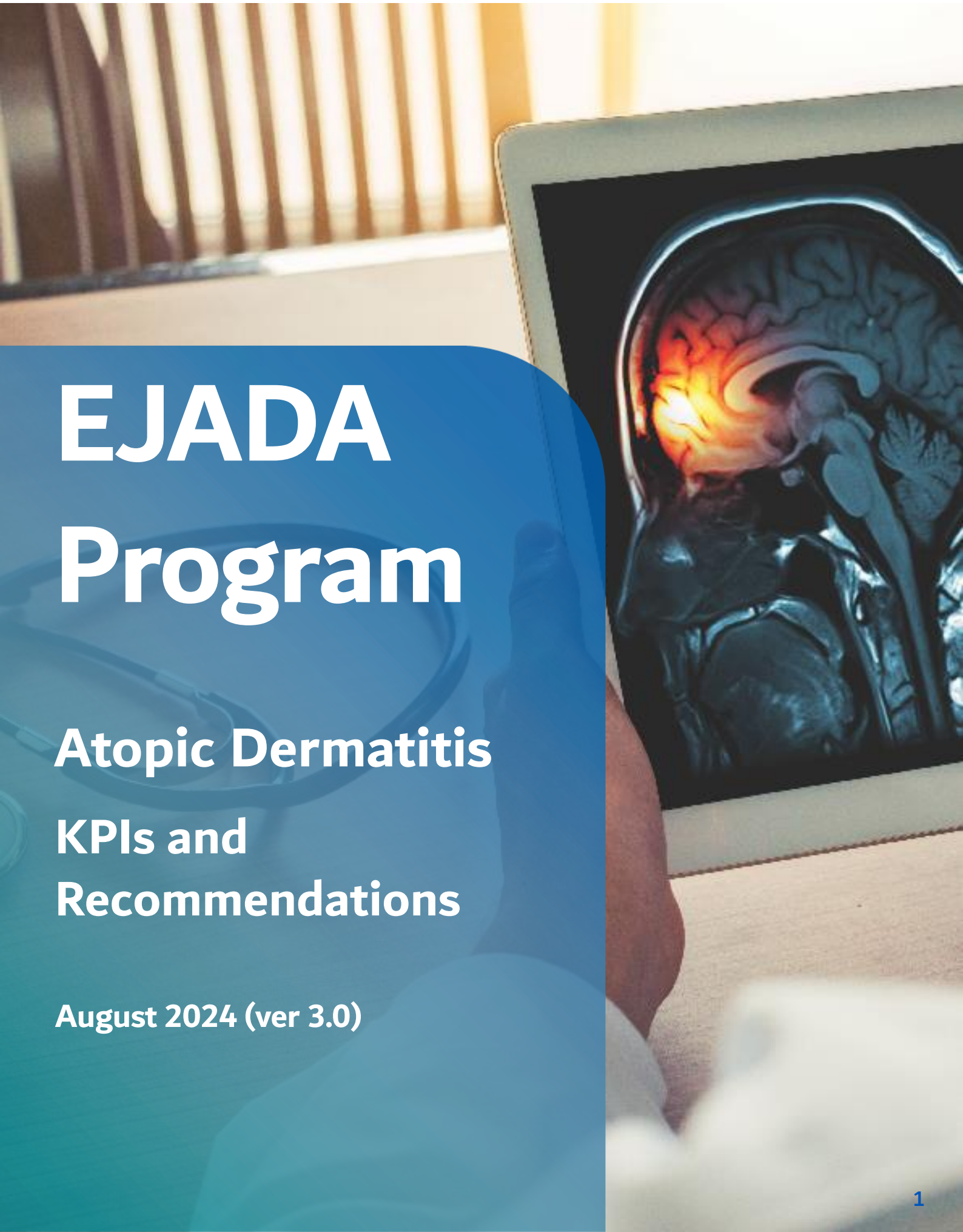
هـيـئـة الصـحـة بدبـي
DUBAI HEALTH AUTHORITY

إجـادة
EJADA



EJADA Program

Atopic Dermatitis

KPIs and Recommendations

August 2024 (ver 3.0)

Content

Introduction

Atopic dermatitis is a skin condition that is chronic and inflammatory. It is characterized by dryness, itching, and redness of the skin, and is often accompanied by eczematous lesions and lichenification. It primarily affects children but can persist into adulthood, causing significant discomfort and psychological distress. The exact cause of atopic dermatitis remains complex and multifactorial, involving genetic predisposition, immune dysfunction, environmental triggers, and skin barrier abnormalities

Atopic dermatitis is associated with various etiological factors. Family history is one of the most significant risk factors, as it increases the likelihood of developing the condition. Environmental factors, such as exposure to allergens, pollutants, and a westernized lifestyle, have also been linked to atopic dermatitis. Additionally, atopic dermatitis is often accompanied by other allergic conditions, such as asthma and allergic rhinitis, which together are known as the atopic march.

The treatment of atopic dermatitis has evolved over time, with a focus on managing symptoms and controlling inflammation. Emollients and topical corticosteroids are still the primary treatments, providing relief from itching and inflammation. In more severe cases, immunosuppressive agents such as topical calcineurin inhibitors or systemic medications like cyclosporine may be used.

The treatment of atopic dermatitis has undergone a significant transformation due to the approval of new biologics and JAK inhibitors. However, despite these advancements, there are still significant unmet needs as physicians continue to learn more about new treatment options and achieving the right balance. Many patients experience inadequate symptom control and frequent relapses, which can lead to a reduced quality of life. To make informed treatment choices for patients with this chronic skin condition, it is essential to understand the unique characteristics of biologics and to distinguish between the efficacy and safety profiles of JAK inhibitors. This expanded range of therapeutic options has the potential to provide significant benefits to people with atopic dermatitis.

Scope

The Ejada KPIs are quality indicators and ratings for physicians, facilities and insurance companies based on information collected by DHA systems from providers, payers and patients.

The atopic dermatitis KPIs and Recommendations are based on UAE and International guidelines on management of atopic dermatitis. The KPIs are designed for healthcare practioners and providers to follow international best practices in the management of atopic dermatitis patients.

The atopic dermatitis KPIs cover the following aspects of atopic dermatitis management:

- Pharmacological management with conventional therapies in patients with mild disease
- Use of new innovative therapies in management of moderate-to-severe atopic dermatitis
- Non-pharmacological management of patients with atopic dermatitis
- Referrals to a dermatologist for long-term follow up of atopic dermatitis patients

The KPIs and recommendations have been reviewed by leading experts in UAE.

List of Abbreviations

S.No.	Abbreviation	Full form
1	DDC	Dubai Drug Code
2	IgE	Immunoglobulin E
3	JAK	Janus Kinase
4	KPI	Key Performance Indicators
5	NB-UVB	Narrow-band ultraviolet B
6	PDE-4	Phosphodiesterase 4
7	TCI	Topical Calcineurin Inhibitors
8	TCS	Topical Corticosteroids
9	UAE	United Arab Emirates
10	UVA1	Ultraviolet A1

KPIs and their Measuring Parameters

Reporting Frequency: Monthly

S.No.	KPIs	Measuring Parameters
1	Diagnostic Testing for Atopic Dermatitis Patients	Serum total IgE, allergen-specific IgE, peripheral eosinophil count, and atopic patch test
2	Anti-Inflammatory Treatment for Mild to Moderate Atopic Dermatitis	DDC list of drugs
3	Conventional Systemic Treatment Using Immunosuppressive Drugs for Moderate to Severe Atopic Dermatitis	DDC list of drugs
4	Biological Therapy for Atopic Dermatitis Patients	DDC list of drugs
5	JAK-inhibitors for Atopic Dermatitis Patients	DDC list of drugs
6	Systemic Oral Glucocorticosteroids as Rescue Therapy for Atopic Dermatitis	DDC list of drugs
7	Allergen Avoidance Techniques for Atopic Dermatitis Patients to Prevent Exacerbation	Allergen Avoidance Techniques, Exacerbation Prevention, Atopic Dermatitis
8	Dermatology Specialist Referral of Atopic Dermatitis Patients	Referral/visits
9	Hospital Care/Inpatient Care for Atopic Dermatitis Patients	Hospital care, Inpatient care, Atopic Dermatitis

Treatment of Atopic Dermatitis in Adults: Stepped-care Plan

Atopic dermatitis-Baseline therapy		
Emollients (daily in sufficient quantity and adjust frequency to degree of skin dryness)	**Avoidance of allergens** (as much as possible in sensitized patients)	**Educational Programs**

↓

Patients with mild disease		
Topical corticosteroids (acute)	**Topical calcineurin inhibitors** (reactive)	**Wet Wraps** (acute)

↓

Patients with moderate disease			
Topical corticosteroids (proactive)	**Topical calcineurin inhibitors** (Proactive)	**NB-UVB &Medium dose UVA1**	**Psychosomatic counselling**

↓

Patients with moderate to severe disease (not controlled with topical or cannot use topicals)		
Cyclosporin/baricitinib/ dupilumab/upadacitinib/ trialkinumab	**Azathioprine/methotrexate**	**Systemic Glucocorticoids**

ADAPTED & MODIFIED FROM:
European guideline (EuroGuiDerm) on atopic eczema: part I – systemic therapy - 2022
https://onlinelibrary.wiley.com/doi/full/10.1111/jdv.18345

Abbreviation: UVA1, ultraviolet A1; NB-UVB, narrow-band ultraviolet B

Health Outcomes Indicators

Diagnostic Testing for Atopic Dermatitis Patients

Description Title	Diagnostic Testing for Atopic Dermatitis Patients
Definition	Percentage of atopic dermatitis patients for whom diagnostic testing (serum total IgE, allergen-specific IgE, peripheral eosinophil count, and atopic patch test) was performed during the measurement year
Numerator	Number of atopic dermatitis patients for whom diagnostic testing (serum total IgE, allergen-specific IgE, peripheral eosinophil count, and atopic patch test) was performed during the measurement year
Denominator	Total number of atopic dermatitis patients during the measurement year
Exclusion criteria	Scabies, Seborrheic dermatitis, Contact dermatitis (irritant or allergic), Ichthyoses, Cutaneous T-cell lymphoma, Psoriasis, Photosensitivity dermatoses, Immune deficiency diseases, Erythroderma of other causes
Reporting frequency	Monthly
Unit of measure	Percentage (Numerator/Denominator x 100)
Measure target and/or threshold	Higher is better
Rationale	The confirmation of atopic dermatitis is based on clinical diagnosis, and currently no reliable biomarker available to confirm the diagnosis. However, diagnostic tests like serum total IgE, allergen-specific IgE, peripheral eosinophil count, and atopic patch test could aid the clinicians in the diagnosis.

Anti-Inflammatory Treatment for Mild to Moderate Atopic Dermatitis

Description Title	Anti-Inflammatory Treatment for Mild to Moderate Atopic Dermatitis
Definition	Percentage of mild to moderate atopic dermatitis patients who were prescribed with anti-inflammatory therapy (topical corticosteroids [TCS], topical calcineurin inhibitors [TCI] and a phosphodiesterase 4 [PDE-4] inhibitors) during the measurement year
Numerator	Number of mild to moderate atopic dermatitis patients who were prescribed with anti-inflammatory therapy (topical corticosteroids [TCS], topical calcineurin inhibitors [TCI] and a phosphodiesterase 4 [PDE-4] inhibitors) during the measurement year
Denominator	Total number of atopic dermatitis patients during the measurement year
Exclusion criteria	Scabies, Seborrheic dermatitis, Contact dermatitis (irritant or allergic), Ichthyoses, Cutaneous T-cell lymphoma, Psoriasis, Photosensitivity dermatoses, Immune deficiency diseases, Erythroderma of other causes
Reporting frequency	Monthly
Unit of measure	Percentage (Numerator/Denominator x 100)
Measure target and/or threshold	Higher is better
Rationale	Topical anti-inflammatory agents provide relief of inflammation of eczematous lesions in mild to moderate cases, that can be done by two approaches: reactive and proactive management. In the reactive treatment regimen, anti-inflammatory topical therapy is applied to lesional skin only and is stopped or rapidly tapered once visible lesions are cleared or almost cleared. Proactive therapy is defined as a combination of predefined, long-term, anti-inflammatory treatment applied usually twice a week to previously affected areas of skin in combination with liberal daily use of emollients on the entire body.

Conventional Systemic Treatment Using Immunosuppressive Drugs for Moderate to Severe Atopic Dermatitis

Description Title	Conventional Systemic Treatment Using Immunosuppressive Drugs for Moderate to Severe Atopic Dermatitis
Definition	Percentage of moderate to severe atopic dermatitis patients who were prescribed with conventional systemic treatment using immunosuppressive drugs (azathioprine/ciclosporin/glucocorticosteroids/methotrexate/mycophenolate mofetil) during the measurement year
Numerator	Number of moderate to severe atopic dermatitis patients who were prescribed with conventional systemic treatment using immunosuppressive drugs (azathioprine/ciclosporin/glucocorticosteroids/methotrexate/mycophenolate mofetil) during the measurement year
Denominator	Total number of atopic dermatitis patients during the measurement year
Exclusion criteria	Scabies, Seborrheic dermatitis, Contact dermatitis (irritant or allergic), Ichthyoses, Cutaneous T-cell lymphoma, Psoriasis, Photosensitivity dermatoses, Immune deficiency diseases, Erythroderma of other causes
Reporting frequency	Monthly
Unit of measure	Percentage (Numerator/Denominator x 100)
Measure target and/or threshold	Higher is better
Rationale	Conventional systemic treatment using immunosuppressive drugs (azathioprine/ciclosporin/ glucocorticosteroids/methotrexate/mycophenolate mofetil) are recommended moderate to severe atopic dermatitis that can help to stop the itch-scratch cycle of eczema, to allow the skin to heal and reduce the risk of skin infection.

Biological Therapy for Moderate to Severe Atopic Dermatitis

Description Title	Biological Therapy for Atopic Dermatitis
Definition	Percentage of moderate to severe atopic dermatitis patients who were prescribed with biological therapy (dupilumab/lebrikizumab/nemolizumab/omalizumab/tralokinumab) during the measurement year
Numerator	Number of moderate to severe atopic dermatitis patients who were prescribed with biological therapy (dupilumab/lebrikizumab/nemolizumab/omalizumab/tralokinumab) during the measurement year
Denominator	Total number of atopic dermatitis patients during the measurement year
Exclusion criteria	Scabies, Seborrheic dermatitis, Contact dermatitis (irritant or allergic), Ichthyoses, Cutaneous T-cell lymphoma, Psoriasis, Photosensitivity dermatoses, Immune deficiency diseases, Erythroderma of other causes
Reporting frequency	Monthly
Unit of measure	Percentage (Numerator/Denominator x 100)
Measure target and/or threshold	Higher is better
Rationale	Biological therapy is recommended for moderate to severe refractory disease that failed to improve with conventional immunosuppressive therapy.

JAK-inhibitors for Moderate to Severe Atopic Dermatitis

Description Title	JAK-inhibitors for Systemic Treatment of Atopic Dermatitis
Definition	Percentage of moderate to severe atopic dermatitis patients who were prescribed with JAK-inhibitors (baricitinib/upadacitinib) during the measurement year
Numerator	Number of moderate to severe atopic dermatitis patients who were prescribed with JAK-inhibitors (baricitinib/upadacitinib) during the measurement year
Denominator	Total number of atopic dermatitis patients during the measurement year
Exclusion criteria	Scabies, Seborrheic dermatitis, Contact dermatitis (irritant or allergic), Ichthyoses, Cutaneous T-cell lymphoma, Psoriasis, Photosensitivity dermatoses, Immune deficiency diseases, Erythroderma of other causes
Reporting frequency	Monthly
Unit of measure	Percentage (Numerator/Denominator x 100)
Measure target and/or threshold	Higher is better
Rationale	JAK inhibition has been reported to attenuate chronic itch and improve skin barrier function by regulating the expression of skin barrier protein filaggrin, in addition to the disruption of cutaneous inflammatory cytokine signaling.

Systemic Oral Glucocorticosteroids as Rescue Therapy in Severe Atopic Dermatitis

Description Title	Systemic Oral Glucocorticosteroids as Rescue Therapy in Severe Atopic Dermatitis
Definition	Percentage of severe atopic dermatitis patients who were prescribed with systemic glucocorticosteroids as rescue therapy during the measurement year
Numerator	Number of severe atopic dermatitis patients who were prescribed with systemic glucocorticosteroids as rescue therapy during the measurement year
Denominator	Total number of atopic dermatitis patients during the measurement year
Exclusion criteria	Scabies, Seborrheic dermatitis, Contact dermatitis (irritant or allergic), Ichthyoses, Cutaneous T-cell lymphoma, Psoriasis, Photosensitivity dermatoses, Immune deficiency diseases, Erythroderma of other causes
Reporting frequency	Monthly
Unit of measure	Percentage (Numerator/Denominator x 100)
Measure target and/or threshold	Higher is better
Rationale	Systemic glucocorticosteroids is recommended only as rescue therapy by combining with any systemic treatment, and topical anti-inflammatory treatment for treating acute flares in severe atopic dermatitis patients.

Allergen Avoidance Techniques for Atopic Dermatitis Patients to Prevent Exacerbation

Description Title	Allergen Avoidance Techniques for Atopic Dermatitis Patients to Prevent Exacerbation
Definition	Percentage of atopic dermatitis patients who were referred for allergen avoidance techniques (allergens such as pollen, house dust mite, animal dander and woolen clothing with coarse fibers) to prevent exacerbation during the measurement year
Numerator	Number of atopic dermatitis patients who were referred for allergen avoidance techniques (allergens such as pollen, house dust mite, animal dander and woolen clothing with coarse fibers) to prevent exacerbation during the measurement year
Denominator	Total number of atopic dermatitis patients during the measurement year
Exclusion criteria	Scabies, Seborrheic dermatitis, Contact dermatitis (irritant or allergic), Ichthyoses, Cutaneous T-cell lymphoma, Psoriasis, Photosensitivity dermatoses, Immune deficiency diseases, Erythroderma of other causes
Reporting frequency	Monthly
Unit of measure	Percentage (Numerator/Denominator x 100)
Measure target and/or threshold	Higher is better
Rationale	Atopic dermatitis patients should avoid pollen, house dust mite and animal dander as much as possible to prevent exacerbations in sensitized patients with a clear history of skin exacerbation. Further, it is recommended to avoid irritant clothing (e.g. wool with coarse fibers) to prevent an exacerbation in patients with sensitive skin.

Dermatology Specialist Referral of Atopic Dermatitis Patients

Description Title	Dermatology Specialist Referral of Atopic Dermatitis Patients
Definition	Percentage of atopic dermatitis patients who were referred to dermatology specialist during the measurement year
Numerator	Number of atopic dermatitis patients who were referred to dermatology specialist during the measurement year
Denominator	Total number of atopic dermatitis patients during the measurement year
Exclusion criteria	Scabies, Seborrheic dermatitis, Contact dermatitis (irritant or allergic), Ichthyoses, Cutaneous T-cell lymphoma, Psoriasis, Photosensitivity dermatoses, Immune deficiency diseases, Erythroderma of other causes
Reporting frequency	Monthly
Unit of measure	Percentage (Numerator/Denominator x 100)
Measure target and/or threshold	Lower is better
Rationale	It is recommended that referral to specialist care (dermatologist) should be reserved for atopic dermatitis patients when no improvement is observed even after implementing treatment in accordance with the present clinical practice guidelines for a period of about 1 month. When prominent erythema, scars from scratching, erosion, lichenification, or prurigo is observed, or a wide range of erythema like erythroderma is observed, referral to specialist should be considered. In addition, when infection to bacteria or virus is concomitantly observed, or a detailed examination of the exacerbating factors including food allergies and contact allergy is necessary.

Hospital Care/Inpatient Care for Atopic Dermatitis Patients

Description Title	Hospital Care for Atopic Dermatitis Patients
Definition	Percentage of atopic dermatitis patients for whom hospital care/inpatient care was provided during the measurement year
Numerator	Number of atopic dermatitis patients for whom hospital care/inpatient care was provided during the measurement year
Denominator	Total number of atopic dermatitis patients during the measurement year
Exclusion criteria	Scabies, Seborrheic dermatitis, Contact dermatitis (irritant or allergic), Ichthyoses, Cutaneous T-cell lymphoma, Psoriasis, Photosensitivity dermatoses, Immune deficiency diseases, Erythroderma of other causes
Reporting frequency	Monthly
Unit of measure	Percentage (Numerator/Denominator x 100)
Measure target and/or threshold	Lower is better
Rationale	Hospital care/Inpatient care is indicated for severe patients for whom it is difficult to induce remission and the area of eruption is extensive with topical anti-inflammatory agents. In patients with chronically protracted severe dermatitis, there are problems regarding disease activity, patient adherence and aggravation factors as background factors. Hospital care may make it possible to thoroughly perform intensive topical therapy with isolation from the daily environment, establish a health-care professional-patient relationship of mutual trust, review triggering factors/application methods/skin care and overcome these problems in the early phase.

References

1. Work Group: Co-chair, Lawrence F. Eichenfield, Wynnis L. Tom, Sarah L. Chamlin, Steven R. Feldman, et al. Guidelines of care for the management of atopic dermatitis. Journal of the American Academy of Dermatology. 2014 Feb; vol 70. Available from: https://www.jaad.org/article/S0190-9622(13)01095-5/fulltext

2. Wollenberg A, Kinberger M, Arents B, Aszodi N, Avila Valle G, Barbarot S, Bieber T, Brough HA, Calzavara Pinton P, Christen-Zäch S, Deleuran M. European guideline (EuroGuiDerm) on atopic eczema: part I–systemic therapy. Journal of the European Academy of Dermatology and Venereology. 2021 Sep;36(9):1409-31. Available from: https://onlinelibrary.wiley.com/doi/10.1111/jdv.18345

3. Wollenberg A, Kinberger M, Arents B, Aszodi N, Avila Valle G, Barbarot S, Bieber T, Brough HA, Calzavara Pinton P, Christen-Zäch S, Deleuran M. European guideline (EuroGuiDerm) on atopic eczema–part II: non-systemic treatments and treatment recommendations for special AE patient populations. Journal of the European Academy of Dermatology and Venereology. 2021 Nov;36(11):1904-26. Available from: https://onlinelibrary.wiley.com/doi/10.1111/jdv.18429

4. Wollenberg A, Barbarot S, Bieber T, Christen-Zaech S, Deleuran M, Fink-Wagner A, Gieler U, Girolomoni G, Lau S, Muraro A, Czarnecka-Operacz M. Consensus-based European guidelines for treatment of atopic eczema (atopic dermatitis) in adults and children: part I. Journal of the European Academy of Dermatology and Venereology. 2018 May;32(5):657-82. Available from: https://onlinelibrary.wiley.com/doi/10.1111/jdv.14888

5. Katoh N, Ohya Y, Ikeda M, Ebihara T, Katayama I, Saeki H, Shimojo N, Tanaka A, Nakahara T, Nagao M, Hide M. Japanese guidelines for atopic dermatitis 2020. Allergology International. 2020;69(3):356-69. Available from: https://www.sciencedirect.com/science/article/pii/S1323893020300186?via%3Dihub

6. Rajagopalan M, De A, Godse K, Shankar DK, Zawar V, Sharma N, Mukherjee S, Sarda A, Dhar S. Guidelines on management of atopic dermatitis in India: an evidence-based review and an expert consensus. Indian journal of dermatology. 2019 May;64(3):166. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6537677/

7. Thyssen JP, Schuttelaar MLA, Alfonso JH, Andersen KE, Angelova-Fischer I, Arents BWM, Bauer A, Brans R, Cannavo A, Christoffers WA, Crépy MN, Elsner P, Fartasch M, Filon FL, Giménez-Arnau AM, Gonçalo M, Guzmán-Perera MG, Hamann CR, Hoetzenecker W, Johansen JD, John SM, Kunkeler ACM, Hadzavdic SL, Molin S, Nixon R, Oosterhaven JAF, Rustemeyer T, Serra-Baldrich E, Shah M, Simon D, Skudlik C, Spiewak R, Valiukevičienė S, Voorberg AN, Weisshaar E, Agner T. Guidelines for diagnosis, prevention, and treatment of hand eczema. Contact Dermatitis. 2022 May;86(5):357-378. doi: 10.1111/cod.14035. Epub 2022 Mar 3. PMID: 34971008.

For any inquiries and additional information contact: EJADAH team on (Ejadah-DHIC@dha.gov.ae)