

OSTEOARTHRITIS

Background

This case definition was developed by the Armed Forces Health Surveillance Center (AFHSC) for the purpose of epidemiological surveillance of a condition important to military-associated populations. In the military, work-related injuries account for significant lost work time, health care costs, and disability compensation.¹

Clinical Description

Osteoarthritis (OA), the most common form of arthritis, is a non-inflammatory degenerative joint disease characterized by destruction of cartilage and remodeling of bone at the joints. OA is highly prevalent in the United States and is associated with advancing age. Osteoarthritis can cause a range of symptoms from joint pain and stiffness to more disabling impairment. Risk factors for OA may be inherent to an individual, i.e., obesity, family history, hypermobility and abnormalities of the joint, or related to exposure, i.e., trauma, or overuse from physical activity or occupation.²

Case Definition and Incidence Rules

For surveillance purposes, a case of osteoarthritis is defined as:

- *One hospitalization* with any of the defining diagnoses of osteoarthritis (see ICD9 code list below) in *any* diagnostic position; or
- *Two outpatient medical encounters*, occurring *within two years* of each other, with any of the defining diagnoses of osteoarthritis (see ICD9 code list below) in *any* diagnostic position.

Incidence rules:

For individuals who meet the case definition:

- The incidence date is considered the date of the first hospitalization or outpatient medical encounter that includes a defining diagnosis of osteoarthritis.
- An individual is considered an incident case only *once per lifetime*.

Exclusions:

- None

¹ Feuerstein M, Berkowitz SM, Peck CA. Musculoskeletal-related disability in US Army personnel: prevalence, gender and military occupational specialties. *J Occup Environ Med.* 1997 Jan;39(1):68-78.

² Armed Forces Health Surveillance Center. Osteoarthritis and Spondylosis, Active Component, U.S. Armed Forces, 2000-2009. *Medical Surveillance Monthly Report (MSMR).* 2010 December; Vol.17 (12): 6-11.



Codes

The following ICD9 codes are included in the case definition:

Fifth-digit subclassification for use with ICD9 715:

- 0 site unspecified
- 1 shoulder region
- 2 upper arm
- 3 forearm
- 4 hand
- 5 pelvic region and thigh
- 6 lower leg
- 7 ankle and foot
- 8 other specified sites
- 9 multiple sites

Condition	ICD-9-CM Codes	CPT Codes
Osteoarthritis	715.0 (osteoarthrosis, generalized [0,4,9]) 715.1 (osteoarthrosis, localized, primary [0-8]) 715.2 (osteoarthrosis, localized, secondary [0-8]) 715.3 (osteoarthrosis, localized, not specified whether primary or secondary [0-8]) 715.8 (osteoarthrosis involving, or with mention of more than one site, but not specified as generalized [0,9]) 715.9 (osteoarthrosis, unspecified whether generalized or localized [0-8])	NA

Development and Revisions

- The case definition was developed by Medical Surveillance Monthly Report (MSMR) staff for use in the MSMR article referenced above.² The case definition was developed based on reviews of the ICD9 codes, the scientific literature, and previous AFHSC report requests.

Case Definition and Incidence Rule Rationale

- The symptoms of osteoarthritis present over time and health care providers may include the condition in the differential diagnosis for an individual prior to making a definitive diagnosis. As such, the case definition requires two outpatient visits to confirm a true case.

Code Set Determination and Rationale

- The ICD9 codes 715.xx were included to use all possible descriptions and sequelae unique to osteoarthritis.

Reports

None



Review

Mar 2011 Case definition reviewed and adopted by AFHSC Surveillance Methods and Standards (SMS) working group.

Dec 2010 Case definition developed and reviewed by MSMR staff.

Comments

None

