

## Background

- Atopic Dermatitis (AD) affects 7% of United States adults.
- There are many unmet therapeutic needs in AD.
- Providing necessary AD education may be challenging in a busy practice and impact patient satisfaction
- In general, previous studies found higher patient satisfaction is associated with increased overall healthcare and prescription medication expenditures.

## Research Objectives

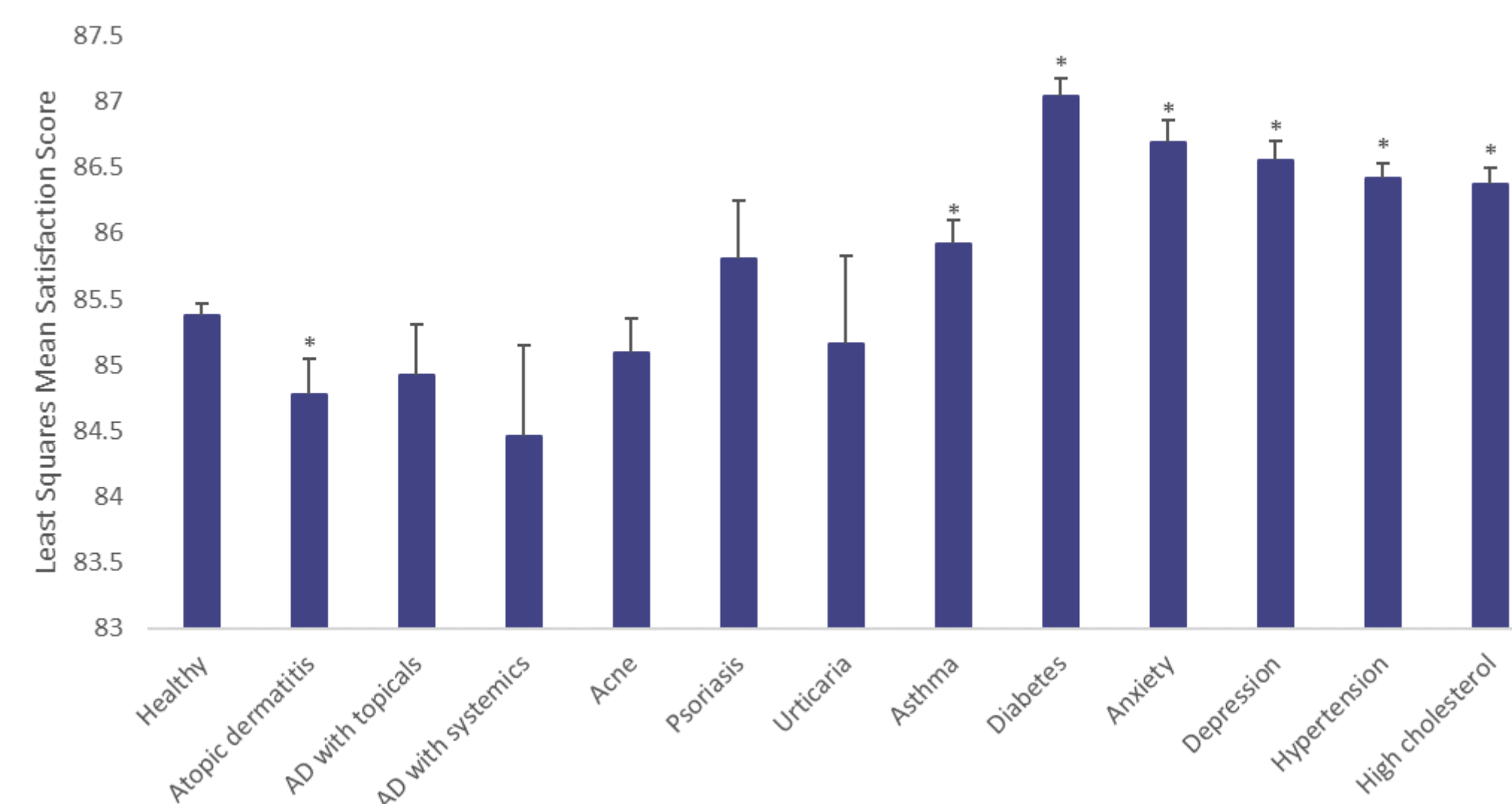
1. Examine overall patient healthcare satisfaction among adults with AD.
2. Determine associations of patient satisfaction with patterns of healthcare utilization.
3. Identify predictors of higher patient satisfaction among adults with AD.

## Methods

- Data were analyzed from the 2000-2015 Medical Expenditure Panel Surveys, an annual, representative survey by the Agency for Healthcare Research and Quality.
- AD diagnosis was determined by ICD-9 code 691/692.
- Patient satisfaction was assessed by the Consumer Assessment of Healthcare Providers and Systems (CAHPS) survey ratings of how often providers (1) listened carefully, (2) explained things clearly, (3) spent enough time, and (4) showed respect, and overall rating of healthcare.
- Linear regression models were used to assess differences in patient satisfaction between different diseases.
- Logistic regression models were constructed to examine the association of healthcare utilization and high satisfaction ( $\geq 75^{\text{th}}$  percentile) among adults with AD.

## Results

### Comparison of Patient Satisfaction Scores by Disease



**Figure 1.** Models adjusted for age, sex, race/ethnicity, education attainment, income, insurance payer, mental and physical health status, self-reported health rating, multimorbidity, and comorbid asthma, hay fever, depression, anxiety, ADD/ADHD, and cutaneous infection. Asterisk indicates statistical significance ( $P < .05$ ).

### Association of healthcare utilization and satisfaction

$\geq 1$ visit vs no visits	Diagnosis			
	No AD	P-value	Atopic Dermatitis	P-value
Office visit	1.74 [1.69, 1.80]	<b>&lt;.0001</b>	1.81 [1.30, 2.52]	<b>0.0005</b>
Emergency room	0.95 [0.91, 0.98]	<b>0.0008</b>	0.84 [0.65, 1.07]	0.16
Hospitalization	1.15 [1.10, 1.20]	<b>&lt;.0001</b>	1.24 [0.90, 1.70]	0.19
Polypharmacy ( $\geq 3$ AD meds)	-	-	1.24 [0.91, 1.67]	0.17

**Table 1.** Models adjusted for socio-demographics, health status, and clinical comorbidities, as above. Bold-face text indicates statistical significance.

- Overall, 3,810 (weighted: 47,417,590) adults with AD were included.
- AD was associated with significantly worse patient experience scores, after adjusting for socio-demographics, health status, and comorbidities.
- Adults with AD and  $\geq 1$  office visit were more likely to have high patient satisfaction ( $\geq 75^{\text{th}}$  percentile).
- Emergency room visits, hospitalization, and polypharmacy were not associated with patient satisfaction.
- Two-way statistical interactions were observed between systemic AD therapy and provider specialty. Topical therapy prescribed by a specialist and systemic therapy by a non-specialist had *lower* satisfaction; systemic therapy by a specialist had *higher* satisfaction.
- Among adults with AD, patient satisfaction was associated with increased age, and inversely associated with lower income, Hispanic ethnicity or multiple races, public or no insurance, and increased multimorbidity.

## Limitations

- Cross-sectional study design precludes analysis of causality.
- Data unavailable to examine AD severity and clinical phenotype.
- All data were self-reported.

## Conclusions

- AD is associated with lower patient satisfaction scores in adults.
- Adults with AD and lower income, no insurance, and multimorbidity had even lower treatment satisfaction.
- Increased outpatient healthcare utilization was associated with higher patient satisfaction.
- These results highlight unmet needs in the clinical management of AD.
- Future studies are needed to develop strategies to optimize treatment satisfaction.