HEALTH CARE UTILIZATION AND COST IN PATIENTS WITH HEMOPHILIA A: HUGS Va

Zheng-Yi Zhou1, Megan Ullman2, Brenda Riske3, Ann Forsberg4, Marion A Koerper5, Amy Shapiro5, Mimi Lou1, Kathleen Johnson1

1University of Southern California, Los Angeles, CA; 2University of Texas Health Science at Houston, Houston, TX; 3University of Colorado Denver, CO; 4New England Hemophilia Center, Worcester, MA; 5University of California, San Francisco, CA; 6Indiana Hemophilia and Thrombosis Center, Indianapolis, IN

INTRODUCTION

• Hemophilia is rare and costly chronic illness in which medication accounts for more than 70% of expenditures.
• Persons with hemophilia use two factor replacement treatment strategies: prophylactic (factor administered multiple times each week to prevent bleeds) and episodic (factor administered as needed to treat bleeds).

OBJECTIVES

• To examine the utilization of healthcare services, factor concentration among persons with hemophilia A in the United States.
• To examine the healthcare services utilization among patients with severe hemophilia treated prophylactically compared with those treated episodically.

METHODS

• Data were obtained from the Hemophilia Utilization Group Study Part Va (HUGS Va), a multi-center study of persons with hemophilia A from six Hemophilia Treatment Centers (HTCs) that provide care to patients in seven states (California, Colorado, Indiana, Massachusetts, Montana, Texas, and Wyoming).
• 329 persons with Hemophilia A were enrolled between June 2005 and July 2007. Participants or parents of children less than age 18 completed a standardized initial interview on sociodemographic and clinical characteristics.
• We reviewed clinical and dispensing records and analyzed one-year healthcare services utilization (emergency, emergency room visits, and hospitalizations) and total units of clotting factor dispensed.

RESULTS

For the whole sample (N=329):
• Fifty percent of patients were adults; mean age was 9.7 ± 4.5 years for children and 33.5 ± 12.5 years for adults. Two-thirds of patients had severe hemophilia (n=209).
• In 322 patients with complete one-year clinical records, 91% reported using health services at least once: 65% had comprehensive visits, 33% had other clinician visits, and 21% had physical therapist visits. Twenty-eight percent of patients had emergency room visits, and 14% were hospitalized. All health care services utilization and units of factor dispensed per patient per year are described in Table 2.
• The average cost of two-year clotting factor dispersed was $165,188 (median: $104,170) per patient-year for patients with inhibitors to clotting factors and $70,272 (median: $91,672) in patients with current inhibitors.

For the subsample of patients with severe hemophilia A (N=194):
• Eighty-seven percent of children used factor prophylactically versus 45% of adults. Patients were more likely to be on prophylaxis if they or their parents had full/part time employment, or annual income over $20,000. Patients with public insurance or less than one year of insurance coverage were less likely to be on prophylaxis (p<0.001).
• Patients were less likely to have an emergency room (ER) visit if they used prophylaxis (20% versus 39%, p=0.006). The mean number of ER visits per patient-year was 3.0 ± 8.0 (range 0-54) for prophylaxis compared with 0.8 ± 1.6 (range 0-8) for patients receiving episodic treatment (p=0.003, Figure 1).
• Fourteen patients (11%) on prophylaxis versus 12 patients (18%) on episodic treatment were hospitalized. Among those who were hospitalized, the average number of hospital days per patient-year was lower in patients treated prophylactically (p=0.005, Figure 1).
• The annual cost of factor dispensed was $273,791 (median: $225,223) per patient-year for patients receiving prophylaxis compared to $158,520 (median: $111,786) for patients receiving episodic treatment (p<0.0001).

CONCLUSIONS

• This study contributes to the growing evidence that prophylactic infusion of clotting factors, compared to episodic treatment, may be associated with decreased healthcare services utilization, including ER visits and length of hospital stay.
• Although this is an observational study, it provides information that will be relevant to the development of healthcare resource allocation guidelines for hemophilia patients. Data addressing different treatment strategies and associated patterns of healthcare services utilization will provide insight for future research, including cost-utility analyses.

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