

# Migraine

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## Overview

In this migraine document, acute medication treatment is synonymous with abortive treatment and prophylactic medication treatment is synonymous with preventive treatment.

Methodology was developed to identify patients with frequent acute migraine medication use. In this condition, frequent migraine headache is defined as 4 migraines per month that result in treatment with an abortive medication. It is not possible to directly quantify migraines; therefore, quantification of acute migraine medications against a threshold is used as a proxy for frequent migraines. Several types of migraine medications are analyzed separately to determine whether or not a patient has frequent migraines. Thresholds are defined for the following medications based on 12 headaches during a 90 day period:

1. Triptan containing medications
  - Oral – 36 tablets within 90 days
  - Subcutaneous – 12 mL within 90 days
  - Nasal spray – 24 spray bottles within 90 days
2. Butorphanol Tartrate (e.g., Stadol NS)
  - Nasal Squeeze Bottle – 10 mL within 90 days
3. Dihydroergotamine Mesylate (e.g., Migranal)
  - Nasal spray – 12 mL within 90 days
  - Injection – 25 mL within 90 days
4. Butalbital (e.g., Fioricet and Fiorinal)
  - Oral – 100 tablets or capsules within 90 days
5. Midrin type medication
  - Oral – 150 capsules within 90 days

## National Standard

### NS-I

#### **9000006 Adult(s) with frequent use of acute medications that also received prophylactic medications.**

The goals of migraine prophylactic therapy are to: 1) reduce the frequency, severity, and duration of acute attacks; 2) improve responsiveness to acute medication treatment; and 3) improve function and reduce disability (1). Patients with frequent migraines would benefit from prophylactic medication treatment (1,2). ICSI specifically recommends a threshold for prophylactic migraine treatment as three or more severe migraines per month that fail to respond adequately to abortive treatment (2). Given these guideline recommendations, this measure was developed using the EBM Connect consultant panel process. This measure identifies patients who might benefit from prophylactic medications. Frequent migraine headache is defined as 4 migraines per month during the last 120 days that result in treatment with an abortive medication, as summarized in the migraine overview section.

Commonly used prophylactic medications include anticonvulsants, beta-blockers, calcium channel blockers, and tricyclic antidepressants. Patients taking at least one of these medications will be identified as taking prophylactic therapy. Recommended first-line prophylactic agents include propranolol, timolol, amitriptyline, and valproic acid derivatives; however, many other medications may be appropriate (1,3). Monitoring for potential toxicities, including laboratory abnormalities, is recommended for some medications used for migraine prophylaxis. Providers that prescribe these medications are encouraged to follow monitoring recommendations. Patients were excluded from this measure if they were less than 18 years of age at the end of the report period since there is insufficient data in this population to recommend

prophylactic therapy (4).

This measure is endorsed by the National Quality Forum.

1. *American Academy of Neurology. Practice parameter: evidence-based guidelines for migraine headaches (an evidence-based review). Report on the Quality Standards Subcommittee of the American Academy of Neurology. Neurology 2000;55:754-63.*
2. *Institute for Clinical Systems Improvement (ICSI). Health Care Guideline: Diagnosis and Treatment of Headache (Released March 2009). Accessed February 18, 2010. URL: <http://www.icsi.org>*
3. *Snow V, Weiss K, Wall EM, et al. Pharmacologic management of acute attacks of migraine and prevention of migraine headache. Ann Int Med 2002;137(10):840-52.*
4. *American Academy of Neurology. Practice parameter: Pharmacological treatment of migraine headache in children and adolescents. Report of the American Academy of Neurology Quality Standards Subcommittee and the Practice Committee of the Child Neurology Society. Neurology 2004;63:2215-2224*

## Care Pattern

### CP-I

#### **9000007 Patient(s) with frequent ER encounters or frequent acute medication use that had an office visit in last 6 reported months.**

AAN states guidelines state that it is appropriate to link the intensity of care with the level of disability and symptoms; it is not appropriate to continue ineffective or poorly tolerated medication (1). Given this statement, this measure was developed using the EBM Connect consultant panel consensus process. This measure identifies patients with poor migraine control who had a provider visit during the last 180 days of the report period through 90 days after the end of the report period. This is an opportunity to review migraine triggers, acute management options, and prophylactic treatment regimens. A patient was defined as having poor migraine control if there was evidence of two or more emergency room (ER) encounters for migraine/headache care or frequent use of acute migraine medications, as defined in the migraine overview.

1. *American Academy of Neurology. Practice parameter: evidence-based guidelines for migraine headaches (an evidence-based review). Report on the Quality Standards Subcommittee of the American Academy of Neurology. Neurology 2000;55:754-63.*