



Essential Tremor Quality Measurement Set

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Improving Outcome for Patients with Essential Tremor

Rationale for Measures

The American Academy of Neurology (AAN). This work group was charged with developing measures focused on improving outcomes for patients diagnosed with essential tremor. The work group includes representatives from professional associations and patient advocacy organizations to ensure measures developed included input from all members of the healthcare team and other relevant stakeholders. All members were required to disclose relationships with industry and other entities to avoid actual, potential, or perceived conflicts of interest.

Importance and Prevalence of Essential Tremor

Essential tremor is a neurological disorder causing involuntary and rhythmic shaking. “Essential tremor is one of the most common movement disorders in the world, with prevalence in the general population of 0.4 to 3.9%”ⁱ Essential tremor is estimated to impact 7ⁱⁱ to 10 million Americans.ⁱⁱⁱ Incidence increases with age^{iv} with the average age of onset in mid-to-late 40s.^v

“The development of ET is usually so insidious that patients cannot date the onset of symptoms to within less than five years. Other patients claim to know within a year, but this usually means they recall their first troublesome incidents with tremors, not when the tremors started. Like most gradually progressive diseases that begin insidiously, ET is often unrecognized until someone brings it to the patient’s attention, or until the tremor reaches sufficient magnitude to interfere with daily living.”^{vi} – Rodger J. Elble, MD, PhD

Essential tremor symptoms can range from barely noticeable to severe and disabling. Although tremor may impact quality of life, particularly eating, speaking, drinking, typing, brushing teeth or writing, only a proportion seek medical attention.^{vii} Many individuals fail to seek treatment due to a lack of awareness and stereotypes.^{viii}

Opportunity for Improvement

Essential tremor can be disabling. Although tremor may impact quality of life, particularly eating, drinking, and writing, only a proportion of patients with tremor seek medical attention.^{ix} It is estimated that between 30^x -62%^{xi} of those diagnosed with ET will also have vocal tremor, which is difficult to treat. In a survey of patients conducted by Louis, et al., only one in ten patients indicated they were satisfied in their current treatment situation.^{xii} These patients indicated psychological services and support (33.9%), physical or occupational therapy (28.6%), handling embarrassment and social effects of tremor (15.8%), and feelings of not being in control (13.7%) as areas needing additional care and support.^{xiii}

Additional information on treatment gaps in care and opportunity for improvement are included in the individual measure specifications that follow.

Clinical Evidence Base

A comprehensive search to identify published guidelines, measures, and consensus recommendations in the National Guidelines Clearinghouse, the National Quality Measures Clearinghouse, PubMed, MEDLINE, EMBASE, and the Cochrane Library occurred. The work group consulted the following clinical practice guidelines and systematic reviews with the following serving as the base of the measure drafts:

- 2005 Practice parameter: therapies for essential tremor: report of the Quality Standards Subcommittee of the American Academy of Neurology.^{xiv}
- 2006 Quality of life and personality in essential tremor patients.^{xv}
- 2011 Evidence-based guideline update: treatment of essential tremor: report of the Quality Standards subcommittee of the American Academy of Neurology.^{xvi}
- 2011 Guidelines for management of essential tremor.^{xvii}
- 2013 Treatment of essential tremor: a systematic review of evidence and recommendations from the Italian Movement Disorders Association.^{xviii}
- 2013 Task force report: scales for screening and evaluating tremor: critique and recommendations.^{xix}
- 2014 Is essential tremor a dementing neurodegenerative disease?^{xx}

- 2014 The Non-motor Features of Essential Tremor: A Primary Disease Feature or Just a Secondary Phenomenon?^{xxi}

Common Abbreviations and Definitions for the Measurement Set

Below is a list of acronyms utilized in this document. The AAN has a Quality Improvement Glossary, which provides more in-depth explanations and is available at aan.com/practice/quality-measures/quality-resources.

- ADL: Activities of Daily Living
- CMS: Centers for Medicare & Medicaid Services
- DBS: Deep Brain Stimulations
- EHR: Electronic Health Record
- ET: essential tremor
- NQF: National Quality Forum
- PD: Parkinson’s disease
- PQRS: Physician Quality Reporting System
- PRP: propranolol
- PRP-LA: propranolol long-acting
- QOL: Quality of Life

2016 Essential Tremor Measurement Set

The following measures were approved by the work group. There is no requirement that all measures in the measurement set be used. Providers are encouraged to identify the one or two measures that would be most meaningful for your patient populations and implement these measures to drive performance improvement in practice. The AAN measure development process involves a modified Delphi review by expert work group membership to reach consensus on measures to be developed prior to a public comment and following public comment further refinement.^{xxii}

2016 Essential Tremor Measurement (ET) Set*
Pharmacological Treatment for Patients with ET
Surgical Evaluation for Patients with ET
Annual Assessment of Essential Tremor Severity
Annual Screening of Depression and Anxiety for Patients with ET
Annual Assessment of Quality of Life for Patients with ET
Promotion of ET Resources

*The Work Group strongly suggests all providers screen for unhealthy alcohol use in this population using the Preventative Care and Screening: Unhealthy Alcohol Use: Screening & Brief Counseling measure (National Quality Forum measure #2152).

Other Potential Measures

The work group strongly suggests all providers assess patients with ET for unhealthy alcohol use. The work group declined to develop a new measure to address this concern given the existence of a current PCPI Foundation measure that is applicable to this population. The PCPI Foundation measure has been endorsed by the National Quality Forum (#2152) and is currently utilized in CMS’s pay-for-reporting Physician Quality Reporting System.

- Numerator: Patients who were screened at least once within the last 24 months for unhealthy alcohol use using a systematic screening method AND who received brief counseling if identified as an unhealthy alcohol user.
- Denominator: All patients aged 18 years older who were seen twice for any visits or who had at least one preventive care visit during the two-year measurement period.

The work group proposed multiple alternate measures. Ultimately these measures were not included in this measurement set, but the concepts will be retained for future measurement set updates as more evidence may support development or a treatment gap in care at that time.

- Annual Diagnostic Review – Following public comment period, the proposed annual diagnostic review measure was not further developed. Further development of the measure would place burden on the provider to either change documentation practices with little added benefit to patient care or burden on the provider to review all medical records manually to locate the data to meet the measure. Prior to public comment, the work group evaluated the possibility of addressing diagnostic needs via a DaTscan measure, but did not pursue development, as use of DaTscan does not definitively confirm a diagnosis of essential tremor. It is anticipated this issue will be reviewed in the next update to evaluate feasibility of developing a measure that will help providers address the diagnostic needs of patients who may exhibit warning signs that their diagnosis should be evaluated further.
- Outcome Measures for Tremor Severity and Quality of Life – The work group felt these concepts were of high value, but ultimately determined it would be impractical to implement at this time, resulting in development of process measures for these issues. It is hoped that a universal tool will rise in the field to allow for quickly assessing patient satisfaction with treatment and monitoring tremor severity without being burdensome to patients and clinicians.
- Botulinum Toxin - Discussed development of a potential measure for vocal, head, and limb tremor, but there was a lack of strong evidence and guideline statements. The work group hopes that additional research will be conducted to demonstrate the efficacy of this treatment option for consideration as a potential measure in the future.
- Speech, occupational and physical therapy – discussed development of a measure addressing referrals to services, but there currently exists no strong evidence statements supporting a link to improved outcomes. Additionally, a patient reported outcome measure was not appropriate for development given the lack of validated instruments to gather outcomes in these settings.
- Exercise and relaxation – There is insufficient published evidence to support development of these measures at this time. There are small studies (n=13) supporting strength training and biofeedback (n=3). These small samples cannot be generalized to patients with ET, and more research and systematic reviews on these issues are needed for future measures.
- Intermediate Medication Stabilization Outcome measure was discussed and dropped from further development given the lack of evidence to support therapeutic blood ranges for current medications used to treat ET, although such ranges exist for seizure control it is not appropriate to apply these ranges to patients with ET.
- Vocal tremor – The work group discussed development of a measure assessing if a patient identified with vocal tremor was informed of available treatment options. The work group discussed that the current level of evidence and absence of guidelines statements did not meet criteria for measurement development.
- Cognitive Impairment – The work group discussed development of a potential measure addressing clinician assessment for cognitive impairments, but evidence was lacking supporting the need for this assessment on all patients with ET. Further research is needed regarding any potential link between ET and cognitive impairment.
- Ultrasound – Many individuals commented on the lack of a measure addressing ultrasound use. Current guideline statements do not address high energy ultrasound use. It is anticipated that in future updates of the measurement set this will be addressed following development of guidelines addressing ultrasound and potential FDA approval.

Technical Specifications Overview

The Work Group developed technical specifications for measures that includes data from:

- Electronic Health Record (EHR) Data
- Administrative Data
- Registry

Administrative claims specifications are not provided for measures given the AMA’s decision to discontinue the maintenance of CPT II codes. The AAN is in the process of creating code value sets and the logic required for electronic capture of the quality measures with EHRs, when possible. A listing of the quality data model elements, code value sets,

and measure logic (through the CMS Measure Authoring Tool) for each of the measures will be made available at a later date. These technical specifications will be updated as warranted.

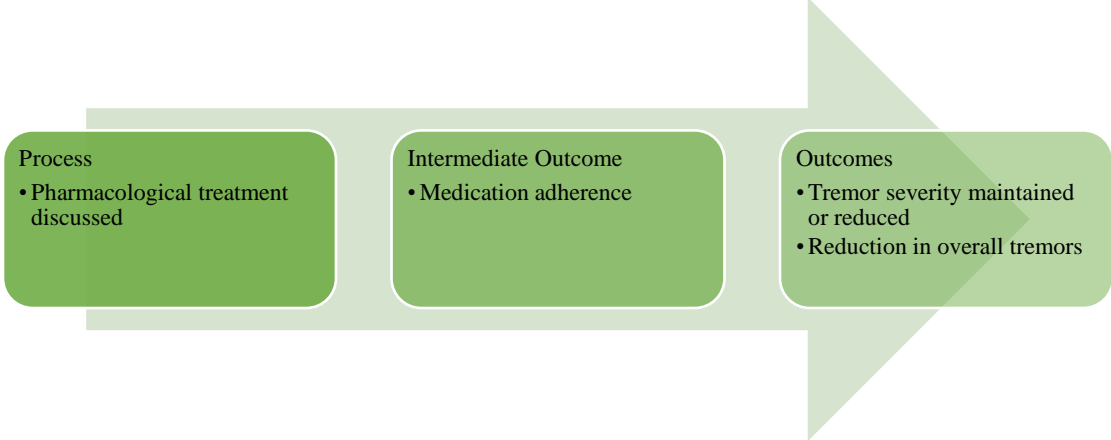
The measurement set may include measures that require the use of validated screening or other assessment tools. The Work Group discussed more and less prescriptive ways to select these tools, eventually determining that multiple tools should be offered to allow providers to determine which tool best meets their individual practice needs. In some cases, tools may be subject to copyright and require licensing fees.

Testing and Implementation of the Measurement Set

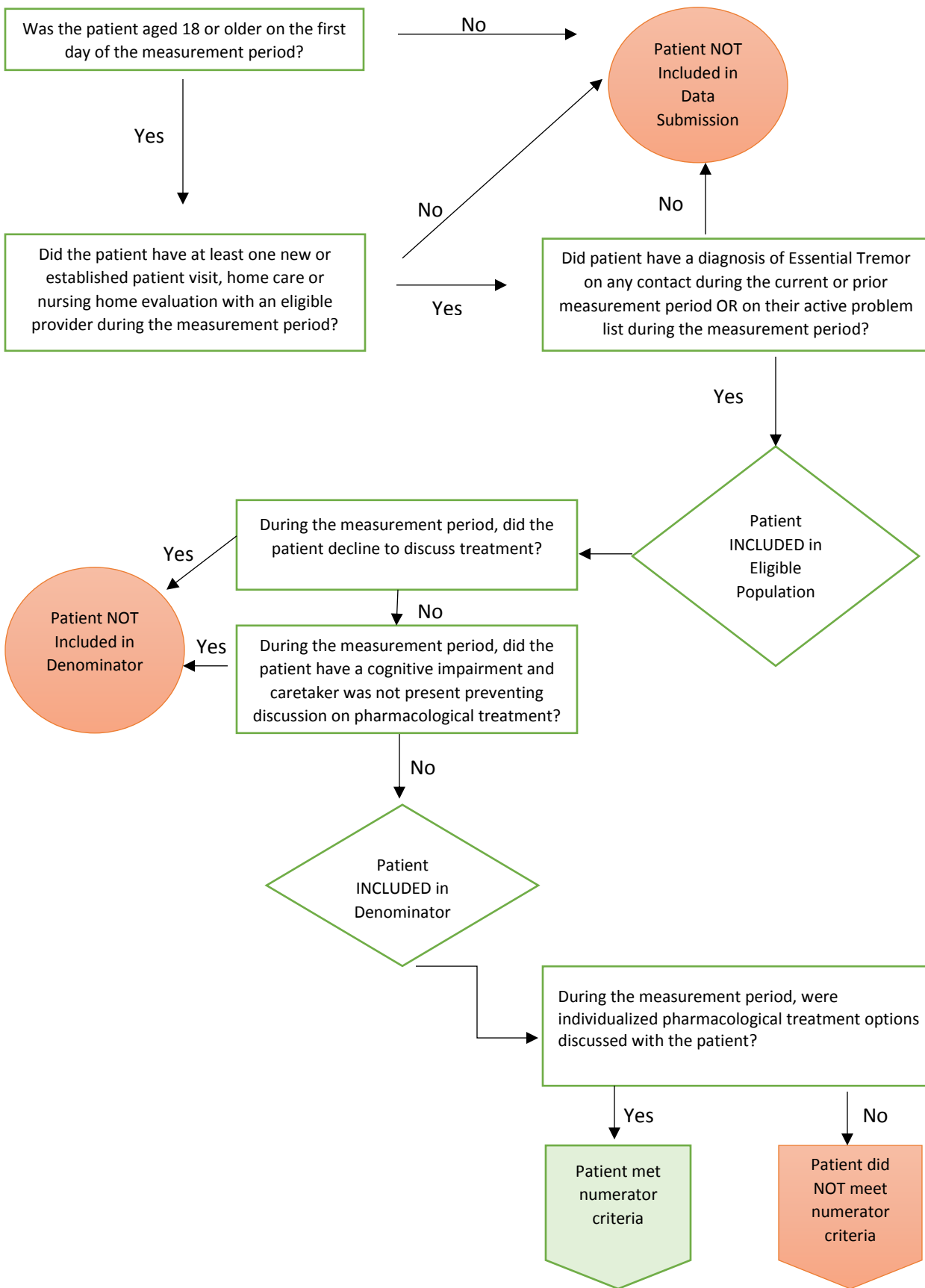
The measures in this set are being made available without any prior testing. The AAN encourages testing of this measurement set for feasibility and reliability by organizations or individuals positioned to do so. Select measures will be beta tested once the set has been released, prior to submission to the National Quality Forum for possible endorsement.

2016 Essential Tremor Measure Specifications

Measure Title	Pharmacological Treatment for Patients with ET	
Description	Percentage of patients aged 18 years or older with ET for whom pharmacological treatment options were discussed at least once in the 12-month measurement period.	
Measurement Period	January 1, 20xx to December 31, 20xx	
Eligible Population	Eligible Providers	Medical Doctor (MD), Doctor of Osteopathy (DO), Physician Assistant (PA), Advanced Practice Registered Nurse (APRN)
	Care Setting(s)	Outpatient and Post-Acute Care
	Ages	18 years and older
	Event	Patient had an office visit, E/M services, or home care services performed or supervised by an eligible provider as a patient.
	Diagnosis	Essential Tremor
Denominator	Patients 18 years and older with a diagnosis of essential tremor.	
Numerator	<p>Patients for whom pharmacological treatment* options were discussed at least once in the 12-month measurement period.</p> <p>*Pharmacological treatment is defined as individualized recommendations to meet patient needs that are in compliance with current guideline statements.</p>	
Required Exclusions	None	
Allowable Exclusions	<ul style="list-style-type: none"> • Patient declines discussion. • Patient is unable to participate in examination (i.e., advanced stage dementia, profound psychosis, neurodevelopmental disorder, brain injury encephalopathy, or hydrocephalus) and caretaker not present. 	
Exclusion Rationale	It is appropriate to exclude patients who decline to discuss pharmacological options. Additionally, a discussion on treatment options cannot be held with those who have an impairment preventing participation without the presence of a caretaker.	
Measure Scoring	Percentage/Proportion	
Interpretation of Score	Higher Score Indicates Better Quality	
Measure Type	Process	
Level of Measurement	Provider, Practice and System	
Risk Adjustment	Not Applicable	
For Process Measures Relationship to Desired Outcome	Pharmacologic therapy to address symptomatic progression to maximize function and safety are available (1) and should be discussed with patients, with the goal of improving quality of life and performance of activities of daily living.	


	<p>“Although benign in term of its effect on life expectancy, it often causes embarrassment and, in a small percentage of patients, also serious disability. Moreover, symptoms are typically progressive and potentially disabling, often forcing patients to change jobs or seek early retirement.” (2)</p> 
<p>Opportunity to Improve Gap in Care</p>	<p>Health care providers need to tailor treatment recommendations based on each individual patient situation. Health care providers must provide patients and caregivers with information on efficacy and lack of efficacy for treatment options, balancing the patient’s treatment goals with available options. In a survey of International Essential Tremor Foundation members, findings indicated an increased need for awareness of guideline approved treatment options.(4) Specifically, members indicated “current treatments included beta-blockers (42%), primidone (20%), benzodiazepines (13%), gabapentin (6%), topiramate (5%) and Deep Brain Stimulation (3%). However, 33% reported no benefit from beta-blockers and 35% discontinued due to side effects. Similarly, 17% had no benefit from primidone and 23% discontinued due to side effects. In addition, 33% had received no treatment for their tremor.”(4) In a similar study by Louis, 11.9% of survey respondents indicated they would like better counseling about current treatment and medications.(5)</p> <p>Measure is met by conducting a discussion regarding pharmacological treatment. If patient has a medical contraindication or declines further treatment options citing satisfaction with current treatment course, the measure has been satisfied as a discussion on treatment options has occurred.</p> <p>Although not explicitly measured, it is the expectation of the work group that clinicians are assessing medication side effects and complications to ensure that pharmacological treatment options are appropriate for individual patients. It is implied that a clinician would meet this measure if a patient had surgery and tremor symptoms were no longer problematic warranting no further pharmacological treatment at the time of evaluation.</p>
<p>Harmonization with Existing Measures</p>	<p>No similar measures known.</p>
<p>References</p>	<ol style="list-style-type: none"> 1. Zesiewicz TA, Elble R, Louis ED, et al.; Quality Standards Subcommittee of the American Academy of Neurology. Practice parameter: therapies for essential tremor: report of the Quality Standards Subcommittee of the American Academy of Neurology. Neurology. 2005;64(12):2008-2020. 2. Zappia M, Albanese A, Bruno E, et al. Treatment of essential tremor: a systematic review of evidence and recommendations from the Italian Movement Disorders Association. J Neurol. 2013;260(3):714-740. 3. Zesiewicz TA, Elble RJ, Louis ED, et al. Evidence-based guideline update: treatment of essential tremor: report of the Quality Standards subcommittee of the American Academy of Neurology. Neurology. 2011;77(19):1752-1755.

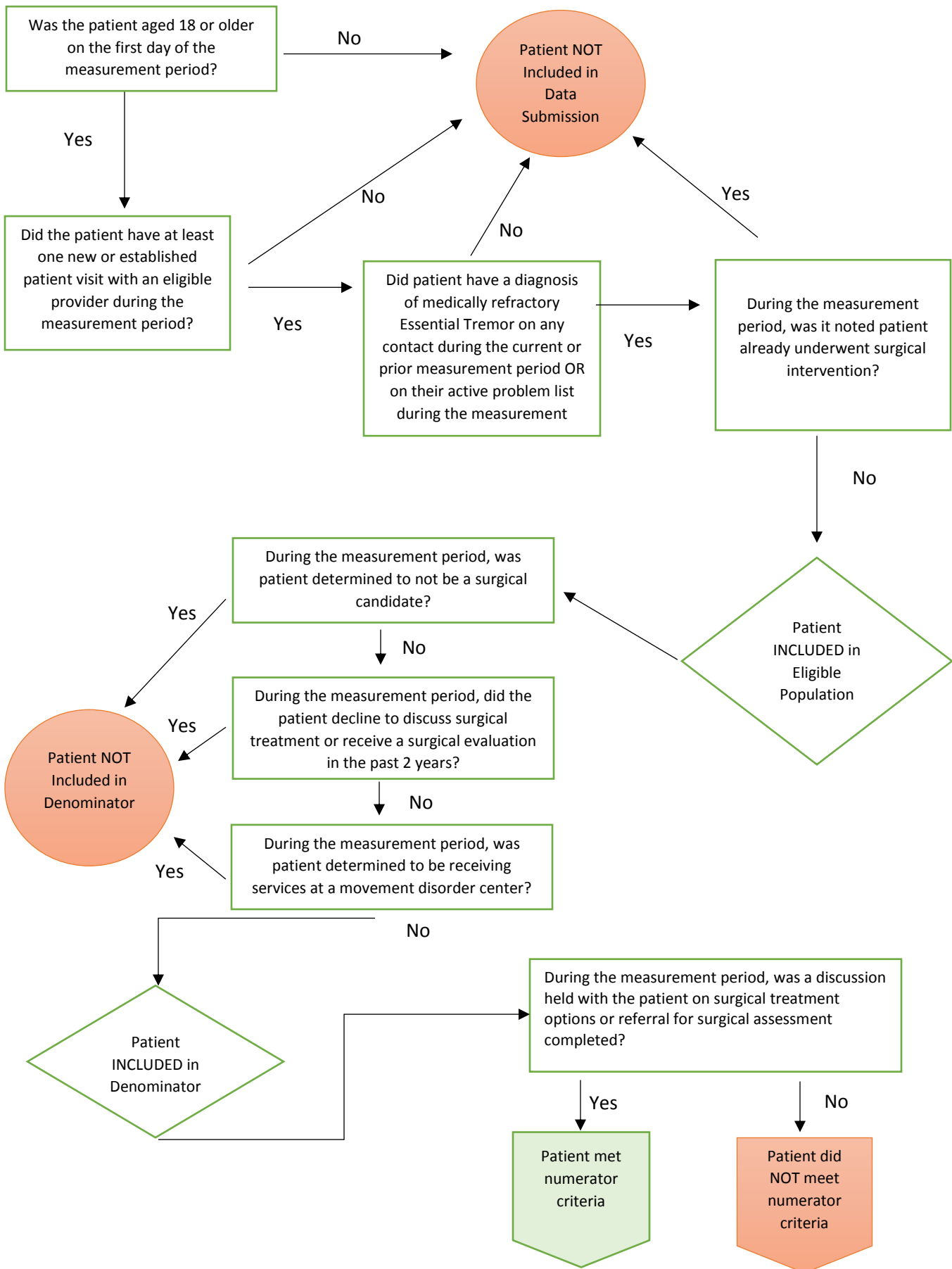
	<ol style="list-style-type: none"><li data-bbox="391 128 1446 233">4. Dowell P, Pahwa R, Lyons K. Exploring Essential Tremor: Results of a Large Online Survey. Neurology. Conference: 68th American Academy of Neurology Annual Meeting, AAN 86(16 SUPPL. 1).<li data-bbox="391 233 1466 300">5. Louis ED, Rohl B, and Rice C. Defining the Treatment Gap: What Essential Tremor Patients Want That They Are Not Getting. Tremor Other Hyperkinet Mov. 2015;5:331.
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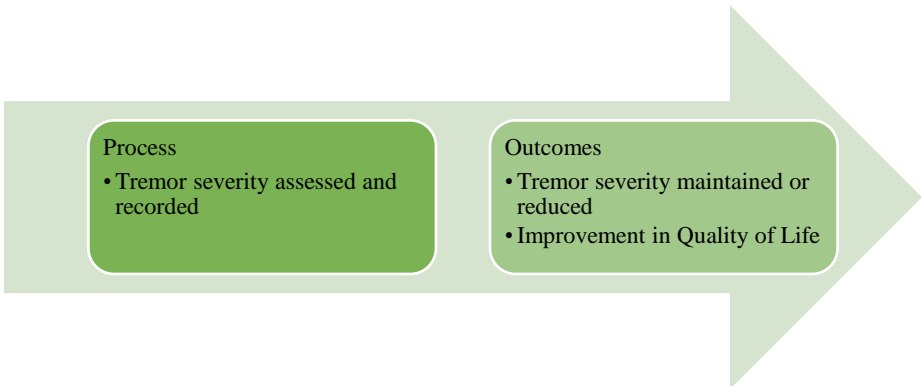
Code System	Code	Code Description
ICD-9	333.1	Essential Tremor
ICD-10	G25.0	Essential Tremor
CPT	99201-99205	Office or Other Outpatient Visit - New Patient (E/M Codes)
CPT	99211-99215	Office or Other Outpatient Visit - Established Patient (E/M Codes)
CPT	99241-99245	Office or Other Outpatient Consultation – New or Established Patient
CPT	99304-99310	Nursing Home Consultation
CPT	99318	Other Nursing Facility Service
CPT	99324-99328; 99334-99337	Domiciliary, Rest Home Care Services
CPT	99339,99340	Domiciliary, Rest Home Care Services Care Plan Oversight
CPT	99341-99345	Home Care
CPT	99347-99350	Home Care

Measure Title	Surgical Treatment for Patients with ET	
Description	Percentage of patients aged 18 years or older diagnosed with medically refractory* ET for whom available guideline appropriate surgical treatment options± were discussed^ least once in the 12-month measurement period.	
Measurement Period	January 1, 20xx to December 31, 20xx	
Eligible Population	Eligible Providers	Medical Doctor (MD), Doctor of Osteopathy (DO), Physician Assistant (PA), Advanced Practice Registered Nurse (APRN)
	Care Setting(s)	Outpatient Care
	Ages	18 years and older
	Event	Patient had an office visit or E/M services performed or supervised by an eligible provider as a patient.
	Diagnosis	Medically refractory Essential Tremor
Denominator	Patients aged 18 years or older diagnosed with medically refractory* ET. *Medical refractory is defined as patients who indicate they are not satisfied with tremor control despite optimal tremor medical management.	
Numerator	Patients aged 18 years or older diagnosed with medically refractory* ET for whom available guideline appropriate surgical treatment options± were discussed^ least once in the 12-month measurement period. ±Surgical Treatment Options – See technical specifications below. ^Discussed is a verbal conversation with patient on treatment options or completion of a surgical assessment.	
Required Exclusions	<ul style="list-style-type: none"> • Patient has already undergone surgical treatment intervention. 	
Allowable Exclusions	<ul style="list-style-type: none"> • Patient declines discussion on surgical treatment options. • Patient is not a surgical candidate. • Patient is already receiving care at a movement disorder center. • Patient has been evaluated at a movement disorder center within the past 2 years. 	
Exclusion Rationale	It is appropriate to exclude patients who decline surgical options and those who have already undergone a surgical treatment intervention. It is appropriate to exclude those who are felt to not be surgical candidates due to unacceptable surgical risks. Patients connected to care at a movement disorder center and who have been evaluated in prior 2-year period are removed to reduce duplicative conversations with the patient on surgical treatment options.	
Measure Scoring	Percentage/Proportion	
Interpretation of Score	Higher Score Indicates Better Quality	
Measure Type	Process	
Level of Measurement	Provider, Practice and System	
Risk Adjustment	Not Applicable	

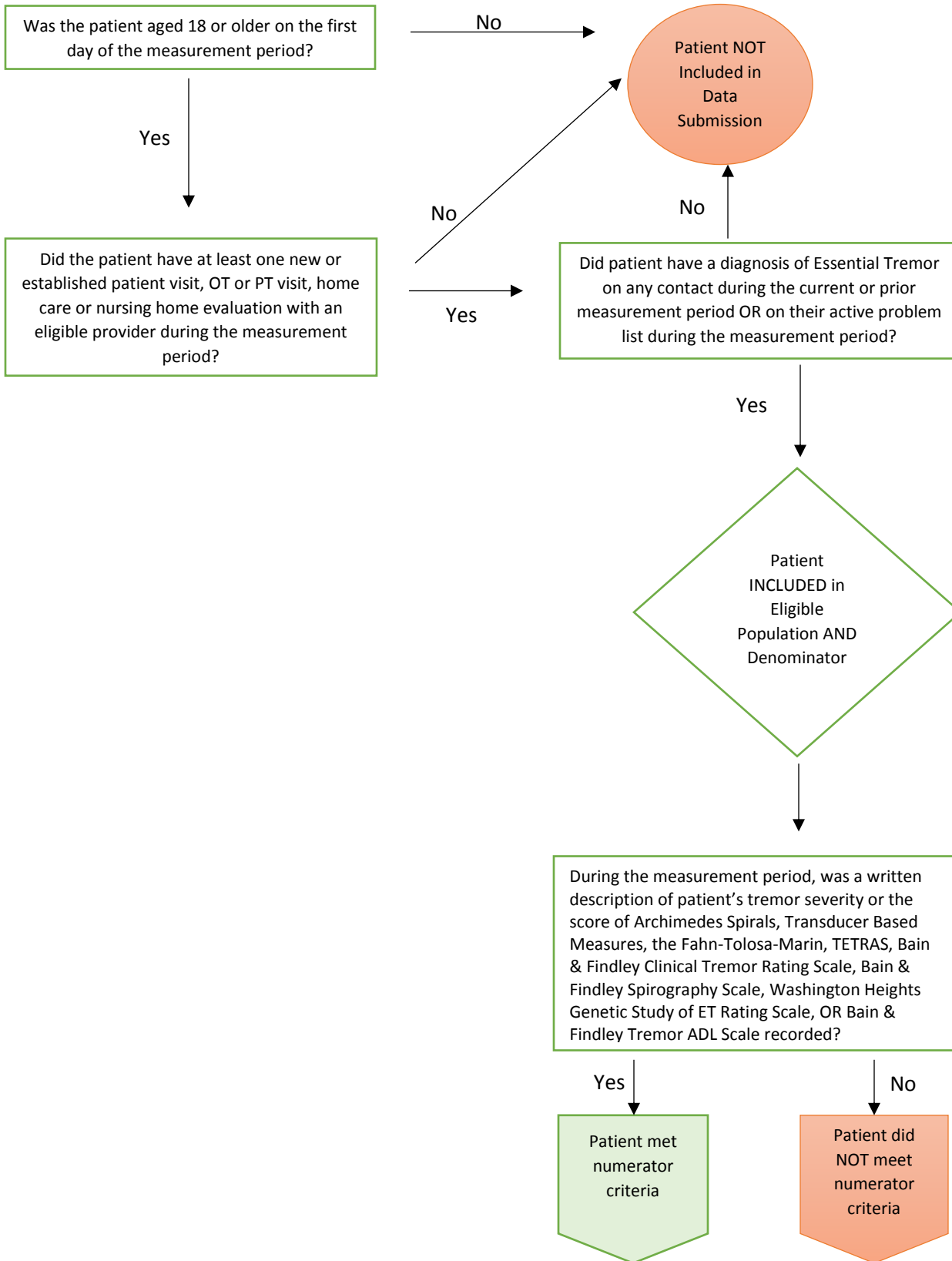
For Process Measures Relationship to Desired Outcome	<p>Surgical treatment options to address symptomatic progression to maximize function and safety are available and should be discussed with patients, with the goal of improving quality of life and performance of activities of daily living.(1-3)</p> 
Opportunity to Improve Gap in Care	<p>In a study by Louis, 11.9% of survey respondents indicated they would like better counseling about current treatment and medications.(4)</p>
Harmonization with Existing Measures	<p>No similar measures known.</p>
References	<ol style="list-style-type: none"> 1. Zesiewicz TA, Elble R, Louis ED, et al.; Quality Standards Subcommittee of the American Academy of Neurology. Practice parameter: therapies for essential tremor: report of the Quality Standards Subcommittee of the American Academy of Neurology. <i>Neurology</i>. 2005;64(12):2008-2020. 2. Zesiewicz TA, Elble RJ, Louis ED, et al. Evidence-based guideline update: treatment of essential tremor: report of the Quality Standards subcommittee of the American Academy of Neurology. <i>Neurology</i>. 2011;77(19):1752-1755. 3. Zappia M, Albanese A, Bruno E, et al. Treatment of essential tremor: a systematic review of evidence and recommendations from the Italian Movement Disorders Association. <i>J Neurol</i>. 2013;260(3):714-740. 4. Louis ED, Rohl B, and Rice C. Defining the Treatment Gap: What Essential Tremor Patients Want That They Are Not Getting. <i>Tremor Other Hyperkinet Mov</i>. 2015;5:331



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ICD-10	G25.0	Essential Tremor
CPT	99201-99205	Office or Other Outpatient Visit - New Patient (E/M Codes)
CPT	99211-99215	Office or Other Outpatient Visit - Established Patient (E/M Codes)
CPT	99241-99245	Office or Other Outpatient Consultation – New or Established Patient

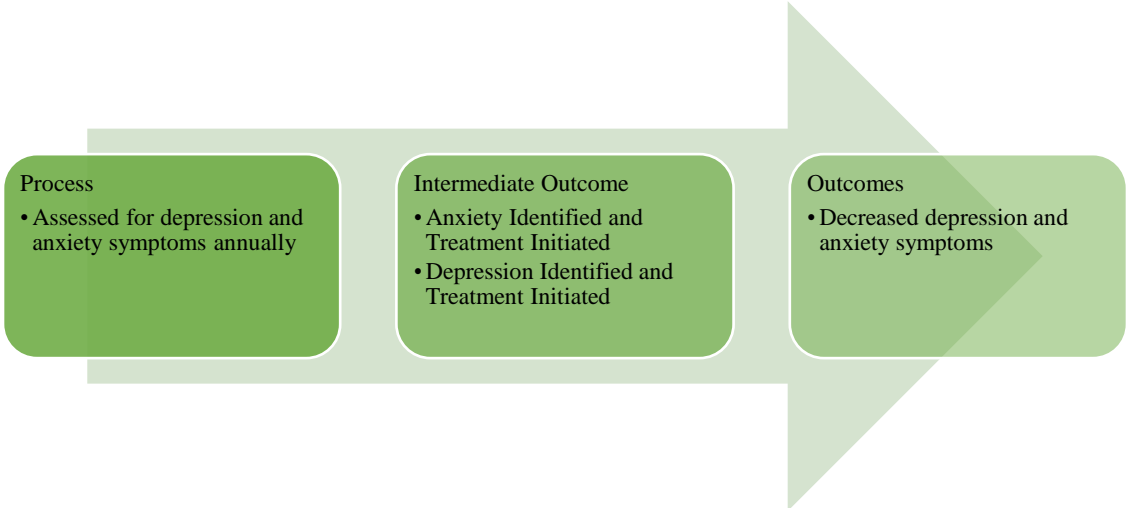
Measure Title	Annual Assessment of Essential Tremor Severity	
Description	Percentage of patients aged 18 years or older with ET whose tremor severity was assessed annually and recorded* at least once in the 12-month measurement period.	
Measurement Period	January 1, 20xx to December 31, 20xx	
Eligible Population	Eligible Providers	Medical Doctor (MD), Doctor of Osteopathy (DO), Physician Assistant (PA), Advanced Practice Registered Nurse (APRN), Physical Therapist, Occupational Therapist
	Care Setting(s)	Outpatient and Post-Acute Care
	Ages	18 years and older
	Event	Patient had an office visit, E/M services, physical therapy, occupational therapy, or home care services performed or supervised by an eligible provider as a patient.
	Diagnosis	Essential Tremor
Denominator	Patients 18 years and older with a diagnosis of essential tremor.	
Numerator	Patients aged 18 years or older with ET whose tremor severity was assessed annually and recorded* in the 12-month measurement period. *Recorded includes a written description of severity OR score from use of a validated tool noted in the medical record: Archimedes Spirals, Transducer Based Measures, the Fahn-Tolosa-Marin, TETRAS, Bain & Findley Clinical Tremor Rating Scale, Bain & Findley Spirography Scale, Washington Heights Genetic Study of ET Rating Scale, or Bain & Findley Tremor ADL Scale(1)	
Required Exclusions	None	
Allowable Exclusions	None	
Exclusion Rationale	Not Applicable	
Measure Scoring	Percentage/Proportion	
Interpretation of Score	Higher Score Indicates Better Quality	
Measure Type	Process	
Level of Measurement	Provider, Practice and System	
Risk Adjustment	Not Applicable	
For Process Measures Relationship to Desired Outcome	<p>The desired outcome is to reduce tremor severity and disability. This measure will deliver meaningful data to healthcare providers to identify and manage tremor severity and disability.</p> 	

Opportunity to Improve Gap in Care	<p>Patients have reported a need for additional detailed reports and more quantitative ways of assessing tremor and tracking progression. (2) This measure would provide a standardized scale assessing tremor and allowing for additional conversations between providers and patients on disease progression.</p> <p>Verbal assessment can be completed for those who decline to use a scale.</p>
Harmonization with Existing Measures	No similar measures known.
References	<ol style="list-style-type: none"> 1. Elble R, Bain P, Forjaz MJ, et al. Task force report: scales for screening and evaluating tremor: critique and recommendations. <i>Mov Disord.</i> 2013;28(13):1793-1800. 2. Louis ED, Rohl B, and Rice C. Defining the Treatment Gap: What Essential Tremor Patients Want That They Are Not Getting. <i>Tremor Other Hyperkinet Mov.</i> 2015;5:331.

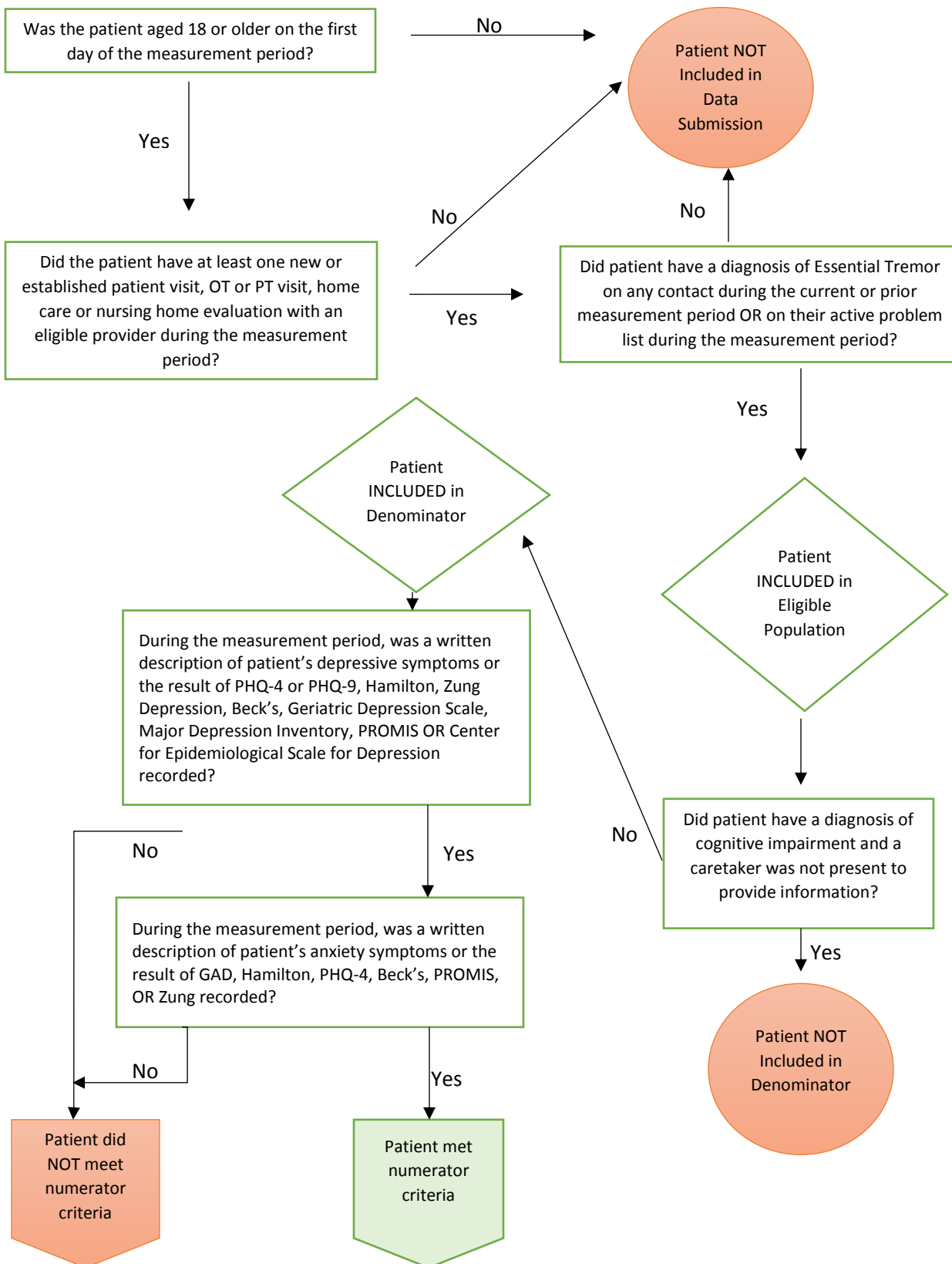


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ICD-10	G25.0	Essential Tremor
CPT	99201-99205	Office or Other Outpatient Visit - New Patient (E/M Codes)
CPT	99211-99215	Office or Other Outpatient Visit - Established Patient (E/M Codes)
CPT	99241-99245	Office or Other Outpatient Consultation – New or Established Patient
CPT	97165,97166,97167	Occupational therapy low, moderate, and high evaluation
CPT	97168	Occupational therapy reevaluation
CPT	97161,97162,97163	Physical therapy low, moderate, and high evaluation
CPT	97164	Physical therapy reevaluation
CPT	99304-99310	Nursing Home Consultation
CPT	99318	Other Nursing Facility Service
CPT	99324-99328; 99334-99337	Domiciliary, Rest Home Care Services
CPT	99339,993340	Domiciliary, Rest Home Care Services Care Plan Oversight
CPT	99341-99345	Home Care
CPT	99347-99350	Home Care

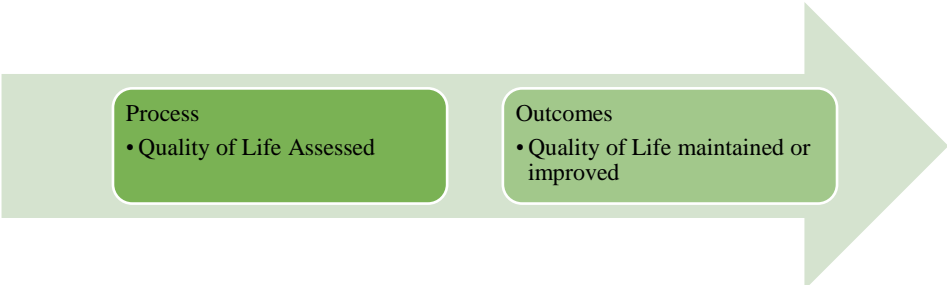
Measure Title	Annual Screening of Depression and Anxiety for Patients with ET	
Description	Percentage of patients aged 18 years or older with ET for whom annual screening* for depression and anxiety were conducted at least once in the 12-month measurement period.	
Measurement Period	January 1, 20xx to December 31, 20xx	
Eligible Population	Eligible Providers	Medical Doctor (MD), Doctor of Osteopathy (DO), Physician Assistant (PA), Advanced Practice Registered Nurse (APRN), Physical Therapist, Occupational Therapist
	Care Setting(s)	Outpatient and Post-Acute Care
	Ages	18 years and older
	Event	Patient had an office visit, E/M services, post-acute, or home care services performed or supervised by an eligible provider as a patient.
	Diagnosis	Essential Tremor
Denominator	Patients 18 years and older with a diagnosis of essential tremor.	
Numerator	<p>Patients for whom annual screening* for depression AND anxiety were conducted at least once in the 12-month measurement period.</p> <p>*Screening- is defined as a verbal assessment of symptoms. A standardized tool may also be used during assessment, these tools are:</p> <p>Depression</p> <ul style="list-style-type: none"> • Patient Health Questionnaire (PHQ-9) or (PHQ-4), • Hamilton Depression Rating Scale (HAM-D or HDRS), • Zung Self-Rating Depression Scale (SDS), • Beck Depression Inventory (BDI) or BDI II, • Geriatric Depression Scale (GDS), • Major Depression Inventory (MDI), • PROMIS Emotional Distress - Depression OR • Center for Epidemiological Studies Depression Scale Revised (CESD-R). <p>Anxiety</p> <ul style="list-style-type: none"> • Generalized Anxiety Disorder Assessment (GAD-7), • Hamilton Anxiety Rating Scale (HAM-A), • Patient Health Questionnaire (PHQ-4), • Beck Anxiety Inventory (BAI), • PROMIS Emotional Distress - Anxiety OR • Zung Self-Rating Anxiety Scale (SAS). 	
Required Exclusions	None	
Allowable Exclusions	<ul style="list-style-type: none"> • Patient is unable to participate in examination (i.e., advanced stage dementia, profound psychosis, neurodevelopmental disorder, brain injury encephalopathy, or hydrocephalus) and caretaker not present. 	
Exclusion Rationale	An assessment of depression and anxiety cannot be conducted for patients with an impairment preventing participation without the presence of a caretaker.	
Measure Scoring	Percentage/Proportion	
Interpretation of Score	Higher Score Indicates Better Quality	
Measure Type	Process	

Level of Measurement	Provider, Practice and System
Risk Adjustment	Not Applicable
For Process Measures Relationship to Desired Outcome	<p>Supportive services and therapies to address non-motor symptoms of ET to maximize function and safety are available and should be discussed with patients, with the goal of improving quality of life and performance of activities of daily living. (1-3)</p>  <p>“Traditionally, psychiatric symptoms have been regarded as occurring in response to debilitating neurological symptoms in ET. However, other evidence suggests that depression might occur before the motor symptoms of ET manifest; in such situations this psychiatric disorder cannot be a secondary response to disability.” (4)</p>
Opportunity to Improve Gap in Care	<p>Some studies have estimated that as many as 30% of patients with ET have mild depressive symptoms. (4).</p> <p>“Respondents raised a multiplicity of issues that were not being addressed in their current care. The top items were psychological services and support (33.9%), physical or occupational therapy (28.6%), handling embarrassment and social effects of tremor (15.8%), feelings of not being in control (13.7%), ... and a discussion of all symptoms aside from tremor (e.g., cognition, balance). (5)</p> <p>Health care providers need to tailor treatment recommendations based on each individual patient situation. Health care providers must provide patients and caregivers with information on efficacy and lack of efficacy for treatment options, balancing the patient’s treatment goals with available options.</p>
Harmonization with Existing Measures	No similar measures known.
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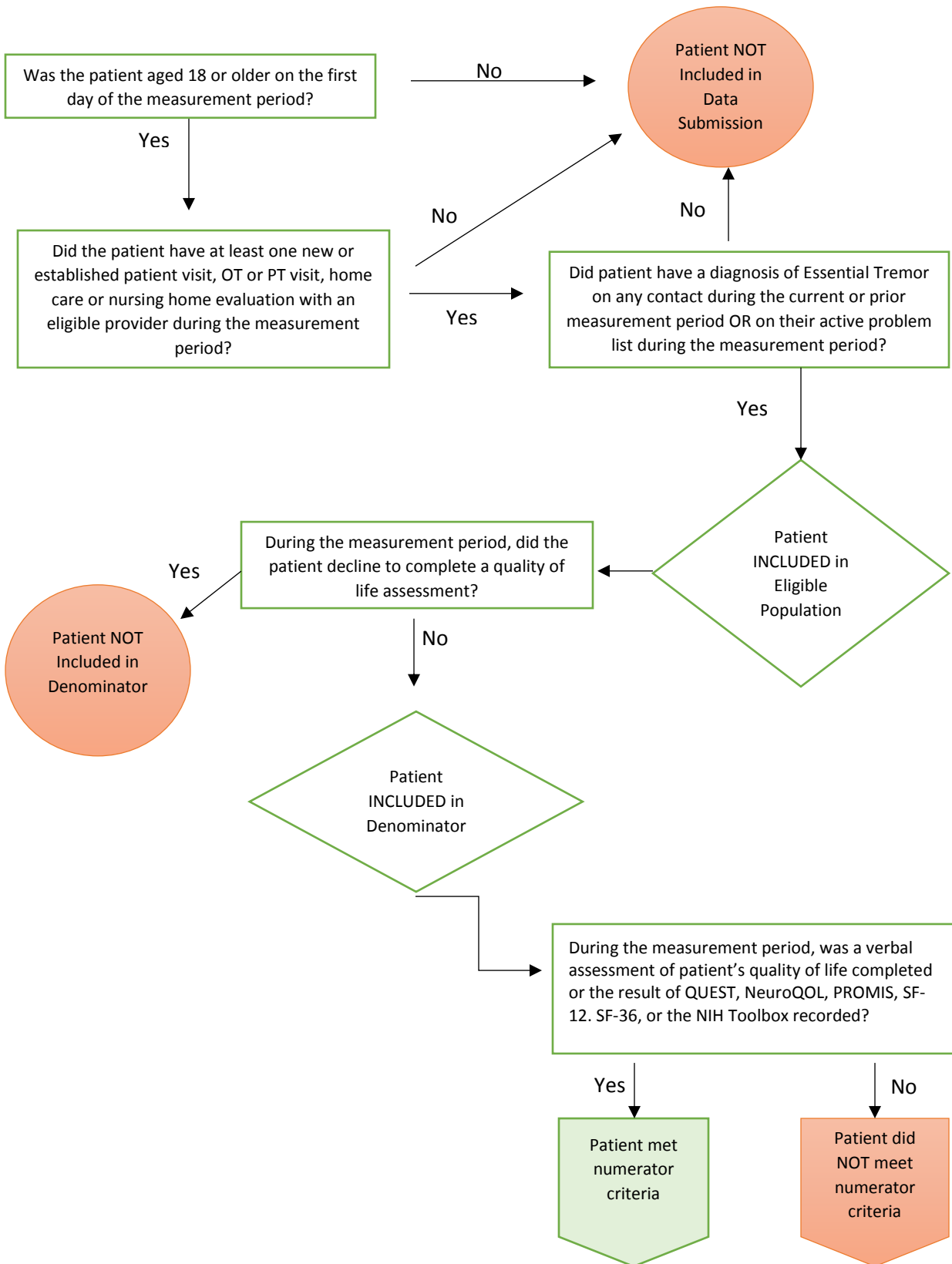
	<ol style="list-style-type: none"><li data-bbox="391 128 1477 233">4. Janicki SC, Cosentino S, and Louis ED. The cognitive side of essential tremor: what are the therapeutic implications? <i>Therapeutic Advances in Neurological Disorders</i>. 2013; 6(6):353-368.<li data-bbox="391 233 1477 300">5. Louis ED, Rohl B, Rice C. Defining the treatment gap: What essential tremor patients want that they are not getting. <i>Tremor Other Hyperkinet Mov</i>. 2015; 5..
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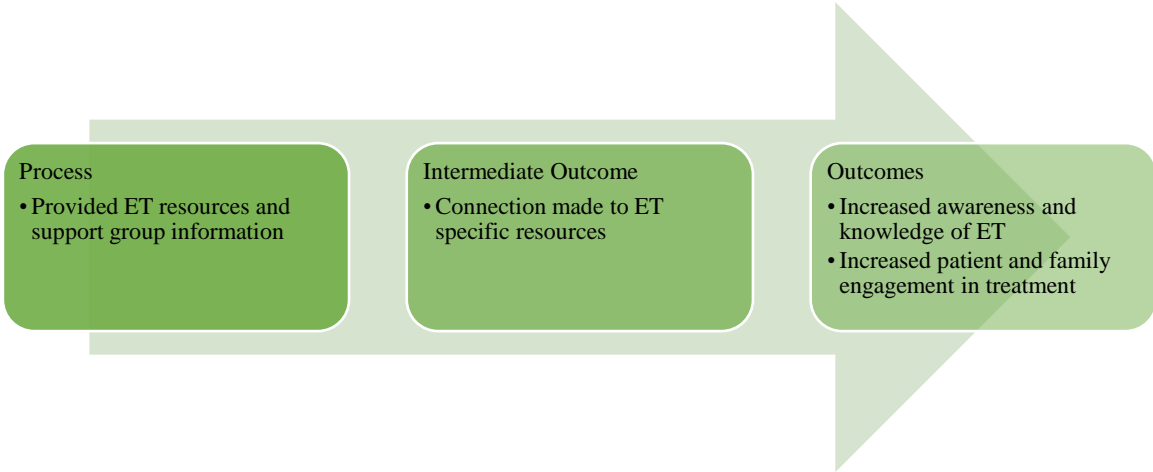
Code System	Code	Code Description
ICD-9	333.1	Essential Tremor
ICD-10	G25.0	Essential Tremor
CPT	99201-99205	Office or Other Outpatient Visit - New Patient (E/M Codes)
CPT	99211-99215	Office or Other Outpatient Visit - Established Patient (E/M Codes)
CPT	99241-99245	Office or Other Outpatient Consultation – New or Established Patient
CPT	99304-99310	Nursing Home Consultation
CPT	99318	Other Nursing Facility Service
CPT	99324-99328; 99334-99337	Domiciliary, Rest Home Care Services
CPT	99339,99340	Domiciliary, Rest Home Care Services Care Plan Oversight
CPT	99341-99345	Home Care
CPT	99347-99350	Home Care
CPT	97165,97166,97167	Occupational therapy low, moderate, and high evaluation
CPT	97168	Occupational therapy reevaluation
CPT	97161,97162,97163	Physical therapy low, moderate, and high evaluation
CPT	97164	Physical therapy reevaluation
CPT	96150-96155	Health and Behavior Assessment / Intervention
CPT	96160, 96161	Health and Behavior Assessment / Intervention

Measure Title	Annual Assessment of Quality of Life for Patients with ET	
Description	Percentage of patients aged 18 years and older diagnosed with ET who were assessed* annually for quality of life in the 12-month measurement period.	
Measurement Period	January 1, 20xx to December 31, 20xx	
Eligible Population	Eligible Providers	Medical Doctor (MD), Doctor of Osteopathy (DO), Physician Assistant (PA), Advanced Practice Registered Nurse (APRN), Physical Therapist, Occupational Therapist
	Care Setting(s)	Outpatient Care
	Ages	18 years and older
	Event	Patient had an office visit or E/M services performed or supervised by an eligible provider as a patient.
	Diagnosis	Essential Tremor
Denominator	Patients aged 18 years and older diagnosed with ET.	
Numerator	Patients 18 years and older diagnosed with ET who were assessed* annually for quality of life in the 12-month measurement period. *Assessed is defined as a verbal discussion or use of a validated tool: QUEST(1,2), NeuroQOL(3), PROMIS(4), SF-12(5), SF-36(6), or the NIH Toolbox(7).	
Required Exclusions	None	
Allowable Exclusions	<ul style="list-style-type: none"> Patients who are unable or decline to complete quality of life instrument. 	
Exclusion Rationale	Quality of life is a subjective symptom that requires patient cooperation to assess.	
Measure Scoring	Percentage/Proportion	
Interpretation of Score	Higher Score Indicates Better Quality	
Measure Type	Process	
Level of Measurement	Provider, Practice and System	
Risk Adjustment	Not Applicable	
For Process Measures Relationship to Desired Outcome	<p>Maintaining quality of life is a desired outcome for all patients with ET. ET can diminish quality of life given the symptoms impact a person's ability to eat, speak, drink, work and engage in social activities. Measuring quality of life and monitoring for maintenance or improvement is expected to result in prompt, timely interventions for patient identified concerns.</p>  <p>The diagram consists of a large, light green arrow pointing to the right. Inside the arrow, there are two rounded rectangular boxes. The first box, on the left, is labeled 'Process' and contains the text 'Quality of Life Assessed'. The second box, on the right, is labeled 'Outcomes' and contains the text 'Quality of Life maintained or improved'.</p>	
Opportunity to Improve Gap in Care	Research supports that ET patients frequently identify embarrassment as a common consequence of ET symptoms leading to social anxiety and avoidance.(8) These factors combined with debilitating effects of ET result in a decreased quality of life. In a survey of ET patients,	

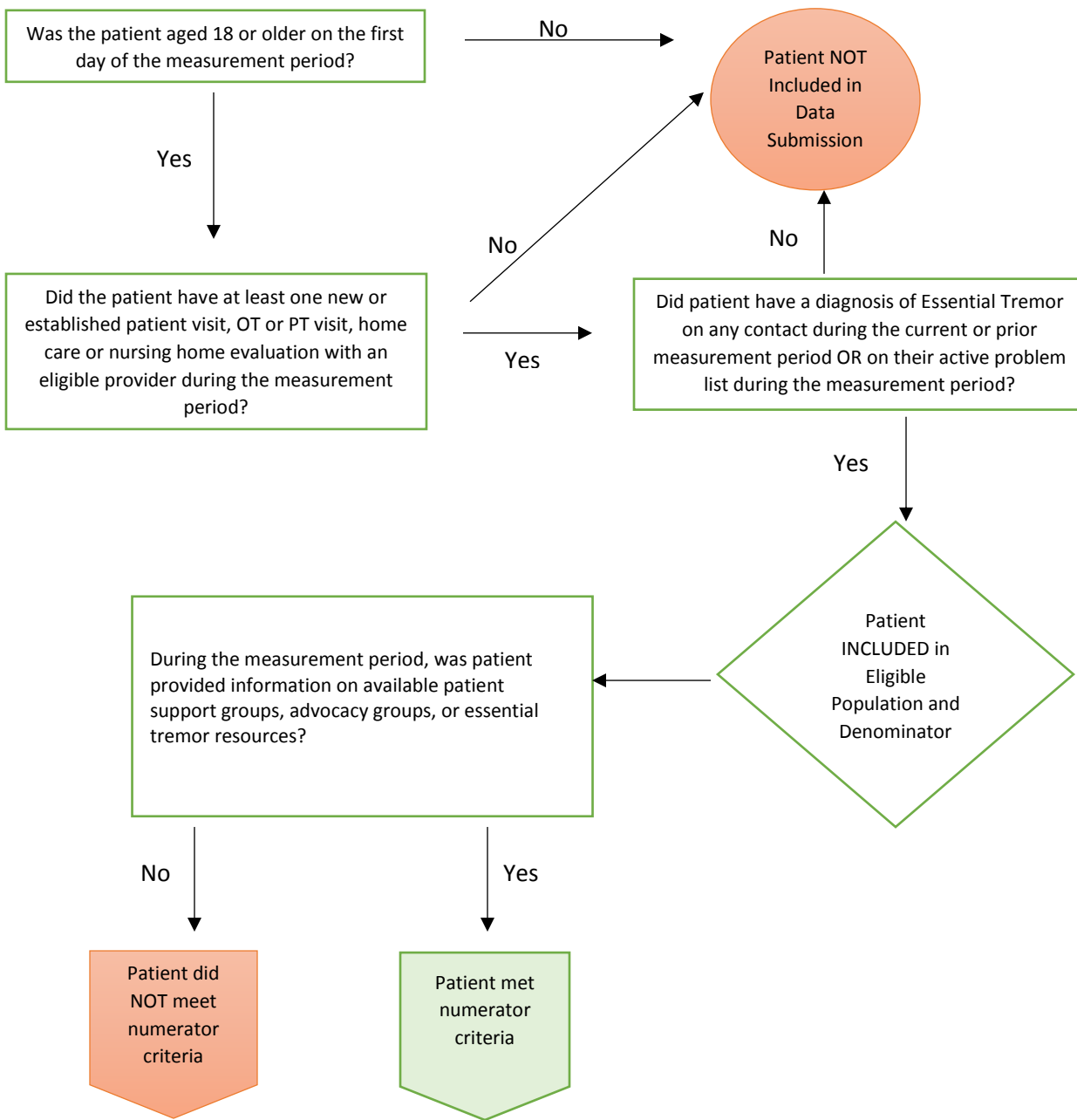
	respondents raised concern that many issues were not being addressed in their current care including psychological services and support (33.9%), handling embarrassment and social effects of tremor (15.8%), feelings of not being in control (13.7%).(9) These gaps support a decreased quality of life for individuals with ET, and an opportunity for improvement.
Harmonization with Existing Measures	No measures addressing ET quality of life are known. Existing measures assess quality of life as a process measure for select individuals and are not generalizable to the ET population (e.g., receiving dialysis, (Assessment of Health-related Quality of Life http://www.qualityforum.org/QPS/0260) family receiving hospice (http://www.qualityforum.org/QPS/0208))
References	<ol style="list-style-type: none"> 1. Troster AI, Pahwa R, Fields JA, et al. Quality of life in Essential Tremor Questionnaire (QUEST): development and initial validation. <i>Parkinsonism Relat Disord.</i> 2005;11(6):367-373. 2. Elble R, Bain P, Forjaz MJ, et al. Task force report: scales for screening and evaluating tremor: critique and recommendations. <i>Mov Disord.</i> 2013;28(13):1793-1800. 3. Gershon RC, Lai JS, Bode R, et al. Neuro-QOL: quality of life item banks for adults with neurological disorders: item development and calibrations based upon clinical and general population testing. <i>Qual Life Res.</i> 2012; 21(3):475-486. 4. DeWalt DA, Rothrock N, Yount S, et al. on behalf of the PROMIS Cooperative Group. Evaluaiton of Item Candidates: The PROMIS Qualitative Item Review. <i>Med Care.</i> 2007;45(5 Suppl 1): S12-S21. 5. Ware JE, Kosinski M, Keller SD. SF-12 how to score the SF-12 physical and mental helath summary scales. 3rd edition. Lincoln (RI): QualityMetric Incorporated. 1998. 6. Ware JE, Kosinki M, Dewey JE. How to Score Version Two of the SF-36 Health Survey. Lincoln (RI): QualityMetric Incorporated. 2000. 7. Hodes RJ, Insel TR, Landis SC. On behalf of the NIH Blueprint for Neuroscience Research. The NIH Toolbox: Setting a standard for biomedical research. <i>Neurology</i> 2013;80(S3):S1-S92. All NIH Toolbox-related materials are ©2012 Northwestern University and the National Institutes of Health. 8. Holding SJ, Lew AR. Relations between psychological avoidance, symptom severity and embarrassment in essential tremor. <i>Chronic Illness</i> 2015;11(1):69-71. 9. Louis ED, Rohl B, and Rice C. Defining the Treatment Gap: What Essential Tremor Patients Want That They Are Not Getting. <i>Tremor Other Hyperkinet Mov.</i> 2015;5:331.



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CPT	99241-99245	Office or Other Outpatient Consultation – New or Established Patient
CPT	97165,97166,97167	Occupational therapy low, moderate, and high evaluation
CPT	97168	Occupational therapy reevaluation
CPT	97161,97162,97163	Physical therapy low, moderate, and high evaluation
CPT	97164	Physical therapy reevaluation

Measure Title	Promotion of ET Resources	
Description	Percentage of patients aged 18 years and older with ET who were provided information on relevant patient support groups, advocacy groups, or essential tremor specific education in the 12-month measurement period.	
Measurement Period	January 1, 20xx to December 31, 20xx	
Eligible Population	Eligible Providers	Medical Doctor (MD), Doctor of Osteopathy (DO), Physician Assistant (PA), Advanced Practice Registered Nurse (APRN)
	Care Setting(s)	Outpatient Care
	Ages	18 years and older
	Event	Patient had an office visit or E/M services performed or supervised by an eligible provider as a patient.
	Diagnosis	Essential Tremor
Denominator	Patients aged 18 years or older diagnosed with ET.	
Numerator	Patients aged 18 years and older who were provided information on relevant patient support groups, advocacy groups, or essential tremor specific education in the 12-month measurement period.	
Required Exclusions	None	
Allowable Exclusions	None	
Exclusion Rationale	Not Applicable	
Measure Scoring	Percentage/Proportion	
Interpretation of Score	Higher Score Indicates Better Quality	
Measure Type	Process	
Level of Measurement	Provider, Practice and System	
Risk Adjustment	Not Applicable	
For Process Measures Relationship to Desired Outcome	<p>By measuring and monitoring the number of patients with ET who are provided patient support group and ET resources it is expected that more patients will connect to these resources. By</p>  <p>connecting to resources it is anticipated that patient engagement in treatment planning will increase as patients gain a greater awareness of ET.</p>	

Opportunity to Improve Gap in Care	<p>Measure is envisioned as a yes/no survey outcome of patients who receive outpatient treatment. Patients would be asked if their provided link them to resources in the past 12 months?</p> <p>In a survey of patients conducted by Louis, et al., only one in ten patients indicated they were satisfied in their current treatment situation.(1) Further, 30+% of patients indicated their doctor is not even moderately well-educated about ET.(1) Surveyed patients indicated numerous areas where additional care and support was needed: psychological services and support (33.9%), physical or occupational therapy (28.6%), handling embarrassment and social effects of tremor (15.8%), feelings of not being in control (13.7%), and better counseling about current treatment and medications (11.9%).(1) Additional resources should be provided to patients with ET to address these noted gaps.</p>
Harmonization with Existing Measures	<p>No similar measures known.</p>
References	<ol style="list-style-type: none"> 1. Louis ED, Rohl B, and Rice C. Defining the Treatment Gap: What Essential Tremor Patients Want That They Are Not Getting. Tremor Other Hyperkinet Mov. 2015;5:331.



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