

# Effective Use of Headache Calendars



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# Conflicts of Interest

- I am a co-founder of BetterQOL, Inc – which has developed an electronic diary – iHeadache App, iHeadache Online, iHeadache MD
- We have received advertisement support from Valeant and Nautilus at various times
- Development has progressed over 5 years

# Potential Diary Features

- Headache days or Headache Periods
- Headache features
  - Severity of Pain
  - Location
  - Pain Quality
  - Aura
  - Associated symptoms

# Potential Diary Features

- Treatments – Meds and Complimentary
  - Acute
  - Preventative
- Disability
  - Real time disability questions
  - Disability hours
- Triggers

# Problems With Diaries

- Patient compliance
  - Time – more complex and complete – more time
  - Not worth effort
  - Cost
  - Left at home/office/car

# Problems With Diaries

- Physician issues
  - Scoring diaries
    - Time effort at visit
    - Extraneous information
  - Transferring data to medical record
  - Hard to look back more than a few visits
- Active Paper Diaries almost impossible to score

# Paper vs Electronic

One comparison study

PDA type device (Windows CE) vs Paper

85 inpatient cohort

Only 7 days recorded per patient

Electronic diary favored vs paper

But – results probably electronic diary and paper diary dependent

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But – results not generalizable – inpatient and probable dependent on specific device and specific paper diary



# Diary Recommendation

WHO – “Lifting the Burden: The Global Campaign to Reduce the Burden of Headache Worldwide”

Recommends diaries but does not specify type or features.

# Paper Diary Advantages

Cheap

Rapid

Easy for physician to customize

Patients can modify to a degree as they desire

# Paper Diary Disadvantages

Patients forget them

More limited information

Lot of time to score detailed information

Can be difficult to find information you want in the mass of information the patient writes

# Electronic Diaries

Usually tied to smartphone so hard to forget

No cost to minimal cost if one owns the device

Very hard to generalize features

More than 20 iOS Apps alone

Only a few websites

Ability to get reports varies widely

# iHeadache Online & iHeadache MD

Designed for migraine and tension headaches

Captures headache days

Pain severity, quality, and location

Disability – real time disability questions and hours

Acute treatments

Preventative treatments

Triggers both headache days and non-headache days

# iHeadache Online & iHeadache MD

Free form field for other notes

Displays data in variety of graphs

User decides which graphs they want to see on their individualized dashboard

Reports gather data by units of time (months, 28 days, 30 days or 7 days)

Cut and paste into EMR

Print for paper charts

Data in cloud – cannot be lost/forgotten

# Use Cases You Have Thought About

Does Patient Have Medication Overuse Headache

Changes in headache days with change in prevention

How well does acute medication work

Does patient need preventative

# Use cases you may not have thought about

Improve Diagnosis

Disability Hours

Is this trigger really a trigger?

Vertigo and migraine – tx one or tx both



# Improve Diagnosis

In the Spectrum Study – 30% of those patients who were initially diagnosed with tension type headache actually had migraine.

# Disability Hours

Some patients have significant improvement in disability hours (totally disabled and/or partially disabled) but do not have fewer headache days. This can be an issue in getting ongoing approval for onabotulinum toxin therapy. Alternatives include MIDAS scale, HIT 6, and real time disability questions.

# Trigger Tracking

How does one identify a trigger?

Most patients wait to have a headache and then think about potential triggers. Ideally, you would track trigger exposure independently of headaches and then determine if the trigger actually is associated with the headache greater by chance.

# Trigger Tracking

Example – 8 headaches per 28 days

Trigger occurred 3 times with headache, 4 times without headache.

% of headaches with trigger – 37.5%

% of no headache days with trigger – 20%

Ratio – about 2 to 1 so probably a mild trigger

# Custom Symptoms

Is your patient's vertigo an independent entity or part of their migraine?

Similar concept to trigger tracking – track custom symptom and see how often it occurs with and without a headache.

# Transferring Data to Medical Record

E.H.R. – select data you want, cut and paste

Paper – print data you want

# Medical Calendar Pearls

Think data you want long term and short term.

Have patient concentrate on immediate needs while preserving long term data.

Thank you

Questions?

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Learn more at [iHeadache.com](http://iHeadache.com)

