

Supplementary Table 1. Survey questions and response options for adults with hemophilia B

Survey Question	Response Options
Bleeding history	
Number of bleeds in the last year	Continuous ^a
Number of joint bleeds in the last year	Continuous ^a
Having a specific joint that bleeds more	0="No" 1="Yes"
Impact on work	
Not working (vs working full- or part-time)	0="Never worked" 1="Part-time employment" 2="Full-time employment"
Not working due to complications from hemophilia	0="No" 1="Yes"
Current treatment allows me to work	0="No" 1="Yes"
Increasing negative experiences with work/career	1="Large negative impact" 2="Moderate negative impact" 3="Small negative impact" 4="No negative impact"
Increasing satisfaction with support from employer or manager	1="Very satisfied" 2="Quite satisfied" 3="Not satisfied"
Negative experience with telling employer or manager	0="No" 1="Yes"
Impact on functional and recreational activities	
Increasing limitation in functional abilities and engagement in activities	1="Unrestricted activities" 2="Full school/work with limited recreational activity" 3="Limited school/work and recreational activity" 4="Limited all activities and self-care or worse"
Sometimes/always used cane/crutches/walker in the past 6 months	1="Never" 2="Sometimes or always"
Sometimes/always used wheelchair in the past 6 months	1="Never" 2="Sometimes or always"
Increasing negative impact of hemophilia on ability to engage in activities	1="Large negative impact" 2="Moderate negative impact" 3="Small negative impact" 4="No negative impact"
Increasing treatment adjustment to accommodate participation in activities	1="Significant change" 2="Moderate change" 3="Small change" 4="No change"
Impact on family and relationships	
Hemophilia affected relationship with (prospective) partners	0="No" 1="Yes"
Increasing satisfaction with support from partner regarding hemophilia	1="Very satisfied" 2="Less than very satisfied"
Increasing satisfaction with support from friends	1="Very satisfied" 2="Less than very satisfied"
Negative experiences with telling friends about hemophilia	0="No" 1="Yes"
Bullied by peers because of hemophilia	0="No" 1="Yes"
Negative experiences with telling colleagues at work/school about hemophilia	0="No" 1="Yes"
Bullied by colleagues at work/school because of hemophilia	0="No" 1="Yes"
Hemophilia affected the quality of sex life	0="No" 1="Yes"
Psychological/stress	

Experienced stressful events: loss of job	0="No" 1="Yes"
Received psychological treatment in the past 5 years	0="No" 1="Yes"
Psychological treatment related to hemophilia	0="No" 1="Yes"
Access to and responsibility for factor/treatment	
Self-responsibility for your hemophilia care (vs somebody else)	1="I have the main responsibility" 2="Someone else has the main responsibility"
Routine factor treatment (vs on-demand)	1="Mostly on-demand" 2="Routine infusion"
Difficulty obtaining or concerns about factor products' availability or affordability	
Last 5 years	0="No" 1="Yes"
Next 5 years	0="No" 1="Yes"
Lack of control	Scale of 0 to 10; 0="not at all," 10="extremely well"
Access to HTC	
Fewer visits to HTC in the past year	Continuous ^a (≥ 70 removed since outlier-based frequency analysis; 18 is the next highest value)

Notes: ^aContinuous responses were not predefined and could be any value. Negative attributes are shown in red.

Abbreviation: HTC, hemophilia treatment center.

Supplementary Table 2. Survey question and response options for caregivers of children with hemophilia B

Survey Question	Response Options
Impact on work due to caring for a child with hemophilia	
CG or SP had to leave job	0="No" 1="Yes"
CG or SP overlooked for promotion	0="No" 1="Yes"
CG or SP not hired for a job	0="No" 1="Yes"
CG or SP not able to work because of child's specific treatment regimen	0="No" 1="Yes"
CG or SP not able to restrict number of hours	0="No" 1="Yes"
CG or SP not able to work flexible hours	0="No" 1="Yes"
Impact on functional and recreational activities	
Increasing limitation in child's functional abilities and engagement in activities	1= "Unrestricted activities" 2= "Full school/work with limited recreational activity" 3= "Limited school/work and recreational activity" 4= "Limited all activities and self-care or worse"
Increasing number of days child missed school/work because of upper extremity problems in prior 6 months	Continuous ^a
Increasing negative impact on your child engaging in recreational activities	1="Large negative impact" 2="Moderate negative impact" 3="Small negative impact" 4="No negative impact"
Increasing treatment adjustment to allow for recreational activities	1="Significant change" 2="Moderate change" 3="Small change" 4="No change"
Impact on family and relationships	
Negative impact of hemophilia on your other children	1="Negative impact" 2="No impact" 3="Positive impact"
CG negative experiences telling someone that your child has hemophilia	0="No" 1="Yes"
Child had a negative reaction telling someone he/she has hemophilia	0="No" 1="Yes"
Child bullied as a result of having hemophilia	0="No" 1="Yes"
Psychological/stress	
Received psychological treatment in the past 5 years	0="No" 1="Yes"
Psychological treatment related to hemophilia	0="No" 1="Yes"
Experienced stressful events	
Loss of job	0="No" 1="Yes"
Financial problems	0="No" 1="Yes"
Any other stressful event	0="No" 1="Yes"
Access to factor/treatment	

Difficulty obtaining or concerns about factor products' availability or affordability	
Last 5 years	0="No" 1="Yes"
Next 5 years	0="No" 1="Yes"
Access to HTC	
Fewer visits to HTC in the past year	Continuous ^a (≥70 removed since outlier-based frequency analysis; 18 is the next highest value)
Increasing difficulty for child to visit the HTC	1="Very easy" 2="Quite easy" 3="Quite difficult or worse"

Notes: ^aContinuous responses were not predefined and could be any value.

Abbreviations: CG, caregiver; HTC, hemophilia treatment center; SP, spouse/partner.

Supplementary Table 3. Pearson correlation assessment between history of bleeds and PRO scores in adults with hemophilia B

Survey Question	EQ-5D-5L Mobility	EQ-5D-5L Self-care	EQ-5D-5L Usual Activities	EQ-5D-5L Pain/ Discomfort	EQ-5D-5L Anxiety/ Depression	EQ-5D-5L Index Score ^a	EQ-5D-5L Overall Health VAS Score	BPI Worst Pain ^b	BPI Least Pain ^b	BPI Average Pain ^b	BPI Current Pain ^b	BPI Pain Severity ^c	BPI Pain Interference ^d	HAL Upper Extremity ^e	HAL Basic Lower Extremity ^e	HAL Complex Lower Extremity ^e	HAL Overall Score ^e	PHQ-9 Total Score ^f
Number of bleeds in the last year	0.064 ^g	0.026 ^g	0.015 ^g	0.154	0.044 ^g	-0.035 ^g	0.108 ^g	0.17	-0.047 ^g	0.034 ^g	0.000 ^g	0.032 ^g	0.018 ^g	0.082 ^g	-0.052 ^g	-0.228	-0.049	0.344
Number of joint bleeds in the last year	0.182	0.034 ^g	0.025 ^g	0.164	0.088 ^g	-0.130 ^g	0.059 ^g	0.211	-0.056 ^g	0.019 ^g	0.071 ^g	0.053 ^g	0.055 ^g	-0.032 ^g	-0.2	-0.323	-0.162	0.272
Having a specific joint that bleeds more	0.236	0.117 ^g	0.086 ^g	0.079 ^g	0.010 ^g	-0.100 ^g	0.155	0.153	-0.124 ^g	-0.059 ^g	-0.027 ^g	-0.031 ^g	0.060 ^g	-0.096 ^g	-0.213	-0.269	-0.186	0.109 ^g

Notes: ^aRange, -0.011 to 1.0 (higher scores indicate better quality of life of functional status). ^bRange, 0 to 10 (higher scores indicate greater pain severity or pain interference). ^cPain severity score is the average of 4 severity scores (worst, least, average, current).

^dPain interference score is the average of 7 interference scores. ^eRange, 0 to 100 (higher scores indicate better quality of life or functional status). ^fRange, 0 to 27 (higher scores indicate more severe depression). ^gNot significant.

Abbreviations: BPI, Brief Pain Inventory v2 Short Form; HAL, Hemophilia Activities List; PHQ-9, Patient Health Questionnaire; VAS, visual analog scale.