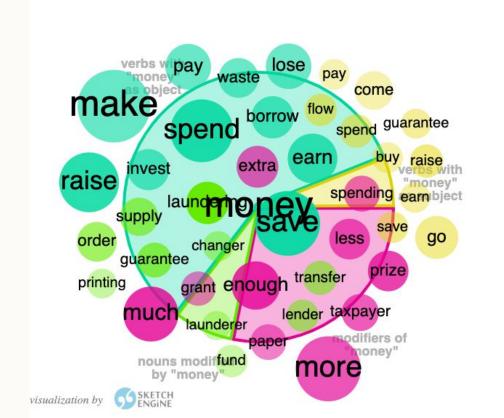




Corpus Linguistics: computer-assisted analysis of large bodies of text

- Suitable for the analysis of large collections of text
- Corpus methods can provide fast and informative insights by:
 - Facilitating analysis of collections of (transcribed) spoken and written language, typically using specialist software to extract common patterns in the use of words, grammar and meaning
 - Offering a mixed methods approach (qualitative and quantitative)





Survey questions open text

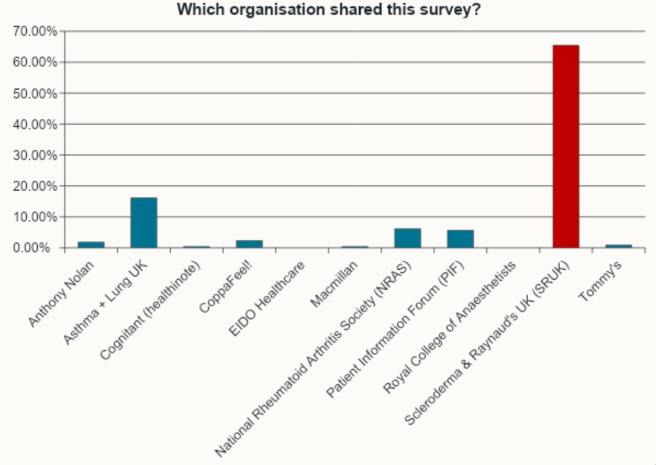
- Q3. Do you agree with this statement: Having access to trustworthy information from this organisation helps me manage my health? Tell us more about your answer.
- Q4. What difference has access to this organisation's health information made to you personally?
- Q6. What type of health information do you prefer? Please select up to three options. Tell us more about your answer.
- Q7. Tell us more about the sources of health information you find most useful.
- Q8. Have you been able to get a GP or hospital appointment in an acceptable time? Tell us more about your answer.
- Q9. Have you tried to find information before making an appointment with a GP or waiting for a hospital appointment?
- Q10. Has a health professional such as doctor, nurse or pharmacist given you health information? Tell us more about your answer.
- Q11. To what extent do you agree or disagree with each of the following statements about your relationship with most healthcare professionals? Tell us more about your answer.
- Q13. How would seeing trust or credibility marks affect your trust in a source of information? Examples are PIF TICK, Orcha and YouTube HealthShelf. Tell us more about your answer.
- Q14. To what extent do you agree or disagree with each of the following statements about online health misinformation? Please think about health information you may find on social media as well as websites. Tell us more about your answers.
- Q15. Do you think you have been harmed by misinformation about your health?



Free text survey data

Scleroderma and Raynaud's UK (SRUK) only: 12,345 words free text

Which organisation shared this survey?		
Answer Choices	Respo	onses
Anthony Nolan	1.91%	4
Asthma + Lung UK	16.27%	34
Cognitant (healthinote)	0.48%	1
CoppaFeel!	2.39%	5
EIDO Healthcare	0.00%	0
Macmillan	0.48%	1
National Rheumatoid Arthritis Society (NRAS)	6.22%	13
Patient Information Forum (PIF)	5.74%	12
Royal College of Anaesthetists	0.00%	0
Scleroderma & Raynaud's UK (SRUK)	65.55%	137
Tommy's	0.96%	2
	Answered	209
	Skipped	2





Most frequent words in the responses

Lemma F	requency [?] ↓	Lemma Fre	quency [?] ↓	Lemma Freq	uency [?] ↓	Lemma Freq	uency [?] ↓	Lemma	Frequency [?] ↓
i i	634	11 it	163	21 that	99	31 from	65	41 only	49 ••
2 be	574 ***	12 information	159	22 condition	85 ***	32 very	63 ***	42 give	49 ••
3 to	466	13 for	137	23 about	83	33 feel	62	43 SO	48 ••
4 and	339	14 with	120	24 can	83 ***	34 consultant	60	44 this	48 ••
5 the	297 •••	15 in	116	25 appointment	83	35 by	54	45 find	48 •-
have	288	16 as	112	26 but	82 ***	36 more	53	46 time	47 ••
7 a	283	17 gp	112 ***	27 get	79 •••	37 see	52 ***	47 no	47 **
my	260 ***	18 me	110	28 or	75 •••	38 other	52 ***	48 website	46 **
not	199 •••	19 do	103	29 know	70	39 up	51 ***	49 nhs	45 ••
10 of	188 ***	20 on	103	30 help	69 ***	40 trust	50 ***	50 at	44 ••

'trust', 'feel', 'information'



Collocates of 'trust' 3L-3R

	Lemma Cooccurren	ices ? Ca	ndidates? T-s	core MI	LogDice ↓		Lemma	Cooccurrences?	Candidates ?	T-score	MI	$LogDice \ \lor$	
1 🗆	source	8	27	2.79 6.32	11.73	11 🔲	website	4	45	1.92	4.58	10.43	***
2 🔲	can	11	83	3.22 5.16	11.40 ***	12	any	3	24	1.68	5.07	10.38	***
3 🔲	site	5	26	2.19 5.69	11.07 •••	13	use	3	42	1.64	4.26	10.06	***
4 🔲	would	4	32	1.94 5.07	10.64	14. 🔲	only	3	49	1.63	4.04	9.96	***
5 🔲	I	31	601	5.17 3.79	10.61	15 🔲	on	4	103	1.81	3.39	9.74	***
6 	that	7	99	2.51 4.25	10.59	16	do	4	103	1.81	3.39	9.74	***
7 🔲	medium	3	18	1.69 5.49	10.50	17 🔲	from	3	65	1.59	3.63	9.74	•••
8 🔲	information	9	157	2.81 3.95	10.48 •••	18 🔲	the	g	297	2.63	3.03	9.73	***
9 🔲	social	3	20	1.69 5.33	10.46	19 🔲	of	6	188	2.16	3.10	9.69	***
10	you	4	44	1.92 4.61	10.45	20	9.80	13	475	3.12	2.88	9.66	

'source' (8), 'can' (10), 'site' (5), 'would' (3), 'information' (9), 'social' (3), 'website' (4)



Importance of trusted sources recognised

- 'I think knowing you can trust a source of info is only a good thing as you will go back to that source and use it to be informed about your health'
- 'Therefore it's extremely helpful to have as much information as possible from a **source** you can **trust**'
- 'There's so much false information out there is good to know I can trust any information that is posted'
- 'I look for information I can trust that comes from a good [source] and I can research at home'
- 'it's extremely helpful to have as much information as possible from a source you can trust'
- 'There is a lot of scaremonger article out there I prefer to go to sites I can trust'
- 'I like that the information I get is from a trusted source'

Difficulties finding trusted sources

- 'Again, the rarity of the disease limits trusted sources'
- 'It's not easy to get information you can trust'





Charity and NHS are trusted sources

- 'I need to be able to **trust** the **information** I'm reading, so tend to limit my sources of information to those linked to the NHS or my own GP practice'
- 'Again trusted websites I like to be able to listen to varied sources of information and then make a decision on a factual basis ie SRUK'
- 'I follow SRUK, SRF, WHO and other organisations I trust on social media as they often give me the most up to date information'
- 'I usually go via SRUK or NHS' wouldn't ever go to a patient website, but on the whole would trust a charity website'
- 'Useful source of trusted information and advice to supplement the info provided by rheumatologist'
- 'Usually check trusted sources eg SRUK as I know that most GPs know little about scleroderma'
- 'It's information I can trust and rely on' | 'It can be trusted'
- 'I trust the information I get from this organisation'
- 'These are more trusted sources of information'
- 'If it's the NHS I would trust that & patient forum'
- 'I only use trusted web sites'





Difficulties trusting social media

- 'I prefer trusted sites for information and take social media references with a pinch of salt although that are useful for conversations'
- 'Social media posts are a definite no because they can not be trusted and I've no wish to know what other patients think or do'
- 'Not that interested in finding info from social media, as I don't feel I can trust it'
- 'I don't think I would trust anything on YouTube as I've seen some "doubtful" items on it'
- 'I don't trust any social media with regard to health information'
- 'On the whole, I don't trust social media'

Importance of trusted websites recognised

- 'There is a lot of scaremonger articles out there I prefer to go on sites I can trust and have more in depth resources and research that I can trust as my condition is seem[ing]ly rare'
- 'There's a lot of information online but it's good to have a trusted UK site'
- 'Always inform myself as good as I can and I use trusted web sites'
- 'Trusted online UK websites and SRUK magazine'
- 'Always look at my trusted websites'





Collocates of 'feel' (3L-3R)

	Lemma	Cooccurrences?	Candidates?	T-score	MI	LogDice ↓		Lemma	Cooccurrences?	Candidates ?	T-score	Mi	LogDice ↓	
1 🔲	alone	8	18	2.80	6.59	11.68 •	11	listen	3	15	1.69	5.44	10.32	•••
2 🔲	1	45	601	6.30	4.02	11.12 •	12 🗌	not	10	199	2.87	3.45	10.29	•••
з 🔲	less	5	12	2.21	6.50	11.11 •	13 🔲	sometimes	3	17	1.69	5.26	10.28	•••
4	do	11	103	3.17	4.53	11.09	14 🔲	no	4	47	1.89	4.21	10.23	•••
5	that	10	99	3.02	4.45	10.99 •	15	*	19	475	3.86	3.12	10.18	•••
6 🔲	me	10	110	3.00	4.30	10.90 •	16	like	3	25	1.67	4.70	10.14	***
7	they	6	42	2.37	4.95	10.88 •	17	very	4	61	1.86	3.83	10.06	***
8 🔲	make	5	29	2.18	5.23	10.81 •	18	and	13	339	3.17	3.06	10.05	***
9 🔲	isolate	3	4	1.72	7.35	10.54 •	19 🔲	be	18	574	3.62	2.77	9.86	***
10	longer	3	7	1.71	6.54	10.48 •	20	more	3	53	1.59	3.62	9.74	***

☐ 'alone' (8), 'isolate' (3), 'listen' (3)



feel +listen (3) +alone (8) +isolate (3)

Feeling let down by medical professionals

- 'Don't feel listened to or respected, especially if I ask about what they've said, they seem to to feel I'm arguing with them'
- 'The whole process is long-winded, I don't feel listened to or have satisfactory answers & end up giving up'
- '...I didn't have a consultant as mine retired after 1st meeting so I feel very alone'
- cf.: 'I definitely feel listened to by my consultant'

Charity helped them to feel less alone

• 'Realising that lots of people suffer with my condition and lots of them are worse than me do not **feel alone** with this

condition, and get the latest research'

• 'Made me feel less alone' x2; 'Makes you feel less alone'

- 'I no longer feel isolated having and official source for information'
- 'I no longer feel isolated, and know I can contact them if I need to'
- 'I don't **feel alone**, and the affect (sic) on my life is recognised'
- 'their emails help me feel less alone'
- 'Not feeling alone'
- 'I feel less isolated'





Collocates of 'information' 3L-3R

	Lemma Cooccurrences	[?] Candidate	s ? T-sc	ore	MI Lo	ogDice ↓		Lemma Cooccurrence	s? C	andidates?	T-score	MI	LogDice ↓	
1 🔲	from	17	65	3.94	4.47	11.28 **	11 🗆	about	12	83	3.18	3.61	10.67	***
2 🔲	the	30	297	4.84	3.10	11.07	12	trust	10	50	2.98	4.08	10.61	***
3 🔲	and	32	339	4.95	3.00	11.04 **	•• 13 🔲	it	15	163	3.38	2.96	10.58	***
4	give	13	49	3.44	4.49	11.00	14 🔲	be	34	574	4.67	2.33	10.57	***
5	T	46	601	5.73	2.69	10.95	•• 15 🔲	can	11	83	3.02	3.49	10.54	***
6	¥	37	475	5.16	2.72	10.90 ••	•• 16 🔲	provide	8	20	2.74	5.08	10.52	***
7	of	20	188	3.98	3.17	10.88 **	•• 17 🔲	in	12	116	3.07	3.13	10.48	***
8 🔲	get	13	79	3.35	3.80	10.81 ••	•• 18 🔲	source	8	27	2.72	4.65	10.46	***
9 🔲	on	14	103	3.42	3.52	10.77	•• 19 🔲	online	8	27	2.72	4.65	10.46	***
10	to	33	466	4.79	2.58	10.76 **	20	health	8	34	2.69	4.32	10.41	***
			Rows per	page:	20	▼ 1–20	of 74	〈 <u>1</u> /4 〉	×Ι					

^{□ &#}x27;give' (12), 'get' (13), 'trust' (9), 'provide' (6), 'source' (8), 'online' (7), 'health' (7)



Information+

Professionals did not give (reliable) information

- 'None of these professionals seem to be able to give information'
- 'Having worked in the NHS for 40 years, I do not trust any of them or their knowledge or information they give'
- 'I was diagnosed with two conditions I know nothing about and given no information about them'
- 'Sometimes doctors give incorrect information or don't know about the illness so nothing is that reliable'
- 'I was told for several years to "deal with it" instead of **giving** my **information** and treatment'
- 'Doctor useless in providing information'
- 'No information given'

Cannot access medical appointments / medical care and support

- 'I work in the hospital environment as an Ambulance ICA and can **get information** from Dr's (sic), however I find it almost impossible to talk to my GP as I can never get an appointment, or the doctors are locums'
- 'The **information** I **get** is very helpful, but I am still lacking help from my medical professional, as my GP's (sic) do not understand it'
- 'I can get information about symptoms and management but unable to get GP support...'
- 'I never get any information back and I don't get much support or follow ups'





Information+

NHS and charities are trusted sources providing quality, detailed information

- 'I need to be able to trust the information I'm reading, so tend to limit my sources of information to those linked to the NHS or my own GP practice'
- 'SRUK provide very helpful information which means I am and I feel very knowledgeable about my current symptoms and the likely development'
- 'I now have a source of information about Ryanair's (sic) which I didn't have before as I haven't officially been diagnosed with it'
- 'It was great to speak to someone in the first instance and get advice that isn't always covered by medical information online'
- 'It has given me more information and also makes you realise that there are other people out there with similar problems'
- 'I would not rely on any source of information other than the NHS or recognised charities supporting conditions'
- 'Especially the seminars that SRUK organise which **give** more indepth (sic) **information** on specific topics'
- 'I used online information from the nhs but that's how I learned about my disease'
- 'These are more trusted sources of information'

Importance of getting reliable, trustworthy information recognised

- 'I get information I can use now and later when my regards [sic] gets worse, which it is doing'
- 'It's the content of the **health information** rather than the format that I find important'
- 'Getting the right information allows me to know what will help me'
- 'I like that the information I get is from a trusted source'
- 'it is good being able to get reliable factual information'
- 'I'm careful who and where I get my information from'





information+

Information does not help to 'manage health' even if useful/trustworthy

- 'I feel the **information** they **give** is trustworthy but I don't think it assists me to manage my health as I rely on my GP and consultant to do that'
- 'I agree it provides information which is useful, but it doesn't affect how I manage my health'

Relevance of information

- 'I trust the information I get from this organisation, but it isn't always relevant to my situation, therefore only helps to a degree'
- 'Scleroderma is a broad spectrum disease so I **get** my **information** from a variety of resources'

Varied sources of information preferred

- I like to be able to listen to varied sources of information and then make a decision on a factual basis ie SRUK
- There's a lot of information online but it's good to have a trusted UK site
- Many medical information sources

Difficulties finding information online

- It's sometimes hard to find the right information online
- There's a lot of information online regarding health

Reluctance to search online for information

- I would NEVER search for health information online
- I probably don't indulge enough in health information online to be helpful here with my answers





Thank you

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