

Table SI. Types of content of E-learning Quality of Life (EQoL)

Type of content	Description
Did you know that...	A short informative piece of text
Frequently asked questions	Question of a patient, answered by a health care provider
Encyclopaedia	Informative text
Interviews with experts	Report of an interview with a health care provider
Poll, including feedback	Short question with multiple choice answers. After answering the patient sees answers given by other patients
Self-assessment, including feedback	A questionnaire with multiple choice items. After answering the patient gets a score and feedback on this score
Interviews with patients	Patient tells his or her story
Tips & tools	Tips to support improvement of health-related quality of life
Homework / Assignments	Assignment aimed at understanding of own disease, increasing empowerment of the patient, and/or behaviour change
External links	Link to an external website with relevant information
Reminders	Application with which patients can send an e-mail linked to a specific assignment to themselves in the future. Time span and specific content of the message can be chosen by the patient

Table SII. Components of E-learning Quality of Life (EQoL)

Domain of HRQoL	Component	Type of content	Description		
<i>Symptoms</i>	Itch	Encyclopaedia, interview with expert	Definition of itch, information about consequences of itch, itch-scratch cycle		
		Poll	Locations of itch		
		Tips & tools, Did you know that...	Coping with itch and scratching behaviour		
		Assignment	1) Registration of own itch and scratching behaviour 2) Habit reversal exercise (scratching behaviour)		
		Self-assessment	Itch-related cognitions (Juckreiz Kognitions Fragebogen ^a), feedback about dysfunctional and helpful itch-related cognitions		
		Interview with patient	How a patient copes with itch and scratching		
		External links	Information about skin diseases		
		<i>Emotions</i>	Worries	Encyclopaedia	Information about factors influencing worries, different types of worries, worrying as a trait versus specific worrying
				Assignment	1) Writing down own worries. 2) Relaxation exercise
				Tips & tools, Did you know that...	Coping with worries
Interview with patient	How a patient copes with worries				
Poll	Degree of worrying				
Self-assessment	Worrying as a trait, worries about skin disease				
Anger	Encyclopaedia, Interview with expert			Encyclopaedia, Interview with expert	Definition of anger, ways of coping with anger, ways to communicate about anger
				Interview with patient	How a patient copes with anger
				Self-assessment	Degree of anger and frustration in past week
				Did you know that...	Importance of communicative skills in managing anger
		Assignment	1) practicing with anger management and disclosure of angry feelings in imagery situations 2) practicing with anger management and disclosure of angry feelings in real life		
		Depression	Encyclopaedia	Encyclopaedia	Information about depressive symptoms, causes of depression, preventing depression, possible treatments of depression, social support
				Interview with expert	Difference between depression and depressive episodes, treatment of depression
				Tips & tools	Coping with depressive episodes
				Did you know that...	Prevalence of depression
				Self-assessment	General Health Questionnaire (GHQ-12 ^b)
Interview with patient	How a patient copes with depression				
Assignment	1) practicing with positive/neutral/negative interpretation of neutral situations. 2) focus on positive experiences, planning activities				
<i>Functioning</i>	Social contacts			Encyclopaedia	Information about the importance and functions of social contacts, ways to improve social contacts
				Interview with expert	Feelings of shame may hamper social contacts, assertiveness, ways to improve social contacts
				Tips & tools	Ways to improve social contacts
		Did you know that...	Problems in social relations are common		
		External links	Voluntary work and patient associations		
		Interview with patient	Experiences of a patient who had a social skills training		
		Assignment	1) Registration of own social contacts 2) Starting new social contacts 3) Maintaining existing social contacts		
		Leisure time	Encyclopaedia	Encyclopaedia	Nervousness/anxiety in social situations may hamper leisure activities, importance of leisure activities, types of leisure activities
				Interview with patient	How a patient learned to cope with feelings of shame and stopped avoiding leisure activities
				Tips & tools	Ways to feel more comfortable in social situations
Assignment	1) Registration of own leisure activities. 2) Planning and undertaking more and/or other leisure activities. 3) Mindfulness exercise				
Did you know that...	Importance of leisure activities				
Poll	Avoiding social contacts				
Self-assessment	Nervousness/anxiety in social situations				

^aStangier U, Ehlers A, Gieler U. (1996). Fragebogen zur Bewältigung von Hautkrankheiten (FBH). Handanweisung. Göttingen: Hogrefe.

^bGoldberg D, Williams P. (1988) A users guide to the General Health Questionnaire. Slough: NFER-Nelson.

HRQoL: health-related quality of life.

Table SIII. Patients' demographic and clinical characteristics (n = 105). Percentages may not add up to 100% due to missing responses and/or the possibility of giving multiple answers

	n (%)
Gender	
Male	44 (42)
Female	61 (58)
Age, mean ± SD	42.4 (13.2)
Age, median (inter quartile range (IQR))	42 (22.5)
Marital status	
Unmarried	31 (29.2)
Married or cohabiting	63 (59.4)
Widowed	1 (0.9)
Divorced	10 (9.5)
Education	
No education	–
Primary school	3 (2.8)
Lower general secondary education	20 (18.9)
Intermediate vocational education	46 (43.4)
Secondary education	6 (5.7)
Higher vocational education	19 (18.1)
University	11 (10.4)
Ethnicity	
Caucasian	88 (83.4)
Surinam/Hinduistic	5 (4.8)
Turkish	3 (2.9)
Moroccan	–
Antillean	–
African	–
Chinese	1 (1.0)
Other	7 (6.7)
Work	
Yes	72 (67.9)
No, reason:	33 (31.4)
Illness	4 (3.8)
Unemployed	1 (0.9)
Disabled	13 (12.3)
Retired	7 (6.5)
Student	6 (5.7)
Other	4 (4.7)
Diagnosis	
Psoriasis	52 (49.5)
Atopic dermatitis	25 (23.8)
Acne	2 (1.9)
Vitiligo	6 (5.7)
Hidradenitis suppurativa	14 (13.3)
Other	8 (7.6)
Disease duration (n=100), months, mean ± SD	19.7 ± 64.4
Disease duration, months, median (IQR)	1.71 (3)
Disease severity	
Patient ^a	
Mean ± SD	3.1 ± 1.03
Median (IQR)	3 (2)
Health care provider ^b	
Mean ± SD	3.13 ± 0.90
Median (IQR)	3 (1)
Global impairment of HRQoL	
Patient ^c	
Mean ± SD	3.3 ± 1.1
Median (IQR)	3 (1)
Health care provider ^d	
Mean ± SD	2.7 ± 0.8
Median (IQR)	3 (1)
Reason for inclusion	
Negative impact of skin disease on HRQoL	74 (70.5)
High motivation to learn about HRQoL	45 (42.9)
Disease severity	40 (38.1)
Other	5 (4.8)

Global disease severity from ^athe patients' (n = 104) and ^bthe health care providers' perspective (5-point scale, 1: not severe to 5: very severe); ^cPatient (n = 103) and ^dhealth care provider (n = 104) global assessment of impairment of patients' health related quality of life (HRQoL) (1: no impairment to 5: severe impairment).

Table SIV. Acceptance patients

Patients	<i>n</i>	Mean ± SD	Median (IQR)
Relevance	59	2.2 ± 0.9	2.1 (1.6)
1. The website is interesting to me.	59	2.7 ± 1.1	3 (2)
2. I have gained new information and knowledge through the website	59	2.6 ± 1.1	3 (2)
3. The website helps me to gain insight into my own quality of life	58	2.6 ± 1.1	2 (1)
4. My quality of life has improved because of the website	59	2.0 ± 1.0	2 (2)
5. I cope differentially with my skin disease because of the website	59	1.9 ± 1.0	2 (2)
6. I have learned new skills through the website	59	2.1 ± 1.0	2 (2)
7. The website is a valuable addition to the treatment of my skin disease	58	2.3 ± 1.1	2 (2)
8. The website helps me to cope better with stress	59	2.0 ± 1.1	2 (2)
9. The website helps me to cope better with emotions	59	1.9 ± 1.0	2 (2)
10. The website increases my self-confidence	59	1.9 ± 1.0	2 (2)
Convenience	55	3.9 ± 0.9	4 (1.8)
1. I can easily understand the vocabulary on the website	55	4.3 ± 0.8	4 (1)
2. It is easy to use the website	55	3.9 ± 1.0	4 (2)
3. I could easily find the information I was looking for	55	3.7 ± 1.2	4 (2)
4. The menu of the website was clear	55	3.8 ± 1.1	4 (2)
Attractiveness	55	3.5 ± 0.7	3.4 (0.8)
1. The colours of the website are... ^a	55	3.5 ± 0.7	3 (1)
2. The pictures on the website are... ^a	55	3.6 ± 0.7	4 (1)
3. The letter font is easily readable	55	3.7 ± 0.8	4 (1)
4. The website is clearly arranged	55	3.5 ± 1.1	4 (1)
5. It is fun to use the website	55	3.0 ± 1.2	3 (2)
Other			
1. The letter font is... ^b	55	3.2 ± 0.5	3 (0)
2. Texts are... ^c	55	3.2 ± 0.6	3 (0)

All answers on a 5-point scale (1: totally disagree, 5: totally agree), except ^a1: not nice at all, 5: very nice; ^b1: too small, 5: too big; ^c1: too short, 5: too long.

Table SV. Ordinal regression with website user's visit frequency (n = 86) and total duration of website visits (n = 86) as dependent variables and age, sex, educational level, diagnosis, disease severity (patient) and HRQoL (Skindex-29, overall score) as predictors

	Website visit frequency ^b			Total duration of website visits ^c		
	B	95% CI		B	95% CI	
		Lower bound	Upper bound		Lower bound	Upper bound
Age	0.082*	0.042	0.122	0.086*	0.045	0.126
Sex	-0.707	-1.627	0.214	-0.397	-1.304	0.510
Educational level	-0.511*	-0.852	-0.169	-0.219	-0.547	0.109
Diagnosis psoriasis	1.019	-0.600	2.637	1.502	-0.114	3.117
Diagnosis atopic dermatitis	0.351	-1.395	2.097	0.102	-1.650	1.855
Diagnosis vitiligo	-0.512	-2.554	1.531	0.186	-1.897	2.268
Diagnosis hidradenitis suppurativa	1.439	-0.530	3.407	0.970	-0.984	2.924
Disease severity, patient ^a	-0.024	-0.497	0.450	-0.162	-0.636	0.312
Skindex-29, overall score	0.005	-0.022	0.031	0.014	-0.012	0.041

^aGlobal disease severity from the patients' perspective, 1: not severe to 5: very severe; ^bWebsite visit frequency: 'Low': ≤1 visit, 'Medium': 2 or 3 visits, 'High': ≥4 visits. Pseudo R²=0.31 (Cox & Snell), 0.35 (Nagelkerke), Model $\chi^2(9)=31.6$, $p<0.05$; ^cTotal duration of website visits: 'Low': ≤0: 07: 41, 'Medium': 0: 07: 42-0: 41: 01, 'High': ≥0: 41: 02. Pseudo R²=0.28 (Cox & Snell), 0.32 (Nagelkerke), Model $\chi^2(9)=28.4$; $p<0.05$; * $p<0.05$.