

Lyme Disease Cost U.S. Patients \$16 Billion a Year

Early diagnosis is critical to reducing a patient's financial burden

Karen Vanderhoof-Forschner, LLM, JD, MBA, BS, CPCU, CLU

A. Funding

LDF and Society of Actuaries each funded this research project.

B. Purpose & Importance

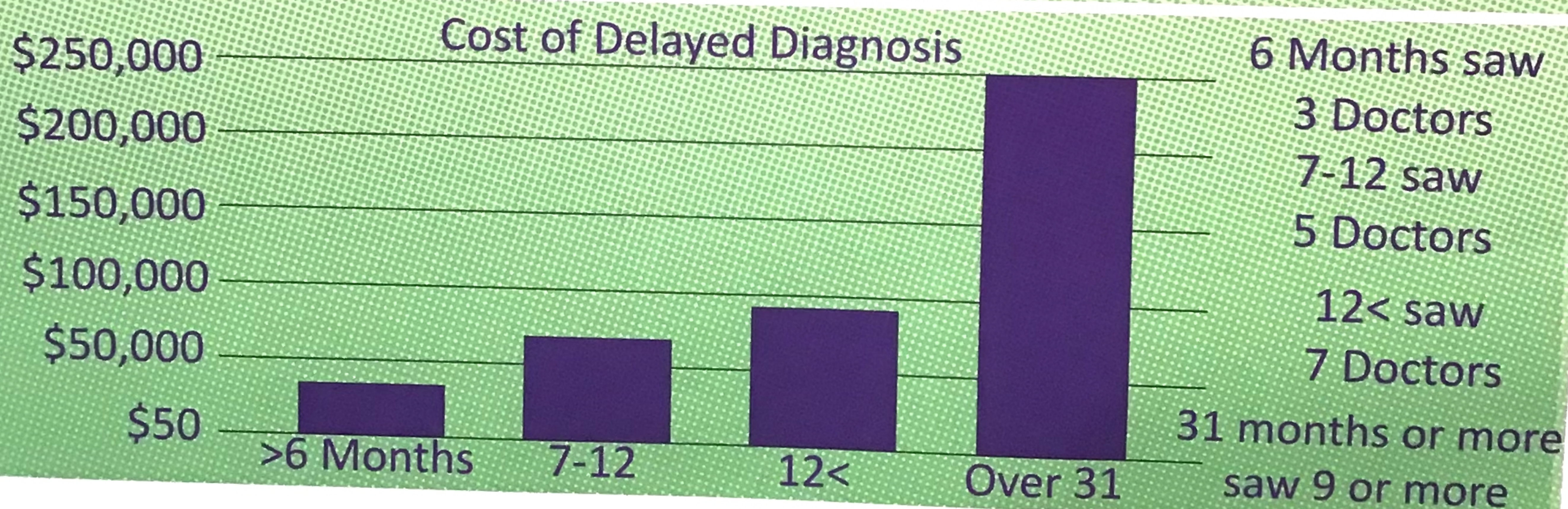
This is the first study to quantify the costs of Lyme disease to patients, their families, and the healthcare system.

C. Results = Cash Losses

Average Costs from diagnosis to the end of treatment, % of all costs.

- i. Costs before Diagnosis = \$22,674 (37%) Income = \$7,877; medical bills \$14,797
- ii. Costs after Diagnosis = \$39,014 (63%) Income \$6,454; medical bills \$32,560
- iii. Total Average Financial Costs = \$ 61,688 (used \$60,000 as the average cost per)

D. Delayed Diagnosis Dramatically Increases Cash Cost



E. Methods

The LDF, with its scientific advisors, developed a survey that quantified the costs incurred by patients. The LDF received 573 completed surveys. 70 surveys were excluded for a lack of physician-diagnosed Lyme Disease.



Created by the Lyme Disease Foundation 2019
Design By Christy Forschner

Lyme Disease Cost U.S. Patients \$16 Billion a Year

Early diagnosis is critical to reducing a patient's financial burden

Karen Vanderhoof-Forschner, LLM, JD, MBA, BS, CPCU, CLU

F. Case Counts Used During This Study

Based on a CDC-funded unpublished study conducted by a Westchester, NY epidemiologist who was working in an active reporting system, only 10% of cases that adhere to the narrow CDC case surveillance definition are reported to the state.

G. Financial Cost to US Patients

1981 - 1991 = \$ 24,205,200,000 [403,420 x \$60,000]

2007 - 2017 = \$183,134,400,000 [3,052,240 x \$60,000]

Average cost to society per year from 2007 to 2017 = \$16,648,581,818.

Total cases from 2007 - 2017 = 3,052,240 (using the CDC's 10% reporting statistic.)

Total Cost = \$207,339,600,000

H. CONCLUSION

This study:

1. Demonstrates that LD has cost society at least \$ 207 BILLION since 1981. The true number is actually higher because the years of 1991 - 2007, and 2018 are missing from the CDC's case counting numbers.
2. Personal prevention measures are critical to preventing all tick-borne diseases.
3. Early diagnosis and treatment is critical to reducing a patient's financial burden.

I. Future Research

We plan to:

1. Follow-up with the original participants.
2. Issue a new survey for new (current) patients.
3. Partner with a national one-payer system to compare results.
4. Partner with healthcare providers in other countries, with universal health care, to compare results.



Created by the Lyme Disease Foundation 2019
Design By Christy Forschner