The American Academy of Neurology (AAN) Patient-Centered Headache Care Payment (PCHCP) Model

**Purpose:**
The purpose of the environmental scan research task is to provide current contextual information to the Physician-Focused Payment Model Technical Advisory Committee (PTAC) related to the proposed model. This includes information about the submitting organization, the clinical condition or type of care addressed in the proposal, the relevant policy environment, the literature supporting or otherwise reflecting the potential implementation and impact of the proposed model, and the relevance of the population, condition, and proposed model to Medicare.

**Methods**
The Environmental Scan Research Task includes a search of grey literature, key documents, timely reports, peer-reviewed literature, and other related materials from targeted online and database (e.g. Pubmed) searches. Search terms included multiple Boolean (and/or/not) combinations of the following:

- Alternative Payment Models (APMs)
- American Academy of Neurology (AAN)
- Centers for Medicare & Medicaid Services (CMS), Medicare
- Center for Medicare & Medicaid Innovation (CMMI)
- Cost of care
- Headache
- Headache care
- Headache care team
- Headache treatment
- Health Care Innovation Award (HCIA)
- Integrated care
- Integrated headache care
- MACRA (Medicare Access and CHIP Reauthorization Act of 2015)
- Multidisciplinary treatment
- Neurologist
- Older Adults, Elder, Elderly
- Patient-centered headache care
- Patient-centered headache care payment (PCHCP)
- Reimbursement
- Telemedicine

**Submitting Organization**
The American Academy of Neurology (AAN) is the leading professional organization for neurologists, representing a 32,000+ worldwide membership. Neurologists treat about one-fifth of all migraine headaches, the most common headache disorder, whereas approximately one-half are treated by primary care clinicians who may then refer severe or complicated cases of migraines or other headaches to neurologists (Lipton, Stewart & Diamond, 2001).

The AAN developed the Axon Registry, which is approved by the CMS (Centers for Medicare & Medicaid Services) as a qualified clinical data registry (QCDR) under the MACRA/MIPS (Medicare Access and CHIP Reauthorization Act of 2015/Merit-Based Incentive Payment System) program. Its use also qualifies providers with self-assessment CME (Continuing Medical Education) credits. According to the September 2017 monthly registry update, the registry includes 169 practices and 1094 providers, of which 793 have data, for a total of 821,000 patients and 2,275,000 visits. The registry is currently integrated with 33 different EHR (electronic health records) systems.
The AAN has developed a 2014 headache measure set that is available for use by any physician treating headaches, but it has yet to be tested and evaluated. The headache measures fall into the following categories: (1) Process measures include appropriate medication use and overuse measures, (2) outcome measures include quality of life and functional status measures, and (3) patient engagement and care coordination measures are a single measure related to the development or review of a care plan.

**Background**

**Headaches**

Headaches are among the most prevalent of neurologic disorders and symptoms in general adult practice. In the United States, migraines affect over 29 million individuals with a prevalence of about 18 percent in women and 6 percent in men (Lipton et al. 2001). According to the National Hospital Ambulatory Medical Care survey, head pain was the fifth leading reason for ED (emergency department) visits. In one report, the estimates of health expenditures alone (without including the lost productivity) totaled over 10 billion dollars, with the vast majority of costs due to outpatient care and medication prescriptions. Despite the high cost estimates, headaches remain vastly under-diagnosed and under-treated and result in significant functional disability and poor quality of life. Another report indicated that the cost of lost productivity may be double the health care costs.

**Headaches in Older Adults**

Although headaches become less common with age, headache symptoms are also less likely to be part of a primary headache disorder in the elderly compared to younger adults. Accordingly, headaches in older adults are more likely to result from temporal cell arteritis, medication overuse, or a brain lesion compared to younger adults. Headache disorders can often present with atypical symptoms in the elderly. Newly onset headaches or a change in headache pattern in older adults is particularly worrisome—thus accurate assessment and diagnosis are especially important in older adults (Hershey & Bednarczyk, 2013).

**Headache Treatment**

A multidisciplinary approach, such as creating a headache care team (as described in the proposal), has been shown to be effective in the care of patients with headache disorders. Up to 50 percent reduction in headache frequency has been demonstrated, although younger age was a predictor of benefit in one of the studies (Gaul, Liesering-Latta, Schäfer, Fritsche, & Holle, 2016; Gaul, Brömstrup, Fritsche, Diener, & Katsarava, 2011; Wallasch & Kropp, 2012; & Diener, Solbach, Holle, & Gaul, 2015). Telemedicine, as proposed in the model, has also been shown to be effective in the care of headaches (Müller, Alstadhaug, & Bekkelund, 2017).

**The Use of Opioids**

Opioids are commonly used in the acute management of headaches. Young, Silverman, Bradford, and Finklestein noted in their study of 1222 consecutive ED visits for migraines that more than one-third resulted in an opioid prescription (2017). However, there was great variation by type of facility, as community EDs gave opioids for migraines in 69 percent of visits, much more frequently than in the academic medical center. In the study, use of opioids was associated with increased length of stay, greater need for rescue medications, and repeat visits.
Summary of PCHCP Model

The proposed PCHCP model responds to two specific challenges in the current care of adults with headaches: (1) The lack of reimbursement for the intensive and extensive assessment needed to take an adequate history to accurately diagnose the cause of headache symptoms, (2) and the inability to effectively triage and coordinate care for patients with headaches among care settings for those who need urgent acute care, acute and chronic primary care management, and specialist care for more severe or complex headache conditions. As a result, many patients receive acute, uncoordinated care, such as through emergency department visits with unsatisfactory outcomes regarding pain control and impact on functioning.

The proposed model would replace current evaluation and management (E&M) payments with a flexible payment model to enable physicians to tailor the delivery of services to patients according to the severity of their headache illness rather than a more generic approach. The model includes time for a more extensive initial assessment of the patient (which can take up to 90 minutes) to increase diagnostic accuracy and promote the successful triage of patients from primary care providers to more specialized services. In addition, willing practices could accept larger bundled payments, initially or over time, which would link payment to performance for all other headache-related services that patients with headaches receive.

Model participants would form headache care teams comprised of a primary care provider (PCP), a headache specialist and/or neurologist, an ED, and as indicated by the patient’s comorbidities, additional health care team members (i.e., physical therapist, mental health care provider, or pharmacist). Medicare patients who list headache as the primary reason for a visit would be eligible for inclusion in the model.

Outcomes and quality metrics used to evaluate the model include utilization and cost measures (avoidance of imaging, costs of headache-related medications, and rates of ED visits and hospitalizations) as well as care quality and outcome measures (frequency, severity, and disability related to headaches, medications for acute pain, overuse of barbiturates and/or opioids, quality of life, patient satisfaction with provider, and preventive screening for alcohol use and depression). Some of these quality measures overlap or are identical with the quality measures used in the AAN measure set. There are currently 10 AAN guidelines related to headache management for specific care practices (such as, for example, Botulinum neurotoxin for headache treatment and the use of electroencephalogram in the evaluation of headaches) rather than to overall care and assessment as described in the proposed model.

Other Models

The Health Care Innovation Award (HCIA) model for chronic pain management by the Mountain Area Health Education Center (MAHEC) developed a multidisciplinary team-based approach to the care of patients who have chronic pain and use opioids. This care model includes behavioral health providers and other clinicians as part of the care team to manage pain and to wean patients off opioids when possible. Although headache patients or neurologists are not excluded explicitly, the ICD-9 codes used to describe eligibility for the model does not include the specific ICD-9 codes for different types of chronic headache syndromes. Thus far, qualitative results from the MAHEC model suggest improvements in patient quality of life and disease management, which was partially attributed to the use of protocols to
reduce opioid use and addiction. Quantitatively, there were no definitive changes—increases or decreases—in the utilization of services or total cost of care as a result of the model.

References


PHYSICIAN-FOCUSED PAYMENT MODEL
TECHNICAL ADVISORY COMMITTEE (PTAC)

PRELIMINARY REVIEW TEAM (PRT)

CONFERENCE CALL
WITH CLINICAL EXPERT
REGARDING
THE AMERICAN ACADEMY OF NEUROLOGY (AAN)
PROPOSAL

Friday, January 26, 2018
11:00 a.m.

PRESENT:

ROBERT BERENSON, MD, PTAC Committee Member
RHONDA M. MEDOWS, MD, PTAC Committee Member
KAVITA PATEL, MD, MSHS, PTAC Committee Member

LOK WONG SAMSON, PhD, Office of the Assistant Secretary for Planning and Evaluation (ASPE)

ANJALI JAIN, MD, Social & Scientific Systems, Inc. (SSS)

MICHAEL RUBENSTEIN, MD, Associate Professor of Clinical Neurology, University of Pennsylvania Perelman School of Medicine; Attending Physician-Neurology, Children’s Hospital of Philadelphia
PROCEEDINGS

[11:07 a.m.]

DR. RUBENSTEIN: Hello.

DR. SAMSON: Hello. This is Lok Wong Samson from ASPE (Office of the Assistant Secretary for Planning and Evaluation). Sorry for the delay in initiating the call.

DR. RUBENSTEIN: Oh, not a problem.

DR. SAMSON: Who's on the line?

DR. RUBENSTEIN: This is Mike Rubenstein.

DR. SAMSON: Hello, Dr. Rubenstein.

DR. PATEL: Kavita Patel.

DR. BERENSON: I think you should probably do a roster call rather than us all speaking up, and ask who's available, who's on.

DR. SAMSON: Okay. I heard Dr. Rubenstein, Kavita Patel, Bob Berenson. Is Rhonda Medows on the line?

DR. MEDOWS: Yes.

DR. SAMSON: And this is Lok Wong Samson. Is anyone else on the line? Is Mary Ellen on the line?

[No response.]

DR. SAMSON: Anjali Jain?
DR. JAIN: I'm here. Hi, Lok.

DR. SAMSON: Hi.

Okay. I think we could get started, then. I'll hand it back over to you, Bob, for the discussion.

DR. BERENSON: Okay. I'll start. I'm all congested, so I'm hoping other people carry the ball more than me. I'm Bob Berenson.

Dr. Rubenstein, thank you very much for doing this. You haven't done one of these before, have you?

DR. RUBENSTEIN: No, I have not.

DR. BERENSON: Do you have any questions about the process, you know, just the rules and what this is all about? Should we go over some of that, if there's any uncertainty?

DR. RUBENSTEIN: I mean, I kind of have a pretty good feel. I mean, we'll see how much we can get done. I mean, I think I'm -- my feel is that I'm kind of at your disposal to answer questions as well as to give you perhaps a little bit of my input from a perspective of a private previous -- previous employment as a private-practice neurologist and now academic neurologist.
DR. BERENSON: That is right. I just want you to understand that we are transcribing this, and it will be part of the public record.

DR. RUBENSTEIN: Okay.

DR. BERENSON: So we all are careful about the words we use. So, this is a public discussion, essentially, even though we're among friends.

DR. RUBENSTEIN: Okay. Yes.

DR. BERENSON: And I guess the other thing I would want to emphasize now, have you received and been able to read their proposal, as well as their responses to the questions we posed to them?

DR. RUBENSTEIN: Yes. I've read -- I've read -- gone through the proposal as well as both of the documents regarding the responses, as well as additional documentation, Table 1, and also the Cleveland Clinic intake information.

DR. BERENSON: Okay. Well, then you've got -- you've got what we had.

Now, we had a phone call with the -- with the proposers earlier this week, on Wednesday, I guess it was. And there is a chance that they -- based on the discussion, they will consider revising and resubmitting. That's not by any means
a commitment that they were willing to make on the phone, but they might be thinking about it because there was something of a disconnect.

And, indeed, I'll try to explain that, and then maybe my colleagues on the call can clarify if I don't get this quite right, but --

DR. RUBENSTEIN: Just so I'm clear, the submitters are the AAN (American Academy of Neurology)?

DR. BERENSON: The AAN, yes.

DR. RUBENSTEIN: Okay.

DR. BERENSON: And, I'm blanking on the physician. What's the name of the physician from Rhode Island, who was the main speaker?

DR. SAMSON: Oh, that was Dr. Joel Kaufman.

DR. BERENSON: Joel Kaufman. I don't know. Do you know him at all -- personally?

DR. RUBENSTEIN: I do not, no.

DR. BERENSON: Okay. This was the AAN, but we've learned there was a committee that had some internal disagreements in the proposal, reflected a decision, and in fact, here's what I was going to say, is it seems to me -- and we
haven't -- the three members of our PRT (Preliminary Review Team) actually haven't debriefed with each other yet as to whether what I'm about to say is correct -- that the letter we received actually isn't relevant to clarify anything.

And here's the point I want to try to make. As I understood it, they are very much committed to the appendix that lists the ICD-10 (10th Revision of the International Classification of Diseases) diagnoses for which they want the payment model to apply to. [There] are really various variations of migraine and cluster headaches, and even though the response letter talked about all the challenges and diagnosis for other conditions that present often in a senior population -- this is, after all, a Medicare proposal -- the payment model would not apply to making those diagnoses.

So, for example, if in fact after an evaluation, they determine that the headaches were from cervical arthritis, or from temporal arteritis, or perhaps from depression, and another physician in a different specialty was ultimately
going to be the sensible physician for that doc, that wouldn't be part of his payment model at all. It really is about managing, even less than diagnosing, and more about managing a migraine and its cousins.

Kavita or Rhonda, do you agree with how I've characterized that?

DR. PATEL: Yeah, Bob. This is Kavita. That's how I interpreted it as well.

DR. BERENSON: So, even though the response -- so some of us, when we read the initial proposal, we're saying -- I mean, that's why we had some questions that were related to well, how much is an issue of which diagnosis --

DR. RUBENSTEIN: Right.

DR. BERENSON: -- of migraine in a Medicare population, and even in management. And the response said, "Oh, no, there's all these other conditions." In fact, there are not all these other conditions. There’s really management of migraine, so that was the point I wanted to make, and let's just let you talk a little bit about what your reaction was.

DR. RUBENSTEIN: Well, yeah. So, the very
first note that I had written on my sheet of comments was that the Appendix B had very limited diagnoses that I think would -- if you're speaking about primarily the Medicare population, though we certainly treat many, many Medicare patients who have migraine headache, it is tremendously skewed against migraine headache in that population age.

So, you know, the migraine -- the migraine headaches that we're typically treating are going to be in a much younger population, in fact, even a pediatric population. Whereas when you get into the Medicare population, that percentage drops dramatically when you look at the entirety of headaches. So, in other words, the incidence of migraine is still there, but the other headaches play a much larger role.

And, in fact, you think about other than cluster headaches, you think about the other primary headache syndromes that we see, like hemicrania continua and paroxysmal hemicrania and hypnic headaches and tension headaches and cervicogenic headaches, and they begin to occupy a much greater percentage of the population over -- when you're dealing with Medicare.
DR. BERENSON: Okay. So that sort of confirms what we were thinking. Is it that migraine -- the natural course of migraine is it becomes less of a problem, or is it that people are under the reasonable management and have their migraine under control, or some combination?

DR. RUBENSTEIN: It's the combination of those things, I think. So, first off, migraine is a childhood diagnosis, and so --

DR. BERENSON: Right.

DR. RUBENSTEIN: -- when we see a headache patient, we consider migraine onset typically to be in childhood and adolescence and early adulthood. Migraine doesn't begin at age 40 or 50.

When we see a patient, even if it sounds like classic migraine, over the age of 40, that's considered to be a red flag, requiring a different management than you do for a patient who's younger. Unless, of course, a patient comes in who has a really good history and says, you know, "I've had these headaches since I was a kid. I've never seen anybody for them before. They've never changed. They're exactly the same," and you're making the brand-new diagnosis of migraine in a patient who's
50 but has had migraines for 35 years.

But for the most part, if you're seeing a new patient with new onset headache in the older population -- and when I say older, that could be over the age of 40 or 50 -- we begin to see the types of headaches change dramatically at onset, and so you're dealing much more with -- you know -- when we talk about the demographics, that older age group is going to be presenting with different headaches, the primary headache syndromes other than migraine, cluster -- including cluster headaches, and then secondary headaches. So, we begin to worry about patients who have a headache from mass lesions or a headache from --

DR. BERENSON: Mm-hmm, mm-hmm.

DR. RUBENSTEIN: -- temporal arteritis or headaches associated with other systemic diseases.

DR. BERENSON: Okay. So that's very helpful. So if you had to choose, if it were mutually exclusive, either a payment model that supported more accurate diagnosis of seniors who present with difficult-to-diagnose headaches or a payment model that was focused on managing migraine, which would you opt for?
DR. RUBENSTEIN: Oh, I would opt for the former.

DR. BERENSON: Yes.

DR. RUBENSTEIN: I would think that trying to put together this type of a program -- because what you're looking at, I mean, if you look at it that somebody would take the initiative to put together a comprehensive headache program, essentially which is what this is, where you would have other personnel that you would be supporting with the payments through this type of a payment program, you would need to include other headache types. Otherwise you would end up, in some way, trying to treat the patients who had other types of headaches and didn't have migraines with the same kind of protocol, and you would be -- wouldn't be reimbursed for it.

DR. BERENSON: Yeah. So they -- I mean, on that specific question, the response basically was, well, that will be done through the traditional fee schedule. The diagnoses of all these other conditions, if they don't fall into that list of ICD-10 codes, we're not asking for support for that. We want to manage migraine
better or migraine and cluster better. Is there
even a need for this whole team to manage migraine,
a nutritionist and an advanced practice nurse?
And, I mean, it seems like overkill for managing
migraine, and yet no way -- specifically excluding
the difficulties of the diagnosis.

DR. RUBENSTEIN: Well, you know -- it's
putting me in a bit of an awkward position because
I would agree with you 100 percent that -- that I
kind of was wondering -- The only thing that I
could guess was that the AAN's proposal was to try
to create a model utilizing Medicare, perhaps, but
then that the other payers would then follow --

DR. BERENSON: Yeah.

DR. RUBENSTEIN: -- and that being a
strategy. But then, it seemed to me that that would
have to be something that would be acknowledged on
the front end --

DR. BERENSON: Yeah.

DR. RUBENSTEIN: -- to make sure that
people understood that that was the purpose.
Because I would agree with you a hundred percent
that looking at this, you know, when I think -- and
I -- so I've been in practice for 30 years. I
I don't have a headache fellowship training, but I'm kind of like the de facto headache person here at Penn, and [I] treat a tremendous number of headaches. Both in children, because I'm also on faculty at CHOP (Children's Hospital of Philadelphia) -- and so I treat kids, and I treat, you know, adults, and I treat [the] geriatric population.

And, in the geriatric population, though I have a huge number of patients with migraine, to be honest with you, the elderly patients with migraines, with a migraine diagnosis, and that is what you're treating -- in other words, patients could have a migraine diagnosis, and they could also have medication overuse headaches and other headaches too. But when you're dealing with a patient with just migraines in the elderly population, those tend to be the easier patients to treat.

DR. BERENSON: Yeah, yeah.

So, I'm going to finish and then turn it over to my colleagues, but the final point I'd make is that the only logic I could figure out here -- and reading between the lines of some of what they
wrote -- was that there's not enough neurologists really to do an adequate job with difficult-to-diagnose headaches.

So if, in fact, we offloaded from the physician some of the management of the migraine to advanced practice nurses and other members of the team, that would free up some more time for the neurologist, him- or herself, to spend time on those other patients who are difficult to diagnose. That's the only logic I could figure out here. They didn't say it that way.

DR. RUBENSTEIN: I would agree. So I would agree with that, but what it ends up being is that those are the easier patients we tend to treat.

DR. BERENSON: Right.

DR. RUBENSTEIN: It still falls short kind of in what your goal is. And that is -- and so, as a model -- as a model of a headache clinic, this is a wonderful proposal, if it was not just for Medicare patients and not just for those diagnoses. This is essentially how I would recommend. I use a nurse practitioner that I work with together. She and I both see patients together, and
what I do is when I'm seeing a new patient who has headache and I want to then -- and the patient now is easier to manage, she typically follows those patients for me, and I don't see those patients again.

DR. BERENSON: Mm-hmm, mm-hmm.

DR. RUBENSTEIN: And the patients are happy, and they're well controlled, and we do all that together. And so we already kind of have a little bit of that. We don't have the other support, like social services or physical therapy, or we don't have a coordinator, we don't have an intake manager. Those are the things that would be wonderful to have, and as a general principle and looking at it as a large-scale program, this is wonderful.

But, I think limiting it, it really -- it really kind of like handcuffs you, and it would end up being that the patients that you would want to use this for, which were the patients that were more difficult, perhaps non-migraine patients, don't fall under this program.

DR. BERENSON: Okay. So let me turn it over to Rhonda. Do you have questions for the
doctor, for the good doctor?

   DR. MEDOWS: I think both of you did a
great job of clarifying and answering 95 percent of
my questions, just in the first few minutes of the
conversation. So, thank you for doing that.

   I do have one other question, and that is
about what exactly is a headache specialist? Is it
limited to a subset of neurologists? Is there an
actual official specialty?

   DR. RUBENSTEIN: Yes.

   DR. MEDOWS: And is it limited to
neurologists or the internist? Is it pain -- what
is that?

   DR. RUBENSTEIN: So, in my world,
headaches -- there are fellowships in headache, and
so just as a neurologist can do a full residency
and then go on and do a headache fellowship. I
believe those fellowships are also open to
internists, so somebody could do a medicine --
somebody could do a medicine residency, internal
medicine, and then could also probably do a
headache fellowship.

   And so, a headache specialist is what we
-- When somebody says that, we consider that to be
a fellowship-trained individual who has done extra
training beyond the normal -- the normal training
for neurology.

And then there are those of us who are
kind of grandfathered in to some degree. So, when
I trained 30 years ago, there really were very few
headache fellowships. There were some, and I
probably could have done one. So there are people
like me who treat lots of headaches, who are not
necessarily fellowship-trained.

And so I think in limiting it to saying it
would have to be a fellowship-trained person that
would probably be narrowing the people that do it.
I think mostly a headache specialist is somebody
who feels comfortable in treating headaches and has
experience.

You know, obviously, people can call
themselves whatever they want to call themselves,
and so you would hope that that wouldn't happen,
and -- but it does. I mean, there are people that
just call themselves specialists, and hopefully
those things kind of come out in the wash, that
those people don't end up being able to practice
very long if they're not very good at what they do.
But I think limiting it beyond that is kind of tough.

DR. MEDOWS: No, it just sounds like the whole proposal is getting narrower and narrower. A small segment of the Medicare population would be impacted, right? Most would either [sic] be diagnosed already. Anyone that would be newly diagnosed would have had a longer history. That would be more consistent with migraine, cluster, et cetera.

Then we'd have a smaller subset of neurologists, internists who may meet the criteria of whatever the applicant is calling a headache specialist. It's just like it's getting a tinier and tinier proposal with each passing minute. Am I --

DR. RUBENSTEIN: Yeah. I mean, I think -- I think -- no, I think -- I think that, like, you know, I've said before that I think the diagnosis of migraine -- the way I look at how this would work, you know, would be if you had some intake form, and on the intake form, there was something when it was reviewed, it would be said that, "Okay, this person probably has migraine, and so we'll go
ahead and bring this person in under this kind of program."

If the person on the intake form didn't have migraine based on the questionnaires that they had, then you would kind of bring the person into the headache clinic, but it would be on a fee-for-service basis.

I mean, ultimately, I could see myself -- I, like I said, I tend to be the de facto headache person here at Penn. We do not have a headache clinic at the University of Pennsylvania.

We do have a fellowship-trained headache person who practices in the community, but is not part of the faculty at Penn from a standpoint of practicing at the hospital.

We don't have an organized clinic. I would love to have that type of thing, and we've looked at recruiting people. So we actually have somebody that we're recruiting to do that.

But I would agree with you that -- I'm not sure that the headache specialist part of it necessarily limits it because I don't think they defined who a headache specialist was, per se, so they -- other than somebody, again, having
experience in treating headache.

DR. MEDOWS:  Okay. And I also just want
to wrap up and say I appreciate the comment in
pointing out that this would be [an] even more
valuable model if it was extended into the
commercial or -- and/or Medicaid space, right, for
-- to, in fact, a younger population as well.

DR. RUBENSTEIN:  Absolutely.

DR. MEDOWS:  Thank you.

DR. RUBENSTEIN:  Yep.

DR. MEDOWS:  Thank you for your input. I
mean, this has been great.

DR. BERENSON:  Thank you, Rhonda.

I just wanted to just follow up on one
question Rhonda asked and then turn it to Kavita.

At the University of Pennsylvania, do they
try to channel the patients to the headache person,
or do most of the neurologists also manage headache
patients competently?

DR. RUBENSTEIN:  No. So we -- so the way
it -- the way we work here at Penn from an academic
standpoint is we have -- we have multiple specialty
-- subspecialty groups. So we have neuromuscular,
multiple sclerosis, movement disorder, epilepsy,
and those are all subspecialty groups where patients are kind of triaged that go to those places.

And then we have a general neurology division, and I'm one of the members of the general neurology division. So our headaches fall under the general neurology division, and so if a patient calls and has a headache, they're going to get referred into the general neurology division.

Currently, there's several of us that see headaches that have indicated that we're happy to see headaches. I like to see headache patients. I feel like I do a good job with headache patients, whereas several of my colleagues who are in the general division prefer not to see headaches. And so we kind of have just done it that way. And so those patients get sent into us.

Now, places like Thomas Jefferson University, which has one of the primary headache centers in the country, which is Steve Silberstein, who used to be [at] the Germantown Headache Clinic and is now [at] the Jefferson Headache Clinic, they have a freestanding headache clinic with a headache fellowship. It's a very well-known, prominent
headache center. It's in Philadelphia here.

I see a lot of patients that have been seen there that come to see me who -- for whatever reason, they work on a -- pretty much on a private pay basis, I believe, and they have -- it's multidisciplinary, so they have -- they do neuro-psych testing, they have psychologists, they have nurses, they have all those things, similar to what this model is. But they work on a private pay basis there.

DR. BERENSON: Okay. Kavita?

[No response.]

DR. BERENSON: Kavita?

[No response.]

DR. BERENSON: We've lost her, I guess, or she's a long way from her mute button, one or the other.

Let me just follow up, then, with one or two more that I was then going to ask. Which is, they sort of argued very early in their proposal that for purposes of adequately diagnosing complicated headaches or -- I guess their language was complex undiagnosed headaches -- the Medicare fee schedule is inadequate. It doesn't pay for --
enough for -- or have codes that are appropriate.

What's your sense of the adequacy of the fee schedule for the time you spend with patients taking history, doing physicals, and diagnosing their problem?

DR. RUBENSTEIN: Well, I mean, partially. I would say that -- okay, first, I work now -- I'm now in academics. I've been at Penn for four years.

DR. BERENSON: Okay.

DR. RUBENSTEIN: I was previously the managing partner of a large -- large neurology group. We had up to eight individuals and, I think, six when I left, and I was the managing partner for 24 years of a private practice. That practice was pretty high-level. We were in the Philadelphia area.

You know, here, I spend an hour -- I have an hour to see a new patient, and I feel that that's an adequate amount of time for me to see a new patient. I feel that for -- that the reimbursements are -- I don't have a difficult time doing what I do with the reimbursements from a relative standpoint.
So I think what you missed, though, is you missed what they're getting at here, which is that the difficulty is that -- is not having the availability of the intake forms. I don't use intake forms. I have kind of a standard -- you know, so nobody has filled anything out before they come to see me. I take all the history when I'm there, and what happens is that allows you to have an intake person who can screen people, make sure they're appropriate, and make sure we have the appropriate information, the right records. The patient then is seen by me or by the neurologist who then gathers the data and comes up with the game plan and makes the diagnosis.

It would be wonderful to have the availability of having a support person after they saw me, where the patient could sit, could go over the -- could go over everything again.

I think that if you look at the big picture, being able to do that -- and this would be including the Medicare population -- being able to do that would increase the likelihood of success in treating patients. So, many patients come back for a second visit and just need to understand all of
the instructions, even though we perhaps wrote them down. So reinforcing them would be helpful, having somebody to perhaps call and check on patients to see how they're doing after the visit and whether they're following through with the plans that were developed, and then also having additional support staff.

You know, a nutritionist, so-so. Physical therapist could be helpful perhaps. I think those things would work, so that would be -- that would be the benefit.

So I can provide the care that I'm currently providing with the current -- with the current payment model, but what I can't do is I can't have all the supportive staff that are mentioned in this proposal.

DR. BERENSON: Yeah, yeah. So one approach to that then would be, as some of my non-PTAC work is involved with, is valuing evaluation or management services higher and reducing the payments from procedures and test interpretations in the --

DR. RUBENSTEIN: Yeah. Well, as a neurologist, that's music to my years.
DR. BERENSON: Yeah. So, basically, I mean, if you had 25 percent or 40 percent more payment in your E&M (evaluation and management), you could then support --

DR. RUBENSTEIN: Yeah.

DR. BERENSON: -- some of those other staff, right? I mean, that's different from, let's say, the PT (physical therapist) or the nutritionists, who are separate professionals, but in terms of supporting your work and diagnosis, that would be a different kind of an approach, right?

DR. RUBENSTEIN: Yes. I could have a medical assistant who could -- you know, we could cover part of the medical assistant’s pay, and we could have them screening people and doing kind of follow-up education, which their medical assistant is perfectly capable to do that.

DR. BERENSON: Yeah.

So, Kavita, did you rejoin us?

[No response.]

DR. BERENSON: I guess not. I heard three new bells go off.

DR. MEDOWS: It's weird. It came in and
DR. BERENSON: Oh, are you there?

DR. MEDOWS: No, this is Rhonda.

DR. BERENSON: Oh, okay.

DR. MEDOWS: So the alternative to -- so adjusting the E&M code would be an alternative to perhaps the care management fee that's proposed?

DR. BERENSON: Well, that's what I'm suggesting. I mean, I think systematically -- and I've written about this -- is that the fee schedule is tilted, pays much -- two times -- two to two-and-a-half times more for [unintelligible] work for minor procedures -- I'm going to ignore major procedures -- for minor procedures and for test interpretations. And if we corrected those distortions, that would pay lots more. For example, a level -- I assume you do a lot of Level 5's for new patients and Level 4's for -- 3's and -- well, mostly 4's for follow-up patients that you'd see with --

DR. RUBENSTEIN: Yeah. Most of my follow-ups are probably Level 4. I spend half an hour typically with follow-up patients, and most of my new patients are probably Level 4 and 5, about 50-
50, and rarely do I have a Level 3 because I rarely have that simple of a person because we see more complex diagnoses typically at Penn, you know, just that are being referred down here.

But, yeah, I think that -- I think that if you looked at the ability -- if we're looking at the big picture here -- and the big picture is -- are issues with -- so I think the diagnosis part isn't the problem.

My feeling is that the diagnosis in bringing people in and coming up with a diagnosis and even the initial management is not the big issue. The big issue is in compliance, and so when you look at the cost of caring for especially headache patients -- and the cost of caring for headache patients, especially with medications and everything else, and emergency room visits, you're really looking at the compliance issue and follow-up and support.

So if I saw a difficult-to-manage patient or difficult-to-diagnose and came up with a game plan -- they'd been on a number -- like I saw a person this morning just like this, and it was a young person, it wasn't a Medicare patient. But, I
came up with her game plan, and I think she'll do
find because she was insightful, but if she wasn't
insightful, I would have loved -- I would love to
have somebody to send a message to a support person
and say, "Call this person in a week, and make sure
you're sticking to what the plan was and go over
everything," because that's just going to give you
a much, much higher rate of success in treating
that patient.

DR. BERENSON: Mm-hmm. Okay. So it turns
out that Kavita has been trying to be on this call
but keeps getting dropped for reasons [sic].

Do we have other people who are on the
call -- still on the call? Have we lost other
people?

DR. SAMSON: Anjali, are you still on the
call?

DR. JAIN: I'm still here.

THE REPORTER: The court reporter is still
here.

DR. BERENSON: Did somebody just join us?

[No response.]

DR. BERENSON: Well, okay. We're only
going to go another five minutes or so, I think.
So I'll just ask Kavita's question that she emailed to me.

DR. RUBENSTEIN: Okay.

DR. BERENSON: In their proposal, they had mentioned from some MEPS (Medical Expenditure Panel Survey) data that the cost associated with a visit for headaches is $4,000, and I think on the call we had on Wednesday, we clarified that that $4,000 was the annual --

DR. RUBENSTEIN: Correct. Yeah, that's what I would have imagined.

DR. BERENSON: So, but we still don't know if that includes Part A or Part B, or is it just related to headache costs or not, but do you have any speculation about what that might represent? We're trying to pin that down. Is it drugs? Is it everybody getting imaging? What thinking might you have had in seeing that number about what that could be about -- and the opportunities for reducing that amount?

DR. RUBENSTEIN: Yeah. I mean, I think that amount would -- so I think that amount probably is greatly impacted.

I think the imaging can certainly be
curtailed by having specifically headache specialists and having, you know, protocol-driven management of these patients, where you're not scanning everybody, and you're, you know, trusting your exam and trusting your history.

I think the place where -- the part that this type of plan would be the greatest in, would be preventing emergency room visits and admissions, because that's going to drive that price up. That annual cost for a headache patient is going to drive them up dramatically.

So, you have one migraine patient go to the emergency room a couple times, you're double that, probably -- that annual cost, and if they have one admission, you're even beyond that.

DR. BERENSON: What would be the typical reasons they go to the emergency room? Intractable vomiting? Severe pain? What would be the reasons for migraine patients?

DR. RUBENSTEIN: It would be -- it would be a patient who has -- I mean, who has intractable pain or vomiting, and those are things that can be often head off at the pass by having follow-up and having constant contact with people. And so we
frequently see -- I also staff the residents’ clinic here, and the residents’ clinic at Penn is often patients who basically are either indigent or have other insurances that have come to see them. And those patients are sometimes difficult to manage and have made several emergency room visits in the interim.

So, it's not uncommon for me to staff a patient with a resident who's had two emergency room visits in the prior three months before they came. The hope is that those patients would have tried to contact us to prevent that emergency room visit, or we would have been notified, but it's often in different systems, and so we often don't get information regarding it.

DR. BERENSON: Yep.

So let me ask one final question, and then I think we'll shut down. I'm going to take advantage of having you here and ask something that wasn't part of their proposal.

To what extent do you think primary care physicians, internists, family physicians, and pediatricians could do a much better job with diagnosing and managing headache if there was some
kind of mentoring program going on with headache specialists? There are some programs that actually either do tele-mentoring or one-on-one mentoring. Do you have any experience or any observations about the opportunities for improving the primary care management of headaches?

DR. RUBENSTEIN: Well, interestingly, I've always been an educator, and before the more recent pharma guidelines that limited physicians, pharmaceutical companies, and allowing me to say go do a lunch talk for primary care, I took a role basically to do education. I considered it disease-state education, and I used to go to primary offices at lunchtime and spend -- and it was always kind of comical because the drug reps would say, "Gosh, we've never seen these primary care doctors spend this much time at lunch." And I would spend an hour talking to them about migraine.

And we know from studies that primary care -- that they're most often diagnosed as sinus headaches, migraines are, and there is no ICD-9 or ICD-10 code for sinus headache, there’s -- for headaches related to acute rhinosinusitis, perhaps.

So many of these patients, and the entire
pharmaceutical world who advertises Tylenol Sinus and Advil Sinus, everybody thinks they have sinus headaches. So I think that a mentoring process would work really well. How to support that would be another matter.

I do think that I've always taken -- I've always said that as neurologists, we have guaranteed -- we have a guaranteed future because it's kind of a touchy-feely specialty, that -- it's very difficult for other people to pick up because you're not doing tests. It's a lot of history taking and a lot of gestalt.

DR. BERENSON: Yeah.

DR. RUBENSTEIN: And it passes over a lot of people. It passes over even the very best internist that I've worked with in my career, unless they're focused on that. So unless it's a focus of theirs, it's really tough to get it. So I'm really -- I'm a bit skeptical that they can do as good a job as a neurologist, but I do think that -- what I always -- what I always felt was that I could give them the information they needed to know when they should send a patient to a neurologist.
DR. BERENSON: Mm-hmm. Okay.
And it was interesting that they did have
-- I mean, that there was some language in their
proposal about creating a team, including the
primary care physician, but when we probed a little
bit, it's not real. There is no primary care
physician, and I don't --

DR. RUBENSTEIN: Yeah. I mean, in the big
picture, if you could include the primary, I would
have no problem, if I had a stable patient, sending
that patient back to the primary saying, "Here's
what I'm prescribing. Here's what I'm doing. As
long as nothing changes, please continue, and
follow the patient up and prescribe these
medicines." And to include the primary care doctor
and that care team.

I mean, how that works from an EHR
(electronic health record) standpoint is another
matter because our EHRs don't talk to each other.

DR. BERENSON: Right.

DR. RUBENSTEIN: But if you did that in a
letter form or somehow to do that, how to include
them in the financial part of it, I'm not sure,
unless it was a system approach where they were all
part of the same health system.

DR. BERENSON: Yep, yep.

Well, we've gone up to our time limit. Now let me just process-wise say that it is possible that this proposal will be revised, and if so, we may need to -- if it's substantially different from what we saw, we may want to get back in touch with you.

If it's really sort of cosmetic changes and it's really the same proposal, chances are we would not need to be in touch, so we're just not sure how this will evolve. But we want to thank you very much for the time you've given us. It's been very helpful in many ways confirming what we were beginning to move towards but with more precision than what we're capable of doing.

So thank you very much.

DR. RUBENSTEIN: Yeah. No, it's my pleasure. I'd be happy to hear back from you to give you whatever other assistance -- I took it on because I felt like it was a really interesting idea, and I wanted to actually be helpful and be a part of it to some degree.

DR. BERENSON: Well, you have been, so
thank you very much, and I'll let you get on with
your day.

DR. RUBENSTEIN: Okay. Take care.

Thanks.

DR. BERENSON: So the rest of us will stay
on the call.

DR. RUBENSTEIN: Okay. Take care. Bye-
bye.

DR. BERENSON: All righty. Bye-bye.

[Whereupon, at 11:45 a.m., the conference
call concluded.]