

# Healthcare resource utilization and financial burden among patients with Chronic Hand Eczema – Results from the CHECK study in the United States



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## Conclusions

- Individuals living with Chronic hand eczema (CHE) have a considerable financial burden in terms of out-of-pocket (OOP) costs to manage their disease.
- In addition, participants reported an average of 3 to 4 office visits per year for CHE management, further underscoring the ongoing need for healthcare resources in this population.
- Health related costs may be a source of significant stress and a barrier to care, particularly for the uninsured. This mandates the need to optimize long-term CHE care to avoid excess healthcare resource utilization (HRU).
- Further research is needed to understand the overall financial burden including direct and indirect costs.

## Objectives

- To analyze healthcare resource utilization (office visits) and OOP costs in relation to CHE in the US, stratified by disease severity in the CHECK-US study.

## Synopsis (Background)

- CHE is a persistent inflammatory skin disease that often requires long-term management and frequent healthcare interactions.<sup>1</sup>
- CHE is hand eczema (HE) that lasts  $\geq 3$  months and/or returns at least 2 times a year.<sup>2</sup>
- In addition to its physical and psychological burden, CHE places a significant economic strain on patients through ongoing needs for consultations, treatments, and OOP costs, as well as associated decreased work productivity either directly or indirectly.<sup>3</sup>
- There is limited patient-reported data and evidence for HRU and financial burden of CHE management in the United States (US).
- A better understanding of these factors is essential to inform care planning, enhance patient support, and reduce financial barriers.
- A similar study was conducted in Canada, France, Germany, Italy, Spain and the United Kingdom (UK).<sup>4</sup>

## Methods

- CHECK-US (Chronic Hand Eczema epidemiology, Care, and Knowledge of real-life burden in the US) was an online survey conducted among 10,636 adult participants representative of the general population in the US, recruited via panels from March to May 2025.
- Participants who self-reported a physician-diagnosed CHE and completed the full questionnaire were included in the analyses.
- **Outcomes included:**
  - Severity in the past week, self-assessed using a validated photographic guide. The categories 'Clear' and 'Almost clear' were categorized as 'Mild' and the categories 'Moderate', 'Severe' and 'Very severe' were categorized as 'Moderate to Severe'.<sup>5</sup>
  - Healthcare office visits in the past 12 months.
  - Monthly OOP costs in USD for emollients, moisturizers, or topical treatments not reimbursed, as well as for other items relevant for managing the CHE (e.g., gloves, wound care, gauze bandages, special soaps, and cleansers) over the past 12 months.
  - Treatments currently used for CHE. Current treatments were grouped using a hierarchical approach. Systemic therapies or phototherapy were classified as the highest level, followed by topical corticosteroids (TCS), and then other topical treatments. Based on this hierarchy, three mutually exclusive treatment groups were created. Participants receiving treatments from different groups were assigned to the highest-ranked group.
  - Data were analyzed descriptively as means with standard deviation (SD) for continuous variables, frequencies (n) and percentages for categorical variables.

Abbreviations: CHE=Chronic hand eczema; GP=general practitioner; HCP=healthcare provider; HRU=healthcare resource utilization; OOP=out-of-pocket; SD=standard deviation; TCS=topical corticosteroid.

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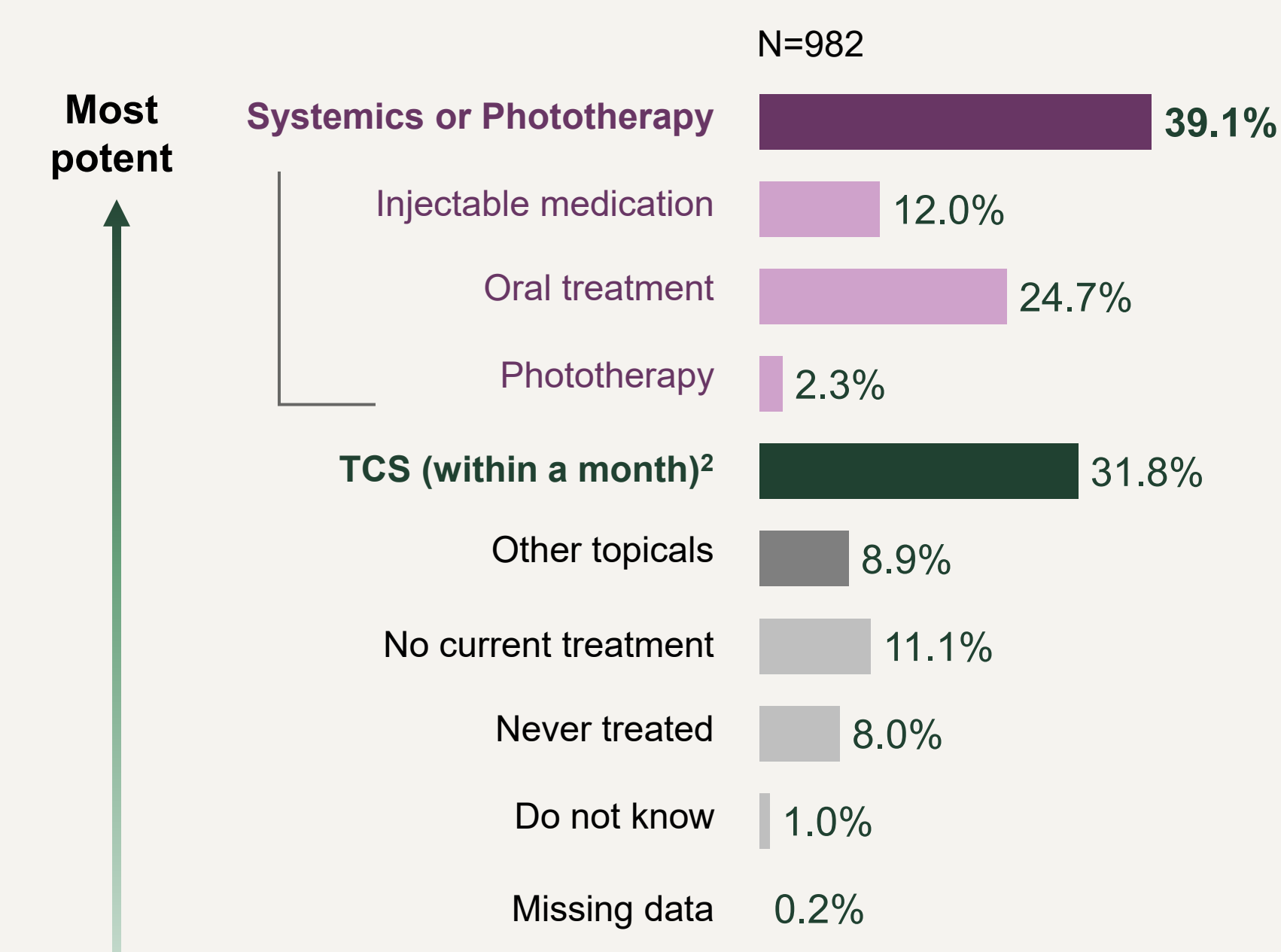
## Results

### Current treatment reported by participants with self-reported physician-diagnosed CHE

In total, **982 participants self-reported a physician diagnosis of CHE and completed the full questionnaire**. 54.4% were male (n=534) with a mean (SD) age of 37.1 (12.4) years.

- The average time since diagnosis was 12.3 (12.5) years.
- Almost two-thirds of participants reported moderate to severe CHE currently (65.1%, n=639).
- In terms of current treatments, 39.1% reported being treated with systemics and/or phototherapy, 31.8% reported being treated with TCS (without systemics and phototherapy), and 8.9% reported being treated with only other topicals. On the other hand, 11.1% were not currently treated, and 8.0% were never treated. The data was missing for the remaining participants (Figure 1).

Figure 1 Current treatment reported by participants with the self-reported physician-diagnosed CHE<sup>1</sup>

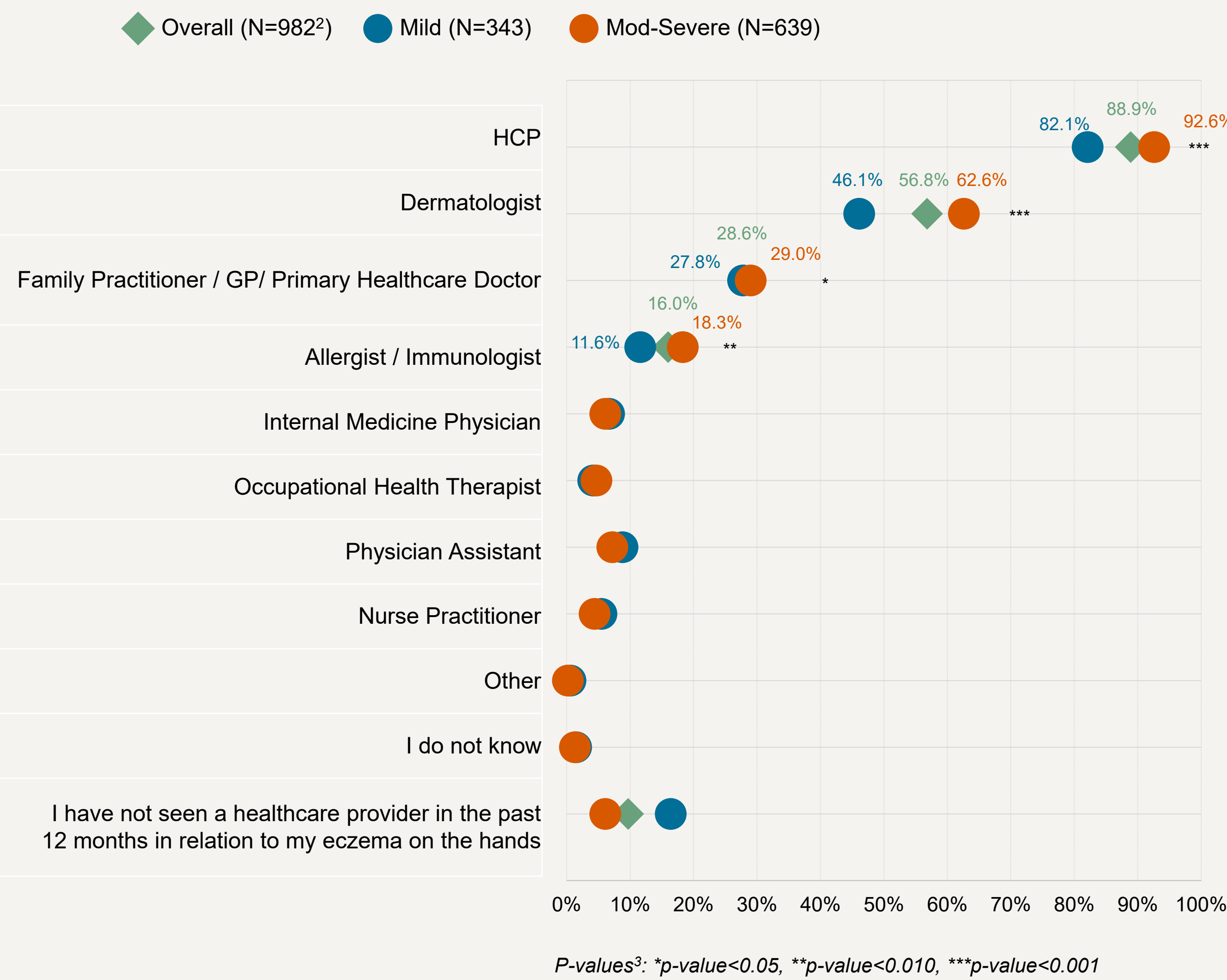


<sup>1</sup> For participants who reported multiple current treatment options, only the highest one—based on the treatment hierarchy described in the methods section—was considered for classification.  
<sup>2</sup> Participants who reported 'I am still using topical corticosteroids', 'Within the past week' or '1 week to 1 month ago TCS reported' were considered as currently treated with TCS.

### Proportion of participants with visit to HCP in relation with HE in the past 12 months among self-reported physician-diagnosed with mild vs. moderate to severe CHE

- In the past 12 months, 88.9% (n=873) had met with a healthcare provider (HCP); 56.8% with a dermatologist, 28.6% with a General Practitioner (GP), whereas 9.7% had not seen any HCP, and 1.3% do not know (Figure 2).
- Participants with moderate to severe CHE were more likely to see an HCP in the past 12 months compared to participants with mild CHE (92.6%, n=592 vs. 82.1%, n=343; p<0.001). Significant differences were observed for dermatologist (p<0.001), general practitioner (p=0.015), and allergist/immunologist visits (p=0.001).

Figure 2 HCP seen in relation with HE over the past 12 months<sup>1</sup>



<sup>1</sup> Multiple responses were allowed. <sup>2</sup> To be representative of the US population, quotas and weighting were applied. Due to weighting, the overall total may not equal the sum of all columns. <sup>3</sup> Chi-squared test with Rao & Scott's second-order correction.

### Monthly OOP costs for emollients, moisturizers, or other topical treatments to treat CHE<sup>1</sup> and for other items for managing CHE among self-reported physician-diagnosed participants with mild vs. moderate to severe CHE

- Over the past 12 months, mean (SD) OOP costs for emollients or other topical treatments were \$124.2 (\$180.0) per month and mean (SD) costs for other items relevant for managing CHE (e.g., gloves, wound care, gauze bandages, special soaps and cleansers) were \$107.2 (\$176.7) per month (Figure 3).
- Participants with moderate to severe CHE had significantly higher mean (SD) monthly OOP costs for emollients or other topical treatments than those with mild CHE (\$134.1 (\$182.4) vs \$105.9 (\$174.2), p<0.001). Patterns were similar for mean (SD) monthly OOP costs for other products used to manage their CHE (\$117.9 (\$182.3) vs. \$87.1(\$164.0), p<0.001).

Figure 3 Money (\$) spent monthly over the past 12 months

	Overall N=982 <sup>2</sup>	Mild N=343	Moderate to severe N=639	P-value <sup>3</sup>
Emollients, moisturizers or topical treatments to treat CHE (SD)	124.2 (180.0)	105.9 (174.2)	134.1 (182.4)	<0.001
Other items for managing CHE (SD)	107.2 (176.7)	87.1 (164.0)	117.9 (182.3)	<0.001

<sup>1</sup> Fully reimbursed treatments are not included; however, any co-payments or out-of-pocket costs for partially covered treatments are. <sup>2</sup> Because of weighting, the overall total may not equal the sum of all columns. <sup>3</sup> Wilcoxon rank-sum test for complex survey samples.

### Number of office visits in relation to HE in the past 12 months among self-reported physician-diagnosed participants with mild vs. moderate to severe CHE<sup>1</sup>

In participants with moderate to severe CHE, 89.0% (n=568)<sup>2</sup> had at least one office visit in the past 12 months. Whereas among participants with mild CHE, 74.3% (n=255)<sup>2</sup> (p<0.001)<sup>3</sup> had at least one office visit (Figure 4).

Figure 4 Number of office visits in relation to HE in the past 12 months

	Overall	Mild	Moderate to severe	P-value <sup>3</sup>
No office visit	16.2%	25.7%	11.0%	<0.001
At least one office visit	83.8%	74.3%	89.0%	<0.001
Mean (SD)	3.0 (4.2)	2.0 (3.5)	3.5 (4.4)	<0.001

<sup>1</sup> The question asked to participants was: 'In relation to the eczema on your hand(s), how many office visits have you had in the past 12 months?'. <sup>2</sup> Because of weighting, the overall total may not equal the sum of all columns. <sup>3</sup> Wilcoxon rank-sum test for complex survey samples; chi-squared test with Rao & Scott's second-order correction.

One limitation of this study is that CHE prevalence estimates are based on patient-reported data.

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