Example of a first-time award recipient University-based Center of Excellence applicant
*The applicant's center name has been replaced with Center B.

Please provide a description of the therapeutic modalities your program offers. a. Multidisciplinary outpatient chronic pain treatment with medication management, cognitive-behavioral therapy [including biofeedback, individual, group and family], physical rehabilitation, interventional pain procedures, and acupuncture, with specific focused programs on pediatric headache, CRPS, pelvic and abdominal pain, and back pain. b. Intensive inpatient and Day Hospital Pediatric Pain Rehabilitation Center (PPRC) for children and adolescents with pain-related disability, primarily due to CRPS. c. Acute pain management with PCA/NCA, epidural infusions, plexus and peripheral infusions, a perioperative regional anesthesia program, and peri-procedural comfort interventions. d. Multidisciplinary palliative care, with pain and symptom management, psychosocial support, spiritual/pastoral care, home and hospice care.

Please provide a description of the range of pain care services your program offers. a. Inpatient acute pain service providing 24/7 coverage for acute pain in a 400-bed tertiary pediatric hospital, including PCA/NCA, epidural and plexus infusions, and consultation on medically complex inpatients with acute and chronic pain or other refractory symptoms. b. Coordination of pain and symptom management in palliative care services at Hospital B and Cancer Institute B. c. Comprehensive general outpatient chronic pain clinic offering multidisciplinary evaluation and treatment of a broad range of pediatric pain chronic pain complaints. d. Comprehensive multidisciplinary headache program. e. Inpatient rehabilitation and Day Hospital rehabilitation in the PPRC, primarily for patients with CRPS.

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. a. Patient-centered: i. telephone support program by clinic nurses for medication monitoring and titration; ii. coordinated scheduling with specialists outside of the program to reduce patient/family travel and duplicative visits; iii. low-cost housing for patients/families traveling for PPRC; iv. fundraising that has generated a patient special needs fund. b. State-of-the-art: items 6, 8, 10 below. c. Evidence-based: items 6,8,10, references. d. Cost-conscious: item 6-a,b,c. e. Culturally-appropriate: (i) ethnically/culturally diverse staff; (ii) interpreter services; (iii) >50% of pediatric Medicaid hospital admissions in MA at CHB. f. Safe: (i) item 6 e; (ii) electronic prescription/medication monitoring program; (iii) adolescent suicide prevention protocol.

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. a. Multidisciplinary headache program with pediatric neurologists, psychologists, nurses, PT. b. Collaboration with pediatric physiatrists, neurosurgeons, nurse-practitioners in intrathecal baclofen program for spasticity management. c. Coordination of pain and symptom management for palliative care program with physicians, nurses, clergy, social workers. d. Collaborative clinical pathway and outcomes research program on pediatric low back pain with sports medicine, orthopedic spine, and neurosurgical colleagues. e. Inpatient and Day Hospital intensive pain rehabilitation program, primarily for patients with CRPS, involves pediatric rheumatologist, PT, OT, psychologists, nurses. f. Collaboration on pediatric abdominal and pelvic pain with pain physicians, pediatric gynecologist, pediatric gastroenterologist, psychologists.

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. a. Leadership in FDA consensus initiative for pediatric analgesic trials. b. Participation of Dr. A in IMPACT consensus process. c. Mentorship in establishing pediatric pain services and pediatric pain protocols at nearby pediatric centers in MA and RI. d. Involvement in pediatric pain multicenter education and advocacy efforts with APS, IASP, ISPP, SPA, WHO. e. Training of fellows who direct pediatric pain programs around the U.S. f. Hospital-wide program for nursing education and competencies around pain directed by Ms. B. g. Teaching modules on pain for residents in orthopedics and fellows in oncology involving multiple affiliated hospitals.

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. a. APS protocols for analgesia and pro-active side-effect reduced hospital costs: lowest admission rates for ACL repairs and lowest ICU utilization for scoliosis surgery compared to pediatric tertiary hospital (PHIS) benchmarks. b. Day-hospital rehabilitation in the PPRC reduced CRPS treatment costs and improved outcomes versus inpatient rehabilitation. c. Group-based CBT program improved care access at reduced costs, with excellent outcomes. d. Multidisciplinary pediatric low back pain program, clinical pathways, first pediatric lumbar radiculopathy ESI study. e. Acute Pain Service – monitoring, CPOE, net-learning for clinicians' competencies, rapid response protocols: 10 years of zero level 4 or 5 events.

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. a. Dr. C's liaison program for school nurses around pediatric recurrent pains and care of children with chronic pain. b. Case management program with MA BCBS for clinical pathways for pediatric pain-related disability. c. Ms. B's program for system-wide interventions for pediatric needle procedures. d. CME lectures for community pediatricians around pediatric pain. e. Liaison with community pediatric mental health providers for patient access to CBT and other forms of psychotherapy. f. Consultation in developing pediatric pain protocols at 4 other pediatric centers in New England. g. Pain and symptom consultation to pediatric chronic care/residential facilities.

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. (See references, appendix materials, and item 10.) a. Dr. D co-edited textbook "Title" – 2 editions in print, 3rd edition planned. b. Co-authorship of WHO monograph on Cancer Pain and Palliative Care, translated into > 10 languages. c. > 130 textbook chapters on pediatric pain topics authored by members of our program. d. Public information via interviews and articles with NBC, Time Magazine, US News and World Report, NY Times, local television stations, and other news media. e. Multiple lectures at national and international meetings. f. Members serve on multiple editorial boards.

The following describes the fellowship training programs you provide to practitioners in the field of pain management. a. The ACGME approved our pain medicine fellowship as the only accredited program in the U.S. with a specific emphasis on pediatric pain. b. 1-3 month rotations for pediatric anesthesia fellows, adult pain fellows, and fellows in other specialties, including pediatric oncology and palliative care. c. Clinical and research postdoctoral fellowship for pediatric psychologists emphasizing pediatric chronic pain management and CBT. d. Endowment-funded fellowship for PT/OT doctoral students for training in rehabilitation for pediatric chronic pain. e. Research opportunities for nurses in masters and doctoral programs. f. Endowment funding for research fellowship training for postdoctoral translational or clinical outcomes research.

The following highlights your research programs and their contributions to advancing our understanding of pain and its management. a. Prospective clinical trials of rehabilitative treatment of pediatric CRPS, of different approaches to pediatric CBT, and of several analgesics and local anesthetics in children. b. First prospective RCT of PCA in children. c. First RCT of methadone in children. d. First case series on patterns of opioid escalation and on uses of spinal analgesic approaches for pediatric advanced malignancy. e. Development of novel prolonged duration local anesthetics currently in clinical trials. f. Brain imaging program for pediatric CRPS, demonstration of reversible changes in regional brain volumes.