Sparrow Summary

Forum Design

Sparrow forums are a set of peer support forums operated by an NHS based mental health service. There are 6 forums, each for a different service user group, that can be accessed via a referral from by a health care professional. Some forums are set up to be used by service users, and others by relatives and carers. The target group and associated clinical service for each of the Sparrow forums is listed in Table 1.



Table 1						
Bird Name	Clinical service	Target				
Sparrow.1	Perinatal	Service users				
Sparrow.2	Talking Therapies	Service users				
Sparrow.3	Learning Disability Services	Relatives and carers				
Sparrow.4	Neurodiversity	Relatives and carers				
Sparrow.5	CAMHS (Child and Adolescent Mental Health Services) Anxiety and Depression	Relatives and carers				
Sparrow.8	Eating Disorder Service	Services users, relatives and carers				

The forum platform presents several ways for users to interact with each other. Each forum has a landing page where messages can be posted by clinicians, service users can post questions, share experiences common to other service users and support others with advice and by sharing their experience. Clinicians can also offer clinical support and signpost to other support and information in the resources section on the forum. Posts can have text, images, emoticons, hashtags, or embedded videos. Other user's posts can be quoted in replies and discussion topics can also be "watched" to notify users when a new post is made in a topic they find particularly interesting. A text search feature is also available for finding posts in the forums based on keywords. Private messages between users is also possible when a user may want to talk only to one person without sharing their message with the rest of the forum.

Beyond the landing page of the platform, there are also other pages providing resources to users as well as other ways for them to interact. There is a support and help page holding links to useful resources linked to each forum. The platform includes a blogs area, which allows users to write blog posts about subjects that they are interested in or to share specific information that they have found useful in their own recovery. The presents page allows users to send virtual presents to each other as a means of non-textual interaction – sending hugs appears to be particularly popular. Finally, the albums area allows users to post and share pictures on the platform. These pictures can also be re-used when posting to the landing page or writing a blog post.

Whilst on the platform, users are expected to remain anonymous and to not share any personally identifiable information on the forum. For service users their data may be linked to their health records, meaning moderators may be aware of who certain users are. Service users may also be aware of the identity of certain moderators if they have met them through in-person services run by the same organisation. Links to the terms & condition of use and a privacy notice are clearly marked at the bottom of each page so users are aware of the rules and expectations of being on the platform.

Moderation

Moderators on the Sparrow platform are a mixture of clinicians, peer volunteers, other volunteers, and Psychology undergraduate students. The clinicians are paid to moderate on the platform as part of their role while the voluntary and student moderators are unpaid. All volunteers hold voluntary contracts with the NHS Trust and have a Trust induction programme. Moderators are expected to be active members of the communities that they moderate and as such, their role goes beyond rule enforcement and removing posts, and includes engaging with users and providing support where necessary. The total number of moderators registered up to March 2024 for each forum is listed in Table 2.

Table 2						
Bird Name	Clinical service forum	Number of Moderators				
Sparrow.1	Perinatal	17				
Sparrow.2	Talking Therapies	60				
Sparrow.3	Learning Disability Services	45				
Sparrow.4	Neurodiversity	63				
Sparrow.5	CAMHS Anxiety and Depression	46				
Sparrow.8	Eating Disorder Service	51				

All moderators on the Sparrow forums go through a standard moderator training package run by the organisation. This training includes guidelines and functions of the platform as well as training on how to craft empathetic replies to users on the platform. Moderators are supported whilst working on the platform through regular meeting with a supervisor who they meet with every 6 weeks and can regularly check in with if they have any problems or questions whilst carrying out their work moderating on the platform.

Frequency of moderations logging in to the platform will depend on the level of clinical risk of the platform. Moderation is Monday-Friday 8.30 - 5.00 by clinicians, but is often outside these hours by other volunteer moderators. Some services have a rota for moderators, and moderators tend to check the forum while doing other work such as responding to emails or while working on the organisation's helpline. Moderators are characterized as "good" when they reactively engage with service users, and "excellent" when they engage proactively to ensure the site stays active and interesting, and when they use open questions to encourage further conversation.

On the platform, posts are screened live by the moderators who may take action as and when they feel risk has been identified. The procedure when risk is found runs on a traffic light system. Green is considered no or minimal risk. Amber indicates moderate risk; in which case a user may be sent a direct private message where they could be signposted to helpful resources. Beyond this a clinical moderator may also be notified and potentially a note made on the patient's record, or their care coordinator notified, if it is a service user. Finally red indicates high risk, at which point the user will be identified through their NHS number and the clinical team will be contacted for urgent support, the user will also be signposted towards emergency support services.

Language Data

Forum posts were collected from the various Sparrow forums on 01/03/2024, dating back to 05/06/2019. Users were asked to individually consent to participate in the iPOF project. A total of 124 users consented for their forum data to be used in this research, of which 45 had posted and were included in our dataset. Table 3 shows the total number of registered users and posts on each Sparrow subforum up to 01/03/2024, as well as the number of users, posts and words included in the iPOF dataset.

Table 3							
	Total registered on forum		Total iPOF dataset (from consenting users)				
Forum	N users	N posts	N users	N posts	N words		
Sparrow.1	22	215	6	74	922		
Sparrow.2	21	97	6	47	3760		
Sparrow.3	18	491	5	171	9621		
Sparrow.4	17	100	9	22	648		
Sparrow.5	34	378	4	20	878		
Sparrow.8	41	377	15	42	3560		
Sparrow Total	153	1658	45	376	19389		

As the overall dataset is extremely small as compared to the others in the iPOF study, we have performed parts of the analysis here in aggregate to gather a better overall picture of Sparrow, rather than focusing on a single subforum which tends to highly skew the results to a handful of users' posts.

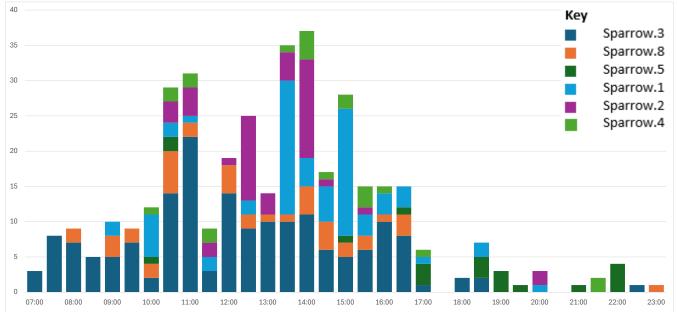


Figure 1 – Total posts per 30-minute period, for all subforums

The Sparrow dataset appears to peak around 2pm, with most activity happening between 10am and 5pm, with the complete dataset for all subforums shown in Figure 1. On an individual subforum level, some show much more activity than others. The highest average posts (per 30-minute block) for a single subforum is ~5.34, dropping to ~0.8 for the lowest. Overall, the dataset sees an average 11.4 posts per 30 minutes, for users we have visibility over.

The most popular topics discussed in threads are displayed in Figure 2. Unfortunately, due to the small size of this dataset there are only two major categories and they both are broad areas. Topic 0 seems to indicate that people talk about help and support. It also appears that there are mentions of thanks, especially noting the information given and the time taken to help the respondent. The other major topic (Topic 1) of note here includes mentions of sensory activities, such as colouring and baking.

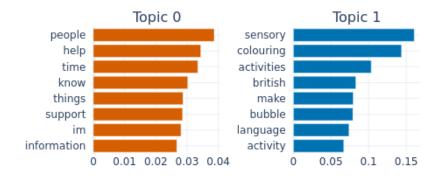


Figure 2 – Topic word scores generated by BertTopic

Figure 3 shows the most relevant keywords when compared to the BNC (British National Corpus). By contrast to the topic analysis in the previous section, here we can see some specialist terms, such as 'ark' and 'zoom' relating to specific technologies and services, along with 'quiz' and 'bubble' relating to activities within the forum.

However, with the dataset being quite small, it is questionable how representative these are, as we only have data from consenting members of Sparrow, rather than a broad picture of the entire platform, so these figures should be considered carefully.

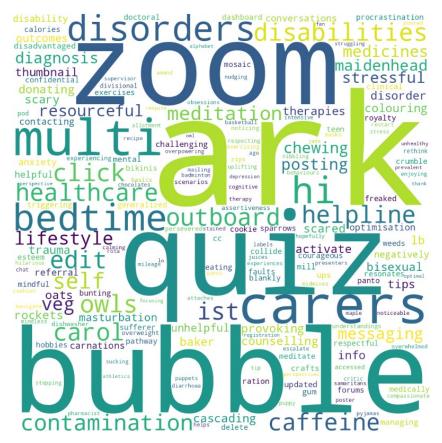


Figure 3 – Keywords based on log-ratio score