

Allergen Immunotherapy Treatment: Allergen Specific Immunoglobulin E (IgE) Sensitivity Assessed and Documented Prior to Treatment – National Quality Strategy Domain: Patient Safety

DESCRIPTION:

Percentage of patients aged 5 years and older who were assessed for IgE sensitivity to allergens prior to initiating allergen immunotherapy AND results documented in the medical record.

INSTRUCTIONS:

This measure is to be reported a minimum of **once per reporting period** for all patients who initiated allergen immunotherapy during the reporting period. This measure is intended to reflect the quality of services provided for patients undergoing allergen immunotherapy. There is a wide consensus that shows confirming the results of IgE sensitivity testing is a necessary step in evaluating and appropriately selecting patients to begin allergen immunotherapy. There is no diagnosis associated with this measure. A patient will be considered denominator eligible if they had an office visit for their initial allergen immunotherapy treatment during the reporting period AND professional services for allergen immunotherapy were billed during the reporting period. Professional services for allergen immunotherapy CPT coding is used to identify patient on allergen immunotherapy but do not have to be billed on the same date as the patient encounter during which IgE sensitivity to allergens was reviewed and documented in the medical record. This measure may be reported by clinicians who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding.

Measure Reporting via Qualified Clinical Data Registry:

CPT codes, patient demographics and medical record data are used to identify patients who are included in the measure's denominator. Medical record data and the listed numerator options are used to report the numerator of the measure.

DENOMINATOR:

Patients aged 5 years and older who initiated allergen immunotherapy during the reporting period

Denominator Criteria (Eligible Cases):

Patients aged ≥ 5 years on the date of the encounter

AND

Professional Services for Allergen Immunotherapy (CPT): 95165, 95115, 95117, 95120, 95125, 95130, 95131, 95132, 95133, 95134, 95144, 95145, 95146, 95147, 95148, 95149, 95170

AND

Patient Encounter during the Reporting Period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215

AND

Patient's initial allergen immunotherapy treatment takes place during the reporting period

NUMERATOR:

Patients who were **assessed** and had **documentation** of IgE sensitivity to allergens in the allergen immunotherapy prescription prior to initiating allergen immunotherapy

Numerator Instructions: This measure requires documentation of IgE sensitivity to allergens in the medical record. Documentation of serum specific IgE laboratory testing (CPT 82785, 86003) OR skin prick testing (CPT 95004, 95017, 95018) OR intradermal testing (CPT 95024, 95027, 95028) OR written documentation in the medical record will meet the numerator requirement for this component of the measure. Review of test results from a referring physician's office will meet the numerator requirement if results are documented in the medical record.

Numerator Options:

Performance Met:

IgE sensitivity to allergens in the allergen immunotherapy prescription was assessed and documented in the medical record prior to initiating allergen immunotherapy

OR

Performance Not Met:

IgE sensitivity to allergens in the allergen immunotherapy prescription was **not** assessed and/or documented in the medical record prior to initiating allergen immunotherapy

CLINICAL RECOMMENDATIONS, TREATMENT GOALS:

Summary Statement 7: Allergen immunotherapy should be considered for patients who have demonstrable evidence of specific IgE antibodies to clinically relevant allergens. The decision to begin allergen immunotherapy might depend on a number of factors, including but not limited to patient's preference, acceptability, adherence, medication requirements, response to avoidance measures, and the adverse effects of medications.¹

¹Cox L, Nelson H, Lockey R, Calabria C, Chacko T, Finegold I, Nelson M, Weber R, Bernstein DI, Blessing-Moore J, Khan DA, Lang DM, Nicklas RA, Oppenheimer J, Portnoy JM, Randolph C, Schuller DE, Spector SL, Tilles S, Wallace D. J *Allergen immunotherapy: a practice parameter third update*. Allergy Clin Immunol. 2011 Jan;127(1 Suppl):S1-55.

The Allergen Immunotherapy Treatment: Allergen Specific Immunoglobulin E (IgE) Sensitivity Assessed and Documented Prior to Treatment measure was developed by the Joint Task Force on Quality and Performance Measures, a joint task force of the American Academy of Allergy Asthma & Immunology (AAAAI) and American College of Allergy Asthma and Immunology (ACAAI). The measure is not a clinical guideline, does not establish a standard of medical care, and has not been tested for all potential applications. The CPT® contained in the measure specification is copyright 2004-2014 American Medical Association.

Measure Type: Process

**Documentation of Clinical Response to Allergen Immunotherapy within One Year – National
Quality Strategy Domain: Communication and Care Coordination**

DESCRIPTION:

Percentage of patients aged 5 years and older who were evaluated for clinical improvement and efficacy within one year after initiating allergen immunotherapy AND assessment documented in the medical record.

INSTRUCTIONS:

This measure is to be reported **once per reporting period** for patients receiving allergen immunotherapy who initiated allergen immunotherapy one year prior to the date of encounter. On the date of service, the patient should be evaluated for clinical improvement and efficacy. Further, assessment results should be documented in the medical record or there should be written documentation that the patient was evaluated for clinical improvement and efficacy at least once within 12 months of being placed on allergen immunotherapy. There is no diagnosis associated with this measure. This measure is intended to reflect the quality of services provided for patients undergoing allergen immunotherapy. This measure may be reported by clinicians who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding.

Measure Reporting via Qualified Clinical Data Registry:

CPT codes, patient demographics and medical record data are used to identify patients who are included in the measure's denominator. Medical record data and the listed numerator options are used to report the numerator of the measure.

DENOMINATOR:

All patients aged 5 years and older who initiated allergen immunotherapy within one year prior to the date of encounter

Denominator Criteria (Eligible cases):

Patients aged 5 years and older on the date of the encounter.

AND

Professional Services for Allergen Immunotherapy (CPT): 95165, 95115, 95117, 95120, 95125, 95130, 95131, 95132, 95133, 95134, 95144, 95145, 95146, 95147, 95148, 95149, 95170

AND

Patient Encounter during the Reporting Period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215

AND

Patients who initiated allergen immunotherapy within one year prior to the date of encounter

AND NOT

Patients who discontinued allergen immunotherapy regimen

NUMERATOR:

Patients who were evaluated for clinical improvement and efficacy at least once within the first year of treatment with assessment documented in the medical record

Numerator Options:

Performance Met:

The patient was assessed for clinical improvement and efficacy at least once within 12 months of initiating allergen immunotherapy treatment and assessment was documented in medical record

OR

Performance Not Met:

The patient **was not** assessed for clinical improvement and efficacy at least once within 12 months of initiating allergen immunotherapy treatment and/or assessment was **not** documented in medical record

CLINICAL RECOMMENDATIONS, TREATMENT GOALS:

Summary Statement 23: Patients should be evaluated at least every 6 to 12 months while they receive immunotherapy in order to assess efficacy, implement and reinforce its safe administration, monitor adverse reactions, assess the patient's compliance with treatment, determine whether immunotherapy can be discontinued and to determine whether adjustments in the immunotherapy to dosing schedule or allergen content are necessary.¹

¹Cox L, Nelson H, Lockey R, Calabria C, Chacko T, Finegold I, Nelson M, Weber R, Bernstein DI, Blessing-Moore J, Khan DA, Lang DM, Nicklas RA, Oppenheimer J, Portnoy JM, Randolph C, Schuller DE, Spector SL, Tilles S, Wallace D. *J Allergen immunotherapy: a practice parameter third update*. Allergy Clin Immunol. 2011 Jan;127(1 Suppl):S1-55.

The Documentation of Clinical Response to Allergen Immunotherapy within One Year measure was developed by the Joint Task Force on Quality and Performance Measures, a joint task force of the American Academy of Allergy Asthma & Immunology (AAAAI) and American College of Allergy Asthma and Immunology (ACAAI). The measure is not a clinical guideline, does not establish a standard of medical care, and has not been tested for all potential applications. The CPT® contained in the measure specification is copyright 2004-2014 American Medical Association.

Measure Type: Process

Documented Rationale to Support Long-Term Aeroallergen Immunotherapy Beyond Five Years, as Indicated – National Quality Strategy Domain: Efficiency and Cost Reduction

DESCRIPTION:

Percentage of patients aged 5 years and older who were assessed for clinical rationale prior to continuation of aeroallergen immunotherapy beyond 5 years AND rationale documented in the medical record.

INSTRUCTIONS:

This measure is to be reported **once per reporting period** for patients who have been on aeroallergen immunotherapy for more than 5 years seen during the reporting period. After a patient has received immunotherapy for 5 years, a risk-benefit assessment should be performed that favors continued inhalant immunotherapy with rationale for continuation of therapy documented within the medical record. This should also take place every subsequent year thereafter. There is no diagnosis associated with this measure. This measure is intended to reflect the quality of services provided for patients undergoing aeroallergen immunotherapy. This measure may be reported by clinicians who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding.

Measure Reporting via Registry:

CPT codes, patient demographics and medical record data are used to identify patients who are included in the measure's denominator. Medical record data and the listed numerator options are used to report the numerator of the measure.

DENOMINATOR:

All patients aged 5 years and older receiving aeroallergen immunotherapy beyond 5 years

Denominator Criteria (Eligible cases):

Patients aged 5 years and older on the date of the encounter.

AND

Professional Services for Allergen Immunotherapy (CPT): 95165, 95115, 95117, 95120, 95125, 95144

AND

Patient Encounter during the Reporting Period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215

AND

Patients receiving aeroallergen immunotherapy beyond 5 years

NUMERATOR:

Patients who were assessed for clinical rationale prior to continuation of aeroallergen immunotherapy with documentation of rationale for continuation of treatment in the medical record

Numerator Options:

Performance Met:

Rationale for continuation of allergen immunotherapy beyond 5 years was documented within the past 12 months

OR

Performance Not Met:

Rationale for continuation of allergen immunotherapy beyond 5 years **was not** documented within the past 12 months

CLINICAL RECOMMENDATION STATEMENTS:

Duration of treatment: Summary Statement 24: The patient's response to immunotherapy should be evaluated on a regular basis. A decision about continuation of effective immunotherapy should generally be made after the initial period of 3 to 5 years of treatment. Some patients might experience sustained clinical remission of their allergic disease after discontinuing immunotherapy, but others might relapse.

The severity of disease, benefits sustained from treatment, and convenience of treatment are all factors that should be considered in determining whether to continue or stop immunotherapy for any individual patient.¹

¹Cox L, Nelson H, Lockey R, Calabria C, Chacko T, Finegold I, Nelson M, Weber R, Bernstein DI, Blessing-Moore J, Khan DA, Lang DM, Nicklas RA, Oppenheimer J, Portnoy JM, Randolph C, Schuller DE, Spector SL, Tilles S, Wallace D. *J Allergen immunotherapy: a practice parameter third update*. Allergy Clin Immunol. 2011 Jan;127(1 Suppl):S1-55.

The Documented Rationale to Support Long-Term Aeroallergen Immunotherapy Beyond Five Years, as Indicated measure was developed by the Joint Task Force on Quality and Performance Measures, a joint task force of the American Academy of Allergy Asthma & Immunology (AAAAI) and American College of Allergy Asthma and Immunology (ACAAI). The measure is not a clinical guideline, does not establish a standard of medical care, and has not been tested for all potential applications. The CPT® contained in the measure specification is copyright 2004-2014 American Medical Association.

Measure Type: Process

Achievement of Projected Effective Dose of Standardized Allergens for Patient Treated With Allergen Immunotherapy for at Least One Year – National Quality Strategy Domain: Effective Clinical Care

DESCRIPTION:

Proportion of patients receiving subcutaneous allergen immunotherapy that contains at least one standardized extract (mite, ragweed, grass, and/or cat) who achieved the projected effective dose for all included standardized allergen extract(s) after at least one year of treatment.

INSTRUCTIONS:

This outcomes measure is to be reported **once per reporting period** when a patient seen during the reporting period receiving subcutaneous allergen immunotherapy for at least one standardized extract achieves the projected effective dose after one year of treatment. This measure is intended to reflect the quality of services provided for patients undergoing allergen immunotherapy. This measure may be reported by clinicians who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding.

Measure Reporting via Registry:

CPT codes, patient demographics and medical record data are used to identify patients who are included in the measure's denominator. Medical record data and the listed numerator options are used to report the numerator of the measure.

DENOMINATOR:

All patients aged 5 years and older who received subcutaneous allergen immunotherapy for at least one year containing at least one standardized antigen

Denominator Criteria (Eligible Cases):

Patients aged 5 years and older on the date of the encounter

AND

Professional Services for Allergen Immunotherapy (CPT): 95115, 95117, 95120, 95125, 95144, 95165

AND

Patient Encounter during the Reporting Period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215

AND

Patients receiving subcutaneous allergen immunotherapy containing at least one standardized extract (cat, dust mite, grass, bermuda, or short ragweed) for 1 year

NUMERATOR:

Patients who achieved the projected effective dose for all standardized extracts included in the prescription

Definitions:

Projected Effective Dose – The allergen dose projected to provide therapeutic efficacy. Not all patients will tolerate the projected effective dose, and some patients experience therapeutic efficacy at lower doses.

Numerator Instructions:

The following doses can be used to determine if the patient achieved the projected effective dose for all standardized extracts included in the prescription:

Cat	1000 BAU per injection
Dust mite (Dp,Df)	500 AU per injection (or 7mcg Der p 1)
Grass (100,000 BAU/ml)	1000 BAU per injection
Bermuda (10,000 BAU/ml)	300 BAU

Short ragweed

1000 AU or 6mcg Amb a 1

Numerator Options:

Performance Met:

Projected effective dose of all applicable standardized extracts was achieved

OR

Medical Performance Exclusion:

Documentation of medical reasons for not achieving the projected effective dose such as local or systemic reactions, interruptions in therapy due to co-morbid conditions (e.g. pregnancy) or patient intolerance to the projected effective dose

Patient Performance Exclusion:

Documentation of patient reason(s) for not achieving the projected effective dose such as interruptions in therapy due to noncompliance

Other Performance Exclusion:

Patients who are receiving allergen immunotherapy prescribed and prepared by eligible professional by an outside entity (providing supervision only)

OR

Performance Not Met:

Projected effective dose of all applicable standardized extracts **was not** achieved, reason not otherwise specified

CLINICAL RECOMMENDATION STATEMENTS:

Summary Statement 80: The efficacy of immunotherapy depends on achieving an optimal therapeutic dose of each of the constituents in the allergen immunotherapy extract.¹

Summary Statement 81: The maintenance concentrate should be formulated to deliver a dose considered to be therapeutically effective for each of its constituent components. The maintenance concentrate vial is the highest concentration allergy immunotherapy vial (eg, 1:1 vol/vol vial). The projected effective dose is called the maintenance goal. Some subjects unable to tolerate the projected effective dose will experience clinical benefits at a lower dose. The maintenance dose is the dose that provides therapeutic efficacy without significant adverse local or systemic reactions and might not always reach the initially calculated projected effective dose. This reinforces that allergy immunotherapy must be individualized.¹

¹Cox L, Nelson H, Lockey R, Calabria C, Chacko T, Finegold I, Nelson M, Weber R, Bernstein DI, Blessing-Moore J, Khan DA, Lang DM, Nicklas RA, Oppenheimer J, Portnoy JM, Randolph C, Schuller DE, Spector SL, Tilles S, Wallace D. *J Allergen immunotherapy: a practice parameter third update*. Allergy Clin Immunol. 2011 Jan;127(1 Suppl):S1-55.

The Achievement of Projected Effective Dose of Standardized Allergens for Patient Treated With Allergen Immunotherapy for at Least One Year measure was developed by the Joint Task Force on Quality and Performance Measures, a joint task force of the American Academy of Allergy Asthma & Immunology (AAAAI) and American College of Allergy Asthma and Immunology (ACAAI). The measure is not a clinical guideline, does not establish a standard of medical care, and has not been tested for all potential applications. The CPT® contained in the measure specification is copyright 2004-2014 American Medical Association.

Measure Type: Outcome

Assessment of Asthma Symptoms Prior to Administration of Allergen Immunotherapy Injection(s) – National Quality Strategy Domain: Patient Safety

DESCRIPTION:

Percentage of patients aged 5 years and older with a diagnosis of asthma who are receiving subcutaneous allergen immunotherapy with a documented assessment of asthma symptoms prior to administration of allergen immunotherapy injections.

INSTRUCTIONS:

This measure is to be reported **once per reporting period** for all patients with a diagnosis of asthma seen for allergen immunotherapy injections during the reporting period. Prior to administration of allergen immunotherapy injections, an assessment of asthma symptoms should be performed. This measure is intended to reflect the quality of services provided for patients undergoing allergen immunotherapy. This measure may be reported by clinicians who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding.

Measure Reporting via Registry:

ICD-10-CM diagnosis codes, CPT codes, and patient demographics are used to identify patients who are included in the measure's denominator. Medical record data and the listed numerator options are used to report the numerator of the measure.

DENOMINATOR:

All patients aged 5 years and older with a diagnosis of asthma AND who are receiving subcutaneous allergen immunotherapy

Denominator Criteria (Eligible Cases):

Patients aged 5 years and older on the date of the encounter

AND

Diagnosis of Asthma (ICD-10-CM): J45.20, J45.21, J45.22, J45.30, J45.31, J45.32, J45.40, J45.41, J45.42, J45.50, J45.51, J45.52, J45.901, J45.902, J45.909, J45.990, J45.991, J45.998,

AND

Professional Services for Allergen Immunotherapy (CPT): 95165, 95115, 95117, 95120, 95125, 95130, 95131, 95132, 95133, 95134, 95144, 95145, 95146, 95147, 95148, 95149, 95170

AND

Patient Encounter during the Reporting Period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215

NUMERATOR:

Patients with documentation of an asthma symptom assessment prior to administration of allergen immunotherapy injection(s)

Numerator Instructions:

The patient must be evaluated for the presence of asthma symptoms prior to administration of allergen immunotherapy injection(s). This assessment should be documented in the medical record in order to meet the numerator requirement for this measure. Prior to subcutaneous allergen immunotherapy injection(s), assess/inquire about one of the following:

- Increased daytime symptoms
- Increased nighttime awakenings
- Interference with normal activity
- Increased short acting beta agonist use for symptom control
- Increased number of asthma exacerbations
- Evaluation of peak flow meter results
- Evaluation of spirometry results

Numerator Options:
Performance Met:

Documentation of an asthma symptom assessment prior to administration of allergen immunotherapy injection(s)

OR

Performance Not Met:

No documentation of an asthma symptom assessment prior to administration of allergen immunotherapy injection(s)

CLINICAL RECOMMENDATION STATEMENTS:

An assessment of the patient's current health status should be made before administration of the allergy immunotherapy injection to determine whether there were any health changes that might require modifying or withholding that patient's immunotherapy treatment.¹ Before the administration of the allergy injection, the patient should be evaluated for the presence of asthma symptoms.¹

¹Cox L, Nelson H, Lockey R, Calabria C, Chacko T, Finegold I, Nelson M, Weber R, Bernstein DI, Blessing-Moore J, Khan DA, Lang DM, Nicklas RA, Oppenheimer J, Portnoy JM, Randolph C, Schuller DE, Spector SL, Tilles S, Wallace D. J *Allergen immunotherapy: a practice parameter third update*. Allergy Clin Immunol. 2011 Jan;127(1 Suppl):S1-55.

The Assessment of Asthma Symptoms Prior to Administration of Allergen Immunotherapy Injection(s) measure was developed by the Joint Task Force on Quality and Performance Measures, a joint task force of the American Academy of Allergy Asthma & Immunology (AAAAI) and American College of Allergy Asthma and Immunology (ACAAI). The measure is not a clinical guideline, does not establish a standard of medical care, and has not been tested for all potential applications. The CPT® contained in the measure specification is copyright 2004-2014 American Medical Association.

Measure Type: Process

**Documentation of the Consent Process for Subcutaneous Allergen Immunotherapy in the
Medical Record – National Quality Strategy Domain:
Person and Caregiver-Centered Experience and Outcomes**

DESCRIPTION:

Percentage of patients aged 5 years and older initiating subcutaneous allergen immunotherapy injections documented to have received education (or their primary caregiver) about possible adverse reactions

INSTRUCTIONS:

This measure is to be reported **once per reporting period** for each patient that is initiating allergen immunotherapy injections during the reporting period. The patient or their legal guardian/primary caregiver should be educated about the possible adverse reactions with immunotherapy injections including life threatening anaphylaxis, immediate reactions and severe delayed reactions which could occur after leaving the clinic. Informed consent should be obtained. This measure is intended to reflect the quality of services provided for patients undergoing allergen immunotherapy. This measure may be reported by clinicians who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding.

Measure Reporting via Registry:

CPT codes, patient demographics and medical record data are used to identify patients who are included in the measure's denominator. Medical record data and the listed numerator options are used to report the numerator of the measure. There are no allowable performance exclusions for this measure.

DENOMINATOR:

All patients aged 5 years and older who initiated subcutaneous allergen immunotherapy during the reporting period

Denominator Criteria (Eligible cases):

Patients aged 5 years and older on the date of the encounter

AND

Professional Services for Allergen Immunotherapy (CPT): 95165, 95115, 95117, 95120, 95125, 95130, 95131, 95132, 95133, 95134, 95144, 95145, 95146, 95147, 95148, 95149, 95170

AND

Patient Encounter during the Reporting Period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215

AND

Patients who initiated allergen immunotherapy during the reporting period

NUMERATOR:

Patients with documentation in the medical record of discussion and education about the potential risk of adverse reactions of subcutaneous allergen immunotherapy

Numerator Instructions:

Patients with documentation in the medical record of education about the potential risk of local allergic reactions following injections, including redness, pruritus, and swelling at the injection site which occur after leaving the clinic. Reported encounter should be for the initial allergen immunotherapy treatment or at a prior office visit.

Patients with documentation in the medical record of education about the potential risk of systemic allergic reactions following injections, including life threatening anaphylaxis and severe delayed reactions which occur after leaving the clinic.

Informed consent should include a discussion of the potential immunotherapy induced adverse reactions during an office visit and this discussion should be documented in the medical record.

If the patient is less than 18 years old, a parent or legal guardian must receive informed consent as described above.

Numerator Options:

Performance Met:

The patient (or their primary caregiver) received education about the risks and benefits of allergen immunotherapy prior to initiating allergen immunotherapy treatment

OR

Performance Not Met:

The patient (or their primary caregiver) **did not** received education about the risks and benefits of allergen immunotherapy prior to initiating allergen immunotherapy treatment

CLINICAL RECOMMENDATION STATEMENTS:

Informed consent should include a discussion of the potential immunotherapy-induced adverse reactions, and this discussion should be documented in the patient's medical record.¹

¹Cox L, Nelson H, Lockey R, Calabria C, Chacko T, Finegold I, Nelson M, Weber R, Bernstein DI, Blessing-Moore J, Khan DA, Lang DM, Nicklas RA, Oppenheimer J, Portnoy JM, Randolph C, Schuller DE, Spector SL, Tilles S, Wallace D. *J Allergen immunotherapy: a practice parameter third update*. Allergy Clin Immunol. 2011 Jan;127(1 Suppl):S1-55.

The Documentation of the Consent Process for Subcutaneous Allergen Immunotherapy in the Medical Record measure was developed by the Joint Task Force on Quality and Performance Measures, a joint task force of the American Academy of Allergy Asthma & Immunology (AAAAI) and American College of Allergy Asthma and Immunology (ACAAI). The measure is not a clinical guideline, does not establish a standard of medical care, and has not been tested for all potential applications. The CPT® contained in the measure specification is copyright 2004-2014 American Medical Association.

Measure Type: Process

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