SPECIAL COMMUNICATION

Standards of Care for Acute and Chronic Musculoskeletal Pain: The Bone and Joint Decade (2000–2010)

Nicolas E. Walsh, MD, Peter Brooks, MBBS, J. Mieke Hazes, MD, PhD, Rorey M. Walsh, BS, Karsten Dreinhöfer, MD, Anthony D. Woolf, BSc, Kristina Åkesson, MD, PhD, Lars Lidgren, MD, PhD, for the Bone and Joint Decade Task Force for Standards of Care for Acute and Chronic Musculoskeletal Pain

ABSTRACT. Walsh NE, Brooks P, Hazes JM, Walsh RM, Dreinhöfer K, Woolf AD, Åkesson K, Lidgren L, for the Bone and Joint Decade Task Force for Standards of Care for Acute and Chronic Musculoskeletal Pain. Standards of care for acute and chronic musculoskeletal pain: the Bone and Joint Decade (2000−2010). Arch Phys Med Rehabil 2008;89:1830-45.

Musculoskeletal conditions often manifest with the onset of pain and the resulting physical limitations. Musculoskeletal pain is almost inevitable in an individual's lifetime. It is one of the most common reasons for self-medication and entry into the health care system. Musculoskeletal pain affects 1 in 4 adults and is the most common source of serious long-term pain and physical disability. The monumental impact of musculoskeletal conditions is now recognized by the United Nations, the World Health Organization, World Bank, and numerous governments throughout the world through support of the Bone and Joint Decade 2000 to 2010 initiative. Individuals with musculoskeletal pain concerns are regularly ignored, their complaints often misunderstood by health care providers, and accordingly they do not receive timely or effective treatment. The standards of care in this document are designed to provide generic guidelines for appropriate care of people with acute or chronic musculoskeletal pain. This document was developed over a 4-year period using multiple international meetings and a Task Force of the Bone and Joint Decade for developing international standards for the care of acute and chronic musculoskeletal pain. The final document is a product of the World Health Organization Collaborating Centre for Evidence-Based Health Care in Musculoskeletal Disorders.

Key Words: Musculoskeletal system; Pain; Rehabilitation; Treatment outcome.

THE OVERALL OBJECTIVES of this document are (1) to inform health care providers in the management of acute and chronic musculoskeletal pain; and (2) to promote partnerships among the community, patients, and clinicians in decision-making in relation to pain—its prevention and management.

This document is based on 3 themes: (1) access to information, support, and knowledge that optimize musculoskeletal health for everyone and enable self-management; (2) access to the right services that enable early assessment, management, and prevention of chronic pain; and (3) access to ongoing and responsive treatment and support.

This documents draws on a number of major documents produced by national and international groups over the last few years: *Core Curriculum for Professional Education in Pain*,[1] produced by the Committee on Education of the International Association for the Study of Pain (*http://www.iasp-pain.org*); *Evidence-Based Management of Acute Musculoskeletal Pain: A Guide for Clinicians*,[2] based in a composite review of best practices for the treatment of musculoskeletal pain produced by the Australian Acute Musculoskeletal Pain Guidelines Group (*http://www.nhmrc.gov.au/publications/synopses/cp94syn.htm*); *Health Care Guideline: Assessment and Management of Chronic Pain*,[3] *Health Care Guideline: Adult Low Back Pain*,[4] and *Health Care Guideline: Assessment and Management of Acute Pain*[5] detailed practice guidelines for musculoskeletal conditions produced by the Institute for Clinical Systems Improvement (*http://www.icsi.org*); *Standards of Care for People With Back Pain*,[6] *Standards of Care for People With Inflammatory Arthritis*,[7] *Standards of Care for People With Osteoarthritis*,[8] *Standards of Care for People With Connective Tissue Diseases*,[9] *Standards of Care for People With Metabolic Bone Disease*,[10] and *Standards of Care for People With Regional Musculoskeletal Pain*[11] produced by ARMA (*http://www.arma.uk.net*); *European Action Towards Better Musculoskeletal Health*[12] review of evidenced-based medicine and best practices for treatment of musculoskeletal pain prepared in cooperation with many European health organizations and experts (*http://www.boneandjointdecade.org/ViewDocument.aspx?ContId=534*); and *Methods of Treating Chronic Pain: A Systematic Review*[13] based on a systematic and critical review of the scientific literature regarding medications, referral, interventions, and patient education with generic recommendations by SBU (*http://sbu.se/en/Published/Yellow/Methods-of-Treating-Chronic-Pain*).

Musculoskeletal conditions often manifest with the onset of pain and the resulting physical limitations. Musculoskeletal

List of Abbreviations

ARMA	Arthritis and Musculoskeletal Alliance
SBU	Swedish Council on Technology Assessment in Health Care

From the Department of Rehabilitation Medicine, University of Texas Health Science Center, San Antonio, TX (NE Walsh, RM Walsh); Pain Medicine Service, South Texas Veterans Administration Health Care System, San Antonio, TX (NE Walsh); Health Sciences, University of Queensland, Brisbane, Queensland, Australia (Brooks); Department of Rheumatology, Erasmus Medical College, Rotterdam, The Netherlands (Hazes); Department of Orthopedics, Ulm University, Ulm, Germany (Dreinhöfer); Duke of Cornwall Rheumatological Unit, Royal Cornwall Hospital, Truro, UK (Woolf); Department of Orthopaedic Surgery, Malmö University Hospital, Malmö, Sweden (Åkesson); and Department of Orthopedics, University Hospital, World Health Organization Collaborating Centre for Evidenced Based Healthcare in Musculoskeletal Disorders, Lund, Sweden (Lidgren).

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Reprint requests to Nicolas E. Walsh, MD, Dept of Rehabilitation Medicine, University of Texas Health Science Center, 7703 Floyd Curl Dr, San Antonio, TX 78229, e-mail: *walshn@uthscsa.edu.*

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pain is almost inevitable in an individual's lifetime. It is one of the most common reasons for self-medication and entry into the health care system.[14] Musculoskeletal pain affects 1 in 4 adults and is the most common source of serious long-term pain and physical disability. Chronic pain, often a result of unresolved musculoskeletal pain, affects 1 in 5 adults across Europe, with significant numbers losing their jobs or taking significant amounts of time off work each year.[15] In fact, musculoskeletal conditions are the primary health problems that limit work among industrialized nations; up to 60% of people on early retirement or long-term sick leave have chronic musculoskeletal ailments.[16]

Musculoskeletal problems result in a significant burden on both social and health care resources, accounting for a quarter of overall cost of illness on a global scale. When looking at the United Sates alone, the cost associated with these conditions increased 18% during the last 5 years, reaching $254 billion. Excluding trauma, musculoskeletal conditions are responsible for roughly 25% of the total expense of illness in developed nations.[17] They are the second most common cause for an individual to seek a physician and in a vast majority of countries account for up to 20% of a typical primary care practice.[18] There is some evidence that musculoskeletal pain is now more common than it was 40 years ago.[19] Whether this is a result of an increase in reporting or a heightened awareness of the symptoms is not clear.

Although the spectrum for musculoskeletal conditions is broad, they can be placed, respectively, within the following major categories: (1) joint conditions—for example, rheumatoid arthritis and osteoarthritis; (2) osteoporosis—for example, fragility fractures; (3) spinal disorders—for example, low back pain; (4) musculoskeletal injuries—for example, high-energy limb fractures, strains, and sprains mainly related to occupation of sports; and (5) childhood disorders. Overall, they incorporate problems ranging from acute onset and short duration to lifelong disorders. In the years to come, the incidence and impact of musculoskeletal conditions with consequential pain is expected to increase substantially in both developed and developing nations because of aging populations, lifestyle changes resulting in obesity, and decreased physical fitness, as well as an increase in road traffic collisions with the urbanization and motorization of the developing world.[20,21] The monumental impact of musculoskeletal conditions is now recognized by the United Nations, the World Health Organization, World Bank, and numerous governments throughout the world through support of the Bone and Joint Decade 2000 to 2010 initiative.[22] Yet patients with musculoskeletal pain concerns are regularly ignored, their complaints often misunderstood by health care providers, and accordingly they do not receive timely or effective treatment. The standards of care in this document are designed to provide guidelines for appropriate care of people with acute or chronic musculoskeletal pain.

Pain is an individual, multifactorial experience influenced by culture, previous pain experiences, belief, mood, and ability to cope. Although pain may indicate tissue damage, it can be experienced in the absence of an identifiable cause. Significant variability occurs in the degree of disability experienced in relation to pain and there is individual variation in response to pain treatments.

Effective pain relief is a human right[23]:

(1) It should be possible to reduce pain to a tolerable level in most people. Pain may not be completely alleviated but only reduced in some people due to its multifaceted nature.
(2) Unrelieved severe pain has adverse psychologic and physiologic effects.
(3) The person with pain should be involved in the assessment and management of their pain.
(4) To be effective pain treatments must be flexible and tailored to individual needs. Very different interventions (eg, medications, acupuncture, surgery, faith healing, herbs) are utilized worldwide with varying degrees of success based on a multitude of factors (eg, physical, cultural, affective, motivational, cognitive).
(5) Pain should be treated early, as established severe pain is much more difficult to treat and consumes significant community and health sector resources.

The term *acute pain* refers to pain that has been present for less than 3 to 6 months.[24]

Chronic pain is pain that has been present for longer than 3 to 6 months.[25] Successful management of pain in the acute phase is essential to prevent transition to chronic pain, which presents a significant social and economic burden. The burden of chronic musculoskeletal pain is often underestimated as to the negative impact it has on the individual, family, and community because of the resulting prolonged disability. Chronic musculoskeletal pain conditions are some of the most common causes of long term disability.

The development of chronic pain is likely the result of small, cumulative changes in lifestyle that have been made to cope with acute musculoskeletal pain.[26] The intensity, duration, and character of the pain influence psychosocial response, and the psychosocial response in turn influences the course of events. People vary in their potential to develop chronic pain. A combination of behaviors, beliefs, and emotions may be involved in the transition from acute to chronic pain.[26] When pain is unrelieved over time, or if there are recurrent episodes of pain, chronic pain may develop. It is essential to identify people with acute pain who are at risk of developing chronic pain and to intervene early to prevent this occurrence.

The appreciation and understanding of pain is now an integral part of patient care and has recently been identified by the US Joint Commission on Accreditation of Healthcare Organizations as the fifth vital sign.[27] Over the last decade, there have been extraordinary advances in the unraveling of pain mechanisms at the molecular level. These expand our understanding of the physiologic and pharmacologic aspects of pain including changes in the central and peripheral nervous system, the identification of chemical pathways, nerve receptive pathways, peripheral sensitization, and central neuroplasticity in the perpetuation of pain and links between inflammation, pain, and psychologic status.[28,29]

STANDARDS OF CARE

These standards are designed to give health service planners and health professionals the information needed to plan for and provide high-quality, evidence-based services for people with acute and chronic musculoskeletal pain. They should also identify for the community and patients the care and treatment they can reasonably expect to receive. The standards recognize that (1) the patient with musculoskeletal pain needs timely access to care that is founded on evidence-based medicine; (2) different types of advice and support may be needed at different times for people with musculoskeletal pain; and (3) integrated services are needed to provide advice and support to cover all aspects of managing musculoskeletal pain—clinical, personal, psychosocial, and employment.