

Focus Article

The ACTION-American Pain Society Pain Taxonomy (AAPT): An Evidence-Based and Multidimensional Approach to Classifying Chronic Pain Conditions

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The views expressed in this article are those of the authors, none of whom has a financial conflict of interest related to the specific issues discussed in this manuscript. All of the authors attended the consensus meeting on which this article is based. In addition, the consensus meeting was attended by employees of Pfizer, one of the companies that provided unrestricted grants to ACTION to support its activities. However, these individuals did not contribute to the content of this manuscript.

No official endorsement by the U.S. Food and Drug Administration (FDA) or the pharmaceutical companies that have provided unrestricted grants to support the activities of the Analgesic, Anesthetic, and Addiction Clinical Trial Translations, Innovations, Opportunities, and Networks (ACTION) public-private partnership with the FDA should be inferred. The

consensus meeting on which this article is based was funded by ACTION, which has received research grants or other revenue from the FDA, various pharmaceutical companies, and other sources.

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<http://dx.doi.org/10.1016/j.jpain.2014.01.004>

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Abstract: Current approaches to classification of chronic pain conditions suffer from the absence of a systematically implemented and evidence-based taxonomy. Moreover, existing diagnostic approaches typically fail to incorporate available knowledge regarding the biopsychosocial mechanisms contributing to pain conditions. To address these gaps, the Analgesic, Anesthetic, and Addiction Clinical Trial Translations Innovations Opportunities and Networks (ACTION) public-private partnership with the U.S. Food and Drug Administration and the American Pain Society (APS) have joined together to develop an evidence-based chronic pain classification system called the ACTION-APS Pain Taxonomy. This paper describes the outcome of an ACTION-APS consensus meeting, at which experts agreed on a structure for this new taxonomy of chronic pain conditions. Several major issues around which discussion revolved are presented and summarized, and the structure of the taxonomy is presented. ACTION-APS Pain Taxonomy will include the following dimensions: 1) core diagnostic criteria; 2) common features; 3) common medical comorbidities; 4) neurobiological, psychosocial, and functional consequences; and 5) putative neurobiological and psychosocial mechanisms, risk factors, and protective factors. In coming months, expert working groups will apply this taxonomy to clusters of chronic pain conditions, thereby developing a set of diagnostic criteria that have been consistently and systematically implemented across nearly all common chronic pain conditions. It is anticipated that the availability of this evidence-based and mechanistic approach to pain classification will be of substantial benefit to chronic pain research and treatment.

Perspective: The ACTION-APS Pain Taxonomy is an evidence-based chronic pain classification system designed to classify chronic pain along the following dimensions: 1) core diagnostic criteria; 2) common features; 3) common medical comorbidities; 4) neurobiological, psychosocial, and functional consequences; and 5) putative neurobiological and psychosocial mechanisms, risk factors, and protective factors.

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Key words: Taxonomy, chronic pain, pain classification, biopsychosocial, evidence-based, mechanism-based pain classification.

The purpose of clinical diagnosis is to provide a valid explanation of symptoms and signs in order to guide treatment and inform prognosis. Several characteristics of an ideal diagnostic system are presented in Table 1. Although clinical diagnosis in many fields has progressed considerably in recent decades, incorporating new evidence and improved diagnostic technologies, classification of pain disorders has witnessed limited advances. Indeed, one could argue that current pain classification systems fail to fulfill the primary purpose of diagnosis (to guide treatment) and meet few of the characteristics of ideal classification systems. A challenge for pain classification is the need to account for individual differences in pain processing, which often result in a weak association between typical "diagnostic" measures of tissue damage or disease activity and the severity and clinical symptoms. The most comprehensive pain classification system available is published by the International Association for the Study of Pain (IASP). First published in 1979, revised in 1994, and updated in 2011, the IASP system intended to fulfill

a mission described by IASP founder John Bonica, who said, "It is possible to ... develop a classification of pain syndromes which are acceptable to many ... in the field; even if the adopted definitions and classifications are not perfect they are better than the Tower of Babel conditions that currently exist" (p. ix).¹⁶ However, although it describes a large number of chronic pain conditions, this system has never been widely adopted by either the clinical or the research community. Notably, over the past 15 years, multiple authors have called for a mechanism-based approach to pain diagnosis²¹⁻²⁴; however, information regarding neurobiological mechanisms is limited and has not been routinely incorporated into any existing pain classification systems. Thus, there is an increasingly urgent need to develop a standardized, systematic, and evidence-based approach to pain classification that incorporates information regarding biopsychosocial mechanisms and that can be applied to all common chronic pain conditions.

To that end, the Analgesic, Anesthetic, and Addiction Clinical Trial Translations Innovations Opportunities

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