



City Research Online

City St George's, University of London

Citation: Santhagunanathan, K. & Ngo, M. (2026). Barriers and Enablers to Accessing a Young Adult Peer Support Group for Proton Beam Therapy Patients. *Journal of Adolescent and Young Adult Oncology*, 15(1), pp. 74-78. doi: 10.1089/jayao.2025.0016

This is the accepted version of the paper.

This version of the publication may differ from the final published version. To cite this item please consult the publisher's version.

Permanent repository link: <https://openaccess.city.ac.uk/id/eprint/35484/>

Link to published version: <https://doi.org/10.1089/jayao.2025.0016>

Copyright and Reuse: Copyright and Moral Rights remain with the author(s) and/or copyright holders. Copies of full items can be used for personal research or study, educational, or not-for-profit purposes without prior permission or charge, unless otherwise indicated, provided that the authors, title and full bibliographic details are credited, a hyperlink and/or URL is given for the original metadata page and the content is not changed in any way. For full details of reuse please refer to [City Research Online policy](#).

1 **Title**

2 Barriers and enablers to accessing a young adult peer support group for proton beam
3 therapy patients

4

5 **Author names and affiliations**

6 1. Karthica Santhagunanathan ^{a*b*}

7 2. Dr Mark Ngo ^{a*}

8

9

10 ^a City St George's, University of London, Northampton Square, London EC1V 0HB, United
11 Kingdom

12 ^b University College London Hospital, London NW1 2BU, United Kingdom

13

14

15 **Corresponding author**

16 Mark Ngo

17 Mark.ngo@city.ac.uk

18

19 **Running Title**

20 Peer support for young adult proton beam therapy patients

21

22 **Keywords**

23 Young adult; adolescent; oncology patients; peer support, mentoring; counselling; cancer
24 survivorship

25

26

27 **Introduction**

28 The needs of young adults (YA) such as emotional and cognitive development, are poorly
29 met by cancer services that tailor more towards the needs of children and older adults.¹
30 While literature demonstrates the benefits of peer support for older populations^{2,3}, the YA
31 demographic is often hesitant to engage.^{4,5} However the benefits of accessing peer support
32 in an oncology setting could improve the YAs experience.

33 Though guidelines exist emphasising the specific needs of this cohort and the importance of
34 specialised care,⁶ YAs often lack access to tailored support. A cancer diagnosis during YA
35 years has a unique impact on this crucial stage of life development, disrupting physical
36 health, educational goals, early-stage career aspirations, and psychological well-being.⁷

37 YA cancer patients face several barriers to accessing peer support in an oncology setting,
38 including lack of age-appropriate services,⁸ person-centred barriers such as emotional
39 challenges and fear of vulnerability, and logistical issues such as distance⁹. While digital
40 platforms offer alternatives, access and preference vary. Healthcare professionals should
41 address the way in which services and support are introduced to YAs, which may be through
42 a thorough psychosocial assessment, to ensure comprehensive understanding of the YA's
43 resilience, risk factors, needs and associated changes over time.

44 Enablers to peer support have been documented as the emotional competence to express
45 feelings, positive previous experience to seeking help, and education and awareness.^{10,11}

46 Literature was limited within an oncological setting. To address this knowledge gap, a service
47 evaluation was performed to explore how 18 to 24-year-olds receiving proton beam therapy
48 (PBT) treatment, a form of radiotherapy, perceive and access peer support. Specific
49 objectives were to:

- 50 (i) Explore how 18 to 24-year-olds perceive peer support
- 51 (ii) Identify the barriers and enablers to accessing peer support for young adults
- 52 (iii) Formulate recommendations based on the findings

53

54 **Material and Methods**

55 Ethical approval for the service evaluation was obtained by the departmental Radiotherapy
56 Governance Committee. As qualitative interviews would be performed, ethical approval
57 from City St George's, University of London was obtained [REF: ETH2324-1817]. Purposive
58 sampling was used to encourage a range of participants with different diagnoses, genders,
59 and ethnicities. Service users were invited to participate in the service evaluation if they
60 were 18 to 24 years at the time of treatment and completed radical PBT treatment within 18
61 months from the start of the study. Exclusion criteria included individuals currently
62 undergoing active cancer treatment and those who were non-English speaking.

63 Interested participants received a participant information sheet detailing the study's
64 background, purpose, and expectations. Written informed consent was obtained from all
65 interested participants (n=11) with the interviews taking place in August and September
66 2024, via Microsoft Teams. Data saturation was reached after the ninth interview, and no
67 further interviews were conducted. Table 1 provides a summary of the participant
68 characteristics.

69 (Insert Table 1 here)

70 Interviews lasted 30-60 minutes, using open-ended questions. These questions explored
71 YA's perceptions and experiences of peer support during their PBT treatment. They
72 examined whether participants had received or would have liked to receive peer support,
73 how it impacted them, and any discussions they had with healthcare professionals about
74 accessing it. The questions also investigated perceived barriers and enablers to engaging in
75 peer support within their age group, the potential benefits of peer support before, during,
76 and after treatment, and ways to facilitate peer connections in an oncology setting. Finally,
77 participants were asked to share their views on what an ideal peer support session would
78 have looked like for them.

79 The data analysis process followed the five stages of Framework Analysis,¹² due to its
80 widespread application in analysing semi-structured interview transcripts, enabling the
81 development of categories, descriptions and explanations. This method maintains data
82 integrity, enhancing credibility,¹² and allows the research to provide practical
83 recommendations. The NHS England Biopsychosocial Model of Care¹³ was selected as the

84 analytical framework for coding transcripts, aligning with a study conducted in the
85 Netherlands¹⁴ who investigated supportive care needs for YA service users using a similar
86 framework and qualitative studies assessing the psychosocial impact of interventions on
87 individuals. This model captures the strong multi-dimensional nature of health and
88 wellbeing, focussing on enabling care in the NHS which is required when analysing support
89 systems such as peer support. Member checking and peer debriefing between the two
90 authors occurred, enhancing credibility. Dependability and confirmability were enhanced by
91 keeping an audit trail. Both authors kept diaries throughout the data collection and analysis
92 process, engaging in reflexivity by acknowledging their individual backgrounds and
93 perspectives.

94

95 **Results and Discussion**

96 The service evaluation highlighted the significance of peer support, emphasising its role in
97 providing meaningful support from individuals with shared experiences, and an opportunity
98 to be a positive role model for others. Participants expressed that a key challenge was their
99 friends' inability to relate to their experience, which made it hard to receive meaningful
100 support. This led to a desire to engage with peer support in an oncological setting. All
101 participants indicated that they did not know anyone with a similar cancer diagnosis, and
102 eight participants did not know anyone who had a cancer diagnosis at all. Similar sentiments
103 have been reflected in other studies, where participants expressed feelings of being different
104 from others,^{15,16,17} and wanting to engage with people in similar situations to them.

105 *“What I was going through is not something that any of my friends or any of my colleagues,
106 close to my age had gone through or were going through...”* - Participant 1

107 YA cancer service users often strive to mirror the lives of their friends and enjoy the typical
108 experiences of their age group. In a survey of 271 YA service users, 81% of respondents
109 commented that no information had been offered to their friends to explain the cancer,
110 treatment, or side effects.¹⁸ For this reason, it is important that these service users are
111 provided with the means to access support from peers undergoing or having undergone
112 similar oncology treatment.

113 *“The kind of support I would have wanted was maybe knowing more people that have*
114 *already been through it” - Participant 2*

115 The presence of a positive role model can be essential to an individual.^{19,20} While some
116 participants felt that they might not personally benefit from peer support sessions, they
117 recognised the value of sharing their own experiences to support others. They expressed a
118 desire to contribute by offering guidance and encouragement, ultimately becoming positive
119 role models for those facing similar challenges.

120 *“Another thing that would motivate me to go is if I was told that I wouldn't just be going for*
121 *myself...if it was presented to me in a way where I could theoretically do a lot of help in*
122 *someone else's life” – Participant 5*

123 *“There were so many little things that I found helped me through my journey, I would love to*
124 *just like share that with other people” – Participant 3*

125 Some participants viewed peer support as a foundation for forming meaningful friendships
126 with individuals facing similar health challenges. They expressed a deeper desire to connect
127 with peers and share experiences, driven by the rarity of their condition.

128 *“It's a lot different than when you're speaking about something that is so vulnerable that you*
129 *can both connect in because it can be very lonely in that kind of age group. It's something*
130 *that would massively benefit not only you know teenagers, but young people as well...to kind*
131 *of maybe feel a bit visible or a bit, you know, connected in that sense” - Participant 1*

132 *“It definitely would have been nice if there was a group of people my age that I knew I could*
133 *reliably get to know” – Participant 5*

134

135 Participants highlighted the need to advertise peer support sessions in departments,
136 through posters, emails, or verbal reminders to raise awareness and encourage engagement.

137 Some participants believed that if sessions were mandatory, individuals would feel obliged
138 to attend, which could lead to discovering comfort in a supportive environment and
139 fostering connections with peers. This aligns with findings from previous studies, indicating a
140 strong demand for accessible peer support opportunities which could positively impact the
141 individual's experience.^{21,22}

142 *“It should be advertised because we want to come”* – Participant 6

143 *“I feel like maybe advertisements are always better than just like speaking to someone. See,*
144 *maybe they'll just forget. Or I'm just thinking posters, I feel like that's better”* – Participant 8

145 Participants indicated that establishing a safe, familiar, and comfortable environment would
146 be an enabler to accessing peer support sessions. They emphasised the importance of the
147 environment potentially mitigating feelings of anxiety, vulnerability and enhancing
148 motivation to attend.

149 *“I think the more familiar and comfortable you are with your environment, the more able*
150 *you are to have conversations and be comfortable to maybe do that thing that isn't so*
151 *comfortable, like speaking to somebody you haven't spoken to before because you were in a*
152 *place that you feel safe”* – Participant 1

153 When participants described what a peer support session would look like to them, they
154 mostly agreed on the length of time and frequency for each session being weekly from 45-
155 60 minutes.

156 *“I feel like timing and location is important... once a week maybe 30 to 45 minutes”* -
157 Participant 6

158 *“I think having a session weekly where you do meet people your age and it's to build those*
159 *friendships up... I would say between maybe 45 minutes to an hour”* – Participant 7

160 A range of session formats were suggested, including activity-based options, for example
161 board games, craft activities, drawing, or structured discussions on specific topics.

162 *“So maybe one week you're having a board game week, but another week you're doing an*
163 *easily accessible craft activity...you know doing some drawing or...some clay*
164 *making...something really simple that is easy to engage with”* – Participant 4

165 *“I think that would be nice to encourage different topics into conversation... because I think*
166 *especially people...who don't wanna talk about it, they can speak about something else or*
167 *speak about that topic and then you can like build upon that”* – Participant 3

168 Key discussion topics that could encourage participation in peer support sessions are
169 outlined in Figure 1. This aligns with findings by Fox et al. (2021), who highlighted the

170 importance of co-designed support programmes that reflect the needs and perspectives of
171 stakeholders.²³ To ensure sessions are relevant and well-received, an introductory survey
172 could be used to gather participant feedback on content, scheduling, and delivery
173 preferences. This could enhance both engagement and long-term participation. Online
174 delivery of sessions is also a viable option, with digital platforms effectively implemented in
175 the past.^{24,25} However, such platforms must be user-friendly and uphold robust security
176 measures to maintain confidentiality and foster a sense of safety and trust.²⁴

177 (Insert Figure 1 here)

178 Four participants raised concerns about trusting strangers, expressing reluctance to confide
179 in unfamiliar individuals, perceiving this as a barrier to engagement. Peer support involves
180 honesty, reflecting on experiences and relies on a degree of vulnerability. Maintaining a
181 consistent facilitator may foster familiarity and help address concerns about trusting new
182 individuals.

183 *“I think just tying into that kind of confidence is the ability to create those relationships... I*
184 *think it’s that trust in the group” – Participant 2*

185 *“It felt really weird opening up to people and I feel like that was a very big barrier cause it’s*
186 *like I don’t wanna tell everyone my problems...It’s more like trusting someone new” –*
187 *Participant 9*

188 Table 2 presents key recommendations derived from the barriers and enablers identified in
189 the service evaluation on peer support access. These recommendations aim to overcome
190 challenges faced by individuals seeking peer support while enhancing its accessibility and
191 effectiveness.

192 (Insert Table 2 here)

193

194 **Conclusion and Future Research**

195 This service evaluation emphasised the importance of peer support in the YA cohort within
196 an oncological setting. As a distinct group with unique needs, YA cancer patients require age-
197 appropriate care initiated and facilitated by healthcare professionals. Peer support may

198 enhance the patient experience by fostering meaningful connections and providing
199 opportunities to serve as positive role models. Given that many YAs feel disconnected from
200 their longstanding friends, peer support with other YA oncology patients offers a sense of
201 normality and shared understanding. Participants expressed a preference for weekly, 45 to
202 60 minute sessions, and emphasised the need for effective promotion and relevant
203 discussion topics to encourage engagement.

204

205 Collaboration with other UK PBT centres could provide valuable insights into optimising peer
206 support facilitation. Partnering with charities or utilising the expertise of the departmental
207 youth support coordinator could help ensure continuity of peer support before, during, and
208 after PBT, extending to YA service users receiving standard radiotherapy. Age-specific care is
209 essential in empowering YAs with cancer to develop independence, self-reliance, and a
210 sense of purpose.

211

212 **Acknowledgements**

213 We are grateful to all the participants for giving their time to participate in the study and to
214 Professor Rachel Taylor and Danielle Fairweather for their support, advice, and guidance
215 with this service evaluation.

216 **Author 1:** Conceptualisation (lead); data curation (lead); formal analysis (lead); methodology
217 (equal); validation (lead); visualisation (equal); writing – original draft (equal); formal
218 analysis (dead); writing – review and editing (equal).

219 **Author 2:** Writing– review and editing (equal); methodology (equal); visualisation (equal);
220 writing – original draft (equal); supervision (lead)

221

222 **Declaration of interests**

223 None

224

225 **Funding statement**

226 No funding required

227

228

229

230

231 **References**

- 232 [1] Stark D, Bielack S, Brugieres L, Dirksen U, Duarte X, Dunn S, et al. Teenagers and young
233 adults with cancer in Europe: from national programmes to a European integrated
234 coordinated project. *Eur J Cancer Care*. 2016;25:419–27. <https://doi.org/10.1111/ecc.12365>
- 235 [2] Seçkin G. I am proud and hopeful: age-based comparisons in positive coping affect
236 among women who use online peer-support. *J. Psychosoc. Oncol*. 2011;29:573–91.
237 <https://doi.org/10.1080/07347332.2011.599361>
- 238 [3] Huber J, Muck T, Maatz P, Keck B, Enders P, Maatouk I, et al. Face-to-face vs. online peer
239 support groups for prostate cancer: a cross-sectional comparison study. *J. Cancer Surviv*.
240 2018;12:1–9. <https://doi.org/10.1007/s11764-017-0633-0>
- 241 [4] Breuer, N., Sender, A., Daneck, L., Mentschke, L., Leuteritz, K., Friedrich, M., Nowe, E.,
242 Stöbel-Richter, Y. and Geue, K. (2017) 'How do young adults with cancer perceive social
243 support? A qualitative study', *Journal of Psychosocial Oncology*, 35(3), pp. 292–308.
- 244 [5] McDonnell, G.A., Shuk, E. and Ford, J.S. (2020) 'A qualitative study of adolescent and
245 young adult cancer survivors' perceptions of family and peer support', *Journal of health*
246 *psychology*, 25(5), pp. 713–726.
- 247 [6] National Institute for Health and Care Excellence. Cancer services for children and young
248 people [online]. NICE;2014. [Accessed 15 October 2024] Available from:
249 <https://www.nice.org.uk/guidance/qs55>
- 250 [7] Morgan S, Davies S, Palmer S, Plaster M. Sex, drugs, and rock 'n'roll: caring for
251 adolescents and young adults with cancer. *J. Clin. Oncol*. 2010;28:4825–30.
252 <https://doi.org/10.1200/JCO.2009.22.547>
- 253 [8] Fern, L.A., Taylor, R.M., Whelan, J., Pearce, S., Grew, T., Brooman, K., Starkey, C.,
254 Millington, H., Ashton, J. and Gibson, F. (2013) 'The art of age-appropriate care: reflecting on
255 a conceptual model of the cancer experience for teenagers and young adults', *Cancer*
256 *nursing*, 36(5), pp. E27–E38.
- 257 [9] Parsons, H.M., Harlan, L.C., Lynch, C.F., Hamilton, A.S., Wu, X., Kato, I., Schwartz, S.M.,
258 Smith, A.W., Keel, G. and Keegan, T.H. (2012) 'Impact of cancer on work and education

259 among adolescent and young adult cancer survivors', *Journal of clinical oncology*, 30(19), pp.
260 2393–2400.

261 [10] Gulliver A, Griffiths KM, Christensen H. Perceived barriers and facilitators to mental
262 health help-seeking in young people: a systematic review. *BMC Psychiatry*. 2010;10:1–9.
263 <https://doi.org/10.1186/1471-244X-10-113>

264 [11] Rickwood DJ, Deane FP, Wilson CJ. When and how do young people seek professional
265 help for mental health problems? *Med J Aust*. 2007;187:S35–9.
266 <https://doi.org/10.5694/j.1326-5377.2007.tb01334.x>

267 [12] Ritchie J, Spencer L, O'Connor W. Carrying out qualitative analysis. 1st ed. London. SAGE
268 Publications Ltd. 2003:219–62.

269 [13] NHS England. [online] NHS England » Supported self-management: peer support guide;
270 2023. [Accessed 29 October 2024]. Available from: [https://www.england.nhs.uk/long-](https://www.england.nhs.uk/long-read/peer-support/)
271 [read/peer-support/](https://www.england.nhs.uk/long-read/peer-support/)

272 [14] Gualthérie van Weezel, A.E., Husson, O., Zilver, S.J., van der Laan, E.J., Koch, S., van
273 Klinken, M., van der Graaf, W.T., Sleeman, S.H., Kunst, J.C. and de Geus, J.E. (2022)
274 'Adolescent and young adult cancer patients' supportive care needs—A social work
275 perspective', *The British Journal of Social Work*, 52(8), pp. 5084–5104.

276 [15] Kim B, White K, Patterson P. Understanding the experiences of adolescents and young
277 adults with cancer: A meta-synthesis. *Eur. J. Oncol. Nurs*. 2016;24:39–53.
278 <https://doi.org/10.1016/j.ejon.2016.06.002>

279 [16] Domínguez M, Sapiña L. "Others Like Me". An approach to the use of the internet and
280 social networks in adolescents and young adults diagnosed with cancer. *J. Cancer Educ*.
281 2017;32:885–91. <https://doi.org/10.1007/s13187-016-1055-9>

282 [17] Soanes L, Gibson F. Protecting an adult identity: a grounded theory of supportive care
283 for young adults recently diagnosed with cancer *Int. J. Nurs. Stud*. 2018;81:40–8.
284 <https://doi.org/10.1016/j.ijnurstu.2018.01.010>

285 [18] David CL, Williamson K, Tilsley DO. A small scale, qualitative focus group to investigate
286 the psychosocial support needs of teenage young adult cancer patients undergoing
287 radiotherapy in Wales. *Eur. J. Cancer.* 2012;16:375–9.

288 [19] Ngo M, Schneider-Kolsky M, Baird M. The attitudes of Australian radiography students
289 towards the use of assistive transfer devices to reduce biomechanical stress in the clinical
290 setting. *Radiography.* 2013;19:125–9. <https://doi.org/10.1016/j.radi.2013.01.00>

291 [20] Scheier, M. F., & Carver, C. S. Adapting to cancer: The importance of hope and purpose.
292 In A. Baum & B. L. Andersen (Eds.), *Psychosocial interventions for cancer.* 2001 (pp. 15–36).
293 American Psychological Association. <https://doi.org/10.1037/10402-002>

294 [21] David C. A qualitative investigation assessing whether implementing a teenage young
295 adult information evening, within a radiotherapy department, would improve the
296 information support and treatment pathway for 18–24-year-old cancer patients.
297 *Radiography.* 2020;26:S15–6. <https://doi.org/10.1016/j.radi.2021.01.005>

298 [22] Pallin ND, McHugh SM, Carvalho M, Hegarty J, Connolly RM, Browne JP. Enablers and
299 barriers to accessing self-management support services for those living with and beyond
300 cancer: a qualitative study using the Theoretical Domains Framework. *Psychooncol.* 2024;33.
301 <https://doi.org/10.1002/pon.6254>

302 [23] Fox, R.S., Oswald, L.B., Fowler, B., Carrera, J.B., Reichel, J., Victorson, D. and Sanford,
303 S.D. (2021) 'Understanding and enhancing support group participation among adolescent
304 and young adult cancer survivors: The impact of integrating adolescent and young adult
305 cancer navigation services', *Journal of Adolescent and Young Adult Oncology*, 10(4), pp. 488–
306 492.

307 [24] Olsson, M., Eliasson, I., Kautsky, S., af Segerstad, Y.H. and Nilsson, S. (2024) 'Co-
308 creation of a digital platform for peer support in a community of adolescent and young adult
309 patients during and after cancer', *European Journal of Oncology Nursing*, 70.

310 [25] Sansom-Daly, U.M., Kirton, C., Lim, C.Y., Wakefield, C.E., Hetherington, K., McGill,
311 B.C., Evans, H.E., Patterson, P. and Ellis, S.J. (2025) 'Support through the screen: therapeutic
312 alliance and group cohesion processes in group videoconferencing-based psychological
313 programs for young cancer survivors', *Australian Psychologist*, 60(2), pp. 125–138.

314

315

316

317

318 **Figure Legend**

319

320 **Figure 1.** Topics of discussion for peer support generated by participants

321

322 Bar One (Top bar): Navigating relationships with friends, family, and dating

323 Bar Two: Returning to work and life adjustments

324 Bar Three: Dealing with diagnosis, side effects and symptoms

325 Bar Four: Body Image

326 Bar Five: Emotional and mental health

327 Bar Six: How to manage people's reactions and feel normal

328 Bar Seven: Hobbies

329 Bar Eight (Bottom Bar): Faith and spirituality

330

331

332

333

334

335

336

337

338

339

340

341

342 **Table 1.** Characteristics of the interview participants

343

	n	%
Sex		
Male	5	55
Female	4	44
Age		
22	2	22
23	4	45
24	3	33
Ethnicity		
White	7	78
Asian/Asian British	2	22
Tumour type		
CNS	5	55
Sarcoma	4	44

344

345

346

347 **Table 2.** Key recommendations highlighted through the service evaluation to better facilitate
348 peer support amongst YAs

349

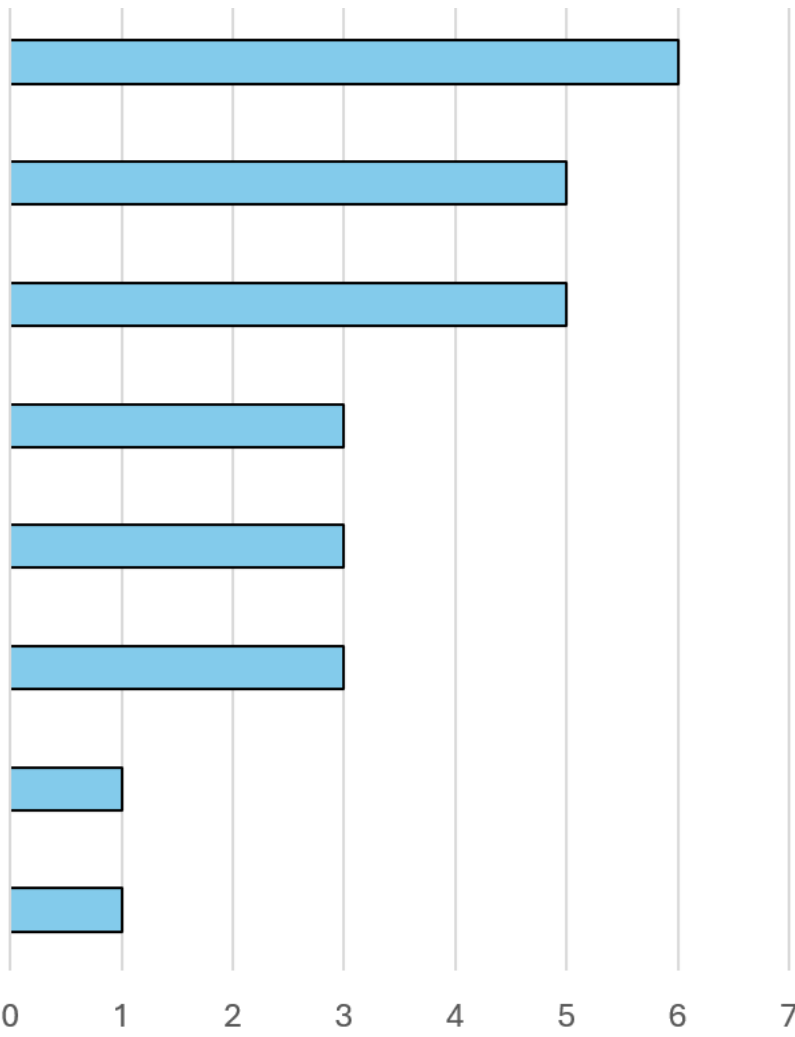
Recommendations	
Advertising and promoting peer support to enhance engagement	Sessions should be well-advertised in departments, through posters, emails, or verbal reminders to raise awareness and encourage participation.
Establishing a safe, familiar, and comfortable environment	A safe space is essential to openly generate discussions while reducing mental load and anxiety.
Weekly peer support sessions with mixed approaches were preferred	Weekly 45 to 60 minute sessions, alternating between activity-based (boardgames, craft activities, drawing) and topic-focussed discussions were favoured in the PBT department.
Include themed topics for discussion	Themed topics of discussion may include navigating personal relationships, faith and spirituality, hobbies, returning to work and life adjustments, body image, and dealing with the diagnosis and associated symptoms.
Maintaining consistency in the facilitator	Maintaining a consistent facilitator fosters familiarity and helps address concerns about trusting new individuals. Participants expressed hesitation in confiding in unfamiliar people, viewing this as a barrier to engagement.

350

351

352

353 **Figure 1**



354