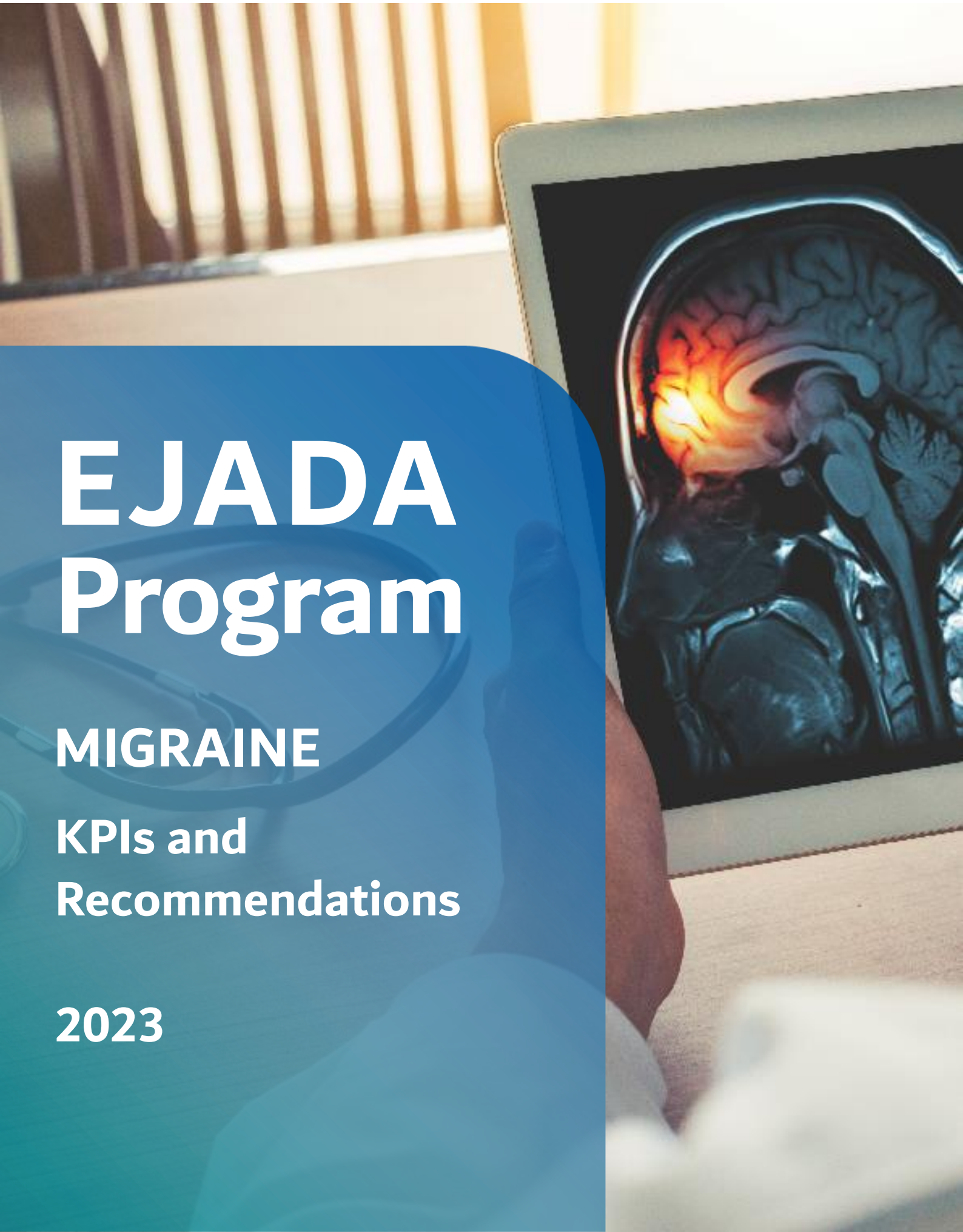
هـيـئـة الصـحـة بدبـي
DUBAI HEALTH AUTHORITY

إجـادة
EJADA



EJADA Program

MIGRAINE

KPIs and Recommendations

2023

Content

Introduction

Headaches are a common condition that can be disabling, leading to lower quality of life, disturbed job performance, and significant economic burden on societies. Migraine is a neurovascular disorder characterized by moderate to severe pain that typically affects only one side of the head and lasts from hours to days. It is known to coexist with various morbidities, including neurological and psychiatric disorders, and can potentially influence daily life activities such as social occasions, employment, and schooling. The major risk factors associated with migraines include stress, anxiety, exposure to sun, sleeping disorders, unhealthy eating habits, smoking, fatigue, and low socioeconomic status. This poses a challenge for both patients and physicians in terms of appropriate recognition, prevention, and timely treatment.

Migraine can significantly decrease the quality of life of those affected. It is important to address migraine in an adequate manner, with appropriate preventive strategies at the level of patients and physicians considered in primary settings. When symptoms remain uncontrolled in primary care, timely referral to neurologists for migraine management is required. Females are more prone to migraines than men, making this vulnerable segment of the population a priority for focused attention. Clinicians, especially general practitioners, should aim not only to relieve current pain and disability but also to avoid its progression by decreasing attack frequency, avoiding overuse of medication, prescribing preventive drugs, encouraging behavioral therapies, and preventing complications while considering the patient's comorbid conditions. These strategies should all be part of migraine therapy to reduce its burden and improve the overall quality of life of sufferers.

Fortunately, recent advances in migraine treatment have led to the development of new classes of drugs such as gepants, ditans, and calcitonin gene-related peptide (CGRP) inhibitors. These drugs have shown promise in improving the quality of life of many migraine patients.

Scope

The Ejada KPIs are quality indicators and ratings for physicians, facilities and insurance companies based on information collected by DHA systems from providers, payers and patients.

The Migraine KPIs and Recommendations are based on UAE experts consensus statement and International guidelines on migraine management. The KPIs are designed for healthcare practioners and providers to follow international best practices in the management of migraine patients.

The migraine KPIs cover the following aspects of migraine management:

- Radiodiagnosis to exclude secondary cause of headache and/or Aura
- Pharmacological management of acute and chronic migraine
- Use of new innovative therapies for management of acute migraine attacks and migraine prevention
- Non-pharmacological and psychological therapies for migraine prevention
- Referrals to a neurologist and long-term follow up of migraine patients

The KPIs and recommendations have been reviewed by leading neurology experts in UAE.

List of Abbreviations

S.No.	Abbreviation	Full form
1	AEs	Adverse Events
2	CBT	Cognitive and Behavioral Therapy
3	CGRP	Calcitonin Gene-related Peptide
4	CM	Chronic Migraine
5	CT Scan	Computed Tomography Scan
6	EM	Episodic Migraine
7	HRQoL	Health-Related Quality of life
8	KPI	Key Performance Indicators
9	mABs	Monoclonal Antibodies
10	MRI	Magnetic Resonance Imaging
11	NSAIDs	Non-steroidal Anti-inflammatory Drugs
12	SSRIs	Selective Serotonin Reuptake Inhibitors

KPIs and their Measuring Parameters

Reporting Frequency: Dynamic

S.No.	KPIs	Measuring Parameters
1	Neuroimaging (CT or MRI) to Confirm or Exclude a Cause of Secondary Headache and/or Aura in Migraine Patients	Neuroimaging, CT, MRI, Secondary Headache, Aura
2	Non-steroidal Anti-inflammatory Drugs (NSAIDs) and Analgesics for the First-line Treatment of Acute Migraine Attacks	DDC list of drugs
3	Second-line Triptan Therapy for the Treatment of Acute Migraine Attacks	DDC list of drugs
4	Third-line Medication With Gepants and Ditans for the Treatment of Acute Migraine Attacks	DDC list of drugs
5	First-line Treatment (Beta Blockers/Angiotensin II-receptor Blocker/Anticonvulsant) for the Prevention of Migraine	DDC list of drugs
6	Second-line Treatment (Tricyclic Antidepressant/Calcium Antagonist/Anticonvulsant) for the Prevention of Migraine	DDC list of drugs
7	Third-line Treatment with OnabotulinumtoxinA for the Prevention of Migraine	DDC list of drugs
8	Third-line Treatment with Calcitonin Gene-related Peptide Monoclonal Antibodies (CGRP-mAbs) for the Prevention of Migraine	DDC list of drugs
9	Emergency Treatment (Intravenous Injections: Lysine Acetylsalicylate, Metoclopramide, Metamizole, Sumatriptan and Steroids) for Migraine Attack	DDC list of drugs
10	Non-pharmacological Therapies (Non-invasive Neuromodulation/Biobehavioral Therapy) for Prevention of Migraine	Non-pharmacological Therapies, Non-invasive Neuromodulation, Migraine Prevention
11	Psychological Therapies Such as Relaxation Training, Biofeedback Therapy, Cognitive-Behavioral Therapy for Prevention of Migraine	Psychological Therapies, Relaxation Training, Biofeedback Therapy, Cognitive-Behavioral Therapy, Migraine Prevention
12	Neurologist Referral of Migraine Patients	Neurologist Referral
13	Long-term Follow-ups (3rd month/6th month) With Neurologist Among Migraine Patients	Long-term Follow-up, Migraine

Goals of the Acute treatment of patients with Migraine

Goals	Key considerations
• Rapid and consistent freedom from pain and associated symptoms, especially the most bothersome symptom, without recurrence. • Restored ability to function. • Minimal need for repeat dosing or rescue medications. • Optimal self-care and reduced subsequent use of resources (e.g., emergency room visits, diagnostic imaging, clinician and ambulatory infusion center visits). • Minimal or no adverse events (AEs). • Cost considerations	• All patients with a confirmed diagnosis of migraine should be offered a trial of acute pharmacological and/or nonpharmacologic treatment.

Acute treatments with Evidence of Efficacy in Migraine

Established Efficacy	Probably Effective
Migraine specific:	
Triptans	Ergotamine
Ergotamine Derivatives	Other forms of Dihydroergotamine
Gepants (except Atogepant)	
Lasmiditan	
Nonspecific:	
NSAIDs: Aspirin, Celecoxib oral solution, Diclofenac, Ibuprofen, Naproxen	NSAIDs: Flurbiprofen, Ketoprofen, IV and IM Ketorolac
Combination analgesics: Acetaminophen + Aspirin + Caffeine	IV Magnesium
	Isometheptene-containing compounds
	Antiemetics: Chlorpromazine, Droperidol, Metoclopramide, Prochlorperazine, Promethazine

Abbreviation: IV, intravenous; IM, intramuscular; NSAID, non-steroidal anti-inflammatory drug
[A] Consider neuromodulator devices in patients who prefer non-drug treatments or in whom drug treatment is ineffective, intolerable, or contraindicated
[b] in migraine with aura

Goals of the Preventive treatment of patients with chronic migraine

Goals	Key considerations

• Rapid and consistent freedom from pain and associated symptoms, especially the most bothersome symptom, without recurrence.
• Restored ability to function.
• Minimal need for repeat dosing or rescue medications.
• Optimal self-care and reduced subsequent use of resources (e.g., emergency room visits, diagnostic imaging, clinician and ambulatory infusion center visits).
• Reduce attack frequency, severity, duration, and disability.
• Improve responsiveness to and avoid escalation in use of acute treatment.
• Improve function and reduce disability.
• Reduce reliance on poorly tolerated, ineffective, or unwanted acute treatments.
• Reduce overall cost associated with migraine treatment.
• Enable patients to manage their own disease to enhance a sense of personal control.
• Improve health-related quality of life (HRQoL).
• Reduce headache-related distress and psychological symptoms.
	• All patients with a confirmed diagnosis of migraine should be offered a trial of acute pharmacological and/or nonpharmacologic treatment.
	• Attacks significantly interfere with patients' daily routines despite acute treatment
	• Frequent attacks
	• Contraindication to, failure, or overuse of acute treatments, with overuse defined as follows:
	  ○ Ten or more days per month for ergot derivatives, triptans, opioids, combination analgesics, and a combination of drugs from different classes that are not individually overused
	  ○ Fifteen or more days per month for nonopioid analgesics, acetaminophen, and NSAIDs.
	• AEs with acute treatments
	• Patient preference

aAs can be measured by the migraine disability assessment scale, Migraine Physical Function Impact Diary, or Headache Impact Test

Medications with evidence of efficacy in Migraine prevention

Established Efficacy		Probably Effective	
Oral	**Parenteral**	**Oral**	**Parenteral**
Candesartan	Eptenizumab	Amitriptyline	OnbotulinumtoxinA + CGRPmAb d,e
Divalproex sodium	Erenumab	Atenolol	Occipital Nerve Block
Frovatriptanc	Fremanezumab	Lisinopril	Transgenic Stimulation
Metoprolol	Galcanezumab	Memantine	Cefaly Device
Propranolol	OnabotulinumtoxinAd	Nadolol	Trigger Point Release
Timolol		Venlafaxine	
Topiramate			
Valproate sodium			
Rimegepant (Episodic)			
Atogepant (Episodic & Chronic)			

Abbreviation: CGRP: Calcitonin gene-relatedpeptide; mAb: monoclonal antibody
aTwo or more Class I trials based on American Academy of Neurology evidence classification
bOne or more Class I trials based on American Academy of Neurology evidence classification
cShort term prevention of menstrual-related migraine; evaluated and rejected by the FDA for this indication
dPrevention of chronic migraine
eOne Class IV trial based on American Academy of Neurology evidence classification

UAE Experts Consensus in Effective use of CGRP-based therapies

When should treatment with CGRP based therapies be offered to individuals with migraine?

For individuals with migraines who require preventive treatment CGRP based therapies should be considered **as a first-line treatment** option for migraine prophylaxis. This should only be initiated by a neurologist after meeting specific criteria, which have been modified from the AHS criteria.

When should treatment efficacy in patients on treatment with anti-CGRP mAbs be firstly evaluated?

Assess the efficacy of CGRP-based therapies in individuals with episodic or chronic migraines after an appropriate duration of therapy. For **episodic migraine, a meaningful improvement is considered a 50% reduction in MMD**, with evaluation after **3 months (6 months for eptinezumab).** For **chronic migraine, a meaningful improvement is considered a 30% reduction in MMD, with evaluation after 6 months.**

The presented data represent the initial discussion / version of the UAE consensus statements discussed.
The published version might slightly change as the experts have not reviewed the statements planned for publication.

UAE Experts Consensus in Effective use of CGRP-based therapies

When should treatment with CGRP based therapies be paused in individuals with migraine?

Individuals with episodic or chronic migraine who have been on continuous treatment with CGRP-based therapies should consider a pause after a **minimum of 12 months** unless continuation is deemed **clinically necessary.** If treatment is paused or discontinued and migraines worsen, restarting the treatment should be considered.

Should individuals with migraine and medication overuse be offered treatment with CGRP based therapies ?

Consider CGRP based therapies targeting for all individuals with migraine, including episodic and chronic migraine **with or without medication overuse**.

For EM/CM or both is reference to the approved label of each medication.

The presented data represent the initial discussion / version of the UAE consensus statements discussed.
The published version might slightly change as the experts have not reviewed the statements planned for publication.

UAE Experts Consensus in Effective use of CGRP-based therapies

Can we switch from one CGRP based therapy to the other?

Switching CGRP-based therapies can be considered in individuals with migraine who have an **inadequate response** to one of the CGRP based therapies. Although there is insufficient evidence on the potential benefits of antibody switch, **it may be an option to explore.**

When should we avoid CGRP-based therapies?

Avoid CGRP-based therapies in **pregnant and nursing women, and those seeking pregnancy**. Carefully review patients with vascular disease or cardiac risk factors before using CGRP therapy. Counsel patients with a **history of constipation** about the use of CGRP-based therapies for migraines. **Do not use CGRP-based therapies in patients under 18.**

The presented data represent the initial discussion / version of the UAE consensus statements discussed.
The published version might slightly change as the experts have not reviewed the statements planned for publication.

Health Outcomes Indicators

Neuroimaging (CT or MRI) to Confirm or Exclude a Cause of Secondary Headache and/or Aura in Migraine Patients

Description Title	Neuroimaging (CT or MRI) to Confirm or Exclude a Cause of Secondary Headache and/or Aura in Migraine Patients
Definition	Percentage of migraine patients who were referred for neuroimaging (CT or MRI) to confirm or exclude a cause of secondary headache and/or aura during the measurement year
Numerator	Number of migraine patients who were referred for neuroimaging (CT or MRI) to confirm or exclude a cause of secondary headache and/or aura during measurement year
Denominator	Total number of migraine patients with suspected secondary headache on the basis of red flags in the medical history and/or physical examination. during measurement year
Exclusion criteria	Treatment responsive migraine, Tension-type headache, Cluster headache
Unit of measure	Percentage (Numerator/Denominator x 100)
Measure target and/or threshold	Lower is better
Rationale	The only role for neuroimaging in the diagnosis of headache is to confirm or exclude causes of secondary headache that are suspected on the basis of red flags in the medical history and/or physical examination. Otherwise, neuroimaging is not only rarely necessary in the diagnostic work-up of migraine but can be harmful, as it can involve exposure to ionizing radiation.

Non-steroidal Anti-inflammatory Drugs (NSAIDs) and Analgesics for the First-line treatment of Acute Migraine Attacks

Description Title	Non-steroidal Anti-inflammatory Drugs (NSAIDs) and Analgesics for the First-line treatment of Acute Migraine Attacks
Definition	Percentage of migraine patients who were prescribed with non-steroidal anti-inflammatory drugs (NSAIDs) and analgesics for the first-line treatment of acute migraine attacks during the measurement year
Numerator	Number of migraine patients who were prescribed with non-steroidal anti-inflammatory drugs (NSAIDs) and analgesics for the first-line treatment of acute migraine attacks during the measurement year
Denominator	Total number of migraine patients during the measurement year
Exclusion criteria	Tension-type headache, Cluster headache, Secondary headaches
Unit of measure	Percentage (Numerator/Denominator x 100)
Measure target and/or threshold	Higher is better
Rationale	Oral NSAIDs (acetylsalicylic acid [900–1,000 mg], Ibuprofen [400–600 mg], and diclofenac potassium [50 mg]) are effective in the treatment of acute migraine. NSAIDs are contraindicated in patients with gastrointestinal bleeding and heart failure. Other analgesics (acetaminophen 1000 mg) are recommended in the treatment of acute migraine, if NSAIDs are contraindicated. However, acetaminophen is contraindicated in patients with hepatic disease and renal failure.

Second-line Triptan Therapy for the Treatment of Acute Migraine Attacks

Description Title	Second-line Triptan Therapy for the Treatment of Acute Migraine Attacks
Definition	Percentage of migraine patients who were prescribed with second-line triptan therapy for the treatment acute migraine attacks during the measurement year.
Numerator	Number of migraine patients who were prescribed with second-line triptan therapy for the treatment acute migraine attacks during the measurement year
Denominator	Total number of migraine patients during the measurement year
Exclusion criteria	Tension-type headache, Cluster headache, Secondary headaches
Unit of measure	Percentage (Numerator/Denominator x 100)
Measure target and/or threshold	Higher is better (after 1st line usage of NSAIDs and Analgesics)
Rationale	Triptans like Almotriptan, Eletriptan, Frovatriptan, Naratriptan, Rizatriptan, Sumatriptan and Zolmitriptan are the substances with the best efficacy in acute migraine attacks and should be used in severe headache and in migraine attacks which are unresponsive to analgesics or NSAIDs. Contraindications of Triptan therapy are cardiovascular or cerebrovascular disease, uncontrolled hypertension, hemiplegic migraine, migraine with brainstem aura are

Third-line Medication With Gepants and Ditans for the Treatment of Acute Migraine Attacks

Description Title	Third-line Medication With Gepants for the Treatment of Acute Migraine Attacks
Definition	Percentage of migraine patients who were prescribed with third-line treatment with gepants and ditans for acute migraine attacks during the measurement year
Numerator	Number of migraine patients who were prescribed with third-line treatment with gepants and ditans for acute migraine attacks during the measurement year
Denominator	Total number of migraine patients during the measurement year
Exclusion criteria	Tension-type headache, Cluster headache, Secondary headaches
Unit of measure	Percentage (Numerator/Denominator x 100)
Measure target and/or threshold	Higher is better (if triptans fail)
Rationale	Third-line medication with gepants (Ubrogepant 50, 100 mg oral; Rimegepant 75 mg oral) could be used to treat acute migrane, If all available triptans fail after an adequate trial period (no or insufficient therapeutic response in at least three consecutive attacks) or their use is contraindicated. However, gepants are contraindicated with concurrent CYP3A4 inhibitors, hypersensitivity, and hepatic impairment. Third-line medication with Ditans (Lasmiditan 50, 100 or 200 mg oral) could be used to treat acute migrane, If all available triptans fail after an adequate trial period (no or insufficient therapeutic response in at least three consecutive attacks) or their use is contraindicated. However, ditans are contraindicated with pregnancy, and concomitant use with drugs that are P-glycoprotein substrates.

First-line Treatment (Beta Blockers/Angiotensin II-receptor Blocker/ Anticonvulsant) for the Prevention of Migraine

Description Title	First-line Treatment (Beta Blockers/Angiotensin II-receptor Blocker/Anticonvulsant) for the Prevention of Migraine
Definition	Percentage of migraine patients who were prescribed with first-line treatment (beta blockers/angiotensin II-receptor blocker/anticonvulsant) for the prevention of migraine during the measurement year
Numerator	Number of migraine patients who were prescribed with first-line treatment (beta blockers/angiotensin II-receptor blocker/anticonvulsant) for the prevention of migraine during the measurement year
Denominator	Total number of migraine patients during the measurement year
Exclusion criteria	Tension-type headache, Cluster headache, Secondary headaches
Unit of measure	Percentage (Numerator/ Denominator x 100)
Measure target and/or threshold	Higher is better
Rationale	First-line medication with beta blockers (atenolol/bisoprolol/metoprolol/propranolol) or angiotensin II-receptor blocker (candesartan) or anticonvulsant (topiramate) are recommended for the prevention of migraine. Beta blockers are contraindicated for patients with asthma, cardiac failure, raynaud disease, atrioventricular block, depression. angiotensin II-receptor blocker is contraindicated with co-administration of aliskiren. Anticonvulsant is contraindicated with patients with nephrolithiasis, pregnancy, lactation, and glaucoma.

Second-line Treatment (Tricyclic Antidepressant/Calcium Antagonist/Anticonvulsant) for the Prevention of Migraine

Description Title	Second-line Treatment (Tricyclic Antidepressant/Calcium Antagonist/Anticonvulsant) for the Prevention of Migraine
Definition	Percentage of migraine patients who were prescribed with second-line treatment (tricyclic antidepressant/calcium antagonist/anticonvulsant) for the prevention of migraine during the measurement year
Numerator	Number of migraine patients who were prescribed with second-line treatment (tricyclic antidepressant/calcium antagonist/anticonvulsant) for the prevention of migraine during the measurement year
Denominator	Total number of migraine patients during the measurement year
Exclusion criteria	Tension-type headache, Cluster headache, Secondary headaches
Unit of measure	Percentage (Numerator/Denominator x 100)
Measure target and/or threshold	Higher is better (after 1st line treatment failure)
Rationale	Second-line medication with tricyclic antidepressant (amitriptyline) or calcium antagonist (flunarizine) or anticonvulsant (sodium valproate) is recommended for the prevention of migraine. Tricyclic antidepressant id contraindications among patients of age <6 years, heart failure, co-administration with monoamine oxidase inhibitors and SSRIs, glaucoma. Calcium antagonist is contraindicated in patients with parkinsonism, and depression. Anticonvulsant is contraindicated in patients with liver disease, thrombocytopenia, female and of childbearing potential.

Third-line Treatment with OnabotulinumtoxinA for the Prevention of Migraineo

Description Title	Third-line Treatment with OnabotulinumtoxinA for the Prevention of Migraine
Definition	Percentage of migraine patients who were prescribed with onabotulinumtoxinA as third-line treatment for the prevention of migraine during the measurement year
Numerator	Number of migraine patients who were prescribed with onabotulinumtoxinA as third-line treatment for the prevention of migraine during the measurement year
Denominator	Total number of migraine patients during the measurement year
Exclusion criteria	Tension-type headache, Cluster headache, Secondary headaches
Unit of measure	Percentage (Numerator/Denominator x 100)
Measure target and/or threshold	Higher is better (after 2nd line treatment failure)
Rationale	OnabotulinumtoxinA is effective in the therapy of chronic migraine with and without overuse of acute medication. OnabotulinumtoxinA should be used in this indication only by neurologists experienced in the diagnosis and therapy of chronic headache.

CGRP may be considered in 1st Line if indicated

Third-line Treatment with Calcitonin Gene-related Peptide Monoclonal Antibodies (CGRP-mAbs) for the Prevention of Migraine

Description Title	Third-line Treatment with Calcitonin Gene-related Peptide Monoclonal Antibodies (CGRP-mAbs) for the Prevention of Migraine
Definition	Percentage of migraine patients who were prescribed with CRGP mAbs as third-line treatment for the prevention of migraine during the measurement year
Numerator	Number of migraine patients who were prescribed with CRGP mAbs as third-line treatment for the prevention of migraine during the measurement year
Denominator	Total number of migraine patients during the measurement year
Exclusion criteria	Tension-type headache, Cluster headache, Secondary headaches
Unit of measure	Percentage (Numerator/Denominator x 100)
Measure target and/or threshold	Higher is better (after failure of 2nd line treatment)
Rationale	Monoclonal antibodies targeting the CGRP pathway are recommended for migraine prevention as they are effective and safe also in the long-term. However, mAbs are not recommended in patients with hypersensitivity, history of stroke, subarachnoid hemorrhage, coronary heart disease, inflammatory bowel disease, chronic obstructive pulmonary, disease or impaired wound healing

Emergency Treatment (Intravenous Injections: Lysine Acetylsalicylate, Metoclopramide, Metamizole, Sumatriptan and Steroids) for Migraine Attack

Description Title	Emergency Treatment (Intravenous Injections: Lysine Acetylsalicylate, Metoclopramide, Metamizole, Sumatriptan and Steroids) for Migraine Attack
Definition	Percentage of migraine patients who were prescribed with intravenous lysine acetylsalicylate, metoclopramide, metamizole, sumatriptan and steroids for emergency treatment of migraine attack during the measurement year
Numerator	Number of migraine patients who were prescribed with intravenous lysine acetylsalicylate, metoclopramide, metamizole, sumatriptan and steroids for emergency treatment of migraine attack during the measurement year
Denominator	Total number of migraine patients during the measurement year
Exclusion criteria	Tension-type headache, Cluster headache, Secondary headaches
Unit of measure	Percentage (Numerator/Denominator x 100)
Measure target and/or threshold	Higher is better
Rationale	Patients who call a doctor for treatment of their migraine attacks or who attend the emergency room have usually used oral medication without success. For this reason, parenterally applied substances are available for emergency treatment. The following drugs can be used for intravenous injections: ASA, metoclopramide (and other dopamine antagonists), metamizole, sumatriptan and steroid

Non-pharmacological Therapies (Non-invasive Neuromodulation/Biobehavioral Therapy) for Prevention of Migraine

Description Title	Non-pharmacological Therapies (Non-invasive Neuromodulation/Biobehavioral Therapy) for Prevention of Migraine
Definition	Percentage of migraine patients who were referred for non-pharmacological therapies (non-invasive neurostimulation/biobehavioral therapy) for prevention of migraine during the measurement year
Numerator	Number of migraine patients who were referred for non-pharmacological therapies (non-invasive neurostimulation/biobehavioral therapy/acupuncture) for prevention of migraine during the measurement year
Denominator	Total number of migraine patients during the measurement year
Exclusion criteria	Tension-type headache, Cluster headache, Secondary headaches
Unit of measure	Percentage (Numerator/Denominator x 100)
Measure target and/or threshold	Higher is better
Rationale	Neuromodulatory devices and biobehavioral therapy should be considered as adjuncts to acute and preventive medication or as stand-alone preventive treatment when medication is contraindicated. Trigger point, occpital nerve, Cefaly device and TMS.

Psychological Therapies, Relaxation Training, Biofeedback Therapy, Cognitive-Behavioral Therapy for Prevention of Migraine

Description Title	Psychological Therapies, Relaxation Training, Biofeedback Therapy, Cognitive-Behavioral Therapy for Prevention of Migraine
Definition	Percentage of migraine patients who were referred with psychological therapies, relaxation training, biofeedback therapy, cognitive-behavioral therapy) for the prevention of migraine during the measurement year
Numerator	Number of migraine patients who were referred with psychological therapies, relaxation training, biofeedback therapy, cognitive-behavioral therapy) for the prevention of migraine during the measurement year
Denominator	Total number of migraine patients during the measurement year
Exclusion criteria	Tension-type headache, Cluster headache, Secondary headaches
Unit of measure	Percentage (Numerator/Denominator x 100)
Measure target and/or threshold	Higher is better
Rationale	Psychological therapy including relaxation training, biofeedback therapy, cognitive-behavioral therapy are highly effective in the prevention of migraine and can be used as an alternative to drug. Relaxation procedures are intended to reduce the general activation level. Biofeedback is a therapeutic psychological intervention for the conditioning of physiological, particularly autonomic functions. Cognitive behavioral therapy (CBT) comprises cognitive-behavioral treatment strategies intended essentially to improve the patient's self-reliance and control conviction.

Neurologist Referral of Migraine Patients

Description Title	Neurologist Referral of Migraine Patients
Definition	Percentage of migraine patients who were referred to neurologist during the measurement year
Numerator	Number of migraine patients who were referred to neurologist during the measurement year
Denominator	Total number of migraine patients during the measurement year
Exclusion criteria	Tension-type headache, Cluster headache, Secondary headaches
Unit of measure	Percentage (Numerator/Denominator x 100)
Measure target and/or threshold	Higher is better
Rationale	It is recommended that referral to specialist care (neurologist) should be reserved for migraine patients whose condition is diagnostically challenging, difficult to treat or complicated by comorbidities.

Long-term Follow-ups (3rd month/6th month) With Neurologist Among Migraine Patients

Description Title	Long-term Follow-ups (3rd month/6th month) With Neurologist Among Migraine Patients
Definition	Percentage of migraine patients who had two follow-ups (3rd month/6th month) with neurologist at a year during the measurement year
Numerator	Number of migraine patients who had two follow-ups (3rd month/6th month) with neurologist at a year during the measurement year
Denominator	Total number of migraine patients during the measurement year
Exclusion criteria	Treatment responsive migraine, Tension-type headache, Cluster headache
Unit of measure	Percentage (Numerator/Denominator x 100)
Measure target and/or threshold	Higher is better
Rationale	It is recommended that primary care should be responsible for the long-term management of patients with migraine, maintaining stability and reacting to change. Referral from neurologist back to primary care should be timely and accompanied by a comprehensive treatment plan. The patient can be referred back to primary care once sustained efficacy with preventive therapy for up to 6 months is obtained with no substantial treatment-related adverse effects.

References

1. Ailani J, Burch RC, Robbins MS, Board of Directors of the American Headache Society. The American Headache Society Consensus Statement: Update on integrating new migraine treatments into clinical practice. Headache: The Journal of Head and Face Pain. 2021 Jul;61(7):1021-39. (https://headachejournal.onlinelibrary.wiley.com/doi/epdf/10.1111/head.14153)

2. Eigenbrodt AK, Ashina H, Khan S, Diener HC, Mitsikostas DD, Sinclair AJ, Pozo-Rosich P, Martelletti P, Ducros A, Lantéri-Minet M, Braschinsky M. Diagnosis and management of migraine in ten steps. Nature Reviews Neurology. 2021 Aug;17(8):501-14.

3. Diener HC, Holle-Lee D, Nägel S, Dresler T, Gaul C, Göbel H, Heinze-Kuhn K, Jürgens T, Kropp P, Meyer B, May A. Treatment of migraine attacks and prevention of migraine: Guidelines by the German Migraine and Headache Society and the German Society of Neurology. Clinical and translational neuroscience. 2019 Jan 30;3(1):2514183X18830377.

4. Becker WJ, Findlay T, Moga C, Scott NA, Harstall C, Taenzer P. Guideline for primary care management of headache in adults. Canadian Family Physician. 2015 Aug 1;61(8):670-9.

5. Demarquay G, Moisset X, Lantéri-Minet M, de Gaalon S, Donnet A, Giraud P, Guégan-Massardier E, Lucas C, Mawet J, Roos C, Valade D. Revised guidelines of the French Headache Society for the diagnosis and management of migraine in adults. Part 1: Diagnosis and assessment. Revue Neurologique. 2021 Sep 1;177(7):725-33.

6. Ducros A, de Gaalon S, Roos C, Donnet A, Giraud P, Guégan-Massardier E, Lantéri-Minet M, Lucas C, Mawet J, Moisset X, Valade D. Revised guidelines of the French headache society for the diagnosis and management of migraine in adults. Part 2: Pharmacological treatment. Revue Neurologique. 2021 Sep 1;177(7):734-52.

For any inquiries and additional information contact EJADAH team on (Ejadah-DHIC@dha.gov.ae)