Institute of Medicine of the National Academies

Report from the Committee on Advancing Pain Research, Care, and Education
The 2010 Patient Protection and Affordable Care Act required the Department of Health and Human Services (HHS) to enlist the Institute of Medicine (IOM) in examining pain as a public health problem. Acting through the National Institutes of Health (NIH), HHS asked the IOM to assess the state of the science regarding pain research, care, and education and to make recommendations to advance the field.
Committee Task

Address the current state of the science with respect to pain research, care, and education; and explore approaches to advance the field.

Specifically:

- Review and quantify the public health significance of pain.
- Identify barriers to appropriate pain care and strategies to reduce such barriers.
- Identify demographic groups and special populations, and discuss related research needs, barriers, and opportunities to reduce such barriers.
- Identify and discuss what scientific tools and technologies are available.
- Discuss opportunities for public-private partnerships in the support and conduct of pain research, care, and education.
Study Committee

19 Members with expertise in:

- Anesthesiology
- Biobehavioral nursing
- Bioethics
- Epidemiology and biostatistics
- Naturopathic care
- Neurosurgery
- Oral and maxillofacial surgery
- Palliative medicine
- Pediatric health
- Pharmacology
- Psychology and behavioral sciences
- Public health
Methods

- Literature Review
- Commissioned Paper
  - Economic burden of pain
- Public Workshops
  - Data collection
  - Public–Private partnerships
  - Cultural views of pain
  - Financing and resources for pain care
  - Basic science of pain and approaches to pain treatment
  - Regulation of pain drugs
  - Testimony from people living with pain, their caregivers, and other stakeholders
Methods (continued)

- Public input through website on:
  - Barriers to care
  - Ways to improve care
  - Undertreated groups
  - Experiences of those seeking care
  - Experiences of those providing care
  - Over 2,000 responses
Underlying Principles

- Pain management is a moral imperative
- Chronic pain can be a disease in itself
- The value of comprehensive treatment
- The need for interdisciplinary approaches
- The importance of prevention
- Wider use of existing knowledge
- Recognition of the conundrum of opioids
- Collaborative roles for patients and clinicians
- The value of a public health and community-based approach
Need to Foster a Cultural Transformation

- Pain is a national challenge
  - All people are at risk for pain
  - Pain is a uniquely individual, subjective experience
- Comprehensive and interdisciplinary (e.g., biopsychosocial) approaches are the most important and effective ways to treat pain
- Such care is difficult to obtain because of structural barriers – including financial and payment disparities
- A cultural transformation is needed to better prevent, assess, treat, and understand pain
- The committee’s report offers a blueprint for achieving this transformation
Committee offers recommendations in the following areas:

• Public health challenges
• Pain care
• Education of providers
• Research
Pain as a Public Health Challenge
Findings

• **Pain is a public health problem**
  - Affects at least 116 million American adults
  - Reduces quality of life
  - Costs society $560–$635 billion annually

• **More consistent data on pain are needed to:**
  - Monitor changes in incidence and prevalence
  - Document rates of treatment and undertreatment
  - Assess health and societal consequences
  - Evaluate impact of changes in policy, payment, and care

• **A population-based strategy is needed to reduce pain and its consequences. It should:**
  - Heighten national concern about pain
  - Use public health strategies to foster patient self-management
  - Inform public about nature of pain
2-1. NCHS, AHRQ, other federal and state agencies, and private organizations should improve the collection and reporting of data on pain
   - Incidence and prevalence
   - Interference with activities of daily living, work, disability
   - Utilization of clinical and social services
   - Costs of pain and pain care
   - Effectiveness of treatment

2-2. HHS Secretary should create a comprehensive population-level strategy for pain prevention, treatment, management, and research
   - Describe coordination of efforts across public and private sector
   - Include agenda for developing research
   - Improve pain assessment and management programs
   - Proceed in cooperation with Interagency Pain Research Coordinating Committee and the NIH Pain Consortium and reach out to private-sector participants as appropriate.
   - Include ongoing efforts to enhance public awareness of chronic pain
Care of People with Pain
Findings

• Pain care must be tailored to each person’s experience
  – Financing, referrals, records management need support this flexibility

• Significant barriers to adequate pain care exist
  – Gaps in knowledge and competencies for providers
  – Magnitude of problem
  – Systems and organizational barriers
• 3-1. Health care provider organizations should promote and enable self-management of pain as the starting point of management
  – Develop educational approaches and culturally and linguistically appropriate materials to promote and enable self-management

• 3-2. Population strategy described in Recommendation 2-2 should include developing strategies to overcome barriers to care
  – Strategies should focus on ways to improve care for populations disproportionately affected by and undertreated for pain

• 3-3. Health professions education and training programs, professional associations, and other groups should provide educational opportunities in pain assessment and treatment in primary care
  – Education should improve knowledge and skills in pain assessment and treatment
• 3-4. Pain specialty professional organizations and primary care professional associations should support collaboration between pain specialists and primary care clinicians, including greater proficiency by primary care providers along with referral to pain centers when appropriate.

• 3-5. Payers and health care organizations should revise reimbursement policies to foster coordinated and evidence-based pain care.

• 3-6. Health care providers should provide consistent and complete pain assessments.
Education Challenges
Finding

- Education is a central part of the necessary cultural transformation of the approach to pain
  - The federal, state and local government and professional organizations are in a position to contribute to substantial improvements in patient and professional education
Education Challenges
Recommendations

- **4-4.** Federal agencies and other stakeholders should expand and redesign education programs to transform understanding of pain
  - In concert with Recommendation 2-2, these entities should develop education programs for patients, the public, and health care providers

- **4-2.** CMS, HRSA, accrediting organizations, and undergraduate and graduate health professions training programs should improve curriculum and education for health care professionals

- **4-3.** Education programs for health professionals should increase the number of health professionals with advanced expertise in pain care
Research Challenges

Finding

- Research to translate advances into effective therapies is a continuing need
  - Significant advances have been made in understanding basic mechanisms of pain but much remains to be learned
  - Data and knowledge gaps remain and have prevented advances from being translated into safe and effective therapies
  - Addressing these gaps will require a cultural transformation in the view of and approach to pain research
5-1. NIH should designate a lead institute within the NIH responsible for moving pain research forward, and increase support for and scope of the Pain Consortium

- The lead institute should:
  - include pain as a central part of its mission
  - assume leadership of the Pain Consortium
  - assess the effectiveness of the NIH in moving pain research forward
  - identify funding needs

- The Pain Consortium should:
  - hold more frequent, regular, structured, and productive meetings
  - improve process for reviewing grant proposals related to pain
  - work with pain advocacy groups to help identify public need related to treatment and management
  - improve and expand public-private partnerships
• 5-2. Academia and Industry should improve the process for developing new agents for pain control

• 5-3. Federal agencies and private funders of pain research should increase support for interdisciplinary research in pain

• 5-4. Public and private funders should increase the conduct of longitudinal research in pain

• 5-5. With the support of NIH, academic institutions should increase the training of pain researchers
Immediate: Start now and complete before end of 2012

- 2-2. Create a comprehensive population-level strategy for pain prevention, treatment, management, and research
- 3-2. Develop strategies for reducing barriers to pain care
- 3-4. Support collaboration between pain specialists and primary care clinicians, including referral to pain centers when appropriate
- 5-1. Designate a lead Institute at NIH responsible for moving pain research forward, and increase the support for and scope of the Pain Consortium
Blueprint for Transforming Pain Prevention, Care, Education, and Research

Near-Term and Enduring: Build on immediate recommendations, complete before 2015, and maintain as ongoing efforts

- 2-1. Improve the collection and reporting of data on pain
- 3-1. Promote and enable self-management of pain
- 3-3. Provide educational opportunities in pain assessment and treatment in primary care
- 3-5. Revise reimbursement policies to foster coordinated and evidence-based pain care
- 3-6. Provide consistent and complete pain assessments
Blueprint for Transforming Pain Prevention, Care, Education, and Research

- 4-1. Expand and redesign education programs to transform the understanding of pain
- 4-2. Improve curriculum and education for health care professionals
- 4-3. Increase the number of health professionals with advanced expertise in pain care
- 5-2. Improve the process for developing new agents for pain control
- 5-3. Increase support for interdisciplinary research in pain
- 5-4. Increase the conduct of longitudinal research in pain
- 5-5. Increase the training of pain researchers