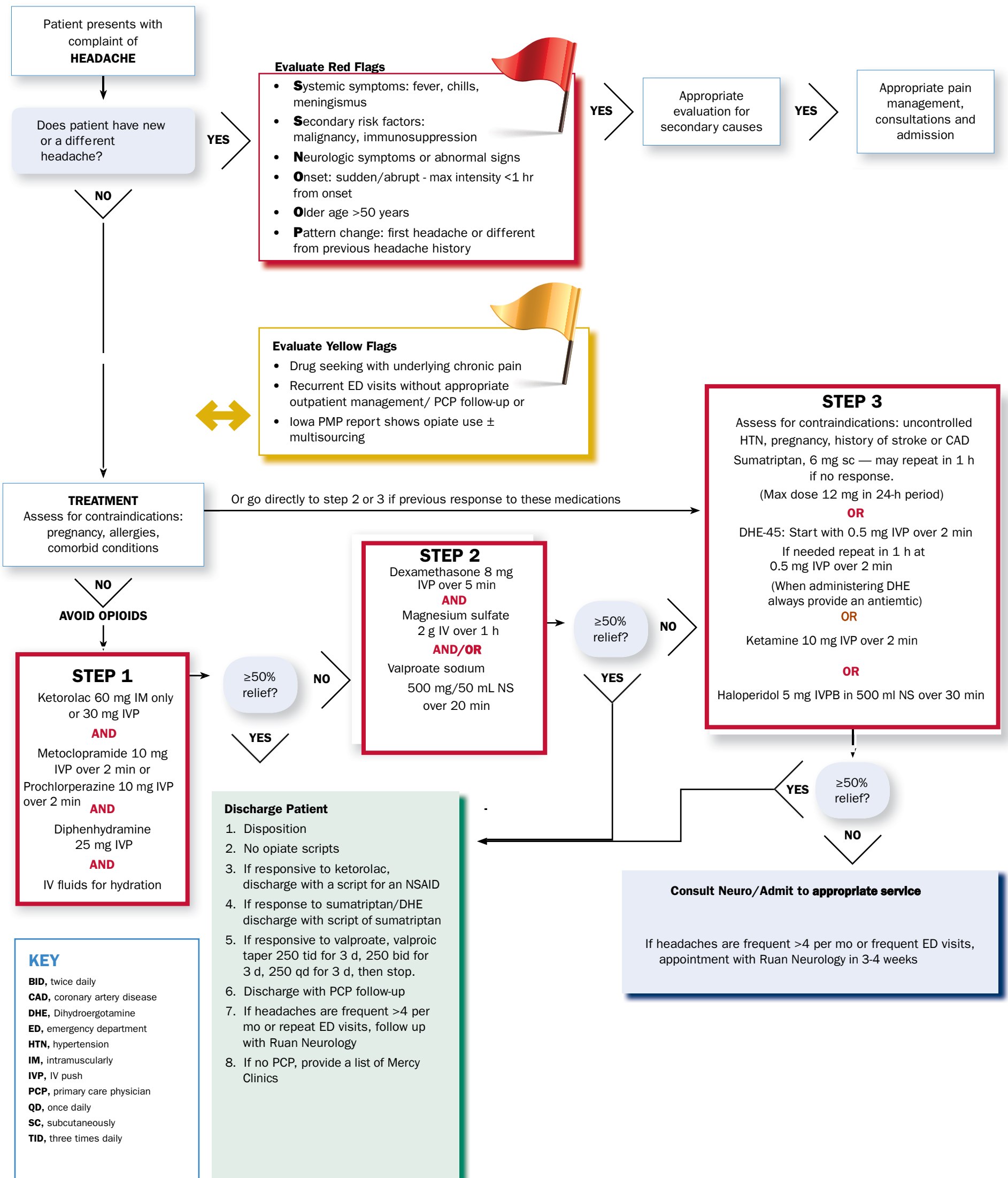


# ED Management of Headache Algorithm



## Evaluate Red Flags

- **S**ystemic symptoms: fever, chills, meningismus
- **S**econdary risk factors: malignancy, immunosuppression
- **N**eurologic symptoms or abnormal signs
- **O**nset: sudden/abrupt - max intensity <1 hr from onset
- **O**lder age >50 years
- **P**attern change: first headache or different from previous headache history

## Evaluate Yellow Flags

- Drug seeking with underlying chronic pain
- Recurrent ED visits without appropriate outpatient management/ PCP follow-up or
- Iowa PMP report shows opiate use ± multisourcing

## STEP 3

Assess for contraindications: uncontrolled HTN, pregnancy, history of stroke or CAD  
 Sumatriptan, 6 mg sc — may repeat in 1 h if no response.  
 (Max dose 12 mg in 24-h period)

**OR**

DHE-45: Start with 0.5 mg IVP over 2 min  
 If needed repeat in 1 h at 0.5 mg IVP over 2 min  
 (When administering DHE always provide an antiemetic)

**OR**

Ketamine 10 mg IVP over 2 min

**OR**

Haloperidol 5 mg IVPB in 500 ml NS over 30 min

## TREATMENT

Assess for contraindications: pregnancy, allergies, comorbid conditions

**NO**

**AVOID OPIOIDS**

## STEP 1

Ketorolac 60 mg IM only or 30 mg IVP

**AND**

Metoclopramide 10 mg IVP over 2 min or  
 Prochlorperazine 10 mg IVP over 2 min

**AND**

Diphenhydramine 25 mg IVP

**AND**

IV fluids for hydration

## STEP 2

Dexamethasone 8 mg IVP over 5 min

**AND**

Magnesium sulfate 2 g IV over 1 h

**AND/OR**

Valproate sodium 500 mg/50 mL NS over 20 min

## Discharge Patient

1. Disposition
2. No opiate scripts
3. If responsive to ketorolac, discharge with a script for an NSAID
4. If response to sumatriptan/DHE discharge with script of sumatriptan
5. If responsive to valproate, valproic taper 250 tid for 3 d, 250 bid for 3 d, 250 qd for 3 d, then stop.
6. Discharge with PCP follow-up
7. If headaches are frequent >4 per mo or repeat ED visits, follow up with Ruan Neurology
8. If no PCP, provide a list of Mercy Clinics

## KEY

- BID**, twice daily
- CAD**, coronary artery disease
- DHE**, Dihydroergotamine
- ED**, emergency department
- HTN**, hypertension
- IM**, intramuscularly
- IVP**, IV push
- PCP**, primary care physician
- QD**, once daily
- SC**, subcutaneously
- TID**, three times daily

## Consult Neuro/Admit to appropriate service

If headaches are frequent >4 per mo or frequent ED visits, appointment with Ruan Neurology in 3-4 weeks