restore function. Complementary medicine interventions include acupuncture and meditation.

Please provide a description of the range of pain care services your program offers. We employ a biopsychosocial approach to evaluating and treating complex acute, chronic, and cancer pain conditions. An interdisciplinary team of physicians, psychologists, occupational and physical therapists, pharmacists, complementary medicine specialists, and nurses coordinates patient care. Biweekly multidisciplinary team conferences integrate all team members' expertise. Consulting physicians participate via video-conference. Treatment modalities include (but are not limited to) the following: 1) pharmacologic (opioid and non-opioid, continuous infusions), 2) psychological/behavioral (individual and group cognitive-behavioral approaches, stress management, mindfulness/relaxation training), 3) interventional (ranging from injections to implantable therapies), 4) rehabilitation/reconditioning (physical and occupational therapy), and 5) complementary medicine (acupuncture, meditation and dietary supplements).

The following features of the program provide evidence that the care provided is patient centered, state-of-the-art, evidence-based, cost-conscious, culturally appropriate, and safe. In your description, provide evidence of sustained excellence, as well as interim improvement and innovation since the time of your last award. Situated in region X, we serve patients from highly diverse racial, cultural and socioeconomic backgrounds. Our faculty and staff also represent this diversity. Since 2008, we obtained donor support to provide free medications for indigent patients, and we have demonstrated improvement in patient satisfaction as measured by Press-Ganey standardized surveys. We use outcome measures to assess patients' functioning in various domains (a link was provided to the center's outcomes webpage), and we translate results from our research and other studies into effective treatments. For example, since the last award, we (a specific example was included here).

The following demonstrates how your program provides access to multidisciplinary and multimodal care, and offers access to other specialists in a variety of disciplines to ensure expert care. In your description, provide evidence of sustained excellence, as well as interim improvement and innovation since the time of your last award. Center A's core faculty is comprised of specialists from Anesthesia, Internal Medicine, Neurology, Physiatry, Psychology, and Addiction Medicine – all additionally trained in Pain Management. Instead of referring patients elsewhere for specialized treatments, all of our specialists are co-located within our Center, thereby providing optimal interdisciplinary assessment and treatment. To maximize patient care, we also coordinate our services with those of other medical center specialties. Since the last award, we have established additional collaborations with Gastroenterology (GI Pain Program) and Neurology (Headache Program); successfully leveraging the expertise of these divisions to treat patients with chronic pain.

The following reveals how your program or the individuals who staff it act as local champions to improve pain management in systems of care that are related to the program, or are regional or national. In your description, provide evidence of sustained excellence, as well as interim improvement and innovation since the time of your last award.

To improve systems of care, faculty and staff deliver pain education at regional, national, and international levels. (The applicant included multiple specific examples of regional, national and international presentations and impacts here).

The following exemplifies your program's innovation and the manner in which it serves as a model of excellence in the structure, processes and outcomes that result from the management of pain. In your description, provide evidence of sustained excellence, as well as interim improvement and innovation since the time of your last award. Interdisciplinary treatment has long been our Center's hallmark. We continue to address the most challenging pain

conditions in one of the only inpatient, comprehensive pain management programs in the country. This program evolved this year to include specific track for headache patients. We monitor the program and Outpatient Center outcomes and incorporate findings into our practice to risk stratify patients and optimize delivery of services. Additionally, we routinely seek innovative ways of delivering interdisciplinary care, as evidenced by our recent collaborations with Gastroenterology and Neurology to establish the joint GI-Pain (provided a link to a press release) and Headache clinics (provided a link to a press release).

The following demonstrates the ways in which your program or its staff actively work with other health care organizations and the community to improve the quality of pain management across the continuum of care. In your description, provide evidence of sustained excellence, as well as interim improvement and innovation since the time of your last award. Our faculty and staff regularly present at local, regional, and national educational seminars for providers and patients. Since 2008, we initiated an outreach program in which we meet with community practitioners, insurance carriers, and medical practice groups to better understand their needs and challenges, and improve the quality of pain care across the spectrum. Our collaborations led to development of new referral pathways, customized treatment programs and a video-conference system to allow community practitioners to participate in patient treatment planning. (Additional specific examples were provided here).

The following highlights your program's commitment to advancing scientific knowledge related to pain and making relevant information available to patients, colleagues and the public. In your description, provide evidence of sustained excellence, as well as interim improvement and innovation since the time of your last award. We are actively engaged in advancing scientific knowledge related to pain. Our faculty and trainees hold multiple NIH awards (P01, R00/R01, K-awards and other NIH grants), foundation grants and pain research endowments. Our research encompasses basic science investigations of pain mechanisms, translational research that applies our basic research to development of effective clinical therapies used in our Center, and clinical research on chronic pain prevention. (Examples of particularly prestigious awards were provided here). Our research is extensively published in peer-reviewed journals. The media's coverage of our work makes it accessible to a general audience.

The following describes the fellowship training programs you provide to practitioners in the field of pain management. In your description, provide evidence of sustained excellence, as well as interim improvement and innovation since the time of your last award. The Center A Management Division is dedicated to educating professionals in the practice of pain management (link provided to education page). (Specific examples of sustained excellence and additional enhancements were included here, with an emphasis on multidisciplinary education and training programs).

The following highlights your research programs and their contributions to advancing our understanding of pain and its management. In your description, provide evidence of sustained excellence, as well as interim improvement and innovation since the time of your last award. (This section included a general overview of the research program with specific examples of research contributions. Examples of recent innovations and a broadening of the interdisciplinary research focus were included here).