

Incorporating Patient Reported Outcomes into Clinical Practice: a 360-degree Clinical Evaluation for Better Care and Treatment of People with Hemophilia through myWBDR and myPROBE

Toong Youttananukorn¹, Donna Coffin¹, Saliou Diop², Cedric Hermans³, Barbera Konkle⁴, Catherine Lambert⁵, Declan Noone⁶, Jamie O'Hara⁷, Glenn Pierce¹, Mark W Skinner^{8 9}, Alfonso Iorio¹⁰

¹World Federation of Hemophilia, Montreal, Canada, ²Cheikh Anta Diop University and Centre National de Transfusion Sanguine, Dakar, Senegal, ³Division of Haematology, Cliniques universitaires Saint-Luc, Université catholique de Louvain (UCLouvain), Leuven, Belgium, ⁴Bloodworks Northwest, Seattle, United States, ⁵Division of Haematology, Cliniques universitaires Saint-Luc, Université catholique de Louvain (UCLouvain), Brussels, Belgium, ⁶European Hemophilia Consortium, Brussels, Belgium, ⁷HCD Economics, London, United Kingdom, ⁸Institute for Policy Advancement Ltd, Washington DC, United States, ⁹Department of Health Research Methods, Evidence, and Impact, McMaster University, Ontario, Canada, ¹⁰McMaster University, Hamilton, Canada



INTRODUCTION

The World Federation of Hemophilia (WFH) World Bleeding Disorders Registry (WBDR) is designed to fill gaps in hemophilia care and knowledge that exist globally. The WBDR is a tool for clinicians to collect real world data on patient clinical care and quality of life, and a tool to empower people with hemophilia (PWH) to manage their own care and treatment. The WFH is introducing myWBDR – a mobile application for PWH participating in the WBDR through the participating hemophilia treatment centers.



myWBDR

Health & Fitness



4:31 ♀ ■
WBDR WFH World Bleeding Discher Registry WORLD FEDERATION OF HEMOPHILIA
Language Selection Please select language English
Next
myWBDR app is for patients enrolled in the World Bleeding Disorders Registry (WBDR) only. For more information, contact us at WBDR@wfh.org or your local Hemophilia Treatment Centre.

Bleeds	Patient Reported Outcomes (PRO)
38 bleed events in the past 6 months	PROBE Survey
25 - 20 - 15 - 10 - 10 - 10 - 10 - 10 - 10 - 1	The Patient Reported Outcomes, Burdens, and Experiences (PROBE) questionnaire was developed from patients and for patients. PROBE can be completed in 15-20 minutes.
Aug Oct Dec Feb	Complete PROBE
Month	EQ-5D-5L Survey
Most frequent bleed sites in the past 6 months	EQ-5D-5L is a short questionnaire used for measuring health-related quality of life and can be completed in a few minutes.
36% 20% 44%	
	Complete EQ-5D-5L
Trunk Left arm Other	Complete EQ-5D-5L
Trunk Left arm Other 16 bleeds 9 bleeds 20 bleeds	Complete EQ-5D-5L
	Complete EQ-5D-5L

METHODS

myWBDR is designed to track bleeds, associated pain, treatments, and health status using EQ-5D-5L and the Patient Reported Outcomes, Burdens, and Experiences (PROBE) questionnaires. Initially, myWBDR will be available in English, French, Hindi, Russian, Spanish, Thai, and Vietnamese.

Hemophilia Treatment	PROBE:	Quality of Life
	Burden of Disease	
myWBDR	myPROBE	EQ-5D-5L
Bleed history:	Pain:	Mobility
location of bleed,	chronic/acute,	
frequency, access to	interference, occurrence	
treatment at time of		
bleed		
Pain level:	Independence:	Self-care
pain associated with a	limitations, impact on	
bleed event.	activities of daily living	
Treatment record:	Education:	Usual Activities
infusion log, dose,	attainment, attendance	
frequency, reason for		
treatment, location of		
treatment received.		
	Employment:	Pain / Discomfort
	duration,	
	underemployment,	
	attendance	
	Family Life:	Anxiety / Depression
	marriage, children	
	Mobility:	VAS
	assistance required,	(visual analog scale)
	impairment	

RESULTS

myWBDR had undergone field testing in non-WBDR PWH. We now initiate a testing cohort of PWH within the WBDR. Implementation is regional, starting with 5 countries (2 regions) in Q3 2021. myWBDR is a simple tool, allowing users to record accurate bleeds and treatment in under 1 minute. The inclusion of the EQ-5D-5L and PROBE questionnaires, both available in a large number of languages, will allow users to track changes in their health status over time. Both myWBDR and myPROBE include an off-line feature so data can be entered at anytime and offer simple data visualization on bleeds (number, location), level of pain and health-status.

CONCLUSION

Integration of Patient Reported Outcomes via the myWBDR will allow PWH to play an active role in their care and treatment. With the 360-degree data, researchers can better understand hemophilia and improve quality of care and treatment for PWH around the world. A data dashboard for PWH to visualize and compare their personal data is in development.

INTRODUCING myWBDR Video (click on image below)



