



Published in final edited form as:

Headache. 2023 ; 63(7): 917–925. doi:10.1111/head.14519.

Headache Clinicians' Perspectives on the Remote Monitoring of Patients' Electronic Diary Data: A Qualitative Study

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Abstract

Objective: We assessed headache clinicians' viewpoints on potential remote access to patients' digital headache diary data and the practicalities of data utilization.

Background: With the ubiquitous nature of electronic medical records and the existence of remote monitoring for many medical conditions, there is now the potential for remote symptom monitoring for patients with headache disorders. While patients are asked to utilize headache diaries, clinicians may or may not have access to the data before patient visits, and their perspectives regarding this emerging technology are currently unknown.

Methods: After recruiting participants from the NIH Pain Consortium Network, the American Headache Society Special Interest Section listservs, and Twitter and Facebook social media platforms, we conducted 20 semi-structured qualitative interviews of headache providers across the US from various types of institutions and asked them their perspectives on remote access to patient headache diary data. We transcribed the interviews which were then coded by two independent coders. Themes and subthemes were developed using inductive content analysis.

Results: All clinicians felt the remote monitoring data needed to be integrated into the electronic medical record. Six themes emerged from the interviews: (1) Clinician Perspectives on how remote monitoring could be beneficial but at other times could create obstacles/challenges, (2) Operationally data integration could benefit Headache Care, (3) There should be initial logistical considerations for of bringing remote monitoring into clinical care, (4) Education may need to be provided to both patients and clinicians, (5) There are likely research benefits associated with remote monitoring and (6) Additional suggestions for considering potential integration of remote monitoring into practice.

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Conflict of Interest Statement: MTM, AG, AK, NL, ICS, NAB, and JL report no conflicts of interest related to this manuscript.

Conclusions: While headache clinicians had mixed opinions on the benefits/challenges remote monitoring presents to patient care, patient satisfaction, and visit time, new ideas emerged that may help advance the field.

Keywords

Headache; Migraine; Provider Perspective; Remote Monitoring; Patient Data

Introduction

Obtaining headache diary data from patients is one of the mainstays of headache treatment.¹ We have conducted multiple qualitative analyses examining what headache app users seek in headache apps^{2,3} and how they have used a migraine app to track what they perceive to be important features of a headache.^{2,3} Our work has taught us that patients with migraine who utilize electronic headache diaries want good data visualization and the ability to share the results and characteristics of their migraine with their providers.^{2,4} Now, with advances in technology and electronic medical record capabilities, there is potential for remote monitoring (RM) of patients' electronic headache diaries.

Two well-established distinct types of remote monitoring data are of direct interest to clinicians. The first is remote physiological monitoring services recorded data.⁵ Examples include the remote monitoring of glucose⁶, blood pressure⁷ and body weight.⁸ The second is remote therapeutic monitoring services.⁵ These devices allow clinicians to monitor patient symptoms and track the effectiveness of prescribed interventions through their patients' data.⁵ Data may be collected automatically by devices or patients may manually input subjective data.⁵

Remote symptom monitoring via transmission between patients and their clinicians is not widely used in headaches and, in the United States, for example, is not included in either billing code family.⁵ Although, this care modality has promise regarding how clinicians solicit headache data, what data patients track, and how collected headache data is returned to headache clinicians, there is little research that explores clinicians' perspectives on how remotely monitoring electronic headache diaries could affect aspects of appointments such as patient visit times or productivity. In an era of healthcare burnout,^{9,10} provider shortages,¹⁰ rapid increases in telehealth,^{11,12} and changing revenue streams,¹³ we sought to better understand headache clinicians' perspectives. Clinician insights on RM of patients' digital headache diary data stand to inform an evidence-based, data-driven path forward for the implementation of previously developed electronic headache diaries.

Methods

This study was conducted virtually from the NYU Grossman School of Medicine (NYUGSoM), located in New York City, with the approval of the NYUGSoM Institutional Review Board. We conducted semi-structured interviews with 20 headache clinicians across the United States from various clinical practices via Cisco WebEx. The interview questions were developed and iteratively reviewed by a diverse group of technology experts. Experts included individuals from the Center for Advancing Point of Care Technologies (CAPCaT)

at the University of Massachusetts, a consultant for the American Academy of Neurology whose expertise is in telehealth, and digital psychiatry experts at external institutions. We developed this group to benefit from their input, confirm that the content was applicable, the wording captured the intended message, and decrease bias. The interview guide remained the same throughout the study period. Interviews were audio recorded and transcribed for qualitative analysis.

Recruitment

Headache clinicians with an MD, DO, NP, or PA degree who treat patients with migraine for at least one full day per week were eligible to participate. Potential participants were recruited via email via the NIH Pain Consortium Network, the American Headache Society Special Interest Section listservs, and Twitter and Facebook social media platforms. They were emailed information about the study using a NYUGSoM IRB-approved email script and an attached key information sheet. Interested clinicians contacted the study coordinator via email to schedule an interview which was then conducted via WebEx. Participants received a \$200 check for the completion of an hour-long, semi-structured interview.

Enrollment and Interview

Clinicians first met with the study coordinator via WebEx to complete the informed e-consent, sent via REDCap. The study coordinator then verbally administered demographic questions and questions regarding their clinical training and practice (Table 1), which were manually entered into REDCap. The twenty individual, semi-structured interviews were conducted by a health psychology Ph.D. student using an IRB-approved interview guide (Appendix 1). A range of topics was discussed in interviews. Questions specific to RM included: the potential benefits of digital headache care, concerns around digital headache care, and considerations impacting clinicians' perspectives. The audio was recorded for each interview and fully transcribed in Word as described below. In this paper, we specifically describe the participants' perspectives on the remote monitoring of electronic headache diary data.

Interview Content and Analysis

This is the primary analysis of these data. Clinicians' interviews were independently coded by four coders. All personally identifying information (PII) was removed from the interview transcripts before coding began. Coders included MTM, a clinician-headache researcher who has prior experience with qualitative analysis, AG, the clinician's research coordinator who assists with headache diary and remote monitoring research, and two trained undergraduate students. Transcripts were separated into two parts based on the semi-structured interview questions: headache diary and remote monitoring. In this paper, we report the responses to the remote monitoring questions (Appendix 1). After an independent coder and MTM coded 4/20 remote monitoring interviews, the coders discussed developing a strategy to ensure that the codes incorporated the nuances within the transcripts.

We used an inductive content analysis approach to generate qualitative codes.^{14,15} All of the codes were aligned via mutual agreement by coders and a codebook was finalized via a series of meetings aimed at reaching a consensus between coders. Each of the coders

independently coded every transcript. After the interview transcripts had been independently coded, the study coordinator integrated and listed the codes by transcript. All codes were parsed out for duplicates and any differences were adjudicated through meetings to establish a group consensus.

Upon establishing a finalized list of codes for each of the interview transcripts, AG created a combined code document where all codes with the same, or similar meanings were grouped together. All four coders met and established any discrepancies in the code groupings. After code groups had been finalized, the coders then identified the commonalities in themes between the similar codes and identified relevant quotations from the transcripts to support the established themes as shown in Table 2.

Statistical Analysis

Quantitative data was downloaded directly from REDCap and exported to Microsoft Excel. We utilized Microsoft Excel software to calculate the frequencies and percentages as indicated in the clinician demographics (Table 1). We additionally calculated the mean, standard deviation, and/or interquartile range for the number of years of clinical practice, as well as the length of the interviews.

A sample size of N=20 was based on the expected sample required for data saturation¹⁶ and practical factors related to the study. The coders believed there was data saturation for categories derived from the 20 individual transcripts. Saturation was defined as the point at which there were few or no relevant new categories in the data, and when repeat issues were brought up with no further contribution to understanding the study's phenomenon or nuances.

Initial codes were derived from the first 4 transcripts and discussed amongst coders before continuing to code the remaining transcripts. The subsequent transcripts (16 remaining) were each separately analyzed by the individual coders. The coders once again met after they reached N=10 transcripts and discussed the findings of new codes. After reviewing all 20 of the transcripts data saturation was reached.

Results

Quantitative Results

As shown in Table 1, of the 20 clinicians, 45% (9/20) were male and 55% (11/20) were female. About two-thirds (65%; 13/20) of clinicians were physicians, and the remaining participants were advanced practice providers (i.e., NPs or PAs). Almost all, 12/13 (92%) of the MD's and DO's had completed a headache medicine fellowship. The mean number of years of clinical practice was 11.7 (IQR= 8.8). Each interview lasted approximately 35±0.3 minutes and ranged from 26–51 minutes.

Qualitative Results

Coding of interview transcripts yielded several themes: (1) Clinician perspectives on how RM could be beneficial but at other times could create obstacles/challenges; (2) Operationally RM could benefit headache care; (3) There should be initial logistical

considerations for bringing RM into clinical practice; (4) Education may need to be provided to both patients and clinicians; (5) There are likely research benefits associated with RM; (6) Additional suggestions on the integration of RM into practice.

1. Clinician Perspectives on RM: Benefits and Challenges—Headache clinicians expressed support for the use of RM in their institutions. They indicated a preference for RM to be integrated into the EMR at their institution so that RM data could be easily accessible to them. Many clinicians felt that RM would improve patient satisfaction as it would allow patients to be involved in their care and better determine whether they were benefiting from their treatment plan. Several clinicians were satisfied with the present practice of reviewing and discussing the RM data with patients during their appointments, as they indicated that they would not have the capacity to view this data outside of their scheduled time with patients.

A number of clinicians expressed that reviewing RM data outside of appointment times would add too much to their already overwhelming workloads and indicated concerns about the potential for RM data access due to their existing time restraints outside of patient visits. Alternately, some clinicians indicated they would prefer to look at data before their patient appointments to gauge their headache frequency and intensity so that they could focus solely on discussing treatment options during the appointment.

2. Operational Benefits of Headache Care—Several clinicians felt RM would allow them to monitor patients' treatment responses, which would help them significantly in developing and adjusting treatment plans. The clinicians expressed that the option of viewing RM data would allow them to determine whether current treatments are effective. Some clinicians reported being concerned that without RM, patient self-reported data might be inaccurate and that through using RM the clinicians would be able to view patient data without reliance on self-report and evaluate if RM is for any given patient.

While clinicians felt that including RM data in their appointments may improve visit efficiency, perspectives were mixed as to whether, or how, it might affect visit time. Some believed that RM would decrease visit time, whereas others believed that RM would either have no impact on visit time or increase it due to an increase in data that would need to be discussed during the visit. For those who said it might be the same duration, they expressed that the conversations might be more in-depth. It was commonly believed that review of the data collected via RM would allow them to improve patient treatment plans (i.e., by accessing information about medication utilization and success rates), which would inevitably increase visit efficiency, as it would allow clinicians to target aspects of patient care that need improvement. Their perception of how this would affect visit duration was what was mixed.

3. Initial Logistics of RM in Practice—Many clinicians supported integrating RM into the EMR but were concerned that there was not enough IT support at their institutions to do so. Most clinicians also expressed concerns that their institutions may only support RM if it would add financial benefit. In addition to concerns about institutional support, clinicians reported concerns about data privacy and security. Several clinicians explained

that RM data and EMR integration must be ensured as HIPAA compliant and endorsed concerns for privacy and security issues. Additionally, clinicians recommended that to limit security issues, patients should be properly educated on how to utilize RM platforms before being asked to use them.

Coinciding with patient security concerns, another patient-centered issue that emerged with RM was that some patients might become too focused on their symptoms. Some clinicians expressed that with the integration of RM, patients may think that they need to monitor their symptoms constantly, which may be counterproductive to the benefits of RM.

The clinicians were also asked whether they would utilize RM outside of patient visits. Nearly all clinicians expressed concerns relating to the extra dedicated time this would require. Some clinicians mentioned that they would prefer to utilize and discuss the RM data with the patient during their visit time because they face time constraints e.g., being overbooked with patients throughout their day.

4. Considerations for Education—A number of clinicians suggested that patients and providers receive adequate training and education on RM and how to use it. They suggested that education might be a way to limit data privacy and security issues, improve efficiency and patient satisfaction, and ensure that patients report the correct information.

5. Benefits of RM for Research—Some clinicians reported that RM will be beneficial for research as it will allow for the analysis of clinician populations and the efficacy of their treatment. Because RM provides clinicians and researchers with several different data points, clinicians suspected it would be useful in research.

6. Additional Suggestions on the Integration of RM into Practice—A majority of clinicians endorsed integrating RM into practice via EMR as that will be the most efficient way for clinicians to access the data. Because of varying resources and support from IT and their institutions, most clinicians expressed concern that this may or may not be feasible. Many providers reported not having had comparable interactions with IT and being uncertain about the level of practical support IT could provide regarding a new application integration broadly.

Discussion

Qualitative analysis of clinicians' perspectives on RM offers insight into the potential benefits and challenges clinicians face when implementing RM in patient care, and the potential benefits of RM in headache care. Clinicians were generally supportive of RM in practice, but also discussed potential limitations. Clinicians expressed that RM may be a useful tool in tracking symptoms, frequency, and intensity of migraine. Because clinicians reported concern that patients' self-reported data during a visit may be inaccurate, the use of RM would allow clinicians to view patient data without the usual reliance on self-reports. Prior research has shown that RM has great potential for bridging gaps of care between in-person or two-way real-time interactive audio or audio-video encounters.¹⁷ Researchers also reported that they expected RM would improve patient satisfaction with care.¹⁷ Although

RM has been implemented as a means of tracking and developing treatment plans for various disorders, many headache clinicians expressed concerns that their patients might overly focus on their symptoms because of involvement in RM. To prevent patients from becoming overly focused on their headache symptoms, such as pain, or frequency, it may be important that clinicians may be intentional with which patients they ask to partake in RM, and that clinicians view patient data to make sure it is not counterproductive to their treatment plan.

Some clinicians expressed considerations for the education of RM use and suggested that both clinicians and patients should be trained in RM before using it. A systematic review to determine if apps are effective in the diagnosis and management of sleep apnea suggested that initially using such apps may be difficult and may require a learning curve.¹⁸ This research aligns with clinicians' concerns for educating patients and providers on the use of RM. Many clinicians also expressed concerns about data accuracy, privacy and security, and IT support in implementing RM at their institutions. Similar concerns have been expressed in studies for other conditions; in a study that investigated wearable technology as remote monitoring and tracking of seizures, researchers examined whether patients and clinicians utilize technology currently for RM and whether they were willing to wear RM devices.¹⁹ There were similar concerns to those expressed by our participant clinicians, such as data accuracy, privacy and security, and IT support, but both patients and clinicians were interested in incorporating RM as a means of epilepsy treatment, as RM may assist in detecting seizure characteristics.¹⁹

Despite its limitations, RM may be beneficial in diagnosing and treating certain medical conditions. Clinicians suggest that they are open to RM if there is no expectation that they review data outside of patient visits. They reported that, while RM may not necessarily decrease patient visit times, it has the potential to make visits more efficient. Clinicians report that for instance, follow-up visit times take about 20 minutes²⁰ on average, and that time spent reviewing patient headache days and history during appointments could be better spent focusing on treatment planning and education. When considering other conditions, for example, diabetes, research on the Diabetes Remote Monitoring and Management Systems (DRMS) has shown that the RM system for diabetes may be beneficial clinically and cost-effective for patients,²¹ which could translate into headache care.

Strengths

We believe we obtained data saturation in our qualitative interviews. We obtained the views of headache clinicians across the United States from various clinical practices.

Limitations

Self-selection bias may have occurred as participants may have participated in this study due to their interest in RM and technology integration into practice as well as their research interest. We did not ask providers whether they treat pediatric and/or adult patient populations and there may be differences associated with these different age groups given how patients' perceptions of technology use may differ with age.²²

Some may wonder whether some of the pros and cons of headache diaries are applicable to both paper and electronic diaries. Our focus in this study was on contextualizing differences between remote monitoring versus non-remote monitoring of the headache diary data rather than digital versus paper.

Participants did not mention that the RM data could potentially come from different apps or diary sources if an institution does not use a single source for the RM data collection. Future studies specifically asking clinicians about the extent to which this is a concern for them, would be useful.

Future Directions

Future research should explore which specific characteristics or aspects of patient conditions clinicians want to remotely monitor and the level of detail they are looking for from RM data. Additionally, non-headache clinicians who frequently treat headache such as primary care providers should be interviewed to determine clinicians' perspectives in general on RM. Preliminary work can examine who would be best to monitor the data since it is unlikely the clinicians themselves would have the capacity to do so, and whether monitoring between visits improves patient outcomes. Accordingly, measures should be taken to identify how those conducting the RM in headache medicine will be reimbursed. Research exploring patient perspectives on RM would also be useful for informing implementation. Finally, as the potential for digital components to care, including remote monitoring, expands, we need to be mindful of the potential that this might also expand the digital divide.

Conclusion

This study provides insight into a previously unexplored topic, clinician perspectives on remote monitoring of headache diary data. The results from this study will assist the further development of telehealth and determine the best ways it can improve headache patient care. The findings may be generalizable to other clinical conditions since, in many cases, clinicians had similar opinions and concerns as their colleagues in other specialties regarding whether RM is useful for patient care.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

Acknowledgments:

We would like to thank the Center for Advancing Point of Care Technologies (CAPCaT) for generously providing the funding that facilitated this research. We would also like to thank the CAPCaT team for their review of the semi-structured interview questionnaire used in this study. We would like to thank Dr. Lisa Doan for her help in distributing the interview requests.

Funding:

MTM obtained funding from the Center for Advancing Point of Care Technologies (CAPCaT) for this research.

Abbreviations:

RM	Remote Monitoring
NYUGSoM	NYU Grossman School of Medicine
CAPCaT	Center for Advancing Point of Care Technologies
DRMS	Diabetes Remote Monitoring and Management Systems

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Table 1.

Clinician Demographics

Variable	Characteristics	Frequency (N=20)	Percent
Sex	Male	9	45%
	Female	11	55%
Ethnicity	Non-Hispanic/Latino	17	85%
	Hispanic/Latino	3	15%
Race	African American	0	0%
	American Indian or Alaskan Native	0	0%
	Asian or Pacific Islander	2	10%
	White/Caucasian	14	70%
	Other	4	20%
Fellowship Area of Study	Cognitive Neurology	1	5%
	Headache	12	60%
	*Did not complete a fellowship	7	35%
Number of Years in Clinical Practice	1–5	6	30%
	6–10	5	25%
	11–20	3	15%
	21+	3	15%
Institution Type	Large Academic	9	45%
	Small Academic	3	15%
	Large Private	2	10%
	Small Private	6	30%

Table 2.

Remote Monitoring Themes and Subthemes

Overarching Theme	Subthemes	Quotes
Clinician Perspectives on RM: Benefits and Obstacles/ Challenges	Clinician Obstacles	<p>“Honestly it’s just additional time spent that’s probably uncompensated and as a physician that’s busy as it is.”</p> <p>“Outside of the visit? Uh, I don’t know. How am I going to divide my clinical time if I am reviewing data on an app? Unless that’s part of my everyday job - dedicate a couple of hours to review data on the patients’ app.”</p>
	Clinician use of RM for visits	<p>“If I have the data, I’ll be able to modify their treatments, even preemptively have a plan for the patient even before the visit - I could have an idea for the decision-making that will take place during the visit. It would help tremendously to have the data ahead of time and discuss it with the patient based on the data.”</p> <p>“There are two very important benefits. The first one is the patient dealing with daily, dealing with information that they’re supporting. So, they assess themselves to get the information. I think this is something valuable. The second one is to have objective and useful information for decision-making that is not relying only on the patient’s perception for a long period of time.”</p>
	Data Accuracy	<p>“I think that would be great because what we can do then is especially if we are looking at it if they come in let’s say every three months, we can kind of look back at the past visit then and see last year...there has been a reduction or not your headaches have flared up, I see that from the last time you were here.”</p> <p>“I mean I imagine that with remote data monitoring, it’s prompting the patient, to fill things out on a regular basis, right, so, whether it’s daily or whatever check-ins. So, you know rather than the patient coming in at their three-month checkup, “I’m so sorry I forgot to fill anything out,” you know? You’re going to have that on all the patients, or more patients that are invested in that process, you’ll just have more- and you don’t have that recall bias.”</p>
Operational Benefits of RM on Headache Care	Efficiency, Visit Time	<p>“I could probably [be] more efficient so I could make decisions because I already know the answers and then I could already have an idea of what invention I was going to make based on their data.”</p> <p>“It would probably shorten the visit time if not make it just more efficient.”</p> <p>“I think it would shorten the visit time so that we could actually spend more time on the education piece because oftentimes I feel like I spend so much time on just the history taking.”</p> <p>“I think for the most part it would lengthen the total visit time rather than shorten it. More data to go through and it depends on the value that it provides.”</p> <p>“...things would be more efficient I don’t think that this time necessarily will be shorter, but I think it will allow greater time to discuss recommendations”</p>
	Improvement in Clinical Care	<p>“Probably that patient would prefer you know, like because then I see what’s going on. They think I’m more involved.”</p> <p>“I think it would just provide optimal care because I would be able to identify the issue faster, instead of just dancing around their history, trying to gather some information that is probably only in the last two weeks. So, I think it would just help the patient, in the end, get better care and decrease their frequency, duration, and severity.”</p> <p>“It’s more, like, for people to realize just how often they’re having their headaches and like I mentioned before whether it leads to medication overuse, and trigger understanding, maybe sometimes it might lead to them being more open to starting a preventive if they were previously hesitant, something like that.”</p>
	Patient Satisfaction	<p>“The patient might have an increased visit satisfaction because they have a sense that you’re, you’re more in the loop with their experience of their headache.”</p> <p>“Patients would feel more heard and instead of being asked a questionnaire they are able to directly convey their experience with migraine in a way that’s a little bit more thorough and just speaking in terms of numbers you know headache days.”</p> <p>“...sometimes the patients can be inaccurate. You know, they might think they’re not doing better, when in fact they are doing better. So, if you say like well, look here a year ago you were here and now here you are today. It would be more reaffirming to say, like you’re on the right track. Because a lot of times I think they think they’re not on a better track.”</p> <p>“It could possibly sometimes go in the opposite direction where they’re trying to be attentive and trying to do the uploading and documentation. That’s why we say we don’t want them to make the headaches worse by trying to figure this out and submit the record, so we don’t want to be an extra stressor for them.”</p>
Logistics of Bringing RM Into Clinical Practice	Clinician Institutions and IT department	<p>“Yeah, I think this would be very much like on the doctor, on the provider. There wouldn’t be a lot of support, I think that’s- I’m coming from that kind of, it’s like a private practice, so it’s not, we don’t have institutional support.”</p> <p>“My practice is very conservative, any changes tend to be microscopic and involve months and months of meetings for the most microscopic things, you know.”</p> <p>“Um so I work for relatively small private practice so I think it would be relatively easy to implement actually, I mean our headache team is 10 people so it’ll just be bumping a meeting and it be done quick so- it’s not a big hospitals where would have to go through a ton of bureaucracy and</p>

Overarching Theme	Subthemes	Quotes
		<p>red tape to get there, so it would be relatively easy if we really felt like we wanted it.” “I think they’re being very supportive right now, so I don’t have any problems on whatever I need, and they were able to basically be able to, you know, to make it happen. So, I don’t think there’s any problem from my personal perspective. I don’t think there’s any problems with the IT department.”</p>
	Privacy/ Security, Integration into the EMR	<p>“Well, I think security is always an issue, you know. Uhm, but I think if you were, you’re certified as HIPAA compliant, I think that goes a long way toward protecting that.” “I think also it might help in data safety issues because if you have everything integrated, you’re already using a set of tools of security of data that hospital has already or the institution.” “Just you know, you obviously want to make sure that privacy issues are not breached. So that’s an important aspect of it or that the data is not being sold without patient consent.” “I could see a liability if they try to email it to us and that would have a little bit looser security line, but our EMR is very secure, so I don’t see that being an issue. The only thing, if, for example, a patient was walking in at the same time as another patient, could you get two patients mixed up? It’s possible. Could there be a HIPAA violation there? How easy is that to fix?”</p>
	Data readability and visualization	<p>“That it would be tailored to what we need like what data I want to extract. It would be in a readable format, would be integrated and quickly accessible. In an easy to interpret format and that it would be accurate and could inform treatment decisions - those are the things that I look for.” “Well, simplicity, visual, if I can scan it, that’s ideal. I think that if I must read a whole bunch of sentences and five pages of single-space, that’s not ideal.” “When they do the report, it usually only comes in these individual migraines, but I do wish you could export the summary data, so what was the average duration of the migraine, what was the average frequency per month. I wish that you could almost get, like, a graph or more like summative analysis vs each individual because what I spend time doing is trying to summarize and centralize all this information.”</p>
Considerations for Education to be Provided to Both Patients and Clinicians		<p>“I think education, that will be basically, in order to produce these kinds of apps or come up these apps, will probably be also like education part on the patient.” “I wish the apps were more publicized, you know, like there’s one by the National Headache Foundation that’s for providers on, like, how to treat migraine, and supposedly it’s been out for several years, and I <i>just</i> heard about it. So, I wish the advertising was better and I wish it was almost partnered with pharmaceuticals because they have money and they have avenues and, you know, patient education is also power.”</p>
RM for use in Research		<p>“I think having some of this information tracked more regularly and like I said in a slightly more objective way that doesn’t have the biases of recall um among other biases might deliver a little bit more accurate research information about patients.” “I mean for research of course it would be amazing.” “I definitely like to look at the MIDAS score, that’s very helpful for research purposes, that’s probably one of the big things.”</p>

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