

Resource utilization and economic burden amongst a cohort of patients with hemophilia with inhibitors in the United States

Elnara Fazio-Eynullayeva¹, Moshe Fridman², Allison Duchman¹, Emily Waters¹

¹Novo Nordisk Inc., Plainsboro, NJ, USA; ²AMF Consulting Inc., Los Angeles, CA, USA

Aim

- To assess hemophilia-related costs and healthcare resource utilization (HCRU) in people with HAwI or HBwI in the United States.

Introduction

- Hemophilia is a rare bleeding disorder characterized by significant economic burden.
- Development of inhibitors against factor VIII and IX compromise treatment options and increase risk of bleeding and joint damage.
- People with hemophilia with inhibitors experience high direct costs of disease management.
- Prophylactic treatment is recommended to prevent bleeding episodes, however, at the time of this study there were limited Food and Drug Administration (FDA)-approved prophylactic options for people with HBwI and only one prophylactic option for people with HAwI.

Methods

- This was a descriptive, non-interventional, retrospective cohort study of medical and pharmacy claims data (Komodo Health claims database).
- The study period ran from January 1, 2016 – December 31, 2023.
- Participants were well-distributed across the US (Figure 1).
- The cohort includes people with HAwI or HBwI on non-prophylactic and prophylactic treatment regimens, identified from medication claims and defined as having had ≥ 6 consecutive prescriptions with days' supply > 7 days and no gaps of > 60 days.

Limitation

- Based on observed data, the study population appears to be representative of patients with mild to moderate hemophilia.

Results

Participants (N=100):
HAwI, n=84 HBwI, n=16

Male: HAwI, 96%
HBwI, 88%

Median age: HAwI, 23.0
HBwI, 21.8

Joint-related problems:
HAwI, 33%
HBwI, 50%

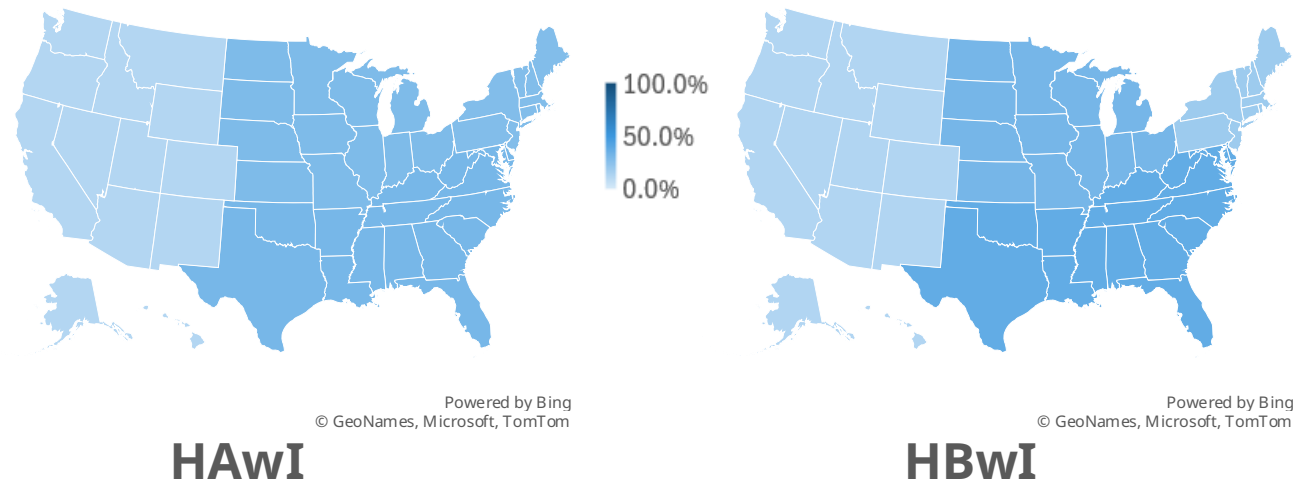


Figure 1. Distribution of participants with HAwI or HBwI across US Census regions

Bleeding events and rates:

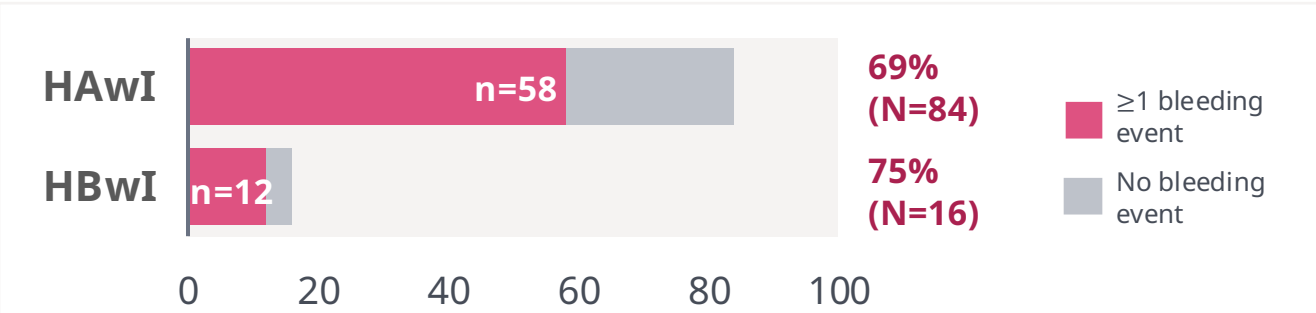


Figure 2. Numbers of participants that experienced ≥ 1 bleeding event (N=100)

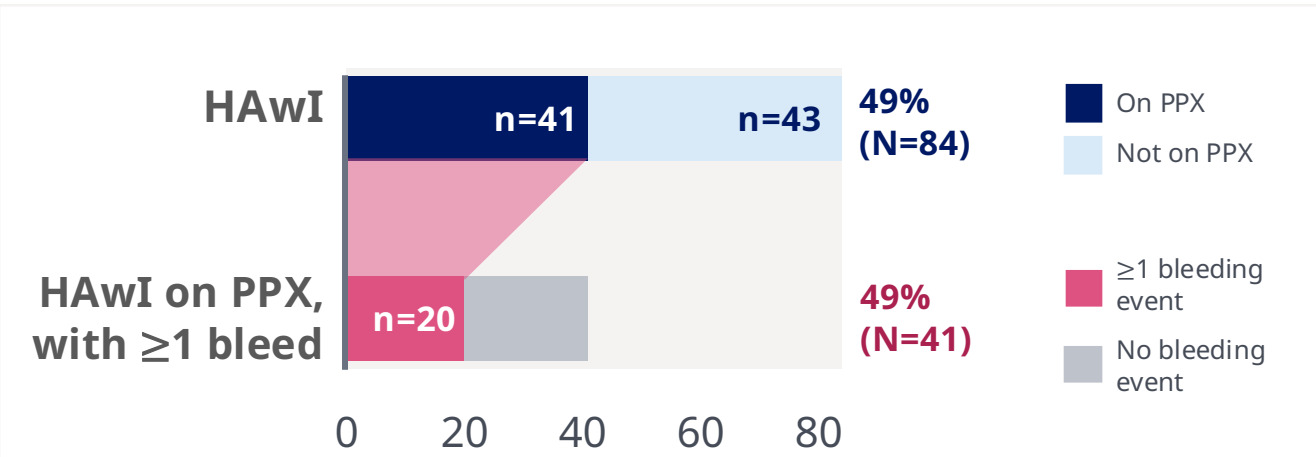


Figure 3. Numbers of participants with HAwI on PPX that experienced ≥ 1 bleeding event (N=41)



Mean ABR:

HAwI 1.3

HBwI 1.8

HAwI on PPX, with ≥ 1 bleed 1.6

HCRU:

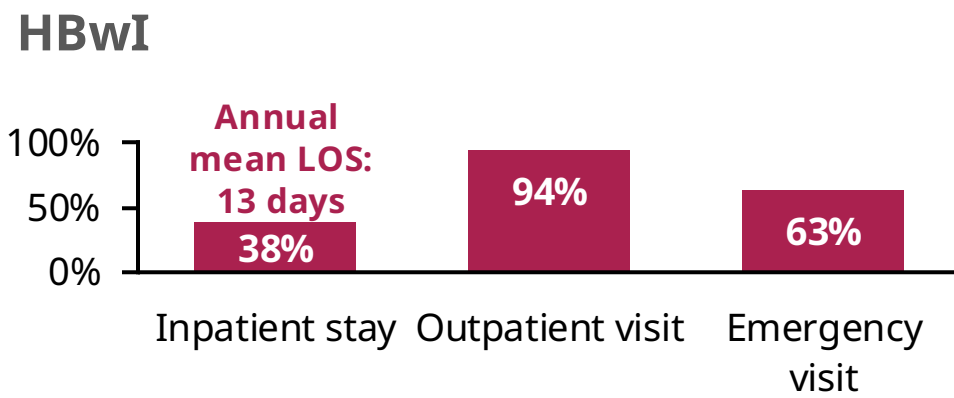
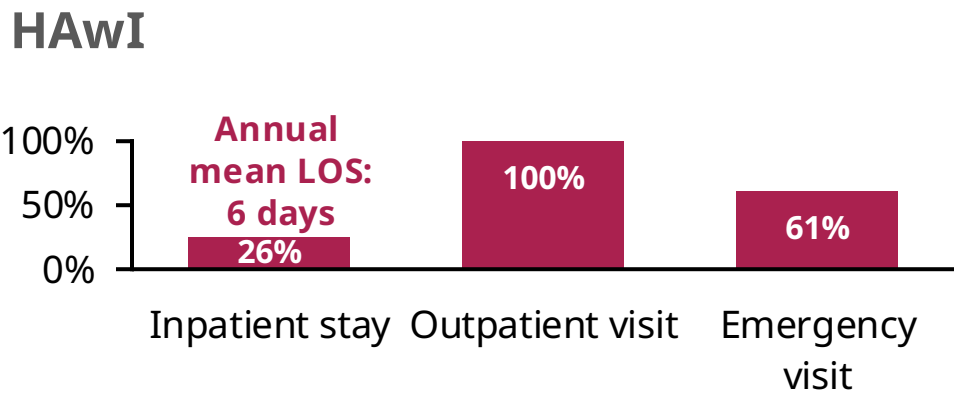


Figure 4. Proportions of participants with HAwI or HBwI with inpatient, outpatient or emergency department visits within the follow-up period

Costs:

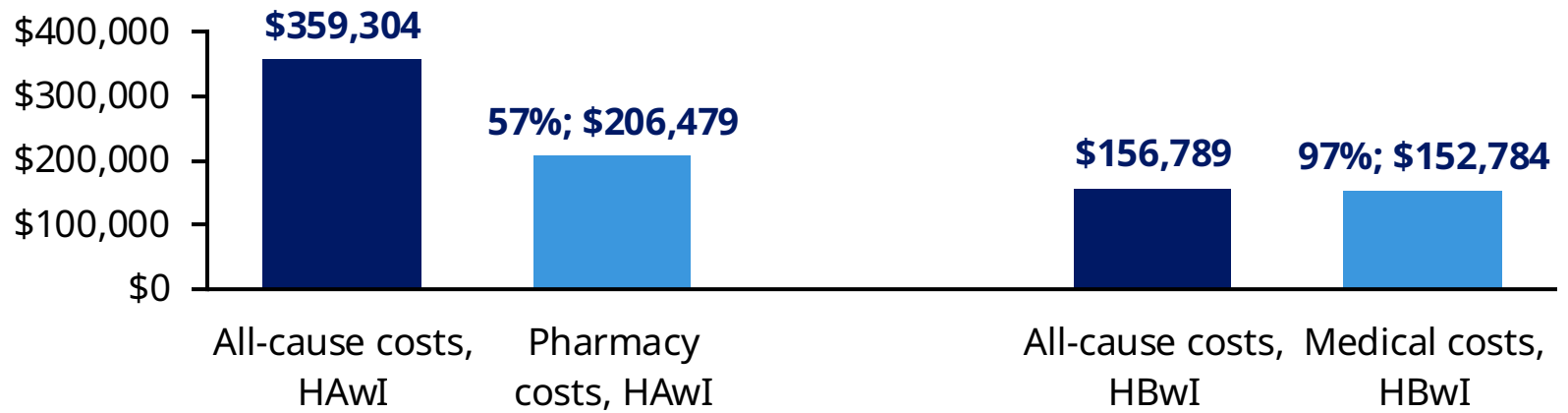


Figure 5. Mean all-cause costs and main contributing costs for participants with HAwI or HBwI

Summary

- Most patients experienced at least one bleeding event during the study period (Figure 2). Notably, almost half of the patients with HAwI who were on prophylaxis also experienced bleeding events (Figure 3).
- Patients demonstrated significant annualized HCRU (Figure 4).
- All patients incurred substantial annual costs, which were almost twice as high for patients with HAwI as for those with HBwI. Pharmacy and medical costs were the greatest contributor to all-cause costs for each group, respectively (Figure 5).

Conclusions

- People with hemophilia and inhibitors incur substantial economic burden.
- There is an urgent need for improved prophylactic options and targeted interventions to optimize patient care and mitigate costs.