Comprehensive Pain Management Program: Current research, inter-professional collaboration, program design and implementation

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Background - Chronic Pain

- Prevalent - 9 percent of U.S. adults
  - Moderate to severe, noncancer chronic pain
  - Major medical and socioeconomic problems

- Costly = $150 billion annually
  - Health care, disability & related expenses in US
  - $70 billion direct healthcare costs annually in US

- Disabling
  - Half million lost workdays annually
  - Most common cause of disability in middle age
Background – Chronic Pain Treatment

- Evolving
  - No longer focused on “eliminating” pain
  - Focused on “managing” pain & restoring function
    - Physical and emotional function
    - Quality of life
Multidisciplinary Pain Programs

- Team of providers work together
- Develop treatment plan
  - Medical/surgical therapy
  - Behavioral therapy
  - Physical reconditioning
  - Education
Multidisciplinary Pain Programs

- Variety of settings
  - Intensive outpatient & residential facilities
  - Rehabilitation facilities
  - Academic medical centers

- In 2011, 64 accredited programs in US (CARF)
  - Over half in Texas
  - Much of the country without coverage

- Not all MPPs are not accredited by CARF

- Approximately 150 MPPs currently in the US
Background - MPPs

- Meta-analysis 180 studies of MPP’s (AHRQ 2011)
- MPPs for chronic pain are superior to
  - no treatment
  - waiting list
  - single-discipline treatments
- Within- and between-group effect sizes
  - Stable over time
- Improvements not limited to pain, mood & interference
  - Return to work
  - Health care utilization
Background - MPPs

Optimal care characteristics
- Comprehensive
- Multi-disciplinary
- Collaborative

Optimal care components
- Medication management
- Behavioral and psychological services
- Addiction monitoring and management
Pain in CP is common and multi-factorial
  ➢ “Challenging,” “Complicated”

Heavy psychosocial co-morbidity
  ➢ Under-recognized & undertreated
  ➢ Can exacerbate pain experience
  ➢ Related to excess inpatient service utilization?

MUSC Performance Improvement Measure (2007)
  ➢ Inter-professional approach
    • Medical, surgical, psychological/psychiatric
  ➢ Outcomes: length of stay & resource utilization
Simulation Modeling Analysis

- Linear downward trend in LOS ($r = -0.857, p = .01$)
- Inter-professional treatment associated with opportunity cost savings of $\$670,750$
- No associated changes in 7-, 14-, and 30-day readmission rates ($p > .05$)
Analysis of 1062 patients in the Chronic Pancreatitis Program at MUSC indicates that the mean physical quality of life rating (SF12) of these patients is \(~1.5\) standard deviations below the normative sample (mean t-score=38.77 stdev=7.13).

35.17% meet or exceed the clinical cut-off for opioid misuse problems (COMM).
- Patients will sign opioid-agreements at the time of enrollment in the C-PMP that outline requirements for participation, risks, liabilities, and contingencies associated with program deviations.
- Patients will be evaluated for appropriateness of ongoing opioid therapy
- Appropriate patients will receive ongoing opioid therapy only from the C-PMP provider(s)
- Patients will undergo psychological/behavioral group or individual pain management therapy
- Medication Education groups will be conducted by PharmD clinicians
- Opioid abuse and misuse will be continually assessed and monitored
- Suboxone and Buprenorphine therapies will be administered, when appropriate, in cases of opioid misuse and abuse
- Outpatient and inpatient opioid detox services will be available to patients for whom they are indicated, including psychological, psychiatric and medication management detox protocols.
- Psychological testing, therapy and medication-management of co-morbid psychiatric disorders will be provided.
- Referral to the Chronic Pain Clinic in the Dept. of Anesthesia will be considered for adjunctive celiac plexus blocks and other interventional pain management techniques when appropriate but will not supersede enrollment in the C-PMP
Program Participation Agreement

The purpose of this agreement is to protect your access to pain management services and controlled substances and to protect MUSC’s ability to give you the best possible care.

The long-term use of such substances as opioids (narcotic analgesics), benzodiazepine tranquilizers, and barbiturate sedatives is controversial because of uncertainty regarding the extent to which they provide long-term benefit. There is also the risk of an addictive disorder developing or of relapse occurring in a person with a prior addiction. The extent of this risk is not certain.

Because these drugs have potential for abuse or diversion, strict accountability is necessary when use is prolonged. For this reason the following policies are agreed to by you, the patient, as consideration for, and a condition of, the willingness of your physician to consider the initial and/or continued prescription of controlled substances to treat your chronic pain.

1. All controlled substances must come from Dr. Kelly Barth and her team in BioBehavioral Medicine or, during her absence, by the covering physician, unless specific authorization is obtained for an exception. (Multiple sources can lead to untoward drug interactions or poor coordination of treatment.)

2. You are expected to inform our office of any new medications or medical conditions, and of any adverse effects you experience from any of the medications that you take.

3. Dr. Barth and her team have permission to discuss all diagnostic and treatment details with dispensing pharmacists or other professionals who provide your health care for purposes of maintaining accountability.
A custom-built, online program management System for the PMP will be used to manage access to the pilot program.
Program management system

Update Status: 12345

- Patient in good standing
- Some concerning behaviors; on watch
- Non-Adherence; Patient being tapered out of program
- Patient removed from program due to non-adherence
- Patient discharged from program; remains eligible for re-admission

Comments:
Comprehensive Pain Management Program
Chronic Pancreatitis Program, Digestive Diseases Center
Division of BioBehavioral Medicine, Department of Psychiatry
Medical University of South Carolina

Current research suggests that the best possible way to manage your chronic pain is through participation in a structured, comprehensive, multi-disciplinary pain management program. We are now pleased to offer this type of state-of-the-art service at MUSC. The Comprehensive Pain Management Program is a highly-structured, intensive pain management program offered through a collaboration between the Digestive Diseases Center and the Division of BioBehavioral Medicine in the Department of Psychiatry at MUSC. Although individual treatment plans will vary from person to person, services offered through this program include:

- Comprehensive physical and behavioral evaluation/assessment of pain and functioning
- Opiate and adjunctive pain medication management services
- Medication education classes
- Group therapy sessions for pain management
- Individual medication education and review sessions
- Individual behavioral pain management therapy sessions
- Psychiatric medication management
- Psychotherapy for co-morbid psychiatric and pain conditions
- Applied physiology/biofeedback for pain control

Our team of nurses, physicians, pain psychologists, and pharmacists will work closely with your referring doctor to ensure the best possible pain management services are provided.

Program space is limited and access to the Comprehensive Pain Management Program is restricted to a pre-set number of patients who are deemed appropriate for participation by the treatment team. Talk to your physician about access to the Program.
Program Goals

- Improve quality of life of patients with chronic pancreatitis at MUSC
- Reduce opioid misuse problems among this high-risk patient population
- Reduce over-utilization of services (e.g., reduce ED visits, inpatient LOS, readmission rates), resulting in potential cost-offsets and cost-savings to MUSC.
- Reduce the no-show rate of patients in the collaborative care of the DDC/Psychiatry service
- Increased provider/faculty satisfaction
- Reduction of costs by changing the allocation of opioid therapy service provision from higher-cost/higher financial-yield-potential providers to physicians in Psychiatry.
Outcomes

- **Provider Indices**
  - Satisfaction
  - Program Value Estimate
  - Subjective Burden Estimate (pre/post)
  - Subjective Appraisal of Program Efficiency
  - Subjective Appraisal of Work Efficiency

- **Program-Related Productivity Indices**
  - Clinical Efficiency/Patient Flow (GI Surgery/BMed)
  - Provider Effectiveness (GI Surgery/BMed)
  - Program Volumes (GI Surgery/BMed)
  - Procedure Volumes (GI Surgery)
  - Billing / P&L

- **Patient Indices:**
  - Patient Satisfaction
  - Pain Control Indices
  - Functional Impairment due to Pain
  - Quality of Life
Wrapping-up

- MUSC Hospital has funded this pilot project by agreeing to cover the gap between program expenses and revenue for 1-year
- If cost-savings and clinical benefits are demonstrated (improved quality of life, decreased ED visits, reduced LOS, reduced readmission rates) the program might be expanded into other clinical specialties
- Ideas for other/additional inter-professional clinical involvement are welcome...