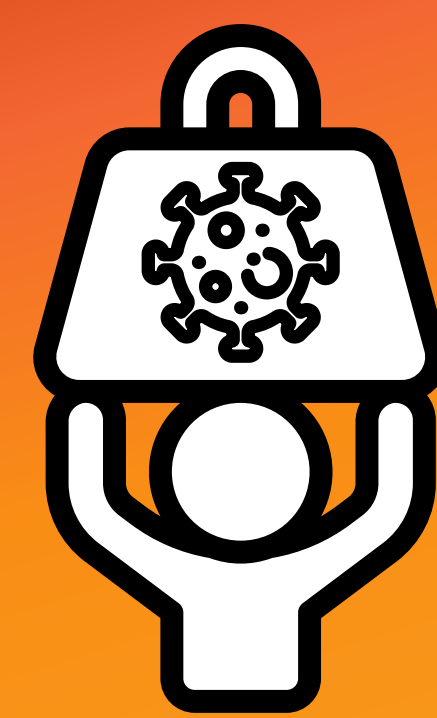


CLINICAL AND ECONOMIC BURDEN OF HERPES ZOSTER IN MEXICO: A RETROSPECTIVE MEDICAL CHART ANALYSIS IN A PRIVATE HEALTHCARE SETTING



Herpes zoster and postherpetic neuralgia impose a **significant burden** on patients and the **private healthcare sector** in Mexico.

Digital poster
Supplemental data



SCAN ME

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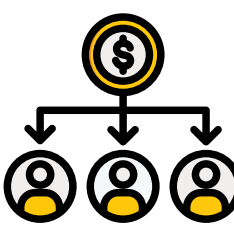
Background

- HZ leads to a painful rash. Complications, including PHN, may arise. Patients with HZ (and PHN) have a substantial loss in quality of life.¹
- HZ and PHN impose a substantial burden on patients and the healthcare system.²
- Information regarding the economic impact of HZ on the healthcare system in Mexico is limited. In one prospective study, conducted in Latin America including Mexico, average costs per HZ episode were \$1,465 USD from a public payer's perspective.³

Aims



Assess the **healthcare resource use** (HCRU) and **economic burden** of herpes zoster (HZ) and postherpetic neuralgia (PHN) in Mexico from a private healthcare perspective.



Evaluate healthcare resource use and costs **by age category and by comorbidity**.

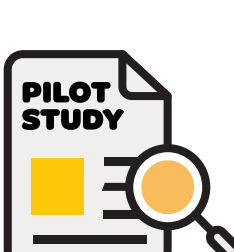


Describe **treatment pathways** of patients with HZ in Mexico.

Methods

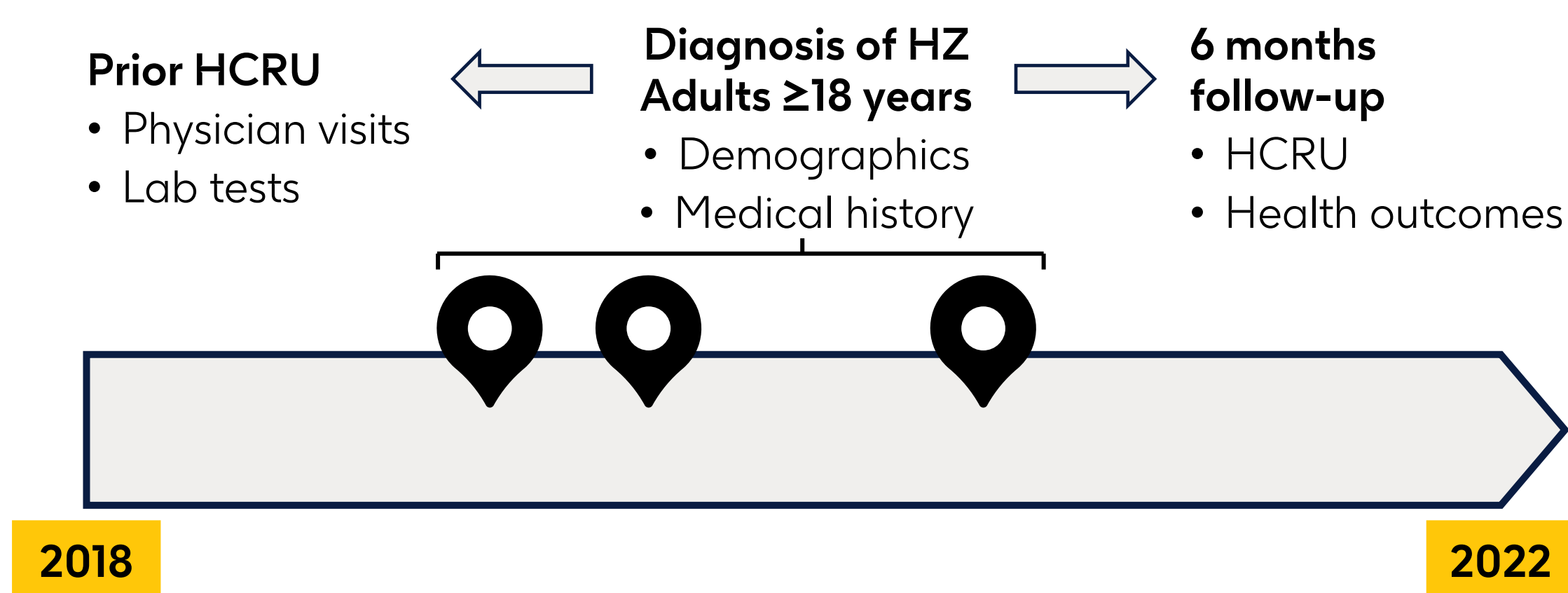


Retrospective, medical chart review at 5 private clinics in Mexico (Figure 1, Figure 2).

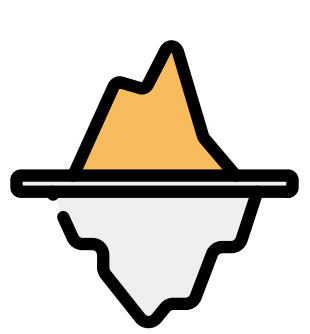


Pilot study on 10 patients to develop study extraction form (Supplementary information).

Figure 1: Study scheme

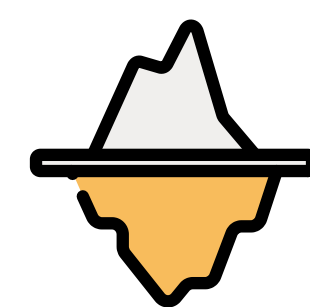


Note: People were stratified by age (e.g., 18-29, 30-39, 40-49, 50-59, 60-69, 70-79 and ≥80 years) and by comorbidity (supplementary information).



Direct costs were calculated using costs for:

- Physician/specialist visits
- Hospitalization
- Drug costs (average from local pharmacy prices)

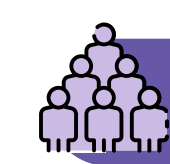
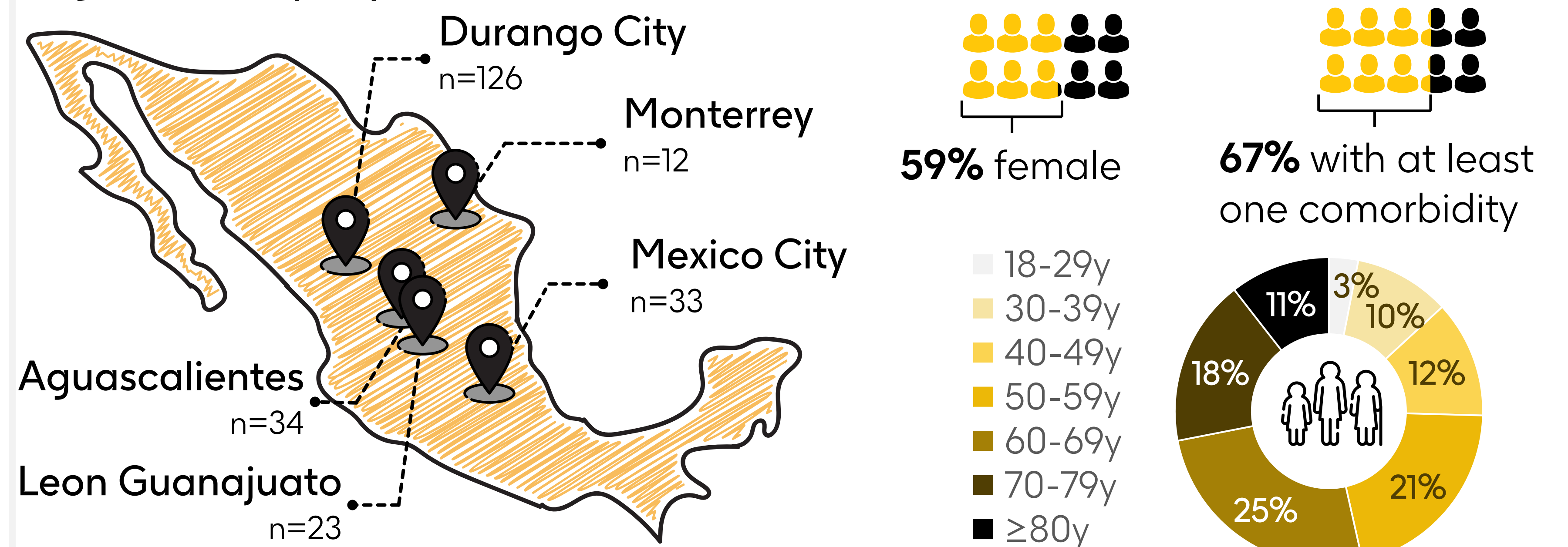


Indirect costs

- Days off work due to outpatient visits, hospitalizations, and follow up visits

Results

Figure 2: Study Population (n=228) and Baseline Characteristics



Complications Overall

33%

HZ patients developed PHN

3%

HZ patients had other complications (HZ ophthalmic, infection)

4%

Patients hospitalized



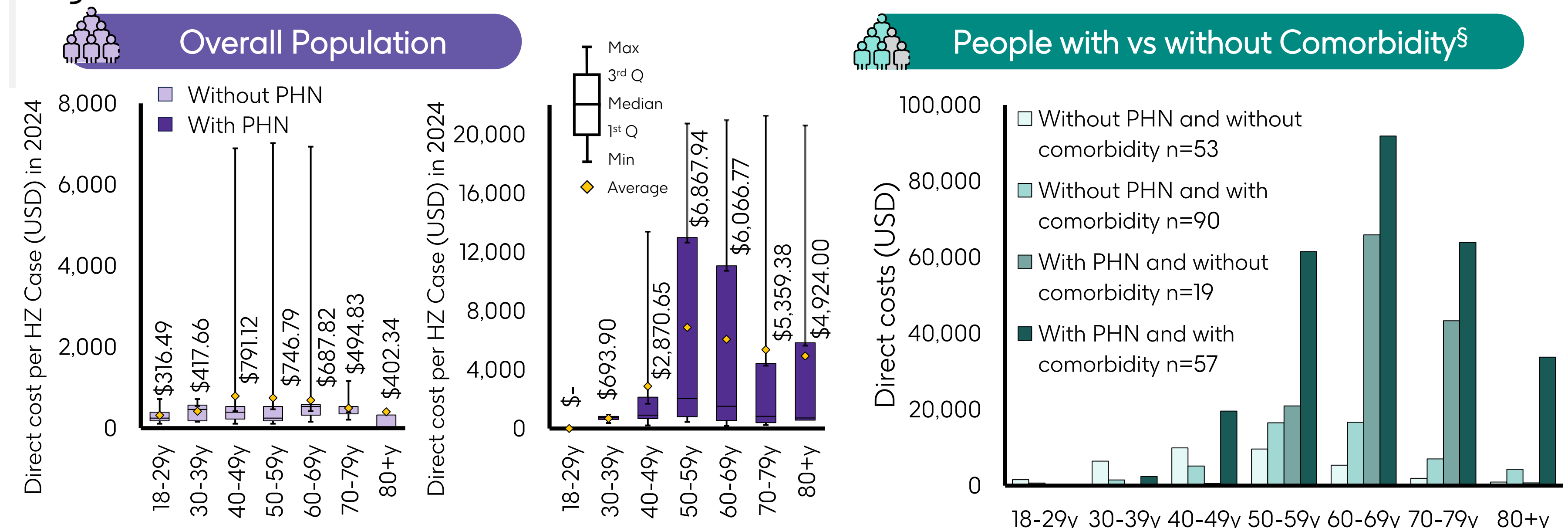
Complications in People with Comorbidity[†]

39%

4%

3%

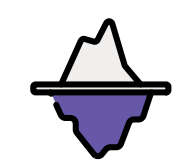
Figure 3: Direct Costs



Total direct costs

➔ \$87,465 without PHN

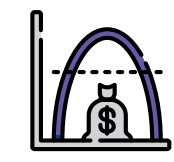
➔ \$404,677 with PHN



Total indirect costs

➔ \$5,411 without PHN

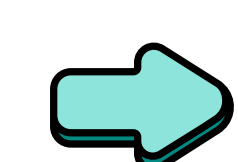
➔ \$6,884 with PHN



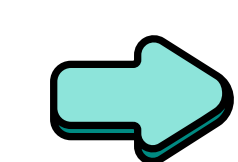
Mean (min/max) direct costs per HZ episode

➔ \$551 (\$317- \$791) without PHN

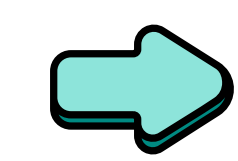
➔ \$3,826 (\$694-\$6,868) with PHN



People **with PHN** and **with comorbidity** contribute more to direct costs.



Cost contributions are **higher in older age groups** (≥50 years).



There are **large variations** in costs per HZ episode.

†: Refers to people with the four most common comorbidities (n=118) in this study sample, ie, hypertension (n=51), type 2 diabetes (n=34), HIV/AIDS (n=18) and hypothyroidism (n=6).

‡: Patients with unknown PHN status were excluded from the analysis by PHN status.

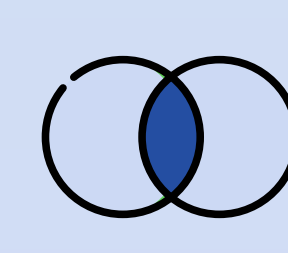
Conclusions



HZ causes a **substantial burden** to patients and the private healthcare sector.



33% of patients with HZ develop PHN. PHN was a **major cost driver** for direct costs.



More than 50% of patients had **comorbidities**. People with comorbidities were more likely to develop PHN and they **incurred higher costs**.

Abbreviations

HCRU, healthcare resource use; HIV/AIDS: human immunodeficiency virus/ acquired immunodeficiency syndrome; HZ, herpes zoster; min, minimum; max, maximum; n, number; PHN, postherpetic neuralgia; Q, quartile; US: United States; USD, US Dollar; y, year

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1. Johnson RW, et al. BMC Med. 2010. 8:37. doi: 10.1186/1741-7015-8-37.
2. Johnson RW, et al. BMC Infect Dis. 2015. 15:502. doi: 10.1186/s12879-015-1262-8
3. Rampakakis E, et al. Int J Infect Dis. 2017. 58:22-6. doi: 10.1016/j.ijid.2017.02.021.

Acknowledgements

The authors thank Ahmed Mohy, Desirée A.M. van Oorschot and Bella Dragova-Maurin. Business & Decision Life Sciences Medical Communication Service Center c/o GSK (writer: Katrin Spiegel).

Disclosures

Conflict of interest: Huerta-Garcia Gloria is employed by GSK. Ahmed Nurilign and Guzman-Holst Adriana are employed by and hold financial equities in GSK. Adrian Camacho-Ortiz declares consulting fees from AstraZeneca and payment for lectures from Pfizer and MSD. These authors declare no other financial and non-financial relationships and activities. Alejandro Ernesto Macias Hernandez, Edgar Pérez Barragán and Juan Carlos Tinoco declare no financial and non-financial relationships and activities and no conflicts of interest. Funding: GSK (VEO-000519).

Supplementary Information

Clinical and Economic Burden of Herpes Zoster in Mexico: a Retrospective Medical Chart Analysis in a Private Healthcare Setting

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Supplementary Table: Study Extraction Form

Variable	Data Type	Variable	Data Type
Clinic ID	Clinic name (pre-specified)	Hospitalization	Yes / No
Patient ID	Anonymized patient ID	Number of days of hospitalization	Number
Date patient diagnosed	Date	Complications	1. HZ encephalitis
Date of birth	Date		2. Postherpetic neuralgia (PHN)
Insurance type	1. Social Security		3. HZ meningitis
	2. Private health insurance		4. HZ Ophthalmic
	3. IMSS (Mandatory)		5. Disseminated HZ
	4. CENSIA		6. Haemorrhagic condition
	5. Out-of-pocket		7. Reye syndrome
Sex	Male / Female / Non-binary		8. Pneumonia
Is this a recurrent HZ case HZ in the previous 12 months?	Yes / No		9. Infections
Who made the referral to this private clinic?	Free text		10. Stroke
Previously how many doctor visits have been done for your current health problem?	Number		11. HZ with other complications
Pre-existing medical conditions	1. Tumors		12. HZ with no complications
	2. Renal system		13. None
	3. Diabetes	Medication given	1. Acyclovir
	4. Respiratory system		2. Famciclovir
	5. Osteo-articular system		3. Valacyclovir
	6. Nervous system		3. Capsaicin topical patch
	7. Endocrine system		4. Anticonvulsants, e.g., gabapentin
	8. Circulatory system		5. Tricyclic antidepressants, e.g. amitriptyline
	9. COPD		6. Lidocaine
	10. Asthma		7. Codeine
	11. CVD		8. Corticosteroids
	12. Other (Please write it down)		9. Local anesthetics
Past history of varicella	Yes / No / unknown		10. Other
Number of lesions	1. Mild: fewer than 50 lesions		11. None
	2. Mild/moderate: 50–249 lesions	Number of days of therapy	Number
	3. Moderate: 250–499 lesions	Outcome	1. Recovered without sequelae/follow-up
	4. Severe: 500 or more lesions		2. Recovered with sequelae/follow-up
			3. Death
		Number of follow-up visits	Number
		Type of treatment (if recovered with sequelae)	Type of medication given if recovered with sequelae

Abbreviations

COPD, Chronic obstructive pulmonary disease; CVD, Cardiovascular disease; ID, identity document; IMSS, Instituto Mexicano del Seguro Social (Mexican Social Security Institute); HZ, herpes zoster; PHN, postherpetic neuralgia.

