



MUHC



Mental health and knowledge translation: Tools to improve wellness with adult patients suffering from Atopic Dermatitis

Carolyn Jack, MDCM, PhD, FRCPC
Assistant Professor, McGill University
Divisional Lead in Quality and Innovation
Division of Dermatology, Medicine
McGill University Health Center-Glen
Junior Scientist, Infectious Diseases and Immunity in Global Health Program,
Research Institute-MUHC EO1-2155



COI Statement

C. Jack reports grants from Innovaderm Research, McGill University Department of Medicine, MITACS, Canadian Dermatology Foundation, and Eczema Society of Canada, as well as grants, involvement in clinical studies, and/or consultancy work for Sanofi, Eli Lilly, AbbVie, Novartis, Valeant, Bausch, Pfizer, Amgen, Celgene, Janssen, Boehringer Ingelheim, Asana, LEO, Dermavant, AntibioTx, Neokera, Kiniksa, Ralexar, Arcutis, BMS, Boston, Cara, Concert, Incyte, Sienna, Aristeia, Target PharmaSolution, and UCB.



itch marks bleeding itch itch
itch sores scabbing itch smelly redness itch
itch depression itch hot
itch oozing rash change
swelling itch pain itch
itch anxiety odor insomnia itch
itch weeping odor insomnia itch





not alone in struggling with management of this disease

A stylized world map in shades of blue and white, centered on the Atlantic Ocean, serving as a background for the text.

The most common and the most burdensome skin disorder worldwide, affecting 5-10% of adults in developed countries.

COSTS TO HEALTH CARE




US estimates
range from
\$364 million
to **\$3.8 billion**

UK total annual cost
£465 million

NHS
£125 million

Patients
£297 million

Lost productivity
£42 million

A stylized world map in shades of blue and white, centered on the Atlantic Ocean, serving as the background for the slide.

Costs per year are nearly double for patients with uncontrolled disease.

€20,695
VS
€11,287

WHY IS INNOVATION NEEDED?

NO DIAGNOSTIC TEST!



VARIABLE

- Distribution
- Appearance
- Time course

UNSTABLE

UNPREDICTABLE

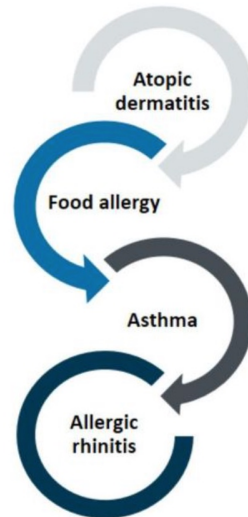
UNBEARABLE

NOT 'JUST A SKIN DISEASE'

Comorbidities in Atopic Dermatitis

- **Infections**
 - (bacterial, viral, and fungal)
- **Mental health disorders**
 - (attention-deficit/hyperactivity disorder, anxiety, depression, autism)
- **Obesity**
- **Cardiovascular disease**

Atopic March



Simpson EL. *Curr Dermatol Rep.* 2012;1:29-38.

Suffering Stigmatization Societal costs



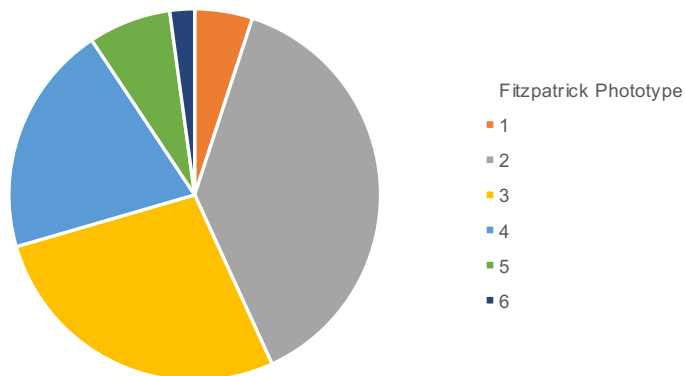


COE AD
CENTER OF EXCELLENCE FOR
ATOPIC DERMATITIS

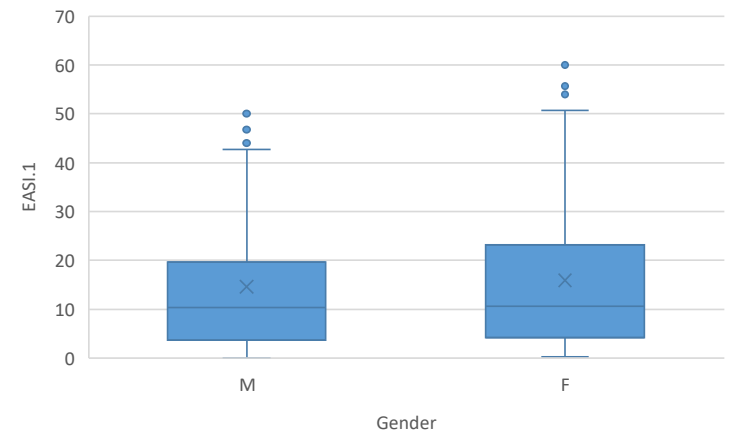
Health-related quality of life in an adult atopic dermatitis cohort

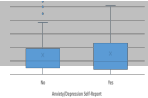
N=207 ADULT AD H&R	Number of Patients with Valid Data (% completeness)	Median / N	IQR / %
Intermittent remission in past year	203 (98%)	72	34.8%
Anxiety or depression secondary to AD	198 (96%)	75	36.2%
Missed school or work in last year due to AD	198 (96%)	69	33.3%

Distribution of Fitzpatrick Phototype



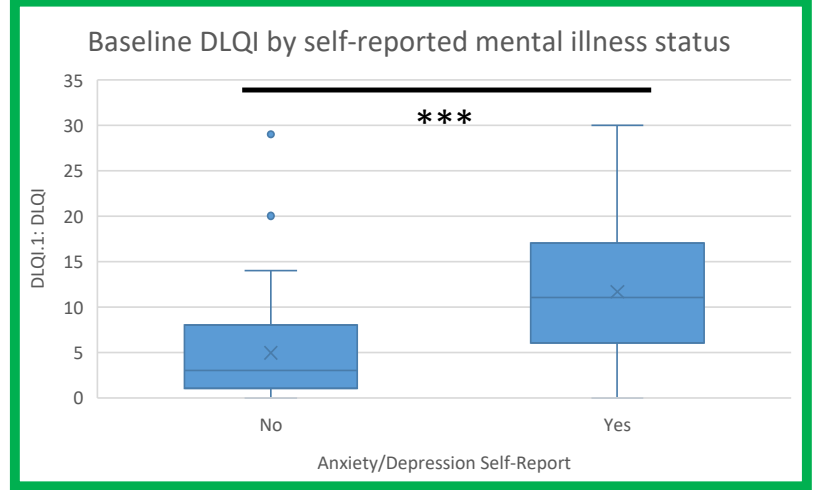
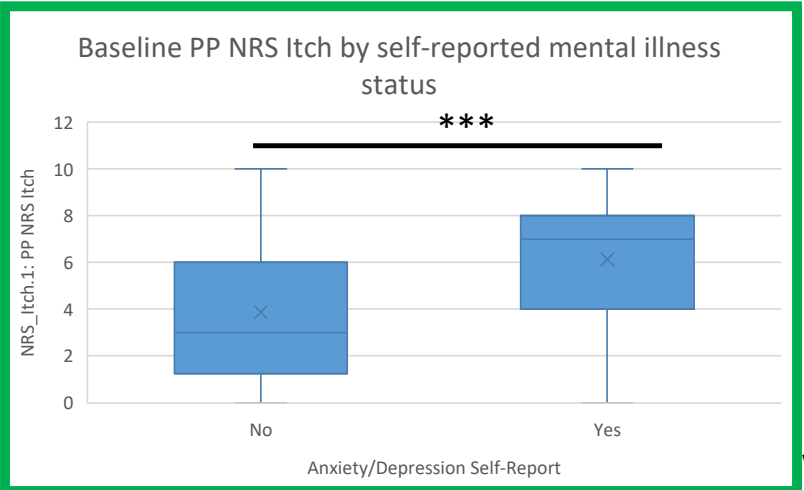
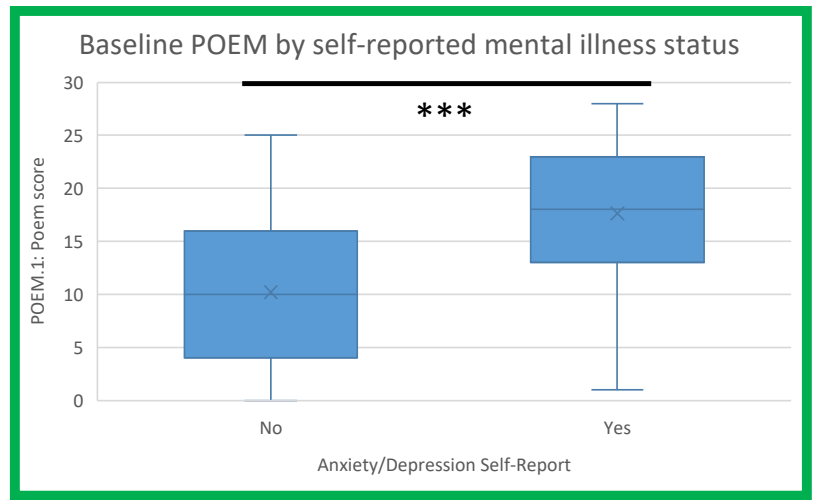
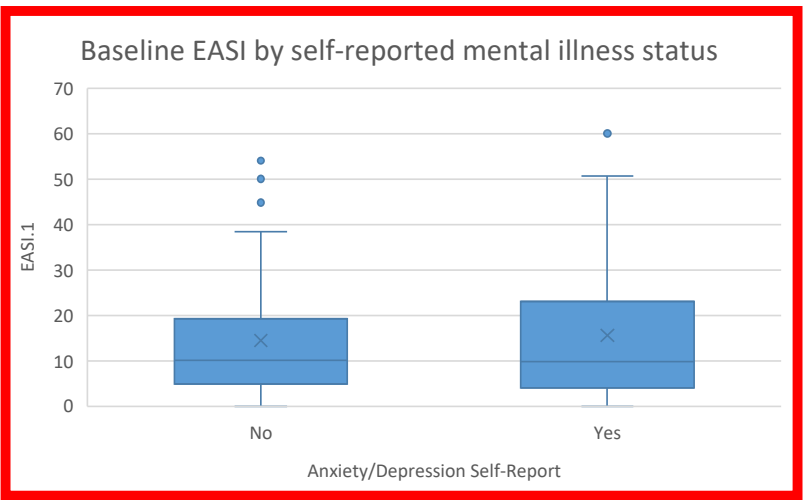
Baseline EASI.1 by Gender





Health-related quality of life in a Montreal atopic dermatitis cohort

n=207
adult
patients



p<0.001. Mann-Whitney U tests.

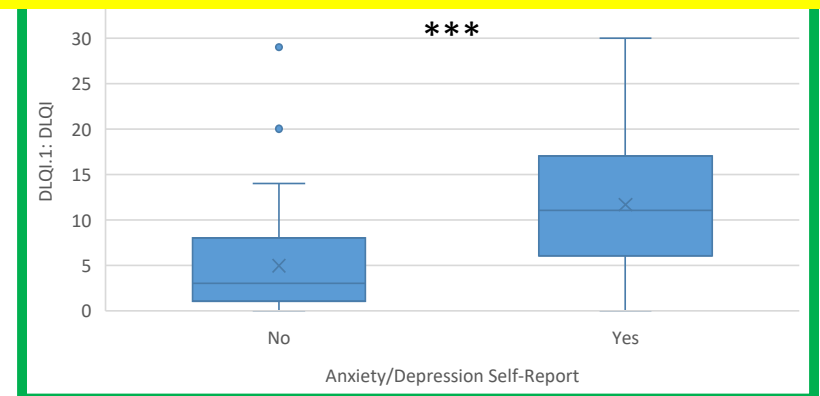
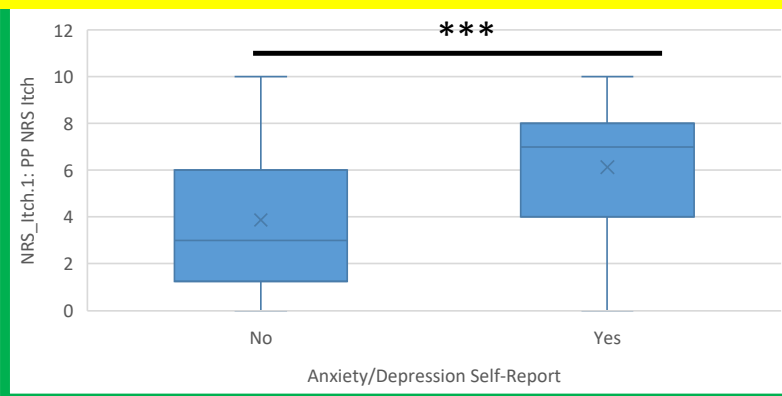
Health-related quality of life in a Montreal atopic dermatitis cohort

Baseline EASI by self-reported mental illness status

Baseline POEM by self-reported mental illness status

Among patients who missed school or work in the last year, the **prevalence ratio** of patients with anxio-depressive symptoms was **3.29** (95% CI [1.82, 5.92], $p < 0.001$).

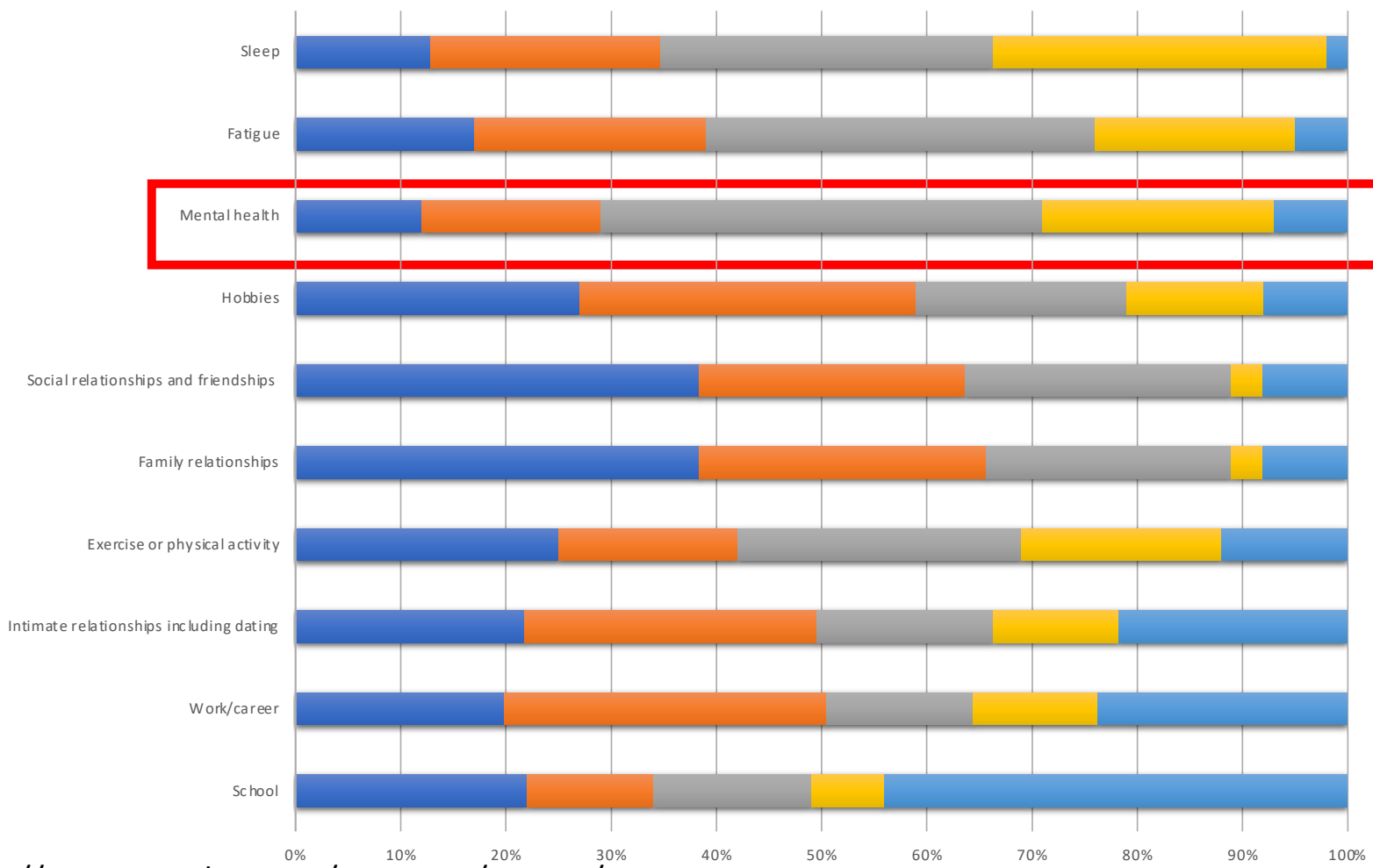
→ more patients who report anxio-depressive symptoms miss school or work in the last year.



$p < 0.001$. Mann-Whitney U tests.

Mental health is rarely spared in AD

■ No impact ■ Slightly negative impact ■ Negative impact ■ Very negative impact ■ N/A

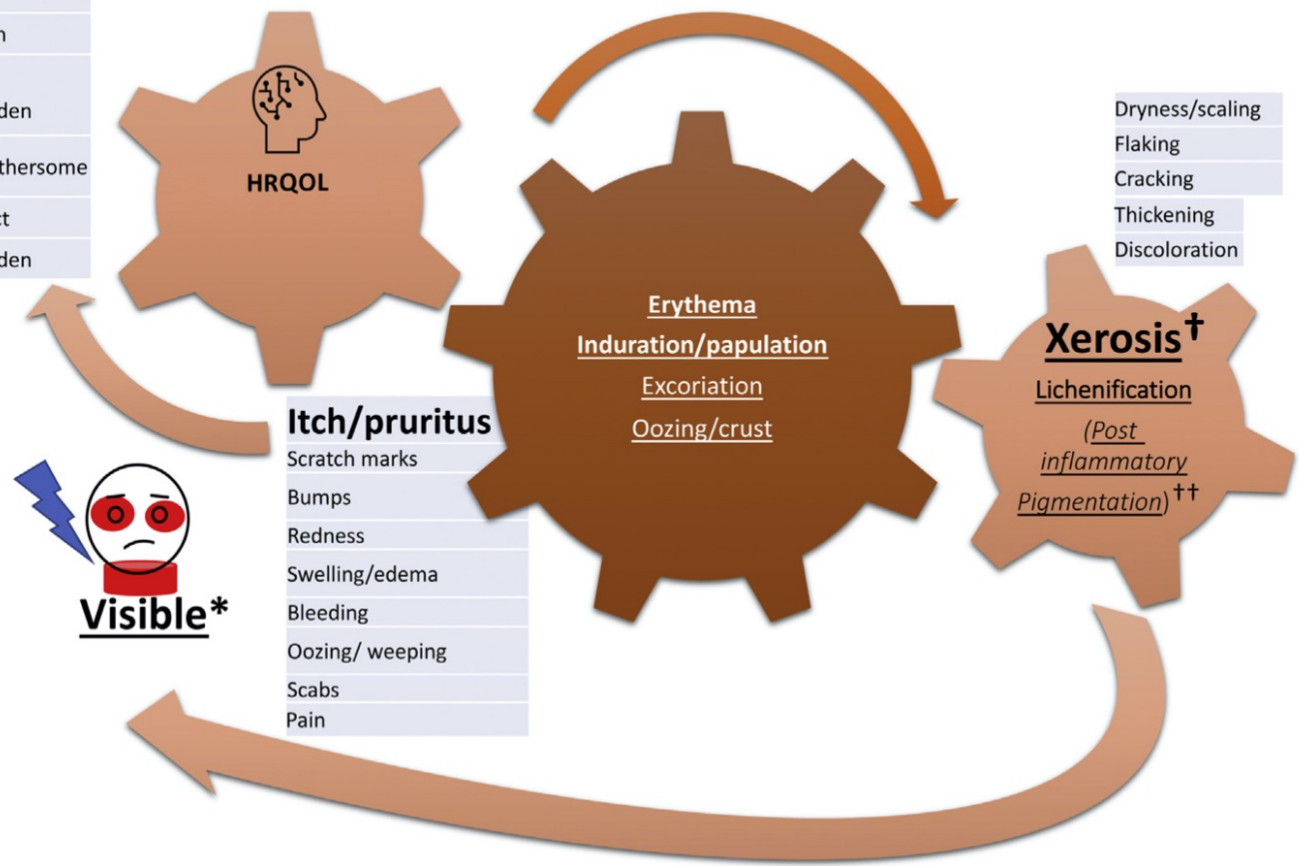


Canadian Skin Patient Alliance
Alliance canadienne des patients en dermatologie

<https://eczemaquebec.com/resources/reports/>

HRQOL items	PRIMARY (acute) features/ items	SECONDARY (chronic) features/ items
-------------	---------------------------------	-------------------------------------

- Sleep impairment
- Function/activity/relationships
- Mood/emotion
- Acceptability/Treatment burden
- Intensity of bothersome
- Clothing impact
- Treatment burden



- Dryness/scaling
- Flaking
- Cracking
- Thickening
- Discoloration

Case : 46yr woman with severe AD in remission



Formulation: Persistent anxio-depressive symptoms in the context of AD, a significant general medical condition

Diagnostic impression:

- 1. Persistent depressive disorder** –with **anxious distress** – with major depressive episodes –not currently in a major depression episode
- 2. DDx**
 - **chronic *adjustment* disorder with depressive symptoms**
 - **affective/ mood disorder 2nd to GMC (eczema)**
 - Less likely somatic symptom disorder
- 3. Stressors/stress-related:** e.g. bereavement (bi-directional relationship with AD)
- 4. r/o perimenopausal contribution**



Existing resources

Resiliency and self-care:

Shawn Reynolds, PhD, for



Self-care → **practice actively**;

paying **attention** to physical and emotional needs, **being active** and participating in enjoyable activities

Resiliency → reflecting on the **challenges one has overcome** in life, and the ways one has grown from them. This reflection can help **shift one' perspective**

<https://www.eczemahelp.ca/blog/managing-the-burden-of-eczema/>



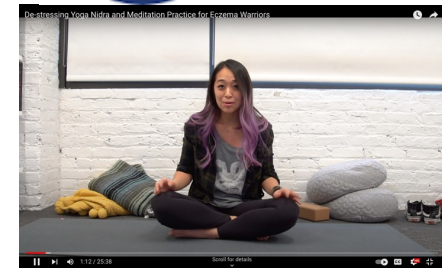
Existing resources

Brain-body awareness, Sleep interventions Yoga and meditation sessions :

Liza Meltzer, PhD, Jennifer Moyer Darr,
LCSW for the



Yoga nidra
eczema warriors



<https://www.youtube.com/watch?v=fk5QqGmWLCA>

<https://nationaleczema.org/blog/mental-health-science/>



COE AD

CENTER OF EXCELLENCE FOR
ATOPIC DERMATITIS

Guidelines and position statements on mental health interventions

→ Few criteria to guide
selection of interventions

Chida et al., 2007 note limitations:

- small sample sizes
- brief interventions
- **psychoeducational > therapeutic**
- focus children > than adults.

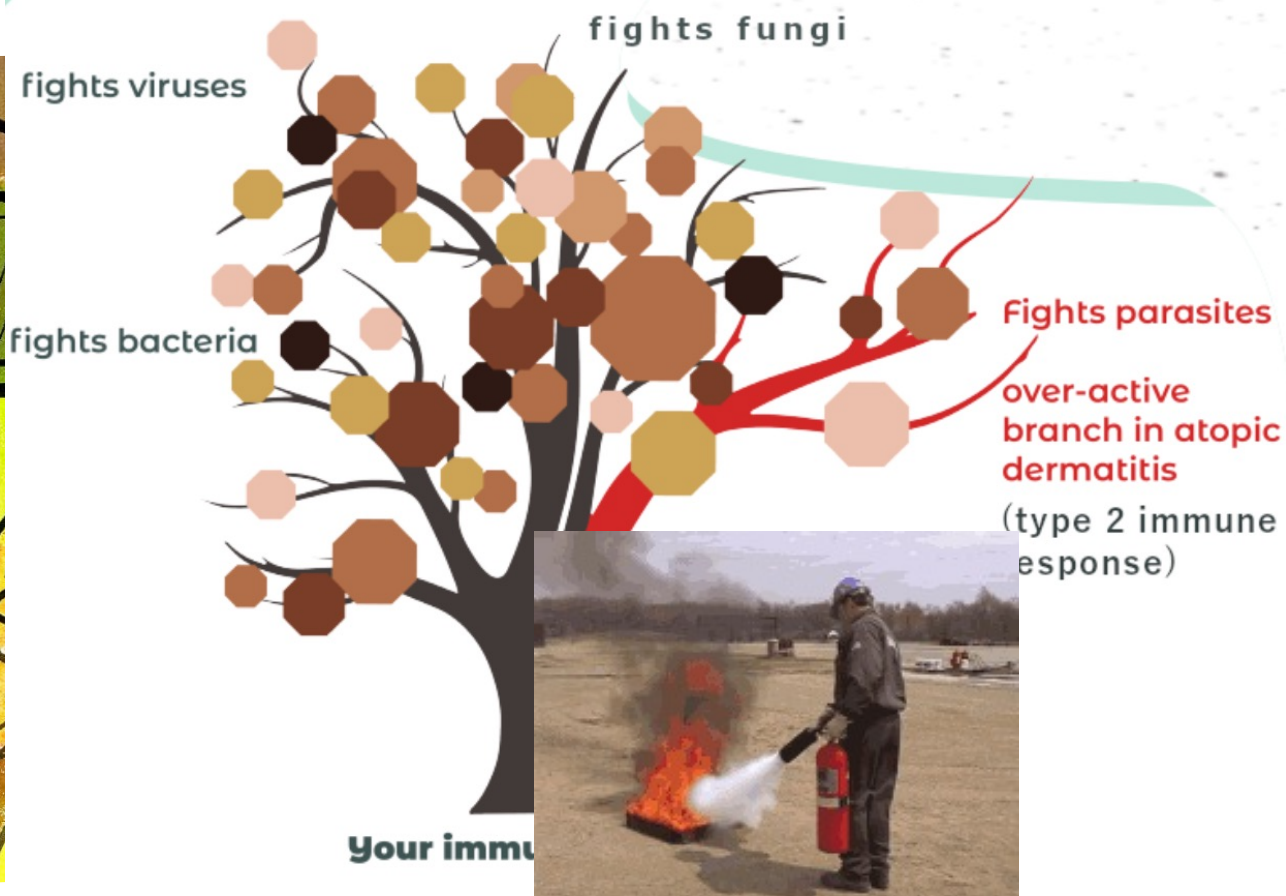
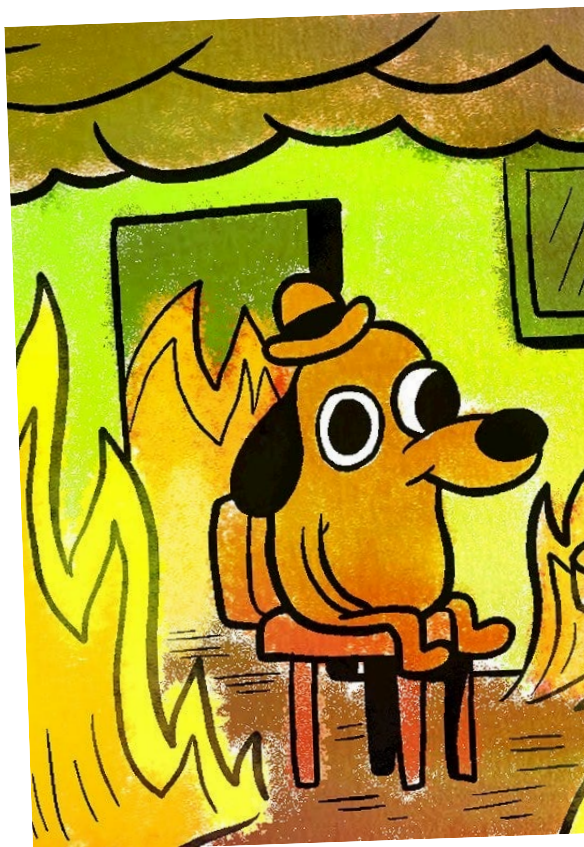
- Psychodynamic psychotherapy (34)
- Humanistic therapies (34)
- Family therapy (34, 35)
- Behavioral and cognitive behavioral therapy (34-37)
- Habit reversal training (34-37)
- Hypnosis (34)
- Biofeedback (34)
- Autogenic training (35, 36, 41)
- Psychoeducation and self-management programs (34-38)
- Stress management and relaxation training (34-37, 41)
- Support groups (34)



THIS IS FINE.

1. Start first with the goal to gain better disease control.

- ✓ Effective topical and/or systemic pharmacotherapy can **disrupt the itch-scratch cycle** and ↓ systemic inflammation, improving mental health outcomes, and an overall greatly improved quality of life



Case: 46yr woman with severe AD in remission, with persistent depressive disorder –

Stress/mental health = a bi-directional relationship with AD

Management approach (Psychiatry)

A. Psycho-pharmacologic → Rx, e.g. antidepressants (beyond the scope here)

B. Psycho-therapeutic

e.g. CBT: at least 15-20 1hr weekly sessions with a trained therapist

C. Behavioral management:

Sleep hygiene, melatonin

Physical *exercise*: 30min 3xwk, **9weeks**, mod-intensity cardiovascular, supervised

Abstaining from substances

MUHC COE 'Wellness' in AD: Group-support programming (pilot):



- Licensed psychologist and addiction/palliative care therapist
- *Goal: to work with patients to build a virtual tool-kit and a safe space for improving emotion regulation and well-being*

- **Format #1. *Eczema and Wellness seminar:***

Weekly drop-in, single-session

- Orientation, opening practice, and introductions.
- **sections: mindfulness, experiential acceptance, and self-compassion introduced with modular activities and guided-practices**

Auto-évaluation de la santé mentale / Mental health self-assessment

Bienvenue à notre auto-évaluation de la santé mentale. Ce ne sont que quelques questions pour avoir une idée de ce que vous traversez en ce moment. / Welcome to our mental health self-assessment. It is just a few questions to get a sense of what you are going through right now.

Veillez indiquer votre adresse e-mail. Nous l'utiliserons pour vous envoyer votre rapport. / Please indicate your email address. We will use this to send you your report.



Welcome to Wellness Together at the MUHC Center of Excellence for Atopic Dermatitis, a mental health support tool for adult eczema patients.

Select

Anxiety

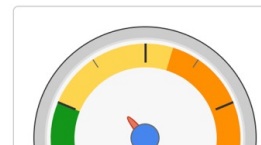
Definition

Anxiety is a sense of worry, nervousness or distress and is associated with threat or uncertainty. It is an important emotion system for anticipating threat or maintaining vigilance. It is also chronically over-activated in modern society, which leads to a variety of mental and physical issues.

Score guide

0-4: Normal. This is a typical everyday level of anxiety.
5-9: Mild. This often (but not always) indicates some stress.
10-14: Moderate. This typically indicates a substantial problem that may cause or exacerbate health problems.
15+: Severe. This indicates a major problem with anxiety. It is important to take action to reduce stress as soon as possible.

Your Latest Score



Score Trend



Psychotherapeutic Behavioral and Stress reduction



parallels with chronic Pain?

1. Cognitive Behavior Therapy

Eg. Clinical trial: Brief **Cognitive Behavioral Therapy** to Treat Itch , Rumination "**Itch CBT**" in **Pediatric Eczema**,
Dr.A.Paller

2. Acceptance and Commitment Therapy

3. Mindfulness-based Interventions

4. Habit reversal training

5. Breathing techniques, deep muscle relaxation

MAY help *restructure thoughts, perspectives and the senses*,

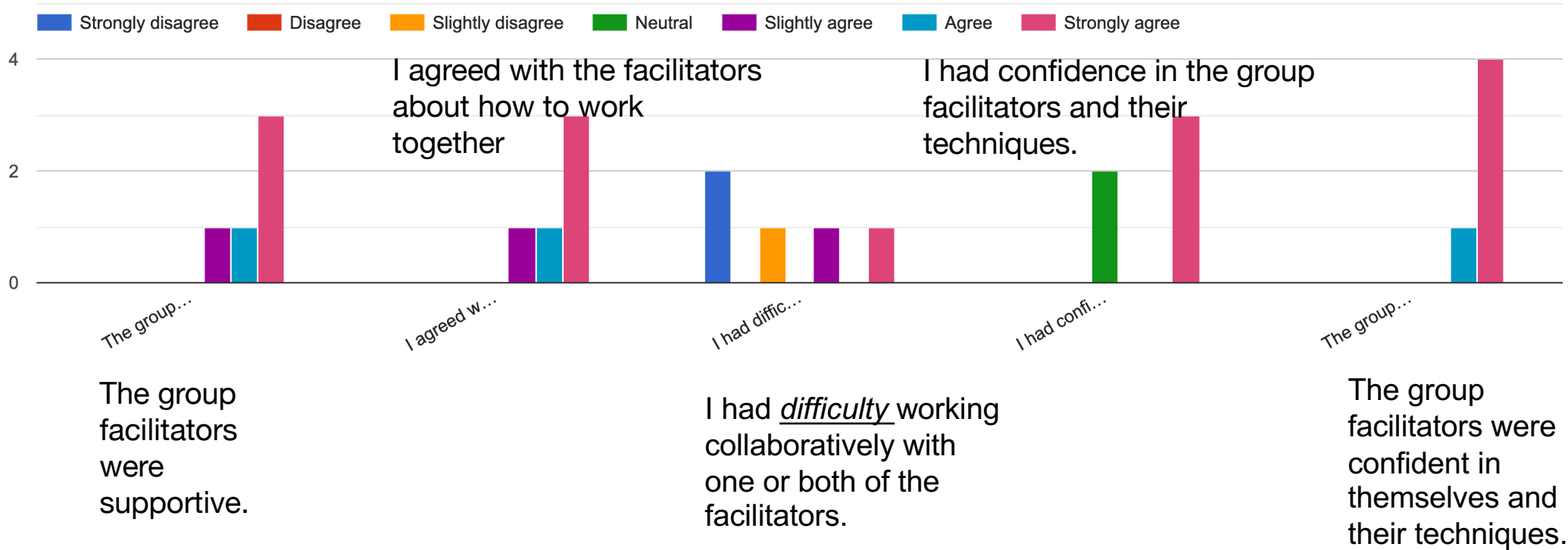
By WITNESSiNG THOUGHTS and EMOTIONS

with conscious positive thoughts and actions

MUHC COE Wellness seminar: PATIENT FEEDBACK



Thinking about the session, please indicate how strongly you agree or disagree with each statement

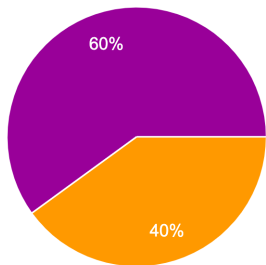


MUHC COE Wellness seminar: PATIENT FEEDBACK



Overall, how helpful did you find this group session?

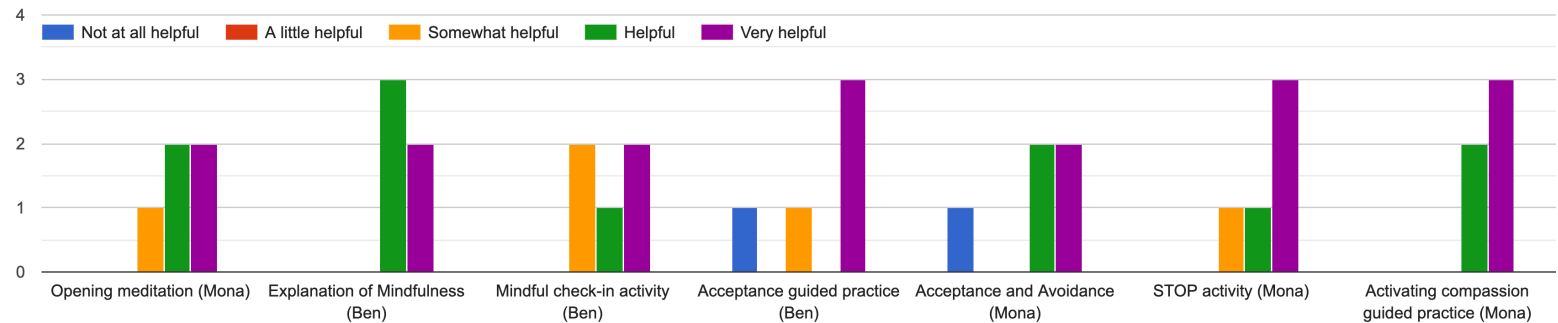
5 responses



- Not at all helpful
- A little helpful
- Somewhat helpful
- Helpful
- Very helpful

"One cannot spend all day meditating to forget irritation"

How helpful or unhelpful did you find each of the session activities?



SUGGESTIONS: More Itch-specific approaches; real-life example guidance; working from patient experiences, approaching compassion across work-places with employers

FOCUS GROUP pending qualitative analysis

Vision:



Canadian Skin Patient Alliance
Alliance canadienne des
patients en dermatologie

1. **Ensure that individuals diagnosed with atopic dermatitis and their caregivers are offered recognition and support for the impact the disease has on their wellbeing.**
2. Support for managing these issues must be part of comprehensive treatment strategy for each individual with AD.
3. A first step would be to conduct a mental health screening and an assessment of sleep quality for every patient with AD, and to ***offer support, care, access to resources, and referral to a specialist, when appropriate.***
4. Innovative strategies are needed to study and to co-develop strategies and tools using a more inclusive form of research

<https://www.eczemahelp.ca/blog/managing-the-burden-of-eczema/>

RESTRICTED ACCESS

- Shortage of dermatologists (2.5 per 100,000)
- Highest number of pending consultations in Quebec
- 53,000 patients currently waiting









**5 – 10
minutes**

**Too
complex**



**Too time-
consuming**



**Repeated
failures**



CURRENT PROBLEM



High numbers of patients are turning to digital resources for self-management.



Remote access to care



Personalized medicine



Self-management



Facilitates shared decision-making

TABLE V. Summary overview of eczema apps

App name	Language				End-user		Flow of information/direction	
	French	English	Spanish	Other	Kids	Adults	Capturing patient data	Delivering educational content
							Patient to app	App to patient
EczemaQ	•	•					•	•
EczemaWise*		•			•	•	•	
Eczema Mobile		•			•	•	•	
Eczema Outreach support		•						
iControl Eczema		•		Bahasa, Indonesia, Malay, Tagalog, Hànyǔ (中文), Tienkg Viet	•		•	
My Eczema Team		•		German, Hànyǔ (中文)			•	
POEM my eczema tracker		•			•		•	
Imagine		•			•	•	•	•
EczemaLess		•	•†		•	•	•	•
Living with Eczema		•			•	•	•	•
Vivre avec un Eczéma chronique	•						•	
Eczemafix†		•				•		
Eczema Fix†		•				•		•
Eczema Disease		•						•
Eczema Info		•						•
PO-SCORAD	•	•	•	21 other languages available	•	•	•	
Itchy		•			•	•	•	•
Eczema causes, diagnosis and management		•						•
SCORAD		•				•	•	
Eczema 101		•				•		•
Eczema Causes, Treatment, Symptoms and Prevention		•				•		•

This summary is a nonexhaustive list, not a systematic review, and subject to rapid change.

*Mobile app access limited to the United States, but Web-based applications can be accessed in other countries such as Canada.

†Requires user to provide personal data to change software display language.

Comment

> [Br J Dermatol. 2020 Feb;182\(2\):276. doi: 10.1111/bjd.18792. Epub 2020 Jan 14.](#)

Most eczema smartphone apps do not conform to clinical guidelines

Laura B von Kobyletzki ¹ ²

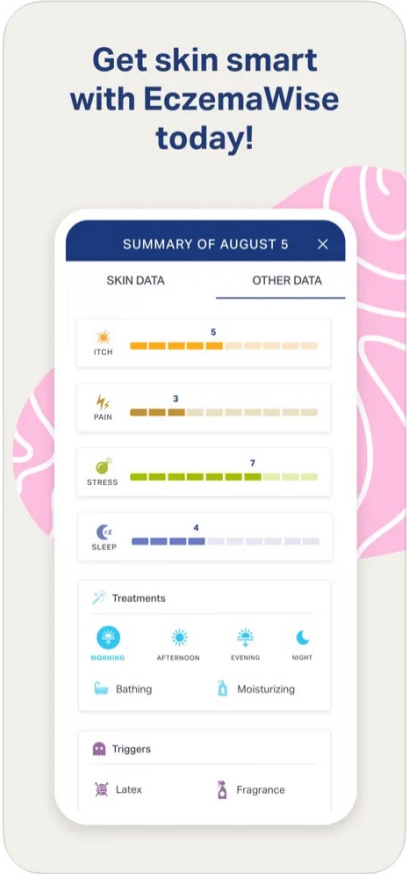
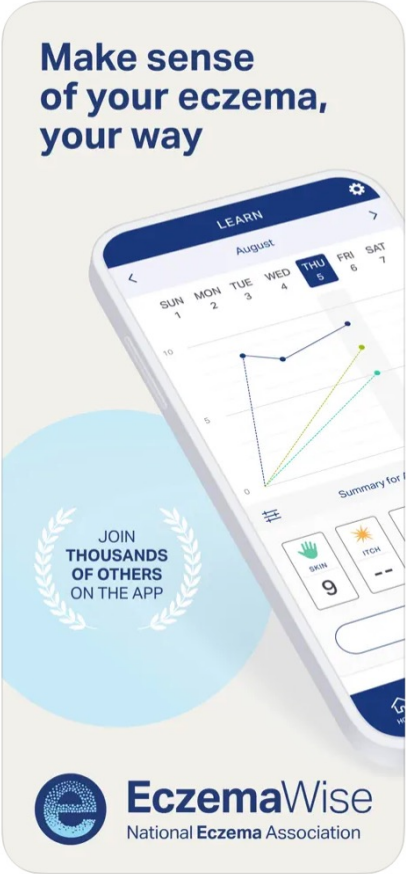
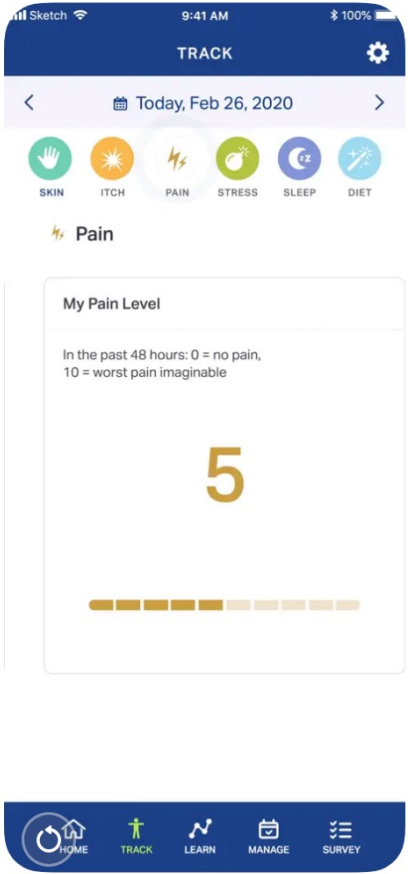
- evaluated all English, Chinese and Spanish language apps that support eczema self-management
- **majority did not conform with information in guidelines and insufficiently support evidence-based self-management**
- large variance in the quality of eczema apps
- need to ensure app quality and guide app selection for patients, caregivers and doctors

> [Br J Dermatol. 2020 Feb;182\(2\):444-453. doi: 10.1111/bjd.18152. Epub 2019 Jul 15.](#)

Eczema apps conformance with clinical guidelines: a systematic assessment of functions, tools and content

L S van Galen ¹ ², X Xu ¹, M J A Koh ³, S Thng ⁴, J Car ¹ ⁵

EczemaWise (NEA)





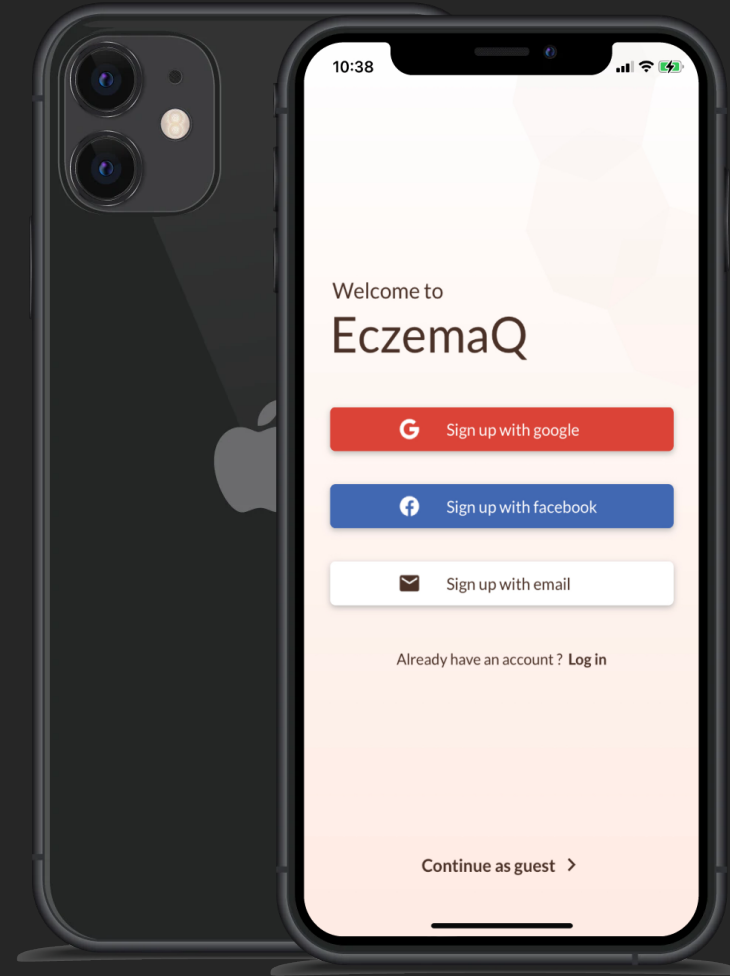
Patient-guided

McGill COE AD patient advisory committee

Expert-validated

Physician advisory board from the McGill COE AD network

Tewfik and Olivenstein



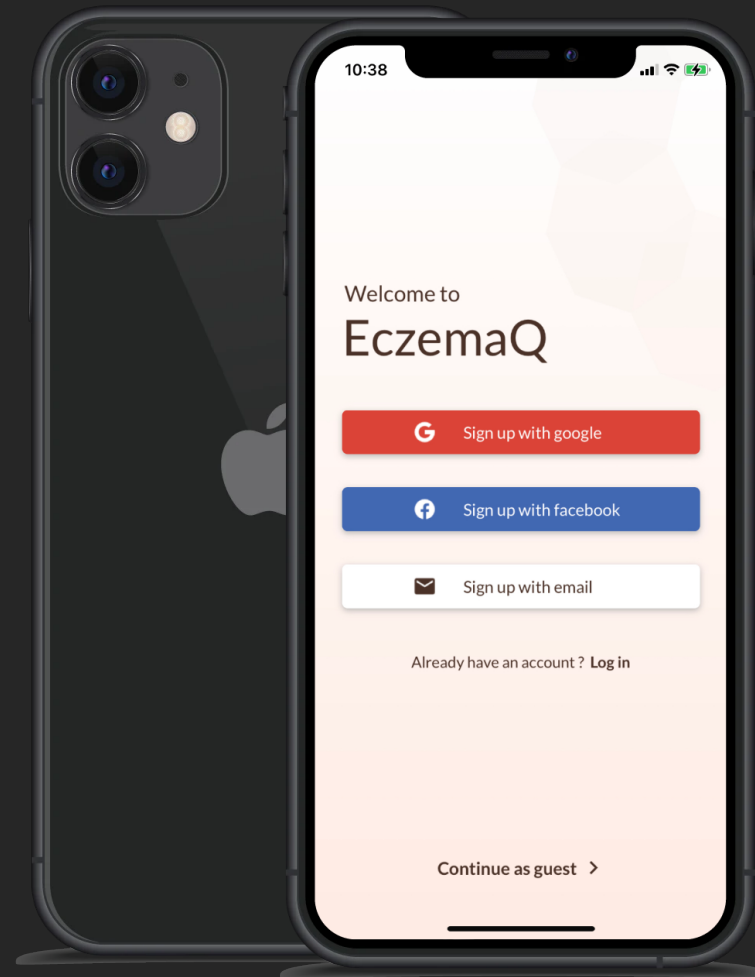


2021 McGill CLIC, Hakim
Family Innovation
Prize: *Most Transformative
Innovation* (\$50,000)



2020 Canadian
Dermatology Foundation,
Public Education Award

mHealth tool for Atopic Dermatitis





AIMS

To comply with international guidelines
To sufficiently support evidence-based self-management



Reduce burden of in-person knowledge translation



Gain efficiency for clinicians and patients



Remote Disease measurement



Long-term reduction in cost

5:40

← My diagnosis

Demographic Medical Family Diagnostic

Yes
 No
 Not sure

*Must provide value

Hay fever or seasonal allergies

Yes
 No
 Not sure

*Must provide value

Where do you currently have eczema?

Face, neck, arms

Where are your problem areas?

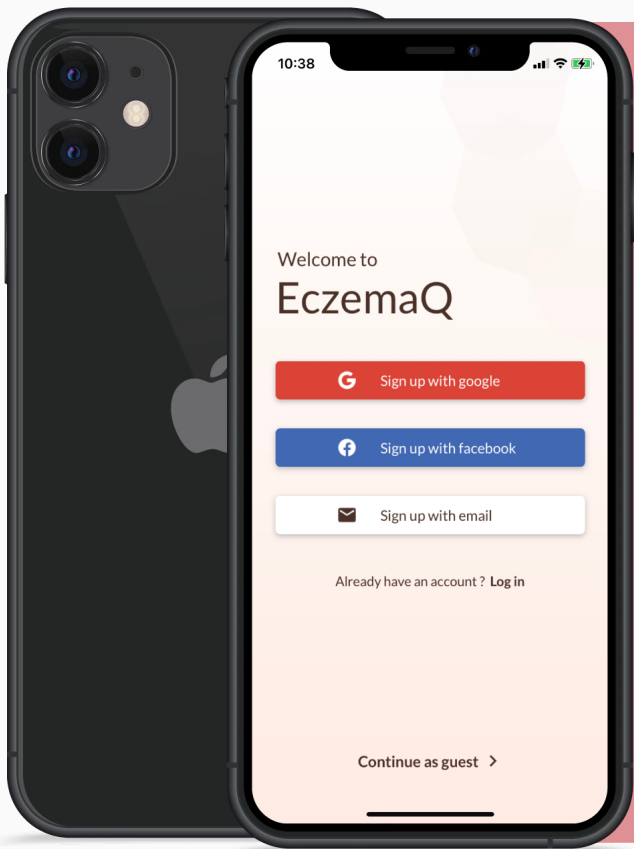
Face

Do you take medication for your asthma?

No	Yes, only during flare-ups of asthma	Yes, I take medication regularly, even I am not having
----	--------------------------------------	--

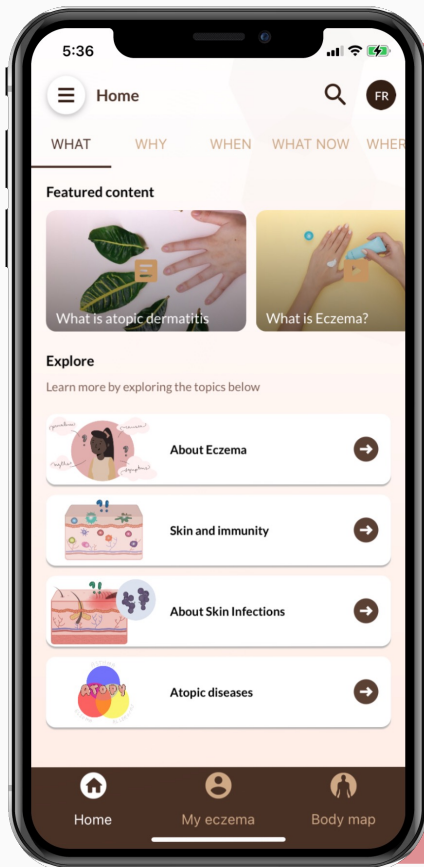
Previous Next

Diagnosis assistant



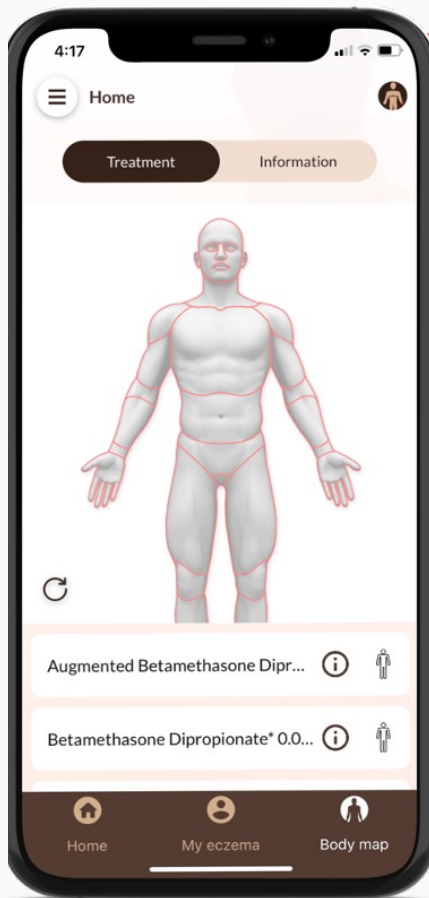
EczemaQ

Software-as-Medical-Device



Validated educational content

- What
- Why
- When
- What now
- Where



Body map

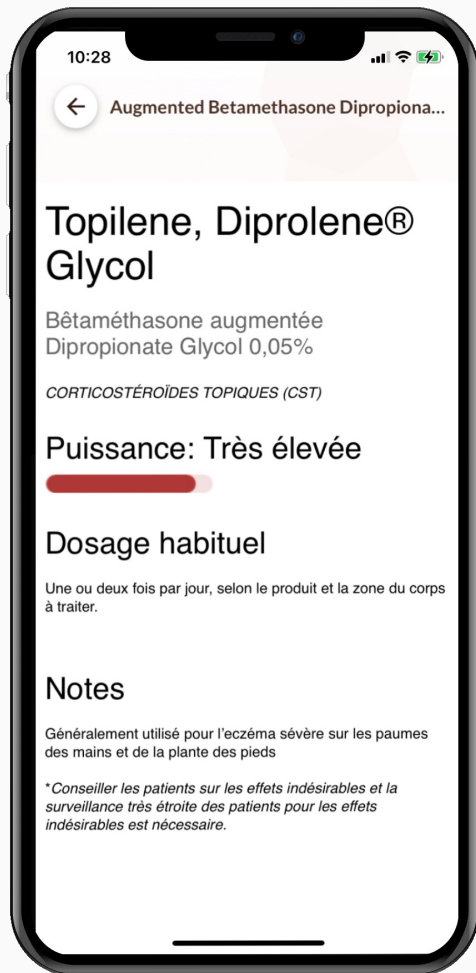




Disease tracking



Disease capture tool and photo gallery

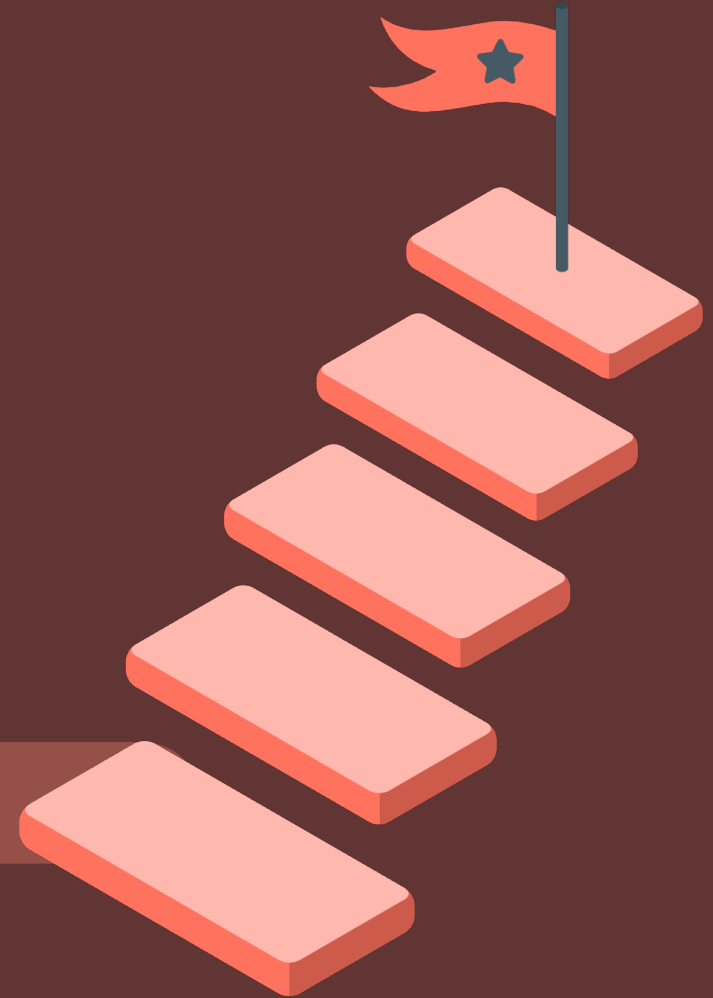


Bilingue

MAADO


the McGill Adult Atopic Dermatitis
Digital Outcomes Study
investigating use of mHealth tools
with adult atopic dermatitis
patients
N=24

Iterative study with healthcare providers and patients



MAADO Phase 1: Iterative Process


Evaluating the usability and acceptability of the beta version of the EczemaQ app



Optimizing the tool



Validation from patient end-users and clinical experts



Phase 2: Pilot RCT

Iterative Process Methodology

Participatory research model: engagement of patient-partner interdisciplinary research team (patients, clinicians, researchers); addressing a patient-user identified need; end-user involvement in all aspects of the research process.

Mixed methods convergent design: Collecting quantitative and qualitative data in parallel for the purpose of triangulation (social science approach, i.e., using more than one method to gather data to increase validity and reliability)

Mixed Methods

QUANTITATIVE



- Socio-demographic survey
- Technology Acceptance Model (TAM2) Questionnaire using 5 themes: perceived usefulness, ease of use, enjoyment, content satisfaction, overall satisfaction
- Patient Activation Measure (PAM)-13 evaluating patients' knowledge, skill, & confidence to take charge of their health condition

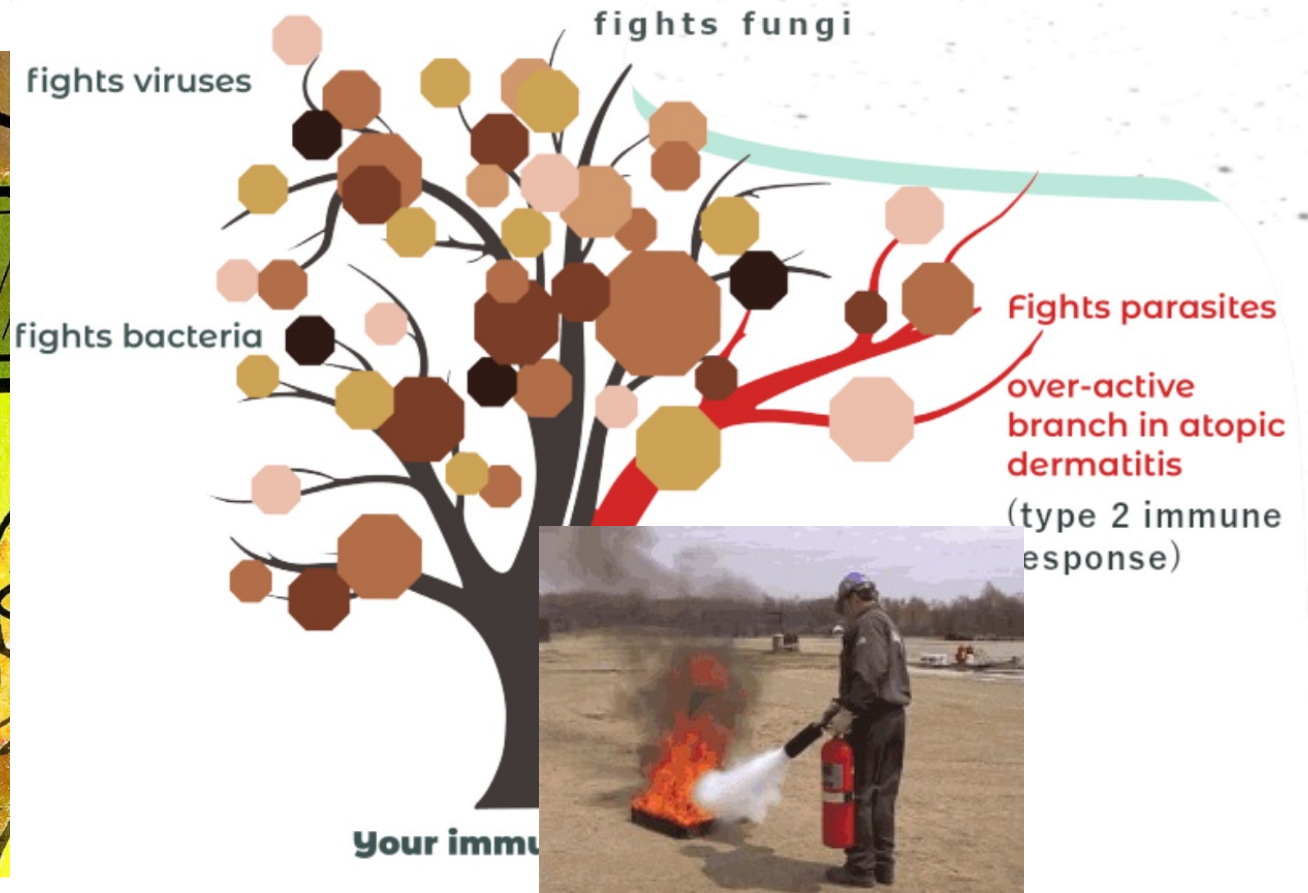
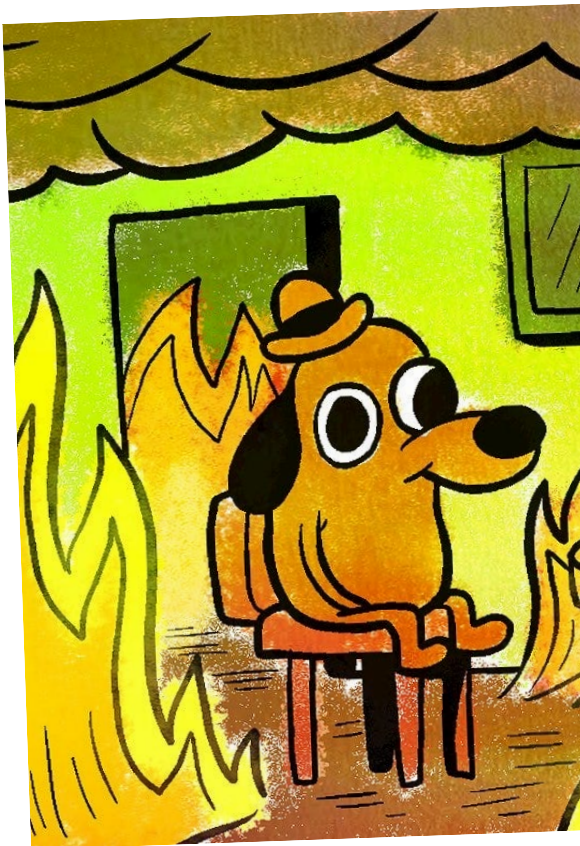
QUALITATIVE



- Focus groups w 2 study arms (AD patients, clinical experts)
- Focus group interviews investigating satisfaction w user experience, and app content & usefulness for managing AD
- Transcription, inductive coding, and analysis

GOAL to work with patients to

- ✓ Effective topical and/or systemic pharmacotherapy can **disrupt the itch-scratch cycle** and **↓ systemic inflammation**, improving mental health outcomes, and an overall greatly improved quality of life



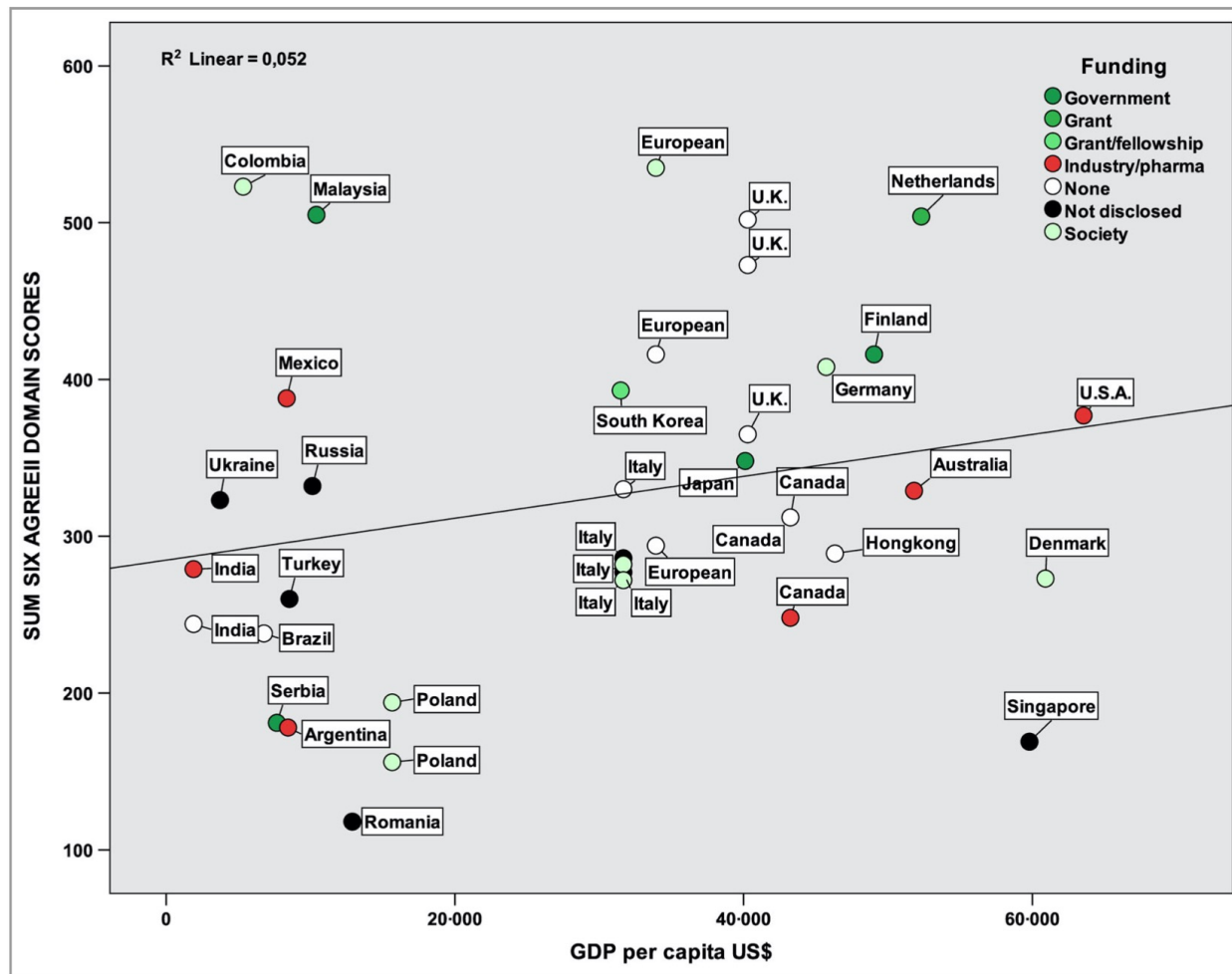


Figure 2 Gross domestic product (GDP) per capita vs. AGREE II sum-of-domain scores. Scatter plot with a simple linear regression line. Source GDP: <https://data.worldbank.org/indicator/NY.GDP.PCAP.CD>; GDP data for Taiwan and Asia were unavailable; the funding source is based on how it was reported in the guideline.

Table 3 Scoring results for AGREE II,^a Institute of Medicine (IOM) and Red Flags

Guideline ^b	AGREE II domains						IOM criteria			
	Scope and purpose	Stakeholder involvement	Rigour of development	Clarity of presentation	Applicability	Editorial independence	Fully met	Partially met	Not met	Lenzer's Red Flags
Colombia 2018 ²⁸	92	72	90	94	83	92	7	1	1	1
Netherlands 2019 ⁵¹	81	83	83	94	71	92	7	1	1	1
UK 2021 ⁶⁶	83	86	84	86	75	88	8	1	0	0
Europe 2021 ³²	97	92	97	97	94	58	8	1	0	1
Malaysia 2018 ⁴⁹	94	61	81	89	88	92	9	0	0	0
UK 2018 ⁶⁴	83	81	71	69	77	92	6	3	0	1
Finland 2016 ³⁴	61	75	72	81	52	75	5	3	1	3
Germany 2021 ³⁵	75	81	51	82	27	92	6	1	2	3
Europe 2018 ³⁰⁻³¹	64	83	69	86	31	83	6	3	0	2
USA 2017 ⁶⁷	78	72	59	78	27	63	5	2	2	5
South Korea 2016 ⁶⁰	67	44	83	78	33	88	6	3	0	0
Italy 2019 ⁴³	72	50	38	72	19	79	1	4	4	3
Mexico 2018 ⁵⁰	97	69	53	75	44	50	0	6	3	3
UK 2016 ⁶⁵	61	47	72	58	56	71	6	3	0	2
Australia 2020 ¹⁴	72	56	46	78	31	46	2	4	3	6
Canada 2019 ²³⁻²⁷	72	44	32	78	23	63	0	6	3	7
India 2017 ⁴⁰	72	53	44	72	25	13	1	5	3	4
Japan 2019 ⁴⁶⁻⁴⁸	67	58	53	78	29	63	3	4	2	5
Hong Kong 2021 ³⁶	50	33	34	64	33	75	1	4	4	3
Italy 2021 ⁴²	75	58	30	67	23	29	0	6	3	3
Asia 2018 ¹³	72	33	51	61	38	25	0	6	3	5
India 2017 ³⁷⁻³⁹	28	25	27	78	23	63	1	6	2	3
Brazil 2019 ¹⁵	39	11	32	58	15	83	1	3	5	3
Europe 2020 ³³	50	53	26	64	52	50	0	6	3	5
Russia 2020 ⁵⁷	50	58	46	69	63	46	3	4	2	2
Ukraine 2016 ⁶³	56	61	39	67	58	42	1	4	4	3
Canada 2017 ¹⁶	58	64	23	69	40	58	0	4	5	4
Italy 2020 ⁴⁵	58	42	31	69	23	63	0	4	5	4
Italy 2018 ⁴¹	67	44	34	50	23	54	0	6	3	5
Italy 2019 ⁴⁴	39	44	65	69	27	33	2	6	1	4
Denmark 2018 ²⁹	47	39	28	67	25	67	1	4	4	5
Turkey 2018 ⁶²	50	33	32	64	35	46	0	3	6	4
Canada 2018 ¹⁷⁻²²	67	33	27	64	15	42	0	5	4	7
Argentina 2019 ¹²	50	19	21	56	19	13	0	5	4	6
Taiwan 2020 ⁶¹	47	25	19	50	10	42	2	4	3	3
Singapore 2016 ⁵⁹	42	25	17	50	10	25	0	1	8	4
Poland 2020 ⁵²⁻⁵⁴	17	25	15	56	10	33	0	3	6	4
Poland 2019 ⁵⁵	39	36	18	42	17	42	0	2	7	4
Serbia 2016 ⁵⁸	36	28	15	39	21	42	0	1	8	3
Romania 2019 ⁵⁶	31	14	8	47	10	8	0	2	7	4

^a AGREE II scores by country/region domain (higher is better). ^b Rating based on number of AGREE II domains meeting excellent (> 70%)

Treatment Guidelines for Atopic Dermatitis Since the Approval of Dupilumab: A Systematic Review and Quality Appraisal Using AGREE-II

Stephanie Ghazal^{1†}, Zainab Ridha^{2†}, Kathleen D'Aguanno¹, David Nassim¹, Andrea Quattini³, Fana Notohinorouk^{4,5}, Yves Poulin⁶, Sunil Kalia⁷, Danielle Marcoux⁸, Vincent ^{1,4,5,11,12*}

Ghazal et al.

TABLE 4 | Recommended time for initiation of dupilumab relative to other treatment modalities, after 1st-line measures and topicals.

Guideline	Type of approach							
	Rapid sequential			Conservative sequential		Slow sequential	No sequential consensus	
	2A	2B	2C	3A	3B	4A		
Ariens et al. (18)						x		
Boguniewicz et al. (31)		x						
Boguniewicz et al. (32)	x							
Brar et al. (33)			x					
Calzavara et al. (34)						x		
Damiani et al. (35)					x			
Lopes et al. (36)					x			
Lynde et al. (37)				x				
Nowicki et al. (42)	x							
Smith et al. (38)				x				
Thyssen et al. (39)								x
Wollenberg et al. (40)					x			

2. Rapid sequential approach: Dupilumab 2nd (after topicals).
 2A: As an equivalent to antimetabolite/conventional systemic therapies.
 2B: preferred over antimetabolite/conventional systemic therapies or phototherapy.
 2C: As an equivalent choice to phototherapy.
 3. Conservative sequential approach: Dupilumab as 3rd line, (after topicals + 2nd intervention).
 3A: 2nd = narrow band UVB (nbUVB) phototherapy.
 3B: 2nd = antimetabolite/conventional systemic therapies.
 4. Slow sequential approach: dupilumab as 4th line [after topicals+ 2nd (nbUVB) + 3rd (conventional systemic therapy)].
 4A: 2nd = nbUVB, 3rd = conventional antimetabolite/conventional systemic therapies or vice versa or one conventional to another prior to dupilumab.

Treatment of secondary bacterial infections in eczema

Treatment	Antibiotic, dosage and course length
First-choice topical if a topical antibiotic is appropriate (see recommendations 1.1.5 and 1.1.6)	Fusidic acid 2%: Apply three times a day for 5 to 7 days For localised infections only. Extended or recurrent use may increase the risk of developing antimicrobial resistance.
First-choice oral if an oral antibiotic is appropriate (see recommendations 1.1.5 to 1.1.7)	Flucloxacillin: 500 mg four times a day for 5 to 7 days
Alternative oral antibiotic for penicillin allergy or if flucloxacillin is unsuitable (for people who are not pregnant)	Clarithromycin: 250 mg twice a day for 5 to 7 days The dosage can be increased to 500 mg twice a day for severe infections.

NICE guideline NG190. : <https://www.nice.org.uk/guidance/ng190> (last accessed 26 January 2022).

<https://www.nice.org.uk/guidance/ng190/evidence/evidence-review-pdf-9018188749>

Antimicrobials

Efficacy of oral antibiotics

Evidence was from 1 systematic review of RCTs.

There were no statistically significant differences in clinical effectiveness, quality of life or microbiological outcomes for oral flucloxacillin compared with placebo in children with infected eczema. Both groups had corticosteroids and were encouraged to use emollients.

Some differences were seen in the presence of clinically apparent infection (definition unclear) at the end of treatment for oral cefadroxil compared with placebo in children with infected eczema (it was unclear whether topical corticosteroids were used in either group). However, there were no statistically significant differences in other clinical-effectiveness outcomes.

There were no differences in adverse events or withdrawals caused by adverse events for oral antibiotics (flucloxacillin or cefadroxil) compared with placebo in children with infected eczema.

Table 3: Mental health recommendations in clinical practice guidelines

	PUBLICATION (AUTHORS, YEAR)	RECOMMEND SCREENING	Management recommendations					
			Patient Education Programs	Behavioral Therapy	Relaxation Techniques	Consulting Other Specialists	Psychological Support	Pharmacologic Intervention
1	<i>Ariens et al. 2018</i>		n/a					
2	<i>Boguniewicz et al. 2018</i>		n/a					
3	<i>Boguniewicz et al. 2018</i>		n/a					
4	<i>Brar et al. 2019</i>						X	
5	<i>Calzavara et al. 2018</i>					X		
6	<i>Damiani et al. 2019</i>			X	X			
7	<i>Lopes et al. 2020</i>			X				
8	<i>Lynde et al. 2017</i>		n/a					
9	<i>Nowicki et al. 2020</i>		n/a					
10	<i>Smith et al. 2019</i>	X	X					
11	<i>Thyssen et al. 2020</i>	X	X			X		
12	<i>Wollenberg et al. 2018</i>		X	X	X			
13	<i>Agache et al. 2021</i>		n/a					
14	<i>Alakeel et al. 2022</i>		n/a					

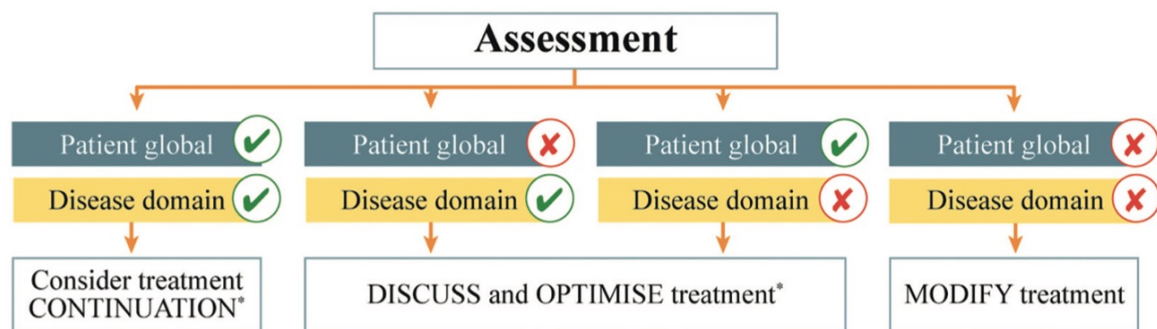
Table 3: Mental health recommendations in clinical practice guidelines

	PUBLICATION (AUTHORS, YEAR)	RECOMMEND SCREENING	Management recommendations					
			Patient Education Programs	Behavioral Therapy	Relaxation Techniques	Consulting Other Specialists	Psychological Support	Pharmacologic Intervention
15	<i>Chan et al. 2020</i>		X					
16	<i>Costanzo et al. 2022</i>		n/a					
17	<i>Susanna et al. 2021</i>	X						
18	<i>Misery et al. 2021</i>			X	X			
19	<i>Nowicki et al. 2020</i>		n/a					
20	<i>Papp et al. 2021</i>		n/a					
21	<i>Saeki et al. 2021</i>				X	X		
22	<i>Sastre et al. 2020</i>		n/a					
23	<i>Torres et al. 2021</i>	X						
24	<i>Werfel et al. 2021</i>		n/a					
25	<i>Wollenberg et al. 2020</i>	X	X	X	X			X
26	<i>Wollenberg et al. 2022</i>		X	X	X	X		

**recommended without modifications as per the AGREE-II instrument thresholds for CPG guidelines.

Treat-to-Target in Atopic Dermatitis: An International Consensus on a Set of Core Decision Points for Systemic Therapies

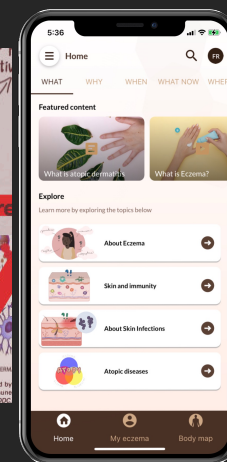
Marjolein DE BRUIN-WELLER¹, Tilo BIEDERMANN², Robert BISSONNETTE³, Mette DELEURAN⁴, Peter FOLEY^{5,6}, Giampiero GIROLOMONI⁷, Jana HERCOGOVÁ^{8,9}, Chih-Ho HONG¹⁰, Norito KATO¹¹, Andrew E. PINK^{12,13}, Marie-Aleth RICHARD¹⁴⁻¹⁶, Stephen SHUMACK¹⁷, Juan F. SILVESTRE¹⁸ and Stephan WEIDINGER¹⁹



Treatment target goals	3 months [†]	6 months [‡]
PtGA (0–4)	Reduction of at least 1 point	Absolute score ≤ 2
EASI	EASI 50	EASI 75 or EASI ≤ 7
SCORAD	SCORAD 50	SCORAD 75 or SCORAD ≤ 24
Peak Pruritus NRS (0–10)	Reduction of at least 3 points	Absolute score ≤ 4
DLQI	Reduction of at least 4 points	Absolute score ≤ 5
POEM	Reduction of at least 4 points	Absolute score ≤ 7

PATIENT GLOBAL

DISEASE DOMAINS



MENTAL HEALTH



COE AD

CENTER OF EXCELLENCE FOR ATOPIC DERMATITIS



COE AD

CENTER OF EXCELLENCE FOR ATOPIC DERMATITIS

Carolyn.jack@mcgill.ca
Eczemaquebec.com