

**Supplementary Appendix 1****Scoping review covering remote self-management, physical activity and follow-up interventions in RMD****1. Purpose**

To map the current research and knowledge gaps within remote care interventions in rheumatology and inform the outlined research questions in the systematic literature review.

**2. Search terms**

Exposure	Disease	Design
Telemedicine Remote Consultation Mobile Applications (telehealth or tele-health or telemedicine or tele-medicine or ehealth or e-health or mhealth or m-health) ((remote or virtual) (consult* or therap* or treatment* or monitor* or assess* or care or followup or follow-up)) (mobile (app or apps or application*)). (teleconferenc* or teleconferenc* or videoconferenc* or videoconferenc* or telecare or tele-care or teleconsult* or tele-consult*) (u-health or uhealth)	Rheumatology Rheumatic diseases	Randomized controlled trail Meta-analysis Meta synthesis Literature review Systematic review Narrative review

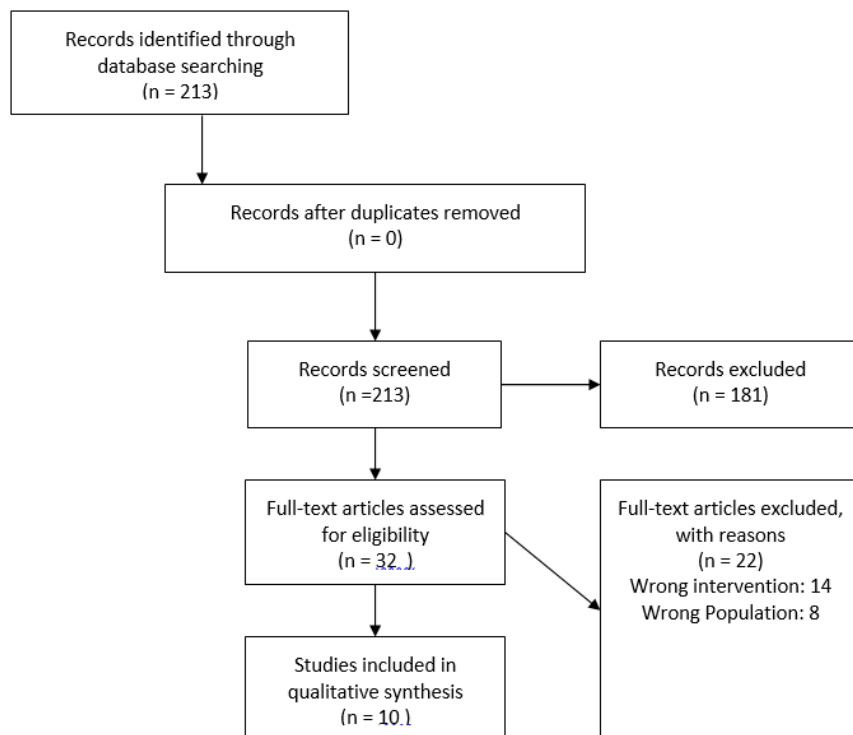
**3. Databases and search period**

Cochrane and PubMed databases, from inception and onwards.

Search conducted in September/October 2020.

#### 4. Self-management and physical activity

##### 4.1 Prisma diagram



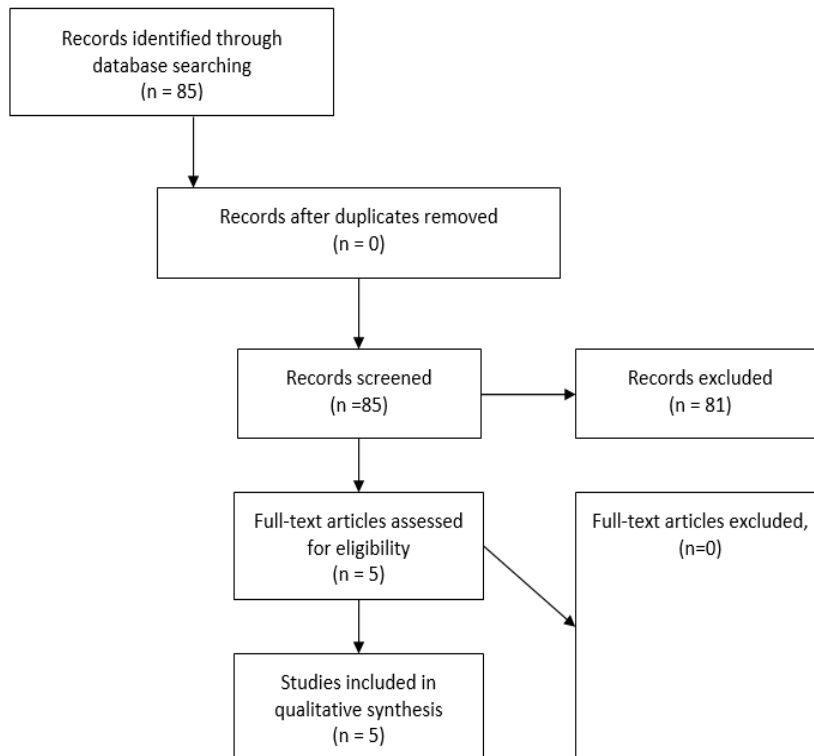
## 4.2 Included studies, self-management and physical activity

Self-management and physical activity, mixed diagnosis					
Study id, year	Study type	Included patients	Included studies	Intervention	Results
Najm et al, 2019 [1]	Systematic review	RA <sup>1</sup> , JIA <sup>1</sup> , OA <sup>3</sup> , FM <sup>4</sup> , PsA <sup>5</sup> , As <sup>6</sup>	N=11 (RCT: N=2)	Use of mHealth Apps in RMD <sup>7</sup>	OA: ↑ number of steps OA: ↓ pain FM: ↓ catastrophizing score
Fritsch et al, 2020 [2]	Systematic review and meta-analysis	OA, RA, FM	N=11 (RCT: N=11)	Use of text messages in RMDs	As a sole intervention: ↔ pain, physical function & QoL <sup>8</sup>  As part of an intervention ↓ pain, ↑ function, ↑ QoL
Piga et al, 2017 [3]	Systematic review	RA, SSc <sup>9</sup> , FM, OA, JIA	N=23 (RCT: N=9)	Remotely delivered self-management interventions	↑ Patient satisfaction ↑ Effectiveness (self-efficacy, QoL, physical function)
McDougallet al, 2017 [4]	Systematic review	IA <sup>10</sup> , PMR <sup>11</sup> , gout, CTD <sup>12</sup>	N=20 (RCT: N=1)	Remotely delivered disease management interventions	↔ due to limited evidence
Self-management and physical activity, OA					
Schäferet al, 2018 [5]	Systematic review and meta-analysis	Knee OA	N=7 (RCT: N=7)	eHealth supported exercise	↓ pain ↑ function ↑ QoL
O'Brien et al, 2018 [6]	Systematic review	Mixed OA	N=21 (RCT: N=20)	Mixed tele-health interventions	↓ pain ↓ disability
Safari et al, 2020 [7]	Systematic review and meta-analysis	Knee OA	N=8 (RCT: N=8)		↓ pain ↑ function ↑ QoL
Self-management and physical activity, RA					
Srikesvan et al, 2018 [8]	Systematic review	RA	N=6 (RCT: N=6)	Web-based rehabilitation	↓ pain ↑ function ↑ QoL
Self-management and physical activity, SLE					
Dantas et al, 2020 [9]	Systematic review	SLE <sup>13</sup>	N=11 (RCT: N=2)	mHealth Apps	↔ medication adherence ↑ Visit adherence ↓ BMI <sup>14</sup>
Self-management and physical activity, LBP					
Dario et al, 2017[10]	Systematic review and meta-analysis	LBP <sup>15</sup>	N=4 (RCT: N=4)	Mixed tele-health interventions	↓ pain ↑ function ↑ QoL

1 Rheumatoid arthritis; 2 Juvenile idiopathic arthritis; 3 Osteoarthritis; 4 Fibromyalgia; 5 Psoriatic arthritis; 6 Axial spondylarthritis; 7 Rheumatic and musculoskeletal diseases; 8: Quality of life; 9 Scleroderma; 10 Inflammatory arthritis; 11 Polymyalgia rheumatica; 12 Connective Tissue Disease; 13 Systemic lupus erythematosus; 14 Body mass index; 15 Low back pain

## 5. Remote follow-up in inflammatory arthritis

### 5.1. Prisma diagram



## 5.2 Included studies, remote follow-up

Remote follow-up, inflammatory arthritis								
Study id, year	Study type	N	Disease	Intervention	Control	Outcome	Follow-up, months	Results
El Miedany et al, 2016 [11]	RCT	224	Prevalent RA <sup>1</sup>	ePROM <sup>2</sup> based follow-up	Standard follow-up	DAS <sup>3</sup> -28	12	No difference
Taylor Gjevre et al, 2018 [12]	RCT	85	Prevalent RA	Video based follow-up	Standard follow-up	DAS-28	10	No difference
Gossec et al, 2017 [13]	RCT	320	Prevalent RA	ePROM based follow-up	Standard follow-up	RAID <sup>4</sup>	12	No difference
Salaffi et al, 2015 [14]	RCT	44	Incident RA	ePROM based ToT <sup>5</sup>	Standard follow-up	CIDAI <sup>6</sup>	12	Favours intervention
De Thurah et al, 2018 [15]	RCT	294	Prevalent RA	ePROM based follow-up	Standard follow-up	DAS-28	12	No difference

1 Rheumatoid arthritis; 2 electronic patient reported outcomes; 3 disease activity score; 4 rheumatoid arthritis disease impact; 5 treat to target; 6 Clinical disease activity index.

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