Introduction to VA/DoD Clinical Practice Guideline for the Management of Headache

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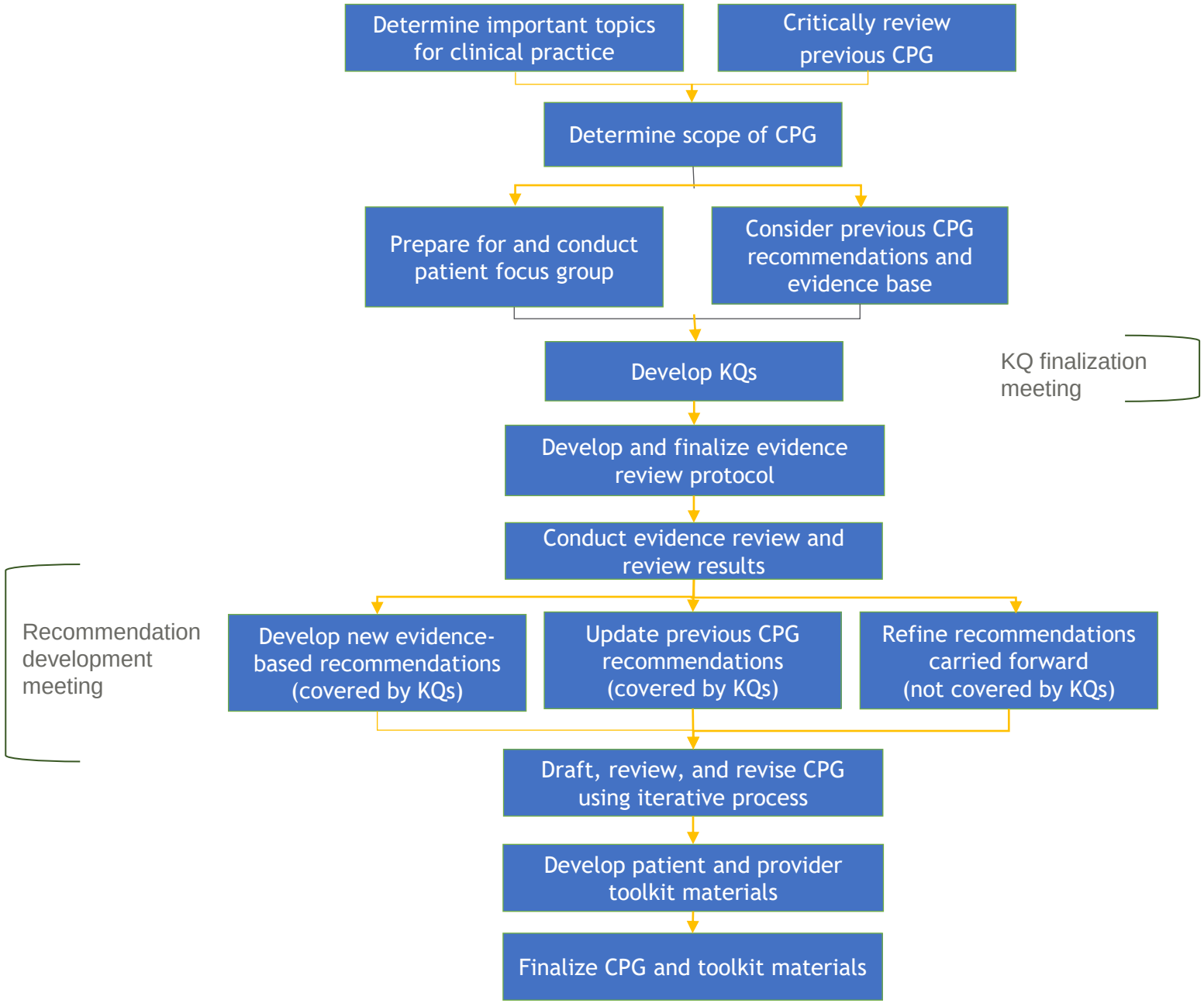
Overview of CPG Development Process



Grading Recommendations - GRADE

- **Evidence-based clinical practice recommendations were developed based on the:**
  - Evidence review, which was informed by 12 key questions
  - GRADE (Grading of Recommendations Assessment, Development and Evaluation) methodology and use of four decision domains to determine strength (*Strong* or *Weak*) and direction (*For* or *Against)* of each recommendation:
    - Confidence in the quality of evidence
    - Balance of desirable and undesirable outcomes
    - Values and preferences
    - Other implications, as appropriate (e.g., resource use)

Strength of a Recommendation

- **Strength of a recommendation on a continuum:**
  - ***Strong for*** (or "*We recommend*…")
  - ***Weak for*** (or "*We suggest*…")
  - ***Neither for nor against*** (or "*There is insufficient evidence*…")
  - ***Weak against*** (or "*We suggest against*…")
  - ***Strong against*** (or "*We recommend against*…")

Background and Statistics

- **Headache is extremely common**
  - Headache is the second leading cause of years lived with disability across all age groups, trailing only low back pain.
  - Ten percent of people living with headache report having multiple different types of headaches each week, and 3% report having some type of headache daily.
- **Headache is disabling**
  - More disability-adjusted life years (DALY) are attributable to headache than all other neurological disorders combined.
  - Headache disability is linked to headache characteristics (e.g., throbbing, stabbing), frequency (e.g., hundreds of times a day, annually), associated features (e.g., nausea, photophobia, unilateral weakness), and conditions highly comorbid with headache (e.g., depression, stroke).
  - Furthermore, health-related QoL scores, a measure of an individual's perceived mental and physical health over time, might decrease during a headache and in periods between headaches.
  - Headaches negatively affect family life, group activities, relationships, and financial stability.

Background and Statistics

- **Headache carries stigma**
  - Stigma, or “a set of negative and often unfair beliefs that a society or group of people have about something,” is commonly experienced by those living with migraine and other types of headache and is increasingly being recognized as an important contributor to headache disability.
  - Stigma can worsen headache symptoms and is associated with **impaired QoL**.
  - Stigma contributes to many patients **not reporting their headaches** to healthcare providers, causing **significant delay** in diagnosis and treatment.

- **Language to reduce stigma**
  - For example, the term *“attack”* is frequently used within the headache community to distinguish among the acute symptoms an individual is experiencing from the chronic disease itself, yet it **can hold negative connotations**, often signifies an external locus of control, and might have strong connotations for Veterans and active duty Service members.
  - Although communicating the severity and fluctuating nature of headache diseases is essential, you might consider using phrases such as **“symptom onset”** or **“symptom escalation”** rather than the word attack.

Background and Statistics

- **Headache is associated with other conditions.**
  - Studies have found significant relationships between migraine and placental abruption, preeclampsia, and stroke during pregnancy.
    - Given the high prevalence and increased risk of adverse outcomes related to migraine in individuals of childbearing age, discussion regarding contraception and early treatment to reduce the burden of disease while minimizing teratogenic effects should be considered among this population.
  - Conditions that more frequently co-occur with migraine than in those without include:
    - Insomnia, depression, anxiety, gastric ulcers/GI bleeding, chest pain, and epilepsy
  - Conditions that were associated with a higher degree of migraine headache pain include:
    - Inflammatory conditions, psychiatric disorders, and sleep disorders.
  - Conditions that are associated with higher migraine headache frequency include:
    - Gastric ulcers/GI bleeding, diabetes, anxiety, depression, insomnia, asthma, and allergies/hay fever
  - Though most headaches are not a sign of another illness, headache can be the presenting symptom of a more serious systemic or neurologic condition.
    - Even when red flag features are absent and evaluations are appropriate significant concern may linger for patients and providers.

Background and Statistics

- **Headache is costly**
  - The estimated direct and indirect medical costs of caring for people with migraines in the U.S. is approximately **$36 billion annually**.
  - Sixty percent of costs are accounted for by physician office visits.
  - The indirect annual cost is largely attributed to missed days of work (i.e., **absenteeism**) and impaired work function when people come to work while impaired by their headache (i.e., **presenteeism**).

Background and Statistics

- **Disparities in headache care are poorly understood**
  - Understanding **health disparities** as they relate to headache care has largely been unexplored. **Men are historically underrepresented in headache research**, including clinical trials and epidemiological work. For example, historically more than 80% of subjects enrolled in migraine clinical trials have been women, whereas 43% of women and 18% of men have migraine sometime during their lifetime.
  - Beyond gender differences in headache care, limited evidence suggests **poorer health care** utilization, more inaccurate diagnoses, and poorer care quality **among Black patients** compared with White, non-Hispanic patients with migraine.
  - Other **marginalized** and **underserved** groups also seem to bear disproportionate burden of migraine, including **Hispanics and Latinos**, people with **low socioeconomic status**, and persons living in **rural** areas.

Background and Statistics

- **Headache in VA patients**
  - Headache appears to be getting more common.
    - From 2008 to 2019, the 1-year prevalence of Veterans **diagnosed with migraine has steadily increased**, from 8.5% to 13.0% and from 1.1% to 2.5%, for women and men respectively.
  - Headache in VA patients is complex.
    - More than one half of veterans diagnosed with migraine have multiple headache diagnoses, compared to ten percent of the general headache population.
    - In fiscal year 2017, approximately 380,000 Veterans sought care in the VA system for a headache disorder and more than 75% of headache management occurred within primary care.
  - History of traumatic brain injury (TBI) is common.
    - TBI is a strong predictor of headache as a symptom in the first year of care for a Veteran within VA, with the severity of TBI and history of recurrent TBIs associated with greater headache severity.
  - Psychiatric comorbidities are common.
    - Psychiatric comorbidities increase the likelihood of headache among those with a TBI diagnosis.

Background and Statistics

- **Headache in DoD patients**
  - Headaches are common in active duty Service members and their dependents
    - In a longitudinal study including a large cohort of 77,000 participants (active duty Service members, Reservists, and National Guard), the self-reported prevalence of provider-diagnosed migraine was **6.9% in males and 20.9% in females**.
  - Posttraumatic headache (PTH) is common, mirroring increased rates of mild TBI in the DoD population
    - Mild traumatic brain injury can result in a complex set of physical, behavioral, and cognitive symptoms.
    - The incidence of **mTBI** and concurrent headache in the DoD population is **four to five times higher** than that in the general U.S. population.
  - DoD patients may be especially prone to healthcare avoidance
    - Active duty patients, especially those with special duties, **may hesitate to report headaches** or other painful conditions to their health care providers. This hesitation might stem from not wanting to appear “weak,” not wanting to be taken off special duties or assignments, or both.
    - A recent study showed that military pilots **self-report healthcare avoidance** because of **fear** of loss of flight status.
    - This avoidance causes s**ignificant delay in accurately diagnosing and treating headache conditions** and might lead to additional care challenges for the patients and providers.

Background and Statistics

- **Active duty, Guard, and Reserve patients may have occupationally specific concerns**
  - Providers must be diligent in reviewing their patient's occupational history and job-specific duties before developing a treatment plan.
  - A clinically indicated and medically appropriate medication **might lead to duty limitations** or even a review for military retention.
  - Providers should strongly consider placing **duty and mobility restrictions** on active duty Service members when starting new medications, even if only temporarily, to allow for evaluation of treatment effect and assessment of potential side effects.
  - **Occupational medicine** and flight medicine specialists can be consulted by primary care as needed for guidance and recommendations.

Background and Statistics

		Tension-Type Headache [a]	Migraine Headache [b]	Cluster Headache [c]
Headache Symptom Duration and Frequency	Duration	30 minutes to 7 days	4–72 hours	15–180 minutes
	Frequency	Variable	Variable	Once every other day to eight per day; often occurring at the same time of day
Headache Characteristics	Severity	Mild to moderate	Moderate to severe	Severe or very severe
	Location	Bilateral	Unilateral	Unilateral orbital, supraorbital, or temporal pain or any combination of such pain
	Quality	Pressing or tightening, non-pulsating	Throbbing or pulsating	Stabbing, boring
	Aggravated by routine physical activity	Not aggravated by routine activity	Aggravated by routine activity	Causes a sense of agitation or restlessness; routine activity might improve symptoms
Associated Features	Photophobia and phonophobia	Can have one but not both	Both	Variably present
	Nausea, vomiting, or both	Neither	Either or both	Might be present
Other Features	Autonomic features[d]	None	Might occur but are often subtle and not noticed by the patient	Prominent autonomic features ipsilateral to the pain (see Appendix B)

- Headache types
  - Tension-type headache is the most common headache type the general population; however, migraines tend to be more debilitating and are more common in patients presenting for medical care.
  - Within the U.S., the prevalence of self-reported migraine, severe headache, or both ranges between 15–18% in women and 6–10% in men; nearly one-half of women and men experience TTH.
    - However, migraine is often misdiagnosed in men and 6-10% may be a significant underestimation.

Diagnostic Criteria

- Tension-type headache
  - At least 10 headaches lasting 30 minutes to 7 days
  - At least two defining characteristics
    - Bilateral location
    - Non-pulsating quality
    - Mild to moderate intensity
    - Not aggravated by routine physical activity
  - Both associated features
    - No nausea or vomiting
    - Either photophobia or phonophobia, but not both
  - If headaches fulfill all but one of the TTH criteria (e.g., having both photophobia and phonophobia), the diagnosis would be probable TTH.
  - Chronic vs. episodic
    - Chronic refers to having frequent headaches occurring on 15 or more days per month for more than 3 months.

Diagnostic Criteria

- Migraine without aura
  - At least five headaches lasting 4–72 hours
  - At least two defining headache characteristics:
    - Unilateral
    - Throbbing or pulsating
    - Moderate or severe intensity
    - Aggravated, or caused by routine physical activity
  - At least one associated feature
    - Nausea, vomiting, or both
    - Both photophobia and phonophobia
  - If headaches fulfill all but one of the migraine criteria (e.g., photophobia or phonophobia but not photophobia and phonophobia), the diagnosis would be probable migraine.

Diagnostic Criteria

- Migraine with aura vs. without aura
  - Aura; Recurrent attacks, lasting minutes, of unilateral fully-reversible visual, sensory or other central nervous system symptoms that usually develop gradually and are usually followed by headache and associated migraine symptoms.

- Chronic vs. episodic
  - Headache occurring on 15 or more days/month for more than 3 months, which, on at least 8 days/month, has the features of migraine headache.

Diagnostic Criteria

- Cluster headache
  - At least five attacks fulfilling the criteria below
  - Severe or very severe unilateral orbital, supraorbital and/or temporal pain lasting 15-180 minutes (when untreated)
  - Either or both of the following:
    - at least one of the following symptoms or signs, ipsilateral to the headache:
      - conjunctival injection and/or lacrimation
      - nasal congestion and/or rhinorrhoea
      - eyelid oedema
      - forehead and facial sweating
      - miosis and/or ptosis
    - a sense of restlessness or agitation
  - Occurring with a frequency between one every other day and 8 per day
  - Not better accounted for by another ICHD-3 diagnosis.

Diagnostic Criteria

- Cluster headache
  - Called “Episodic” when there have been at least two cluster periods lasting from 7 days to 1 year (when untreated) and separated by pain-free remission periods of ≥3 month.
    - Clusters usually last between 2 weeks and 3 months.
  - Called “Chronic” when attacks occur without a remission period, or with remissions lasting <3 months, for at least 1 year.

Primary Headache Disorders Criteria*			
	Tension-type headache	**Migraine headache**	Cluster headache
Attack duration and frequency			
Duration	30-minutes – 7-days	**4 – 72 hours**	15 – 180 minutes
Frequency	Variable	**Variable**	Once every other day to eight per day; often occurring at the same time of day
Headache characteristics			
Severity	Mild to moderate	**Moderate to severe**	Severe or very severe
Location	Bilateral	**Unilateral**	Unilateral orbital, supraorbital, and/or temporal
Quality	Pressing or tightening, non-pulsating	**Throbbing or pulsating**	Stabbing, boring
Aggravated by routine physical activity	Not aggravated by routine activity	**Aggravated by routine activity**	Causes a sense of agitation or restlessness; routine activity may improve symptoms
Associated features			
Photophobia and phonophobia	Can have one but not both	**Both**	Variably present
Nausea and/or vomiting	Neither	**Either or both**	May be present
Other features			
Autonomic features	None	**May occur, but are often subtle and not noticed by the patient**	Prominent autonomic features ipsilateral to the pain

Diagnostic Criteria

- **Secondary headache:**
  - When a new headache occurs for the first time in c**lose temporal relation to another disorder that is known to cause headache**, or fulfils other criteria for causation by that disorder, the new headache is coded as a secondary headache attributed to the causative disorder. This remains true even when the **headache has the characteristics of a primary headache** (migraine, tension-type headache, cluster headache or one of the other trigeminal autonomic cephalalgias).
  - When a pre-existing primary headache becomes chronic or is made significantly worse (usually meaning a two-fold or greater increase in frequency and/or severity) in close temporal relation to such a causative disorder, both the primary and the secondary headache diagnoses should be given, provided that there is good evidence that the disorder can cause headache.

Diagnostic Criteria

- **General diagnostic criteria for secondary headaches:**
  - Any headache fulfilling criterion below
  - Another disorder scientifically documented to be able to cause headache has been diagnosed with evidence of causation demonstrated by at least two of the following:
    - Headache has developed in temporal relation to the onset of the presumed causative disorder
    - Either or both of the following:
      - Headache has significantly worsened in parallel with worsening of the presumed causative disorder
      - Headache has significantly improved in parallel with improvement of the presumed causative disorder
    - Headache has characteristics typical for the causative disorder
    - Other evidence exists of causation
  - Not better accounted for by another ICHD-3 diagnosis.

Diagnostic Criteria

- **Types of secondary headache:**
  - Headache attributed to trauma or injury to the head and/or neck.
  - Headache attributed to cranial or cervical vascular disorder.
  - Headache attributed to non-vascular intracranial disorder.
  - Headache attributed to a substance or its withdrawal.
  - Headache attributed to infection.
  - Headache attributed to disorder of homeostasis.
  - Headache or facial pain attributed to disorder of the cranium, neck, eyes, ears, nose, sinuses, teeth, mouth or other facial or cervical structure.
  - Headache attributed to psychiatric disorder.

Diagnostic Criteria

- **Medication-overuse headache**
  - Headache occurring on ≥15 days/month in a patient with a pre-existing headache disorder
  - Regular overuse for >3 months of one or more drugs that can be taken for acute and/or symptomatic treatment of headache
  - Not better accounted for by another ICHD-3 diagnosis.

Medication-overuse headache

Medication Overuse Headache Type	Medication Overuse Frequency
Butalbital overuse	≥5 days/month for >3 months
Opioid overuse	≥8 days/month for >3 months
Triptan overuse	≥10 days/month for >3 months
Ergotamine overuse	
Combination-analgesic overuse (any combination of classes, not to include combinations that only include non-opioid analgesics)[c]	
Non-opioid analgesic overuse (e.g., aspirin, NSAIDs, acetaminophen, steroids, and combinations of non-opioid analgesics)	≥15 days/month for >3 months

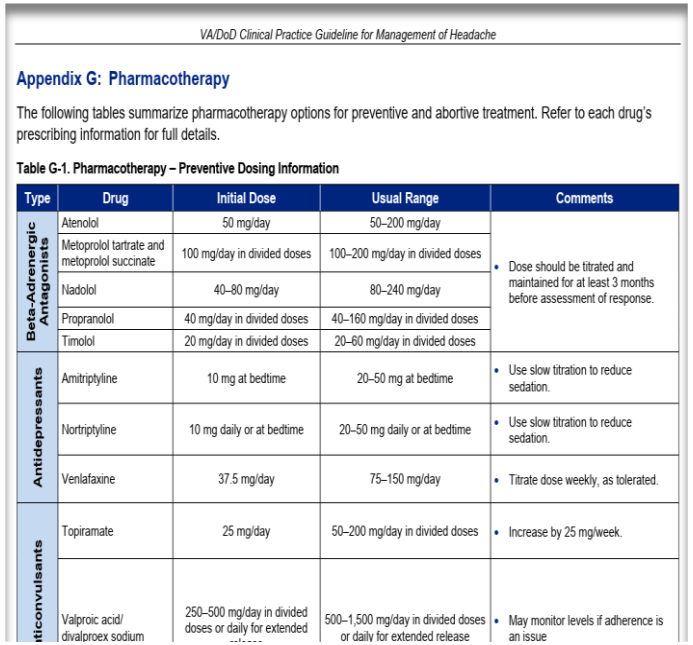
[c] Combination-analgesic refers to a headache abortive medication that contains more than one active ingredient and may refer to over-the-counter or prescription agents.

Screening and Diagnosis

	Recommendation	Strength[a]	Category[b]
Medication Overuse Headache Screening and Other Considerations			
1.	We suggest providers assess for and consider the following high-risk factors for medication overuse headache in patients with headache (in order of relative impact): • Headache frequency (greater than or equal to 7 days per month) • Migraine diagnosis • Medication use: frequent use of anxiolytics, analgesics (for any condition, including use of opioids or non-opioid analgesics for acute treatment of migraine), or sedative hypnotics • History of anxiety or depression, especially in combination with musculoskeletal complaints or gastrointestinal complaints • Physical inactivity • Sick leave of greater than 2 weeks in the last year • Self-reported whiplash • Smoking (tobacco use)	Weak for	Not reviewed, Amended

Pharmacotherapy Recommendations – overarching principles

- Keep in mind recommendations are made **recent literature pull** (2016 – 2022). See Appendix A
- Some pharmacotherapies indicated for headache treatment are not in recommendations
  - This does **not** mean these are not options for patients
  - Examples: almotriptan, dihydroergotamine, zavegepant
- **Full list** of commonly used outpatient pharmacotherapies are in **Appendix G** of CPG
- We will review select pharmacotherapies' VA National Criteria for Use. The VA Formulary Advisor is available to search formulary status and, if applicable, Criteria For Use for any drug: https://www.va.gov/formularyadvisor/



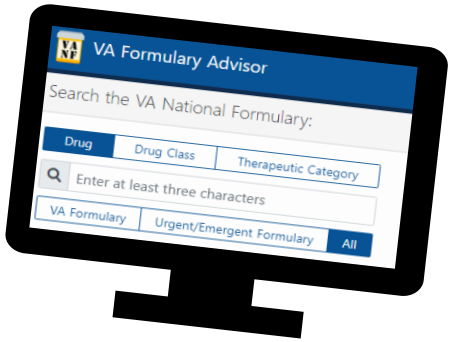
VA/DoD Clinical Practice Guideline for Management of Headache

Appendix G: Pharmacotherapy

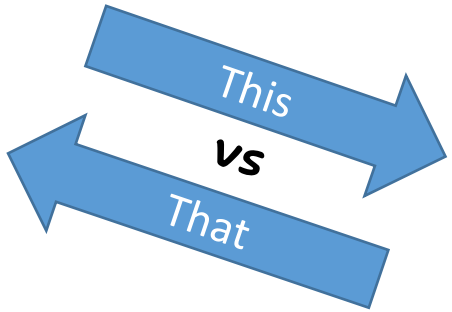
The following tables summarize pharmacotherapy options for preventive and abortive treatment. Refer to each drug's prescribing information for full details.

Table G-1. Pharmacotherapy – Preventive Dosing Information

Type	Drug	Initial Dose	Usual Range	Comments
Beta-Adrenergic Antagonists	Atenolol	50 mg/day	50–200 mg/day	• Dose should be titrated and maintained for at least 3 months before assessment of response.
	Metoprolol tartrate and metoprolol succinate	100 mg/day in divided doses	100–200 mg/day in divided doses	
	Nadolol	40–80 mg/day	80–240 mg/day	
	Propranolol	40 mg/day in divided doses	40–160 mg/day in divided doses	
	Timolol	20 mg/day in divided doses	20–60 mg/day in divided doses	
Antidepressants	Amitriptyline	10 mg at bedtime	20–50 mg at bedtime	• Use slow titration to reduce sedation.
	Nortriptyline	10 mg daily or at bedtime	20–50 mg daily or at bedtime	• Use slow titration to reduce sedation.
	Venlafaxine	37.5 mg/day	75–150 mg/day	• Titrate dose weekly, as tolerated.
ticonvulsants	Topiramate	25 mg/day	50–200 mg/day in divided doses	• Increase by 25 mg/week.
	Valproic acid/ divalproex sodium	250–500 mg/day in divided doses or daily for extended	500–1,500 mg/day in divided doses or daily for extended release	• May monitor levels if adherence is an issue



New in 2023 update: Comparative Pharmacotherapy Evidence



- With all the new and existing pharmacotherapies approved for headache treatment, **which is more effective?**

- 50. There is **insufficient evidence** to recommend for or against any specific medication over another for the acute treatment of migraine.
- 51. There is **insufficient evidence** to recommend for or against any specific medication over another for the prevention of migraine headache, tension headache, or cluster headache.

- **What this means** – there is no evidence that exists to suggest that any pharmacotherapy with a “for” recommendation is any better than another

Pharmacologic “For” Migraine Recommendations

- Prevention
  - 4. We recommend **candesartan or telmisartan** for the prevention of episodic migraine
  - 5. We recommend **erenumab, fremanezumab, or galcanezumab** for the prevention of episodic or chronic migraine
  - 6. We suggest intravenous **eptinezumab** for the prevention of episodic or chronic migraine
  - 7. We suggest **lisinopril** for the prevention of episodic migraine
  - 8. We suggest **oral magnesium** for the prevention of migraine
  - 9. We suggest **topiramate** for the prevention of episodic and chronic migraine.
  - 10. We suggest **propranolol** for the prevention of migraine.
  - 11. We suggest **valproate** for the prevention of episodic migraine.
  - 12. We suggest **memantine** for the prevention of episodic migraine.
  - 13. We suggest **atogepant** for the prevention of episodic migraine.

Pharmacologic “For” Migraine Recommendations

- Prevention
  - 4. We recommend **candesartan or telmisartan** for the prevention of episodic migraine
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  - 11. We suggest **valproate** for the prevention of episodic migraine.
  - 12. We suggest **memantine** for the prevention of episodic migraine.
  - 13. We suggest **atogepant** for the prevention of episodic migraine.

Erenumab: VA's Formulary with Prior Authorization CGRP antibody.

What prior medication trials are required for chronic migraine in Criteria for Use?

- 9. We suggest **topiramate** for the prevention of episodic and chronic migraine.
- 10. We suggest **propranolol** for the prevention of migraine.
- 11. We suggest **valproate** for the prevention of episodic migraine.

Erenumab-aooe CFU

☐ Contraindication, intolerance, or lack of therapeutic response after at least 12 weeks of a therapeutic dose of **one** beta blocker (e.g. metoprolol 50-100 mg BID, propranolol 20-80 mg BID)[1]

☐ Contraindication, intolerance, or lack of therapeutic response after at least 12 weeks of a therapeutic dose of topiramate 50-200 mg BID[1]

☐ Contraindication, intolerance, or lack of therapeutic response after at least 12 weeks of a therapeutic dose of divalproex 500-1000 mg daily (divalproex is not recommended in patients who can become pregnant)[1]

This is an **excerpt**. Full CFU for erenumab at: https://www.va.gov/formularyadvisor/

Pharmacologic “For” Migraine Recommendations

- Acute
  - 19. We recommend **eletriptan, frovatriptan, rizatriptan, sumatriptan** (oral or subcutaneous), the **combination of sumatriptan and naproxen**, or **zolmitriptan** (oral or intranasal) for the acute treatment of migraine
  - 20. We recommend **aspirin/acetaminophen/caffeine** for the acute treatment of migraine
  - 21. We **suggest** acetaminophen, aspirin, ibuprofen, or naproxen for the acute treatment of migraine
  - 22. We **suggest** rimegepant or ubrogepant for the acute treatment of migraine

Pharmacologic “For” Migraine Recommendations

- Acute
  - 19. We **recommend** eletriptan, frovatriptan, rizatriptan, sumatriptan (oral or subcutaneous), the combination of sumatriptan and naproxen, or zolmitriptan (oral or intranasal) for the acute treatment of migraine
  - 20. We **recommend** aspirin/acetaminophen/caffeine for the acute treatment of migraine
  - 21. We suggest **acetaminophen, aspirin, ibuprofen,** or **naproxen** for the acute treatment of migraine
  - 22. We suggest **rimegepant** or **ubrogepant** for the acute treatment of migraine

Ubrogepant: VA Non-formulary gepant.

What prior medication trials are required in Criteria for Use?

- 19. We recommend **eletriptan, frovatriptan, rizatriptan, sumatriptan** (oral or subcutaneous), the **combination of sumatriptan and naproxen, or zolmitriptan** (oral or intranasal) for the acute treatment of migraine.

Inclusion Criteria

The answers to **all** of the following must be fulfilled in order to meet criteria.

- ☐ Treatment initiated by a VA/VA Community Care neurologist or locally designated headache expert
- ☐ Diagnosis of migraine, with or without aura, per the International Classification of Headache Disorders (ICHD-3)
- ☐ Moderate to severe migraine intensity
- ☐ Currently receiving preventive therapy for migraine if indicated
- ☐ Contraindication[1], intolerance, or lack of response to trial of two different triptans at a clinically effective dose.

This is an **excerpt.** Full CFU for ubrogepant at: https://www.va.gov/formularyadvisor/

Pharmacologic “Neither For Nor Against” and “Against” Migraine Recommendations

- Preventive
  - 16. There is insufficient evidence to recommend for or against **rimegepant** for the prevention of episodic migraine
  - 18. There is insufficient evidence to recommend for or against **levetiracetam** for the prevention of episodic migraine
  - 17. We suggest against the use of **gabapentin** for the prevention of episodic migraine
- Acute
  - 24. There is insufficient evidence to recommend for or against **lasmiditan** for the acute treatment of migraine
  - 23. We suggest against **intravenous ketamine** for the acute treatment of migraine

Pharmacologic “Neither For Nor Against” and “Against” Migraine Recommendations

- Preventive
  - 16. There is insufficient evidence to recommend for or against **rimegepant** for the prevention of episodic migraine
  - 18. There is insufficient evidence to recommend for or against **levetiracetam** for the prevention of episodic migraine
  - 17. We <u>suggest against</u> the use of **gabapentin** for the prevention of episodic migraine
- Acute
  - 24. There is insufficient evidence to recommend for or against **lasmiditan** for the acute treatment of migraine
  - 23. We <u>suggest against</u> i**ntravenous ketamine** for the acute treatment of migraine

Pharmacologic Tension-Type Headache Recommendations

- Preventive
  - 25. We suggest **amitriptyline** for the prevention of chronic tension-type headache.
- Acute
  - 27. We suggest **ibuprofen** (400 mg) or **acetaminophen** (1,000 mg) for the acute treatment of tension-type headache.

Pharmacologic Cluster Headache Recommendations

- Preventive
  - 28. We suggest **galcanezumab** for the prevention of episodic cluster headache
  - 30. There is insufficient evidence to recommend for or against **verapamil** for the prevention of episodic or chronic cluster headache
  - 29. We suggest against **galcanezumab** for the prevention of chronic cluster headache.
- Acute
  - 31. We suggest subcutaneous **sumatriptan** (6 mg) or intranasal **zolmitriptan** (10 mg) for the acute treatment of cluster headache.
  - 32. We suggest the use of **normobaric oxygen therapy** for the acute treatment of cluster headache

Pharmacologic Cluster Headache Recommendations

- Preventive
  - 28. We suggest **galcanezumab** for the prevention of episodic cluster headache
  - 30. There is insufficient evidence to recommend for or against **verapamil** for the prevention of episodic or chronic cluster headache
  - 29. We suggest against **galcanezumab** for the prevention of chronic cluster headache
- Acute
  - 31. We suggest subcutaneous **sumatriptan** (6 mg) or intranasal **zolmitriptan** (10 mg) for the acute treatment of cluster headache
  - 32. We suggest the use of **normobaric oxygen therapy** for the acute treatment of cluster headache

Pharmacologic Cluster Headache Recommendations

- Preventive
  - 28. We suggest **galcanezumab** for the prevention of episodic cluster headache
  - 30. There is insufficient evidence to recommend for or against **verapamil** for the prevention of episodic or chronic cluster headache
  - 29. We suggest against **galcanezumab** for the prevention of chronic cluster headache
- Acute
  - 31. We suggest subcutaneous **sumatriptan** (6 mg) or intranasal **zolmitriptan** (10 mg) for the acute treatment of cluster headache
  - 32. We suggest the use of **normobaric oxygen therapy** for the acute treatment of cluster headache

Pharmacologic Cluster Headache Recommendations

- Preventive
  - 28. We suggest **galcanezumab** for the prevention of episodic cluster headache
  - 30. There is insufficient evidence to recommend for or against **verapamil** for the prevention of episodic or chronic cluster headache
  - 29. We suggest against **galcanezumab** for the prevention of chronic cluster headache
- Acute
  - 31. We suggest subcutaneous **sumatriptan** (6 mg) or intranasal **zolmitriptan** (10 mg) for the acute treatment of cluster headache
  - 32. We suggest the use of **normobaric oxygen therapy** for the acute treatment of cluster headache

Pharmacologic recommendations for Headache

- Evidence for medications in these recommendations included multiple types of headache.

- Preventive:
  - 2. There is insufficient evidence to recommend for or against **co enzyme Q10**, **feverfew**, **melatonin**, **omega-3**, **vitamin B2**, or **vitamin B6** for the prevention of headache
  - 3. There is insufficient evidence to recommend for or against **fluoxetine** or venlafaxine for the prevention of headache

Medication Overuse Headache

- 33. There is insufficient evidence to recommend for or against the addition of **any specific preventive agent or withdrawal strategy** to guide the treatment of medication overuse headache.

Injections, Procedures, and Invasive Interventions for the Acute Treatment of Headache

- Migraine
  - 34 – We suggest **greater occipital nerve block** for the acute treatment of migraine
  - 36 – There is insufficient evidence to recommend for or against **supra orbital nerve block** for the acute treatment of migraine
  - 37 – There is insufficient evidence to recommend for or against intravenous **antiemetics** (i.e., chlorpromazine, metoclopramide, prochlorperazine), **intravenous magnesium** or **intranasal lidocaine** for the acute treatment of headache

Injections, Procedures, and Invasive Interventions for the Prevention of Headache

- Migraine
  - 14 – We suggest **onabotulinumtoxinA** injection for the prevention of chronic migraine
  - 15 – We suggest against **onabotulinumtoxinA** injection for the prevention of episodic migraine
  - 35 – There is insufficient evidence to recommend for or against **greater occipital nerve block** for the prevention of chronic migraine

- Tension-Type Headache
  - 26 – We suggest against **botulinum/neurotoxin** injection for the prevention of chronic tension-type headache

Non-Pharmacologic Therapies – Neuromodulation

- 41 – We suggest **non-invasive vagus nerve stimulation** for the treatment of episodic cluster headache

- 48 – There is insufficient evidence to recommend for or against **any form of neuromodulation** for the treatment and/or prevention of migraine:
  - Non-invasive vagus nerve stimulation
  - Supraorbital, or external trigeminal nerve, nerve stimulation
  - Remote electrical neurostimulation
  - External combined occipital and trigeminal neurostimulation system
  - Repetitive transcranial magnetic stimulation
  - Transcranial direct current stimulation

Injections, Procedures, and Invasive Interventions for the Prevention of Headache

- Migraine
  - 14 – We suggest **onabotulinumtoxinA** injection for the prevention of chronic migraine
  - 15 – We suggest against **onabotulinumtoxinA** injection for the prevention of episodic migraine
  - 35 – There is insufficient evidence to recommend for or against **greater occipital nerve block** for the prevention of chronic migraine

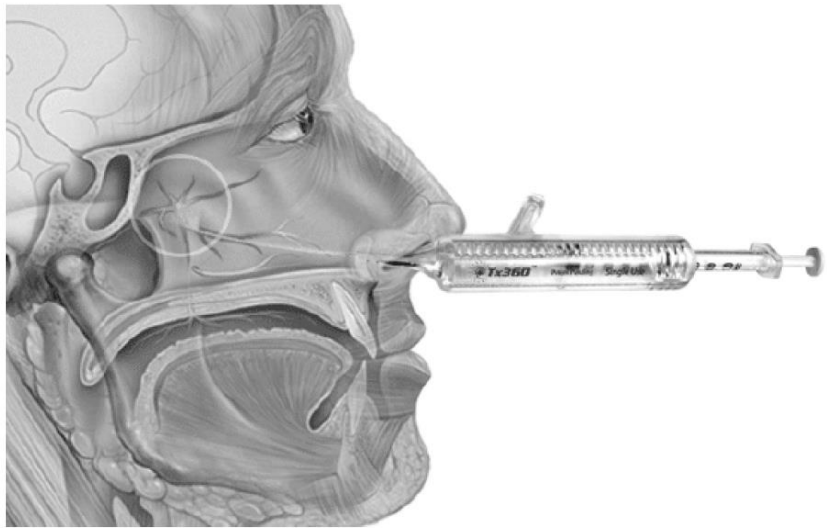
- Tension-Type Headache
  - 26 – We suggest against **botulinum/neurotoxin injection** for the prevention of chronic tension-type headache

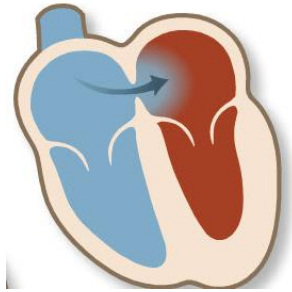
Injections, Procedures, and Invasive Interventions for the Prevention of Headache

- 38 – There is insufficient evidence to recommend for or against greater **pulsed radiofrequency procedure of the upper cervical nerves of sphenopalatine ganglion block** for the treatment of chronic migraine

- 39 – We suggest against **implantable sphenopalatine ganglion stimulator** for the treatment of cluster headache

- 40 – We suggest against **patent foramen ovale closure** for the treatment or prevention of migraine





Non-Pharmacologic Therapies – Rehabilitation Approaches and Exercise

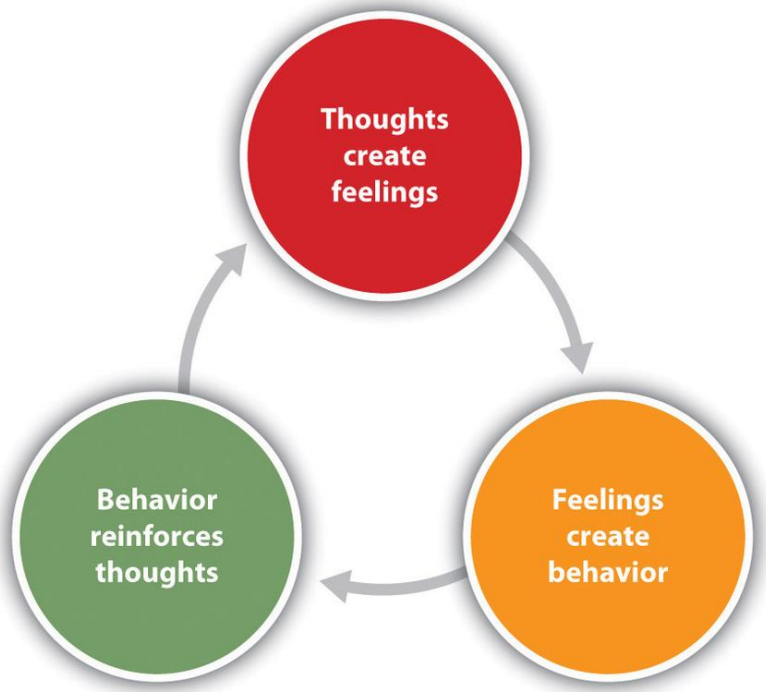
- 42 – We suggest **physical therapy** for the management of tension-type, migraine, or cervicogenic headache

- 43 – We suggest **aerobic exercise or progressive strength training** for the prevention of tension-type and migraine headache

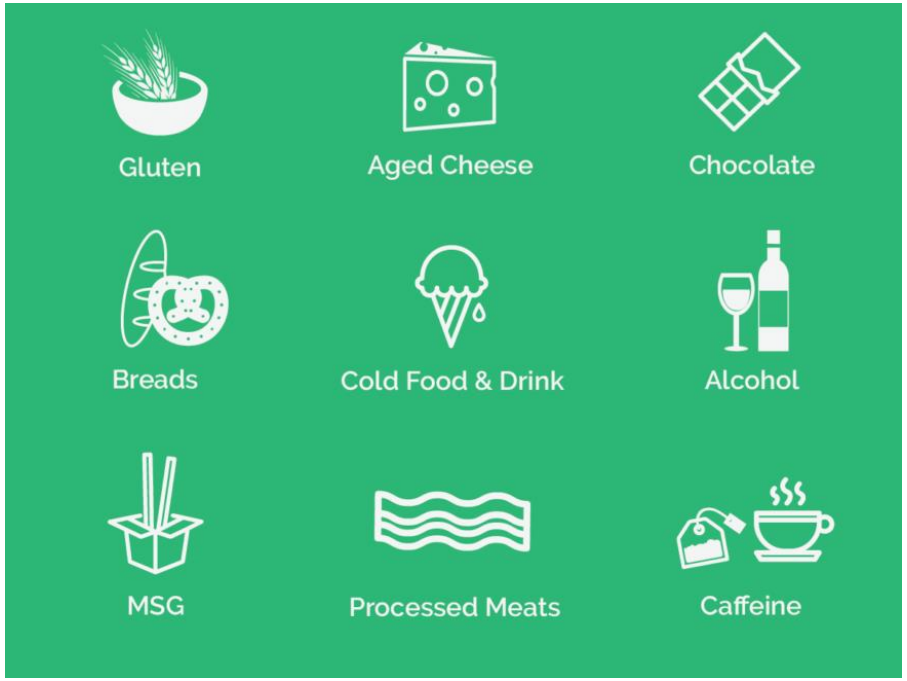
- 45 – There is insufficient evidence to recommend for or against **acupuncture**, **dry needling**, or **yoga** for the treatment and/or prevention of headache

Non-Pharmacologic Therapies – Behavioral Interventions

- 44 – There is <u>insufficient evidence</u> to recommend for or against the following **behavioral interventions** for the treatment and/or prevention of headache:
  - Biofeedback and smartphone application-based heartrate variability monitoring
  - Cognitive behavioral therapy
  - Mindfulness-based therapies
  - Progressive muscle relaxation



Non-Pharmacologic Therapies – Dietary Triggers and Testing



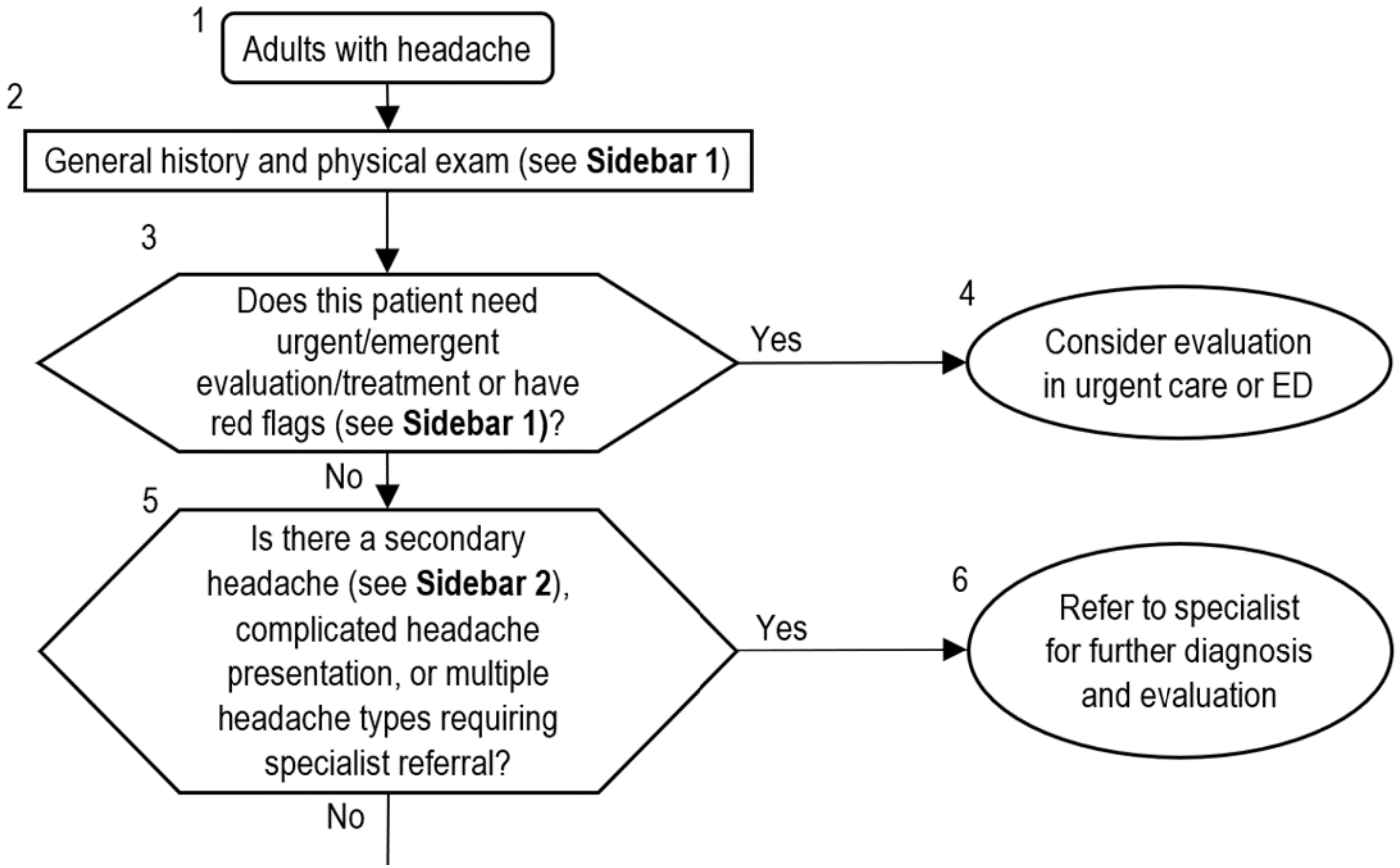
- 46 – There is <u>insufficient evidence</u> to recommend for or against the **dietary trigger avoidance** for the prevention of headache
- 47 – We <u>suggest against</u> **immunoglobulin G antibody testing** for dietary trigger avoidance for the prevention of headache

Comparative Effectiveness and Combination Therapies

- 49 to 51 – There is insufficient evidence to recommend for or against:
  - Any specific medication over another for the acute treatment of migraine
  - Any specific medication over another for the prevention of migraine, tension type, or cluster headache
  - Choosing a specific treatment strategy for posttraumatic headache

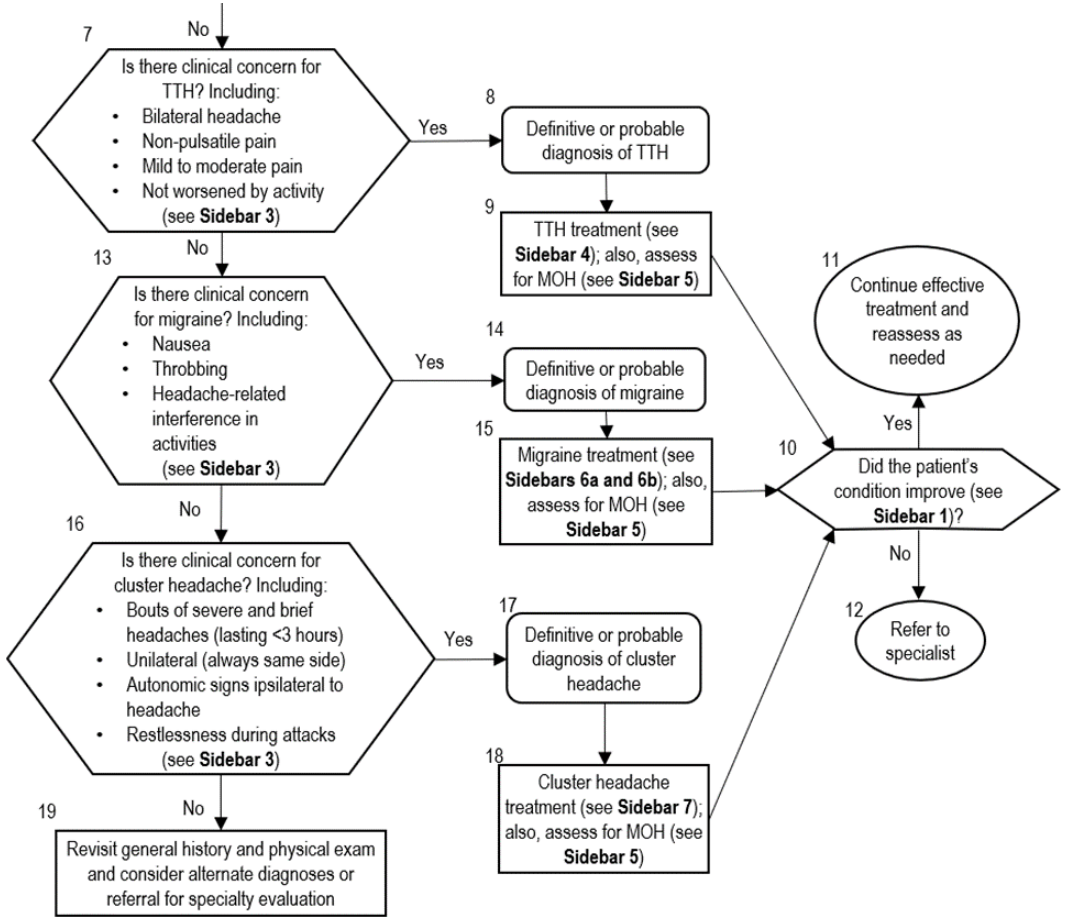
- 52 – There is insufficient evidence to recommend for or against:
  - **Combination of therapies** for the prevention of headache

Algorithm – Module A: Evaluation and Treatment of Headache



Note: Box 5 connects to Box 7 on the next slide

Algorithm – Module A: Evaluation and Treatment of Headache (cont.)



Note: Box 7 connects to Box 5 on the previous slide

Patient Education and Self Management

About the CPG

The guideline is formatted as a single clinical algorithm and 27 evidence-based recommendations:

Questions about the Headache Guideline

Guideline Links

- Headache Full Guideline (2020)
- Headache Provider Summary (2020)
- Headache Pocket Card (2020)

Patient Provider Tools

- Headache Patient Summary (2020)
- Headache Diagnosis Coding Tool (2021)
- Headache Patient 7 Day Diary (2021)
- Headache Patient 3 Months Diary (2021)
- Types of Headache Handout (2021)

Related Guidelines

- Concussion-mTBI
- Posttraumatic Stress Disorder (PTSD)
- Opioid Therapy (OT) for Chronic Pain

Webinars

- Introduction to the New VA/DOD CPG: The Primary Care Management of Headache Webinar (2020)

Headache in Peer Reviewed Publications

- Synopsis of the 2020 Headache CPG (2022)

https://www.healthquality.va.gov/guidelines/pain/headache/

Patient Education and Self Management

Patient Provider Tools

- Headache Patient Summary (2020)
- Headache Diagnosis Coding Tool (2021)
- Headache Patient 7 Day Diary (2021)
- Headache Patient 3 Months Diary (2021)
- Types of Headache Handout (2021)

7-DAY HEADACHE DIARY

This form can be printed and filled in manually, or completed on a computer. Write down your headache information DAILY to share with your health care providers to help them diagnose your headaches correctly. Check the boxes of the topic that apply to you each day.

Name: ____ Prophylaxis: ____ Clear Button

Date	Prevention	Headache	Symptoms	Warning Signs	Medication / Device	Lifestyle	Behavioral Coping
	☐ Medication ☐ Device ☐ Behaviors	Pain (0-10): ____ Start time: ____ End time: ____	Sensitive to: ☐ Light ☐ Sound ☐ Nausea ☐ Vomiting ☐ Worse with activity	Aura	Medication: ____ Time: ____ Dose: ____ Device: ____ Time: ____	Stress (0-10): ____ Headache interference (0-10): ____ Hours slept: ____ Sleep quality: ____ ☐ Physically active ☐ Skipped meal ☐ Hydration ☐ Caffeine	
	☐ Medication ☐ Device ☐ Behaviors	Pain (0-10): ____ Start time: ____ End time: ____	Sensitive to: ☐ Light ☐ Sound ☐ Nausea ☐ Vomiting ☐ Worse with activity	Aura	Medication: ____ Time: ____ Dose: ____ Device: ____ Time: ____	Stress (0-10): ____ Headache interference (0-10): ____ Hours slept: ____ Sleep quality: ____ ☐ Physically active ☐ Skipped meal ☐ Hydration ☐ Caffeine	
	☐ Medication ☐ Device ☐ Behaviors	Pain (0-10): ____ Start time: ____ End time: ____	Sensitive to: ☐ Light ☐ Sound ☐ Nausea ☐ Vomiting ☐ Worse with activity	Aura	Medication: ____ Time: ____ Dose: ____ Device: ____ Time: ____	Stress (0-10): ____ Headache interference (0-10): ____ Hours slept: ____ Sleep quality: ____ ☐ Physically active ☐ Skipped meal ☐ Hydration ☐ Caffeine	
	☐ Medication ☐ Device ☐ Behaviors	Pain (0-10): ____ Start time: ____ End time: ____	Sensitive to: ☐ Light ☐ Sound ☐ Nausea ☐ Vomiting ☐ Worse with activity	Aura	Medication: ____ Time: ____ Dose: ____ Device: ____ Time: ____	Stress (0-10): ____ Headache interference (0-10): ____ Hours slept: ____ Sleep quality: ____ ☐ Physically active ☐ Skipped meal ☐ Hydration ☐ Caffeine	
	☐ Medication ☐ Device ☐ Behaviors	Pain (0-10): ____ Start time: ____ End time: ____	Sensitive to: ☐ Light ☐ Sound ☐ Nausea ☐ Vomiting ☐ Worse with activity	Aura	Medication: ____ Time: ____ Dose: ____ Device: ____ Time: ____	Stress (0-10): ____ Headache interference (0-10): ____ Hours slept: ____ Sleep quality: ____ ☐ Physically active ☐ Skipped meal ☐ Hydration ☐ Caffeine	
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	☐ Medication ☐ Device ☐ Behaviors	Pain (0-10): ____ Start time: ____ End time: ____	Sensitive to: ☐ Light ☐ Sound ☐ Nausea ☐ Vomiting ☐ Worse with activity	Aura	Medication: ____ Time: ____ Dose: ____ Device: ____ Time: ____	Stress (0-10): ____ Headache interference (0-10): ____ Hours slept: ____ Sleep quality: ____ ☐ Physically active ☐ Skipped meal ☐ Hydration ☐ Caffeine	

VA/DOD Clinical Practice Guideline for Primary Care Management of Headache. For more information, https://www.healthquality.va.gov/guidelines/pain/headache/VADoDHeadacheCPGPatientSummaryFinal508.pdf

https://www.healthquality.va.gov/guidelines/pain/headache/

Patient Education and Self Management

Patient Provider Tools

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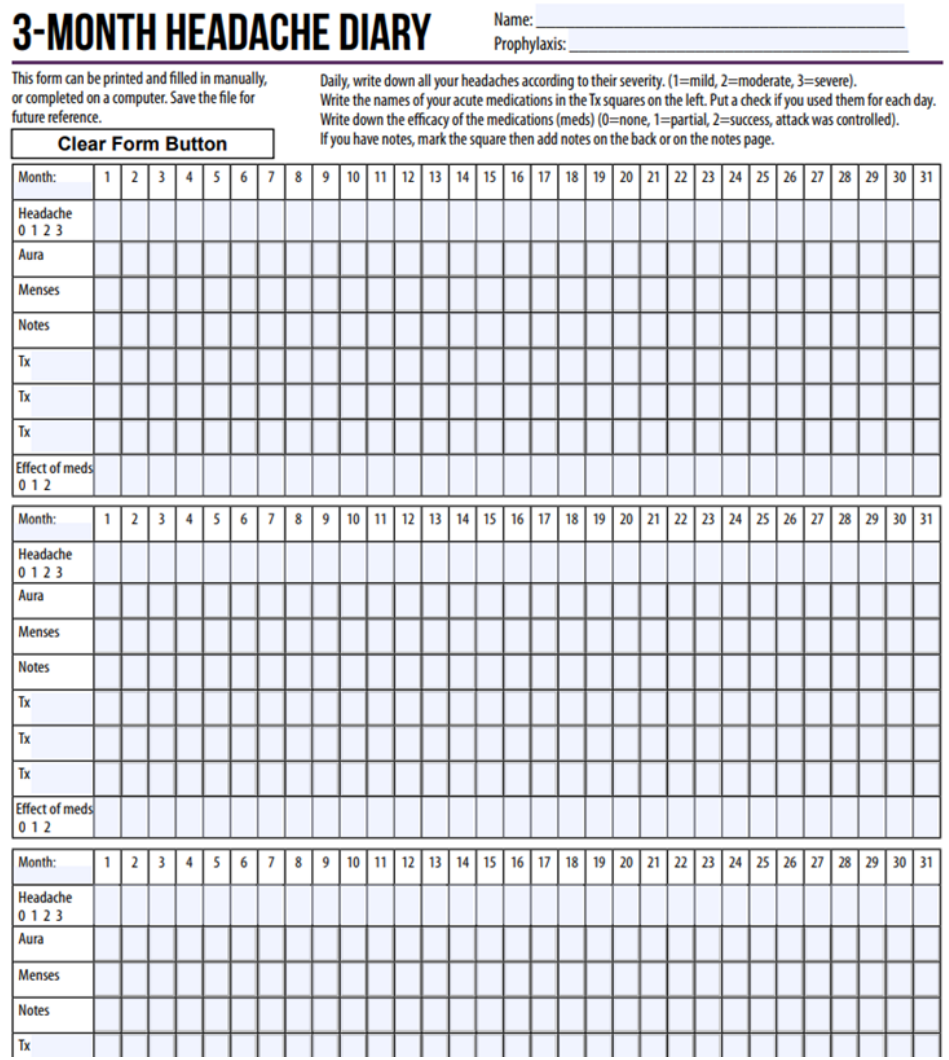

3-MONTH HEADACHE DIARY

Name: _____

Prophylaxis: _____

This form can be printed and filled in manually, or completed on a computer. Save the file for future reference.

Clear Form Button

Daily, write down all your headaches according to their severity. (1=mild, 2=moderate, 3=severe).
Write the names of your acute medications in the Tx squares on the left. Put a check if you used them for each day.
Write down the efficacy of the medications (meds) (0=none, 1=partial, 2=success, attack was controlled).
If you have notes, mark the square then add notes on the back or on the notes page.

Month:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Headache 0 1 2 3																															
Aura																															
Menses																															
Notes																															
Tx																															
Tx																															
Tx																															
Effect of meds 0 1 2																															

Month:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
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Headache 0 1 2 3																															
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Tx																															

https://www.healthquality.va.gov/guidelines/pain/headache/

Patient Education and Self Management

[Health Psychology for Headache – YouTube]

[Post-Traumatic Headache - YouTube]

[Nutrition & Headache - YouTube]

[Exercise for Headache (Video) - YouTube]

Patient Education and Self Management

- Annie is named after Lieutenant Annie G. Fox, the first woman to receive the Purple Heart for combat. She was Chief Nurse in the Army Nurse Corps at Hickman Field, Pearl Harbor
- Annie uses SMS text messaging to promote self care in Veterans. Patients receive automated prompts to track/monitor health as well as motivational/educational messages.
- Headache protocol is assigned by provider/designee or veteran can self subscribe
- Annie Headache Protocol includes:
    - Headache diary:
        - Asks patient daily about presence of headache
        - If patient answers Yes to headache questions, 5 more questions are asked about pain, disability, symptoms and medications
        - 5 month duration
    - Educational tips:
        - Releases two educational tips per week for 6 months
        - Tips relate to non-pharmacological information on headache (acupressure, nutrition, sleep, health psychology, relaxation)
        - Some tips include links to learn more

https://mobile.va.gov/app/annie-app-veterans#protocol

Patient Education and Self Management

ANNIE HEALTH SUBSCRIPTIONS ARE DIVIDED INTO SEVERAL CATEGORIES

Select the plus sign to reveal the available health subscriptions in a category. To subscribe to any of these, text **SUB** and the associated **KEYWORD** to Annie or 75338. For example, in the Diabetes category, to subscribe to the subscription named Diabetes Foot Care Reminder, text **SUB FOOT**

+ **Cancer**
+ **COVID**
+ **Diabetes**
+ **General Wellness**
+ **Hypertension**
+ **Hearing Difficulty**
+ **Infectious Disease**
+ **Mental Health**
− **Pain**

Subscription Name	Description	Duration	Approximate Frequency of Texts	Keyword to Subscribe
Pain Self-Management Support	This subscription provides Veterans with techniques to self-manage pain.	26 days	7/week	SUB PAIN
Post Battlefield Acupuncture Instructions	This subscription provides Veterans with follow-up instructions after the placement of Battlefield Acupuncture (BFA) needles, tacks, and seeds.	4 days	Up to 7/week	SUB BFA
Headache Diary and Self-Management	This subscription provides Veterans with tips to improve headache control and an electronic diary to better understand how headaches impact their lives.	6 months	Up to 12/week	SUB HEADACHE

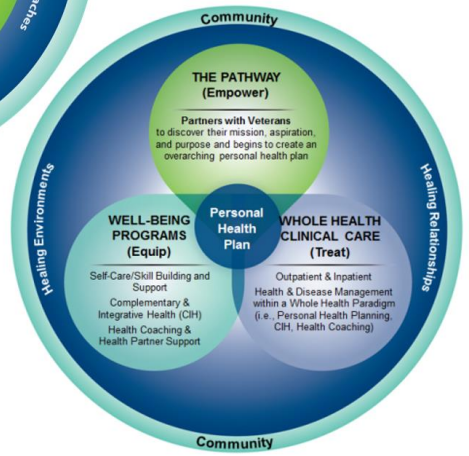
https://mobile.va.gov/app/annie-app-veterans#protocol

Patient Education and Self Management

Moving from "What's the Matter with You?" to **"What Matters to You?"**

Whole Health is an approach to health care that **empowers** and **equips** people to take charge of their health and well-being and live their life to the fullest.

Live Whole Health.



Whole Health System

VA | U.S. Department of Veterans Affairs
Veterans Health Administration

[Whole Health Home (va.gov)]

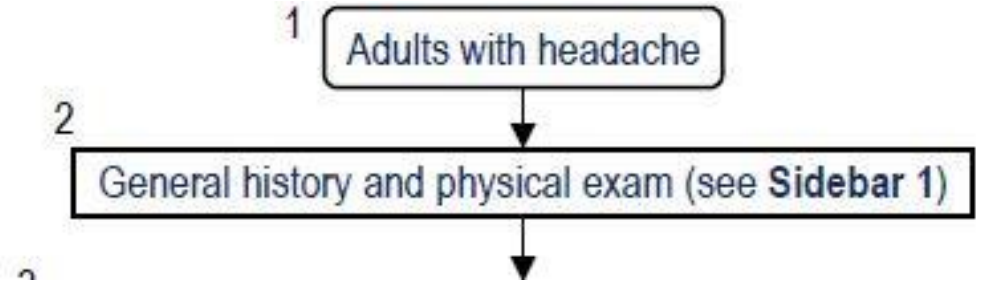
U.S. Department of Veterans Affairs

Headache Case Studies

DoD Patient

Case Example #1

DoD Patient



- 28 y/o active duty male,
  - MOS: 11B Infantry

- Presents with frequent headaches, increasing for the past 6 months, after returning from deployment

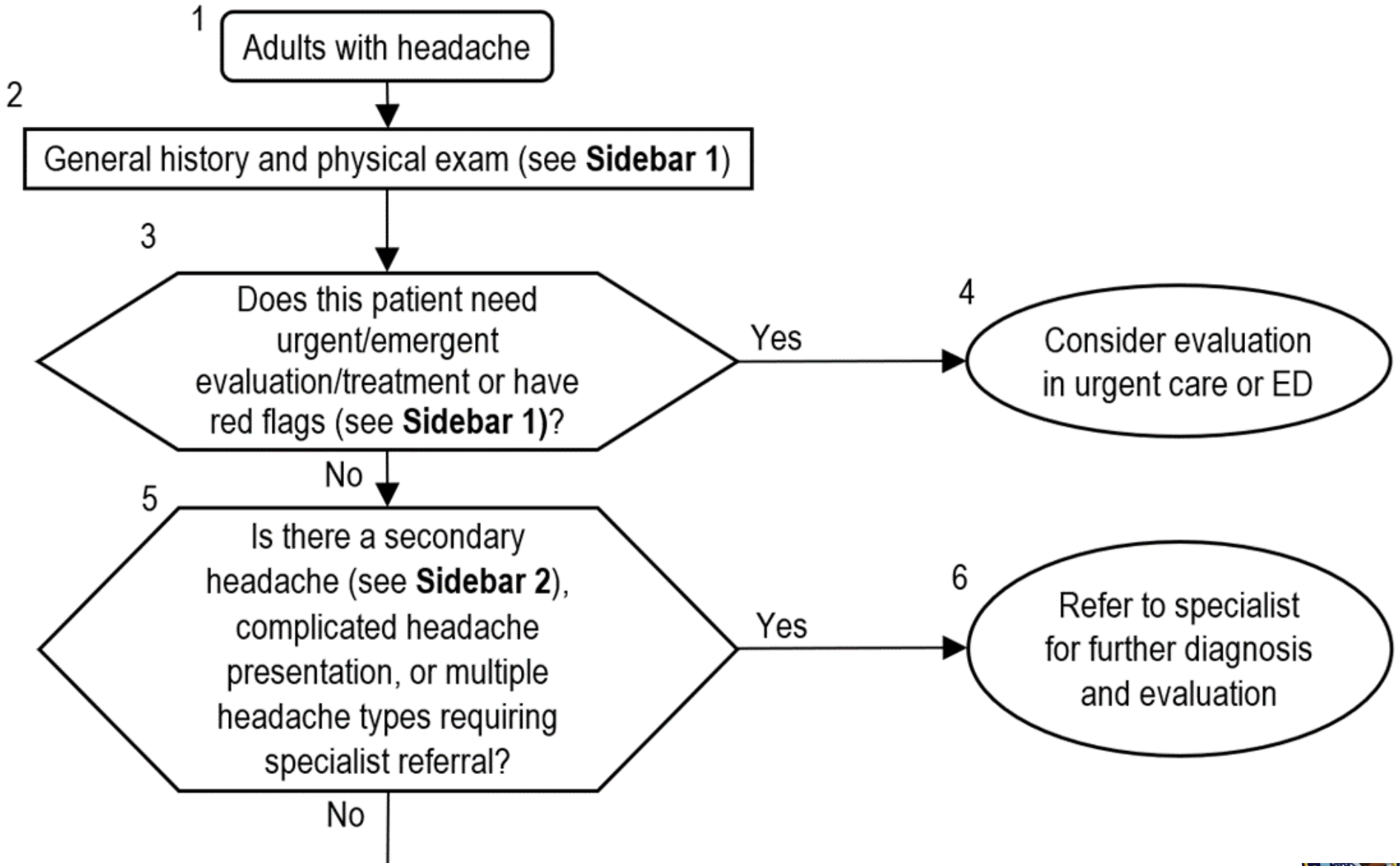
- Command directed evaluation – patient does not like docs and meds

History and Physical

- Migraines as a teen
- Recurrent headaches after enlistment, 1-2 per month
- Post-deployment readjustment disorder (follows with mental health) following complicated deployment
- No history of TBI

History and Physical

- Medications
  - OTC 1-2 x's week (Excedrin Migraine)
  - No prescription medications
- Physical limitations – on physical profile due to daily physical training aggravating headaches
- Misses work once a month from a headache
- Frustrated as he uses exercise to help with his stress (work and relationships) now short tempered & gaining weight
- Vaping or tobacco dipping daily
- Social History
  - Married (separated) with 2 young children (ages 3 and 5)


1
Adults with headache
2
General history and physical exam (see **Sidebar 1**)
3
Does this patient need urgent/emergent evaluation/treatment or have red flags (see **Sidebar 1**)?
Yes
4
Consider evaluation in urgent care or ED
No
5
Is there a secondary headache (see **Sidebar 2**), complicated headache presentation, or multiple headache types requiring specialist referral?
Yes
6
Refer to specialist for further diagnosis and evaluation
No

Headache Description

Historical Feature	Description
Frequency	1-2 times/month
Duration	One hour if treated; 5 hours if untreated
Location	Right temporal
Quality	Throbbing
Intensity	6-8/10
Prodrome	No visual aura
Associated features	Nausea, vomiting, photophobia, phonophobia, osmophobia
Dysautonomia	Absent
Triggers	Decreased sleep, fluorescent lights from his office/computer
Worsened by	Exercise, household chores, driving home at the end of the day
Alleviated by	Sitting in a dark room; OTC medications “takes the edge off”
Debilitating	Yes

Headache Description

Historical Feature	Description
Frequency	1-2 times/month
Duration	One hour if treated; 5 hours if untreated
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Worsened by	Exercise, household chores, driving home at the end of the day
Alleviated by	Sitting in a dark room; OTC medications “takes the edge off”
Debilitating	Yes

Red Flags?

Sidebar 1: General History and Physical Exam

History

- Frequency, character
- Onset, prodrome/aura
- Location, duration
- Relieving or exacerbating factors
- Associated symptoms
- Autonomic symptoms
- Jaw symptoms
- Neck symptoms
- Visual deficits/changes
- Dizziness and imbalance
- Current medications, abortive dose and frequency per month, prophylactic dose
- Prior medication trials
- Diet and nutrition, hydration
- Alcohol, caffeine intake
- Sleep
- Exercise
- Aggravated by routine physical activity
- Sense of restlessness
- Foreign body sensation in the eye
- Nicotine and other stimulant use
- Risk factors for MOH
- History of trauma to the head, neck, or both
- Other comorbid conditions that might contribute to or exacerbate headaches
- Mental health (e.g., depression, anxiety, PTSD)
- Menstrual cycle and proximity to menopause

Red flags SNOOP(4)E (84)

- **Systemic** symptoms, illness, or condition (e.g., fever, chills, myalgias, night sweats, weight loss or gain, cancer, infection, giant cell arteritis, pregnancy or postpartum, or an immunocompromised state—including HIV)
- **Neurologic** symptoms or abnormal signs (e.g., confusion, impaired alertness or consciousness, changes in behavior or personality, diplopia, pulsatile tinnitus, focal neurologic symptoms or signs, meningismus, or seizures, ptosis, proptosis, pain with eye movements)
- **Onset** (e.g., abrupt or "thunderclap" where pain reaches maximal intensity immediately or within minutes after onset; first ever, severe, or "worst headache of life")
- **Older** onset (age ≥50 years)
- **Progression** or change in pattern (e.g., in headache frequency, severity, clinical features)
- **Precipitated** by Valsalva (e.g., coughing, bearing down)
- **Postural** aggravation
- **Papilledema**
- **Exertion**

Examination

- Blood pressure
- General neurologic (upper extremities reflexes, sensation, strength, UMN, pathologic reflexes)
- Cranial nerves (including funduscopic exam)
- Cervical spine and surrounding musculature (palpation, ROM, Spurling's sign test)
- Temporomandibular joint (palpation, ROM, symmetry, jaw claudication)
- Pericranial muscle palpation
- Temporal artery palpation; pertinent findings might include tenderness, cord-like artery, or lack of pulse

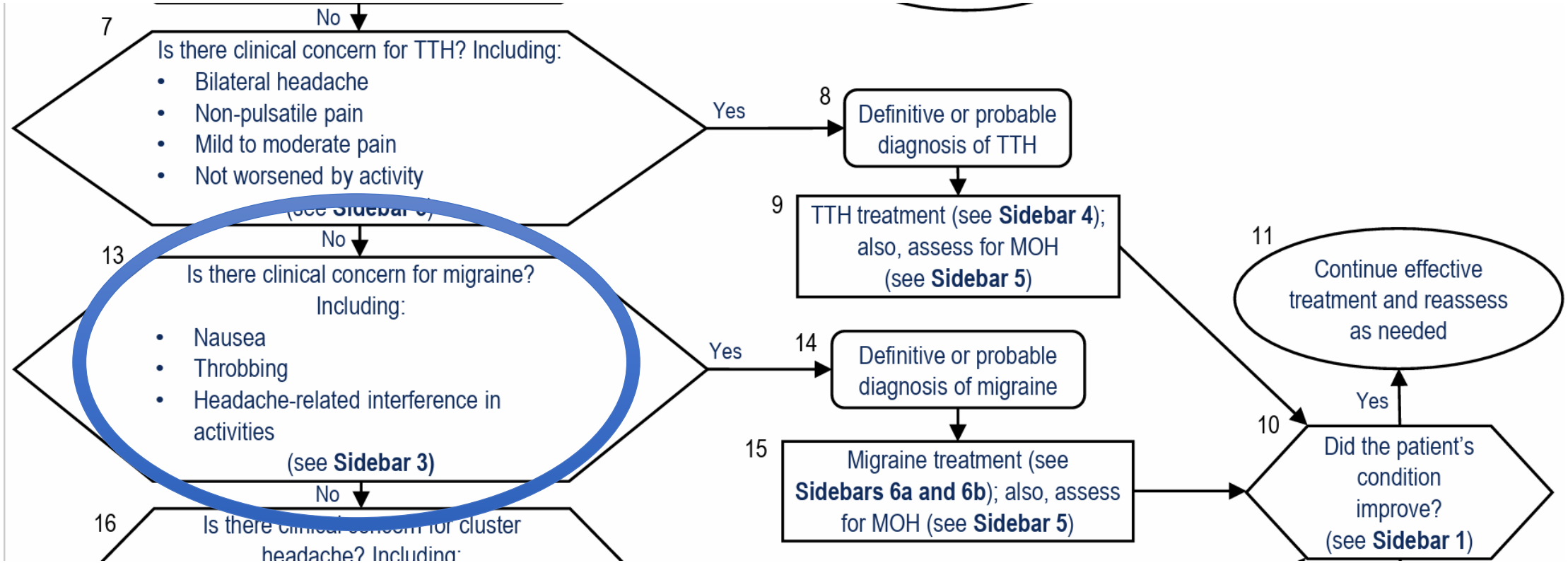
Standardized headache assessments

- MIDAS (migraine-related disability) (85)
- HIT-6 (impact of headache on daily life and pain severity) (86)
- MSQL (quality of life) (87)
- ID Migraine (migraine) (88)
- Patient Headache Diary (7 day, 3 months)[a]

Additional screening tools

- PHQ-2 and PHQ-9 (depression) (89, 90)
- GAD-2 and GAD-7 (anxiety) (91, 92)
- CAGE (ethanol overuse headache) (93)
- AUDIT-C (ethanol overuse headache) (94)
- PC-PTSD (PTSD) (95)
- STOP-BANG (sleep) (96)

Primary Headache Disorders Criteria*			
	Tension-type headache	**Migraine headache**	Cluster headache
Attack duration and frequency			
Duration	30-minutes – 7-days	**4 – 72 hours**	15 – 180 minutes
Frequency	Variable	**Variable**	Once every other day to eight per day; often occurring at the same time of day
Headache characteristics			
Severity	Mild to moderate	**Moderate to severe**	Severe or very severe
Location	Bilateral	**Unilateral**	Unilateral orbital, supraorbital, and/or temporal
Quality	Pressing or tightening, non-pulsating	**Throbbing or pulsating**	Stabbing, boring
Aggravated by routine physical activity	Not aggravated by routine activity	**Aggravated by routine activity**	Causes a sense of agitation or restlessness; routine activity may improve symptoms
Associated features			
Photophobia and phonophobia	Can have one but not both	**Both**	Variably present
Nausea and/or vomiting	Neither	**Either or both**	May be present
Other features			
Autonomic features	None	**May occur, but are often subtle and not noticed by the patient**	Prominent autonomic features ipsilateral to the pain


No
7
Is there clinical concern for TTH? Including:
• Bilateral headache
• Non-pulsatile pain
• Mild to moderate pain
• Not worsened by activity
Yes
8
Definitive or probable diagnosis of TTH
9
TTH treatment (see Sidebar 4); also, assess for MOH (see Sidebar 5)
No
13
Is there clinical concern for migraine? Including:
• Nausea
• Throbbing
• Headache-related interference in activities
(see Sidebar 3)
Yes
14
Definitive or probable diagnosis of migraine
15
Migraine treatment (see Sidebars 6a and 6b); also, assess for MOH (see Sidebar 5)
11
Continue effective treatment and reassess as needed
Yes
10
Did the patient's condition improve? (see Sidebar 1)
No
16
Is there clinical concern for cluster headache? Including:

CPG Application: Assess for Risk Factors MOH

- ❑Headache frequency >/= 7d/mo
- ✓Migraine diagnosis
- ✓Medication use: frequent use of anxiolytics, analgesics, or sedative hypnotics
- ✓History of anxiety or depression with or without musculoskeletal complaints and/or gastrointestinal complaints
- ✓Physical inactivity
- ✓Sick leave of greater than two weeks in the last year
- ❑Self-reported whiplash
- ✓Smoking (tobacco use)

Sidebar 5: Medication Overuse Headache Criteria

ICHD-3 diagnostic criteria include:

A. Headache occurring on 15 or more days per month in a patient with a preexisting headache disorder

B. Regular overuse for more than 3 months of one or more drugs that can be taken for the acute or symptomatic treatment of headache (see table below)

C. No better accounted for by another ICHD-3 diagnosis

Medication Overuse Headache Type	Medication Overuse Frequency
Butalbital overuse[a]	≥5 days/month for >3 months
Opioid overuse[a]	≥8 days/month for >3 months
Triptan overuse	≥10 days/month for >3 months
Ergotamine overuse	
Combination-analgesic overuse (any combination of classes, not to include combinations that include only non-opioid analgesics)[a, b]	
Non-opioid analgesic overuse (e.g., aspirin, NSAIDs, acetaminophen, steroids, and combinations of non-opioid analgesics)	≥15 days/month for >3 months

Diagnosis and Concerns

Migraine without aura, episodic

At risk for Medication Overuse Headache

Veteran Patient in VA CARE

Case Example #2

History and Physical

Veteran is a 36-year-old right-handed gentleman with a history of episodic migraine.

He reports that his first, more severe type of headache is consistent with his episodic migraine attacks, though have become increasingly more severe, frequent, disabling, and less responsive to OTC medications.

His second type of headache began more than 6-months ago.

History and Physical

- Medications
  - OTC multiple times daily (Excedrin Migraine)
  - No prescription medications (previously on topiramate)
- Physical limitations – has reduced physical activity because of headaches
- Misses work 2-3 times every month from a headache
- Social History
  - Vaping or tobacco dipping daily
  - Divorced

History and Physical

- Mental Status: AAOx4, fluent speech
- Cranial Nerves: no ptosis; increased sensitivity over Right V1 without trigger points along V2
- Motor: 5/5 UE/LE; normal tone and bulk
- Sensory: intact UE/LE
- DTRs: 3+ UE/LE; toes down-going
- Cerebellar: intact
- Gait: normal

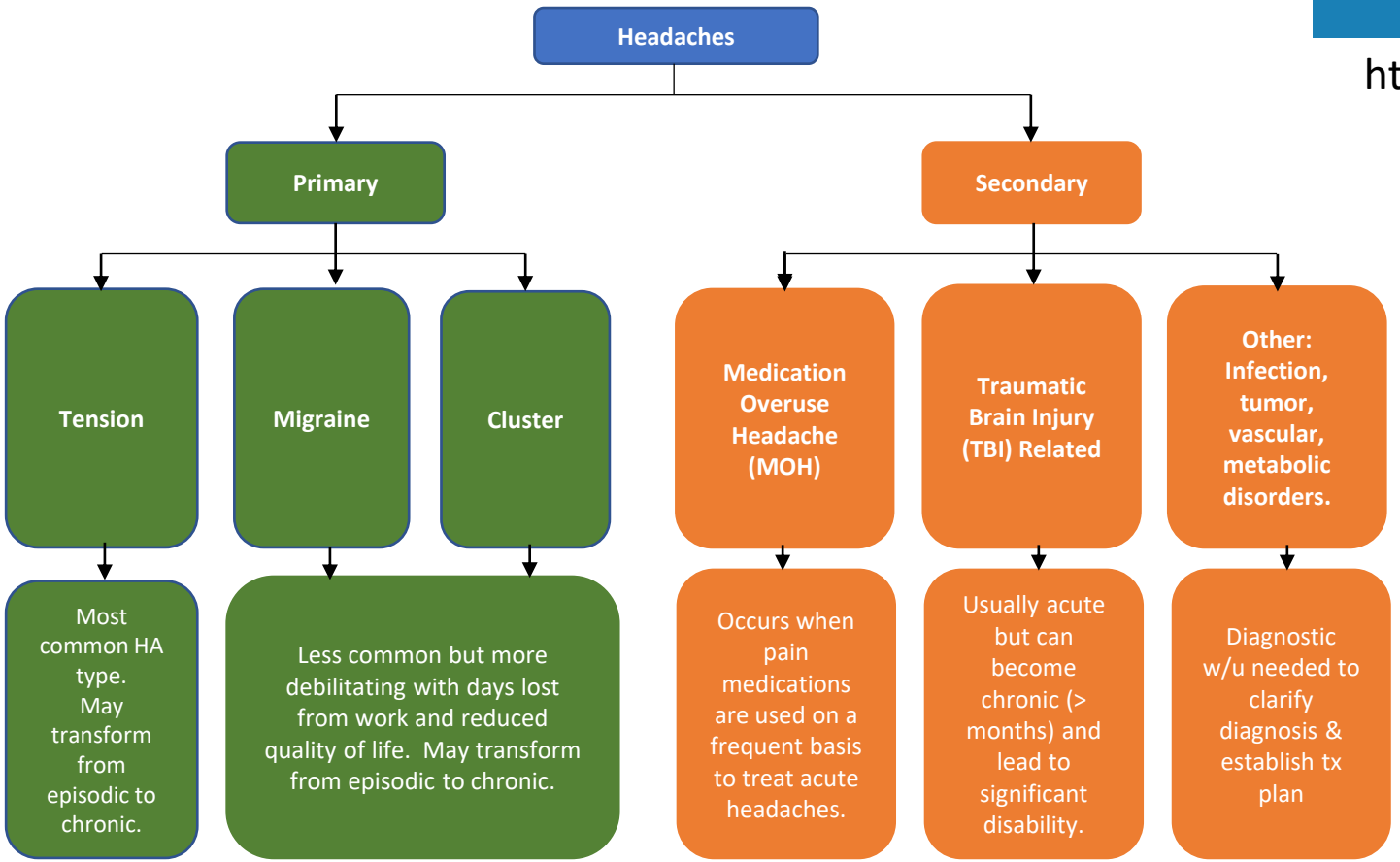
History and Physical

Historical feature	Headache 1	Headache 2
Frequency	4-5 times/week	Daily
Duration	Two hours if treated; 24 hours + if untreated	Continuous
Location	Right temporal	Holocranial
Quality	Throbbing	Aching
Intensity	8-9/10	2-3/10
Prodrome	No visual aura	No visual aura
Associated features	Nausea, vomiting, photophobia, phonophobia, osmophobia	None
Dysautonomia	Absent	Absent
Triggers	Decreased sleep, fluorescent lights	None
Worsened by	Exercise, household chores, driving	Going more than 12 hours without taking OTC medication
Alleviated by	Sitting in a dark room	None
Debilitating	Yes	No

Headache Classification

IHS CLASSIFICATION ICHD-3

https://www/ichd-3.org



Diagnoses

Migraine without aura, chronic

Medication Overuse Headache

http://www.healthquality.va.gov

Audience Q&A