

Supplementary Table 1. Full List of Formatted Search Terms

Embase Classic+Embase search terms <1947 to 2021 November 12>

1	Chronic illness*.mp.	25718
2	chronic condition*.mp.	33249
3	long-term condition*.mp.	2940
4	long-term health condition*.mp.	352
5	long-term illness*.mp.	983
6	Chronic disease*.mp.	269041
7	Chronic health condition*.mp.	4176
8	Long-lasting disease*.mp.	388
9	long-lasting condition*.mp.	69
10	Inflammatory Bowel Disease.mp.	95288
11	exp ulcerative colitis/ or exp colitis/ or exp Crohn disease/ or exp inflammatory bowel disease/	255342
12	Ulcerative Colitis.mp.	94775
13	UC.mp.	49264
14	Crohns Disease.mp.	80934
15	CD.mp.	214417
16	rheumatoid arthritis.mp.	257628
17	MS.mp.	523172
18	multiple sclerosis.mp.	161082
19	(Intervention* or RCT or Randomised Control Trial* or Clinical Trial* or Online intervention* or Web-based intervention* or digital intervention* or digital health intervention* or app intervention*).mp.	3341829

20	1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 1587598
21	Adherence.mp. 235416
22	medication adherence.mp. 21202
23	patient compliance.mp. 149479
24	adher*.mp. 341384
25	complian*.mp. 384614
26	persit*.mp. 210
27	discount*.mp. 22340
28	non-complian*.mp. 14761
29	concordan*.mp. 115308
30	non-concordan*.mp. 597
31	non-persisten*.mp. 1656
32	Non-adheren*.mp. 19337
33	medication non adherence.mp. 1673
34	medication non compliance.mp.307
35	Intervention*.mp. 1669396
36	RCT.mp. 46549
37	Randomised Control Trial*.mp. 3658
38	Clinical Trial*.mp. 1869027
39	Online intervention*.mp. 1388
40	Web-based intervention*.mp. 2563
41	digital intervention*.mp. 749
42	digital health intervention*.mp. 413
43	app intervention*.mp. 184

44	21 or 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30 or 31 or 32 or 33 or 34	780868
45	35 or 36 or 37 or 38 or 39 or 40 or 41 or 42 or 43	3341829
46	20 and 44 and 45	12699
47	limit 46 to (english and (adult <18 to 64 years> or aged <65+ years>))	6179

Supplementary Table 2. Categories of Interventions

	<u>Approach Type</u>				
	Technology Assisted	Educational	Monitoring	Psychological/ Behaviour Change	Tools
<u>Examples</u>	<i>Text message reminders, Web-based interventions, Telephone.</i>	<i>E-learning; Teaching sessions.</i>	<i>Electronic pill bottle/s &/or caps; Pill counts; Telephone check-ups.</i>	<i>Cognitive Behavioural Therapy; Motivational Interviewing; Counselling.</i>	<i>Pill box organiser; Diaries; Information pack, Advice sheet.</i>
<u>Description</u>	<i>Electronic system is used to support adherence.</i>	<i>Education provided to participants in various formats.</i>	<i>Frequent checking of participants' adherence behaviour/s.</i>	<i>Psychological approach based upon a theoretical framework.</i>	<i>Physical items offered to participants and used independently.</i>
<u>Predominant Intervention Component/s</u>	Chapman et al ⁴ , 2020 Cross et al ⁴⁷ , 2012 De Jong et al⁴⁸, 2017 Del Hoyo et al⁴⁹, 2018	Chapman et al ⁴ , 2020 El Miedany et al⁵⁰, 2012 El Miedany, Gaafary & Palmer⁵¹, 2012 Nikolaus et al ⁵⁷ , 2014	Cross et al ⁴⁷ , 2012 Del Hoyo et al⁴⁹, 2018 Hebing et al ⁵² , 2022 Landtblom et al ³⁶ , 2012	Asgari et al⁴⁶, 2021 Cross et al ⁴⁷ , 2021 Chapman et al ⁴ , 2020 El Miedany et al⁵⁰, 2012 Ferguson et al ⁴⁵ , 2014	Cross et al ⁴⁷ , 2012

	<p>El Miedany, Gaafary & Palmer⁵¹, 2012</p> <p>Landtblom et al³⁶, 2012</p> <p>Linn et al⁵⁴, 2018</p> <p>Mary et al⁵⁵, 2019</p> <p>Rice et al⁵⁸, 2021</p> <p>Settle et al⁵⁹, 2016</p> <p>Song et al⁶⁰, 2020</p> <p>Turner et al⁶³, 2014</p>	<p>Song et al⁶⁰, 2020</p> <p>Taibanguay et al⁶¹, 2019</p> <p>Tan et al⁶², 2021</p> <p>Unk et al⁶⁴, 2014</p>	<p>Matteson-Kome et al⁵⁶, 2014</p> <p>Rice et al⁵⁸, 2021</p> <p>Settle et al⁵⁹, 2016</p> <p>van Heuckelum⁶⁵, 2021</p>	<p>Hebing et al⁵², 2022</p> <p>Keefer et al⁵³, 2012</p> <p>Linn et al⁵⁴, 2018</p> <p>Mary et al⁵⁵, 2019</p> <p>Matteson-Kome et al⁵⁶, 2014</p> <p>Song et al⁶⁰, 2020</p> <p>Taibanguay et al⁶¹, 2019</p> <p>Turner et al⁶³, 2014</p> <p>Zwikker et al⁶⁶, 2014</p>	
<p><u>Secondary Intervention Component/s</u></p>	NIL	<p>Asgari et al⁴⁶, 2021</p> <p>Cross et al⁴⁷, 2012.</p> <p>De Jong et al⁴⁸, 2017</p> <p>Del Hoyo et al⁴⁹, 2018</p> <p>Landtblom et al³⁶, 2019</p> <p>Settle et al⁵⁹, 2016</p> <p>Zwikker et al⁶⁶, 2014</p>	<p>De Jong et al⁴⁸, 2017</p> <p>Turner et al⁶³, 2014</p>	van Heuckelum et al ⁶⁵ ,2021	<p>Asgari et al⁴⁶, 2020</p> <p>Del Hoyo et al⁴⁹, 2018</p> <p>El Miedany et al⁵⁰, 2012</p> <p>Mary et al⁵⁵, 2019</p> <p>Landtblom et al³⁶, 2012</p>

*Note: Studies in **Bold** text were found to have a significantly effective adherence intervention at completion when compared to controls*