Figure 1. Median T Score stratified by study group. Data are shown as mean and standard deviation. The overall p-value was calculated by the Mann-Whitney non-parametric test for independent samples.

Conclusion: Firstly, this study highlights the need to investigate further the association between Rheumatic Diseases and gastrointestinal symptoms as potential patterns of underlying diseases and, secondly, the need to adopt validated questionnaires in clinical practice that can help healthcare professionals to detect underestimated symptoms.

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POS1458-HPR DIGITAL RHEUMATOLOGY IN THE ERA OF COVID-19: RESULTS OF A NATIONAL PATIENT AND PHYSICIAN SURVEY

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Background: Digital health applications (DHAs) are gaining influence and promise great potential for the monitoring and management of rheumatic and musculoskeletal diseases (RMDs).

Objectives: To analyse the impact of the COVID-19 pandemic on RMD patients' and rheumatologists' usage, preferences, and perception of digital health applications (DHAs) in Germany.

Methods: A web-based national survey was developed by the Working Group Young Rheumatology of the German Society for Rheumatology and the German League against Rheumatism. The prospective survey was distributed via social media, QR-code, and email. Descriptive statistics were calculated, and regression analyses were performed to show correlations.

Results: We analysed the responses of 299 patients and 129 rheumatologists. Most patients (74%) and rheumatologists (76%) believed that DHAs are useful in the management of RMDs and felt confident in their own usage thereof (90%; 86%). 38% of patients and 71% of rheumatologists reported that their attitude had changed positively towards DHAs and that their usage had increased due to COVID-19 (29%; 48%).

Usage and recommendation of DHAs for both groups are shown in Figure 1:

Figure 1. Usage or recommendation of digital health applications. Patients and rheumatologists were asked to indicate the specific digital health applications (DHAs) they used or were recommended.

The majority in both groups agreed on implementing virtual visits for follow-up appointments in stable disease conditions. The most reported advantages of DHAs were usage independent of time and place (76.6%; 77.5%). The main barriers were a lack of information on suitable, available DHAs (58.5%; 41.9%), poor usability (42.1% of patients) and a lack of evidence supporting the effectiveness of DHAs (23.2% of rheumatologists) (Table 1).

Table 1. Advantages and Barriers of DHA, n (%).

Advantages	Barriers			
	Patients	Rheumatologists	Patients	Rheumatologists
Location-Independence	229 (76.6)	100 (77.5)	Too little information	175 (58.5)
Time-independence	223 (74.6)	94 (72.9)	Too little evidence of benefits	36 (12.0)
Detailed documentation	97 (32.4)	47 (36.4)	Poor quality of current apps	30 (23.3)
Cost saving	95 (31.8)	37 (28.7)	Concerns about data protection	47 (15.7)
More information	88 (29.4)	38 (29.5)	Lack of usability	29 (22.5)
Independence	36 (12.0)	-	Lack of accessibility	52 (17.4)
of doctors*				25 (19.4)
More flexibility	107 (36.8)	77 (59.7)	High costs	126 (42.1)
Preparation	46 (15.4)	-	No suitable equipment	4 (1.3)
for discussion*				17 (13.2)
No advantages at all	18 (6.0)	1 (0.8)	Lack of user competence	23 (17.8)
			No Need	4 (1.3)
				11 (8.5)
				9 (3.0)
				39 (13.0)
				12 (9.3)

Patients and rheumatologists were asked about the advantages and barriers of DHAs. Multiple answers were allowed. Patients had two additional potential advantages and potential barriers to choose from*.

Only a minority (<10% in both groups) believed that digitalisation has a negative impact on the patient-doctor relationship.

Conclusion: The COVID-19 pandemic instigated an increase in patients' and rheumatologists' acceptance and usage of DHAs, possibly introducing a permanent paradigm shift in the management of RMDs.

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POS1459-HPR IDENTIFYING MEANINGFUL CHANGE IN THE RA FLARE QUESTIONNAIRE SCORES IN RHEUMATOID ARTHRITIS

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Background: The RA-FQ is a patient-reported measure of current disease activity in RA that can be used to identify disease flares. The RA-FQ queries pain, physical function, fatigue, stiffness, and participation and yields a score from 0-50. We previously reported on reliability, validity, and responsiveness.

Objectives: To identify changes in RA-FQ that represent minimal and meaningful improvement or worsening from the perspective of people with RA, treating rheumatologists, and in relation to disease activity indices. We hypothesized that

Methods: Data were from adults with early RA (sx <1 year) enrolled in the Canadian Early Arthritis Cohort, a prospective study of real-world patients

treated across Canada. Participants completed the RA-FQ, Patient Global, and RA transition item since last visit (a little vs. a lot better or worse or same) between consecutive 3- and 6-month visits. Rheumatologists recorded joint counts, MD Global, and change in RA. We compared mean change across improvement and worsening using patient anchors and disease activity indicators.

Results: The 808 adults were mostly white (84%) women (71%) with a mean (SD) age of 55 (15) and moderate-high CDAI level (85%) at enrollment. Most (79%) reported their RA had changed; 59% were better and 20% worse. Patients who were a lot worse had a mean increase of 8.9 points whereas those who rated themselves as a lot better had a -6.0 decrease on the RA-FQ (Figure 1). Minimal worsening and improvement were associated with 4.7 and -1.8 change in RA-FQ scores, respectively, while patients who rated their RA unchanged had stable RA-FQ scores (Table 1).

Similar changes were evident in CDAI, SDAI, and DAS indices (Table 1). Larger differences were observed with patient vs. physician global scores and tender vs. swollen joints. Across measures, the change associated with worsening was greater than for improvement. Results supported all prespecified hypotheses ab.

Table 1. Change in RA-FQ scores between visits by patient rating of RA status.

Domain	A Lot Better (N=346; 43%)			A Little Better (N=132; 16%)			The Same (N=174; 21%)			A Little Worse (N=94; 12%)			A Lot Worse (N=62; 8%)		
	Δ	95% CI	SD	Δ	95% CI	SD	Δ	95% CI	SD	Δ	95% CI	SD	Δ	95% CI	SD
RA-FQ Total (0-50)	-6.0	(-7.1, -4.9)	10.3	-1.8	(-3.2, -0.3)	8.4	-0.1	(-1.3, 1.1)	8.1	4.7	(2.9, 6.6)	9.1	8.9	(5.1, 12.7)	15.0
Pain	-1.2	(-1.4, -0.9)	2.4	-0.4	(-0.8, 0.0)	2.3	0.0	(-0.2, 0.3)	1.8	1.3	(0.8, 1.7)	2.2	2.0	(1.2, 2.9)	3.3
Physical Function	-1.3	(-1.6, -1.1)	2.4	-0.3	(-0.6, 0.1)	2.1	0.0	(-0.3, 0.3)	2.1	0.9	(0.4, 1.4)	2.4	1.8	(0.8, 2.7)	3.7
Fatigue	-1.1	(-1.4, -0.8)	2.6	-0.4	(-0.7, 0.0)	1.9	0.0	(-0.3, 0.3)	2.1	0.7	(0.3, 1.1)	2.1	1.3	(0.5, 2.1)	3.2
Stiffness	-1.1	(-1.4, -0.9)	2.4	-0.4	(-0.7, 0.0)	2.0	-0.1	(-0.4, 0.2)	2.0	1.1	(0.6, 1.5)	2.2	1.8	(1.0, 2.7)	3.3
Participation	-1.2	(-1.5, -1.0)	2.5	-0.1	(-0.5, 0.3)	2.1	-0.1	(-0.4, 0.2)	2.2	0.8	(0.4, 1.3)	2.2	2.0	(1.1, 2.8)	3.4
Disease Activity CDAI*	-5.3	(-6.3, -4.3)	9.1	-3.3	(-5.4, -1.3)	11.5	-0.8	(-2.0, 0.5)	8.1	1.7	(-0.1, 3.5)	8.8	6.8	(3.7, 9.8)	12.0
SDAI	-5.6	(-6.8, -4.4)	9.2	-3.5	(-6.1, -0.9)	12.2	-1.9	(-3.6, -0.2)	8.9	1.5	(-0.7, 3.7)	9.2	4.7	(1.0, 8.4)	12.2
DAS28-CRP	-0.7	(-0.8, -0.6)	1.01	-0.5	(-0.7, -0.2)	1.2	-0.2	(-0.4, 0.0)	1.0	0.3	(0.1, 0.5)	1.0	0.5	(0.2, 0.9)	1.2
Patient Global (0-10)	-1.3	(-1.5, -1.0)	2.7	-0.5	(-0.9, -0.1)	2.1	-0.1	(-0.4, 0.2)	2.1	1.3	(0.8, 1.8)	2.4	2.9	(2.1, 3.6)	3.1
MD Global (0-10)	-1.2	(-1.4, -1.0)	1.9	-0.7	(-1.1, -0.3)	1.1	-0.1	(-0.4, 0.2)	1.9	0.1	(-0.3, 0.5)	2.8	0.7	(0.0, 1.5)	2.8
Swollen Joints (28)	-1.4	(-1.7, 1.0)	3.2	-1.0	(-1.8, -0.2)	4.6	-0.4	(-0.9, 0.0)	3.0	0.0	(-0.7, 0.7)	3.4	1.3	(0.2, 2.5)	4.6
Tender Joints (28)	-1.5	(-1.9, -1.1)	3.9	-1.3	(-2.2, -0.3)	5.5	0.0	(-0.7, 0.6)	4.3	0.3	(-0.7, 1.2)	4.5	2.2	(0.8, 3.5)	5.4

Conclusion: In this large cohort of adults with ERA, the RA-FQ was responsive to change and generally distinguishes between minimal and meaningful improvement and worsening. These data add to a growing evidence demonstrating robust psychometric properties of the RA-FQ and offer