

DRAFT – FOR DISCUSSION ONLY
AN ALTERNATIVE PAYMENT MODEL FOR
PATIENT-CENTERED EPILEPSY CARE

CONTENTS

I.	Overview of Patient-centered Epilepsy Care Payment	2
II.	Goals of Patient-centered Epilepsy Care Payment	5
	1. Improving Outcomes for Patients and Controlling Costs for Payers.....	5
	2. Resolving the Barriers in Current Fee-for-service Payment.....	6
III.	Separate Payment Categories for Distinct Phases of Patient Care	7
IV.	Eligibility to Receive Patient-centered Epilepsy Care Payments	9
	1. Eligible Patients	9
	2. Physician Practices Eligible to Participate.....	9
	3. Patient Designation of Epilepsy Care Teams.....	10
V.	Structure of Payments in Each Phase of Care	12
	1. Basic Bundled Payment	12
	2. Optional Larger Bundled Payments.....	13
VI.	Payment Amounts Stratified Based on Patient Characteristics	18
	1. Goal of Stratifying Payment Amounts.....	18
	2. Types of Patient Characteristics Affecting the Amount of Payment.....	18
	3. Defining Subcategories of Patients Associated with Differing Levels of Payment ..	19
VII.	Accountability for Spending and Quality/Outcomes.....	23
	1. Minimum Quality Standards.....	23
	2. Performance Measures.....	23
	3. Assessment of Performance.....	24
VIII.	Setting and Adjusting Payment Amounts.....	29
	1. Default Payment Amount	29
	2. Adjustment of Payment Based on Performance	30
IX.	Method of Billing and Payment	31
X.	Examples of How Patient-centered Epilepsy Care Payment Would Work for Hypothetical Patients	32

I. Overview of Patient-centered Epilepsy Care Payment

MACRA provides the opportunity for neurologists to develop and participate in new value-based models of care. The AAN has developed this patient-centered epilepsy care payment (PCECP) for that purpose. Most alternative payment models (APMs) in place at this time are primary care focused (e.g., Accountable Care Organizations [ACOs]) or bundled payment models around a procedure (e.g., total hip replacement), medical care (e.g., diabetes), or a hospitalization (e.g., CMS's Bundled Payments for Care Improvement initiative). Our goal is to present models that center on the patient and the specialty care and expertise that neurologists provide. The ultimate goal is for patients to have better health, less disability and disruption to their lives; reduced cost to payers and society; and neurologists to have greater satisfaction with their practices. We also endorse collaborative care across specialties, including those that specialize in internal medicine, family practice, pediatrics and others, reducing barriers to shared patient management, and enhanced communication regarding both stable and active patients. This PCECP promotes active alignment between neurologists and PCPs in any given community.

The Patient-centered Epilepsy Care Payment is an APM designed to give neurologists and primary care physicians the resources and flexibility they need to deliver accurate diagnoses and appropriate, cost-effective treatment for patients with epilepsy.

Today, physicians treating patients with epilepsy are paid based on the number of times the patient comes to the physician's office or the number of tests or procedures the patient receives (fee-for-service). There is no payment at all for many high-value services, such as phone calls to respond to patient problems, coordination with other physicians, and social and psychological services to patients, and payments are often inadequate to support the additional time and services needed by patients with more complex conditions. As a result, patients may be inaccurately diagnosed or incorrectly treated, they may experience seizures or side effects of medication that could have been avoided, and they may be hospitalized or be seen in an emergency department for problems that could have been prevented. (See Section II for a more complete list of the opportunities for improving care and reducing costs in the diagnosis and treatment of epilepsy and the problems with the current fee-for-service system that prevent physicians from making those improvements.)

To address this, Patient-centered Epilepsy Care Payment (PCECP) would replace current Evaluation & Management (E/M) payments with flexible monthly payments that could be used by neurologists or primary care physicians to deliver a range of services to patients with epilepsy without the restrictions in the current fee-for-service system. In return, those physicians would take accountability for controlling the cost and quality of the epilepsy-related care their patients receive. (See Section IV for a detailed discussion of the patients and physicians eligible to participate in PCECP.)

Because patients need different types of care during different phases of the diagnosis and treatment process, PCECP payments would be divided into nine categories corresponding to these different phases of care (see Section III for a more detailed description of the phases of care and categories of payment):

1. Diagnosis of a new patient with possible epilepsy

2. Initial treatment for epilepsy following diagnosis
3. Continued treatment for a patient who has well-controlled seizures
4. Supervised withdrawal from epilepsy drugs
5. Changes in treatment regimens for well-controlled patients
6. Management of pregnancy and epilepsy
7. Treatment planning for refractory epilepsy
8. Non-surgical treatment for refractory epilepsy
9. Surgery for epilepsy

In addition, because patients with different characteristics will need different amounts of services during individual phases of care, the payment amounts within each phase would be stratified based on specific patient characteristics such as their age, comorbidities, and ability to access appropriate treatments. (See Section VI for a more detailed description of the stratifications within each phase of care.)

In order to receive Patient-centered Epilepsy Care Payments, physicians would be expected to meet minimum quality standards developed by the American Academy of Neurology. In addition, the physicians would be accountable for maintaining good performance on measures of service utilization, spending, care quality, patient outcomes, and patient experience that are specific to each phase of care. The amount of payments they receive under PCECP would be adjusted up or down based on their performance on these measures. (See Sections VII and VIII for a more detailed description of the performance measures in each phase of care and how payment amounts would be established and adjusted based on performance.)

The basic Patient-centered Epilepsy Care Payment system is designed to be easily implementable by both physician practices and payers. The physician practice would bill one of a new series of service codes for patients with epilepsy instead of billing traditional E/M CPT codes, and the payer would pay the practice a pre-agreed amount for each of those new service codes, similar to a fee schedule based on CPT codes. The physician would determine the appropriate service code to bill for an individual patient based on the current phase of care for that patient and the characteristics of that patient. (See Section IX for a more detailed description of the billing and payment process.)

In addition, physician practices and health systems that were willing and able to do so could accept larger “bundled” versions of Patient-centered Epilepsy Care Payments. Instead of a monthly payment that is designed only to cover the clinical services directly delivered by the physician managing the patient’s care, these optional bundled payments would include the funds to pay for some or all of the other services that epilepsy patients receive. These bundled payments would give the physician practice greater flexibility to redesign the way care is delivered, but they would also require the physician practice to take greater accountability for managing utilization and spending. (See Section V for a more detailed discussion of the bundled payment options.)

Patient-centered Epilepsy Care Payment would enable neurologists to serve as a “specialty medical home” for patients with epilepsy or to work with primary care physicians or other specialists to co-manage the patient’s epilepsy and other health problems in a coordinated way. The flexible monthly payments under PCECP would be similar to the monthly per-patient payments being used in many

primary care medical home payment models, but in PCECP, the payment amounts would be specifically designed to meet the needs of epilepsy patients and the performance measures would be focused specifically on the types of services and outcomes relevant to epilepsy patients. In contrast to “shared savings” payment models, PCECP would not tie the physician’s payment to how much money they can save, but rather, PCECP would provide adequate flexible resources to the physician in order to enable them to deliver care in the most efficient and effective way possible to patients with epilepsy.

II. Goals of Patient-centered Epilepsy Care Payment

1. Improving Outcomes for Patients and Controlling Costs for Payers

Accurate, Efficient Diagnosis

- Reduce misdiagnosis of non-epileptic seizures and other neurologic conditions
- Reduce multiple referrals for diagnosis
- Reduce unnecessary referrals for diagnosis
- Reduce use of unnecessary testing for diagnosis
- Cost-effectively use advanced neurodiagnostic and genetic tests
- Reduce use of inpatient long term video EEG monitoring
- Reduce delays in determining diagnosis
- Avoid use of anti-epilepsy drugs for non-epileptic conditions
- Reduce avoidable problems and associated costs due to failure to diagnose
- Reduce loss of productivity due to failure to diagnose and treat effectively

Appropriate, Cost-effective Treatment

- Reduce frequency and severity of seizures through improved access to effective specialty treatment
- Minimize side effects of medication
- Identify comorbidities and coordinate treatments for epilepsy and other conditions
- Improve cognitive and behavioral outcomes for patients
- Reduce work absence and increase work productivity through effective treatment
- Reduce the risk of birth defects for newborns and reduce health risks to pregnant women through coordinated treatment during pregnancy
- Avoid drug interactions and complications for patients with comorbidities
- Appropriately screen for known medication side effects, such as osteoporosis
- Reduce unnecessary use of medications and use of inappropriate medications
- Use lower cost medications with equivalent effectiveness
- Improve adherence to treatment plans
- Improve access to support for psychiatric, psychological, and social service needs
- Reduce ED visits and hospitalizations due to seizures and complications of seizures (e.g., falls and motor vehicle accidents)
- Reduce injuries, disability, and mortality due to seizure-related motor vehicle accidents, stroke, etc.
- Improve control of refractory epilepsy and reduce long-run treatment costs through appropriate use of surgery and other advanced treatment alternatives
- Avoid unnecessary epilepsy-related surgeries
- Wean patients from medication when clinically appropriate
- Reduce complications and deaths due to overtreatment and undertreatment

2. Resolving the Barriers in Current Fee-for-service Payment

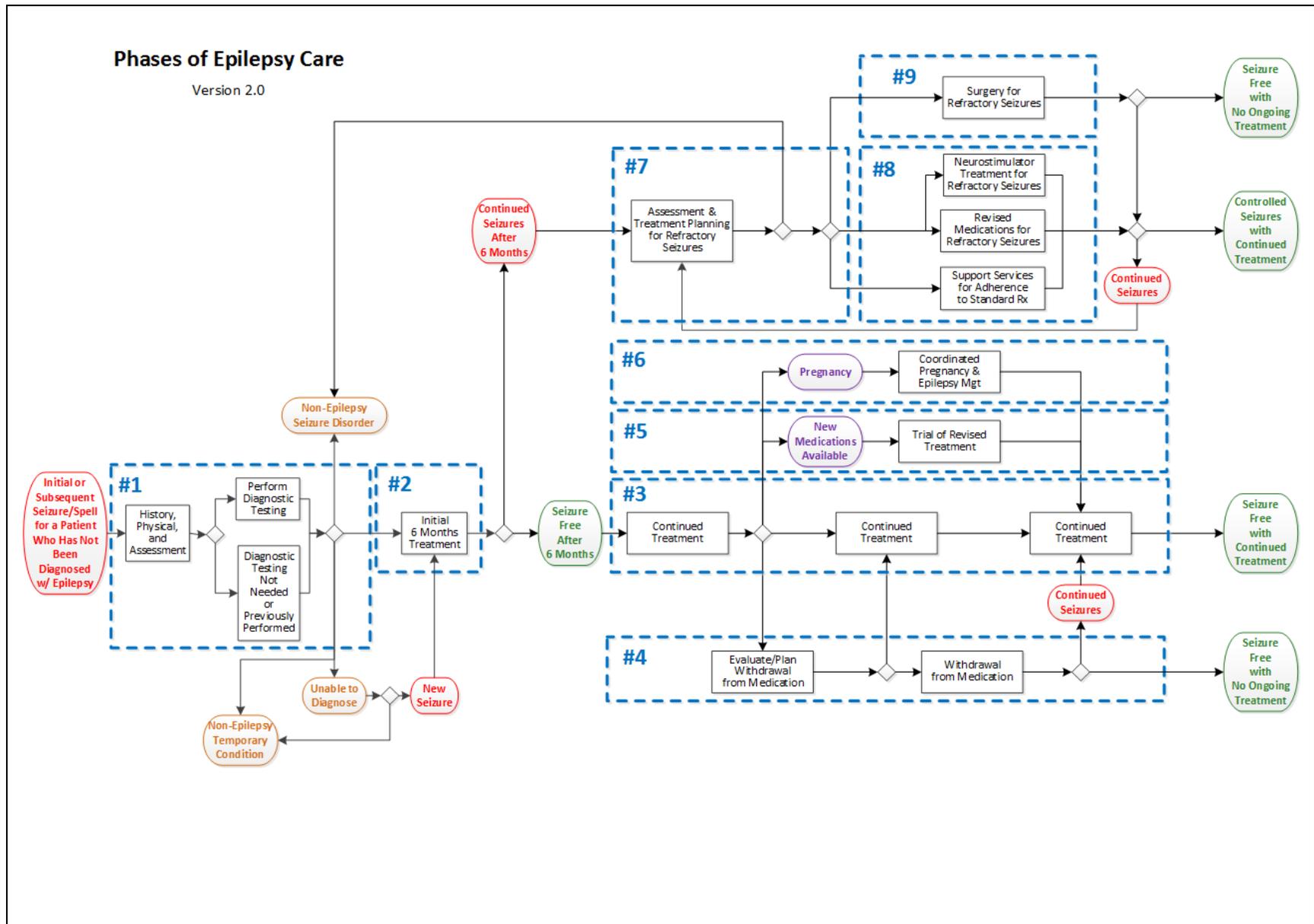
- Inadequate payment for time and skill needed to accurately diagnose cause of seizures
- Inadequate payment for detection of comorbidities
- Inadequate payment for time and skill needed to manage treatment of complex patients
- Inadequate payment for time spent with patients and family members in counseling, reviewing medication side effects, and encouraging medication adherence
- No payment for non-face-to-face contacts by physicians with patients to encourage medication adherence, respond to problems, etc.
- No payment for communications between and coordination among neurologists and PCPs/other specialists
- No payment for services to patients delivered by non-physicians, such as nurses and social workers

III. Separate Payment Categories for Distinct Phases of Patient Care

Individuals with epilepsy and potential epilepsy receive different types of care during different phases of the diagnosis and treatment process. Since the cost of the services patients need and the outcomes that physicians can help them achieve will differ significantly between one phase of care and another, a payment system designed to support patient-centered care will need to provide different payment amounts and/or set different performance standards in different phases of care.

To accomplish this, Patient-centered Epilepsy Care Payment (PCECP) would be divided into nine categories, corresponding to nine different phases of care individuals with epilepsy and potential epilepsy may experience:

1. **New Patient with Possible Epilepsy.** Payments for this phase of care would support initial evaluation, testing, diagnosis, and shared decision-making for treatment planning for a patient who has not been previously diagnosed with epilepsy and who is experiencing one or more spells or other problems that could be due to epilepsy. Payments would also support evaluation of a patient suspected of being misdiagnosed with epilepsy.
2. **Initial Treatment for Epilepsy.** Payments for this phase would support visits, communication, and care management for a patient for six months following initiation of treatment for a new diagnosis of epilepsy.
3. **Continued Treatment for Patient with Well-managed Epilepsy.** Payments for this phase would support continued treatment for a patient with diagnosed epilepsy whose seizures are well-controlled under anti-epilepsy medications or other evidence-based therapies.
4. **Supervised Withdrawal from Anti-epilepsy Drugs.** Payments for this phase of care would support shared decision-making and a supervised effort of withdrawal from anti-epilepsy medications for patients whose seizures have been well-controlled.
5. **Changes in Treatment Regimens for Well-controlled Patients.** Payments for this phase of care would support treatment planning and short-term enhanced care management services when there is a need to change medications or other treatments for a previously well-controlled patient (e.g., a new medication becomes available, seizures reoccur, a patient is planning pregnancy, etc.).
6. **Management of Pregnancy and Epilepsy.** Payments for this phase of care would support revisions in medication regimens and enhanced care management for patients who have epilepsy and are pregnant.
7. **Treatment Planning for Refractory Epilepsy.** Payments for this phase of care would support evaluation and shared decision-making about treatment options for a patient who has had continued seizures after adequate trials of two anti-epilepsy medications or other evidence-based therapies.
8. **Non-surgical Treatment for Refractory Epilepsy.** Payments for this phase of care would support services for patients who receive continuing treatment for epilepsy and continue to experience seizures. This would include patients receiving neurostimulator treatments, patients who have had continued seizures due to inability to adhere to medication regimens, and/or patients who continue to have seizures after surgery.
9. **Surgery for Epilepsy.** Payments for this phase of care would support neurology services associated with planning epilepsy surgery and assisting in recovery from surgery.



IV. Eligibility to Receive Patient-centered Epilepsy Care Payments

1. Eligible Patients

Table 1 describes the patients who would be eligible for care supported by Patient-centered Epilepsy Payments in each phase of care.

Since Phase 1 is designed to determine whether epilepsy is present, patients would be eligible if they have not previously been diagnosed with epilepsy and they experience one or more seizures, spells, or other problems suggesting that an evaluation for epilepsy by a neurologist is appropriate. In some cases, it may not be possible for a physician to make a determination of whether a patient has epilepsy based on the patient's symptoms and test results; in these cases, the physician practice could potentially receive a second Phase 1 payment at a later time, after another seizure or spell occurs, in order to make a diagnosis. A physician practice would be limited to no more than two Phase 1 payments for the same patient in a single year. If a patient needed or wanted additional evaluations from the practice, the physicians would be paid using standard E/M payments.

Patients would also be eligible for Phase 1 payment if they have received a diagnosis of epilepsy in the past and come to a new physician for treatment, but the physician suspects that the diagnosis may be inaccurate.

Phases 2–9 are designed to support treatment for patients who have received a diagnosis of epilepsy from a neurologist or other physician qualified to make such a diagnosis. A diagnosis of epilepsy would be based on the latest accepted definition of epilepsy, and would include patients who have had two or more unprovoked seizures more than 24 hours apart, a single unprovoked seizure with characteristics indicating a high probability for subsequent seizures, or a defined epilepsy syndrome that does not involve seizures but warrants treatment. However, the payments would not be intended to support treatment for non-epilepsy seizure disorders.

Patients who have not received a diagnosis of epilepsy would not be eligible for payments under Phases 2–9. Patients for whom a diagnosis cannot be made could continue to be followed with payment supported by E/M services payments. For patients with a diagnosis other than epilepsy, payments would be made using standard E/M services payments or an APM specific to that diagnosis.

2. Physician Practices Eligible to Participate

In general, a neurologist will need to make the determination of whether a patient has epilepsy and what the most appropriate treatment plan would be, so in most cases, Phase 1 payments would be paid to a neurologist or to a team of physicians including a neurologist. Similarly, Phase 7, which involves evaluation and treatment planning for refractory epilepsy, will require the skills of a neurologist who specializes in epilepsy care.

Once a diagnosis and treatment plan has been developed by a neurologist, the most appropriate physician to supervise the treatment will depend on the nature of the treatment, the characteristics of the patient, and the availability of neurologists and other physicians in the community where the patient lives. For some patients, their routine epilepsy care could be effectively managed by a primary care physician with support from a neurologist. For other

patients, a neurologist will need to play a lead role in managing care of the patient’s epilepsy, but the neurologist would need to work closely with the patient’s primary care provider (if the patient has a designated primary care provider) to enable the primary care provider to coordinate the patient’s care for epilepsy and other conditions.

Under Patient-centered Epilepsy Care Payment, a single payment would be made for all of the services in Phase 1, Phase 7, and Phase 9, and a single payment would be made for each month of care in Phases 2, 3, 4, 5, 6, and 8. This single payment could be shared by two or more physicians, e.g., a neurologist and a primary care physician, if each of physicians was playing a role in the delivery of care during that phase. If the physicians were in separate practices, the payment could be paid to one of the practices, which would then share it with the other practice, or the two practices could form a jointly-owned entity (such as a limited liability corporation) that would receive the payment and allocate it between the two practices, or if the practices were part of an Independent Practice Association (IPA) or a health system, the IPA or health system could accept the payment and allocate it between the practices.

Some patients will need coordinated services from neurologists and other specialists, such as OB-GYNs or family physicians during pregnancy, or surgeons for patients pursuing surgical treatment for epilepsy. Patient-centered Epilepsy Care Payments in Phases 6 and 9 are intended to support the time and activities of the neurologist, including the time the neurologist spends coordinating with other physicians, but the payment is not intended to directly support the time or activities of the other physicians.

In some cases, a neurologist may be the only physician treating the patient, or the patient’s epilepsy may be so dominant compared to the patient’s other conditions that it would be appropriate for the neurologist to take on the responsibility for coordinating all of the patient’s care. Higher payment amounts would be provided under Phases 3 and 8 to support this “specialty medical home” role when it is performed.

3. Patient Designation of Epilepsy Care Teams

Because the diagnosis and treatment services supported by Patient-centered Epilepsy Care Payments in each phase of care would be delivered over several days or an entire month, and because the physician or team of physicians receiving the payment would be accountable for spending and outcomes during that period of time, a patient would need to explicitly designate the physician or team of physicians receiving the payment as the patient’s “Epilepsy Care Team” and the patients would need to agree to receive all of their epilepsy-related services from the members of that team, or from other providers designated by that team, during the period of time covered by the payment, except in emergency circumstances. Since most payments would be made on a monthly basis, a patient would only be limited to using a particular set of providers for one month at a time. (This is similar to the way the Medicare Chronic Care Management payment is structured.) If the patient obtained non-emergency epilepsy-related services that were not ordered by members of the Epilepsy Care Team, those services would not be included in the spending measures for which the Epilepsy Care Team would be held accountable. It would be up to the patient’s health insurance plan as to whether the patient’s cost-sharing requirements would be higher for non-emergency services that were not ordered by the Epilepsy Care Team.

Before agreeing to serve as a patient’s Epilepsy Care Team, the Team could ask the patient to agree to take specific types of actions and follow specific guidelines designed to maximize the

Team’s ability to deliver care that achieves the best possible outcomes at the most affordable cost.

V. Structure of Payments in Each Phase of Care

1. Basic Bundled Payment

Bundled Payments for Epilepsy-related Physician Services

In each phase of care, a physician or team of physicians would receive either a single payment or a series of monthly payments to support all of the *epilepsy-related clinical services* that the patient needs from the physician practice(s) during that phase of care. These “bundled” payments would replace current E/M services payments for these patients, i.e., the physician(s) would no longer bill the patient’s payer (or the patient) for office visits during the phase of care covered by the payment, but instead would bill for the Patient-centered Epilepsy Care payment.

The physician/team would have the flexibility to use this payment in ways that are not currently permitted or adequately supported with E/M services payments, e.g., the payments could support non-face-to-face communications between physicians and patients (such as phone calls and emails), services delivered to patients by nurses and other practice staff, and longer visits for higher-need patients.

The new payment would only replace E/M payments for office visits related to epilepsy care. If a patient with epilepsy visits the physician(s) for an unrelated neurological issue or for a health problem other than epilepsy, that visit would still be paid for separately under the regular physician fee schedule (or under an APM designed for those other health problems).

As shown in Table 1, a single payment would be paid during phases or portions of phases in which services would be expected to occur on a single day or over a short period of time of less than a month. Monthly payments would be paid for phases or the portions of phases in which services would be expected to continue for a multi-month period or indefinitely into the future.

The physician practice would bill the patient’s health insurance plan (or the patient, if the patient is not insured) for payment using a billing code specific to the category of payment associated with the phase of care for which the patient is receiving epilepsy-related services.

Separate Payment for Other Epilepsy-related Services

All other services received by the patient—EEGs, laboratory tests and imaging studies, medications, hospitalizations, etc.—would be paid separately, but the physicians would be accountable for utilization and/or spending on those services as discussed in Section VII.

Payment for Care Coordination Services

If a patient had other health problems besides epilepsy, then it would be desirable to ensure that the care delivered for those other problems is coordinated with the ongoing care for their epilepsy. For many patients, it would be expected that they would have a primary care medical home that would perform that function, and the time and costs associated with that coordination would be supported by medical home payments to the patient’s primary care practice.

However, if the neurologist or other physician who is providing the ongoing care for epilepsy also takes responsibility for coordinating the other health care services that the patient is

receiving (i.e., the epilepsy physician is serving as a “specialty medical home” for the patient), that that physician would receive a higher payment to support the additional time and resources associated with the care coordination function.

2. Optional Larger Bundled Payments

An optional approach would be to include all or part of the patient’s other epilepsy-related treatment costs in the payment bundle in addition to the physicians’ services. This would provide additional flexibility and an alternative approach to accountability:

- The physician or team of physicians could use the resources available in the larger bundle to pay for services that would not be eligible for payment under the standard fee-for-service payment system.
- The physician(s) would be accountable for ensuring the average of amount of spending for their patients on the services covered by the bundled payments remained within the revenues from those payments.

Since many of the other services covered by the bundled payment would not be delivered directly by the physician practice, the most common way of implementing this type of a bundled payment would be using an administrative process called retrospective reconciliation. The patient’s health plan would pay the other providers who deliver services in the bundle based on current fee-for-service rates, and the health plan would then tabulate the total amount paid on all services during the month and compare that total to the bundled payment amount. If the total payments were less than the bundled payment amount, the balance would be paid to the physician(s) managing the bundled payment; if the total payments were larger than the bundled payment amount, the balance would be paid to the health plan by the physicians managing the bundled payment. In order to avoid the need for repayments, the health plan could “withhold” a portion of the physicians’ payments, and then if the payments on all services exceed the bundled payment amount, the health plan would only repay a portion of the withhold to the physicians.

Option A: Inclusion of Electroencephalography (EEGs) in the Bundled Payments

Under Option A, the bundled payment would include the cost of routine electroencephalography (other than electrocorticograms) in addition to office visits and other services that would previously have been billed as E/M services. This option would give physicians flexibility about whether to use electroencephalography but reward them for reducing avoidable overutilization.

Option B: Inclusion of All Frequently Used Tests and Imaging Studies in the Bundled Payments

Under Option B, the bundled payment would be designed to cover the cost of all frequently-ordered laboratory tests and imaging studies used for diagnosis of epilepsy and for monitoring of epilepsy treatment in addition to physician services. This option would give physicians flexibility about the tests and imaging studies they order but reward them for reducing avoidable overutilization. The bundled payment would only include tests and studies that are frequently ordered by physicians who are diagnosing or treating epilepsy in order to reduce the amount of random variation in spending and make it more likely that small physician practices could participate in this bundled payment option.

Option C: Inclusion of Medication Costs in the Bundled Payments

Under Option C, the bundled payment would be designed to cover the cost of medications used to treat epilepsy in addition to physician services and testing/imaging. Outlier payments or adjustments to the payment amounts would be made when new drug options become available that have significantly higher efficacy but also significantly higher cost, or when drug manufacturers increase prices of drugs.

Option D: Inclusion of All Epilepsy-related Services in the Bundled Payment

Physician practices with the size and capabilities to do so could accept a bundled payment that would be designed to cover the average costs of all services needed by patients during a particular phase of care. Outlier payments and risk corridors would be established to protect physician practices from financial risk associated with price increases on drugs or hospital services or resulting from patients needing unusually expensive care.

Option E: Population-based Payment for Epilepsy Care

A fifth option would be for a physician practice or group of physician practices to accept a condition-based payment to manage the epilepsy-related care of all individuals with diagnosed epilepsy in a broader pre-defined population, such as all of the patients in an accountable care organization or a health plan's membership. The physician practice(s) would receive one monthly payment for all of the individuals with epilepsy in that population, regardless of which phase of care they were in, but the amount of the payment would be adjusted based on the proportion of patients in different phases of care (i.e., the relative costs of different phases of care would be used to risk-adjust the overall payment amount) and based on the characteristics of the patients (as discussed in more detail in Section VI). This monthly payment could be designed to cover all costs of epilepsy-related care for the patients (as Option D would do for a particular phase of care) or for a portion of those costs (as the basic payment model and Options A, B, and C would do for each phase of care).

TABLE 1

Phase of Care	Eligible Patients	Goals and Services Supported	Structure of Alternative Payment	Current FFS Payments Replaced
1. New Patient with Possible Epilepsy	A new patient with no previous diagnosis of epilepsy, who self-refers or is referred by another physician for seizures or spells that could be due to epilepsy; includes patients seeking a second opinion or A new patient who is referred for treatment of epilepsy but there is concern that the diagnosis is inaccurate	Determine diagnosis (or determine diagnosis cannot be made unless additional seizures occur); and Develop treatment plan in coordination with patient's other physicians if epilepsy diagnosis is made	<ul style="list-style-type: none"> One-time payment A physician practice could not bill for this payment for the same patient more than twice in one year 	E/M payments for evaluation of seizure/spells
2. Initial Treatment for Epilepsy	A patient with a new diagnosis of epilepsy who is beginning anti-epilepsy treatment	Supervise initial anti-epilepsy treatment with adequate trial of up to 2 anti-epilepsy drugs or other evidence-based therapies	Monthly payment for up to 6 months	E/M payments for epilepsy care
3. Continued Treatment for Epilepsy	A patient who has completed initial treatment for epilepsy and has well-controlled seizures or A patient who has not completed adequate trials of 2 anti-epilepsy drugs or other evidence-based therapies after 6 months	Supervise continued anti-epilepsy treatment for well-controlled patients; or Supervise completion of initial anti-epilepsy treatment if adequate trial of 2 drugs or other evidence-based therapies requires more than 6 months to complete	Monthly payment as long as treatment continues (the monthly payment would be smaller than Phase 2 monthly payments)	E/M payments for epilepsy care

Phase of Care	Eligible Patients	Goals and Services Supported	Structure of Alternative Payment	Current FFS Payments Replaced
4. Supervised Withdrawal from Anti-epilepsy Drugs	A patient who has been seizure free and has not attempted withdrawal from anti-epilepsy drugs within the past 2 years	Engage in shared decision-making with patient about whether to withdraw from AEDs; preparation of a treatment withdrawal plan if patient chooses to pursue withdrawal	One-time payment	E/M payments for epilepsy treatment planning
	A patient who has been seizure free and after engaging in shared decision-making, decides to attempt withdrawal from anti-epilepsy drugs	Supervise discontinuation of therapy	Monthly payment for up to 6 months during discontinuation of therapy (same payment as Phase 3 or slightly higher); lower payment for 3 months of follow-up after discontinuation is complete	E/M payments for epilepsy care
5. Changes in Treatment for Previously Well-controlled Epilepsy Patients	<p>A patient whose seizures have been well-controlled but:</p> <ul style="list-style-type: none"> • The side effects of the treatment are problematic; or • A new treatment has become available that promises fewer side effects or lower cost; or • The patient has suddenly begun experiencing seizures; or • Is planning for pregnancy; or • Has other characteristics clinically justifying a change in meds 	Plan and supervise changes in anti-epilepsy treatment to maintain or improve seizure control or to balance seizure control with side effects and other health needs	Monthly payment for 3–6 months during trial of new medications or other evidence-based therapies	E/M payments for epilepsy care

Phase of Care	Eligible Patients	Goals and Services Supported	Structure of Alternative Payment	Current FFS Payments Replaced
6. Management of Epilepsy During Pregnancy	A patient who has epilepsy and becomes pregnant	Maximizing the health of the mother and fetus by using appropriate medications and coordination with pregnancy management	Monthly payment during pregnancy	E/M payments for epilepsy care during pregnancy (payments to the OB/GYN or family physician managing the pregnancy would be separate)
7. Evaluation and Treatment Planning for Refractory Epilepsy	A patient who has completed adequate trials of 2 anti-epilepsy drugs or other evidence-based therapies and continues to have uncontrolled seizures, including a patient seeking a second opinion	Shared decision-making with patient about treatment options	One-time payment	E/M payments for epilepsy diagnosis and treatment planning
8. Non-Surgical Treatment for Refractory Epilepsy	A patient who has refractory epilepsy and receives treatment using drugs or neurostimulators, including after surgery that fails to resolve seizures	Supervise anti-epilepsy treatment for patients with continued seizures using different drugs, neurostimulators, or other services and assist patient in minimizing complications of seizures	Monthly payment for as long as treatment continues	E/M payments for epilepsy care
9. Surgery for Epilepsy	A patient who receives surgery to treat epilepsy	Successful planning of epilepsy surgery and recovery from surgery	One-time payment	E/M payments for neurology services related to surgery (payments to the surgeon, hospital, and other physicians would be separate)

VI. Payment Amounts Stratified Based on Patient Characteristics

1. Goal of Stratifying Payment Amounts

Patient-centered Epilepsy Care Payment will be designed to ensure that adequate resources are available to address patient needs, that physicians are not penalized financially for caring for patients with greater needs, and that savings are achieved by eliminating avoidable and unnecessary spending, not by withholding needed care. Within most phases of care, the amount of the payment for an individual patient would differ based on characteristics of the patient that would be expected to affect one or more of the following three things:

1. The amount of time or resources that the physician practice(s) receiving the payment would need to spend on services or activities specifically related to that patient
2. The number, type, or cost of testing, imaging, procedures, or other services that the patient would need
3. The outcomes, such as seizure frequency and severity, medication side effects, etc. that would be achievable for the patients based on current treatments that are available

2. Types of Patient Characteristics Affecting the Amount of Payment

In contrast to the current fee-for-service system, the amount of payment would not differ based directly on the number or types of services the physician practice delivers to the patient, but rather payment amounts would vary based on patient characteristics that are likely to affect the physician practice's services, services from other providers, or patient outcomes. These characteristics would fall into four categories:

1. Patient age
2. The number and severity of health conditions other than epilepsy (i.e., comorbidities) that have a significant effect on treatment resources and/or outcomes for epilepsy
3. The type and severity of side effects that the patient is experiencing from anti-epilepsy drugs, or characteristics of the patient that contraindicate preferred treatment methods
4. Non-medical barriers the patient faces in utilizing preferred treatment methods (e.g., access to public transit, affordability of medications, language barriers, etc.)

Objective criteria for these categories, methods of recording the categories using ICD-10 codes or the new Patient Condition Groups required under MACRA, and efficient methods of documentation would need to be created.

Comorbidities that would be expected to have a significant impact on treatment for epilepsy would include:

- Depression, anxiety, and other neuropsychiatric disorders
- Stroke or brain injury
- Neurodevelopmental and intellectual disabilities
- Sleep disorders
- Substance abuse
- Conditions being treated with medications that interact with anti-epilepsy medications

3. Defining Subcategories of Patients Associated with Differing Levels of Payment

Different subcategories of payment would be defined when treatment costs or outcomes in a phase of care will predictably differ in significant ways for patients with different characteristics. Each category would be defined based on combinations of characteristics likely to require similar levels of resources for treatment and result in similar outcomes. The physician would determine the appropriate subcategory for an individual patient based on that patient’s characteristics, and then the physician would bill for services using a condition-based payment code indicating the appropriate payment subcategory for that patient.

Since no two patients are exactly alike, there will inherently be variation in patient needs within subcategories. The fewer the number of subcategories, the more variation there will be within subcategories, but the more subcategories that are used, the more likely it is that patients will be assigned to an incorrect subcategory. Consequently, in general, only two to four subcategories will be used within each category in order to distinguish patient characteristics that have large impacts on resource use or outcomes. (For example, in the system of Diagnosis Related Groups [DRGs] used by Medicare to pay hospitals, there are generally two to three subcategories of payment for major categories of admissions or procedures based on the number and severity of comorbidities and complications.) The subcategories within each phase are shown in Table 2.

These subcategory definitions could also serve as part of the overall system of “patient condition groups” Congress required be created under the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA).

In addition, many patients experience spells or other symptoms that are not seizures and do not represent manifestations of epilepsy. Patients who are not part of a primary care medical home or accountable care organization will probably be more likely to seek an evaluation from a neurologist for spells that are caused by non-epileptic conditions, so the time needed to evaluate such patients would be expected to be less, on average, than patients who are part of a PCMH or ACO where the primary care physicians screen patients before referring them for specialty care. Consequently, Phase 1 payments would likely need to be higher for patients who are referred by a physician who is part of a PCMH or ACO.

TABLE 2

Phase of Care	Billing Code	Patient Characteristics
1. New Patient with Possible Epilepsy (Single Payment)	xxx10	New or existing patient with no previous diagnosis of epilepsy; self-referred for evaluation of spells or referred by a physician who is not part of an accountable medical home or an accountable care organization; all necessary diagnostic testing has been performed by other physicians
	xxx11	New or existing patient with no previous diagnosis of epilepsy; self-referred for evaluation of spells or referred by a physician who is not part of an accountable medical home or an accountable care organization; no prior diagnostic testing or insufficient testing has been performed by other physicians
	xxx12	New patient with no previous diagnosis of epilepsy; referred for evaluation of spells by a physician who is part of an accountable medical home or accountable care organization
2. Initial Treatment for Epilepsy (Monthly Payment for 6 Months)	xxx21	Patient with a new diagnosis of epilepsy who: <ul style="list-style-type: none"> • Is 19 years of age or older; AND • Has no significant comorbidities; AND • Has typical reactions to medications; AND • Has no significant barriers to accessing care
	xxx22	Patient with a new diagnosis of epilepsy who: <ul style="list-style-type: none"> • Is 12–18 years of age; OR • Has 1–2 significant comorbidities; OR • Has some significant barriers to accessing care
	xxx23	Patient with a new diagnosis of epilepsy who: <ul style="list-style-type: none"> • Has two or more of the characteristics for xxx22; OR • Is 3–11 years of age; OR • Has multiple significant comorbidities; OR • Has multiple significant barriers to accessing care; OR • Has significant side effects from or contraindications to common anti-seizure medications
	xxx24	Patient with a new diagnosis of epilepsy who: <ul style="list-style-type: none"> • Has two or more of the characteristics for xxx23; OR • Is under 3 years of age

Phase of Care	Billing Code	Patient Characteristics
3. Continued Treatment for Epilepsy (Monthly Payment with No Time Limit)	xxx31	New or existing patient with epilepsy <u>and no significant comorbidities</u> , who has completed 6 months of initial treatment for epilepsy with well-controlled seizures
	xxx32	New or existing patient with epilepsy <u>and significant comorbidities</u> , who has completed 6 months of initial treatment for epilepsy with well-controlled seizures
	xxx33	New or existing patient with epilepsy and significant comorbidities, who has completed 6 months of initial treatment for epilepsy with well-controlled seizures, <u>and physician provides overall care coordination services</u>
	xxx34	New or existing patient with epilepsy who has completed 6 months of initial treatment for epilepsy and is having continued seizures but <u>has not successfully completed trials of 2 medications or other evidence-based therapies</u> ; payment can be made for up to 3 months
4a. Decision Making Regarding Withdrawal from Anti-epilepsy Drugs (Single Payment)	xxx40	New or existing patient with epilepsy who has been seizure-free on anti-epilepsy medications, who wants to consider withdrawing from anti-epilepsy medications, and who has not attempted withdrawal from anti-epilepsy drugs within the past 2 years
4b. Supervised Withdrawal from Anti-epilepsy Drugs (Monthly Payment, Time Limited)	xxx41	New or existing patient who has agreed through a shared decision-making process to attempt withdrawal from anti-epilepsy drugs and <u>who would qualify for xxx31 payment if treatment continued</u> . This payment is made for up to 6 months while the patient is being supervised for medication withdrawal as part of a treatment withdrawal plan
	xxx42	New or existing patient who has agreed through a shared decision-making process to attempt withdrawal from anti-epilepsy drugs and <u>who would qualify for xxx32 payment if treatment continued</u> . This payment is made for up to 6 months while the patient is being supervised for medication withdrawal as part of a treatment withdrawal plan
	xxx43	Patient who has completed withdrawal from anti-epilepsy drugs within previous 6 months; payable for up to 3 months
5. Changes in Treatment Regimens for Well-controlled Patients (Monthly)	xxx51	New or existing patient <u>with no significant comorbidities</u> who has had well-controlled seizures on an existing medication, but who needs to try different medications to address side effects, prepare for pregnancy, or other clinical reasons; payable while a trial of a medication or other evidence-based therapy is underway for up to 3 months

Phase of Care	Billing Code	Patient Characteristics
Payment During Trial of New Medication)	xxx52	New or existing patient <u>with significant comorbidities</u> who has well-controlled seizures on an existing medication, but who needs to try different medications to address side effects, prepare for pregnancy, or other clinical reasons; payable while a trial of a medication or other evidence-based therapy is underway for up to 6 months
6. Management of Pregnancy and Epilepsy	xxx61	New or existing patient who is pregnant and who had well-controlled epilepsy prior to pregnancy; Low risk pregnancy profile
	xxx62	New or existing patient who is pregnant and who had well-controlled epilepsy prior to pregnancy; High risk pregnancy profile
	xxx63	New or existing patient who is pregnant, with refractory epilepsy prior to pregnancy
7. Evaluation and Treatment Planning for Refractory Epilepsy	xxx70	New or existing patient who has completed adequate trials of 2 anti-epilepsy drugs or other evidence-based therapies and continues to have uncontrolled seizures
8. Non-Surgical Treatment for Refractory Epilepsy, Including Use of Neurostimulators	xxx81	New or existing patient whose seizures are not well-controlled but has failed to adhere to anti-epilepsy treatment regimen specifications
	xxx82	New or existing patient who has completed adequate trials of 2 anti-epilepsy drugs or other evidence-based therapies but has continued seizures and will continue to use drug therapy to manage seizures
	xxx83	New or existing patient who has completed adequate trials of 2 anti-epilepsy drugs or other evidence-based therapies but has continued seizures and will use neurostimulators in addition to or instead of other anti-epilepsy treatments to manage seizures
	xxx84	New or existing patient who has completed adequate trials of 2 anti-epilepsy drugs or other evidence-based therapies but who has continued seizures; has multiple comorbidities, problems accessing care, or other complex needs; receives treatment using neurostimulators or anti-epilepsy drugs to manage seizures; and for whom the physician provides overall care coordination
9. Surgery for Epilepsy	xxx90	New or existing patient who is a candidate for surgical epilepsy treatment and decides to pursue surgery

VII. Accountability for Spending and Quality/Outcomes

In order to be eligible to receive Patient-centered Epilepsy Care Payments for a particular phase of care, a physician or team of physicians would need to accept accountability for aspects of service utilization and spending, for quality of service, and for patient outcomes that are associated with that phase of care and that the physician(s) can reasonably be expected to control or influence. Accountability would be achieved by adjusting the amounts of payment up or down to reflect good or poor performance.

1. Minimum Quality Standards

Where feasible and consistent with evidence, the American Academy of Neurology would establish minimum standards for the services to be delivered during a phase of care and the physician(s) would be required to meet those standards for a patient in order to receive a payment for that patient during that phase of care. The minimum standards would help to ensure quality of care for individual patients in all practices, and the standards would be designed to enable participation of small physician practices that do not have a sufficient number of patients to generate reliable measures of performance on cost or outcomes. (Some or all current AAN quality measures could be used as minimum standards for care of patients in the program.)

2. Performance Measures

For practices with a sufficient number of patients, in addition to meeting required minimum standards for all patients, the performance of the physician or team of physicians would be determined using several measures of spending and outcomes relevant to each phase of care. The services and outcomes will differ from phase to phase, but in general, they will fall into the following categories:

- **Service Utilization and Spending**
 - Number, type, and cost of epilepsy-related services that are *delivered* by the physician practice(s) receiving the Patient-centered Epilepsy Care Payment
 - Number, type, and cost of services related to the patient’s epilepsy care that are *ordered* by the physician(s) receiving the Patient-centered Epilepsy Care Payment
 - Number, type, and cost of services required to address symptoms of epilepsy or complications of epilepsy treatment that are delivered by other providers (e.g., emergency department visits and hospital admissions for epilepsy patients experiencing seizures)
- **Care Quality and Patient Outcomes**
 - Adherence to evidence-based guidelines for care
 - Patient adherence to treatment plans
 - Frequency and severity of seizures
 - Frequency and severity of side effects of treatment
 - Improvements in behavior and cognition
 - Improvements in quality of life
 - Work and school attendance and productivity

- Access and responsiveness of Epilepsy Care Team to patient problems as perceived by patient and patient satisfaction with care

Table 3 lists the specific measures that would be used in each phase of care.

Validated scales would be used to measure patient-reported outcomes such as frequency and severity of seizures. Measures would be reported separately for patients in each subcategory within a phase of care (as defined in Section VI) and measures could be further risk-adjusted within subcategories based on patient characteristics known to affect costs or outcomes.

Rules would be developed to allow excluding patients from the denominator of measures if the patients have unique characteristics that require special treatment, if the patients have barriers that preclude use of evidence-based treatment (e.g., lack of insurance coverage for recommended medications), or if the patients have refused to adhere to evidence-based standards of care. In order to ensure that performance measures are not based on too narrow a subset of patients, the percentage of patients who are included in each performance measure would also be reported.

3. Assessment of Performance

Performance on a measure would be determined by comparing the performance of an individual physician practice or team of physicians to the average performance of all physicians/teams receiving Patient-centered Epilepsy Care Payments during the prior year. As long as the physician/team’s performance was within reasonable statistical variation around the average, the physician/team’s performance would be deemed “good performance.” If performance was significantly better than this range, it would be deemed “high performance” and if it was significantly worse, it would be deemed “low performance.” If the physician practice had too few patients to reliably measure a particular aspect of performance, then the physician practice would be treated as having “good performance” until the practice had treated a sufficient number of patients to generate a reliable measure.

During the initial years of implementation of the Patient-centered Epilepsy Care Payment system when there are not sufficient prior year data available on physicians’ performance on a measure for comparison purposes, performance would be determined based on comparisons to the average performance on the measures for *all* epilepsy patients for whom data are available in the prior year.

TABLE 3

Phase of Care	Minimum Performance Standards to Receive Payment	Performance Measures Related to Service Utilization and Spending	Performance Measures Related to Care Quality, Outcomes, and Patient Experience
1. New Patient with Possible Epilepsy	<ul style="list-style-type: none"> • At least one face-to-face visit with patient • Documented use of AAN guidelines for diagnosis-related testing and imaging • Completion of shared decision-making process with patient regarding treatment plan during face-to-face visit • Documented use of AAN guidelines for initial treatment of epilepsy in developing treatment plans 	<ul style="list-style-type: none"> • Per-patient cost of epilepsy-related laboratory testing and imaging ordered by physicians in the Epilepsy Care Team • % of tests and imaging studies ordered that do not meet appropriate use criteria • Total per-patient cost of epilepsy-related testing and imaging ordered during and prior to referral through diagnosis 	<ul style="list-style-type: none"> • % of patients whose diagnosis is changed within 1 year following failure of initial treatment plan to control seizures • Rating by referring physician regarding coordination of diagnostic workup and communication about results • Patient rating of quality of diagnostic experience
2. Initial Treatment for Epilepsy	<p>Documented use of AAN guidelines for initial treatment of epilepsy</p>	<ul style="list-style-type: none"> • Average risk-adjusted per-patient spending on anti-epilepsy drugs • % of patients visiting ED for seizures or complications of epilepsy treatment • % of patients hospitalized for seizures or complications of epilepsy treatment 	<ul style="list-style-type: none"> • Change in average risk-adjusted frequency/severity of seizures as reported by patient • Patient rating of severity of side effects of anti-epilepsy drugs • Patient outcomes on Quality of Life and Clinical Global Impression scales • Patient rating of responsiveness of Epilepsy Care Team to problems

Phase of Care	Minimum Performance Standards to Receive Payment	Performance Measures Related to Service Utilization and Spending	Performance Measures Related to Care Quality, Outcomes, and Patient Experience
3. Continued Treatment for Epilepsy	<ul style="list-style-type: none"> • Documented use of AAN guidelines for treatment • Minimum of 1 face-to-face visit with the patient every 6 months unless waived by the patient 	<ul style="list-style-type: none"> • Average risk-adjusted per-patient spending on anti-epilepsy drugs • % of patients visiting ED for seizures or complications of epilepsy treatment • % of patients hospitalized for seizures or complications of epilepsy treatment 	<ul style="list-style-type: none"> • Change in average risk-adjusted frequency/severity of seizures as reported by patient • Patient rating of severity of side effects of anti-epilepsy drugs • Patient outcomes on Quality of Life and Clinical Global Impression scales • Patient rating of responsiveness of Epilepsy Care Team to problems
4. Supervised Withdrawal from Anti-epilepsy Drugs	Documented use of AAN guidelines for withdrawal of treatment	<ul style="list-style-type: none"> • % of patients remaining off of medications after initiating withdrawal • % of patients hospitalized for seizures during withdrawal 	<ul style="list-style-type: none"> • Patient outcomes on Quality of Life and Clinical Global Impression scales • Patient rating of responsiveness of Epilepsy Care Team to problems
5. Changes in Treatment Regimens for Well-controlled Patients	Documented use of AAN guidelines for treatment of epilepsy	<ul style="list-style-type: none"> • Average risk-adjusted per-patient spending on anti-epilepsy drugs • % of patients visiting ED for seizures or complications of epilepsy treatment • % of patients hospitalized for seizures or complications of epilepsy treatment 	<ul style="list-style-type: none"> • Change in average risk-adjusted frequency/severity of seizures as reported by patient • Patient rating of change in severity of side effects related to anti-epilepsy drugs • Patient outcomes on Quality of Life and Clinical Global Impression scales • Patient rating of responsiveness of Epilepsy Care Team to problems

Phase of Care	Minimum Performance Standards to Receive Payment	Performance Measures Related to Service Utilization and Spending	Performance Measures Related to Care Quality, Outcomes, and Patient Experience
6. Management of Pregnancy and Epilepsy	Documented use of AAN and ACOG guidelines for treatment of epilepsy during pregnancy	<ul style="list-style-type: none"> • % of patients visiting ED for seizures or complications of epilepsy treatment • % of patients hospitalized for seizures or complications of epilepsy treatment • Per-patient cost of epilepsy-related laboratory testing and imaging ordered by physicians in the Epilepsy Care Team 	<ul style="list-style-type: none"> • Average risk-adjusted frequency/severity of seizures as reported by patient • Rate of pregnancy complications associated with AEDs • Patient rating of severity of side effects related to anti-epilepsy drugs • Patient rating of responsiveness of Epilepsy Care Team to problems
7. Evaluation and Treatment Planning for Refractory Epilepsy	Documented use of AAN guidelines for diagnosis and treatment planning for refractory seizures	<ul style="list-style-type: none"> • Per-patient cost of epilepsy-related laboratory testing and imaging ordered by physicians in the Epilepsy Care Team • % of tests and imaging studies ordered that do not meet appropriate use criteria 	<ul style="list-style-type: none"> • Patient rating of responsiveness of Epilepsy Care Team to problems

Phase of Care	Minimum Performance Standards to Receive Payment	Performance Measures Related to Service Utilization and Spending	Performance Measures Related to Care Quality, Outcomes, and Patient Experience
8. Non-Surgical Treatment for Refractory Epilepsy	Documented use of AAN guidelines for treatment	<ul style="list-style-type: none"> • Average risk-adjusted per-patient spending on anti-epilepsy drugs and neurostimulators • % of patients visiting ED for seizures or complications of epilepsy treatment • % of patients hospitalized for seizures or complications of epilepsy treatment 	<ul style="list-style-type: none"> • Change in average risk-adjusted frequency/severity of seizures as reported by patient • Patient rating of severity of side effects related to anti-epilepsy drugs • Patient outcomes on Quality of Life and Clinical Global Impression scales • Patient rating of responsiveness of Epilepsy Care Team to problems
9. Surgery for Epilepsy	Documented use of AAN guidelines for planning of surgical treatment of epilepsy	% of patients continuing to use anti-epilepsy drugs after surgery	<ul style="list-style-type: none"> • Change in risk-adjusted frequency/severity of seizures as reported by patient • Patient outcomes on Quality of Life and Clinical Global Impression scales

VIII. Setting and Adjusting Payment Amounts

1. Default Payment Amount

A default payment amount would be established for each subcategory of patients within each phase of care. These payment amounts would be defined in advance, similar to a standard fee schedule, so that physicians would know what they would be paid for delivering the services defined in a particular phase of care to patients meeting the characteristics for a particular severity stratum within that phase.

The payment amounts would be set at levels designed to achieve three goals:

- **Provide adequate resources to support the services patients need for high-quality care and good outcomes.** The amount of payment for each subcategory of patients should be adequate to support the time and costs that the physician practice(s) would need to spend for patients with the characteristics associated with the subcategory during the relevant phase of patient care.
- **Avoid losses of revenue to high-quality, efficient practices.** The aggregate amount of net revenue that a high-quality, efficient physician practice would receive under the new payment system from a participating payer should be no less than the aggregate amount of revenue that the practice would have received from that payer under the current payment system. There may be some shift in revenues from one subcategory to another if the current payment system provides higher payments relative to costs in one subcategory than another.
- **Budget neutrality/slower spending trend for payers.** The total spending by the payer on epilepsy care for the patients in all participating physician practices, considering both what is paid to the practices and what is paid for other costs of epilepsy care to the practices' patients (e.g., laboratory testing, imaging, emergency room visits, hospitalizations, drugs, etc.) should be less than or equal to what would be projected under the current payment system.

It is important to recognize that the payments received by a physician practice under Patient-centered Epilepsy Care Payment would differ from payments under the current payment system in two important ways:

1. The total net revenue the *physician practice* receives could be *greater* than under the current system, at the same time that *total spending on epilepsy care* by payers is *lower* than under the current system. This is because the net revenue to the practice represents only a small proportion of the total spending on epilepsy care for its patients, and so the savings from reductions in avoidable emergency room use and hospitalizations, reductions in unnecessary testing, etc. could more than offset higher payments to the physician practices.
2. The total payment that a physician practice receives for any *individual patient* would inherently differ from what it would have received under the current payment system, since Patient-centered Epilepsy Care Payments are intended to give practices more predictable and flexible payments for patient care. The payment levels would be set such that the total amount of the payments averaged across all of a practice's patients would be similar to what they are today during the initial year of implementation. However, over time, practices would likely redesign care in more patient-centered ways without the fear that revenues would decline under the less flexible payment system used today.

2. Adjustment of Payment Based on Performance

The physician or team of physicians participating in the Patient-centered Epilepsy Care Payment would receive the default payment level as long as their performance during the most recent measurement period was “good” on all measures. The payment would be increased if all measures were “good” and some were “high,” and the payment would be reduced if some measures were “low.” The maximum increases and decreases would initially be $\pm 4\%$ and then would increase over time to $\pm 9\%$.

IX. Method of Billing and Payment

A physician or team of physicians serving as a patient’s Epilepsy Care Team would submit a claim each month to the patient’s health insurance plan (or a bill to the patient, if the patient has no insurance) using the “condition based payment code” in Table 2 that matches the patient’s phase of care and the patient’s risk/acuity characteristics. The claim with this code could be billed to the payer using the physician practice’s existing billing system and the claim could be paid by the payer using its existing claims payment system, similar to what is done today with claims forms billed using CPT codes. The payer would reject any claims for E/M services for epilepsy care services to the patient that are submitted by the physician practices on the Team.

Submission of the claim would represent a certification by the physician (subject to periodic audit and verification) that:

- The patient has characteristics that qualify them for the particular subcategory associated with the condition-based payment code that is shown on the claim form.
- The physician or another member of the Epilepsy Care Team has met or will meet any minimum standards for services and delivering all appropriate services for the phase of care and for the characteristics of the patient associated with the condition-based payment code that is shown on the claim form.
- The physician and the other members of the Epilepsy Care Team will accept the payment associated with that payment code as payment in full for all of the types of epilepsy-related services covered by the payment bundle during the time period defined by the payment

The payer receiving the claim will determine the standard payment amount for the code on the claim form that is specified in the contract between the payer and that physician practice, and it will adjust the payment by the performance adjustment factor for that practice that is determined using the methodology described in Section VIII. In general, the performance adjustment factor would be established on an annual basis based on the practice’s performance in the prior year. Larger practices could potentially have their performance adjustment factors updated more frequently (e.g., semiannually or quarterly), whereas small practices could have their performance measured over a longer period of time (e.g., two years) in order to have more reliable measures with smaller numbers of patients.

If two or more physician practices are working together as an Epilepsy Care Team to manage patient care (e.g., a primary care practice and a neurology practice), then the two practices would be permitted to determine how the Patient-centered Epilepsy Care Payment would be divided between them. The practices could either agree that one practice will receive the payments and then make the allocations to the other practices, or the practices could form a separate corporate entity (e.g., a limited liability company) controlled by the participating practices and the payer would make the payments to that entity. (This entity could serve as an “alternative payment entity” under MACRA.)

If the code is submitted as part of a payment arrangement that involves a larger bundle of services such as Options A-D described in Section V, then the payer would deduct any relevant payments it made to other providers from the bundled payment amount and pay the balance to the Epilepsy Care Team.

X. Examples of How Patient-centered Epilepsy Care Payment Would Work for Hypothetical Patients

Example 1

- A 30-year-old patient experiences two unprovoked seizures more than 24 hours apart, and the patient’s primary care physician refers him to a neurologist.
- The neurologist evaluates the patient, diagnoses epilepsy, and develops a treatment plan in collaboration with the patient. The neurologist bills the patient’s health plan for a Phase 1 PCEC payment using the xxx10 billing code.
- The patient begins using the anti-epilepsy medication in the treatment plan under the supervision of the neurologist. The patient has no other serious health problems other than the epilepsy, and the patient has good insurance coverage. The patient tolerates the medications well and experiences no further seizures. The neurologist bills the patient’s health plan for a Phase 2 PCEC payment each month for six months using the xxx21 billing code.
- The patient continues to take the anti-epilepsy medications and remains seizure free for two more years. The neurologist bills the patient’s health plan for a Phase 3 PCEC payment each month using the xxx31 billing code.
- The patient is concerned about the side effects of the medication. The patient visits the neurologist to discuss the advantages and disadvantages of stopping the medication and decides to try to stop. The neurologist develops a plan for phasing out the medication. The neurologist bills the patient’s health plan for a Phase 4 PCEC payment using the xxx40 billing code.
- The patient begins the medication withdrawal process but after four months, the patient has a new seizure and decides to return to the previous medication regimen. The neurologist bills the patient’s health plan for a Phase 4 PCEC payment for four months using the xxx41 code, and then, after the patient returns to the previous treatment plan, the neurologist again bills the health plan every month for a Phase 3 PCEC payment using the xxx31 billing code.

Example 2

- A 27-year-old patient experiences two unprovoked seizures more than 24 hours apart and is referred to a neurologist by an emergency department physician.
- The neurologist evaluates the patient, diagnoses epilepsy, and develops a treatment plan in collaboration with the patient. The neurologist bills the patient’s health plan for a Phase 1 PCEC payment using the xxx10 billing code.
- The patient begins using the anti-epilepsy medication in the treatment plan under the supervision of the neurologist. The patient has no other serious health problems other than the epilepsy, and the patient has good insurance coverage. The patient continues to have seizures under the first medication the neurologist prescribes and the neurologist prescribes a second medication, but the patient continues to experience seizures. The trial of the two medications takes eight months. The neurologist bills the patient’s health plan for a Phase 2 PCEC payment each month for six months using the xxx21 billing code,

and then bills the health plan for a Phase 3 PCEC payment for two additional months using the xxx34 billing code.

- The neurologist conducts an additional evaluation of the patient and discusses the treatment options with the patient. The neurologist indicates that testing suggests that the seizures could potentially be prevented with surgery. The patient decides to pursue surgery and the neurologist helps the patient select a surgeon. The neurologist bills the patient’s health plan for a Phase 7 PCEC payment using the xxx70 billing code.
- The neurologist works with the surgeon to plan the surgery and the surgery is completed. The neurologist bills the patient’s health plan for a Phase 9 PCEC payment using the xxx90 billing code. The surgeon, anesthesiologist, and hospital bill the health plan separately for their services.
- The surgery fails to control the seizures. The patient returns to the physician to discuss additional options and decides to have a neurostimulator implanted. The neurologist arranges for this procedure to be performed. The neurologist bills the patient’s health plan for a Phase 7 PCEC payment for the diagnosis and treatment planning using the xxx70 billing code. The physician and hospital who perform the implant procedure would be paid separately for their services.
- The neurologist provides ongoing supervision of the neurostimulator and the patient’s drug regimen in order to control the patient’s seizures as best as possible. The neurologist bills the patient’s health plan each month for a Phase 8 PCEC payment using the xxx83 billing code.

Acknowledgements

The AAN wishes to acknowledge the work of the following individuals who contributed to the development of this document:

Harold D. Miller, Center for Healthcare Quality and Payment Reform

Members of the AAN Payment Alternatives Team:

Joel M. Kaufman, MD, Chair

Stuart B. Black, MD, FAAN

David A. Evans, MBA

James N. Goldenberg, MD, FAAN

Cynthia L. Harden, MD

Daniel B. Hoch, MD, PhD, FAAN

Elaine C. Jones, MD, FAAN

Lyell K. Jones, MD, FAAN

Michael J. Kitchell, MD, FAAN

Robert Kropp, MD, FAAN

Mark Mintz, MD

Laura B. Powers, MD, FAAN

Marc Raphaelson, MD

AAN Staff:

Amanda Becker

Amy Kaloides

Rod Larson

Brandon Magliocco, MA

Becky Schierman, MPH

Katie Shepard

Daniel Spirn, JD, MA

Amber Stock

Copyright license

The American Academy of Neurology has developed these alternative payment model documents (APMs) as educational tools for its members. AAN members may print and use the APMs for their noncommercial purposes, which includes sharing the documents with insurers.

Disclaimer

The APMs do not contain legal advice. Members choosing to use the APMs should consult their own legal counsel or other professional advisors about using the documents in their specific situations.

The AAN has undertaken reasonable efforts to make the APMs as accurate and useful as possible but cannot guarantee their accuracy or utility. In addition, the AAN intends to, but is not obligated to, update the APMs from time to time.

Finally, the AAN is not responsible for any losses, expenses, damages, claims, or liabilities incurred by any user or third party that arise from the use of the APMs.