Scope

- Impact of Chronic Pain
- To be familiar with the Pain Management Strategies
- To realize the importance of Coordination of Care between Pain Specialist and Primary Care Physician

Chronic Pain Definition

- Pain that persists beyond the course of an acute disease or
- Pain that persists beyond a reasonable time for an injury to heal or
- Pain that is associated with a chronic pathologic process that causes continuous pain or
- **Pain that recurs at intervals of months or years or**
- **Pain that persists > 6 months**

Disclosures

Nothing to Disclose
Chronic pain is a major public health problem in the US

Incidence of various conditions in US (in millions)-2011

<table>
<thead>
<tr>
<th>Condition</th>
<th>Incidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes</td>
<td>25.8</td>
</tr>
<tr>
<td>Coronary Heart disease</td>
<td>16.3</td>
</tr>
<tr>
<td>Stroke</td>
<td>7</td>
</tr>
<tr>
<td>Cancer</td>
<td>14.5</td>
</tr>
<tr>
<td>Chronic pain</td>
<td>100</td>
</tr>
</tbody>
</table>

Chronic Pain affects more Americans than diabetes, heart disease and cancer combined

Cost of pain accounts to both healthcare delivery costs and costs due to lost productivity

Incremental cost per person by pain types (2010)

- Annual cost of chronic pain in the US was $635 billion in 2010
- Lost productive time from common pain conditions among active workers costs an estimated $61.2 billion per year
- 76.6% of lost productivity was due to reduced performance at work and not work absence

Lower Back pain is a major case of Chronic pain

Most commonly reported Pain conditions

<table>
<thead>
<tr>
<th>Pain</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low back pain</td>
<td>28%</td>
</tr>
<tr>
<td>Migraine pain</td>
<td>17%</td>
</tr>
<tr>
<td>Neck pain</td>
<td>15%</td>
</tr>
</tbody>
</table>

Low back pain is the leading cause of disability in Americans ≤ 45 years

Chronic Pain management after back surgery is a huge challenge

~600,000 Americans opt for back operations each year

Annually, neurosurgeons perform at least 100,000 operations for lumbar disc disease alone

30% of patients report persistent and chronic back pain despite an apparent adequately-performed surgery
**WHO’s Pain Management guidelines**

- **Severe Pain**: Strong oral opioids ± Non-opioids ± Adjuvant
- **Moderate Pain**: Low dose Opioids ± Non-opioids ± Adjuvant
- **Mild Pain**: Non-narcotics ± Non-opioid ± Adjuvant

**Opioid drug abuse in US**

<table>
<thead>
<tr>
<th>Drug Type</th>
<th>% of Consumers Reporting Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ritalin</td>
<td>2.4%</td>
</tr>
<tr>
<td>Cocaine (any form)</td>
<td>2.8%</td>
</tr>
<tr>
<td>Inhaling</td>
<td>3.2%</td>
</tr>
<tr>
<td>Sedatives</td>
<td>4.3%</td>
</tr>
<tr>
<td>OxyContin</td>
<td>4.9%</td>
</tr>
<tr>
<td>Hallucinogens</td>
<td>5.0%</td>
</tr>
<tr>
<td>MDA/MDMA/ECstasy</td>
<td>5.3%</td>
</tr>
<tr>
<td>Cough Medicine</td>
<td>5.3%</td>
</tr>
<tr>
<td>Tranquilizers</td>
<td>5.6%</td>
</tr>
<tr>
<td>Salvia</td>
<td>5.9%</td>
</tr>
<tr>
<td>Adderall</td>
<td>6.5%</td>
</tr>
<tr>
<td>Vicodin</td>
<td>6.5%</td>
</tr>
<tr>
<td>Synthetic Marijuana</td>
<td>11.4%</td>
</tr>
<tr>
<td>Marijuana</td>
<td>16.4%</td>
</tr>
</tbody>
</table>

**HCAHPS Survey**

- Hospital Consumer Assessment of
- Healthcare Providers and Systems Survey
- First national, standardized, publicly reported survey of patients’ perspectives of hospital care
- IMPACT: Results of survey used to determine payment scale
HCAHPS Survey Questions

- How often was your pain well controlled? (Q13)
- How often did the hospital staff do everything they could to help you with your pain? (Q14)

CGCAHPS Survey

- The Clinician and Group Consumer Assessment of Healthcare Providers and Systems survey
- Measure patient perceptions of care provided by a physician in an office or clinic setting

Pain Management Strategies

For many patients, treatment of pain inadequate not just because of uncertain diagnoses and societal stigma, but also because of shortcomings in the availability of effective treatments and inadequate patient and clinician knowledge about the best ways to manage pain.

- IOM report, Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research (2011)
Chronic Pain treatment requires multimodal strategy

- Pharmacotherapy
- Interventional Approaches
- Treatment Approaches
- Lifestyle Changes
- Psychological Support

With multimodal analgesia there is synergistic affect, while side effects are of small degree

Multimodal Analgesia: Step therapy

**STEP 1**
- Severe Postoperative Pain
- Malignant Pain
- Non-opioid analgesics
- NSAIDs, TOP, Psychological therapy, OTC Pain medicine, Exercise programs
- Opioids, Regional anesthesia, Nerve blocks

**STEP 2**
- Moderate Postoperative Pain
- Step 1 & Step 2 strategies
- AND Local Anesthetic Peripheral Neural blockade (With/without catheter)

**STEP 3**
- Intermittent doses of Opioids
- Use of Sustained release Opioid analgesics

Pain treatment focuses on minimal invasive therapies initially

**LEVEL 1 Pain Therapies**
- NSAIDs, TENS, Psychological therapy, OTX, Pain medicine

**LEVEL 2 Pain Therapies**
- Opioids, Thermal procedures, Neuromodulation, Spinal cord stimulation

**LEVEL 3 Pain Therapies**
- Surgical, Neuromodulation, Nerve blocks, Neurolysis

Better clinical outcomes, low risk, and reduced costs of care compared with standard treatments

- Counseling about the pain, management strategies, lifestyle factors
- Physical therapy modalities for reconditioning
- Application of heat or cold
- TENS, massage, acupuncture

**Interdisciplinary approach**
- Neurosurgery, Neurology, physical therapy
- Psychological approaches
- Other physical approaches
- Occupational therapy
- Regional anesthesia
- Pharmacology
- Nonopioids, opioids, antidepressants, anti-inflammatory drugs, stimulants, antihistamines

**Pain treatment Continuum**
- Least Invasive
- Most Invasive
Role Of Primary Care Physicians

Education, Education, Education. Educate more physicians on proper diagnosis and proper pain management. Educate the person with pain and their family on addiction versus physical dependency and proper storage of medication. Educate the public and press about the realities of pain medication and people living with pain.

- A response from a person with chronic pain

PCPs are well placed to handle Pain problems

A Primary care physician with an ongoing relationship with the patient can provide enhanced access to care in the complex healthcare system

Advantages of a PCP:
- Ease of access
- Exposure to variety of clinical presentations
- Long-term relationship with patients
- Continuity of care

Primary-care physicians are the base of Pain consultation chain

Distribution of pain patients among major pain management providers

Primary care physicians treat more pain patients when compared to other pain management providers

- Primary-care physician (PCP) is usually the first source of contact for any patient with pain

PCPs have to be trained in Chronic Pain management to improve patient care

Primary care physicians have a low patient satisfaction quotient compared to other pain management providers

- Primary care physicians in US devote 1/3rd of their time to patients with a chief symptom of chronic pain
- Most PCPs have little education or training in chronic pain management
Post-operative pain is undermanaged

A collaborative care, lead by Primary care physician in coordination with Pain specialist can close this gap in post-operative pain management

Pain Specialist - PCP Coordination of Care

Progress occurs when courageous, skillful leaders seize the opportunity to change things for the better

- Harry S Truman

Regulatory bodies have recommended the PCP-Pain specialist collaboration

Both recommended complete restructuring care, emphasizing the central role of PCPs

Recommended supporting collaborating between pain specialists and PCPs

In collaboration with Pain specialist, PCP can improve care
A recent evidence of the success of Primary Physician-Pain Specialist collaboration

The Primary Practice Physician Program for Chronic Pain (4PCP)

Outcomes of a Primary Physician—Pain Specialist Collaboration for Community-based Training and Support

Thomas C. Chelimsky, MD, ROCC, RDMS
Mark I. Chenet, EDJF, Sybil K.

4PCP includes:
- an active learning arm, providing patient-focused, practice-based learning collaboration emphasizing the bio-psychosocial pain model;
- a PCP-led clinical support arm facilitating rehabilitative matrix style care by teams of pain-informed health providers

A recent evidence of the success of Primary Physician-Pain Specialist collaboration

The Primary Practice Physician Program for Chronic Pain (4PCP)

Comparison of Interview Data for 4PCP Completing Physicians vs Noncompleters

<table>
<thead>
<tr>
<th>Items</th>
<th>Noncompleters (n = 7)</th>
<th>Completers (n = 19)</th>
<th>P</th>
<th>Completers vs Noncompleters</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>MD functional approach</td>
<td>3.0</td>
<td>3.9</td>
<td>0.11</td>
<td>2.7</td>
<td>3.3</td>
</tr>
<tr>
<td>Patient functional approach</td>
<td>3.7</td>
<td>3.6</td>
<td>0.9</td>
<td>2.7</td>
<td>3.3</td>
</tr>
<tr>
<td>Enabling self-management</td>
<td>2.8</td>
<td>3.6</td>
<td>0.7</td>
<td>2.5</td>
<td>2.6</td>
</tr>
<tr>
<td>Assisting patient mood</td>
<td>3.9</td>
<td>4.3</td>
<td>0.4</td>
<td>3.0</td>
<td>1.9</td>
</tr>
<tr>
<td>Assessing patient sleep</td>
<td>4.0</td>
<td>4.4</td>
<td>0.4</td>
<td>3.5</td>
<td>3.2</td>
</tr>
<tr>
<td>Comfort with use of TCA agents</td>
<td>3.4</td>
<td>3.9</td>
<td>0.43</td>
<td>3.4</td>
<td>3.8</td>
</tr>
<tr>
<td>STEB</td>
<td>4.1</td>
<td>4.6</td>
<td>0.43</td>
<td>3.7</td>
<td>4.5</td>
</tr>
<tr>
<td>NSAIDs</td>
<td>4.9</td>
<td>4.9</td>
<td>0.0</td>
<td>4.5</td>
<td>4.3</td>
</tr>
<tr>
<td>Anxiety</td>
<td>3.9</td>
<td>4.1</td>
<td>0.3</td>
<td>3.6</td>
<td>3.5</td>
</tr>
<tr>
<td>Depression</td>
<td>3.1</td>
<td>3.6</td>
<td>0.4</td>
<td>3.1</td>
<td>3.6</td>
</tr>
<tr>
<td>Reassurance</td>
<td>3.1</td>
<td>3.6</td>
<td>0.4</td>
<td>3.1</td>
<td>3.6</td>
</tr>
</tbody>
</table>

NSAIDs indicate non-steroidal anti-inflammatory drugs; STEB, selective serotonin reuptake inhibitors.

Results:
- Patients with chronic pain experienced clinically significant benefit from the physician program including reduction in pain, fatigue, depression and pain interference resulting in improved function
- PCP’s comfort with management of chronic pain and belief in the value of interdisciplinary team approach increased
- Time spent addressing chronic pain decreased during clinical visits
- Self-assessed skill in the use of chronic pain medications (narcotics) increased
Pain Specialist-PCP collaboration in Chronic Pain management can improve patient outcomes

Benefits
Balanced and safe use of Narcotics by PCP

Better Patient outcomes
Interdisciplinary Rehabilitation based on Bio-psycho-social approach

Benefits
PCP will have an advantage of having the specialist recommendations

Thank you
415-885-PAIN