

Budget Impact Analysis of Adopting Prophylactic Approach in the Management of Hemophilia A in Egypt From Payor Perspective

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ABSTRACT

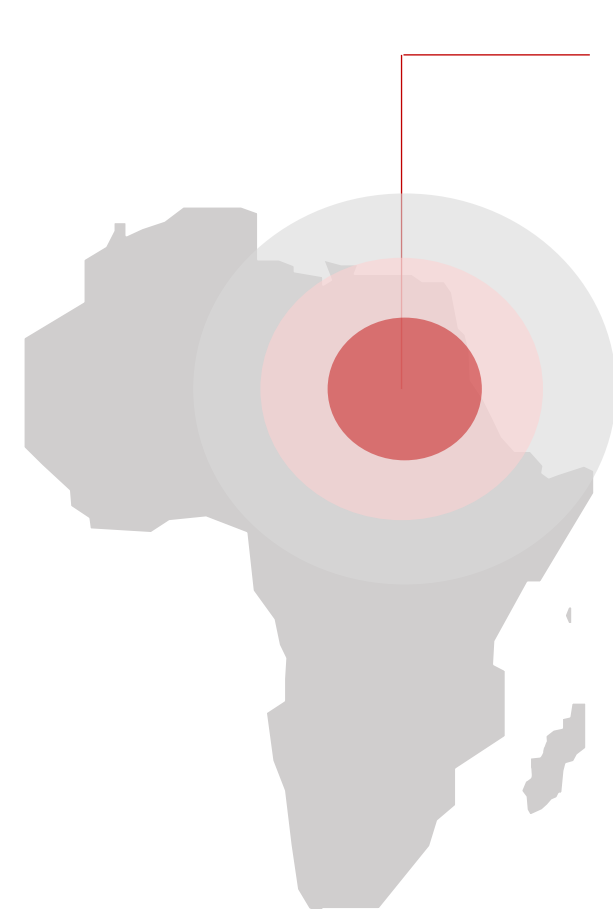
OBJECTIVES: Egypt is currently managing Hemophilia A patients through reactive on-demand control of bleeding episodes imposing a significant economic burden on public payor budgets and deteriorated quality of patients' life. The main objective of this study was to assess the impact on the public payor budgets when adopting hemophilia treatments prophylactically across pediatric and adult populations compared to an optimum on-demand approach in Egypt.

METHODS: An excel-based analysis was created measuring the direct medical costs from payor perspective when used prophylactically and the consequent economic benefits compared to hypothetical on-demand management approach considering that all eligible patients are utilizing public insurance and that treatments are administered based on their SmPC. Hemophilia A population prevalence, age and inhibitors incidence were calculated from figures reported by WFH report 2020. Annual bleeding rate (ABR) on on-demand approach was collected from published studies. ABR on prophylactic approach was obtained from treatment's published clinical studies.

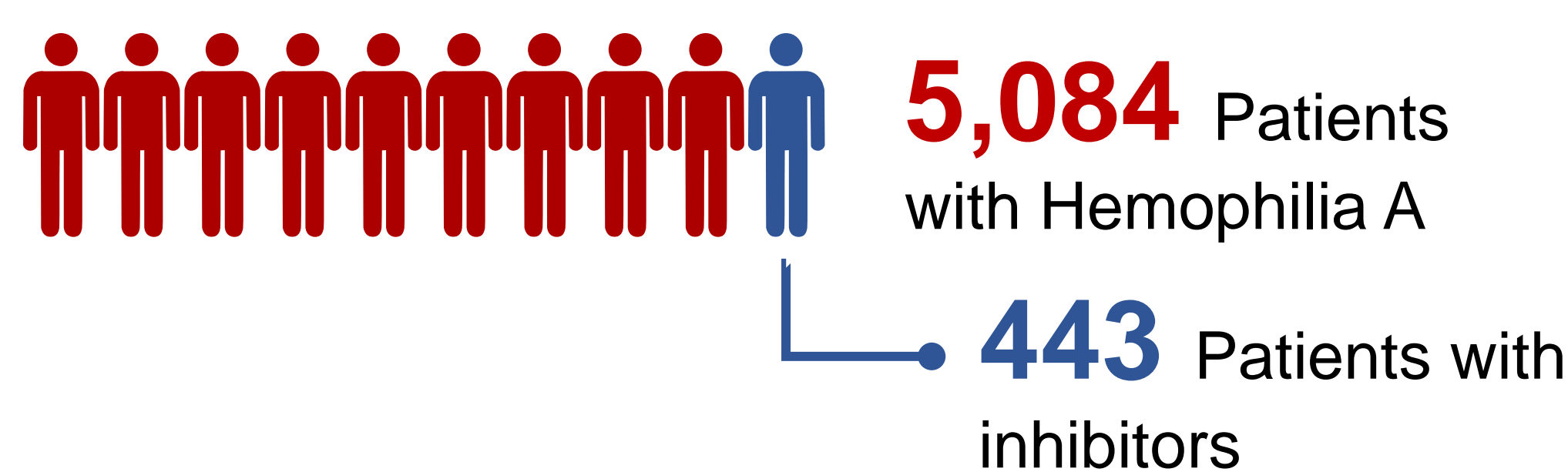
RESULTS: Egypt has a prevalence of 5,084 hemophilia A patients. Public payor covers 3,966 pediatric patients with average weight of 28.5 KG. and 895 adult patients with average weight of 70 KG. With an average ABR of 14 bleeding episodes for pediatrics and adults. Prophylactic approach significantly reduced the ABR to 1.5-7.9 bleeding episodes based on the different approved medications. Comparing prophylactic approach to on-demand approach yielded annual budget reductions in bleeding management, disease related surgery, admission and physiotherapy costs resulting in savings up to 25% compared to the hypothetical on-demand approach. Weighted average savings can reach up to EGP 260k per patient per year across both pediatric and adult with and without inhibitors populations.

CONCLUSIONS: Prophylactic management of Hemophilia A in Egypt would result in a significant budget saving compared to on-demand approach. The results of this model would inform decision makers for efficient resources allocation in Hemophilia care in Egypt

INTRODUCTION



Egypt is one of the countries with highest prevalence of Hemophilia A patients across the MENA region according to estimates by WFH registry reported data in 2020.¹



Hemophilia A is a debilitating and life-threatening disease imposing significant clinical burden and negative impact on patients' quality of life.

In Egypt, the mainstay of current treatment for haemophilia A is factor VIII replacement therapy, administered reactively on on-demand basis (as needed to treat bleeds). On-demand management approach doesn't help reduce number of bleeds nor ease the clinical burden on patients and is estimated to drain payors budget significantly.

OBJECTIVES

The main objective of this study was to assess the impact on the public payor budgets when adopting different hemophilia treatments prophylactically across pediatric and adult populations compared to the optimum on-demand approach following Summary of product characteristics (SmPC) posology in Egypt.

METHODOLOGY

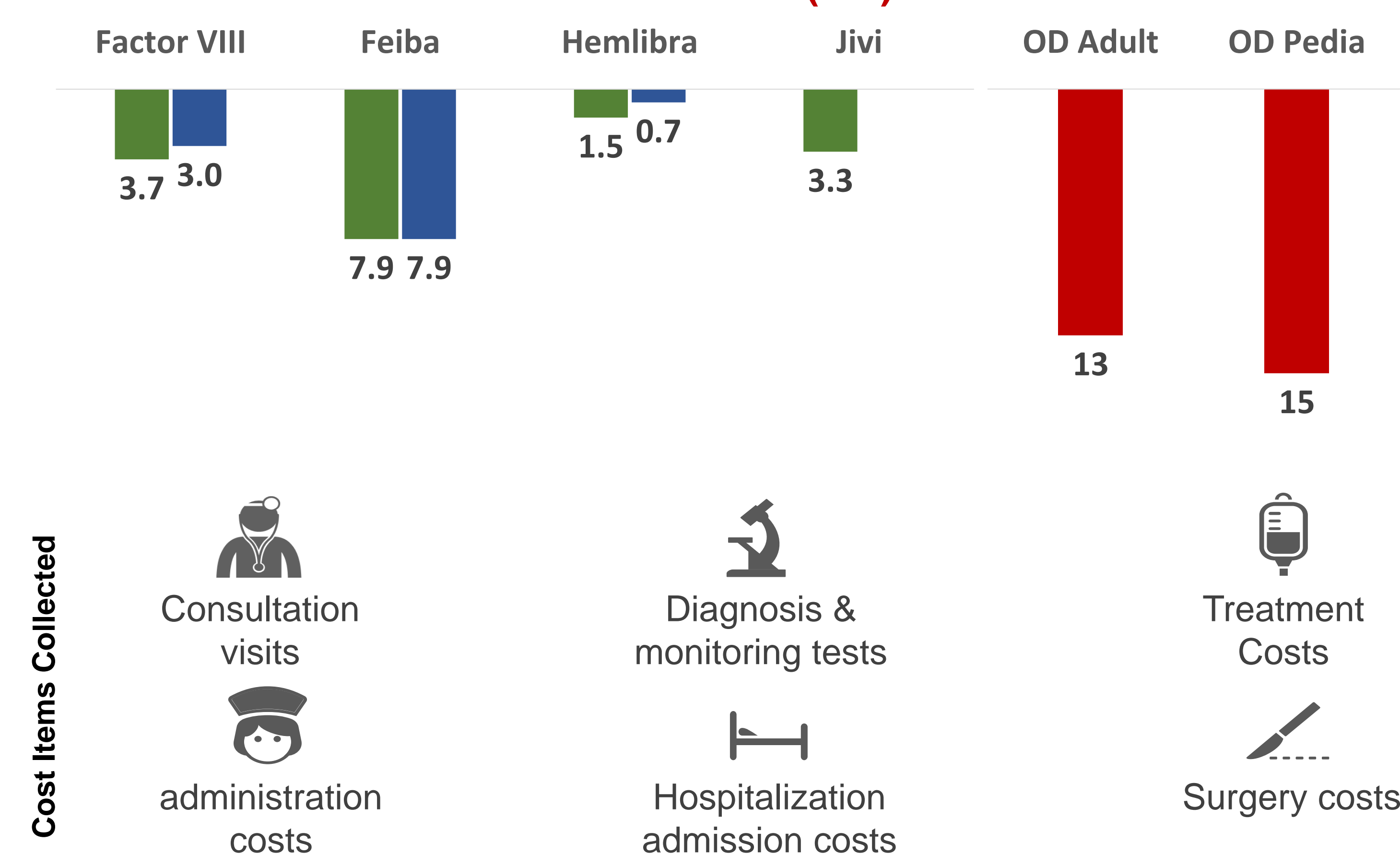
An excel-based analysis was created measuring the direct medical costs from payor perspective upon using treatments prophylactically compared to on-demand approach assuming that all eligible patients are utilizing public insurance resources and that treatments are administered as per the dosage listed in SmPC.

The model was built taking into consideration both pediatric and adult Hemophilia A patients with and without inhibitors.

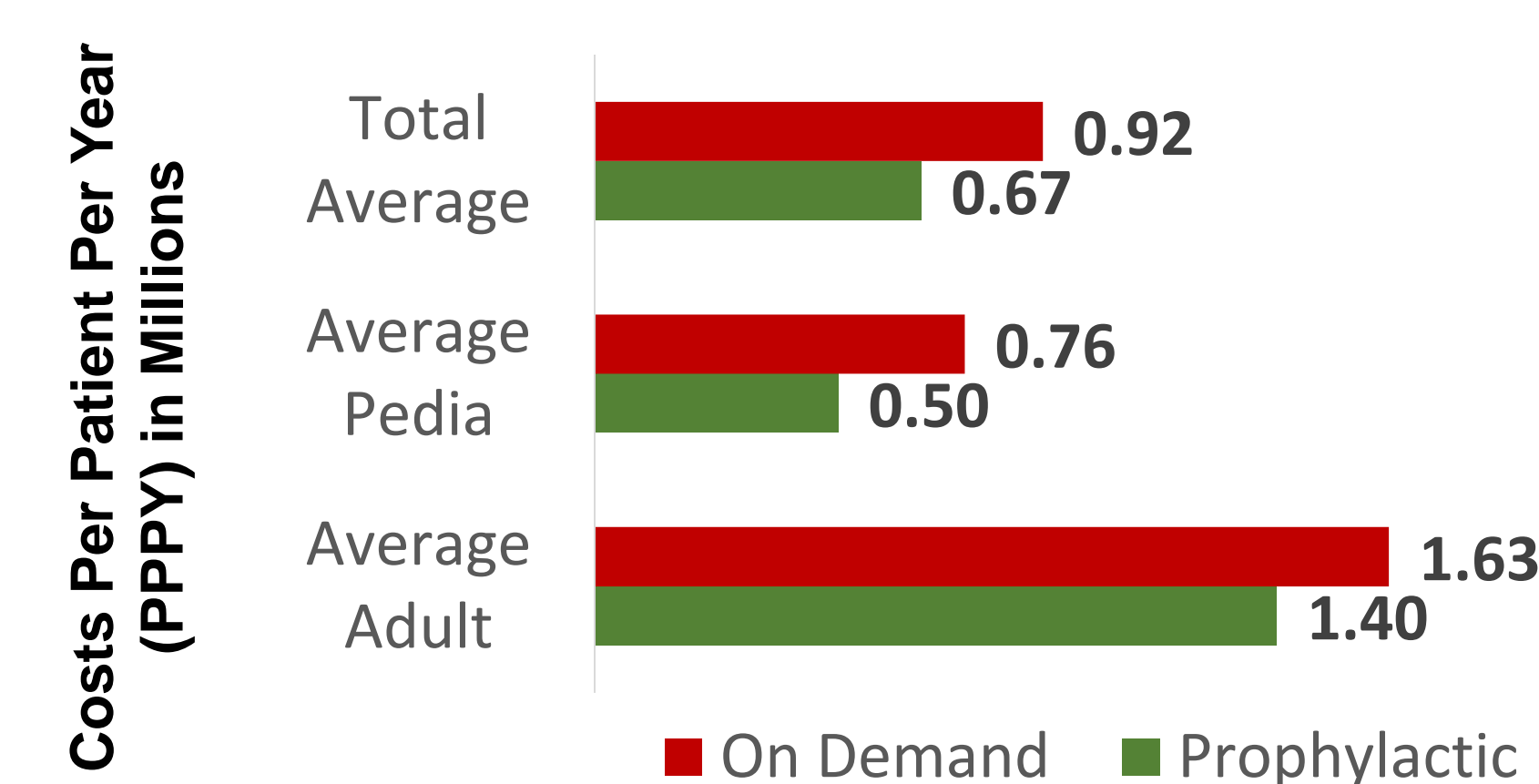
Adults	Variables	Pediatrics
895	Eligible Population	3,966
+12 Years old	Age	0-12 years old
70 Kgs	Weight	28.5 Kgs

Hemophilia A population prevalence, age and inhibitors incidence were calculated from figures reported by WFH report 2020. Annual bleeding rate (ABR) on on-demand approach was collected from different published studies. ABR on prophylactic approach was obtained from treatment's published clinical studies. Costs were calculated from payor perspective and the model accounted for costs of outpatient visits, bleeding management, hospitalization, surgery and physiotherapy costs.

ABR on Prophylactic Approach (Adult and Pedia) Vs On-Demand (OD)²⁻⁵



RESULTS



Savings in Budget calculated across both indications and can reach up to **EGP 250K Annually**



CONCLUSION

Prophylactic management of Hemophilia A in Egypt would result in a significant budget saving compared to on-demand approach. Prophylactic management of Hemophilia A in Egypt would result in a significant budget saving compared to on-demand approach